MINISTRY OF EDUCATION, YOUTH AND SPORTS

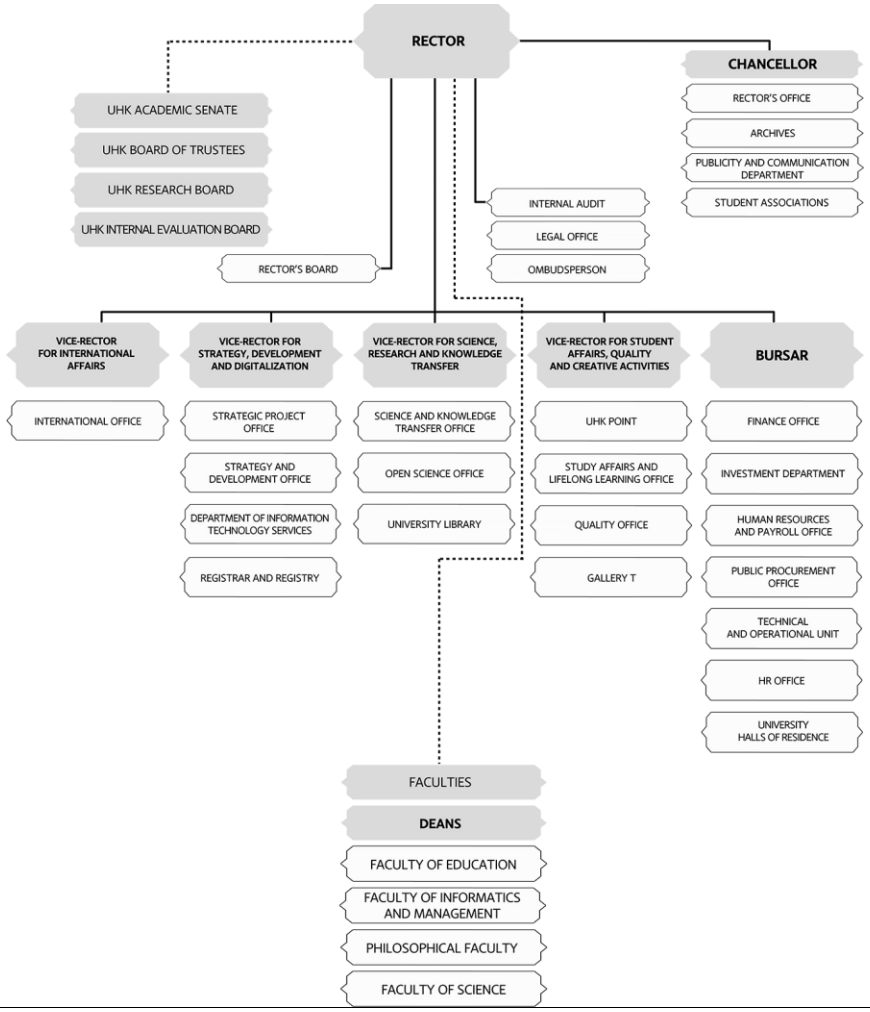
SELF-EVALUATION REPORT FOR EVALUATION OF RESEARCH ORGANIZATIONS IN THE SEGMENT OF HIGHER EDUCATION INSTITUTIONS IN YEAR 2025

HIGHER EDUCATION INSTITUTION NAME: University of Hradec Králové

COMPANY REGISTRATION NUMBER (CRN): 62690094

THE LIST OF EVALUATION UNITS IN MODULE 3: Faculty of Education, Faculty of Informatics and Management, Philosophical Faculty, Faculty of Science

ORGANIZATIONAL STRUCTURE OF THE HIGHER EDUCATION INSTITUTION



HIGHER EDUCATION INSTITUTION WEBSITE (HTML LINK): https://www.uhk.cz/en

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Signature (Rector), stamp

Introductory information about the evaluated higher education institution

The HEI briefly introduces itself. The organizational chart, the position of the HEI within the research, development and innovation system and the system of HEIs in the Czech Republic may be commented on, the mission and vision, the size of the HEI, the number and focus of the units evaluated will be briefly presented.

Maximum 500 words.

Description:

The University of Hradec Králové (UHK) is a proud regional university with global ambitions. The spectrum of educational activities includes teaching, arts and languages at the **Faculty of Education (FEdu)**, economics, informatics and management at the **Faculty of Informatics and Management (FIM)**, social sciences and humanities at the **Philosophical Faculty (PhF)**, and natural sciences at the **Faculty of Science (FSci)**.

The Strategic Plan of the University of Hradec Králové 2021+ (hereinafter the SP UHK) is the fundamental strategic document of the UHK. It sets out the University's long-term strategy for ten years and defines the UHK's mission – to spread knowledge within the regional and global community.

As of 31 December 2024, a total of 814 employees worked at the UHK, of whom 450 were women (55%). A total of 525 academic, scientific and professional staff worked at the UHK, of whom 237 were women (45%).

Thanks to its rich international links with institutions in more than 60 countries in North and South America, Africa, Asia and Europe, the University students can gain valuable experience during study and work stays abroad. In 2024, a total of 509 students and 220 academicians of the UHK benefited from international mobility. The total number of admitted international students in 2024 was 567 and the total number of admitted international academicians was 48.

In terms of international comparison, the UHK has long been strengthening its position among universities. Thanks to its excellence in research, but also in the field of internationalisation, the UHK is ranked regularly in the most frequently mentioned rankings (QS World University Rankings, University Rankings: Europe & QS Eastern Europe 2024, THE World University Rankings, THE BY SUBJECT: Life sciences, THE BY SUBJECT: Physical Science, THE BY SUBJECT: Computer Science, THE Young Universities, THE Emerging Economies, ShanghaiRanking's Global Ranking of Academic Subjects: Pharmacy & Pharmaceutical Sciences, UI Green Metric).

The main objectives of the development of science and research at the UHK include high-quality, internationally competitive scientific and research activities that are also reflected in the quality of publications, increase of the scientific qualifications of the UHK employees and increase of the UHK employees involvement in international research projects. The quality of publication outputs is increasing gradually, with an emphasis on the publication of outputs in impacted journals accepted by the international community in Q1 and Q2 according to AIS JCR ISI Web of Knowledge. The quality of research and creative activities is reflected, among other things, by the number of research projects that are being solved at the UHK. Emphasis is also placed on applied and contract research or knowledge and technology transfer. Consideration is given to the social need for research, its ability to respond to current challenges and its impact on the society.

The UHK is involved in national and international professional or scientific networks reflecting its fields of specialization. The UHK is also an important member and partner of a number of regional platforms.

The UHK offers a diversified and attractive range of study programmes. In academic year 2023/2024, the UHK had a total of 273 accredited study programmes (122 Bachelor's degree programmes, 77

Master's degree programmes, and 74 doctoral degree programmes). The total number of accredited study programmes in a english language was 62 (23 Bachelor's degree programmes, 17 Master's degree programmes, and 22 doctoral degree programmes). The UHK also offers a wide portfolio of lifelong learning courses, the largest share of courses being oriented to exercise of a profession, the remaining courses being offered within the University of the Third Age.

In academic year 2023/2024, the total number of active students was 8,326 of which 4,157 students at the Faculty of Education, 1,987 students at the Faculty of Informatics and Management, 1,520 students at the Philosophical Faculty, and 662 students at the Faculty of Science.

SWOT ANALYSIS

Strengths • Modern and dynamic institution with a progressive approach to research and education; • Attractive and wide range of study programmes; • Strong international cooperation and mobility programmes for students; • Cooperation with regional partners; • Family environment for learners, modern campus and state-of-the-art teaching and research facilities; • Growth in scientific activity and grant projects; • Tradition of preparing future teachers.	**Weaknesses** • Limited financial resources for research; • Weak wage competitiveness in the international context; • Difficulty of recruiting top academicians and scientists; • Small number of foreign or international research projects; • Lower involvement in prestigious international research networks; • Administrative burden associated with grant financing and project management.
Opportunities • Preparation of new attractive and socially necessary study programmes; • Strengthening cooperation with industry in applied research; • Attracting more international students and strengthening study programmes taught in a foreign language; • Opportunities to participate in major research projects at European level.	**Threats** • Stagnation or decline in the number of students; • Growing competition from other universities; • Uncertainty of funding for public universities and possible lack of grants; • Challenging retention of academic and scientific staff in an increasingly competitive labour market; • Lack of membership in the European University Alliance - the threat of opening the scissors between member universities a non-member universities.

SELF-EVALUATION REPORT FOR MODULE 3

THE NAME OF THE UNIT BEING EVALUATED:
University of Hradec Králové, Faculty of Education

FORD: 5 - Social sciences

SOCIAL CONTRIBUTION OF THE EVALUATED UNIT

3.1 Introductory information about the unit under evaluation

The evaluated unit will describe its mission and vision and provide a general self-reflection of the societal contribution of R&D&I, along with its long-term goals in the fields it develops. The distribution of research activities by type of research will also be commented on.[1] The evaluated unit will describe its organisational structure and size (staffing, number of students, number of study programmes implemented, etc.) based on the data provided in annex tables 3.1.1 to 3.1.6.

Maximum 1000 words.

This is a non-rated indicator that serves as an introduction to the evaluated unit, providing context for data in indicators 3.2-3.7.

Self-assessment:

The Faculty of Education of the University of Hradec Králové (FEdu), in accordance with its primary mission and the prevailing disciplinary focus (humanities, social sciences and arts), continuously strives for the high-quality preparation of teachers for all levels of schools and other pedagogical staff (educators, leisure educators, teaching assistants). Contemporary education must necessarily respond to the changes, current challenges and needs of the society (the application of new technologies, the dynamics of new findings, the global and multicultural nature of life, the environmental issues, the issue of creating a resilient society).

Students of both teaching and non-teaching study programmes (e.g., Language and Literary Culture, Foreign Languages for Tourism, Transcultural Communication, Social Pathology and Prevention, Social Pedagogy, Social Communication in the Non-Profit Sector, Graphic Design – Multimedia, and Textile Design from among the non-teacher study programmes) are educated to critical thinking and the ability to hold a free discussion. They are guided to build a relationship with cultural heritage, traditional artistic values within the framework of national identity and, at the same time, to respect the culture of other communities and nations. In this context, multicultural education, teaching of ethics, and personal and communication development takes place. Emphasis is placed on foreign languages learning, but also on the mastery of mother tongue competences. The FEdu considers important to work with students so that they understand education as a lifelong process, to equip them with effective strategies for future self-education, and, at the same time, to support their personal development so that they are able to work not only as educated professionals, but also as active citizens ready to participate in the life of local communities.

[1] Basic, applied, contract, artistic research (see Definition of Terms in Methodology HEI2025+).

Eleven departments and two institutes provide accreditation for a wide range of Bachelor's and Master's degree programmes. Applicants for the study of teaching at the FEdu choose a combination of two disciplines according to their preference. The disciplines guaranteed at the FEdu (e.g., Czech Language and Literature, English Language and Literature, French Language and Literature, German Language and Literature, Russian Language and Literature, Music Culture Focused on Education, Physical Education, Art Focused on Education, Technical Fundamentals Focused on Education) can also be combined with the teaching study programmes offered by the Faculty of Science or the Philosophical Faculty. The vast majority of Bachelor's and Master's degree programmes are implemented in full-time form only, all doctoral degree programmes can be studied in both full-time and combined form. The overview of the number of students shows an uneven gender structure of students which reflects the gender structure of teachers in different types of schools, but also in social professions. This situation is a manifestation of deep-rooted social traditions and stereotypes, which the faculty is striving to overcome in its work with students. The more balanced gender composition of students studying doctoral programmes also corresponds to long-term trends.

The FEdu has long been striving to offer a diverse range of lifelong learning programmes that have the potential to strengthen its position in the region, strengthen cooperation with schools of all types. The University of the Third Age is one of the most sought-after forms of lifelong learning at the FEdu; it is a specific form of education designed for the elderly. Its mission is to make the latest findings of science, technology and culture available to this age category. The topic of lifelong learning is also reflected in pedagogical research which is oriented not only to the fields of preschool and school education, but also to the field of andragogy and gerontagogy.

The focus of scientific and research activities corresponds to the above-mentioned objectives and the profile of the faculty. The research and publication activities of the FEdu are traditionally classified in Ford 5 but the overview shows that they are almost evenly distributed between social sciences and humanities, i.e. Fords 5 and 6. The specific features of the FEdu include not only the varied and thematically rich research but also rich artistic activities, in which the FEdu is one of the top Czech faculties of education. The FEdu is striving intensively to support research activities; the faculty has established the Educational Research Centre (CPV) which provides academics and students with continuous methodological support.

The specifics of the FEdu were also evident in the time of the pandemic, in the years 2020 and 2021 when academics had to adapt their teaching and research activities, and at the same time many of them participated significantly in the transition of primary and secondary schools to online teaching, created conditions for the involvement of students in teaching practice, and participated in the creation of new support materials for teachers. In this period, new topics, such as psychological and social support for pupils and students at different levels of schools, the issue of teacher burnout, became relevant and remain present in current debates about modern education, both at the level of government education policy and in the field of educational research and the preparation of future teachers.

The pandemic and post-pandemic situation was also reflected in specific research activities at the FEdu. The Faculty was involved in the project of the Technology Agency of the Czech Republic (TA ČR) *Changes of Selected Social Services Provided to People with Disabilities during the Viral Disease Crisis*, received support from the Czech Science Foundation (GA ČR) for the project *The Central European BDSM Subculture during the Pandemic*.

Due to the disciplinary focus, the FEdu cooperates mostly with kindergartens, primary and secondary schools and art schools in the Hradec Králové and Pardubice regions, and also with institutions operating in the field of other helping professions, including children's homes, homes for people with disabilities, hospitals, non-governmental non-profit organizations dedicated to children's leisure time, work with people with disabilities, etc. The FEdu also cooperates with cultural institutions of

the region, such as libraries, galleries, museums, philharmonics (especially non-teaching and teaching study programmes in the humanities and arts). The contribution of all fields of study developed at the FEdu lies mainly in the social sphere.

Table 3.1.1 - Staffing per FTE[2]

Academic/ Professional position	Total / Of which women					
	2019	2020	2021	2022	2023	Total
Professor	8.74/1.01	9.1/1.05	8.65/1.10	8.16/1.10	9.50/1.10	16/2
Associate Professor	26.26/11.56	23.94/10.40	24.79/11.41	24.17/11.35	22.63/11.94	39/15
Assistant Professor	80.57/52.94	83.62/53.86	80.62/50.61	78.7/49.65	77.39/50.40	128/86
Assistant	0.00/0.00	0.00/0.00	0.00/0.00	0.00/0.00	0.00/0.00	0/0
R&D Personnel[3]	0.00/0.00	0.00/0.00	0.00/0.00	0.00/0.00	0.00/0.00	0/0
Researchers in other categories[4]	36.37/20.80	31.52/17.14	27.81/14.95	29.55/15.26	31.81/16.82	185/109
Technical and economic staff[5]	1.00/1.00	1.00/1.00	2.00/2.00	1.83/1.83	2.00/2.00	2/2
Scientific, research and development staff involved in teaching activities	147.06/83.86	145.24/81.00	139.16/76.68	136.25/75.42	135.01/76.77	321/183
Early career researchers[6]	45.26/30.62	41.76/26.97	36.49/23.18	30.65/18.46	28.30/17.00	73/50
Total[7]	152.94/87.31	149.18/83.45	143.87/80.07	142.41/79.19	143.33/82.16	370/214/ 731.73/412.18

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

[2] The average number of hours worked is calculated as the ratio of the total number of hours actually worked during the reference period, from 1 January to 31 December, by all staff (including agreement on work activity, excluding agreement on work performance) to the total annual working time pool per full-time employee. The full- time status of the worker in the evaluated unit is always reported. If an employee holds more than one type of full-time job within the evaluated unit, the total sum of the two shall be reported.

[3] The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

[4] The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

[5] Who participates in the management and support of R&D&I in the institution.

[6] See Definition of Terms in Methodology HEI2025+.

[7] Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

3.1.2 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2019 (numbers of physical employees and personnel)[8]

Academic/ professional position	Under 29 years		30-39 years old		40-49 years old		50-59 years old		60-69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	0	0	0	0	0	0	11	1
Associate Professor	0	0	0	0	3	1	5	2	6	5	14	4
Assistant Professor	0	0	8	4	34	23	26	18	21	14	6	3
Assistant	0	0	0	0	0	0	0	0	0	0	0	0
R&D Personnel[9]	0	0	0	0	0	0	0	0	0	0	0	0
Researchers in other categories[10]	0	0	23	5	22	15	3	1	5	3	0	0
Technical and economic staff[11]	0	0	1	1	1	1	0	0	0	0	0	0
Scientific, research and development staff involved in teaching activities	0	0	22	9	57	38	34	21	32	22	31	8
Early career researcher[12]	0	0	12	7	23	13	13	10	7	6	0	0
Total[13]	0	0	32	10	60	40	34	21	32	22	31	8

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D Personnel, Researchers in other categories and Technical and economic staff are mutually exclusive, i.e. one staff member is reported in only one category. The categories of scientific, research and development staff involved in teaching activities and early career researchers are reported collectively for all the above-mentioned categories.

[8] The total number of employees/workers as of 31st December of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

[9] The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

[10] The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

[11] Who participates in the management and support of R&D&I in the institution.

[12] See Definition of Terms in Methodology HEI2025+.

[13] Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I Personnel, Researchers in other categories and technical and economic staff.

3.1.3 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2023 (numbers of physical employees and personnel)[14]

Academic/ professional position	Under 29 years		30-39 years old		40-49 years old		50-59 years old		60-69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	1	0	2	0	0	0	7	1
Associate Professor	0	0	0	0	2	0	8	4	5	5	10	4
Assistant Professor	0	0	8	4	41	28	22	17	17	11	4	1
Assistant	0	0	0	0	0	0	0	0	0	0	0	0
R&D Personnel[15]	0	0	0	0	0	0	0	0	0	0	0	0
Researchers in other categories[16]	3	1	23	6	13	9	7	4	4	1	0	0
Technical and economic staff[17]	0	0	1	1	1	1	0	0	0	0	0	0
Scientific, research and development staff involved in teaching activities	3	1	19	8	53	34	38	24	25	17	21	6
Early career researcher[18]	0	0	14	9	14	8	8	6	2	2	0	0
Total[19]	3	1	32	11	58	38	39	25	26	17	21	6

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

[14] The total number of employees/workers as at 31.12. of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

[15] The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

[16] The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

[17] Who participates in the management and support of R&D&I in the institution.

[18] See Definition of Terms in Methodology HEI2025+.

[19] Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

Table 3.1.4 – Students

Type of study	2019		2020		2021		2022		2023		Total	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Undergraduate	2298	1894	2227	1828	2571	2040	2689	2141	2664	2114	5223	4168
Master's[20]	1613	1340	1519	1273	1458	1245	1430	1257	1370	1206	2872	2437
Doctoral	56	31	52	29	39	21	33	17	44	25	81	48
Lifelong Learning Courses	29	21	26	20	26	20	27	23	38	37	105	91
Total	3910	3214	3715	3054	3929	3196	4073	3352	4030	3304	-	-

Table 3.1.5 - Study programmes in Czech/English

Type of study programme	Total[21] / Of which professional study programmes											
	2019		2020		2021		2022		2023		Total	
Undergraduate	11/4	0/0	38/10	0/0	42/12	0/0	44/12	0/0	46/12	0/0	46/12	0/0
Master's	15/3	0/0	18/6	0/0	21/7	0/0	21/7	0/0	21/8	0/0	21/8	0/0
Doctoral	5/0	0/0	6/0	0/0	6/0	0/0	6/0	0/0	10/0	0/0	10/0	0/0
Lifelong Learning courses	2/0	0/0	2/0	0/0	3/0	0/0	2/0	0/0	2/0	0/0	4/0	0/0
Total	33/7	0/0	64/16	0/0	72/19	0/0	73/19	0/0	79/20	0/0	-	-

Note: For each SP type, enter the number of SPs in Czech language in the first cell and insert the number of SPs in English language after the slash in the same cell (e.g. 15/3), enter the number of professional SPs in Czech language in the second cell and insert the number of professional SPs in English language after the slash. Follow a similar procedure in the last column of the table (Total).

3.1.6 – R&D&I capacities

R&D&I field	FORD	FORD share [%]	Predominant type of research	Total share of industry group [%]
1. Natural Sciences	1.1 Mathematics	0.12	Basic Research	1.27
	1.2 Computer and information sciences	0.92	Basic Research	
	1.3 Physical sciences		Zvolte položku.	
	1.4 Chemical sciences		Zvolte položku.	
	1.5 Earth and related environmental sciences		Zvolte položku.	
	1.6 Biological sciences		Zvolte položku.	
	1.7 Other natural sciences	0.23	Basic Research	
2. Engineering and Technology	2.1 Civil engineering	0.12	Basic Research	1.27
	2.2 Electrical engineering, Electronic engineering, Information engineering	0.35	Basic Research	

[20] All master's degree students are listed, regardless of the length of their programme of study.

[21] The total number of study programmes for which admissions have been announced in a given academic year.

	2.3 Mechanical engineering	0.45	Basic Research	
	2.4 Chemical engineering		Zvolte položku.	
	2.5 Materials engineering	0.23	Basic Research	
	2.6 Medical engineering		Zvolte položku.	
	2.7 Environmental engineering	0.12	Basic Research	
	2.8 Environmental biotechnology		Zvolte položku.	
	2.9 Industrial biotechnology		Zvolte položku.	
	2.10 Nanotechnology		Zvolte položku.	
	2.11 Other engineering and technologies		Zvolte položku.	
3. Medical and Health Sciences	3.1 Basic medicine		Zvolte položku.	3.58
	3.2 Clinical medicine	0.23	Basic Research	
	3.3 Health sciences	3.35	Basic Research	
4. Agricultural and veterinary sciences	4.1 Agriculture, Forestry, and Fisheries		Zvolte položku.	
	4.2 Animal and Dairy science		Zvolte položku.	
	4.3 Veterinary science		Zvolte položku.	
	4.4 Other agricultural sciences		Zvolte položku.	
5. Social Sciences	5.1 Psychology and cognitive sciences	2.08	Basic Research	47.41
	5.2 Economics and Business	0.69	Basic Research	
	5.3 Education	34.34	Basic Research	
	5.4 Sociology	5.90	Basic Research	
	5.5 Law		Zvolte položku.	
	5.6 Political science	0.58	Basic Research	
	5.7 Social and economic geography		Zvolte položku.	
	5.8 Media and communications	0.58	Basic Research	
	5.9 Other social sciences	3.24	Basic Research	
6. Humanities and the Arts	6.1 History and Archaeology	2.54	Basic Research	46.47
	6.2 Languages and Literature	20.58	Basic Research	
	6.3 Philosophy, Ethics and Religion	5.66	Basic Research	
	6.4 Arts (arts, history of arts, performing arts, music)	17.34	Basic Research	
	6.5 Other Humanities and the Arts	0.35	Basic Research	
	Total	100 %	-	100 %

RECOGNITION BY THE RESEARCH COMMUNITY

3.2 Recognition by the research community

The evaluated unit will briefly comment on its position in the research community. It shall consider individual and other prestigious R&D&I awards, participation of its academic staff in the editorial boards of international scientific journals, elected membership in professional societies, major invited lectures given by the evaluated unit's academic staff abroad or by foreign scientists and other relevant guests at the evaluated unit. Additionally, it will address the involvement of staff in the evaluation of national or European project/programme calls over the period of 2019–2023 based on the data provided in annex tables 3.2.1 to 3.2.5 (max. 10 most relevant items). If necessary, the evaluated unit shall list any additional services to the scientific community that it considers relevant.

Maximum 1000 words.

Self-assessment:

In the period under review, five academic staff members of the FEdu received prestigious awards. An international award was given to **Prof. PhDr. Bohuslav Mánek, CSc.** from the Department of English Language and Literature, who was awarded the annual award of the International Federation of Language Teacher Associations in 2021 for his outstanding achievements in the field of teaching English language and literature and his contribution to the development of good Czech-English relations. The Federation acknowledged the recognition Prof. Mánek has long received for his academic work, while also highlighting his translation activities, both his translations of poetry published in books and magazines and translations of audio-visual works.

Prof. PhDr. Tomáš Petráček, Ph.D., Th.D., a church historian and Catholic theologian from the Department of Cultural and Religious Studies, is the 2021 recipient of the Senate President's Silver Medal for Science and Faith. This award is given to distinguished scholars, artists, athletes, and other public officials who have excelled in their fields or by their special actions or abilities. Since 2012, the Senate President's Silver Medals have been awarded by the President of the Upper House of Parliament of the Czech Republic (CR) on the occasion of Czech Statehood Day, on 28 September.

Prof. PhDr. Jiří Skopal, CSc. from the Department of Music was awarded the 2022 Ministry of Culture Award in the field of leisure artistic activities for his long contribution in the field of children's choir singing. Prof. Skopal is a prominent choirmaster, music teacher and organizer of musical events. In the course of his professional activity at the FEdu which he started in 1974, he has focused mainly on the field of children's choir singing; the music department created a course on choir conducting at his instigation. In 1977, he took over the leadership of the Hradec Králové Choir Jitro. Under his leadership, the choir developed to a world-class level.

Prof. PhDr. Stanislav Bohadlo, CSc. from the Department of Music, a prominent Czech musicologist, critic, music educator, producer, initiator and organizer of cultural events, was awarded the Artis Bohemiae Amicis medal in 2023. The medal was awarded to him by the Minister of Culture for his lifelong achievement in musicological research and organizing in the field of pre-classical music, and for his contribution to research, general awareness and popularization of especially Italian music before 1800.

Mgr. Jan Suk, Ph.D. from the Department of English Language and Literature is the recipient of the Václav Königsmark Award: Honorary Award of the Theatre Studies Society for his contribution to theatre science. He received the award in 2019 as part of the 10th annual competition of the Theatre Studies Society for the Václav Königsmark Award for his doctoral thesis The Poetics of Immanence: Performance Theatre of Forced Entertainment which he defended at Charles University in Prague. The thesis was judged remarkable for its focus on contemporary poststructuralist thinking about theatre, performance and life art. The award-winning thesis was subsequently published in 2021 by

the prestigious publishing house De Gruyter **under the title** *Performing Immanence: Forced Entertainment*.

Academic staff of the FEdu serve on the editorial boards of foreign journals (Asian Journal of Contemporary Education, Verba theologica, L'Oiseau Bleu), and on the editorial boards of international journals published in the Czech Republic in English and indexed in the Scopus database (Caritas et Veritas, Ostrava Journal of English Philology, Musical Science).

Invited lectures cover a wide range of disciplines cultivated at the FEdu, namely education, philological and artistic topics. They also demonstrate long-term cooperation with foreign institutions such as Pädagogische Hochschule Graz, Austria, University of Opole, Poland, School of the Art Institute of Chicago, USA, and University of Findlay, Ohio. The lectures of scholars from abroad at the FEdu testify to the rich international cooperation in the period before the pandemic, specifically in 2019, but also to the successful renewal of international cooperation in 2022 and 2023. Academics presented a wide range of research topics in the field of pedagogy, history, anthropology, literature or musicology at their invited lectures given at foreign institutions some of which are listed below.

Academic staff of the FEdu are involved in the evaluation of R&D&I results as evaluators of TA ČR projects and as members of evaluation panels of the GA ČR; the cooperation with the Research, Development and Innovation Council (RVVI) is the most frequent. They also cooperate with the Scientific Grant Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic and the Slovak Academy of Sciences in the evaluation of specific research projects.

The Department of French Language and Literature has a long-term international cooperation with a partner department at the Université de Lille. It is focused on research on literature for children and young people. It is a unique systematic research in this field in the Czech Republic. The most important outputs of this cooperation which was established in 2005 and has been developed in recent years by **Assoc. prof. PhDr. Květuše Kunešová, Ph.D.** include the annual International Conference on Literature for Children and Youth. Publications in the journal *L'Oiseau Bleu* published at the Université de Lille by the research unit ALITHILA (Analyses littéraires et histoire de la langue) represent important outputs of the international conference, e.g., KUNEŠOVÁ, Květuše. L'image de la mort dans la littérature québécoise de jeunesse : La fête des morts de Dany Laferrière. *L'Oiseau Bleu*. 2022, (3), p:p:. ISSN 2781-954X. Assoc. prof. Kunešová is also a member of the editorial board of the journal. **Mgr. Helena Polehlová, Ph.D.** from the Department of English Language and Literature published *Gildas. On the Destruction of Britain* in 2023 by the prestigious Czech publishing house Argo. The publication consists of a translation and an extensive scholarly study. The book was nominated for the Litera for Translation award at the Magnesia Litera competition in 2024.

Table 3.2.1 - Prestigious R&D&I awards granted during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the award	Awarding institution
prof. PhDr. Bohuslav Mánek, CSc.	Annual award of the International Federation of Language Teacher Associations for outstanding achievements in the field of teaching English language and literature and his contribution to the development of good Czech-English relations	International Federation of Language Teacher Associations Award 2021
prof. PhDr. Tomáš Petráček, Ph.D., Th.D.	Senate President's Silver Medal for Science and Faith in 2021	Czech Senate
prof. PhDr. Jiří Skopal, CSc.	Ministry of Culture Award in the field of children's leisure artistic activities	Ministry of Culture of the Czech Republic (2022)
prof. PhDr. Stanislav Bohadlo, CSc.	Artis Bohemiae Amicis	Czech Minister of Culture (2023)
Mgr. Jan Suk, Ph.D.	Václav Königsmark Award: Honorary Award of the Theatre Studies Society for his contribution to theatre science	Theatre Studies Society

Note: Provide up to 10 examples.

Table 3.2.2 Participation of academic staff of the evaluated unit in editorial boards of international scientific journals during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of scientific journal, ISSN
Mgr. et Mgr. Petra Ambrožová, Ph.D., MBA	Asian Journal of Contemporary Education, ISSN 2617-1252
Mgr. Martin Kaliba, Ph.D.	Asian Journal of Contemporary Education, ISSN 2617-1252
Doc. Mgr. David Bouma, Ph.D.	Caritas et Veritas ISSN: 1805-0948
Th.Lic. František Burda, Ph.D.	Caritas et Veritas, ISSN 1805-0948
Prof. Tomáš Petráček, Ph.D.	Verba theologica, ISSN 1336-1635
Květuše Kunešová, doc., PhDr., Ph.D.	L'Oiseau Bleu ISSN 2781-954X (member of the journal's scientific editorial board), Lille, Francie
Prof. PhDr. Bohuslav Mánek, CSc.	Ostrava Journal of English Philology ISSN 1803-8174, ISSN 2571-0257 (online), (Advisory Board, Scopus)
Mgr. Jan Suk, Ph.D.	Ostrava Journal of English Philology ISSN 1803-8174, ISSN 2571-0257 (online), (Advisory Board, Scopus)
prof. PhDr. Stanislav Bohadlo, CSc.	Hudební věda. ISSN 0018-7003 (Print) ISSN 2694-6998 (Online). Scopus/WoS

Note: Please provide up to 10 examples of academic staff participation in editorial boards of international scientific journals (e.g. editor, editorial board member, etc.).

Table 3.2.3 The most important invited lectures delivered by the academic staff of the evaluated unit at foreign institutions during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Invited lecture title	Name of host institution, or name of conference or event	Year
Martin Skutil, Mgr. et Mgr., Ph.D.	Different approaches to assessment in education	University of Oldenburg (Germany)	2019
Mgr. Jan Suk, Ph.D.	Propositions #1	Invited lecture at the School of the Art Institute of Chicago, Chicago, USA	2019
Prof. Tomáš Petráček, Ph.D.	The Controversy on the Christian Social Movement in Czechia and Slovakia	Ca Foscari University of Venice	2020
Mgr. et Mgr. Lucie Francová, Ph.D.	Sport for people with intellectual impairment in the Czech Republic	Turkish Special Athletes Sport Federation and Van Yüzüncü Yıl University, Turkey	2022
PaedDr. Ivo Harák, Ph.D.	Sarmacia – early Mannerist fictitious ego-document	A. Mickiewicz University in Poznan	2022
Mgr. Jana Karlová, Ph.D.	„Homes – Cities – Communities: Contemporary challenges of living in diversity" & „Homes – Cities – Communities in Cologne: Impressions and reflections based on a Czech perspective"	Lectures with discussion, participation in field analysis and reflection in the framework of the workshop Internationale Begegnungswoche/ International Encounter Week (Katholische Hochschule Nordrhein-Westfalen and Bethlehem University), Cologne	2022
Mgr. Františka Schormová, Ph.D.	"The Czechoslovak Connection: Spies, Translators, and African American Poets in Cold War Prague"	Czech Semester Lecture Series, Missouri Southern State University	2022
Prof. PhDr. Jan Hábl, Ph.D.	Neither angels nor daemons – Comenius's educational anthropology	Jubilee Centre for Character and Virtue, Univ. of Birmingham	2022
Naděžda Heinrichová, PhDr., Ph.D.	*Zum Einsatz der graphischen Romane im FSU*	Austria, Pädagogische Hochschule Graz, Come2Graz - International Week	2023
Mgr. Kateřina Andršová, Ph.D.	Roma People and Their Music in Europe	University of Findlay, USA, Ohio (international mobility)	2023

Note: Provide up to 10 examples.

Table 3.2.4 - The most important lectures by foreign scientists and other guests relevant to R&D&I at the evaluated unit during the evaluation period

Name, surname and title(s) of the lecturer	Lecturer's employer at the time of the lecture	Invited lecture title	Year
prof. Shan-Mei Tseng, Ph. D.	National Pingtung University, Taiwan	Music Teaching under the Trend of Globalization	2019
Sabina Wieruszewska-Duraj, Katarzyna Marciniak-Paprocka, Ewa Jówko	Siedlce University of Natural Sciences and Humanities, Poland	Methods of work with students whit special educational needs	2019
Anja Agaard Christensen, Ph.D.	VIA University College Viborg, Denmark	Social Innovation: local and global reasons for working as a social entrepreneur	2019
doc. Sergey Zasorin	Moscow State Pedagogical University, Russian Federation	Historical memory of contemporary Russians. Soviet-czechoslovakian relationships in the second half of 20th century	2019
prof. dr hab. Joanna Czaplińska	Institute of Literary Studies, University of Opole	Metodological lecture aimed at newly arising pathography studies	2022
James W. Pennebaker	University of Texas at Austin	Separating the speaker from the speech: Using language to understand the psychology of the author	2022
SeaHwa Jung, DMA	University of Findlay, USA, Ohio	American Music Education	2022
Dr. Franz Schindler	Justus-Liebig-Universität-Giessen	Does the life experience of lesbians and gays differ?	2023
HS-Prof. Univ.-Doz. Mag. Dr. Klaus-Börge Boeckmann	Austria, Graz University, Pädagogische Hochschule Steiermark	Authentizität und entdeckendes Lernen im (Fremd)Sprachenunterricht	2023
doc. Bartosz Jakubczak	Uniwersytet Muzyczny Fryderyka Chopina, Warsaw	Organ workshop	2023

Note: Provide up to 10 examples.

Table 3.2.5 - Involvement in the evaluation of national/European research project/programme calls relevant to the R&D&I area at the unit during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the research project/programme call	Name of the contracting authority/ guarantor of the project/programme call	Year
doc. Mgr. Adrián Agricola, Ph.D.	ÉTA (project evaluator)	TA ČR	2019 2020 2021 2022
PhDr. Ivan Růžička, Ph.D.	ÉTA (project evaluator)	TA ČR	2019 2020 2021 2022 2023
doc. PaedDr. Martina Maněnová, Ph.D.	Member of the expert group	TA ČR	2019 2020 2021 2022
prof. PhDr. Tomáš Petráček Ph.D., Th.D.	Panel No. 401/Philosophy, Theology, Religious Studies	GA ČR	2019 2020 2021 2022
Mgr. et Mgr. Martin Skutil, Ph.D.	Evaluator of selected VaVaI results according to M17+	RVVI	2019 2020 2021
doc. PhDr. Květuše Kunešová, Ph.D.	Expert body of evaluators	RVVI	2019 2020 2021 2022 2023
PhDr. Nella Mlsová, Ph.D.	Expert body of evaluators	RVVI	2021 2022 2023
PhDr. Naděžda Heinrichová, Ph.D.	Expert body of evaluators	RVVI	2021 2022 2023
Mgr. Jana Kostincová, Ph.D.	Expert evaluation for the Scientific Grant Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic and the Slovak Academy of Sciences (VEGA)	Scientific Grant Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic and the Slovak Academy of Sciences (VEGA)	2022
Mgr. Jana Karlová, Ph.D.	Expert evaluation for the Scientific Grant Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic and the Slovak Academy of Sciences (VEGA)	Scientific Grant Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic and the Slovak Academy of Sciences (VEGA)	2022

Note: Provide up to 10 examples.

RESEARCH PROJECTS

3.3 Research projects

The evaluated unit shall list at most 10 (considered most significant by the evaluated unit) research projects/activities (regardless of whether they are supported by public funds or based on contract research[22]) that it has implemented or participated in during the period of 2019–2023[23]. This should be done from the full list in annex tables (Table 3.3.1-3.3.2)[24], regarding particularly the results achieved or the application potential of the projects. The unit should also describe how the research projects contributed to the mission and purpose of the evaluated unit. If the evaluated unit has been a participant in listed project, it shall indicate which other entities were involved and describe its contribution to the project. The interdisciplinary aspects of the projects will also be commented on, along with any collaboration with other units of the evaluated HEI.

Maximum 300 words per project.

Self-assessment:

In the evaluated period, two projects were implemented at the faculty, the provider of which is GA ČR.

The year 2019 was the final year of the project GA17-17823S Russian Transmedia Poetry as a Model of Literature in Post-Digital Era, with Mgr. Jana Kostincová, Ph.D. from the Department of Russian Language and Literature as the investigator in 2017-2019. The focus of the project reflects the current trend towards interdisciplinary research of literature, orientation towards multimodal literature, viewed in the context of digital media. The researcher presented the Russian transmedia poetry as a field of artistic synthesis, using traditional and digital media, crossing the boundaries between physical and virtual space, and also close to social activism. The research results were presented, for example, at the prestigious ELO2019 (Electronic Literature Organization) conference at University College Cork, Ireland. The main output is represented by the monograph *slova_interfejsy: Ruská postdigitální poezie (words_interfaces: Russian Postdigital Poetry)*. Pavel Mervart Publishing House, 2020. The project is in line with the literary research at the Department of Russian Language and Literature which focuses on exploring contemporary literature in a broad context, addressing the topics of literature and technology, literature and gender, literature and activism. This is evidenced in a collective monograph which was produced as part of one of the first postdoctoral projects (Odehnalova, L. (ed.) *Jiné texty, jiní autoři. [Mezi]prostory současné literatury (Other Texts, Other Authors. Liminal Spaces of Contemporary Literature)*. Pavel Mervart Publishing House, 2023) and which was also the result of the collaboration of the authors of three language departments, namely the Department of Russian Language and Literature, the Department of Czech Language and Literature and the Department of German Language and Literature.

In 2023, Mgr. Lucie Drdová, Ph.D. from the Institute of Social Studies started the project GA23-07020S*, BDSM under-CoV-2*: *The Central European BDSM Subculture during the* Pandemic which has funding for 2023-2025. Mgr. Lucie Křivánková, Ph.D. and Prof. Steven Saxonberg, Ph.D., a Swedish professor of political science and sociology who has long been researching socio-political developments in post-communist countries are other members of the research team. This project focuses on the impact of the SARS-CoV-2 pandemic on the Czech, Slovak, Polish and Hungarian Bondage-Discipline-Dominance-Submission-Sadism-Masochism (BDSM) scene. The aim of this project is to analyse how

[22] For the definition of contract research for the purposes of evaluation in the HE segments, see Article 2.2.1 of the Community Framework for State Aid for Research, Development and Innovation 2014/C 198/01.
[23] Regardless of whether the projects are completed or still ongoing, provided that at least part of the project was implemented during the evaluation period.
[24] The evaluated unit shall only fill tables that are relevant to it.

the pandemic has affected the BDSM scene and the individual identity of BDSM practitioners, what differences have emerged between the countries and how they can be explained. Based on a pilot study, identity theories, and previous studies on how the gay community responded to the AIDS pandemic, the researcher formulated hypotheses for her research: (1) subcultural identity could be strengthened due to a sense of progressive marginalization by the majority society; (2) subcultural identity could be weakened due to increased social isolation; (3) subcultural identity does not become stronger or weaker, but rather simply changes as a result of: (a) a trend toward the elimination of fixed roles and toward greater individuation; (b) a shift to a more monogamous BDSM identity; (c) a specific BDSM narrative will emerge that makes sense of the sadness and isolation felt; and (d) a more rebellious and promiscuous BDSM identity will emerge. The project has already published a monograph *BDSM Communities in Central Europe: Societal Perspectives and Current Issues in the Digital Era*. Cham: Springer Nature Switzerland AG, 2024. ISBN 978-3-031-75619-1. The research project is in line with the long-standing research activities of the Institute of Social Studies, their focus on a wide range of topics in the social and social pedagogical sphere as well as in the field of prevention and treatment of risky behaviour and socially pathological phenomena in children, youth and adults.

In the period from 1 February 2019 to 31 December 2021, Mgr. Zdenka Sokolíčková, Ph.D. from the Department of Cultural and Religious Studies implemented the project EF18_070/0009476 Overheating in the High Arctic – Qualitative Anthropological Analysis which was supported by the Ministry of Education, Youth and Sports of the Czech Republic (MŠMT) within the Operational Programme Research, Development, and Education (2014-2020). The project was inspired by Dr. Sokolíčková's previous collaboration with the eminent Norwegian scientist, professor of social anthropology Thomas E. Eriksen from the University of Oslo, and was implemented in Longyearbyen, Svalbard. The research in the form of interviews investigated how people living in environmentally vulnerable environments perceive the processes of "overheating", how they re-/de-/construct their local identity and how they understand the changing world. The project was oriented towards anthropological exploration of the local impacts of broader global processes evident in culture, notions of identity, economy and environment. The aim of the project was to collect comprehensive cultural and anthropological data on the community studied and to analyse and interpret it. As an example, we present two C publication outputs and one B output:

Sokolíčková, Z. (2021). The Chinese Riddle: Tourism, China and Svalbard. In Lee, Young- Sook (Ed.). Asian Mobilities Consumption in a Changing Arctic, pp. 141-154. Abingdon Oxfordshire: Routledge

Eriksen, T. H., and Sokolíčková, Z. (2023). Extraction cultures in Svalbard: From mining coal to mining knowledge and memories. In Sörlin, Sverker (Ed.). Resource Extraction and Arctic Communities: The New Extractivist Paradigm. pp. 66-86. Cambridge: Cambridge University Press.

Sokolíčková, Z. (2023). The Paradox of Svalbard: Climate change and globalisation in the Arctic. London: Pluto Press.

The professional focus of the project corresponds to the interdisciplinary oriented research of the Department of Cultural and Religious Studies which is at the borderline of ethics, religious studies, philosophy, theology, social and cultural anthropology. After returning from the research stay abroad, the researcher, with the support of the Department, carried out a number of popularization events (interviews in the press, radio, presentation of a documentary film) that had a great response from the general public.

In the evaluated period, three projects supported by TA ČR were implemented at the FEdu.

In 2018-2020, the faculty participated in the project TH03020322 – Compensated Broadband Current Shunt with Inductive Coupling, whose beneficiary was the University of West Bohemia in Pilsen. Assoc. prof. PaedDr. René Drtina, Ph.D. from the FEdu, Department of Technology, and Assoc. prof.

Ing. Jaroslav Lokvenc, CSc. were the project investigator and co-investigator, respectively. The aim of the project was to construct a universal shunt for measuring AC currents of large ranges (500 A - 1 kA) and frequencies (50 Hz - 200 kHz), suitable for new or existing technology. Due to its unique design, the shunt was intended to have only minimal influence on the measured current and was also planned to be highly resistant to external electromagnetic fields. Due to these characteristics, its application was planned to be mainly in the field of wireless charging of electric vehicles or induction heating (melting). In both cases, current measurement is either difficult or technologically demanding. The collaboration of Assoc. prof. Drtina and Assoc. prof. Lokvenc with the University of West Bohemia resulted in patents No. 309328 Current Shunt and No. 309 692 Cascade Current Shunt.

In 2020-2023, Assoc. prof. PhDr. Iva Jedličková, CSc. from the Institute of Social Studies and Assoc. prof. PhDr. Pavel Vacek, Ph.D. from the Department of Pedagogy and Psychology participated in the project TL03000296 Digital Society open to Seniors with prof. RNDr. Peter Mikulecký, PhD. from the Faculty of Informatics and Management of the UHK as the principal investigator. The aim of the project was to create a unique extensible software platform that makes various digital content and services easily accessible to people with low digital literacy, especially the elderly. Selected usage scenarios focused on communication and media content, education and memory recording and sharing were implemented in the platform. The project combined knowledge from psychology, gerontology, andragogy, computer science including systems engineering and artificial intelligence. It was based on the needs and limitations of the target group, on which the output was tested systematically and adjusted according to the feedback. Assoc. prof. Jedličková applied in the project her research in education of the edlerly, andragogy, but also her long-term experience from the organization of courses of the University of the Third Age at the UHK. Assoc. prof. Vacek developed the topic of the influence of technology on adult education.

In 2021-2023, the FEdu participated in the project TL05000413 *Changes in Selected Social Services Provided to People with Disabilities in Times of Crisis Due to Viral Disease*. The project was implemented by the Department of Special Pedagogy of the Faculty of Education of the University of South Bohemia in České Budějovice and the Institute of Primary, Pre-Primary and Special Education of the FEdu, the project investigator from the FEdu being Mgr. Zuzana Truhlářová, Ph.D. The aim of the project was to map and analyse the approach of selected social services to quarantine measures associated with the occurrence of a viral disease and to propose and implement a pilot test of the procedure during quarantine measures. The project objective included the development of proposals for generally applicable procedures for social services in times of epidemic measures. The results of the research were presented and discussed at the conference Emergency Situation in Social Services – COVID-19 Experience, held on 17 October 2023. In addition to a number of scientific articles, we can mention the following two publications: the collective monograph **Marková, Aneta et al.** *Mimořádná situace v sociálních službách – zkušenosti z COVID-19. (Emergency Situation in Social Services – COVID-19 Experience).* Červený Kostelec: Pavel Mervart, 2023, as well as a recommended procedure for the Ministry of Labour and Social Affairs of the Czech Republic (MPSV): MARKOVÁ, Aneta and TRUHLÁŘOVÁ, Zuzana, ed. *Changes in Selected Social Services Provided to People with Disabilities in Times of Crisis Due to Viral Disease: Recommended Practice for the MLSA. Output of TL05000413-V6* [online]. University of South Bohemia in České Budějovice, 22 December 2022, p. 31 [cited 2023-05-05]. This research and its outputs relate to the research on the pandemic experience which was carried out from different perspectives at the various departments of the FEdu and which continues to be carried out due to the fact how strongly this experience has affected the field of education and social services, how it has manifested itself in the introduction of new forms of teaching, but also in the problems caused by social isolation.

The project DH23PO30VV022 *Memory Fibers. The Past and the Present of Vamberk Lace-Making* is funded by the Ministry of Culture of the Czech Republic (MK), NAKI III Programme – Programme to Support Applied Research in the Field of National and Cultural Identity in 2023-2030. The FEdu is the

beneficiary – coordinator of the project's financial support. PhDr. Vlastimil Havlík, PhD. is the beneficiary-coordinator's investigator. The other beneficiaries include the University of Chemistry and Technology in Prague and the National Heritage Institute, a state-owned organization of the MK. The duration of the project Memory Fibers is 1 March 2023 – 31 December 2027.

The main objective of the project, directed to the field of movable monuments, is to create the key tools and methodological procedures necessary for the preservation, protection and care of a part of the national cultural heritage belonging to the most endangered typological groups. The project is aimed at systematic analysis, documentation and presentation of the phenomenon of Vamberk lace-making. The analysis of the development of the lace-making craft and its historical and artistic personalities will complement the basic tools of identification and documentation and will lead to the elimination of shortcomings in the current imperfect registration and identification of the heritage values of lace and lace-making and to a significant improvement in the communication of these values at home and abroad. The interpretation of the findings will be presented in the form of three exhibitions with critical catalogues. Based on the findings, tools for care, restoration, systematic protection, appropriate presentation and use in heritage institutions of different types, by state and private owners and restorers will be developed in the form of a methodology. The exhibitions will be targeted for presentation to artists and designers, vocational education and folk art courses and, last but not least, to textile companies. The specified outputs are an essential scientific disposition for further grasping and presentation of Vamberk lace-making by public institutions, namely the Hradec Králové Region and the town of Vamberk that initiated the successful inscription on the List of Intangible Assets of Traditional Folk Culture of the Czech Republic which is an important first step to the efforts to inscribe the monument on the UNESCO list. The multi-layered research and interpretation carried out through the above outputs will support the conditions for the inscription of the monument on the UNESCO list.

In the period under review, the FEdu also implemented contract research projects for the first time, both in 2021.

The research report *Analysis of the Impact of the Pandemic Experience on Social Workers in Public Administration* was prepared for the MPSV. Its authors are Mgr. Zuzana Truhlářová, Ph.D. and Assoc. prof. Jana Marie Havigerová, Ph.D. from the Institute of Primary, Pre-Primary and Special Education, and Mgr. Jiří Haviger, Ph.D. from the Department of Mathematics and Quantitative Methods of the Faculty of Informatics and Management of the UHK.

Assoc. prof. PaedDr. Martina Maněnová, Ph.D., Mgr. Jitka Vítová, Ph.D. and Mgr. Janet Wolf, Ph.D. and Ph.D. from the Institute of Primary, Pre-Primary and Special Education, developed, within the framework of contract research for iSophi s.r.o., an applicant in the Prague Voucher for Innovative Projects programme, a proposal for a prototype of a pedagogical diagnostic tool for pupils entering the first grades of primary schools and a methodology for using the diagnostic tool.

The cooperation between the FEdu and the Faculty of Informatics and Management on the TA ČR project Digital Society Open to Seniors and the research report Analysis of the Impact of Pandemic Experience on Social Workers in Public Administration can be mentioned in the context of the UHK.

A significant part of the supported projects have an interdisciplinary character which is usually oriented towards the using or thematising digital technologies, whether it is an exploration of the relationship between literature and digital technologies, the exploration of digital technologies in a social context, the use of technologies in documenting and archiving cultural heritage (project dedicated to the phenomenon of lace), etc. It is therefore understandable that interfaculty cooperation within the UHK is directed towards the FIM UHK.

Table 3.3.1 Projects supported by public funds

In the role of beneficiary						
Provider[25]	Project name	Support (in thousands CZK/EUR)[26]				
		2019	2020	2021	2022	2023
GA ČR	Russian Transmedia Poetry as a Model of Literature in Post-digital Era	281/11	-	-	-	-
MŠMT	Overheating in the High Arctic – Qualitative Anthropological Analysis	4043/160	1375/54	1375/54	-	-
GA ČR	BDSM under-CoV-2: The Central European BDSM Subculture during the Pandemic	-	-	-	-	1498/59
MK	Memory Fibres. The Past and the Present of Vamberk Lace-Making	-	-	-	-	2606/103
Total		4324/171	1375/54	1375/54	0/0	4104/162
In the role of another participant						
Provider[27]	Project name	Support (in thousands CZK/EUR)				
		2019	2020	2021	2022	2023
TA ČR	Compensated Broadband Current Shunt with Inductive Coupling	200/8	147/6	-	-	-
TA ČR	Changes of Selected Social Services Provided to People with Disabilities during the Viral Disease Crisis	-	-	353/14	761/30	905/36
Total		200/8	147/6	353/14	761/30	905/36

[25] If the provider is from abroad, please indicate the provider's country of origin in brackets. For the determination of the country of origin of the provider, the place of residence of the provider is decisive.
[26] Indicate the total amount expressed in thousands of CZK and the conversion of the total amount into Euro.
[27] Ibid.

Table 3.3.2 - Contract research activities

Client[28]	Activity name	Revenue (in thousands CZK/EUR)				
		2019	2020	2021	2022	2023
MPSV	Analysis of the Impact of the Pandemic Experience on Social Workers in Public Administration. Research Report.	-	-	99/4	-	-
iSophi education s.r.o.	Prototype of a pedagogical diagnostic tool for school readiness testing for primary schools https://isophi.cz/diagnostika-pro-zs/	-	-	499/20	-	-
Total		-	-	598/24	-	-

Note: List and describe contract research activities with a revenue in a given calendar year, regardless of the amount of financial revenue.

[28] If the client is from abroad, indicate in brackets the country of origin of the client.

3.4 Research results with existing or prospective impact on society

The evaluated unit shall briefly comment on a maximum of 10 (considered most significant by the evaluated unit) research results already applied or realistically heading towards application during the period of 2019–2023, based on the overview annex table 3.4.1 (it is recommended to indicate results with a link to projects listed in indicator 3.3). The evaluated unit must demonstrate in its description that the research results have led or will soon lead to positive impacts[29], on society (e.g. description of how the results are used by various users, the range of persons/institutions for which the result is relevant, measurable economic impacts, etc.). The evaluated entity shall indicate in its commentary whether the gender dimension is considered in these results and discuss the impacts of the results regarding sustainability.

Maximum range 300 words/result.

Self-assessment:

The research report titled Analysis of the Impact of the Pandemic Experience on Social Workers in Public Administration is the result of contract research carried out in 2021 and was prepared for the MPSV. The research report reflects a situation when, like most countries, the Czech Republic was facing the epidemic disease Covid-19, social conditions were changing and society was exposed to a global crisis which resulted in an emphasis on the need for social work. The aim of the analysis was to map the impact of the pandemic experience on social workers, to use the data to assess the mental health risks and needs of social workers, and to propose recommendations to the MPSV.

The iSophi pedagogical diagnostic tool is the output of a 2021 contract research project. It is designed primarily for primary school teachers and can be used both during primary school enrolment and after entry into the first year of primary school. The publication VÍTOVÁ, Jitka, M. MANĚNOVÁ, J. WOLF. Pohledy na diagnostiku školní připravenosti. (Perspectives on School Readiness Diagnostics). Červený Kostelec: Pavel Mervart, 2021, is related to the topic of the contract research. The book presents the results of a two-year survey on school readiness and delayed school entry. A large part of the book is devoted to the analysis of results from children testing by the researchers as to school readiness using the iSophi diagnostic tool. Both the diagnostic tool itself and the book following the contract research project touch on the current topic of school readiness. This topic is seen as extremely important for the society as the Czech Republic is one of the countries with a high rate of postponed school entry, with almost 25% of children being enrolled in compulsory school attendance with a one-year postponement. Experts are calling for a reduction in the number of postponements but, at the same time, warn of possible risks, including increased educational failure. This demonstrates the importance of school readiness diagnosing.

The following methodological procedures and recommendations are based on the findings obtained from a research survey of providers, founders and clients of social services within the project Changes of Selected Social Services Provided to People with Disabilities during the Viral Disease Crisis. The methodological procedures were pilot-tested in practice and commented on by both social service providers and the MPSV.

Recommended methodological procedure for providers of selected social services – HOME FOR PERSONS WITH HEALTH DISABILITIES was prepared by Assoc. prof. P. Zikl from the Institute of Primary, Pre-Primary and Special Education together with Mgr. Eva Fremuthová, Director of the Home on the Silver Hill. The methodological procedure is focused on the residential social service of the Home for Persons with Disabilities (HPD). The draft of this methodological procedure was created on the basis of the results of research and verification in the practice of HPD. This service is mainly provided to clients with intellectual and combined disabilities, a group that was the second most at risk group in

[29] See Terms definition.

terms of mortality (after the elderly) during the COVID-19 pandemic. Due to the nature of the service, closure is not an option and the proposed procedures aim to minimise the impact of the epidemic on both the clients and staff. The whole procedure is divided into parts according to chronology – prevention, crisis, progress, end and evaluation of the crisis. Checklists for each phase are provided at the end.

Ivana Havránková, head of the Social Services and Prevention Department at the Hradec Králové Municipality, and Pavlína Potůčková from the Institute of Primary, Pre-Primary and Special Education have prepared a Recommended Methodological Procedure for Providers of Selected Social Services – PERSONAL ASSISTANCE. Personal assistance ensures the provision of support and assistance to a wide target group, in particular, to persons with reduced self-sufficiency due to age, chronic illness or disability, whose situation requires the help of another person due to an adverse situation that they are unable to resolve on their own and need additional help and support in various areas of their lives. The recommended working procedures for personal assistance constitute a basic framework of procedures in situations where the outreach service faces a crisis situation due to a viral disease. The draft procedures emphasise partial situations at different stages and times. The outreach service has its own specificities that are solved individually with the client. The diversity of situations requires considerable management concentration and logistics by the provider so that negative impacts are minimal for all parties involved. The provision of timely, comprehensible information by the state and local government (especially information in the areas of health, law, work with clients, work with staff), ensuring the material and technical equipment of providers, as well as the financial stability of providers is an important issue for the functioning of the service in times of crisis.

PhDr. Petra Bendová, Ph.D., MBA from the Institute of Primary, Pre-Primary and Special Education is the author of the document Recommended Methodological Procedure for Providers of Selected Social Services – EARLY CARE. Early care is a social prevention service. Due to the fact that it is mainly implemented in the field, i.e., in client families, its implementation is linked fundamentally to generally valid anti-epidemiological regulations concerning, for example, the use of protective equipment, (limited) contact of persons, etc. The above suggestions for working practices are based on the practice of the selected early care social service. They form helpful working material that can be built upon, but the individual early care service providers must further refine them in their internal regulations and adapt them to the specificities of the particular early care service, the target group as well as to their own practice.

Recommended Procedure for the MPSV, Marková, A., Truhlářová, Z., Zikl, P., Bendová, P., Havránková, I., Mojžíšová, A., Prázdná, R., Nesládek, M.

The document represents the output of the project Changes in Selected Social Services Provided to People with Disabilities in Times of Crisis Due to Viral Disease (TL05000413) which is implemented by the University of South Bohemia in České Budějovice and the UHK in cooperation with the application guarantor of the project, the MPSV, and which was financially supported by the TA ČR in the ÉTA programme. The aim of the project was to map and analyse the approach of selected social services to dealing with quarantine measures associated with the occurrence of a viral disease, to propose and pilot test the procedure for quarantine measures and to develop a proposal for generally valid procedures for social services during epidemiological measures.

The patents No. 309328 Current Shunt and No. 309 692 Cascade Current Shunt are the result of the collaboration of Assoc. Prof. PaedDr. René Drtina, Ph.D. and Assoc. Prof. Ing. Jaroslav Lokvenec, CSc. from the Department of Technology with the University of West Bohemia in Pilsen, specifically the project TH03020322 – Compensated Broadband Current Shunt with Inductive Coupling.

The evaluation report for the previous period appreciated the contribution of the FEdu in the field of applied research results with non-economic impact on society, namely monographs and textbooks with a wide range of social impact – education, re-education, and rehabilitation. Therefore, Table

3.4.1 shows, in addition to outputs from specific projects, also some publications that we consider to be particularly relevant in this respect.

The monograph *Educational Aspirations of Contemporary Seniors* is based on a project carried out at the Institute of Social Studies of the FEdu and is closely related to the University of the Third Age of the UHK where the elderly are the recipients of the educational offer. The educational aspirations of current seniors were investigated. The authors decided to map the motivations and reasons for education in this population group which has certain specificities. Topics closely related to external influences involved in the process of forming educational aspirations and the educational process itself are represented, including the impact of the covid-19 pandemic. The text thus provides a comprehensive insight into the educational needs of this target group.

The monograph *Motor Skills of Children with Mild Mental Disabilities* deals with the topics of education of children with mild mental disabilities; their inclusion or placement in special schools, or the issues of curriculum content are widely discussed topics. This publication focuses on motor skills that are one of the basic prerequisites for education, independent living or employment. The main part of the work is formed by the presentation of the results of several research studies aimed at comparing children with mild intellectual disabilities with the general population in fine motor, gross motor and manual skills. Attention is also paid to the analysis of curriculum documents focusing on motor activities and, last but not least, recommendations for practice.

As to the results with an impact on the society, we consider necessary to mention the involvement of academic staff in the elaboration of curriculum documents prepared within the framework of the extensive reform of the Framework Educational Programmes for both levels of primary school. The Framework Education Programmes (FEPs) constitute a generally binding framework for the development of school curricula in all fields of education in pre-primary, primary, primary artistic, language and secondary education. The FEP sets out, in particular, the specific objectives, forms, duration and compulsory content of education, its organisational structure, the conditions for the course and completion of education and the principles for the development of school education programmes. PhDr. Hana Havlínová, Ph.D. from the Institute of Primary, Pre-primary and Special Education participated in the development of the FEP for primary education (responsibility for the parts concerning the first level of primary education).

The formulation of another important document that is to influence the quality of teacher training, the Competency Framework for Graduate Teachers, was co-authored by Mgr. Daniela Vrabcová, Ph.D. from the Department of Education and Psychology. It is a document that describes the professional competences that every graduate of the teacher education programme should be equipped with. This document is a shared vision for the quality of teacher training and is intended to serve to further improve the quality of teacher training in the Czech Republic.

The opportunity to participate in the formulation of documents that will influence fundamentally the shape of the Czech education system means that pedagogical research at the FEdu has long maintained a high quality. Many colleagues are also actively involved in the work of the Czech Association of Educational Research.

The research of the FEdu is oriented towards the school and out-of-school pedagogy but also social work, areas that traditionally show a significant imbalance in terms of gender. In the Czech Republic, women are significantly predominant in these areas, and this fact is consequently reflected in the content of the projects, in the staff structure of the institutions with which the research is carried out, and in the structure of the institutions to which the research results are offered. The research teams and working groups at the FEdu are formed predominantly on the basis of disciplinary proximity and shared previous work experience, the gender perspective is difficult to apply. Individual projects are no exception.

Table 3.4.1 - Overview of research results in the period under evaluation

Type of result[30]	Year of application	Name
Research report	2021	Analysis of the impact of the pandemic experience on social workers in public administration
iSophi education s.r.o.	2021	Prototype of a pedagogical diagnostic tool for school readiness testing for primary schools
Patent No. 309328	2022	Current shunt
Methodological procedure	2023	Recommended methodological procedure for providers of selected social services – HOMES FOR PEOPLE WITH DISABILITIES
Methodological procedure	2023	Recommended methodological procedure for providers of selected social services – PERSONAL ASSISTANCE
Methodological procedure	2023	Recommended methodological procedure for providers of selected social services – EARLY CARE
Results reflected in approved strategic and conceptual documents	2023	Recommended procedure for the MLSA
Patent No. 309 692	2023	Cascade current shunt
Monograph	2023	KRUPKOVÁ, Kateřina, I. JEDLIČKOVÁ, V. BĚLÍK. *Vzdělávací aspirace současných seniorů. (Educational Aspirations of Contemporary Seniors)*. Červený Kostelec: P. Mervart, 2023. ISBN 978-80-7465-616-3
Monograph	2021	ZIKL, Pavel**.** *Motorika dětí s lehkým mentálním postižením*. (*Motor skills of children with Mild Mental Disabilities)*. Prague: Karolinum, 2021. ISBN 978-80-246-5015-9

Note 1: Please list and describe the results already applied in practice or heading towards application in practice with existing or prospective impact on the society (e.g. domestic or foreign patents, sold licenses, spin-offs, prototypes, varieties and breeds, methodologies, significant analyses, surveys, expert outputs for policymaking or other forms of non-publication outputs, etc.). Indirect results of research, development and creative activities with documented societal impact, e.g. expert activities, services to the public/government/scientific community, may also be reported.

[30] Specify the specific type of result. Add rows as needed.

TRANSFER OF RESULTS INTO PRACTICE

3.5 Transfer of results into practice

The evaluated unit shall briefly describe its system for transferring results into practice. It shall also indicate up to five of the most typical users of its results, whether in the university environment or in the non-university application/corporate sphere, detailing how it collaborates with them and how it seeks out new users (using a maximum of five specific examples).

It will also indicate whether and how it commercialises R&D&I results (e.g. selling licences, setting up start-up or spin-off companies, etc.)[31], providing brief description of the commercialisation methods used. The effectiveness of the transfer of results and the commercialisation of R&D&I results will be described using a selection of results (max. five) listed in annex table (Table 3.4.1).[32]

Additionally, the evaluated unit shall briefly comment on the funds received during the period of 2019–2023 from non-public, non-grant sources (e.g. licences sold, spin-off revenues, donations, etc.). A full summary shall be provided in annex table (Table 3.5.1).

Maximum 500 words plus 200 words for each provided example of finding a new user of results and commercialization.

Self-assessment:

The FEdu cooperates primarily with schools of all types (kindergartens, primary and secondary schools), as well as with institutions working in the field of helping professions, including, in particular, children's homes, homes for people with disabilities, hospitals, schools, and non-governmental non-profit organizations dedicated to children's leisure time, prevention or work with people with disabilities, etc. Due to its nature, the composition of study programmes and research focus, the FEdu is not oriented towards the establishment of spin-offs, and the application of patents that were created thanks to the cooperation of the Department of Technology with the University of West Bohemia in Pilsen, remains marginal and not quite typical.

Donations are mostly directed to the field of pedagogical research or artistic activities.

Financial donations that were repeatedly provided by the Hradec Králové Bishop's Office and once by Bohemia Event Service s.r.o., Prague, were intended for the activities of the Music Department.

In 2019, the French University of Lille continued its financial support of the Department of French Language and Literature, specifically to support the holding of a conference on children's literature and to support the publication of a publication output. Here again, pandemic constraints were at work, leading to the transfer of the conference to an online format after which the financial support did not continue although the collaboration with the University continues. The activities of the Department of French Language and Literature have also been supported repeatedly by Gallica, z. s., an association of university teachers of French at Czech universities which contributes to research activities in the field of French literature. In 2023, they supported the publication of the outputs of the international conference Vérité et mensonge: information et désinformation en littérature de jeunesse.

The largest financial donations were provided by Otevřeno, z.s. movement which supported specific activities of the academic staff of the FEdu in 2021, 2022 and 2023. In 2022-2023 it was the *Collegial Networks in the Preparation of Future Teachers* by Assoc. prof. Mgr. Kateřina Juklová, Ph.D. from the Department of Pedagogy and Psychology, and *The Teacher is a Hero – Prevention of Children's Online*

[31] In the case of military HEIs, their specific position is taken into account when evaluating the commercialisation/evaluation of R&D&I results.
[32] If the commercialisation of R&D&I results is carried out in this way.

Risky Behaviour by Mgr. Martin Kaliba, Ph.D. from the Department of Primary, Pre-Primary and Special Education.

In 2021-2022, the projects *Character Matters* by prof. PhDr. Jan Hábl, Ph.D. from the Department of Pedagogy *and Psychology and* Don't *Be Afraid of Experiencing – Developing Emotional Intelligence by* Ing. et Bc. Stanislav Michek, Ph.D. from the Department of Primary, Pre-Primary and Special Education were supported by the Otevřeno movement.

Hradecká nokturna, z.s. contributed to the financing of the educational, scientific, research, development, innovation, artistic and other creative activities of the Faculty of Education in 2019 and 2023.

Pojišťovací servis M+M s.r.o. Hradec Králové provided a financial donation to the Institute of Primary, Pre-Primary and Special Education for the organization of the international conference Current Issues and Possibilities in the Field of Intervention for Persons with Disabilities.

Table 3.5.1 - Summary of non-public revenues received during the period under evaluation

Type of revenue	Revenue (in thousands CZK/EUR)				
	2019	2020	2021	2022	2023
Co-ownership interests – patents	-	-	7.3/0.3	1/0.04	1.3/0.05
Hradecká nokturna z.s., Hradec Králové	3/0.1	-	-	-	3.5/0.14
Hradec Králové Bishop's Office	45/1.8	45/1.8	-	-	-
Bohemia Event Service s.r.o., Prague	8/0.3	-	-	-	-
University of Lille, Lille, France	10.5/0.4	-	-	-	-
Gallica z.s., Kájov	10/0.4	10/0.4	-	-	8/0.3
Fomei s.r.o., Prague	-	10/0.4	-	-	-
Otevřeno, z.s., Brno	-	-	254/10	584/23	146/5.8
Otevřeno, z.s., Brno	-	-	597/23.5	270/10.7	67/2.6
Pojišťovací servis M+M s.r.o., Hradec Králové	-	-	7/0.3	-	-
Total	76.5/3	65/2.6	865.3/34.1	855/33.74	225.8/8.89

Note: Enter funds raised for R&D&I from non-public sources besides grants or contract research (e.g. licences sold, spin-off company revenues, donations, etc.) in the calendar year.

POPULARIZATION OF VAVAI

3.6 The most important activities in the field of popularization of R&D&I and communication with the public

The evaluated unit shall briefly describe its main activities related to the popularisation of R&D&I and communication with the public (e.g. popularisation lectures, citizen science initiatives, etc.) during the period of 2019–2023 and provide up to 10 examples that it considers the most significant.

Maximum 500 words plus 200 words for each example given.

Self-assessment:

The third role forms an important part of the activities of the FEdu which is constantly striving to popularise R&D&I and communicate with the general public. This is done within the framework of regular events, such as the EDU Days (a week of lectures, seminars, workshops, discussions, exhibitions and concerts organized at the FEdu every March and open to the general public), or the Night of Scientists (lectures, competitions and workshops addressed to the public). The FEdu cooperates continuously with the Czech Radio Hradec Králové (interviews on current topics), the Study and Research Library (e.g., co-organization of the lecture series Literary Workshops by the Department of Czech Language and Literature) and the Hradec Králové City Library. Popular articles or interviews with researchers published both in printed and digital media (Respekt, Hospodářské noviny, Hudební rozhledy, Prevence) are important.

In the area of popularization, the faculty is represented by activities based on a specific research project (in the period under review, this was mainly the project *Overheating in the High Arctic - Qualitative Anthropological Analysis*), activities related to important regional personalities or anniversaries, activities in which the academia responds to current social events, but also activities demonstrating long-term cooperation with regional institutions. We consider important those activities that emphasize the position of the faculty in the region, give the general public the opportunity to get acquainted with the results of scientific and research activities, but also those that have the potential to activate students of different programmes, to broaden and deepen their knowledge and, at the same time, lead them to social engagement and to authentic and active involvement in regional life.

Several departments of the FEdu are developing cooperation with the **Drak Theatre** in Hradec Králové. This cooperation is expanding continuously in connection with the announced reform of the FEP for primary schools which was prepared during the period under review by the MŠMT and which envisages the modification of aesthetic education in schools. In addition to art and music education, drama and multimedia education will continue to play an important role. As a prominent centre of modern theatre, the Drak Theatre is an important partner for several departments of the FEdu. The Department of English Language and Literature cooperates with it. Mgr. Jan Suk, Ph.D. participates on the theatre's workshops, taking the opportunity to popularize his long-term research on contemporary British theatre, performativity and pedagogy. Dr. Suk's lecture *Home Is Where...* asking questions about the limits of performativity in contemporary theatre but also, for example, in redefining the perception of the audience vs. performer relationship can serve an example of the collaboration undertaken in 2022. In 2023, the ***What's What*** lecture was given focusing, in particular, on contemporary English-speaking projects at the intersection of theatre and performance art. Both lectures were given within the framework of the Clinical Week at the Drak Theatre which is implemented by the Department of Educational Drama of the DAMU Prague in cooperation with the Drak Theatre in Hradec Králové for its students and other potential interested parties as a practice in theatre aimed at children and young audience. Dr. Suk's cooperation with the Drak Theatre also includes the translation of subtitles into English.

He translated the subtitles for the performances of *The Robber and the Kasperle*, *The Seven Ravens* and *The War of the Worlds.* The Department of Russian Language and Literature annually presents performances by the student theatre group Inspiration in the Drak Theatre. Other departments that cooperate with the theatre include the Department of Art Culture and Textile Design and the Department of Primary, Pre-Primary and Special Education.

The **Study and Research Library** in Hradec Králové is another important regional partner of the FEdu. In cooperation with the library, the FEdu organizes Literary Workshops that were held in the last century already as a series of loosely connected lectures and discussions about literature with prominent personalities active both in the East Bohemia region and beyond. Later, the range of literary topics was expanded. In 2019, the lectures in this series included *The Story of Building No. 301* by Assoc. prof. PaedDr. Alena Zachová, CSc., PhDr. Nella Mlsová, Ph.D. and Mgr. Petra Bubeníčková, Ph.D. from the Department of Czech Language and Literature. The authors presented their book of the same title. It is an interesting contribution to the history of the FEdu and the history of Hradec Králové education and architecture. It deals with a building that served Hradec Králové as a business college from 1897, started to serve teacher education in 1959 and is currently one of the buildings used by the FEdu. Mgr. Jana Kostincová, Ph.D. from the Department of Russian Language and Literature gave a lecture To Dream, to Write, to Study… Russian Literary Emigration in Interwar Czechoslovakia as part of the Literary Workshops series in the same year. In the lecture, she presented possible new perspectives on Russian emigration in the 1920s and 1930s in the context of contemporary migration and the transformation of Europe into a post-migration space.

In April 2022, Mgr. Luděk Jirka, Ph.D. from the Department of Cultural and Religious Studies gave a lecture *Russian Disinformation in the Russian-Ukrainian War* in the Study and Research Library. The topic is related to his long-standing professional interest in migration, ethnic and national minority issues.

Lectures organised by **the Literary Society** and the **Linguistic Association** are intended for both the professional and the general public and have long provided those interested with the opportunity to learn about research topics developed at the Department of Czech Language and Literature and the Departments of Foreign Languages. At the same time, they also provide space for invited experts from Czech universities with which the FEdu cooperates. Examples include the lectures by PaedDr. Ivo Harák, Ph.D. *Ego-Document, Diary, Open Diary, Literary Diary (in Contemporary Czech Literature)* 2023, Assoc. prof. Mgr. Erik Gilk, Ph.D. *The Artistic Image of Transcarpathia in Interwar Prose* (2022), or Dr. J. Sommer *Russian "Pre-Queer" and "Post-Queer" Literature* (2021).

The lecture organised by the Department of Czech Language and Literature of the FEdu in 2019 was held outside the above-mentioned cycles and was exceptionally well received. It was given by a prominent member of the doctoral programme's Subject-Area Board, historian and literary historian Prof. Petr Čornej on the topic of PERSONALITY AND HISTORY, in which he presented his book *Jan Žižka. The Life and Times of the Hussite Warrior.*

Events associated with the anniversary of the performance of Karel Čapek's world-famous play R.U.R. are an example of successful and multifaceted regional cooperation. The Čapek's play was premiered on 2 January 1921 in Hradec Králové. A programme called *RUR-100* was planned for 2021, with the participation of the Drak Theatre, FEdu, Klicpera Theatre and Komité Čapek Hronov. Due to the pandemic situation, a virtual exhibition entitled *The First, Albeit by Coincidence* was made available in January, prepared by Dr. Jan Bílek from the Department of Czech Language and Literature of the FEdu and Martin Sedláček from the Klicpera Theatre. Mgr. Jan Bílek, Ph.D. was also a guest on the Klicpera Theatre's POT&LESK podcast in which he talked about the historical circumstances of the world premiere of Čapek's play. A full-day programme was held on 6 October, when the literary-historical conference *Hradec Králové to the Čapeks* was followed by a staged reading at the Klicpera

Theatre, an interdisciplinary colloquium *Man – Robot* and an evening at the Drak Theatre which staged a production of *R.U.R. 2.0* based on Čapek's play. The project was followed in 2023 by the publication of Dr. Bílek's expert monograph *The World Premiere of R.U.R.: Čapek's Drama in Hradec Králové*.

In 2019, the faculty participated in the national event of the Academy of Sciences of the Czech Republic**,** the **Week of Science and Technology**, with a lecture and workshop entitled *La musique als Leshrerin of Life*. Both events presented the results of the research Music in the Teaching of Foreign Languages which was carried out under the guidance of Petra Besedová, PhD. from the Department of German Language and Literature across the departments of the FEdu and focused on the relationship between music and foreign languages in the process of foreign languages teaching.

The activities related to the project of Mgr. Zdenka Sokolíčková, Ph.D. ***Overheating in the High Arctic – a Qualitative Anthropological Analysis*** can serve as an example of a broad and successful popularization of a specific research project. In the period from July to December 2021, i.e., within the return phase of the project which followed Dr. Sokolíčková's research stay abroad in Svalbard, several media outputs were produced, e.g., the Checkpoint podcast (Seznam Zprávy) or an interview in Deník N in 2021. Another interview was published in 2019 in the 31st issue of the Respekt magazine (31/2019), and an article about Dr. Sokolíčková's project was published in Hospodářské noviny on 22 June 2022.
In 2021, BBC Sounds launched a new radio series called The New Arctic, produced by Just Radio and co-created, among others, by Dr. Sokolíčková. The film *Visitors*, a full-length documentary which was previewed in the Czech Republic during the EDU Days of the FEdu in March 2023 is also an important popularisation output of the project. The screening included a discussion with Dr. Sokolíčková*, Climate and Culture*. The screening and the discussion were organised by the Department of Cultural and Religious Studies of the FEdu in cooperation with the UHK's Academic Film Club. The domestic and international success of the film is extremely important for the popularisation of the research presented in the film. The film is permanently available on the KVIFF TV and dafilms.cz platforms, has been screened at international festivals, and has won several awards (Special Jury Mention – Ji.hlava IDFF, Best Documentary – One World SK, Special Mention – New Wave IFF USA, Main Jury Award – Job Film Days IT, nomination for the Czech Film Critics Award and Czech Lion 2023).

A member of the Department of Music, musicologist and music historian Prof. PhDr. Stanislav Bohadlo, CSc. is the founder of the **Theatrum Kuks** festival, a festival of Baroque culture, especially music, theatre and dance. The zero year took place in 2002. Since then, the festival has been held every year at the end of August in the Baroque complex in Kuks. The festival is accompanied by lectures, workshops, installations, exhibitions and other activities. Prof. Bohadlo was the director and producer of the festival, and he has been its music producer since 2017. Prof. Bohadlo also participated as an expert advisor in the historical film ***Il Boemo*** by director Petr Václav about the life and work of composer Josef Mysliveček. The film, a Czech-Italian-Slovak co-production, focuses mainly on Mysliveček's career in Italy. The film premiered on 19 September 2022 at the San Sebastian Film Festival; the Czech premiere took place in October 2022.

Representatives of the academic community of the FEdu cooperate with the regional radio station of the Czech Radio and the national broadcast of the Czech Television. In September 2022, ČT24 presented a discussion programme Fokus VM (Václav Moravec) on the topic How to Reconcile the Nation. Prof. Tomáš Petráček, PhDr., Th.D. from the Department of Cultural and Religious Studies of the FEdu discussed with other prominent Czech public intellectuals, philosopher Tereza Matějčková, political scientist Anna Durnová, legal philosopher Jiří Pribáň, anthropologist Marie Heřmanová and psychologist Tomáš Vašák. Prof. Petráček also contributed to the documentary series Forbidden God presented by the Czech Television in 2021. The series focused on the political, cultural and socio-

religious changes in the second half of the twentieth century in Czechoslovakia. The Czech Catholic Church was viewed in the perspective of global events and the clash of different currents of thought and ideologies. A reflection on the role of Catholic intellectuals in the society and the Church, which is still relevant today, was one of the main topics of the series.

The FEdu was one of the partners of the project **Comenius – Lessons of Humanity (Comenius 2020)** which sought, on the occasion of the 350th anniversary of the death of Jan Amos Comenius, to reach out students and the general public with Comenius' message, to pass on his legacy to the today's young generation, and "thus invite the nation to follow up and complete Comenius' consultation on the improvement". The project included, for example, a lecture by Assoc. prof. Jan Hábl *Humanity is Not Completely Lost: The World that Has a Future according to J. A. Comenius*, as well as a public reading *The Best of Comenius*. In March 2022, an exhibition *Selected Qu*otations *from Comenius' General Consultation on the Improvement of Human Affairs* was held in Building A of the UHK. The project also included the publication of a book with quotations from Comenius' work *The Best of Comenius' General Consultation on the Improvement of Human Affairs* which is intended to serve as a basis for schools to study Comenius' ideas in order to implement their own improvement project.

In the winter semester of the academic year 2022/2023, the Department of Art Culture and Textile Design of the FEdu hosted a Ukrainian lecturer and painter Anna Artemenko from the Department of Design at the Kyiv National University of Construction and Architecture who received temporary protection status in the Czech Republic in 2022. In addition to teaching courses in Evening Drawing, Painting Technology and Drawing and Painting Course, she has also held several exhibitions of her work. A. Artemenko has participated in a project that combines literature, visual arts with the topics of intercultural communication and civic engagement, and also has an important dimension of transcultural solidarity. It was a project titled ***Rise and Go!*** mapping the testimonies of people who fled the war and found safety in the Polička, Bystré and Svitavy regions. Workers and volunteers of the Regional Charity in Polička collected stories of Ukrainian refugees, mainly women, and MgA. Anna Artemenko authored the visual component, large scale drawings and paintings. The project gives a glimpse into the fates of women and their families from different parts of Ukraine who have found a home, job, and temporary safety in the Czech Republic. The project was launched in 2022 and was presented in Polička, Svitavy and Hradec Králové. In March 2024, it was placed in the Atrium of the Chamber of Deputies of the Parliament of the Czech Republic.

IMPLEMENTATION OF RECOMMENDATIONS

3.7 Implementation of the recommendations in Module 3

The evaluated unit will briefly describe how it has implemented the recommendations for Module 3 from the previous evaluation period, if applicable.

Maximum 1000 words.

Self-assessment:

The evaluation report has repeatedly praised the varied composition of study programmes and research and creative activities of the FEdu. It identified the weakness of the FEdu in the number of research projects (in the previous evaluation period, the FEdu had two projects), while it found promising the intensive efforts of the faculty to acquire new projects and stated that the growth rate in applying for projects should translate into increased efficiency in obtaining them. In the current evaluation period, the FEdu has two GA ČR projects, three TA ČR projects in which FEdu is involved as a co-investigator, one NAKI project and one project supported by the MŠMT, as well as two contract research projects. Thus, although the specific position and role, as well as the disciplinary composition of the FEdu is not primarily directed towards research or contract projects, the qualitative increase in this area is noticeable. This is undeniably due to the multilateral support of science, research and other creative activities at the FEdu and the active work of the CPV which provides continuous methodological support, especially in the field of publishing and project submission and solution. The FEdu continues to strive to attract new projects; in 2024, seven applications for projects of the GA ČR were submitted, one of which was successful, as well as five projects of the TA ČR. It was possible to meet the call of the evaluation report for improvement in the area of contract research and to implement two projects of this type.

Other recommendations related to the pandemic situation. The report recommended to move towards contract research in the area of online/distance learning, establish an expertise in executing research on quality evaluation or monitoring of educational activities in public education as well as in private companies. This suggestion corresponds to contract research carried out by the FEdu, directed to the field of pedagogical diagnostics. The second project analysed pandemic experience in the field of social services and formulated recommendations for the Ministry of Labour and Social Affairs. Topics related to the pandemic experience in education and social services have been also significantly reflected in publications.

The evaluation report also recommended to promote research articles to be published in peer reviewed journals. Although monographs or chapters in collective monographs remain important publication outputs for the humanities and social sciences, the FEdu supports systematically publication in journals. Financial support is provided for publishing articles in Open Access journals requiring payment of the Article Processing Charge. The FEdu supports publications aspiring to excellence through the *Excellence in Publishing of Scholarly Books Competition* which allocates financial support for the publication of scholarly books by external domestic or foreign publishers. In both cases, the allocation of financial support is subject to the decision of the FEdu Creative Activity Committee appointed by the Dean. The Committee is also involved in other measures designed to support scholarly activity. These include the annual evaluation of the creative (scientific and artistic) activities of academic staff which is based on the standards of creative activity at the FEdu defined by the Dean's decisions issued annually.

The evaluation report recommended the FEdu to use its wide potential to find and apply new multidisciplinary methods in education: to combine science, art, psychology and new technologies. The NAKI project *Memory Fibers. The Past and the Present of Vamberk Lace-Making* can serve undeniably as an example of such a project. In the future, the FEdu plans to further focus on multidisciplinary projects combining science, art and technology. Such projects require long-term

cooperation of academics from different faculty departments which is complicated by the fact that the departments of the FEdu are located in several buildings relatively far from each other. This arrangement represents a partial obstacle to developing cooperation and also to strengthening the identity and unity of the entire faculty. We believe that the renovation of one of the buildings used by the FEdu which will be completed in mid-2025 will contribute to the removal of these obstacles, while allowing the implementation of other recommendations – to make the non-economic impact more visible by contributing to promoting cultural and linguistic heritage in the youngest generation. The renovated building has the potential to become a space for the presentation of the artistic outputs of the FEdu, an important regional meeting place for professionals and the general public across generations, and an inspiring space supporting various aspects of the FEdu mission.

The evaluation report appreciated the results of applied research with non-economic impact on society, namely monographs and textbooks with a wide range of social impact – education, re-education, and rehabilitation. Therefore, some publications that we consider to be particularly relevant in this respect are listed in Table 3.4.1. in addition to outputs from specific projects. We consider necessary to mention the involvement of academic staff in the elaboration of curriculum documents prepared within the framework of the extensive reform of the FEP at both levels of primary school that also belongs to the results with an impact on the society.

The document mainly repeats calls for interdisciplinarity, linking scientific research and technology with the field of art, continuing successful and diverse cooperation with regional institutions, and intense promotion of the rich activities that the FEdu is developing. Many of the research and popularization activities are currently multidisciplinary oriented (research in the field of teaching and technology, literature and technology, the Graphic Design – Multimedia study programme, and others). The FEdu strives for the all-round development of its potential in the context of the region, being aware at the same time of the necessity to carry out research and educate its students in the context of global issues and broad international debate. External reflection of its activities is considered effective and necessary by the FEdu, which is why a faculty international committee, the International Advisory Board, has been established by the decision of the Dean and has already held both online and face-to-face meetings at the UHK.

A LIST OF SUPPORTING DOCUMENTS/LINKS FOR MODULE 3

Document name	No. criteria	Location (link in HTML)
Strategy of Research Organisation	-	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/strategic-documents/strategy-of-research-organisation-of-the-uhk-2023.FEdu
Decision of the Dean No 33/2023 "Call for support of doctoral studies at Faculty of Education UHK"	3.1	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Decision of the Dean No 40/2022 "Call for support of doctoral studies at Faculty of Education UHK"	3.1	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Decision of the Dean No 33/2021 "Call for support of doctoral studies at Faculty of Education UHK"	3.1	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Prof. PhDr. Stanislav Bohadlo, CSc.	3.2.1	https://mk.gov.cz/novinky-a-media-cs-4?searchString=bohadlo&searchId=5541
Prof. PhDr. Bohuslav Mánek, CSc.	3.2.1	https://fiplv.com/fiplv-international-award/
Prof. PhDr. Tomáš Petráček, Ph.D., Th.D.	3.2.1	https://www.senat.cz/cinnost/pametni_medaile/oceneny.php?id=10
Prof. PhDr. Jiří Skopal, CSc.	3.2.1	https://mk.gov.cz/novinky-a-media-cs-4/5019cs-cena-ministerstva-kultury-za-obor-detskych-umeleckych-aktivit-byla-predana-prof-phdr-jirimu-skopalovi-csc
Mgr. Jan Suk, Ph.D.	3.2	https://teatrologie.cz/archiv-vk/
Decision of the Dean No. 30/2020 "Call for applications to support funding of research teams at the Faculty of Education UHK"	3.3	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Decision of the Dean No. 6/2023 "Rewards for scientific and artistic activities at the Faculty of Education UHK"	3.7	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Decision of the Dean No. 02/2022 "Rewards for scientific and artistic activities at the Faculty of Education UHK"	3.7	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Decision of the Dean No. 32/2020 "Rewards for scientific and artistic activities at the Faculty of Education UHK"	3.7	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Decision of the Dean No. 28/2019 "Rewards for the	3.7	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-

scientific outcomes at the Faculty of Education UHK"		the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Decision of the Dean No. 4/2023 "The call for grant competition to support excellence"	3.7	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Decision of the Dean No. 01/2022 "The call for grant competition to support excellence"	3.7	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Decision of the Dean No. 2 /2021 "The call for grant competition to support excellence"	3.7	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Decision of the Dean No. 1 /2020 "The call for grant competition to support excellence"	3.7	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Decision of the Dean No. 11 /2019 "The call for grant competition to support excellence"	3.7	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents

SELF-EVALUATION REPORT FOR MODULE 3

THE NAME OF THE UNIT BEING EVALUATED:
University of Hradec Králové, Faculty of Informatics and Management

FORD: 5 - Social sciences

SOCIAL CONTRIBUTION OF THE EVALUATED UNIT

3.1 Introductory information about the unit under evaluation

The evaluated unit will describe its mission and vision and provide a general self-reflection of the societal contribution of R&D&I, along with its long-term goals in the fields it develops. The distribution of research activities by type of research will also be commented on.[1] The evaluated unit will describe its organisational structure and size (staffing, number of students, number of study programmes implemented, etc.) based on the data provided in annex tables 3.1.1 to 3.1.6.

Maximum 1000 words.

This is a non-rated indicator that serves as an introduction to the evaluated unit, providing context for data in indicators 3.2-3.7.

Self-assessment:

Over the past five years (2019-2023), the Faculty of Informatics and Management (FIM) at the University of Hradec Kralove (UHK) has reinforced its position as a leading institution in the integration of advanced education, cutting-edge research, and international collaboration. Aligned with the strategic vision of the university, the faculty has consistently pursued excellence in digital transformation, innovation-driven decision-making, and sustainable societal development. These efforts have resulted in significant academic and research advancements, strengthening FIM's role as a hub for technological and managerial expertise. The faculty's strategic priorities have been centered around three key areas:

- Development of Information Technology and Intelligent Systems: FIM has actively contributed to the advancement of artificial intelligence, digitalization, and intelligent systems across diverse domains, including economic systems, healthcare, cybersecurity, and education. Ethical and societal implications remain at the core of these technological developments.
- Innovation, Decision-Making, and Analytical Methods: The faculty has enhanced its research and academic programmes in data science, intelligent analytics, and algorithmization, fostering data-driven decision-making and cognitive process optimization.
- Sustainability, Governance, and Social Development: With a strong emphasis on sustainable economic, environmental, and social systems, FIM has strengthened its management strategies to address emerging societal challenges.

[1] Basic, applied, contract, artistic research (see Definition of Terms in Methodology HEI2025+).

In line with its strategic direction, FIM has expanded its portfolio of accredited study programmes, offering students a diverse selection ranging from Applied Informatics to Economics and Management. These programmes were attended by between 1804 and 2046 students in each year. Overall, the number of students, and therefore the interest in studying at the FIM, can be considered stable. Study programmes such as Applied Informatics, Data Science, Information Management, Tourism Management, or Economics and Management equip students with the necessary skills to face practical obstacles in various types of institutions ranging from commercial companies or public administration bodies to healthcare institutions or non-profit organisations.

Over the past five years, the faculty has maintained a stable student enrolment, reflecting a sustained demand for its programmes. The integration of real-world case studies, internships, and hands-on projects has further enhanced graduates' employability, resulting in a near-zero unemployment rate for alumni. Graduates occupy key positions across various industries, including IT, finance, logistics, and public administration, further reinforcing the faculty's impact on workforce development. The faculty's alumni network includes professionals who have led technology transformation initiatives and initiated entrepreneurship in domestic and international markets. The FIM's global influence is further strengthened by its international partnerships. Institutions with which the faculty maintains partnerships include Norwegian, Portuguese, Greek or Dutch universities in Europe or higher education institutions in Asia – Japan, Malaysia or Taiwan. The FIM facilitates intercultural education and research opportunities through student exchange programmes such as Erasmus+.

FIM has also made significant strides in research and innovation, leading multiple projects in collaboration with national and international institutions. Notable contributions include initiatives in various domains. From a business perspective, the Smart Cities initiative is one of the most important initiatives in the Faculty's research portfolio. It focuses on the development of sustainable urban environments from both an environmental and technological perspective. For instance, the aim of research on the Smart Transport Systems is to increase the efficiency of public transport and to alleviate urban congestion. Similar initiatives are often funded by the Technology Agency of the Czech Republic (TA ČR) and in partnership with Czech ministries, which ensures the pursue of state development goals. From the environmental perspective, the FIM was involved for instance in projects Reducing the Negative Impacts of Tourism on Ecosystems through an Intelligent Software Guide or the project Effilab – Paperless Laboratory project, which investigated optimised laboratory procedures implemented without the need for traditional paper documentation and workflow. From the health-care perspective, the mobility problems of people with disabilities were addressed by the project entitled Measuring Walking Paths Using Sensors in Urban Environments to Support the Mobility of People with Disabilities. The faculty's commitment to innovation in healthcare is also evidenced by its leadership of projects under the TA ČR Gamma II initiative, including the Decision Supporting System for Emphysema Diagnosis, Vibration Diagnostic System and SEM Automation for Clinical Research and Diagnostics. All these examples of initiatives sufficiently illustrate the FIM's ability to use research for the benefit of the society. Needless to emphasize, the vast majority of research projects integrate doctoral students as team members and thus support the development of their research activities and successful doctoral studies.

Overall research funded by above mentioned agencies addressed critical societal challenges, such as mobility solutions for people with disabilities and the environmental impact of tourism. These projects exemplify the faculty’s ability to bridge academic research with practical societal applications.

The faculty’s commitment to continuous learning is reflected in its education initiatives focused on a broader audience. By organising workshops, open lectures or an international summer school, the FIM extends its expertise beyond academia and gets involved in activities of the professional community. Topics such as the ethics of artificial intelligence or sustainable business models attract heterogeneous groups of participants, promoting social awareness of these critical issues. The senior

digital literacy initiative empowers the elderly to use technology confidently, addressing the existing digital divide. The faculty's commitment to continuous learning ensures that knowledge dissemination will continue to benefit the broader community. Projects dealing with ecological IT solutions that are developed in collaboration with local governments, aim to contribute to reducing the environmental impact of information systems. The FIM equips students with the necessary skills to innovate responsibly in their professional lives by promoting an understanding of sustainable practices.

Driven by a culture of innovation, openness, and creativity, FIM actively supports entrepreneurship and start-up development among students and researchers. Partnerships with innovation centres and incubators have fostered the establishment of successful enterprises in software development, data analytics, and e-commerce. The examples include a platform which is run by faculty members and facilitates connections between students and mentors from various industries and public institutions.

Through these efforts, FIM has successfully implemented its strategic vision, ensuring its continued contribution to technological advancement, economic progress, and societal well-being.

Table 3.1.1 - Staffing per FTE[2]

Academic/ Professional position	Total / Of which women					
	2019	2020	2021	2022	2023	Total
Professor	10.90/2.12	11.48/3.00	10.71/3.07	10.08/2.67	10.18/3.11	16/6
Associate Professor	14.09/7.56	13.22/5.85	13.48/5.75	15.68/7.41	16.24/6.58	24/11
Assistant Professor	39.54/15.49	40.97/17.12	41.69/17.78	42.45/18.44	42.72/19.7	64/28
Assistant	0.00/0.00	0.00/0.00	0.00/0.00	0.00/0.00	0.00/0.00	0/0
R&D Personnel[3]	4.11/0.00	4.19/0.00	4.11/0.00	3.89/0.00	3.55/0.00	5/0
Researchers in other categories[4]	17.55/10.76	21.06/9.98	27.04/10.20	29.94/10.70	23.71/8.60	92/30
Technical and economic staff[5]	7.12/7.12	8.48/8.48	8.20/8.20	7.83/7.83	7.85/7.85	14/14
Scientific, research and development staff involved in teaching activities	75.49/33.15	75.64/32.74	74.76/32.35	76.03/33.59	76.53/33.40	139/63
Early career researchers[6]	22.40/10.86	19.18/9.56	19.30/6.38	24.22/8.40	27.18/10.88	54/23
Total[7]	93.31/43.05	99.40/44.43	105.23/45.00	109.87/47.05	104.25/45.84	215/89/ 512.06/225.37

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

[2] The average number of hours worked is calculated as the ratio of the total number of hours actually worked during the reference period, from 1 January to 31 December, by all staff (including agreement on work activity, excluding agreement on work performance) to the total annual working time pool per full-time employee. The full- time status of the worker in the evaluated unit is always reported. If an employee holds more than one type of full-time job within the evaluated unit, the total sum of the two shall be reported.

[3] The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

[4] The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

[5] Who participates in the management and support of R&D&I in the institution.

[6] See Definition of Terms in Methodology HEI2025+.

[7] Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

3.1.2 - Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2019 (numbers of physical employees and personnel)[8]

Academic/ professional position	Under 29 years		30-39 years old		40-49 years old		50-59 years old		60-69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	1	0	1	0	3	0	6	2
Associate Professor	0	0	0	0	7	4	5	2	1	1	3	2
Assistant Professor	0	0	4	2	18	5	14	6	5	3	0	0
Assistant	0	0	0	0	0	0	0	0	0	0	0	0
R&D Personnel[9]	2	0	1	0	1	0	1	0	0	0	0	0
Researchers in other categories[10]	0	0	10	3	6	4	3	3	3	1	1	1
Technical and economic staff[11]	3	3	3	3	3	3	0	0	0	0	0	0
Scientific, research and development staff involved in teaching activities	0	0	9	5	28	11	23	11	11	5	10	5
Early career researcher[12]	0	0	5	2	16	7	4	2	2	2	0	0
Total[13]	5	3	18	8	36	16	24	11	12	5	10	5

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D Personnel, Researchers in other categories and Technical and economic staff are mutually exclusive, i.e. one staff member is reported in only one category. The categories of scientific, research and development staff involved in teaching activities and early career researchers are reported collectively for all the above-mentioned categories.

[8] The total number of employees/workers as of 31st December of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

[9] The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

[10] The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

[11] Who participates in the management and support of R&D&I in the institution.

[12] See Definition of Terms in Methodology HEI2025+.

[13] Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I Personnel, Researchers in other categories and technical and economic staff.

3.1.3 - Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2023 (numbers of physical employees and personnel)[14]

Academic/ professional position	Under 29 years		30-39 years old		40-49 years old		50-59 years old		60-69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	3	1	3	2	4	1	4	2
Associate Professor	0	0	0	0	9	3	5	2	0	0	2	1
Assistant Professor	0	0	14	6	16	9	13	5	4	1	0	0
Assistant	0	0	0	0	0	0	0	0	0	0	0	0
R&D Personnel[15]	0	0	1	0	2	0	1	0	0	0	0	0
Researchers in other categories[16]	5	2	11	4	6	1	2	1	1	0	1	0
Technical and economic staff[17]	1	1	1	1	4	4	2	2	0	0	0	0
Scientific, research and development staff involved in teaching activities	5	2	15	6	28	13	22	10	9	2	6	3
Early career researcher[18]	0	0	24	8	6	4	1	0	1	1	0	0
Total[19]	6	3	27	11	40	18	26	12	9	2	7	3

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

[14] The total number of employees/workers as at 31.12. of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

[15] The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

[16] The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

[17] Who participates in the management and support of R&D&I in the institution.

[18] See Definition of Terms in Methodology HEI2025+.

[19] Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

Table 3.1.4 - Students

Type of study	2019		2020		2021		2022		2023		Total	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Undergraduate	1549	654	1400	512	1569	574	1610	550	1580	542	4120	1609
Master's[20]	339	84	354	93	394	107	390	118	383	113	910	264
Doctoral	56	12	50	14	47	13	46	13	46	11	92	24
Lifelong Learning Courses	0	0	0	0	0	0	0	0	0	0	0	0
Total	1905	738	1777	612	1977	684	2024	677	1978	655	-	-

Table 3.1.5 - Study programmes in Czech/English

Type of study programme	Total[21] / Of which professional study programmes											
	2019		2020		2021		2022		2023		Total	
Undergraduate	6/2	0/0	8/3	0/0	12/3	2/0	12/4	2/0	14/4	2/0	14/4	2/0
Master's	5/2	0/0	7/3	0/0	8/3	0/0	9/4	0/0	10/4	0/0	10/4	0/0
Doctoral	4/4	0/0	6/6	0/0	6/6	0/0	6/6	0/0	8/8	0/0	8/8	0/0
Lifelong Learning courses	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Total	15/8	0/0	21/12	0/0	26/12	2/0	27/14	2/0	32/16	2/0	-	-

Note: For each SP type, enter the number of SPs in Czech language in the first cell and insert the number of SPs in English language after the slash in the same cell (e.g. 15/3), enter the number of professional SPs in Czech language in the second cell and insert the number of professional SPs in English language after the slash. Follow a similar procedure in the last column of the table (Total).

3.1.6 - R&D&I capacities

R&D&I field	FORD	FORD share [%]	Predominant type of research	Total share of industry group [%]
1. Natural Sciences	1.1 Mathematics	6	Balanced basic and applied research	42
	1.2 Computer and information sciences	30	Balanced basic and applied research	
	1.3 Physical sciences	1	Applied Research	
	1.4 Chemical sciences	2	Applied Research	
	1.5 Earth and related environmental sciences	2	Applied Research	
	1.6 Biological sciences	1	Applied Research	
	1.7 Other natural sciences		Zvolte položku.	
2. Engineering and	2.1 Civil engineering	1	Applied Research	14

[20] All master's degree students are listed, regardless of the length of their programme of study.
[21] The total number of study programmes for which admissions have been announced in a given academic year.

Technology	2.2 Electrical engineering, Electronic engineering, Information engineering	11	Balanced basic and applied research	
	2.3 Mechanical engineering		Zvolte položku.	
	2.4 Chemical engineering		Zvolte položku.	
	2.5 Materials engineering		Zvolte položku.	
	2.6 Medical engineering		Zvolte položku.	
	2.7 Environmental engineering	1	Applied Research	
	2.8 Environmental biotechnology	1	Applied Research	
	2.9 Industrial biotechnology		Zvolte položku.	
	2.10 Nanotechnology		Zvolte položku.	
	2.11 Other engineering and technologies		Zvolte položku.	
3. Medical and Health Sciences	3.1 Basic medicine	1	Basic Research	5
	3.2 Clinical medicine		Zvolte položku.	
	3.3 Health sciences	4	Balanced basic and applied research	
4. Agricultural and veterinary sciences	4.1 Agriculture, Forestry, and Fisheries		Zvolte položku.	0
	4.2 Animal and Dairy science		Zvolte položku.	
	4.3 Veterinary science		Zvolte položku.	
	4.4 Other agricultural sciences		Zvolte položku.	
5. Social Sciences	5.1 Psychology and cognitive sciences	5	Balanced basic and applied research	35
	5.2 Economics and Business	17	Balanced basic and applied research	
	5.3 Education	7	Balanced basic and applied research	
	5.4 Sociology	1	Applied Research	
	5.5 Law		Zvolte položku.	
	5.6 Political science		Zvolte položku.	
	5.7 Social and economic geography	1	Applied Research	
	5.8 Media and communications		Zvolte položku.	
	5.9 Other social sciences	4	Balanced basic and applied research	
6. Humanities and the Arts	6.1 History and Archaeology	1	Basic Research	4
	6.2 Languages and Literature	3	Balanced basic and applied research	
	6.3 Philosophy, Ethics and Religion		Zvolte položku.	
	6.4 Arts (arts, history of arts, performing arts, music)		Zvolte položku.	
	6.5 Other Humanities and the Arts		Zvolte položku.	
	Total	100 %	-	100 %

RECOGNITION BY THE RESEARCH COMMUNITY

3.2 Recognition by the research community

The evaluated unit will briefly comment on its position in the research community. It shall consider individual and other prestigious R&D&I awards, participation of its academic staff in the editorial boards of international scientific journals, elected membership in professional societies, major invited lectures given by the evaluated unit's academic staff abroad or by foreign scientists and other relevant guests at the evaluated unit. Additionally, it will address the involvement of staff in the evaluation of national or European project/programme calls over the period of 2019–2023 based on the data provided in annex tables 3.2.1 to 3.2.5 (max. 10 most relevant items). If necessary, the evaluated unit shall list any additional services to the scientific community that it considers relevant.

Maximum 1000 words.

Self-assessment:

The significant consolidation of the position of the FIM in the global scale is evidenced not only by the QS World University Ranking of the UHK as such at the 1001-1200th place, but also by the position of the FIM in The World University Ranking according to disciplines, where the FIM has been steadily ranked 601-800th in the field of Computer Science since 2022.

The FIM has also received a number of prestigious awards that recognise its achievements in research, innovation and applied sciences. Awards include achievements in IT and digital transformation, contributions to smart city security, and advances in artificial intelligence applications. The most significant individual awards include 1st place to assoc. prof. Josef Horálek, Ph.D., in the IT Project of the Year competition for the development of an application for open data cataloguing using artificial intelligence. This award is given annually by the Czech Association of Information Technology Managers. In the social sciences, Dr. Tomáš Burda, Ph.D., was awarded by the Czech Academy of Sciences for outstanding results of research, experimental development and innovation achieved in solving research tasks in 2020 (Czech Historical Atlas, Chapters from the 20th Century). Academics also win prizes for their articles or presentations at prestigious conferences around the world, e.g., in Hong Kong. Some researchers have also been ranked among the world's top scholars, which confirms the international impact and scientific influence of the faculty. Prof. Blanka Klímová, Ph.D., who has been ranked repeatedly in the global Top 2% of scientists by Stanford University, or prof. Ondřej Krejcar, Ph.D., prof. Kamil Kuča, Ph.D. and assoc. prof. Marcel Pikhart, Ph.D., who were ranked in particular years, have made a significant contribution to this.

Members of the FIM contribute actively to the development of science through membership in editorial boards of renowned international journals. Through their editorial and review functions, the academics set the direction of research in their fields and maintain high publication standards internationally. The FIM is involved in a number of editorial and professional activities of scientific journals, some of which are published by Elsevier, such as Regional Science Policy & Practice or Heliyon, others by Springer Nature, such as Humanities & Social Sciences Communications.

In the period 2019-2023, the FIM academics were invited to give lectures at renowned institutions around the world, including UNESCO, National Taiwan University, University of Surrey, University of Regensburg, University of Udine, and Fukuoka University. Their presentations covered scientific topics related to their teaching and research activities, such as artificial intelligence in education, geoparks and cultural heritage, and computational methods in scientific research. These invited lectures reflect the recognition of the FIM and its role in academic discussions on new trends and challenges in various fields.

The FIM hosts regularly eminent scientists from all over the world, thus promoting knowledge exchange and interdisciplinary collaboration. Some of the important institutions from which experts

have come to the FIM include, for example, Saint Anselm College, USA, a renowned American university with an emphasis on social sciences and innovation; Lingnan University, Hong Kong, a prestigious university focused on the humanities and social sciences with a major research centre for data science; The State University of New York at Oswego, USA, part of one of the largest university systems in the USA, known for its teaching and technology programmes; and the University of Regensburg, Germany, a prestigious German university with a strong research background in computer science and social sciences. Visiting experts gave lectures on topics such as social innovation, applications of artificial intelligence, STEM education, business strategies, and the use of translation in language learning. These events provide opportunities for researchers, students and experts to interact and discuss with world-leading experts and gain insight into the latest developments.

The FIM participates actively in the evaluation of research projects and programmes at both national and European levels. Researchers participate in advisory panels, grant evaluation committees and expert groups that determine the direction of scientific funding and research priorities. Their involvement ensures that research funding is allocated to high-quality and promising projects, thereby strengthening the credibility and expertise of the FIM in the academic and innovation sphere. At the national level, academic staff of the FIM were involved in the evaluation of prestigious projects of the Czech Science Foundation (GA ČR), the Technology Agency of the Czech Republic (TA ČR), the Ministry of Industry and Trade of the Czech Republic (MPO), the Ministry of the Interior of the Czech Republic (MV), the Ministry of Education, Youth and Sports of the Czech Republic (MŠMT), or the Research, Development and Innovation Council (RVVI). Some of the academics are also involved in the evaluation of prestigious projects abroad, e.g., assoc. prof. Marcel Pikhart, Ph.D. serves as rapporteur and evaluator of the State Agency for Educational Development of the Republic of Latvia, or prof. Vladimír Bureš, Ph.D., evaluates scientific projects for the Slovak Research and Development Agency.

The international conferences held at the FIM since 2019 have also contributed to strengthening its prestige. They include, for example, co-organization and organization of the International Conference on Blended Learning and the International Symposium on Educational Technology. The Hradec Králové Economic Days (HED) conference is an annual international conference. The HED strengthens the international position of the FIM through cooperation with renowned foreign institutions such as the University of Economics in Wrocław or Oslo Metropolitan University in Norway. During the period under evaluation, the FIM academics have also strengthened their participation in the organization and programme committees of international conferences and consortia, such as COST.

In the period 2019-2023, the FIM has established a strong position in the global research community. Its contributions in various scientific fields, along with prestigious awards, editorial activities, invited lectures and participation in research project evaluations, demonstrate its strong commitment to the advancement of science. Through continued collaboration and academic excellence, the FIM continues to strengthen its influence and reputation in the international research environment.

Table 3.2.1 - Prestigious R&D&I awards granted during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the award	Awarding institution
Josef Horálek, assoc. prof. Mgr. Ph.D.	1st place in the IT project of the year competition for Research application for open data catalogue using AI datakhk.tech, client: the Hradec Králové Region, contractors: the University of Hradec Králové, Faculty of Informatics and Management	Czech Association of Information Technology Managers

Tomas Burda, RNDr., Mgr., PhD.	Award of the Academy of Sciences of the Czech Republic for extraordinary results of research, experimental development and innovations achieved in solving research tasks for year 2020 (Czech Historical Atlas, Chapters of the 20th century)	Academy of Sciences Czech Republic
Blanka Klímová, prof. PhDr., M.A., Ph.D.	World Ranking Top 2% Scientists (twice for Single Year – 2020;2022; once for Career-Long - 2020)	Stanford University Global List
Ondřej Krejcar, prof. Ing. Ph.D.	Deep Learning for Segmentation of Polyps for Early Prediction of Colorectal Cancer: A prosperous Direction. Best Paper Award https://comsysconf.org/Comsys2022/index.html	3rd Int. Conference on Frontiers in Computing and Systems.
Marcel Pikhart, assoc. prof., Mgr. et Mgr., Ph.D.	World Ranking Top 2% Scientists – Single Year 2021, 2023	Stanford University Global List
Miloslava Černá, assoc. prof., Anna Borkovcova, Ing.	Utilization of Selected Social Media in University Setting with Focus on Communication and Revision Excellent paper award https://hksmic.org.hk/icbl/2022/award.html	ICBL 2022 Blended Learning: Engaging Students in the New Normal Era, Hong Kong
Kamil Kuča, prof. Ing. Ph.D.	Highly cited researcher 2021	Clarivate analytics
Vladimír Bureš, prof. Ing. Ph.D. MBA	Learning by Doing in Medicine: Solution and Configuration of Virtual Medical Cases Best paper award	5th International Symposium on Educational Technology (ISET2019)
Chaloupský David, Mgr. Ph.D.	Use of Fitness Trackers in Fitness Running Classes to Enhance Students' Motivation Best paper award	12th International Conference on Blended Learning (ICBL2019)

Note: Provide up to 10 examples.

Table 3.2.2 - Participation of academic staff of the evaluated unit in editorial boards of international scientific journals during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of scientific journal, ISSN
Vladimír Soběslav, assoc. prof. Ing., Ph.D.	Applied Sciences, ISSN 2076-3417
Hana Mohelská, prof., Ing., Ph.D.	Journal of Risk and Financial Management, ISSN 1911-8074
Vladimír Bureš, prof. Ing. Ph.D., MBA	Systems, ISSN 2079-8954
Ondřej Krejcar, prof. Ing. Ph.D.	Applied System Innovation, ISSN 2571-5577
Samuel Amponsah Odei, Ph.D.	Regional Science Policy & Practice, 1757-7802
Ondřej Krejcar, prof. Ing. Ph.D.	Journal of Advances in Information Technology, ISSN 1798-2340
Blanka Klímová, prof. PhDr., M.A., Ph.D.	Educational Administration: Theory and Practice, ISSN 1300-4832
Josef Hynek, prof. RNDr., MBA, Ph.D.	E+M Economics and Management, ISSN 1212-3609
Marcel Pikhart, assoc. prof. Mgr. et Mgr., Ph.D.	Humanities & Social Sciences Communications, ISSN 2662-9992
Samma Faiz Rasool, Ph.D.	Psychology Research and Behaviour Management, ISSN 1179-1578

Note: Please provide up to 10 examples of academic staff participation in editorial boards of international scientific journals (e.g. editor, editorial board member, etc.).

Table 3.2.3 - The most important invited lectures delivered by the academic staff of the evaluated unit at foreign institutions during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Invited lecture title	Name of host institution, or name of conference or event	Year
Martina Pasková, assoc. prof. Ing. Ph.D.	Training in Creative and Cultural Industries using Traditional Knowledge	UNESCO, Management Schemes for UNESCO Global Geoparks in Latin America, the Caribbean, West – and North Africa (Arab States)	2021
Ondřej Krejcar, prof. Ing. Ph.D.	Mobile positioning based on wireless networks	Malaysia-Japan International Institute of Technology, Universiti Teknologi Malaysia	2022
David Chaloupský, Mgr. Ph.D.	Geographical and natural conditions for outdoor sports in the Czech Republic	University of Thessaly, Larissa Campus, Greece	2019
Samuel Amponsah Odei, Ph.D.	Research design for public policy analysis	Chiam Mai University school of public policy, Thailand	2020
Pavlína Chaloupská, Mgr. Ph.D., David Chaloupský, Ph.D.	Outdoor sport tourism in the Czech Republic	University of León, Spain	2023
Marcel Pikhart, assoc. prof. Mgr. et Mgr., Ph.D.	Chatbots in Foreign Language Learning	University of Surrey, Great Britain	2022
Ivan Soukal, assoc. prof. Ing. Ph.D.	Data visualization in history	Wroclaw University of Economics, Poland	2019
Jana Medková, Mgr.	Anonymization of social network datasets	University of Regensburg, Faculty of informatics and data science, Germany	2022
Klímová Blanka, Prof. PhDr. Ph.D. MA	Use of information and communication technologies in foreign language education and the TPACK model	University of Alcalá, Spain	2023
Otčenášková Tereza, Ing. BA, Ph.D.	Corporate Social Responsibility	Suan Sunandha Rajabhat University, Thailand	2022

Note: Provide up to 10 examples.

Table 3.2.4 - The most important lectures by foreign scientists and other guests relevant to R&D&I at the evaluated unit during the evaluation period

Name, surname and title(s) of the lecturer	Lecturer's employer at the time of the lecture	Invited lecture title	Year
Dinorah Frutos-Bencze, Prof., PhD.	Saint Anselm College, NH, USA	Introduction to Social Innovation	2021
Janis Pekša, Mg.sc.ing., Mg.oec.	School of Data Science, Director, LEO Dr David P. Chan Institute of Data Science, Lingnan University, Hong Kong SAR, China	Building and Managing PL/SQL Programme Units	2022
Burcu Aytaçoğlu, assoc. prof. Dr.	Ege University in Izmir, Turkey	Adaptive EWMA Control Charts with Dynamic Probability Control Limits	2023
Morten Irgens, prof.	Kristiania University College – School of Economics, Innovation, and Technology, Norway	From Technology Transfer to Ecosystem Participation	2022
Joseph Huang, dr.	Wenzao Ursuline University of Languages, Taiwan	Use of translation in teaching foreign language students	2023
Harrison Hao Yang, prof.	The State University of New York at Oswego, USA	What Affects the Adoption of Flipped Learning: The Views of Instructors and Students in Higher Education	2019
Shengquan Yu, prof.	Beijing Normal University, China	A Double Spiral Deep Learning Model Based on Learning Cell Platform	2019
Przemyslaw Korytkowski, Assoc. Prof., Ph.D.	West Pomeranian University of Technology	Design Thinking	2023
Ali Bin Selamat, prof.	Universiti Teknologi Malaysia, Malaysia	Technology Transfer	2023
Kannapat Kankaew, Ass. Prof.	Suan Sunandha Rajabhat University, Thailand	Tourism in Thailand	2023

Note: Provide up to 10 examples.

Table 3.2.5 - Involvement in the evaluation of national/European research project/programme calls relevant to the R&D&I area at the unit during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the project/ programme call research	Name of the contracting authority/ guarantor of the project/ programme call	Year
Josef Horálek, assoc. prof. Mgr., Ph.D.	SIGMA Applied Research and Innovation Support Programme	TA ČR	2023
Josef Horálek, assoc. prof. Mgr., Ph.D.	Research and Experimental Development and Innovation Open Challenges Programme in Security Research 2023-2029	MV	2023
Vladimír Soběslav, assoc. prof. Ing., Ph.D.	Member of GA ČR – Panel P202 – Mathematics and Computer Science	GA ČR – Czech Science Foundation	2022-2024
Vladimír Soběslav, assoc. prof. Ing., Ph.D.	Member of the advisory group for cluster 4 of Horizon Europe – digitalization, industry and space	MPO	2021-2027
Hana Mohelská, prof., Ing., Ph.D.	Support for international cooperation in research, development and innovation Inter-Excellence II (Inter-Action sub-programme)	Ministry of Education, Youth and Sport	2017-dosud
Blanka Klímová, prof. PhDr., M.A., Ph.D.	Member of the Humanities Council	Agency for Research and Development Support, Bratislava, Slovakia	2023-present
Vladimír Bureš, prof. Ing. Ph.D. MBA	APVV standard and bilateral projects proposals	Agency for Research and Development Support, Bratislava, Slovakia	2020-present
Blanka Kíimová, prof. PhDr., M.A., Ph.D.	Member of GA ČR – P406 (linguistics and literary sciences) panel	GA ČR – Czech Science Foundation	2019-2023
Marcel Pikhart, assoc. prof. Mgr. et Mgr., Ph.D.	Programme financed by the European Economic Area Financial Mechanism for 2014-2021), Horizon 2020	Rapporteur and evaluator The State Education Development Agency of the Republic of Latvia	2020

Note: Provide up to 10 examples.

RESEARCH PROJECTS

3.3 Research projects

The evaluated unit shall list at most 10 (considered most significant by the evaluated unit) research projects/activities (regardless of whether they are supported by public funds or based on contract research[22]) that it has implemented or participated in during the period of 2019–2023[23]. This should be done from the full list in annex tables (Table 3.3.1-3.3.2)[24], regarding particularly the results achieved or the application potential of the projects. The unit should also describe how the research projects contributed to the mission and purpose of the evaluated unit. If the evaluated unit has been a participant in listed project, it shall indicate which other entities were involved and describe its contribution to the project. The interdisciplinary aspects of the projects will also be commented on, along with any collaboration with other units of the evaluated HEI.

Maximum 300 words per project.

Self-assessment:

In the evaluated period 2019-2023, the FIM built on previous project activities and expanded them significantly, especially in the area of applied research and involvement in international projects and consortia. Thematically, the projects in their focus further develop the faculty and newly more specifically focused departmental research directions. In view of this, the strong interdisciplinary character of the research based mainly on the application of selected methods in specific professional domains is evident. The application of managerial, economic and informatics methods to areas such as health care, psychology, social work or tourism can serve as a suitable example. In the past five years, the faculty staff were the principal investigators of two basic research projects of the GA ČR, 17 applied research projects of the TA ČR, 11 of which belonged to the TA ČR GAMA group, and three departmental research projects (MV, Ministry of Culture (MK) and MŠMT). In addition, they participated as co-investigators in one GA ČR project and, in the field of applied research, in four TA ČR projects, seven MPO applied research projects and one MV project. In the international field, the faculty staff participated in eight COST projects and worked on two EEA and Norway Grant projects. In addition, more than 20 contract research projects were solved in the period 2019-2023. The most important projects include:

GA21-22276S Accessibility Modelling for the Elderly, Perceptions of Accessibility and Determinants of their Spatial Mobility

The project No. 1 GA21-22276S entitled Accessibility Modelling for the Elderly, Perceptions of Accessibility and Determinants of their Spatial Mobility focused on the assessment of transport accessibility with respect to the needs of the elderly, crucial for their autonomy and quality of life. The interdisciplinary aspects of this project were carried out in collaboration among different faculties of the evaluated university. The Philosophical Faculty contributed its expertise in sociology and social work. Its role included setting up the research among the elderly, developing the structure of the questionnaire and the form of interviewing and data collection. Their approach allowed for comprehensive and accurate information to be obtained about the needs and experiences of the elderly, enabling the development of more accurate accessibility models that reflect the actual needs of this specific group. The Faculty of Informatics and Management focused on the economic aspects associated with an ageing population. It has analysed the costs associated with old age and the public expenditure associated with this demographic change. Its work has provided valuable insights that

[22] For the definition of contract research for the purposes of evaluation in the HE segments, see Article 2.2.1 of the Community Framework for State Aid for Research, Development and Innovation 2014/C 198/01.

[23] Regardless of whether the projects are completed or still ongoing, provided that at least part of the project was implemented during the evaluation period.

[24] The evaluated unit shall only fill tables that are relevant to it.

can be used to plan and optimise public resources and services aimed at the elderly. This project provides valuable information for policy making and planning for more inclusive transport systems, which has a positive impact on the quality of life of the elderly, their mobility and the promotion of healthy ageing.

EF18_069/0010054 IT4Neuro

The project No. EF18_069/0010054, entitled IT4Neuro, focused on the top pre-application research in the field of medical applications, design and testing of new compounds in preclinical drug development, socio-economic analysis in the field of neurodegeneration and implementation of new diagnostic procedures using high-performance ICT to evaluate advanced imaging methods. The Faculty of Science focused on research into new drugs and chemicals that slow down neurodegeneration. Their expertise in chemistry and biology enabled the identification and testing of new compounds that can slow the progression of neurodegenerative diseases, which is key to improving the quality of life of patients with these diseases. The Faculty of Informatics and Management focused not only on providing socio-economic context and describing the impact of new solutions with respect to the target group, but also on diagnostic procedures using high-throughput ICT to evaluate modern imaging methods. Its role included analysing the socio-economic impact of new diagnostic and treatment procedures, which enabled a better understanding of what economic and societal benefits new methods can bring and how best to implement them in practice.

GA17-03037S Evaluation of Investments in the Development of Medical Devices

The project brings new insights that allow to better express the economic aspects of medical device development. This research is crucial to understanding how to invest effectively limited financial resources in medical device development, which is crucial for developed countries with rising healthcare costs. The proposed model allows for better description and prediction of the potential for investment in medical device development. The model provides the opportunity to optimise the processes involved in the development and market application of these devices, which can lead to more efficient use of resources and improved healthcare. The results of the project will lead to the development of methodological approaches complemented by case studies. These approaches will enable the measurement of the efficiency of medical device development, which is crucial for competitiveness in the global economy. The case studies provide real examples of the application of these methods in practice, thus contributing to better understanding and implementation.

TL02000267 Reducing the Negative Impacts of Tourism on Ecosystems through an Intelligent Software Guide

The aim of the project was to test the concept of an intelligent software tourist guide for environmentally friendly wandering in the countryside. The system allows to manage interlinked interpretive data (photos, texts) for the destination through a web interface, to relate them to the territory and to provide semantic tags, to acquire and manage translations, to build a model of the paths through the territory used for tourism, to manage time series from visitor monitoring in the context of the territory, to predict the visitor traffic for the next period from the time series, to simulate the movement of visitors through the territory and to receive real records of passages through the territory from users, and to visualize this data. In real time, the behaviour of the system can also be influenced with respect to visitors; for example, a path segment can be closed temporarily and thus excluded immediately from the navigation, or a current alert can be given to visitors moving in the area. A combination of advanced data modelling techniques and tools, semantic tagging, recurrent neural networks, agent-based simulations, geographic information systems, visualizations, and many others were used. The reference Android tourist guide mobile app supports basic map reading, unlocking interpretive details of places the user has passed, or recording the route of the trip.

TL01000191 Innovation of Management Systems of Tourism Entities Using Process Management Tools

The main objective of the project was to support the implementation of innovative methodologies and process management tools into the management systems of hotels and other organizations operating in the tourism sector, thereby increasing their efficiency and the quality of services provided. Within the interdisciplinary cooperation of the project partners, the Interactive Library of Key Processes of Hotels and other Tourism Organisations and the Hotel Process Simulator were created and made available to the application sphere. Faculty staff participated primarily in the development of the Hotel Process Simulator application. It is an interactive hotel process simulator enabling the simulation of selected processes in the conditions of selected virtual markets (customers, competitors). Using this simulator, users are able to verify in the form of a game the behaviour of selected hotel processes under set conditions and thus understand their characteristics, usability, linkages and outputs.

COST – Evaluating the Potential for Reducing Health and Social Expenditure on the Elderly through Smart Environment

This project examined the benefits of ICT solutions in the context of care for the elderly and estimated the potential savings that could be reached. There are the following positive impacts on society: a) Reduced health and social expenditure: the implementation of smart environment and ICT solutions for the elderly can lead to savings in health and social expenditure, as prevention and monitoring can reduce care and hospitalisation requirements; b) Improved quality of life for the elderly: smart environment and assistive technologies contribute to a better quality of life for the elderly by promoting their independence, safety and comfort; c) Economic benefits for the market: the ICT solutions developed have a high market potential, which can foster economic growth and innovation in the smart technology sector targeting the elderly.

Research in the field of smart furniture and smart environment supports further innovation and the development of new technologies that can be integrated into smart city concepts. This project has therefore not only produced important academic knowledge but also practical applications that can have a broad impact on society and contribute to sustainable development and improved care for the elderly.

FW01010160 EffiLab – Paperless Lab

The aim of the project was to develop software that changes the way of working in regulated pharmaceutical, chemical, food and ISO 17025 accredited laboratories towards digital flow. The EffiLab – Paperless Lab software helps automate laboratory processes by introducing digital workflow, helps eliminate human error, and enables the transition to paperless operation while meeting legislative requirements for data integrity and security. The digital workflow, i.e., direct connection of the system to laboratory instruments and ERP systems, speeds up work in the laboratory, leads to savings in operating costs and manual work of staff.

EG19_262/0020308 Development of a Unique Specialized Database for e-Commerce Solutions

The main goal of the project was to develop a software solution for e-commerce that offers all standard functionalities of e-commerce search ready for immediate use, sufficiently algorithmically optimized so that the resulting solution can be operated on commodity hardware. At the same time, it offers sufficient variability to implement unique and individual functionalities required by e-shop operators. Within the project, faculty staff and students participated together with the principal investigator's team in the development of the unique database evitaDB. The database was designed with regard to low latency responses to complex queries common in the implementation of e-commerce catalogues. All indexes are strictly held in RAM in immutable data structures allowing lock-free parallel reading. The developed database has millisecond latencies in filtering and sorting records with cardinality in the units of millions of entries. The result of the project can be expanded sufficiently in terms of applicability to standardized e-shops. It is variable in terms of implementation

to different requirements of B2B and B2C solutions, serially usable in terms of saving considerable amount of implementers' work, parametrically sophisticated to maximize time savings to address end-user requirements, using optimal search algorithms to reduce CPU computing power requirements (reducing power consumption). It is a completely innovative and unique software feature for the e-commerce industry. From the tests performed so far, the proposed solution is proven to be 100x faster than PostgreSQL and 10x faster than Elasticsearch.

EG20_321/0024477 Smart Parking & Charging
The software solution under development combines smart parking and electromobility. It allows integration into heterogeneous environments of different sized cities with different sub-solutions in this area and provides the possibility of comprehensive data analysis related to the movement of cars in cities and the use of parking and charging stations. The ChargePark application provides easy navigation to a parking space or charging station and automatic payment for parking and/or charging. Faculty members were involved in the analysis to extract maximum information from the huge amount of data from the navigation, parking and charging part of the system, and to secure the system.

EG20_321/0025243 Optimization of Material Flow in ERP ALTEC by Artificial Intelligence
The project was aimed at research and development of artificial intelligence-based software for warehouse management. The project resulted in an artificial intelligence module for warehouse management compatible with any ERP system, mainly aimed at companies from 30 to 1,000 employees (mostly SMEs) with piece and small batch production, where no such solution within an ERP system for this target market exists yet.

Table 3.3.1 Projects supported by public funds

In the role of beneficiary						
Provider[25]	Project name	Support (in thousands CZK/EUR)[26]				
		2019	2020	2021	2022	2023
GA ČR	GA17-03037S Evaluation of investments in the development of medical devices	1,625/64.1	-	-	-	-
GA ČR	GA18-01246S Non-standard optimization and decision-making methods in managerial processes	1,570/61.9	1,419/55.9	-	-	-
TA ČR	TL03000296 Digital society open to the elderly	-	2,055/81.1	4,187/165.2	3,841/151.5	1,846/72.8
TA ČR	TL01000300	1,349/53.2	1,397/55.1	-	-	-

[25] If the provider is from abroad, please indicate the provider's country of origin in brackets. For the determination of the country of origin of the provider, the place of residence of the provider is decisive.
[26] Indicate the total amount expressed in thousands of CZK and the conversion of the total amount into Euro.

	Treatment and care of people with Alzheimer's disease – the economic burden in the context of new drug development perspectives					
TA ČR	TL01000302 Developing medical devices as an effective investment for public and private entities	1,098/43.3	1,081/42.6	353/13.9	-	-
TA ČR	TL02000066 Effective knowledge transfer management	1,379/54.4	1,363/53.8	1,305/51.5	-	-
MPO ČR, EU funds	Industrial Property Rights Protection Project – University of Hradec Králové	196/7.7	-	-	-	-
MV, EU funds	ARTISEC – Using Artificial Intelligence for Smart City Cybersecurity	-	-	-	7,442/293.6	7,410/292.3
MŠMT, EU funds	IT4Neuro	35,657/1406.6	-	4,438/175.1	-	-
EHP and Norway funds	Usefulness of emerging technologies in formal foreign language education	-	-	-	-	206/8.1
EHP and Norway funds	Artificial Intelligence in Formal Foreign Language Education	-	-	-	-	333/13.1
Visegrad Fund	Central European Urban Resilience Handbook for best Practices	-	-	-	-	918/36.2
MŠMT, COST	Evaluating the potential for reducing health and social spending on the elderly using smart environments	1,216/47.9	1,178/46.5	735/28.9	-	-

MŠMT, COST	LTC20020 Consolidating research in tsunami hazard through the application of systems approach	-	-	1,041/41.1	1,803/71.1	227/8.9
IUGN/Unesco	4GEON - Four Continents Connected through Playful Geoeducation	-	-	-	234/9.2	155/6.1
MK ČR, EU funds	Updating of strategic materials in the area of CCI support in the Hradec Králové Region	-	-	-	-	78/3.1
Total		43,894/1731.5	8,493/335	12,059/475.7	13,320/525.4	11,173/440.7

In the role of another participant						
Provider[27]	Project name	Support (in thousands CZK/EUR)				
		2019	2020	2021	2022	2023
GA ČR	GA21-22276S Accessibility modelling for the elderly, perception of accessibility and determinants of their spatial mobility	-	-	1,038/40.9	996/39.3	873/34.4
TA ČR	TL02000267 Reducing the negative impacts of tourism on ecosystems through an intelligent software guide	1,632/64.4	1,867/73.6	1,191/46.9	1,839/72.5	-
TA ČR	TL01000191 Innovation of management systems of tourism entities using process management tools	620/24.4	621/24.5	485/19.1	37/1.5	-
TA ČR	FW01010160 EffiLab - paperless lab	-	726/28.6	736/29	745/29.4	-
TA ČR	CK01000190 Sensor measurement of pedestrian routes in urban environments to support mobility of people with disabilities	-	1,391/54.9	1,385/54.6	589/23.2	655/25.8
MPO, EU funds	Research and development of a new software solution – intelligent robotic document management RPA	-	500/19.7	1,258/49.6	1,744/68.8	161/6.4
MPO, EU funds	Support for research and development activities of REMOSKA s.r.o. in	-	2,057/81.1	2,446/96.5	2,492/98.3	-

[27] Ibid.

	Frenštát pod Radhoštěm					
MPO, EU funds	Optimization of material flow in ERP ALTEC by artificial intelligence	-	-	331/13.1	778/30.7	231/9.1
MPO, EU funds	Knowledge Transfer's partnership with HEIs to create solutions for managing marketing campaigns	-	-	277/10.9	647/25.5	296/11.7
MPO, EU funds	Smart Parking &	-	-	1,840/72.6	1,964/77.5	201/7.9
MPO, EU funds	Development of a unique specialized database for e-commerce solutions	-	242/9.5	585/23.1	1,685/66.5	-
MPO, EU funds	Intelligent neurorehabilitation device for the development of cognitive brain functions	-	-	-	411/16.2	241/9.5
MK, EU funds	Evidence of the landscape heritage of the sugar industry in the Czech lands and support of general awareness of the public about its presence in the contemporary landscape	-	-	-	-	891/35.1
Total		2,252/88.8	7,404/292.1	11,572/456.5	13,927/549.4	3,549/140

Table 3.3.2 - Contract research activities

Client[28]	Activity name	Revenue (in thousands CZK/EUR)				
		2019	2020	2021	2022	2023
Protronix s.r.o.	Innovation Voucher – Creation of NLII-NFC mobile application	258/10.2	-	-	-	-
Savoir - faire s.r.o.	Innovation Voucher – Methodology for introducing effective elements of	295/11.6	-	-	-	-

[28] If the client is from abroad, indicate in brackets the country of origin of the client.

	internal communication into companies					
CPR HK s.r.o.	Innovation Voucher – Methodology for effective management of processes for coordination and communication of recruitment and retention of new employees	295/11.6	-	-	-	-
ŠKODA AUTO, a.s.	Contract research	253/9.9	300/11.8	333/13.1	220/8.7	129/5.1
PKS servis s.r.o.	Innovation Voucher – Digitally controlled drive system for changing the geometric volume and speed of the pump depending on the operating parameters)	-	-	392/15.5	-	-
PKS servis s.r.o.	Innovation Voucher – Development and optimization of a silent hydraulic tank with accelerated air evacuation from the working medium	-	-	395/15.6	-	-
TC HK	Creative voucher – Design and development of an application – TCHK information system	-	-	130/5.1	-	-
Tringa Travel s.r.o.	Creative voucher – Intelligent search using artificial intelligence	-	-	98/3.8	-	-
MLJ solutions a.s.	Innovation voucher – Bank fee comparator with stochastic component	-	-	181/7.1	-	-
Credos Technologies, s.r.o	Innovation Voucher – Platform for the use of key knowledge in decision-making	-	-	-	32/1.3	-
MLJ solutions a.s.	Applied research and development of the Payment Account Comparator application	-	-	-	303/11.9	-
STIMVIA S.R.O.	Health Technology Assessment (HTA) for URIS® neuromodulation system	-	-	-	-	295/11.6
Maecenata Foundation	Contract research	-	-	-	-	188/7.4
Total		1 101/43.4	300/11.8	1 529/60.3	555/21.9	612/24.1

Note: List and describe contract research activities with a revenue in a given calendar year, regardless of the amount of financial revenue.

3.4 Research results with existing or prospective impact on society

The evaluated unit shall briefly comment on a maximum of 10 (considered most significant by the evaluated unit) research results already applied or realistically heading towards application during the period of 2019–2023, based on the overview annex table 3.4.1 (it is recommended to indicate results with a link to projects listed in indicator 3.3). The evaluated unit must demonstrate in its description that the research results have led or will soon lead to positive impacts[29], on society (e.g. description of how the results are used by various users, the range of persons/institutions for which the result is relevant, measurable economic impacts, etc.). The evaluated entity shall indicate in its commentary whether the gender dimension is considered in these results and discuss the impacts of the results regarding sustainability.

Maximum range 300 words/result.

Self-assessment:

Security baseline for station energy management systems (TP01010032-V26)
Most typical users: companies developing and supplying industrial control systems
Institutions for which the result is relevant: Hitachi Energy Czech Republic s.r.o., TTC Marconi s.r.o., ANDRITZ HYDRO s.r.o., EGC - EnerGoConsult ČB s. r. o., ELVAC a.s., TECHSYS - HW a SW, a.s.
Gender implications of the results: None
Sustainability implications of the results: Effective and long-term assurance of cybersecurity of industrial control systems not only ensures secure and uninterrupted service delivery, but also reduces the need for repair/replacement and replenishment of new equipment, thereby reducing the emission footprint and contributing to sustainability.
Implementation of the transfer into practice: The use of the output is currently being tested in pilot verification by Hitachi Energy Czech Republic s.r.o. within its subcontracts.
Implemented or potential commercialisation: Use within a supply chain is being considered.

Software for law firms
NearFuture creates software to help lawyers write texts. The specific problem being solved was to identify and search for key phrases in codes of law using traditional and modern techniques based on deep learning so that they can be easily used when writing new legal documents, contracts, and others. This goal was achieved; the proposed module was functional.
Real Use: Not verified; potential use is for legal services at all levels.
Economic impact: Not measured; results from the time savings in writing legal documents and the use of precise phrases declared by law.
Gender dimension: The proposed module does not take gender into account – it neither favours nor discriminates the gender.

Development of a unique specialized database for e-commerce
Within the project, the faculty staff and students participated together with the principal investigator's team in the development of a unique database for e-commerce, **evitaDB**. The design of the database took account of low latency responses to complex queries common in the implementation of e-commerce catalogues. All indexes are strictly held in RAM in immutable data structures allowing lock-free parallel reading. The developed database has millisecond latencies in filtering and sorting records with cardinality in the units of millions of entries. For more information, see https://evitadb.io/?lang=evitaql.
Gender dimension: The proposed SW does not take gender into account – it neither favours nor discriminates the gender.

[29] See Terms definition.

Smart Parking & Charging

The project was solved by Vigour Alfa spol. s r.o. together with the FIM and the Jan Perner Transport Faculty of the University of Pardubice. The aim of the project was to create a unique software product (Smart Parking & Charging) supporting the integration of various parking systems and charging stations, providing simple navigation to a parking space or charging station and automatic payment for parking and/or charging. Faculty members were involved in the analysis of extracting maximum information from the huge amount of data from the navigation, parking and charging parts of the system and security of the system.

Gender dimension: The proposed SW does not take gender into account – it neither favours nor discriminates the gender.

Innovation of tourism management systems using process management tools

The project was solved by a broad consortium led by the University of West Bohemia in Pilsen (ZČU). The faculty staff participated primarily in the development of the Hotel Process Simulator application. It is an interactive hotel process simulator enabling the simulation of selected hotel processes in the conditions of selected virtual markets (customers, competitors). Using this simulator, users are able to verify in the form of a game the behaviour of selected hotel processes under set conditions and thus understand their characteristics, usability, links and outputs. The simulator allows users to set up and manage selected processes of a virtual hotel while monitoring their impact on the overall performance of the hotel.

Gender dimension: The proposed SW does not take gender into account – it neither favours or discriminates the gender.

Table 3.4.1 - Overview of research results in the period under evaluation

Type of result[30]	Year of application	Name
Pilot production	2019	Equipment for Smart Furniture solutions for the elderly and people with respiratory limitations in areas with poor dispersion conditions
Pilot production	2019	Equipment for image processing by the method of gradual gradient of brightness of image pixels in the area with K-means clustering
Industrial design	2020	Window sensor with Energy Harvesting power supply and integrated EMC filter
Industrial design	2020	Window sensor with Energy Harvesting power supply
Industrial design	2020	Energy Harvesting power supply using TEG energy source
Industrial design	2020	Energy Harvesting power supply using photovoltaic energy source
Utility Model	2020	Electrode system for continuous blood glucose measurement
Utility Model	2020	Diagnostic rehabilitation tool for measuring joint range
Software	2020	Software for image processing by the method of gradual gradient of brightness of image pixels in the area with K.-means clustering
Software	2020	Software for image processing by the method of gradual gradient of brightness of image pixels in the area with K-means clustering in MATLAB environment
Patent	2020	Aluminium alloy for baking ovens

[30] Specify the specific type of result. Add rows as needed.

Utility Model	2020	Device for processing of a pre-processed image by the K-means clustering method
Utility Model	2020	Sensor system with wireless communication, especially for areas with poor dispersion conditions
Map of	2020	Historical Atlas of Towns of the Czech Republic, Volume No. 31 – Jaroměř
Functional sample	2020	Central node for sensor data acquisition with a microcontroller
Functional sample	2021	DCDC-type power supply for powering the wireless communication system
Functional sample	2021	Power supply with 230 V input voltage with capacitive coupling
Software	2021	Software for automatic evaluation of images of biological samples taken by electron microscope (proof-of-concept)
Map of	2021	Historical Atlas of Towns of the Czech Republic, Volume No. 33 – Vysoké Mýto
Research report	2021	Analysis of the impact of the pandemic experience on social workers in public administration
Software	2021	Intellectual Property Management System
Software	2021	Comprehensive SW solution of an algorithmic model for economic evaluation of the potential of new ICT solutions for intelligent environments for the elderly
Functional sample	2021	Sensor assembly for assessment of walking path parameters with central sensor data acquisition node with a microcontroller and GNSS module
Industrial design	2021	Sensor of adhesion
Functional sample	2021	Power supply with 230 V input with capacitive coupling for powering the wireless communication system – variant 2
Functional sample	2021	Power supply for particle sensor control and monitoring system
Software	2021	Hotel Process Simulator
Research report	2022	Final research report from long-term field research in the wider territory of the technological zone Kvasiny-Solnice-Rychnov n. Kněžnou. Analysis of the situation.
Software	2022	VDS – vibration diagnostic system
Functional sample	2022	VDS – vibration measure system
Semi-operational	2022	Centre for scanning electron microscopy of biological objects
Software	2022	Software for the detection of viruses from electron microscopy images and related methodological procedures
Industrial design	2022	Power supply for particle sensor control and monitoring system
Proven technology	2022	Sensor of particulate matter in the air
Prototype	2022	Device for detection and decoding of HDO signal in the distribution network with possibility of controlling appliances with high energy consumption
Functional sample	2022	Board for development of HDO signal sensing algorithm in the distribution network

Functional sample	2022	Add-on board of a microcontroller development module for measuring and evaluating HDO signals in the distribution network
Functional sample	2022	Device for detection and decoding of HDO signal in the distribution network with possibility of controlling appliances with high energy consumption
Prototype	2022	Device for acquisition of client health-related data
Functional sample	2022	A board for data acquisition linked to the medical condition of the mask wearer
Functional sample	2022	Heart rate and skin surface temperature sensor
Proven technology	2022	Device for acquisition of client health-related data
Functional sample	2022	230 V input power supply with integrated NCP 1246 controller for powering the wireless communication system
Functional sample	2022	Expansion board for power supply and work with peripherals
Functional sample	2022	Temperature calibration board
Prototype	2022	Device for non-contact body temperature monitoring
Proven technology	2022	Device for non-contact body temperature monitoring
Functional sample	2022	Footpath adhesion sensor
Software	2022	A guide for gentle wandering in the countryside
Industrial design	2023	Motif of connections on the PCB of a functional prototype device for controlling appliances based on HDO signal
Industrial design	2023	Motif of connections on the PCB of a functional prototype of a calibration component for an IR camera
Industrial design	2023	Motif of connections on the PCB from a functional prototype of a smart mask
Prototype	2023	ProxyQB – rehabilitation cube

Note 1: Please list and describe the results already applied in practice or heading towards application in practice with existing or prospective impact on the society (e.g. domestic or foreign patents, sold licenses, spin-offs, prototypes, varieties and breeds, methodologies, significant analyses, surveys, expert outputs for policymaking or other forms of non-publication outputs, etc.). Indirect results of research, development and creative activities with documented societal impact, e.g. expert activities, services to the public/government/scientific community, may also be reported.

TRANSFER OF RESULTS INTO PRACTICE

3.5 Transfer of results into practice

The evaluated unit shall briefly describe its system for transferring results into practice. It shall also indicate up to five of the most typical users of its results, whether in the university environment or in the non-university application/corporate sphere, detailing how it collaborates with them and how it seeks out new users (using a maximum of five specific examples).

It will also indicate whether and how it commercialises R&D&I results (e.g. selling licences, setting up start-up or spin-off companies, etc.)[31], providing brief description of the commercialisation methods used. The effectiveness of the transfer of results and the commercialisation of R&D&I results will be described using a selection of results (max. five) listed in annex table (Table 3.4.1).[32]

Additionally, the evaluated unit shall briefly comment on the funds received during the period of 2019–2023 from non-public, non-grant sources (e.g. licences sold, spin-off revenues, donations, etc.). A full summary shall be provided in annex table (Table 3.5.1).

Maximum 500 words plus 200 words for each provided example of finding a new user of results and commercialization.

Self-assessment:

The faculty implements the transfer of research and development results into practice through long-term developed mechanisms and processes. These are mainly partnerships with companies based on joint projects. The transfer of research and development results takes place in the form of prototypes, pilot solutions or benchmarking studies. The faculty also develops cooperation with application partners from the field of public or state administration (e.g., city, municipal, and regional authorities) and other non-profit institutions (e.g., in the field of social services or with libraries or schools). In this respect, the transfer of results is most often carried out through expert consultations, methodological supervision, educational lectures, thematic workshops or trainings. The transfer of research results also includes internships for faculty staff and students and practical projects related to contract research or thesis writing. For this purpose, the faculty has set up a mechanism for commissioning external practical projects and created an application solution that links partner companies, professional supervisors and students of the faculty. The promotion of the Open Access publishing model and the sharing of R&D results in public databases and source code repositories is also a key concept for the use of research results.

The most typical users of the results and cooperation with them:

1. **Companies developing industrial control systems.** Use of the Security Baseline methodology for cybersecurity of energy control systems. The cooperation is carried out through pilot verification with specific industrial partners and also through training of company personnel on a cyber polygon.

2. **Public administration authorities.** Implementation of artificial intelligence for cyber security within the Smart City concept. At the same time, the creation of traffic simulation models to optimise traffic congestion and related infrastructure, including infrastructure for e-mobility. The cooperation is carried out through workshops and practical demonstrations and testing by the application guarantor.

3. **E-commerce companies.** Use of specialized evitaDB database for e-commerce solutions. The cooperation takes place through licensing the database and its distribution to partners.

[31] In the case of military HEIs, their specific position is taken into account when evaluating the commercialisation/evaluation of R&D&I results.
[32] If the commercialisation of R&D&I results is carried out in this way.

4. **Social service providers and organisations caring for the elderly.** Use of social software to support active ageing or health monitoring. The cooperation is carried out through pilot testing of the software in homes for the elderly and the universities of the third age.

5. **Healthcare facilities.** Collaboration is taking place in the application of specialized applications evaluating large data sets, capturing diagnostic procedures in the form of expert systems and methodologies for cybersecurity risk management.

Search for new users of results:

- **Professional networking**. The faculty is involved actively in various professional associations and technology platforms that enable sharing of expertise and establishing cooperation with potential users of research outputs. The faculty organises professional workshops (e.g., focusing on cyber security or artificial intelligence) and invites representatives of commercial and non-profit entities. During the workshops, the faculty presents current trends and challenges along with the results of its own research and opportunities for cooperation or practical application. Examples include the Artisec workshop held as part of the project Using Artificial Intelligence for Smart City Cybersecurity. The workshop is attended by representatives of cities and municipalities from the Hradec Králové region, representatives from hospital management and employees in the private sector. The workshop serves as a platform for expert discussion but also offers the results of the project to new users. The workshop contributes not only to finding new users of the faculty's research results but also offers possible involvement in currently implemented research activities.
- **Cooperation with industry partners**. The faculty has long been cooperating with technology companies and industrial partners interested in the application of innovative research outputs into practice. The cooperation takes the form of joint meetings, e.g., at the Blue Faculty – Your Partner, or HIT Career events, or research projects, contract research projects or licensing of developed technologies. Examples include the cooperation with Hitachi Energy Czech Republic s.r.o. which is testing the Security Baseline methodology for cyber security of energy control systems. This research responds to the growing need to protect critical infrastructure and its transfer into practice is being carried out through pilot implementations within the supply chain. Examples also include the collaboration with Škoda Auto to improve websites through eye-tracking. The faculty conducted a research study in its laboratory to evaluate the correct placement of elements on a web page. Similarly, optimisation solutions for production and logistics processes are offered. The faculty develops procedures and methods to streamline the production cycle by analysing large data sets. The solutions provided include process modelling, process orchestration, simulation, and mathematical methods from operations research. Visualization tools for business management are an integral part of these solutions. To find partners in the sector, faculty representatives participate regularly in company events where the needs of the industrial sector and the research capabilities of the faculty are discussed. Examples include the Day with IT organised by Škoda Auto. The faculty is also involved in industry associations of companies such as the Hradec Králové IT Cluster. At the same time, the faculty is also in close contact with its graduates who come up with specific research tasks.
- **Cooperation with technology centres and design offices**. The faculty actively develops cooperation with technology centres and design offices that mediate potential candidates for partnerships from the corporate sector. Companies usually do not have such a space for long-term research and search for new innovative solutions. The faculty has expertise in a number of rapidly evolving areas of IT and is able to create demonstrators or prototypes that can be translated into practice if a suitable partner is found. Specific examples include the prototypes applying tools and techniques from the field of artificial intelligence. The faculty offers solutions for internal document processing using large-scale language models that can be applied in

document management systems. Taking a prototype into a production environment requires close collaboration between researchers and developers from the corporate environment, which creates room for joint projects and grants.

- **Cooperation with the public sector**. The faculty cooperates closely with the public sector, especially with municipal and regional authorities, in the implementation of innovative technological solutions. The faculty offers streamlining of administrative processes through process modelling, management and analysis of public data as well as more effective risk analysis against current security threats. The faculty also develops solutions using the Internet of Things (IoT) for data collection and monitoring of public infrastructure and works on the concept of the sharing economy, especially in the field of energy and increasing the energy efficiency of buildings. The faculty is also working on transport optimization and related transport infrastructure, including technologies for electromobility. Using modern approaches from the field of artificial intelligence, the faculty models traffic situations in selected locations or regions and simulates different options for smoother public and private mobility. These technologies enable municipalities to manage urban environments efficiently, reduce operating costs and improve the quality of life of residents. The search for new partners in the public sector is carried out with the help of authorities from higher territorial units and through faculty events for representatives of cities and municipalities.

Table 3.5.1 - Summary of non-public revenues received during the period under evaluation

Type of revenue	Revenue (in thousands CZK/EUR)				
	2019	2020	2021	2022	2023
Škoda Auto, a.s.	-	200/7.8	-	-	-
Škoda Auto, a.s.	-	-	148/5.8	-	-
Škoda Auto, a.s.	-	-	207/8.2	-	-
Škoda Auto, a.s.	-	-	100/3.9	714/28.2	191/7.5
Škoda Auto, a.s.	-	-	555/21.9	-	-
Škoda Auto a.s.	53/2.1	-	-	-	-
Autocont, a.s.	-	115/4.5	-	-	-
Autocont, a.s.	15/0.6	-	70/2.8	-	-
Autocont, a.s.	-	-	-	-	65/2.6
Autocont, a.s.	-	-	-	-	130/5.1
MDPI AG	13/0.5	-	-	-	-
MULTICORE s.r.o.	10/0.4	-	-	-	-
Zdeněk Tomášek	10/0.4	-	-	-	-
Quadient s.r.o.	10/0.4	-	-	-	-
Akcenta CZ, a.s.	-	-	-	15/0.6	15/0.6
FG Forrest, a.s.	-	-	-	38/1.5	15/0.6
GIST, s.r.o.	10/0.4	-	-	12/0.5	-
Prusa Research a.s.	-	-	-	-	20/0.8
ERAMONT s.r.o.	-	-	-	-	20/0.8
Lucie Vítková	-	-	-	-	10/0.4
Total	121/4.8	315/12.4	1 080/42.6	779/30.7	467/18.4

Note: Enter funds raised for R&D&I from non-public sources besides grants or contract research (e.g. licences sold, spin-off company revenues, donations, etc.) in the calendar year.

POPULARIZATION OF VAVAI

3.6 The most important activities in the field of popularization of R&D&I and communication with the public

The evaluated unit shall briefly describe its main activities related to the popularisation of R&D&I and communication with the public (e.g. popularisation lectures, citizen science initiatives, etc.) during the period of 2019–2023 and provide up to 10 examples that it considers the most significant.

Maximum 500 words plus 200 words for each example given.

Self-assessment:

The staff of individual departments are involved intensively in the popularization of R&D&I through a wide range of activities. Examples include the field of artificial intelligence and cyber security. The main popularization activities include workshops in the field of cyber security, especially for representatives of local governments, cities, municipalities, health and educational institutions, and other institutions. However, the event is open to all professional and lay public and also serves for professional networking between academia and practice. The Night of Scientists, organised university-wide for the general public, is another important popularisation event. At this event, demonstrations of how can artificial intelligence be applied in everyday life are presented. Specific examples include the simulation of transport through multi-agent systems. The event is intended to expose and introduce the practical outputs of scientific work to general public and to motivate interest in knowledge-intensive fields. At the Night of Scientists, various quizzes (Kahoot) in the field of geography, as well as accompanying sports activities (rappelling, orienteering, fitness testing, etc.) are also offered. Visitors are quite interested in these activities. At the same time, faculty representatives are also involved in the popularisation of science through the media with thematic radio interviews. In the period under review, there was, for example, a programme dedicated to the solution of the international project 4GEON on Czech Radio or an interview on artificial intelligence to present its possibilities, challenges and risks, or the presentation of projects in the regional press. Prof. Blanka Klímová, Ph.D., participated, together with other experts, in a discussion for the BBC station which focused on artificial intelligence: https://www.bbc.com/news/business-65849104. Prof. Josef Hynek, Ph.D. was invited to the Breakfast with Nova programme of TV NOVA where he spoke about coping with failure and underachievement. Academics give lectures at secondary schools, especially in the field of computer science, management or tourism (e.g., lectures on geoparks and geotourism, cyber security or financial literacy). The faculty also organizes one-off events such as Geography Days, Heckathon of the Hradec Králové Region or Pi Day at the FIM.

Artificial intelligence is a little bit of an alien that we create ourselves	2023	Radio interview with Ing. Karel Mls, Ph.D. from the Department of Information Technology, FIM. The interview dealt with artificial intelligence (AI), its possibilities, challenges and risks. The discussion focused on whether AI is an inevitable part of the future, how it can be used effectively and ethically in education, and whether its use poses a risk to humanity.
ARTISEC Workshop	2022, 2023	The workshop focused on current cyber threats and related security measures in the context of Smart City and was intended for representatives of local governments, cities, municipalities, health and educational institutions and other institutions. Venue. Campus of the University of Hradec Králové
CNB Discussion Forum	2021	Participation in two panels at the CNB discussion forum for the general public, University of Hradec Králové (via stream https://www.cnb.cz/cs/verejnost/servis-pro-media/audio-video/Diskusni-forum-CNB-00001/)

The UHK team is the only Czech participant in the $10 million competition. They are building a prototype of the FIM Bot robot	2020	In December 2019, the team from the FIM qualified among the 77 best teams from 19 countries in the prestigious ANA Avatar XPRIZE competition. The aim of the activity was to present in the media the current status and perspectives of the project – 3D printing of a prototype humanoid robot, working name FIM Bot, its programming and testing. Venue: Czech Radio Hradec Králové Target group: General public https://hradec.rozhlas.cz/tym-z-uhk-je-jedinym-ceskym-ucastnikem-souteze-o-10-milionu-dolaru-vyrabi-8249538
Without access to the sea or the ocean, Vladimír Bureš explores tsunamis directly from Hradec Králové	2023	A popularization article presenting the solutions and results of an international project that focused on various aspects of tsunami research. Risk management was the main denominator. The contribution of the FIM focused on the application of different modelling approaches and the results achieved. The article targeted the general public in the Hradec Králové region: https://hradecka.drbna.cz/drbna/neobycejni/15878-bez-pristupu-k-mori-ci-oceanu-zkouma-vladimir-bures-tsunami-primo-z-hradce-kralove.html
Partner School	2019,2020, 2023	Within the framework of the university's Partner School activity, the FIM participates in the popularization of science and education among secondary school students. Academician Mgr. Jiří Haviger, Ph.D. attends regularly the mathematics camp of the Episcopal Secondary School where he gives lectures on old and modern discoveries in mathematics. The aim of this activity is to inspire students to take a deeper interest in mathematics and related fields, to promote their study motivation and to show the practical application of mathematical knowledge. The event is held at Episcopal Secondary School and is targeted to students interested in science and engineering.
Pi Day	2019	The Pi Day at the FIM was a popularization event focused on mathematics education. The programme included an introductory lecture on current scientific trends in mathematics and its applications. It was open to general public and was followed by specialised workshops for secondary school students. The workshops focused on the practical application of mathematics in modern research, for example, solving logical and analytical problems or using modern computational methods. The event promoted scientific literacy, motivated a deeper interest in innovative mathematical disciplines and contributes to the popularisation of science.
The Night of Scientists	2019, 2020, 2021, 2022, 2023	The Night of Scientists is an annual national event aimed at popularising science and research. The FIM offers visitors a varied programme including 3D printing demonstrations, information security activities, language workshops, math quizzes for children and workshops focused on financial literacy. The aim is to inspire general public, especially young people, to take an interest in science, computer science and mathematics, and to introduce the Faculty's research and educational activities to potential students. The event takes place at the FIM and is intended for the general public, children, primary and secondary school students, parents and those interested in science.
Hackathon of the Hradec Králové	2019, 2022, 2023	The Hackathon of the Hradec Králové Region is an annual competition focused on data analysis and innovative solutions to specific problems, connecting students, professionals and companies. The FIM is involved actively in the organization of the event in cooperation with regional partners. The aim of the activity is to popularize the fields of data analysis and IT, to promote the practical application of academic knowledge, to inspire the use of open data and to strengthen the connection between academia and practice. The event takes place in the Hradec Králové region, typically in the city of Hradec Králové, and is targeted to students of secondary schools and universities, IT professionals and representatives of regional institutions and companies.

Logic Olympiad	2021, 2022, 2023	Co-organization of the regional round of the Logic Olympiad. The event is aimed at children from the first grade of primary school, second grade of primary school and secondary school. The Olympiad is organised by Mensa Czech Republic.

IMPLEMENTATION OF RECOMMENDATIONS

3.7 Implementation of the recommendations in Module 3

The evaluated unit will briefly describe how it has implemented the recommendations for Module 3 from the previous evaluation period, if applicable.

Maximum 1000 words.

Self-assessment:

Comments on weaknesses identified during the previous evaluation have been implemented systematically to minimise or eliminate their occurrence. During the period under review, the following measures were implemented in the relevant areas:

Research

- The faculty has significantly increased its participation in international research projects or networking initiatives (e.g. COST) fulfilling previous recommendations to engage in large-scale European research initiatives.
- Research directions were redefined continuously using the expertise of individual departments as the starting point.
- The scheme to support excellent research based on publications from the Q1/Q2 quartiles was modified continuously. It resulted in increase of the number of publications in journals with a non-zero impact factor which almost doubled from 2019 to 2023.
- The system for evaluation of scientific activities has been updated. The updated version strengthens the contribution of applied results in a broader spectrum than before. During a multi-round development process in which the broader faculty management members participated.
- A mechanism to support proposals for high-quality basic research projects not supported by external funding sources, despite being positively evaluated by funders, was established. This scheme allows potential investigators to cover the costs of the first year of the project from internal sources, with the obligation of resubmitting it for evaluation at the funder's next call.
- The ratio between manuscripts published in scientific journals and conference proceedings has changed significantly. In Business and Management, the ratio has reversed from 0.6 in 2019 to 27 in 2023, which represents publication in scientific journals only). There is a similar trend in Computer Science (the ratio has changed from around 0.5 in 2019 to 3.6 in 2023).
- Administrative and financial support was provided to support staff efforts to submit proposals for applied research projects. This effort has led to an increase in the success rate of submission of research projects of an applied nature, mostly funded by TA ČR or by departmental projects such as those of the MPO (see Tables 3.3.1 and 3.3.2).

Organisational changes

- The Centre for Basic and Applied Research (CZAV) was re-organised and in the period under review, it focused on two key activities, namely support of the faculty interdisciplinarity and support of internationalisation by involving international experts.

- The faculty has expanded its infrastructure for applied research by modernizing two existing laboratories (Computer Networks lab and the Computer graphics lab) and establishing one new focusing onthe cognitive and behavioural studies.
- The spectrum of academic staff has been expanded significantly to include postdocs. Individual departments had integrated postdocs in ways that enabled their active work, e.g., research-focused lectures for PhD students or research and publication activities with members of the departments.

Study area

- Two further master degree study programmes (Data Science and Economics and Management) have newly been accredited and an application for accreditation of a new Bachelor's study programme in Information and Network Security has been submitted.
- The application for accreditation of a new doctoral programme in Economics and Management was submitted to the National Accreditation Bureau. This enriches the offer of doctoral study programmes portfolio, which now completes the full range of main study programmes from bachelor to master and doctoral degree.
- The faculty has participated in the creation of a new platform called Ph.D. Summit which is aimed at integrating Ph.D. students into the faculty's primary processes.
- FIM has actively addressed the recommendations for commercialization and spin-off support by integrating entrepreneurship education into its curriculum. The faculty has introduced a Business Plan course, where students develop their own start-up ideas and gain hands-on experience in company formation. Additionally, the Technology Centre in Hradec Kralove provides ongoing mentorship, incubation support, and networking opportunities.
- The previously absent compulsory tuition in a world language was introduced for selected study programmes.
- Cooperation with Coursera, the world's leading provider of MOOC courses, has been established and developed. This has expanded the international dimension of education at the faculty as students have the opportunity to study at international educational institutions. In aggregate, students and staff have successfully completed 1,302 courses to date.

Internationalisation

- The development of cooperation with international experts who are employed within the CZAV and are involved in the scientific research work of the faculty is underway.
- Participation in international COST events has increased significantly; faculty representatives are not only members of working groups, but also members of management committees.
- Blended Intensive Programmes (BIPs) were introduced and implemented. They allow a higher level of involvement of international students in the tuition at the faculty through a combination of physical participation in the tuition and virtual mobility. This has also led to the signing of new contracts with new Erasmus international mobility partners.
- The international outreach of the faculty has been supported by the organization of an international summer school which takes place regularly at the beginning of the summer after the end of the teaching and examination part of the semester. The summer school is always attended by dozens of students from different countries around the world, such as Taiwan, Hong Kong, China, South Korea, and France.
- Students of doctoral study programmes are obliged to complete a one-month internship at a foreign research institution. This ensures that the national dimension of doctoral studies is

overcome and the perception of the ways of scientific work is broadened by the experience from foreign institutions.

- The participation and representation of faculty members in consortia, review panels, research boards, Ph.D. examination committees at foreign universities, expert panels, etc. has been increased from a total of 50 positions in 2019 to a total of 95 positions in 2023.
- The faculty co-organized the Semester Abroad event with the Missouri Southern State University where a course on Export Marketing in the team teaching concept was conducted by a Czech and American teacher for a mixed class of Czech and American students.
- FIM has enhanced the popularization of its research and innovation activities by expanding its presence across multiple communication channels. Research successes, prototype developments, student achievements, and grant projects are now actively shared through social media, engaging a broader audience and fostering greater visibility.

A LIST OF SUPPORTING DOCUMENTS/LINKS FOR MODULE 3

Document name	No. criteria	Location (link in HTML)
Strategy of Research Organisation	-	https://www.uhk.cz/file/edee/university-of-hradec-Králové/uhk/official-board/internal-regulations-guidelines-and-decrees/strategic-documents/strategy-of-research-organisation-of-the-uhk-2023.pdf
Strategic Plan FIM UHK	3.1	https://www.uhk.cz/en/faculty-of-informatics-and-management/about-faculty/official-board/public-information
Dean's Decree – Grant Competition Excellence of FIM – 2019	3.7	ditto
Dean's Decree – Rules of the student grant competition at FIM for the use of specific research funds	3.7	ditto
Dean's Decree – Call for the BRASS Grant Programme	3.3	ditto
Dean's Decree – Criteria for the evaluation of research activities at FIM in 2019	3.7	ditto
Dean's Directive – Principles for awarding extraordinary scholarships to doctoral students	3.7	ditto
Habilitations and professorships – directive and regulation, self-evaluation table	3.1	ditto
Call for employees' mobility	3.2	ditto
Postdoc position opening	3.7	ditto

SELF-EVALUATION REPORT FOR MODULE 3

THE NAME OF THE UNIT BEING EVALUATED:
University of Hradec Králové, Philosophical Faculty

FORD: 6 - Humanities and the arts

SOCIAL CONTRIBUTION OF THE EVALUATED UNIT

3.1 Introductory information about the unit under evaluation

The evaluated unit will describe its mission and vision and provide a general self-reflection of the societal contribution of R&D&I, along with its long-term goals in the fields it develops. The distribution of research activities by type of research will also be commented on.[1] The evaluated unit will describe its organisational structure and size (staffing, number of students, number of study programmes implemented, etc.) based on the data provided in annex tables 3.1.1 to 3.1.6.

Maximum 1000 words.

This is a non-rated indicator that serves as an introduction to the evaluated unit, providing context for data in indicators 3.2-3.7.

Self-assessment:

The Philosophical Faculty (PhF) is a fully established and dynamically developing faculty of the University of Hradec Králové (UHK) providing education and conducting research in the key areas of humanities (philosophy, history, archives) and basic social sciences (political science, sociology, social work). Interdisciplinarity both towards natural sciences (e.g., archaeology) and towards the use of IT and IA approaches (digital humanities) is an important dimension of the research and teaching. The structure of the faculty corresponds to this orientation; it is divided organizationally into five separate departments (Department of Philosophy and Social Sciences, Department of Political Science, Department of Sociology, Department of Archaeology, and Department of Historical Auxiliary Sciences and Archives), two institutes (Institute of History and Institute of Social Work) and a language training centre. At the organisational level, the Dean's management agenda is divided into four Vice-Dean's responsibilities (studies, science and research, strategy and development, and foreign affairs) to which the individual Dean's Offices correspond. The Faculty's self-governing bodies include the Academic Senate, the Disciplinary Committee, the Research Board and the Council for Cooperation with Practice.

In terms of its direction, or rather scientific, research and social mission, the PhF subscribes to its positively perceived regional role, consisting of the effort to cover a wide range of educational topics and study programmes while striving for excellence in selected research areas and specific topics. Thanks to its ability to integrate science and education in several workplaces (i.e., a total of 5 departments/2 institutes and the language training centre), the PhF can profile itself as an institution that builds its brand not solely on tradition or on the range of professional, study and research capacities,

[1] Basic, applied, contract, artistic research (see Definition of Terms in Methodology HEI2025+).

but on its ability to provide high-quality education in an open and friendly environment and on respected scientific results in selected fields. Such a "family-like" environment, both in the approach towards students (smaller groups of educated students) and in the functioning of individual research teams, ensures a superior working atmosphere both among colleagues and in the context of the educational process, as well as in the context of management and governance.

The aforementioned selective excellence of research orientation is linked synergistically to the educational sphere which, in the face of certain regional and national competition from similarly configured faculties of the humanities and social sciences, ensures that the the PhF develops research activities and education in areas that are exclusive as compared to the profiles of other institutions (e.g., Latin American and African political science studies, experimental archaeology, presentation of historical and cultural heritage, etc.), and, on the other hand, it seeks to form specific (also excellent) approaches in those programmes that are part of the classical portfolio of faculties of philosophy but for which the specialised nature of our departments also allows for a unique and inspiring profile (e.g., analytical research and continental traditions in philosophy, the development of digital humanities within the historical sciences and auxiliary historical sciences, etc.). In terms of the development of higher education, teacher training programmes in the fields of history (History Aimed at Teaching) and civics, or the foundations of social sciences (Social Sciences Aimed at Teaching) have also become a pillar of the PhF. Moreover, the fact that both these programmes are guaranteed and developed in a cooperative manner in cooperation with other UHK faculties not only ensures the strengthening of the synergic effect of academic departments as such, but also contributes positively to the reflection of the faculty study programmes by students. In this respect, the strengthening of the didactics of the PhF associated in the newly established Didactic Centre is a very positive element. The Didactic Centre enables both the organisation of interdisciplinary and international didactic cooperation projects and the training of the necessary teaching competences beyond general pedagogy and didactics.

From the scientific point of view, the PhF is based mainly on the profiling of basic research in the fields of history and archaeology, philosophy and political science, which corresponds to the dominance of scientific research outputs in these fields according to the FORD category; important results in the application level are also achieved by PhF in the fields of sociology and social work. Achieving quality in the basic research in the above-mentioned fields is helped by the already emphasized specialization of individual expert teams in sub-disciplines on specific topics, which allows to obtain not only highly prestigious research projects, such as the Czech Science Foundation (GA ČR) Expro project in the field of analytical philosophy, but also to penetrate into the contractual and publicly needed research (for example, the activities of the Centre of Field Archaeology (CETA) and the related development of experimental archaeology). Moreover, thanks to the relevant involvement of the faculty departments in the projects of the Technology Agency of the Czech Republic (TA ČR) and the Ministry of Culture of the Czech Republic (MK) – Program of Applied Research and Development of National and Cultural Identity (NAKI), the research strategy of the PhF can be used to increase the share of research activities with application potential, both in the development of regional infrastructure, information and social care and assistance, and in the field of protection of cultural heritage and its digital access to the public. Moreover, the implementation of similar projects together with the strategic design of the faculty's PR activities contributes significantly to the conceptual popularisation of the scientific and research projects of the PhF for the professional and general public, both in terms of long-term cooperation with regional educational and cultural institutions and in terms of regular media activity of selected faculty experts.

In the context of the scientific, study and general social mission of the faculty, the process of student and academic internationalisation, within which the PhF can be considered the university flagship, is the key dimension. This dimension is greatly assisted by the aforementioned specialisation of selected faculty disciplines on exclusive or non-traditional topics and destinations, which facilitates international networking in otherwise more difficult to access areas, while the fact that this international cooperation is not limited to one department but goes across the departments/institutes is an important trend.

Although networking at the individual-research level (mobility, invited lectures, etc.) remains the focus of this internationalisation process, institutional internationalisation is, thanks to the broad base of international contacts, also being strengthened in the form of faculty-led formation of university alliances, double degree programmes and international research teams.

Table 3.1.1 - Staffing per FTE[2]

Academic/ Professional position	Total / Of which women					
	2019	2020	2021	2022	2023	Total
Professor	3.93/1.7	4.5/1.7	4.2/1.7	4.20/1.7	4.03/1.7	6/2
Associate Professor	16.28 /5.35	17.17/5.3	17.06/4.25	17.33/3.5	17.59/3.29	28/7
Assistant Professor	44.5/16.27	42.42/16.65	45.63/18.55	45.96/19.19	49.13/21.96	82/35
Assistant	0/0	0/0	0/0	0/0	0/0	0/0
R&D Personnel[3]	18.28/8.84	13.67/9.3	7.12/4.62	7.8/5.55	8.02/5.75	29/16
Researchers in other categories[4]	44.51/21.37	48.61/22.37	36.15/14.43	37.48/17.03	36.15/16.17	159/70
Technical and economic staff[5]	3.03/3.03	3.94/3.94	3.41/3.41	3.63/3.63	3.53/3.53	7/7
Scientific, research and development staff involved in teaching activities	73.29/28.79	72.81/28.57	71.66/28.18	71.82/27.72	74.88/30.35	143/56
Early career researchers[6]	32.04/8.71	31.37/11.3	27.73/9.94	24.59/10.45	27.91/13.6	58/23
Total[7]	130.53/56.56	130.31/59.26	113.57/46.96	116.4/50.6	118.45/52.4	311/137/ 609.26/265.78

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

[2] The average number of hours worked is calculated as the ratio of the total number of hours actually worked during the reference period, from 1 January to 31 December, by all staff (including agreement on work activity, excluding agreement on work performance) to the total annual working time pool per full-time employee. The full- time status of the worker in the evaluated unit is always reported. If an employee holds more than one type of full-time job within the evaluated unit, the total sum of the two shall be reported.

[3] The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

[4] The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

[5] Who participates in the management and support of R&D&I in the institution.

[6] See Definition of Terms in Methodology HEI2025+.

[7] Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

3.1.2 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2019 (numbers of physical employees and personnel)[8]

Academic/ professional position	Under 29 years		30-39 years old		40-49 years old		50-59 years old		60-69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	0	0	0	0	4	2	2	0
Associate Professor	0	0	0	0	4	1	6	2	4	1	5	2
Assistant Professor	0	0	7	4	34	8	13	8	0	0	0	0
Assistant	0	0	0	0	0	0	0	0	0	0	0	0
R&D Personnel[9]	17	9	5	2	0	0	2	2	0	0	0	0
Researchers in other categories[10]	2	0	30	12	19	8	8	3	4	2	2	0
Technical and economic staff[11]	0	0	2	2	1	1	0	0	0	0	0	0
Scientific, research and development staff involved in teaching activities	0	0	12	6	40	11	22	12	8	3	7	2
Early career researcher[12]	0	0	11	4	25	4	6	2	0	0	0	0
Total[13]	19	9	44	20	58	18	29	15	12	5	9	2

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D Personnel, Researchers in other categories and Technical and economic staff are mutually exclusive, i.e. one staff member is reported in only one category. The categories of scientific, research and development staff involved in teaching activities and early career researchers are reported collectively for all the above-mentioned categories.

[8] The total number of employees/workers as of 31st December of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

[9] The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

[10] The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

[11] Who participates in the management and support of R&D&I in the institution.

[12] See Definition of Terms in Methodology HEI2025+.

[13] Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I Personnel, Researchers in other categories and technical and economic staff.

3.1.3 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2023 (numbers of physical employees and personnel)[14]

Academic/ professional position	Under 29 years		30-39 years old		40-49 years old		50-59 years old		60-69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	0	0	0	0	3	2	2	0
Associate Professor	0	0	0	0	11	2	5	1	1	0	3	1
Assistant Professor	0	0	16	9	30	10	11	8	0	0	0	0
Assistant	0	0	0	0	0	0	0	0	0	0	0	0
R&D Personnel[15]	6	3	4	3	0	0	0	0	0	0	0	0
Researchers in other categories[16]	7	5	20	9	18	7	5	0	1	0	0	0
Technical and economic staff[17]	1	1	1	1	3	3	0	0	0	0	0	0
Scientific, research and development staff involved in teaching activities	0	0	17	10	45	15	16	9	4	2	5	1
Early career researcher[18]	0	0	20	10	11	5	4	2	0	0	0	0
Total[19]	14	9	41	22	62	22	21	9	5	2	5	1

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

[14] The total number of employees/workers as at 31.12. of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

[15] The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

[16] The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

[17] Who participates in the management and support of R&D&I in the institution.

[18] See Definition of Terms in Methodology HEI2025+.

[19] Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

Table 3.1.4 – Students

Type of study	2019		2020		2021		2022		2023		Total	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Undergraduate	689	374	811	506	1020	643	1110	695	1116	687	2487	1517
Master's[20]	254	159	233	145	249	146	252	129	241	123	632	358
Doctoral	93	33	105	38	108	41	112	43	97	39	191	73
Lifelong Learning Courses	1	0	0	0	0	0	0	0	0	0	1	0
Total	1035	566	1147	688	1376	830	1469	865	1449	847	-	-

Table 3.1.5 - Study programmes in Czech/English

Type of study programme	Total[21] / Of which professional study programmes											
	2019		2020		2021		2022		2023		Total	
Undergraduate	15/1	2/0	17/1	2/0	21/2	3/0	22/2	3/0	22/2	3/0	22/2	3/0
Master's	9/2	0/0	11/3	0/0	11/3	0/0	13/4	0/0	14/4	0/0	14/4	0/0
Doctoral	12/5	0/0	12/5	0/0	12/5	0/0	16/5	0/0	16/5	0/0	16/5	0/0
Lifelong Learning courses	1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/0	0/0
Total	37/8	2/0	40/9	2/0	44/10	3/0	51/11	3/0	52/11	3/0	-	-

Note: For each SP type, enter the number of SPs in Czech language in the first cell and insert the number of SPs in English language after the slash in the same cell (e.g. 15/3), enter the number of professional SPs in Czech language in the second cell and insert the number of professional SPs in English language after the slash. Follow a similar procedure in the last column of the table (Total).

3.1.6 – R&D&I capacities

R&D&I field	FORD	FORD share [%]	Predominant type of research	Total share of industry group [%]
1. Natural Sciences	1.1 Mathematics		Zvolte položku.	1.56
	1.2 Computer and information sciences	1.56	Balanced basic and applied research	
	1.3 Physical sciences		Zvolte položku.	
	1.4 Chemical sciences		Zvolte položku.	
	1.5 Earth and related environmental sciences		Zvolte položku.	
	1.6 Biological sciences		Zvolte položku.	
	1.7 Other natural sciences		Zvolte položku.	
2. Engineering and	2.1 Civil engineering		Zvolte položku.	0

[20] All master's degree students are listed, regardless of the length of their programme of study.

[21] The total number of study programmes for which admissions have been announced in a given academic year.

Technology	2.2 Electrical engineering, Electronic engineering, Information engineering		Zvolte položku.	
	2.3 Mechanical engineering		Zvolte položku.	
	2.4 Chemical engineering		Zvolte položku.	
	2.5 Materials engineering		Zvolte položku.	
	2.6 Medical engineering		Zvolte položku.	
	2.7 Environmental engineering		Zvolte položku.	
	2.8 Environmental biotechnology		Zvolte položku.	
	2.9 Industrial biotechnology		Zvolte položku.	
	2.10 Nanotechnology		Zvolte položku.	
	2.11 Other engineering and technologies		Zvolte položku.	
3. Medical and Health Sciences	3.1 Basic medicine	0.16	Basic Research	0.94
	3.2 Clinical medicine	0.47	Basic Research	
	3.3 Health sciences	0.31	Basic Research	
4. Agricultural and veterinary sciences	4.1 Agriculture, Forestry, and Fisheries	0.31	Basic Research	0.31
	4.2 Animal and Dairy science		Zvolte položku.	
	4.3 Veterinary science		Zvolte položku.	
	4.4 Other agricultural sciences		Zvolte položku.	
5. Social Sciences	5.1 Psychology and cognitive sciences	1.09	Basic Research	32.35
	5.2 Economics and Business	0.47	Basic Research	
	5.3 Education	2.81	Balanced basic and applied research	
	5.4 Sociology	5.63	Balanced basic and applied research	
	5.5 Law	0.78	Basic Research	
	5.6 Political science	17.19	Basic Research	
	5.7 Social and economic geography	0.16	Basic Research	
	5.8 Media and communications		Zvolte položku.	
	5.9 Other social sciences	4.22	Basic Research	
6. Humanities and the Arts	6.1 History and Archaeology	45.47	Basic Research	64.84
	6.2 Languages and Literature	0.78	Basic Research	
	6.3 Philosophy, Ethics and Religion	17.81	Basic Research	
	6.4 Arts (arts, history of arts, performing arts, music)		Zvolte položku.	
	6.5 Other Humanities and the Arts	0.78	Basic Research	
	Total	100%	-	100%

RECOGNITION BY THE RESEARCH COMMUNITY

3.2 Recognition by the research community

The evaluated unit will briefly comment on its position in the research community. It shall consider individual and other prestigious R&D&I awards, participation of its academic staff in the editorial boards of international scientific journals, elected membership in professional societies, major invited lectures given by the evaluated unit's academic staff abroad or by foreign scientists and other relevant guests at the evaluated unit. Additionally, it will address the involvement of staff in the evaluation of national or European project/programme calls over the period of 2019–2023 based on the data provided in annex tables 3.2.1 to 3.2.5 (max. 10 most relevant items). If necessary, the evaluated unit shall list any additional services to the scientific community that it considers relevant.

Maximum 1000 words.

Self-evaluation:

In the field of official prestigious awards for scientific and research activities carried out at the PhF in the monitored period, three directions (types) of awards can be distinguished: "Excellent" evaluation of specific research projects, exceptional performance in certain regionally focused research, and recognition of individual scientific lifetime merit. In terms of the first category mentioned above, "Excellent" evaluations were achieved in individual cases by researchers of grant projects within the GA ČR; one of these awards was granted by a foreign institution. In the category of lifetime scientific merit, Dr. Zdeněk Zahradník from the PhF was awarded the prestigious Primus Inter Pares award by the City of Hradec Králové. In the context of scientific activities aimed at researching a specific region, the awards of faculty academics in the field of research on the history and society of Poland stand out (the badge of the Polish Minister of Foreign Affairs for scientific activities promoting Poland in the international context awarded to Prof. Felcman and the jubilee prize for the best scientific work on Poland in the last decade published by dr. Květina (PhF affiliation) in form of a monograph and awarded "Excellent" evaluation in M1 Module). In this context, it can be emphasised that the PhF has been at the top of university rankings for a long time in the context of prestigious awards for scientific results in M1 Module.

As to the participation of faculty academics in the operation of prestigious scientific journals, it should be emphasized that various PhF researchers have long been successful in holding relevant positions on the publishing and editorial boards of not only domestic, but also foreign prestigious journals that are in the first or second quartiles of the Web of Science (WoS) and Scopus databases. The fact that this presence on foreign editorial boards is spread across various disciplines (i.e., philosophy, semiotics, archaeology, anthropology, international relations, history, and sociology) is also positive.

In terms of the internationalization of the PhF research and presentations (i.e., foreign mobility or invited lectures), it can be stated that faculty experts across various disciplines are invited to major academic institutions in various geographical and cultural contexts (logical coverage of Central Europe, including German-speaking countries, the Anglo-Saxon academic world, selected countries in Africa and Latin America), as well as to prestigious scientific meetings or conferences. The fact that these international research mobilities in the form of invited lectures are not limited to several individuals, nor to one or two disciplines, should also be highly appreciated. It is also highly desirable to point out a positive spill-over effect in case of invited lectures in non-European settings, whereby initially political science cooperation has led to the establishment of links in other disciplines, with the result of, for example, mutual sharing of post-colonial perspectives of the German and Austro-Hungarian space by the Czech and African research institutions. The same applies to the opposite direction of mobilities, i.e. the concept and strategy of incoming professors and associated invited lectures. In this case, the international link of the Department of Philosophy aimed at research in analytic philosophy or a specific branch of philosophy of the human-animal relationship plays

a particularly significant role: the global dimension is reflected in the ability to invite successfully world-leading experts from the USA, Australia or the UK. However, even other departments do not stay away from international links and contacts in the form of invited lectures given by foreign professors; for example, the communication between the history departments and the Austrian institutions is significant in this respect.

In terms of the participation of the PhF experts in panels, it can be highlighted that academics in the fields of history, philosophy and political science get regularly into the evaluation panels of the GA ČR (i.e., panels 401, 408, and 410). In addition, a number of faculty experts serve on the expert body of evaluators of the Research, Development and Innovation Council (RVVI), and there is a significant involvement of individual academics in bodies evaluating the basic and applied research projects in competitions of the GA ČR, TA ČR, NAKI, OP JAK, etc.

Table 3.2.1 - Prestigious R&D&I awards granted during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the award	Awarding institution
prof. PhDr. Ondřej Felcman, CSc.	Honorary Bene Merito Badge from the Minister of Foreign Affairs of the Republic of Poland for scientific activities supporting Poland's international position	Ministry of Foreign Affairs of the Republic of Poland
PhDr. Zdeněk Zahradník	Laureate of the Primus Inter Pares award (an award for outstanding, long-term achievements in the field of science and culture)	City of Hradec Kralove
PhDr. Jan Květina, Ph.D.	Marian Szyjkowski Jubilee Award for the best scientific work on Poland in the past decade	Polish Institute and Embassy of the Republic of Poland in Prague
doc. Ladislav Koreň, Ph.D.	"Excellent" evaluation of the research project GA ČR 17-33808L – Inferentialism and Collective Intentionality	FWF (Austrian Grant Agency)
Mgr. Iva Svačinová, Ph.D.	Outstanding evaluation of the research project GA ČR 19-14095S - Modes of (Self-)Persuasion in Personal Diaries	GA ČR

Note: Provide up to 10 examples.

Table 3.2.2 Participation of academic staff of the evaluated unit in editorial boards of international scientific journals during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of scientific journal, ISSN
prof. RNDr. Jaroslav Peregrin, CSc.	International Review of Pragmatics, 1877-3109
doc. Mgr. Filip Jaroš, Ph.D.	Biosemiotics, 1875-1342
Mgr. Richard Thér, Ph.D.	Interdisciplinaria Archaeologica, 1804-848X
Mgr. Stephanie Rudwick, Ph.D.	International Journal of the Sociology of Language, 1613-3668
doc. Mgr. Martin Paleček, Ph.D.	Philosophy of the Social Sciences, 0048-3931
PhDr. Petr Skalník, CSc.	Focaal – European Journal of Anthropology, 0920-1297
Mgr. Jan Prouza, Ph.D.	The Central European Journal of International and Security Studies, 1802-548X
Mgr. Martina Bolom-Kotari, Ph.D.	Konštantínove listy / Constantine's Letters, 1337-8740
doc. Mgr. Ján Bunčák, CSc.	Sociológia, 0049 - 1225
doc. PhDr. Eduard Droberjar, Dr.	Sprawozdania Archeologiczne, 0081-3834

Note: Please provide up to 10 examples of academic staff participation in editorial boards of international scientific journals (e.g. editor, editorial board member, etc.).

Table 3.2.3 The most important invited lectures delivered by the academic staff of the evaluated unit at foreign institutions during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Invited lecture title	Name of host institution, or name of conference or event	Year
doc. Mgr. Martin Paleček, Ph.D.	Conspiracy Theories and Anxiety in Culture	University of Memphis (USA)	2023
Stovall Preston John, Ph.D.	The Phenomenology of Deontic Picturing	Potsdam University (Germany)	2023
doc. Mgr. Ladislav Koreň, Ph.D.	Wherein is Reasoning Social	University of Vienna (Austria)	2019
PhDr. Martin Dekarli, Th.D.	Wyclif in Late-Medieval Bohemia Revisted	University of Leeds (UK)	2023
doc. Stephanie Rudwick, Ph.D.	English as a Lingua Franca: Southern perspectives.	University of Cape Town (RSA)	2020
Mrg. Richard Thér, Ph.D., Mgr. Tomáš Mangel, Ph.D.	Use of the potter's wheel in changing socio-economic conditions of the Late Iron Age in Central Europe	Annual Meetings of European Association of Archaeologists, Belfast (Northern Ireland)	2023
PhDr. Jan Květina, Ph.D.	Collective Identity & Memory Historical roots of the Russia-Ukraine Conflict	University of Namibia (Namibia)	2023
Dr. Joan Pinar Gil	Archaeological researches at Scorrione (2020-2022): outcomes and prospects	Johannes Gutenberg University in Mainz (Germany)	2022
doc. Mgr. Jiří Hutečka, Ph.D.	Masculinity and the First World War	Juraj Dobrila University of Pula (Croatia)	2021
Mgr. Leona Stašová, Ph.D.:	Parents in action: Parenting in context of media use and covid-19	Pontificia Universidad Javeriana, Cali (Colombia)	2023

Note: Provide up to 10 examples.

Table 3.2.4 - The most important lectures by foreign scientists and other guests relevant to R&D&I at the evaluated unit during the evaluation period

Name, surname and title(s) of the lecturer	Lecturer's employer at the time of the lecture	Invited lecture title	Year
Mark Risjord, Jared Millson, Kareem Khalifa	Emory University, Rhodes College, Middlebury College	Inference and Scientific Representation	2021
Karen Rosenberg	University of Delaware	Infant helplessness in humans: A biological anthropologist reflects on Adolf Portmann	2019
Philip Pettit	Australian National University	A Genealogy of Rule-following	2023
Ulf Hlobil	Concordia University	Teleo-Inferentialism	2021
Malcolm Payne	Kingston University St. Georges Medical School	Critical eco practice: A sustainable social work for sustainable social relations?	2022
Walter Lorenz	University of Bolzano	Affirming social work values and principles in the light of the Corona Crisis	2020
Stephen E. Lahey	University of Nebraska-Lincoln USA	Matthias of Janov and the Four Articles of Prague	2022
Edit Anna Lukács	IMAFO, ÖAW, Wien	Teaching of the Sentences at the Medieval Unviersity of Vienna (1384 - ca. 1420)	2021
Lee McIntyre	Boston University	The Nexus of Post-Truth, Disinformation, and AI: A Problem from Hell	2023
Ela Drazkiewicz	Lund University	The State is Lying to us!	2023

Note: Provide up to 10 examples.

Table 3.2.5 - Involvement in the evaluation of national/European research project/programme calls relevant to the R&D&I area at the unit during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the project/ programme call research	Name of the contracting authority/ guarantor of the project/ programme call	Year
doc. Mgr. Petr Grulich, Ph.D.	Project evaluator TA ČR Éta	TA ČR	2019, 2020, 2021, 2022, 2023
doc. Mgr. Jiří Hutečka, Ph.D.	Evaluator– panel 410	GA ČR	2021, 2022, 2023
doc. Mgr. Jaroslav Daneš, Ph.D.	Evaluator – panel 401	GA ČR	2023
Mgr. Lucie Cviklová, M.A., Ph.D.	First-level evaluator	Marie Skłodowska-Curie Actions, Research Fellowship Programme	2019
doc. Mgr. Karel Kouba, M.A., Ph.D.	Evaluator – panel 408	GA ČR	2020, 2022
Mgr. Stanislav Myšička, Ph.D.	Expert body of evaluators	RVVI	2019, 2020, 2022, 2023
prof. PhDr. Mgr. Jana Levická, PhD.	Evaluator of APVV projects	Ministry of Education SR	2021, 2022, 2023
Mgr. Martina Bolom Kotari, Ph.D.	Evaluator of NAKI projects	MK	2020, 2022
doc. Mgr. Ján Bunčák, CSc.	Project evaluator VEGA	Project evaluator VEGA	2020, 2022
prof. PhDr. Dana Musilová, CSc.	Expert body of evaluators	RVVI	2019, 2020, 2021, 2022, 2023

Note: Provide up to 10 examples.

RESEARCH PROJECTS

3.3 Research projects

The evaluated unit shall list at most 10 (considered most significant by the evaluated unit) research projects/activities (regardless of whether they are supported by public funds or based on contract research[22]) that it has implemented or participated in during the period of 2019–2023[23]. This should be done from the full list in annex tables (Table 3.3.1-3.3.2)[24], regarding particularly the results achieved or the application potential of the projects. The unit should also describe how the research projects contributed to the mission and purpose of the evaluated unit. If the evaluated unit has been a participant in listed project, it shall indicate which other entities were involved and describe its contribution to the project. The interdisciplinary aspects of the projects will also be commented on, along with any collaboration with other units of the evaluated HEI.

Maximum 300 words per project.

Self-evaluation:

1. **Naturalized Inferentialism Project: Norms, Meanings and Reasons in the world (EXPRO)**

The project was concerned with the thesis that inferentialism, formulated by Brandom and later developed as one of the most discussed philosophical doctrines of the twenty-first century to date, is usually conceived of as a purely philosophical doctrine that provides a new perspective on uniquely human rational and expressive capacities, but which does not intersect with what science tells us about us as creatures with a natural, cultural and developmental history. The project found this a missed opportunity and our project of naturalizing inferentialism was proposed to bridge this yawning gap. It was based on the idea that inferentialism could be mined as a rich resource of ideas that can be reconstructed in direction to a philosophical naturalism, according to which philosophy should be continuous with science. The theoretical innovations of inferentialism might in turn fertilize current scientific research. More specifically, the team aimed to naturalize inferentialism by reconstructing, rethinking and quite possibly revising its account of the nature of rules, reasoning, and meaning from the two main perspectives on man as a natural being: namely phylogenesis and ontogenesis.

As a result of the project, the term naturalized inferentialism has come to be recognized as a true trademark of a specific branch of inferentialism, with its centre here in Hradec Králové that still manages to move the main topic ahead, elucidating it from the different perspective and making it appear appropriately multi-dimensional. The project yielded three books, two special issues of journals and about 25 papers published in the top journals and books (the journals were, with a few exceptions, from the top decile of the SCIMAGO ranking). And although it is too early to count citations, it seems that the response of the research is favourable. Details can be found at Inferentialism Naturalized.

2. **Changes in the Provision of Basic Services in Rural Municipalities and Impacts on their Inhabitants (TA ČR)**

This is an applied research project. The results are used by the Ministry for Regional Development of the Czech Republic (MMR) and the Association of Local Governments of the Czech Republic which represents local governments of small municipalities. The research on rural amenities has helped to assess what role the support of the service quality can play in the government's regional policy and

[22] For the definition of contract research for the purposes of evaluation in the HE segments, see Article 2.2.1 of the Community Framework for State Aid for Research, Development and Innovation 2014/C 198/01.
[23] Regardless of whether the projects are completed or still ongoing, provided that at least part of the project was implemented during the evaluation period.
[24] The evaluated unit shall only fill tables that are relevant to it.

in what form can deficiencies in service quality be compensated. The project described which types of municipalities are experiencing changes in the provision of basic services, or which services (mainly shops, GP surgeries, post offices, pubs and primary schools) are disappearing or being transformed. The project also investigated which categories of inhabitants of rural municipalities feel these changes most strongly, to what extent they lack the primary as well as secondary functions of these services (e.g., community function) or how they are compensated. These results are mainly used by the Ministry of Regional Development to formulate strategies and tools for their implementation. The project has also created an information base for mayors of small municipalities on how their municipality compares in terms of amenities with other similar municipalities and how the situation can be influenced (the so-called Municipal Amenities Calculator).

3. **Use of Artificial Intelligence in the Provision of Professional Social Counselling (TA ČR)**

The aim of the project TA ČR TL03000671 Use of Artificial Intelligence in the Provision of Professional Social Counselling was to create an innovative communication chatbot for the general public, available 24/7 to the entire population of the Czech Republic (CR) for free on the domain Poradim.info. The chatbot focuses on social counselling in the areas of housing, debt, family law, employment, and others. The chatbot is not a generative engine based on a large language model (GPT, Gemini type) but is made up of closed content, the accuracy of which is guaranteed by its creators according to current legislation. This was the first ever targeted use of such a tool for the needs of systematic social counselling. At the time of the project implementation, the authors of the project were not even aware of any direct analogues of the use of such a tool in counselling practice abroad. The UHK has a total 10% co-ownership share in the result (the project was implemented in cooperation with the Civic Counselling Centre in Hradec Králové). The UHK uses the product for research on user behaviour in communication with machine intelligence and for the development of counselling procedures for specific target groups of social work. It does not have further access to the content of the knowledge base data (formulation of answers for users) but has 50% access to the algorithms of the communication platform.

4. **Dowry Towns of Bohemian Queens (Living Part of Historical Consciousness and its Support by Tools of Historical Geography, Virtual Reality and Cyberspace) (NAKI)**

The NAKI II project Dowry Towns of Bohemian Queens (Living Part of Historical Consciousness and its Support by Tools of Historical Geography, Virtual Reality and Cyberspace), implemented in 2018-2022 in cooperation with the Institute of History of the Academy of Sciences of the Czech Republic (AV ČR) and the Faculty of Information Technology of the Czech Technical University, addressed in an interdisciplinary manner the phenomenon of the dowry towns of Bohemian queens which has been insufficiently explored so far. Despite the fact that many towns have long proudly claimed the heritage of this segment of their past, even historians have not been able to provide an informed interpretation of the issue in the absence of more extensive and systematic research that would make substantial use of the applied level. It was only thanks to the synergistically implemented NAKI II project that a holistic view of this important part of cultural heritage was formed. The projects results in a series of application outputs, e.g., use of a virtual reality application or an augmented reality application in a mobile environment for a 3D time travel through Hradec Králové, and an interactive mobile guide to the dowry cities. In addition, the main outputs include four Historical Atlases of the Czech Towns (HAM) – Dvůr Králové nad Labem, Vysoké Mýto, Jaroměř and Polička as part of the Czech HAM series which is part of the worldwide series of historical city atlases. A set of 3D modelling of selected buildings that have disappeared in the past in the most important dowry town of Hradec Králové is also valuable. Among the secondary outputs, the monograph on the phenomenon of dowry towns across time, the related English monograph Atlas of the Dowry Towns of Bohemian Queens and the educational film which is used in teaching at secondary schools and in lectures for the public, are worthy of attention. The availability of the outputs and the regular lecture activities have helped to disseminate the results of the research among the public and strengthen their relationship to this

important part of the national cultural identity. Since the publications and other outputs of the project are largely available in both Czech and English, they are fully available to the international scientific community.

5. Inferencialism and Collective Intentionality (GA ČR)

This project engaged in a cross-fertilizing dialogue inferentialism and collective intentionality analysis, representing two important philosophical perspectives on the nature of human social-normative practices. According to international reviewers (evaluating the project for the lead Austrian agency - FWF), the project was a huge success and broke some truly new ground in this so far underexplored area of the international research. In the three-year period, our relatively small UHK team managed to create 27 publication outputs in total. Moreover, most of them were published in first-class (including impacted) journals (Inquiry, Synthese, Philosophers' Imprint, Philosophy of Social Science, Journal of the American Philosophical Association or Biosemiotics or Philosophia or representative books of publishers such as Routledge and Springer (including one author monograph and two co-edited volumes, in addition to a number of essays published in such volumes). During the whole period of duration of the project we intensely cooperated with the partner-team based in Vienna. We established a wider international network including external researchers who participated at our conferences and/or contributed to our edited volume (including C. Gauker (University of Sazburg), G. Satne (University of Wollongoing), J. Zamora-Bonilla (Universidad Nacional de Educación a Distancia, Madrid), R. Loeffler (Grand Valley State University), and others. The last three researchers spent a couple of days touring our institution and delivering invited talks. Also, according to the plan, we regularly participated at international (and a few national) conferences where we presented outputs of our research (including networking). Indeed, the Hradec Králové research team as such was international: from the beginning it involved two researchers from USA: Preston John Stovall, Ph.D. (postdoc based at our institution) and prof. Mark Winden Risjord, Dr. (affiliated research professor at our institution). During the period of the project three doctoral students were actively involved in the project-related research activities and organisation of its workshops.

6. Adolf Portmann: a Pioneer of the Eidetic and Semiotic Approach in the Philosophy of the Life Sciences (GA ČR)

The project brought an interdisciplinary revision and philosophical popularization of Adolf Portmann's biological theory. Project team managed to fulfil all the targets of the original proposal of the grant, moreover, it published 1 article and 1 book chapter extra: altogether 2 books, 1 chapter and 11 articles Jimp/Jsc. Three doctoral students (Ivana R. Vajdová, Matěj Pudil, Michal Hubálek) were part of the research team and published four articles altogether: all of them gained a PhD. title later in their studies. The grant project was very positively approved from the Czech Science Agency. An edited volume Jaroš, Klouda (eds.) – Adolf Portmann: A Thinker of Self-Expressive Life, New York: Springer (2021) is the first monograph dedicated to the philosophical anthropology and biology of Portmann published in the English language. Several leading international experts in philosophy, biology and biosemiotics (Prof. Roger A. Stamm, Prof. Markus Wild, Riin Magnus, PhD., Andres Kurismaa, PhD., Pietro Conte, PhD.) has contributed to the edited volume. It has a potential to guide future research on Portmann, as his role in philosophical anthropology and adjacent fields is currently re-established (the volume has been among others cited by a leading international expert J. Fischer). The IF article Cognitive Systems of Human and Non-human Animals: At the Crossroads of Phenomenology, Ethology and Biosemiotics (Biosemiotics) has been already recognized as an important asset for the field of biosemiotics, since it has received Biosemiotics Achievement Award (2020) for novel contributions to the field (awarded by International Society for Biosemiotic Studies).

7. Linguistic and 'racial' identities of Africans and Afro-Czechs in the Czech Republic (GA ČR)

Grounded in ethnography, the primary aim of this project was to develop a nuanced and interdisciplinary understanding of social identities among African diaspora in the CR with a focus on

language and race. The project responded to a paucity of research on the topic in the country which also provided its unique character. While the increasing presence of African diasporic people in Europe and their identity politics have given rise to a proliferation of studies on Afropean identities, central eastern Europe lacks behind. The study largely pioneers uncharted territory in Czech racial studies and also advances the ontological and epistemological study of the relationship between language and race through the geopolitical shift towards an ex-communist country. Its theoretical grounding in intersectionality allowed for insightful studies into power dynamics, racial and linguistic ideology, and identities of Czech residents with African heritage. Collaboration with sociologists, anthropologists and political scientists from Poland, the UK, USA, and South Africa has very much been at the core of the project and resulted in joined conference presentations, invited lectures and even joined publications (Makoni, Idem and Rudwick 2023). The Q1 publication of Rudwick & Nwagbo (2024) in the Journal of Ethnic and Racial Studies, as well as a signed book contract with the prestigious academic publishing house Palgrave Macmillan is also a sign of the excellency of the project. Hosted by PhF/UHK, the project also drew some participants from the ERASMUS+ students who are present during the semesters at the faculty. In this regard, the study also offers great application potential as interviewing African students individually and collectively provided many insights into struggles, failures and successes of foreign students in the CR more generally which the researchers of the project plan on writing up in a comprehensive public report.

8. **Women in Czech and Czechoslovak Science in the First Half of the 20th Century (GA ČR)**

The project Women in Czech and Czechoslovak Science in the First Half of the 20th Century, supported by GA ČR, aimed to create a comprehensive picture of women in science in the Czech and Czechoslovak society in the first half of the 20th century, taking into account the European context. The project focused on the analysis of the share of women and men in scientific work, the reasons that brought more women than men into certain fields, the possibilities of professional growth and building a scientific career for women, and the reconciliation of work and personal life. The Masaryk Institute and Archives of the AV ČR was the principal project investigator and the PhF and the Faculty of Arts of Charles University were the co-investigators. The work on the project was divided equally among all the institutions involved; the same applies to the main output, the monograph No Scientific Field is Closed to Women by Nature: Women's Complicated Paths to Scientific Careers in the First Half of the 20th Century. The book seeks answers to the questions of what kind of knowledge women represent and produce, what their places were in scientific institutions, and how scientific information was exchanged. It traces both the educational and scientific institutions in which women appeared and the personal and professional lives of women in science. The specific examples given often testify to the peculiar fates and atypical scientific careers of women who got over all norms, stereotypes and established practices and achieved (even if only partial) success. In its concept, methodology and conclusions, the monograph represents a major contribution to research on the status of women in science in a historical perspective. The project has an application potential of preserving and cultivating the national, regional and local identity and tradition in a national context.

9. **Rescue Archaeological Research during the Construction of the D11 Motorway, Section 1106, and Rescue Archaeological Research during the Construction of the D11 Motorway, Section 1107**

The contract research project was carried out for the Road and Motorway Directorate in cooperation with EUROVIA CS, a.s., the Archaeological Centre Olomouc and the SOVIS CZ company. It was the most important rescue research of this kind in terms of its scope and financial requirements, in which the PhF researchers (from the Department of Archaeology and CETA) played a key role both in terms of the use of the faculty's expert technical and instrumental equipment, and especially in terms of analytical, methodological and interpretative expertise. The uniqueness of the research and the potential of the results obtained were ensured by the fact that both parallel rescue archaeological excavations on the two mentioned routes of the D11 motorway affected a traditional settlement zone

inhabited intensively since the Neolithic period. The phenomenon of the site in question has thus contributed to the fact that the two connected excavations together form the largest, 22 km long archaeological probe into the landscape of eastern Bohemia with a number of evidence of settlements and burial sites from the Early Stone Age to the Early Middle Age, but also, for example, of new-age fortifications and field military camps or holloways. The excavations produced the largest volume of finds and one order for specific services related to the application of the analysis methodology being developed at the PhF, Department of Archaeology.

10. The Gate of Wisdom is Open. Baroque Cultural Heritage of the Monasteries in Broumov and Rajhrad: Protection, Restoration, presentation (NAKI)

The joint project of the PhF, the Moravian Library in Brno and the Faculty of Restoration of the University of Pardubice was aimed at the preservation and access to the cultural heritage of the Benedictine Order in the Czech lands with a focus on two sites (Broumov and Rajhrad). The aim of the project was to create applied results usable for the identification, presentation, education and protection of movable and immovable cultural heritage of the monastic libraries of the Benedictines in Broumov and Rajhrad with primary attention focused on the libraries of both monasteries (i.e., book collections, premises and equipment). The most important results of the project consist of the preservationists' procedure for the protection and care of the library collections of the monastery libraries together with a methodology for the care of the premises and equipment of the interior of historical libraries. A database of typographic elements of the book block and special software for its use that create a platform for further editorial, analytical and comparative work with the material forms a special result, intended for work with the book collection and its presentation. The provenance of individual prints is presented in the form of four specialised maps (3 for Rajhrad, 1 for Broumov). As both monasteries are important monuments that have significantly shaped their region, they enjoy the interest of both the professional and lay public, which increases their presentation potential that has not yet been fully exploited. The cultural heritage of both monasteries is presented to the general and professional public by making their rich collections available through the Aleph library system, by an exhibition with an accompanying critical catalogue, and by a video documentary dedicated to the Broumov library which is freely available in four languages. At the same time, steps have been taken to preserve the cultural heritage of, in particular, the Broumov monastery by restoring its rarest and most endangered books.

Table 3.3.1 Projects supported by public funds

In the role of beneficiary						
Provider[25]	Project name	Support (in thousands CZK/EUR)[26]				
		2019	2020	2021	2022	2023
GA ČR	Opera Logicalia of Stephen of Pálč (†1423) and the Reception of English Logic in Late Medieval Bohemia	1,244/49	-	-	-	-

[25] If the provider is from abroad, please indicate the provider's country of origin in brackets. For the determination of the country of origin of the provider, the place of residence of the provider is decisive.
[26] Indicate the total amount expressed in thousands of CZK and the conversion of the total amount into Euro.

GA ČR	Outputs of Social Movements and the Dynamics of these Movements	546/22	-	-	-	-
GA ČR	The Image of Indigenous Cultures in the Context of Contemporary Western Alternative Spirituality, Society and Science	1,116/44	-	-	-	-
GA ČR	Modern Tendencies of European History and their Parallels and Resonances in the Work of František Kutnar	907/36	-	-	-	-
GA ČR– international grant projects evaluated using the LEAD Agency principle	Inferentialism and Collective Intentionality	1,442/57	-	-	-	-
GA ČR	Middle-Stream and Alternative Economic Discourses in the Czech Republic and Slovakia	1,241/49	1,024/40	-	-	-
GA ČR	The Relationship between Electoral Competition and Government Repressive Strategies in Latin American Hybrid Regimes	1,054/42	828/33	-	-	-
GA ČR	Forms of (Self-)Persuasion in Personal Diaries	245/10	266/11	251/10	-	-
GA ČR	Adolf Portmann: Pioneer of the Eidetic and Semiotic Approach in the Philosophy of the Life Sciences	1,514/60	1,492/59	1,481/58	-	-
GA ČR	Women in Czech and Czechoslovak Science in the First Half of the 20th Century. Careers, Fates, Achievements	1,117/44	1,091/43	961/38	236/9	-
GA ČR	Technological Changes in the Production of Ceramics in Connection with Social Transformations during the La Tene Age in Bohemia	938/37	923/36	853/34	-	-
GA ČR	A Study of Parliamentary Speeches and their Effects on the Performance of MPs in the Czech Republic	-	1,045/41	1,221/48	1,012/40	-
GA ČR	Political Competition and Local Democracy in Comparative Perspective	-	1,195/47	1,358/54	1,329/52	-
GA ČR	War and Ancient Greek Tragedy	-	-	276/11	228/9	244/10
GA ČR	Naturalized Inferentialism: A Step Towards Social-Normative Pragmatics	-	-	-	1,205/48	1,755/69

GA ČR	Urban Community in War: Olomouc/Olmütz as a Case Study of the Home Front during the World War I, 1914-1919	-	-	-	974/38	949/37
GA ČR	Linguistic and 'Racial' Identities of Africans and Afro-Czechs in the Czech Republic	-	-	-	576/23	894/35
GA ČR	New Contexts of Philosophical Anthropology: the Search for Anthropological Difference Beyond the Nature/Culture Dichotomy	-	-	-	-	1,591/63
GA ČR (EXPRO)	Naturalised Inferentialism: Norms, Meanings and Reasons in the World	-	4,101/162	4,320/170	4,272/169	4,356/172
TA ČR	Analysis of the Social Situation in Relation to Automotive Production in the Industrial Zone Solnice-Kvasiny-Rychnov n/Kněžnou	1,006/40	226/9	1,120/44	314/12	-
TA ČR	Use of Artificial Intelligence in the Provision of Professional Social Counselling	-	411/16	947/37	864/34	356/14
GA ČR– international grant projects evaluated using the LEAD Agency principle	Inferentialism and Collective Intentionality	1,442/57	-	-	-	-
Total		12,370 CZK / 488 EUR	12,602 CZK / 497 EUR	12,788 CZK / 505 EUR	11,010 CZK / 434 EUR	10,145 CZK / 400 EUR
In the role of another participant						
Provider[27]	Project name	Support (in thousands CZK/EUR)				
		2019	2020	2021	2022	2023
GA ČR	The Limits of Reason in the Age of Reason: Controversies in the 18th Century Philosophy	926/37	-	-	-	-
GA ČR	Old and New Virtues. Virtue ethics in Hume and Mandeville		1,334/53	1,555/61	1,773/70	110/4
GA ČR	Amalgamation of Municipalities and Local Democracy	-	-	-	1,862/74	1,481/58
GA ČR	Ceramics as a Witness of Cultural Change? The Old Bronze Age Settlement Agglomeration in Plotiště nad	-	-	-	-	2,388/94

[27] Ibid.

	Labem in the Light of Multidisciplinary Research					
GA ČR	The Jizerské Mountains Metabasite as a Transcultural Connector of Prehistoric Communities in Central Europe	-	-	-	-	2,140/84
TA ČR	Changes in the Provision of Basic Services in Rural Municipalities and Impacts on their Inhabitants	1,357/54	1,580/62	1,672/66	161/6	-
MK	Dowry Towns of Bohemian Queens (A Living Part of Historical Consciousness and its Support by the Tools of Historical Geography, Virtual Reality and Cyberspace)	4,043/160	4,262/168	4,603/182	4,509/179	-
MK	The Gate of Wisdom is Open. Baroque Cultural Heritage of the Monasteries in Broumov and Rajhrad: Protection, Restoration, Presentation	5,095/201	4,908/197	-	-	-
MK	Historical Spa Settlements as a Cultural, Urban and Landscape Phenomenon	-	-	-	-	3,214/127
Alexander von Humboldt Stiftung (Germany)	Framing a Unique Landscape. Rural Catacombs in South-Eastern Sicily between Antiquity and the Middle Ages	-	-	-	204/8	272/11
Total		11,421 CZK / 450 EUR	12,084 CZK / 477 EUR	7,830 CZK / 309 EUR	8,509 CZK / 336 EUR	9,605 CZK / 379 EUR

Table 3.3.2 - Contract research activities

Client[28]	Activity name	Revenue (in thousands CZK/EUR)				
		2019	2020	2021	2022	2023
Road and Motorway Directorate	Survey of archaeological potential and preparation of methodology for rescue archaeological research in the route of the Jaroměř bypass	54/2	-	-	-	-
Regional Museum and Gallery in Jičín	Preservation of metallurgical furnaces from the Roman period from Jičín	35/1	-	-	-	-
Museum of East Bohemia in Pardubice	Conservation of archaeological finds	57/2	-	-	-	-

[28] If the client is from abroad, indicate in brackets the country of origin of the client.

Museum of East Bohemia in Pardubice	Rescue archaeological research in Mikulovice	257/1	-	-	-	-
Faculty of Humanities, Charles University	Archaeological research of the field military fortification in Nebesy near Aš	119/5	-	-	-	-
Museum of East Bohemia in Pardubice	Rescue archaeological excavation in Pardubice Castle	40/2	-	-	-	-
Museum of East Bohemia in Pardubice	Rescue archaeological research in Libišany	149/6	-	-	-	-
Matějí a Kopp s.r.o.	Rescue archaeological excavation of Lanškroun – castle, modification of the terrace for the primary school classroom	3/0	-	-	-	-
Javamont s.r.o.	Archaeological supervision: Lanškroun – optical fibre cable	99/4	-	-	-	-
City of Lanškroun	Rescue archaeological excavation within the school extension in Lanškroun	408/16	-	-	-	-
HELLAS a.s.	Rescue archaeological research in the Na valech location in Lanškroun	-	185/7	-	-	-
City of Lanškroun	Rescue archaeological research during the reconstruction of the health care facility in Lanškroun	-	434/17	-	-	-
Road and Motorway Directorate	Rescue archaeological research in the route of the Hradec nad Svitavou bypass	606/24	13 921/549	1 666/66	-	-
Museum of East Bohemia in Pardubice	Floating of samples from archaeological excavations	30/1	-	-	-	-
Gardenline s.r.o.	Rescue archaeological excavation as part of the restoration of the castle hill in Náchod	-	724/29	447/18	420/17	-
Road and Motorway Directorate	Rescue archaeological research on the route of the Doudleby bypass	-	-	8 105/320	4 205/166	-
Road and Motorway Directorate	Rescue archaeological research on the route of the Jaroměř bypass	-	-	17 310/683	5 253/207	4 471/176
Road and Motorway Directorate	Archaeological prospection in the route of the D35 expressway	-	-	770/30	-	-
Faculty of Arts, Charles University	Analysis of ceramics from the earlier Iron Age by computed tomography	-	-	-	296/12	-

South Bohemia Museum in České Budějovice	Geophysical prospecting in the route of the D4 motorway	-	45/2	-	-	-
Faculty of Arts, Charles University	Analysis of ceramics from the Early Iron Age and the Older Roman Age by computed tomography	-	-	-	43/2	20/1
Museum of East Bohemia in Pardubice	X-ray imaging of collection objects	-	-	-	2/0	-
Museum Písek	Conservation of amber collection items	-	-	-	33/1	-
Road and Motorway Directorate	Rescue archaeological research in the route of the R35 Sadová-Hořice expressway	-	-	-	3 715/147	8 047/317
Road and Motorway Directorate	Archaeological supervision during the construction of the Hradec nad Svitavou bypass	-	-	-	1 386/55	-
Museum and Gallery of the Eagle Mountains in Rychnov nad Kněžnou	Conservation of archaeological findings from archaeological research in the route of the Opočno bypass	-	-	-	55/2	-
City of Úpice	Rescue archaeological excavation in the location of Za roubenkou in Úpice	-	-	-	273/11	-
Faculty of Arts, Masaryk University	Computed tomography of Neolithic ceramic sculptures	-	-	-	66/3	50/2
Road and Motorway Directorate	Rescue archaeological research on the route of the D11 motorway in the section Trutnov - state border (1109)	-	-	-	-	35 505/1401
Institute of Archaeological Heritage Care of Central Bohemia	Conservation of bronze artefacts from the Zápy site	-	-	-	-	3/0
Road and Motorway Directorate	Rescue archaeological research in the route of the expressway D35 Sadová – Plotiště	-	-	-	-	5 339/211
Institute of Archaeological Heritage Care of Central Bohemia	Conservation of bronze artefacts from Brandýs nad Labem	-	-	-	-	34/1
Faculty of Humanities, Charles University	Conservation of metal finds from Strašice "Mráček" site	-	-	-	-	16/1

T.G.M. Museum Rakovník	Conservation of collection objects	-	-	-	-	2/0
Museum of East Bohemia Hradec Králové	Processing of archaeological osteological material	-	-	-	-	89/4
Regional Museum and Gallery in Jičín	Anthropological analysis of skeletal remains from the Nová Paka site No. 231	-	-	-	-	13/1
National Heritage Institute	Rescue archaeological research during the drainage of the terrace: the Náchod Castle	-	-	-	-	133/5
Institute of Archaeological Heritage Care of Central Bohemia	Preservation and conservation of metal artefacts from the Královice site	-	-	-	-	15/1
National Museum	X-ray images of collection objects for drawing documentation	-	-	-	-	8/0
Museum and Gallery of the Eagle Mountains in Rychnov nad Kněžnou	Conservation of bronze and iron archaeological finds from Solnice	-	-	-	-	19/1
Road and Motorway Directorate	Rescue archaeological excavation during the construction of the D11 motorway, section 06 In the consortium UHK + Sovis + Archaeological Centre Olomouc	12 956/511	9 150/361	-	-	-
Road and Motorway Directorate	Rescue archaeological excavation during the construction of the D11 motorway, section 07 In the consortium UHK + Eurovia + Archaeological Centre Olomouc	3 013/119	3 195/126	-	-	-
The City of Hradec Králové	Survey of container sites in the defined area of the city of Hradec Králové	48/2	-	-	-	-
Hradec Králové Region	Satisfaction of the citizens of the Hradec Králové Region with the services provided by the Hradec Králové Regional Authority	90/4	-	-	-	-
Hradec Králové Region	The relationship between the place and the Cirk-Uff festival from the point of view of the target groups	30/1	-	-	-	-

Total	17,994/710	27,654/1,090	28,298/1,116	15,747/621	53,764/2,121

Note: List and describe contract research activities with a revenue in a given calendar year, regardless of the amount of financial revenue.

3.4 Research results with existing or prospective impact on society

The evaluated unit shall briefly comment on a maximum of 10 (considered most significant by the evaluated unit) research results already applied or realistically heading towards application during the period of 2019–2023, based on the overview annex table 3.4.1 (it is recommended to indicate results with a link to projects listed in indicator 3.3). The evaluated unit must demonstrate in its description that the research results have led or will soon lead to positive impacts[29], on society (e.g. description of how the results are used by various users, the range of persons/institutions for which the result is relevant, measurable economic impacts, etc.). The evaluated entity shall indicate in its commentary whether the gender dimension is considered in these results and discuss the impacts of the results regarding sustainability.

Maximum range 300 words/result.

Self-evaluation:

1. AI Chatbot Poradím (I Will Advise) (R_Software)

The results of the project in the form of a counselling chatbot "Poradim.info" are used actively by citizens' counselling centres in the CR, operating on a non-profit basis. Citizens' counselling centres face an ever increasing burden, growing volumes of clients affected by unemployment, housing losses, debt and other influences. For these reasons, the project proceeded to create an innovative tool – a counselling chatbot, i.e., an automated system designed to orient the clients initially in their difficult life situation. Such a tool can serve not only as a tool for immediate help (counselling) but also as a tool for longer-term education of the public in the CR in the typical social problems of the contemporary Czech society. In terms of the gender, the chatbot is not designed in such a way that it *a priori* thematises this aspect but the communication strategy of the programme is set up in such a way that the chatbot uses correct practices in its communication. Its sustainability is primarily a question of future (faster/slower) developments of generative chatbots (like GPT, Gemini) that may, in the near future, eventually catch up and surpass the closed content chatbot developed in the project with their factual correctness of answers (however, the current factual correctness of communication with generative chatbots is not at a level that would allow professional use in counselling practice).

2. BERNARD, Josef, L. VÍTKOVÁ, M. JOUKL. Basic Services in Small Municipalities: Importance, Use and Sustainability of Services (V_research report)

The results were used mainly by the Ministry for Regional Development of the Czech Republic for the formulation of strategies and tools for their implementation. The results are also used by the Association of Local Government that participates in the solution of basic services in small municipalities and the overall development of rural areas and regions. A conference with the participation of the main actors mentioned above and other researchers working on the issues was an important contribution to the study area. Representatives of the municipalities were also presented with the Rural Municipal Service Calculator which is used, for example, to compare whether a given municipality is equipped with services comparably as, better or worse than common Czech municipalities with the same selected characteristics. The project includes an implementation plan which, among other things, includes meetings of the aforementioned actors in the formulation and implementation of strategies for further rural development. Sustainability is linked to new trends in service provision; the structure of services also touches on gender issues of users and service providers and last but not least their sustainability.

[29] See Terms definition.

3. JOUKL, Miroslav, J. BUNČÁK, T. LEDVINKA, L. VÍTKOVÁ. Final Research Report from Long-Term Field Research in the Wider Territory of the Technological Zone Kvasiny-Solnice-Rychnov nad Kněžnou. Analysis of the situation (V_research report)

The results are used by the Hradec Králové Region which – in its position of a self-governing body – is responsible for the sustainable development of the region and which has been entrusted by the memorandum of the Czech Government to ensure the conditions for the development of automotive production in accordance with the sustainable development of the region. The report identifies the social impacts, their causes and possible solutions, requiring the interaction of all actors with their differentiated competences and potential tools to solve the issues. A workshop on the project conclusions held with the participation of a wide range of stakeholders, where the project results were presented and discussed, e.g., with the representatives of the Hradec Králové Region, local authorities, the Police of the Czech Republic, the Immigration Police, the Coordination Centre for Foreigners in the Industrial Zone, Škoda Auto, secondary schools of the region, etc. was an important outcome. Currently, the Department is working on the implementation plan which foresees participation in joint meetings and consultations with the representatives of actors in the affected locality, with gender equality or fairness being one of the areas of impact discussed.

4. Joukl M., Vítková L., Truhlářová Z., Marešová P., Orlíková L.: The Importance of Mobility for the Autonomy of Seniors. CONTACT – Journal of Nursing and Social Sciences Related to Health and Illness, 2022, 24 (3), pp. 254-262 (Jimp)

The article was part of the output of the basic research project which was implemented in cooperation with VSB – Technical University of Ostrava, while the research team of sociologists from the PhF participated in the project in cooperation with the Faculty of Informatics and Management of the UHK. The output is based on the analysis of rich empirical material and the results have been received positively both in terms of contemporary theoretical approaches and their further absorption at the level of the municipalities of the cities of Ostrava and Hradec Králové that are concerned with ensuring safe mobility of the elderly in public space. Contacts were also established with nursing homes (Harmonie in Hradec Králové and Slunečnice in Ostrava) during which specific barriers to mobility of seniors in their surroundings and possibilities of their removal were discussed. The results were also discussed with senior citizen clubs that bring together active seniors, and these discussions reflected sensitively the needs that were formulated distinctively according to gender identity. Based on the contacts, there is an interest in sharing knowledge and good practices aimed at motivating and encouraging walking in urban environments.

5. A set of Specialized Reconstruction Maps (Nmap) of Royal Dowry Towns. Royal Dowry Towns, Comparison of the Current Topography with the Situation before 1420 and in the Second Half of the 19th Century (N_map)

The result is available on the project's website (Dowry Towns of Bohemian Queens). It can be used by historians, geographers, teachers and other similar professions, but also for the enjoyment and enlightenment of people interested in regional history. The significant social benefit of the result lies in its use both in the educational process at all levels of the educational system and in its use by the professional community. The use of the results in conservation and urban planning represents a very specific impact. The results are used by the authorities of the respective city (the Department of Heritage Protection and the Chief Architect's Office) in the context of understanding the history of the territory, but also by the higher levels of these departments at the regional level. The result has also had an impact abroad where it has become a study material for research on the Czech urban history. Given the specifically historical dimension of the topic, it is not possible to speak unequivocally of an a priori reflection of the gender dimension, although the popularization research on the issue of the dowry towns has naturally contributed to the transformation of public perception of the gender-based position of the Bohemian medieval and early new-age queens and female

aristocracy in general. The result is further used in the PhF teaching and in lectures for the public, which significantly increases its potential for sustainability.

6. Interactive Web-Based Historical Guide to the Dowry Towns (R-software)

The result is available on the project's website (Dowry Towns of Bohemian Queens) and serves as a tourism tool for visitors to the dowry towns and people interested in history, or as an educational tool for pupils, students and their teachers. The project has a social impact on the educational process, especially at secondary schools, and also in tertiary education, both in the field of historical sciences and IT applications. The guide is available to the general public and has been accepted by the voluntary association of the Royal Dowry Towns as a product for use by the relevant information centres and destination companies. The result is used by IT researchers as a study resource. In this case too, it can be stated that the output has contributed to the transformation of public perception of the gender-based position of the Bohemian medieval and early new-age queens and female aristocracy in general. From the point of view of sustainability, based on the experience from the implementation of the result, it is possible to work on other results based on geodatabases and Nmap or Nimap, e.g., within the project NAKI III DH23P03OVV075 Historical Spa Settlements as a Cultural, Urban and Landscape Phenomenon.

7. Dowry Towns of Bohemian Queens (audio-visual production)

The educational film introduces viewers to the history of the legal institution of the dowry of the Bohemian crowned queens from its beginnings in the 14th century until its demise in 1918. Special attention is paid to the queen's dowry towns, a specific historical phenomenon that is still commemorated by various activities of the former dowry towns and their association Royal Dowry Towns (Dowry Towns). The history of the dowry towns, one of the most important cultural heritages of especially the East Bohemian region, has been revealed in its entirety thanks to the NAKI II project Dowry Towns of Bohemian Queens. The project resulted in this educational film made for the general public and school groups. Since 2022, the output has been used regularly and quite successfully in the lectures given by the Centre for Urban History of the PhF where it is presented not only to the public (lectures at the UFFO Cultural Centre in Trutnov, the Hradec Králové City Library, the UHK's University of the Third Age), but also to secondary schools located in the region, thus fulfilling positively the principle of sustainability. The cooperation with the Czech Radio Hradec Králové where historical issues are also promoted in live broadcasts belongs to the positive impacts of the project. The wide popularisation potential of the output also ensures implicit consideration of the gender dimension, enabling a change in public perception of the gender-based position of the Bohemian medieval and new-age queens and female aristocracy in general.

8. Libraries of the Benedictine Monasteries in Broumov and Rajhrad (Organisation of an Exhibition with Critical Content)

The exhibition with a critical catalogue presented the movable and immovable heritage associated with the book collection of these monasteries. It offered visitors a glimpse into the spaces of both libraries, their artistic decoration, furnishings and the challenges associated with the care of these spaces. At the same time, the exhibition presented the issue of preservation and restoration of books, accompanied by photographic documentation of the project. This output appealed to a wide range of visitors from the professional public, including historians, librarians and restorers, to the general public with an interest in cultural heritage. In terms of sustainability and economic impact, there has been an increased interest in visiting the monasteries concerned and associated exhibitions, which supports positively tourism and contributes to funding for projects aimed at preserving and promoting cultural assets. Regarding the gender dimension of the outcome, it is not possible to operate with direct or *a priori* planned impacts of the outcome, although the exhibition also reflected the gender-based areas of monastic life at the time.

9. Care of Building Components and Furnishings of Interior Libraries in Historic Buildings (N_Certified methodology)

The methodology provides guidance for the preservation of historic libraries and their equipment. It provides procedures for the construction and maintenance of interiors that respect the architectural value of the spaces and ensure optimal conditions for the storage of valuable book collections. The methodology is relevant for managers of listed buildings, for architects, restorers and other professionals involved in the preservation of cultural heritage. The economic benefit lies in the prevention of damage caused by improper maintenance or unprofessional interventions, which reduces repair costs and increases the sustainability of these unique spaces. Given the specifically technical nature of the issue addressed, the output does not include relevant gender sensitivity. However, the methodology promotes awareness and education in the care of historic buildings and provides a practical tool for planning and sustainable operation of these spaces.

10. Programme for registration and presentation of typographic parts of the book block of Bohemian prints (R-software)

The programme provides researchers with an efficient tool for searching and analysing data from the database of typographic elements. It is particularly relevant for scientists, historians, librarians and book culture specialists who are researching Bohemian prints, their typographic decoration and historical context. With filtering options and detailed descriptions of decorations or books, this tool streamlines significantly research work and increases data accessibility. The output is not explicitly relevant to the issue of gender or the consideration of the gender impact of the result. The economic impact includes support for scientific projects in the field of digitisation and preservation of cultural heritage, as well as opportunities for educational and research institutions to use the software in professional practice, reinforcing the principle of its long-term usability and sustainability.

Table 3.4.1 - Overview of research results in the period under evaluation

Type of result[30]	Year of application	Name
R_SOFTWARE	2022	AI Chatbot Poradím (I will advise)
N_MAP	2022	A set of specialized reconstruction maps (Nmap) of royal dowry towns. Royal dowry towns, comparison of the current topography with the situation before 1420 and in the second half of the 19th century
W_Workshop organisation	2022	Dowry Towns of Bohemian Queens. Didactic use of the outputs of the NAKI II project Dowry Towns of Bohemian queens in teaching at primary and secondary schools
O_OTHER	2019	Population, employment and housing in the municipalities of the core area of the Kvasiny Industrial Zone
O_OTHER	2019	People, work and housing in the impact area of the strategic industrial Zone Kvasiny - Solnice - Rychnov n/K
V_RESEARCH REPORT	2019	Research report on the social situation in relation to automotive production in 2019

[30] Specify the specific type of result. Add rows as needed.

V_RESEARCH REPORT	2020	Basic services in small municipalities: Current availability of services and infrastructures, their development and territorial availability of services
V_RESEARCH REPORT	2022	Final research report from long-term field research in the wider territory of the technological zone Kvasiny-Solnice-Rychnov n. Kněžnou. Analysis of the situation.
W_Workshop organisation	2022	Workshop Social Changes Associated with the Development of Automotive Production in an industrial zone
V_RESEARCH REPORT	2022	Basic services in small municipalities: Importance, use and sustainability of services
V_RESEARCH REPORT	2022	Basic services in small municipalities: Importance, use and sustainability of services
V_RESEARCH REPORT	2022	Basic services in small municipalities: Promoting services in rural areas
V_RESEARCH REPORT	2020	Research report on the social situation in relation to automotive production in 2020
Jimp	2022	Accessibility modelling for the elderly, perceptions of accessibility and determinants of mobility in space
B_PROFESSIONAL BOOK	2022	Basic services in rural municipalities: Development, importance, and use
M_Conference organisation	2022	Conference Business, School, Playground... and what next? Provision of basic services in rural municipalities
M_Conference organisation	2022	The use of artificial intelligence in the provision of professional social counselling and the possibilities of applying new technologies in the field of social work
N_MAP	2019	Historical Atlas of the Czech Towns, Volume No. 30 – Polička
N_MAP	2020	Historical Atlas of the Czech Towns, Volume No. 31 – Jaroměř
N_MAP	2021	Historical Atlas of the Czech Towns, Volume No. 33 – Vysoké Mýto
N_MAP	2022	Historical Atlas of the Czech Towns, Volume No. 34 – Dvůr Králové nad Labem
R_SOFTWARE	2022	Interactive web-based historical guide to dowry towns
R_SOFTWARE	2022	Time travel through Hradec Králové without 3D glasses for mobile devices and the web
B_PROFESSIONAL BOOK	2022	Dowry Towns of Bohemian Queens
R_SOFTWARE	2022	Interactive mobile historical guide to dowry towns

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R_SOFTWARE	2022	3D time travel through Hradec Králové (augmented reality application in mobile environment)
R_SOFTWARE	2022	3D time travel through Hradec Králové (virtual reality application)
A_Audio-visual production	2022	Dowry Towns of Bohemian Queens
B_PROFESSIONAL BOOK	2020	The Gate of Wisdom is Open. Books and Libraries of the Broumov Monastery
R_SOFTWARE	2019	Programme for registration and presentation of typographic parts of the book block of Bohemian prints
B_PROFESSIONAL BOOK	2019	Libraries of the Benedictine Monasteries in Broumov and Rajhrad
N_Certified methodology	2020	Care of building components and furnishings of interior libraries in historic buildings
N_MAP	2020	Provenance Map of the Broumov Collection Focusing on Original Church Libraries
Organizing an exhibition with critical content	2019	Libraries of the Benedictine Monasteries in Broumov and Rajhrad
A_AUDIOVISUAL PRODUCTION	2021	Digitization of Sacral Monuments in the Broumov Region
A_AUDIOVISUAL PRODUCTION	2022	Protecting the Treasures of Centuries
A_AUDIOVISUAL PRODUCTION	2023	Family Tree of the Broumov Region. Landscape of coming and leaving
S_SPECIALISED PUBLIC DATABASE	2023	Digital Edition Gregorius
R_SOFTWARE	2023	Tei-Parsel 1.0
M_Conference organisation	2020	Monastica historia V: Monastic Libraries between the Middle Ages and the Enlightenment

Note 1: Please list and describe the results already applied in practice or heading towards application in practice with existing or prospective impact on the society (e.g. domestic or foreign patents, sold licenses, spin-offs, prototypes, varieties and breeds, methodologies, significant analyses, surveys, expert outputs for policymaking or other forms of non-publication outputs, etc.). Indirect results of research, development and creative activities with documented societal impact, e.g. expert activities, services to the public/government/scientific community, may also be reported.

TRANSFER OF RESULTS INTO PRACTICE

3.5 Transfer of results into practice

The evaluated unit shall briefly describe its system for transferring results into practice. It shall also indicate up to five of the most typical users of its results, whether in the university environment or in the non-university application/corporate sphere, detailing how it collaborates with them and how it seeks out new users (using a maximum of five specific examples).

It will also indicate whether and how it commercialises R&D&I results (e.g. selling licences, setting up start-up or spin-off companies, etc.)[31], providing brief description of the commercialisation methods used. The effectiveness of the transfer of results and the commercialisation of R&D&I results will be described using a selection of results (max. five) listed in annex table (Table 3.4.1).[32]

Additionally, the evaluated unit shall briefly comment on the funds received during the period of 2019–2023 from non-public, non-grant sources (e.g. licences sold, spin-off revenues, donations, etc.). A full summary shall be provided in annex table (Table 3.5.1).

Maximum 500 words plus 200 words for each provided example of finding a new user of results and commercialization.

Self-assessment:

In the issue of transferring results into practice, the PhF relies on those disciplines or departments whose research character has undeniable application potential (i.e., in particular, the Department of Sociology, the Department of Archaeology, the Institute of Social Work), and on the systemic setting of experience with specific partial research projects, implemented in the view of expectated cooperation with practical users (in particular the TA ČR and NAKI projects – see section 3.4 for more details). In this respect, the systemic nature of this transfer lies primarily in maintaining intensive contacts with regional and supra-regional partners in the areas of public interest, educational activities and cultural heritage protection. In addition, a number of the PhF workplaces have specialised centres designed specifically to transfer research results into practice (e.g., Centre for Sociological Studies of the City and Region, Archaeopark Všestary, CETA, and Didactic Centre).

The most typical users of the research results include the following institutions or social groups:

1. State and local government authorities (specifically the relevant departments of the Hradec Králové Municipality and the Regional Office of the Hradec Králové Region);
2. State-owned enterprises (specifically the Road and Motorway Directorate in the case of archaeological excavations);
3. Institutions established by the state and the region as representatives and mediators of public interest in the protection of cultural heritage (e.g., museums);
4. Residents of the region or regional organizations (e.g., citizens in need, charitable organizations, especially in the specific case of the research conducted by the Institute of Social Work);
5. Other academic institutions using the results in basic and applied research.

New contacts in the field of potential partners and users of research with an overlap into practice are established at the general level of all departments and projects through presentations of results at professional conferences and seminars. In the field of sociology, the Centre for Sociological Studies of the City and Region is a key institution. It maintains a network of regular contacts with potential

[31] In the case of military HEIs, their specific position is taken into account when evaluating the commercialisation/evaluation of R&D&I results.
[32] If the commercialisation of R&D&I results is carried out in this way.

users of its research results. However, contract research with a practical application depends in most cases in all the disciplines involved on the specific demand of the respective sponsors. In order to attract new users of its results, the Department of Archaeology makes inquiries to potential users of its contractual services via electronic portals (e.g., TENDER ARENA, E-ZAK, Supplier Portal, Archaeological Map of Bohemia). In terms of spreading awareness of the successful transfer of results into practice, services based on the developed methodological portfolio are published through a web presentation in Czech and English (Centre for Field Archaeology - Offered Services) as well as on social networks (Facebook, Instagram). In the field of the professional and lay teaching community as one of the key social platforms for the application of the didactic dimension of professional research (Didactic Centre of the PhF UHK), the PhF focuses on the expansion of cooperating accompanying teachers and training supervisors within the region as well as on the application of specific outputs of professional projects (KA2 Teaching humanities, ID CARD 4, upcoming OP JAK Pregraduate) in teaching practice at individual regional primary and secondary schools.

Due to the nature of basic and applied research in the humanities and social sciences, the PhF does not show such examples of revenues from non-public sources (e.g., sold licences, revenues of spin-off companies, donations, etc.) that would fall into the category monitored under indicators 3.5.1 (Summary of non-public revenues received during the period under evaluation). For these reasons, Table 3.5.1 is left blank. For the same reasons, the way in which the results of research are commercialised is also not reflected here.

Table 3.5.1 - Summary of non-public revenues received during the period under evaluation

Type of revenue	Revenue (in thousands CZK/EUR)				
	2019	2020	2021	2022	2023
----------	---------	---------	---------	---------	---------
Total	---------	---------	---------	---------	---------

Note: Enter funds raised for R&D&I from non-public sources besides grants or contract research (e.g. licences sold, spin-off company revenues, donations, etc.) in the calendar year.

POPULARIZATION OF VAVAI

3.6 The most important activities in the field of popularization of R&D&I and communication with the public

The evaluated unit shall briefly describe its main activities related to the popularisation of R&D&I and communication with the public (e.g. popularisation lectures, citizen science initiatives, etc.) during the period of 2019–2023 and provide up to 10 examples that it considers the most significant.

Maximum 500 words plus 200 words for each example given.

Self-assessment:

As part of the third role of academic institutions, the PhF carries out regular popularization, cultural and discussion events intended for external educational institutions (i.e., especially events for primary and secondary schools) and for the wider professional and general public. While in the case of the first type of activity, i.e. the cooperation of the faculty with the primary and secondary level of education, we can talk about a combination of a certain educational and culturally emancipatory intention with an effort to make educational and scientific trends accessible to potential applicants for studies, in the case of a wider professional and lay audience, the PhF strives to educate the general public which is, in cooperation with a number of other regional cultural and educational institutions, seen as a necessary part of academic activity in the formation of a sustainable, critically thinking and democratic society. In addition to the above-mentioned aspect which takes into account the different forms of the target group or audience, the nature of these popularisation and public activities can also be distinguished with regard to the initiative of the events organised, i.e., according to the question in which cases the PhF is involved in awareness-raising events of a national dimension, and in which cases it carries out similar events on its own.

As far as national events are concerned, the first place should be given to the regular annual participation of the faculty in the Night of Scientists project. In accordance with the strategy of the University, the Night of Scientists is organized at each faculty separately (i.e., at the Building B), with space given for the participation of all departments and institutes as sovereign faculty units. During the Night of Scientists, presentations of diverse scientific results in the field of archaeology, history, political science, sociology, social work, philosophy, auxiliary historical sciences and archival science take place, with the important specificity of this presentation being the active involvement of students who present research achievements and approaches together with the researchers. The Humanities Week is another similar popularisation event with a national dimension and with active participation of the PhF. Educational activities of various scope are organised at the faculty for the general public during the week. The initiative “Humanitky” (Humanitky.cz) represents a specific long-term popularization project aimed at demonstrating the benefits of studying social sciences and humanities and to dispel the basic myths prevailing among the public regarding their usefulness. The PhF has implemented the initiative together with the Faculty of Arts of the J. E. Purkyně University in Ústí nad Labem and the Faculty of Arts of the University of Ostrava.

Among the platforms organised by the PhF but carried out in cooperation with other important regional educational and cultural institutions, it is necessary to highlight the long-term cooperation with the Museum of East Bohemia on a number of events, both cultural and didactic. This popularisation cooperation is also facilitated by the activities of the Didactic Centre of the PhF UHK which is also oriented towards research cooperation with the Museum of East Bohemia, given the nature of some study programmes (Presentation of Historical and Cultural Heritage, Teacher Training, etc.). In addition, cooperation with the cultural institution Bio Centrál is also relevant. Experts from the PhF are invited to its premises for expert events (e.g., PechaKucha Night, discussion talks, introductory lectures for cinema presentations, etc.). Moreover, this nature of activity is also reflected in the systematic cooperation of the PhF with libraries and schools across the Hradec Králové and East

Bohemia region, within the framework of which travelling lectures by academics are organised not only for institutions in the regional city, but also in smaller settlements. The HUBs (Hradec University Discussions) represent a specific platform for the regional presentation of expert opinions. Their aim is to invite experts from other institutions and backgrounds to the faculty for discussion panels devoted to special topics, thus enabling the presentation of external experts to the regional audience. The Faculty podcast FFUHK Coffee in which selected PhF academics interviewed interesting guests across disciplines, generations and worldviews, also played a role in this area in the period under review. At the same time, the creation of podcasts opens up space for the faculty to make greater use of the new media. This activity is, in line with current trends, decentralised to individual departments and institutes (i.e., departmental YouTube channels and podcasts).

Presentation of innovations in the field of scientific and popularization findings, especially for educational institutions and schools (i.e., primary and secondary schools) is a pillar activity of the faculty, as evidenced not only by the regular series of workshops for schools, but also the organization of professionally focused Olympiads. In addition to the already established History competition, sponsored by the Ministry of Education, Youth and Sports of the Czech Republic (MŠMT), it is necessary to highlight the Philosophy Olympiad which originated at our Department of Philosophy and Social Sciences. This competition grew from an initially local event to a prestigious nation-wide competition during the period under review. In addition, the regular year-long FFree Index project, consisting in the organisation of lectures and workshops in various fields that are held approximately twice a month by individual PhF academics, also fits into this category. Anyone from the general public can attend any of these events but the whole series also functions as an incentive programme for applicants for study who receive a bonus in the admission procedure for regular participation.

Among the whole range of professional conferences that are not limited to subject knowledge and have the potential to reach a wider public, it is important to emphasize the long-term role of the Hradec Days of Social Work, i.e., a conference organized by the Institute of Social Work at the premises of the UHK. The event overlap lies in establishing links between the academic, public and socially defined commercial sector in the field of social services and related care. A one-off three-year project in another area aimed at innovating higher education in the humanities and social sciences had a similar dimension. It resulted in the conference Whither Teaching, Whither Humanities? oriented towards presenting key results to the educational community.

In terms of the long-term cooperation of the PhF with the printed, audio-visual and new media, the strategic communication between the university PR department, the faculty PR department and individual faculty departments and academics plays an irreplaceable role, thanks to which, in the period under review, faculty research was regularly presented in the mainstream Czech media, especially in those areas in which the PhF is characteristic or exceptional (e.g., African and Latin American topics, military history and Polish history – e.g., Historie.cs., commenting on the topics of regional politics, digital humanities, presentations of the results of experimental archaeology and the use of new methods in classical archaeological research, etc.).

IMPLEMENTATION OF RECOMMENDATIONS

3.7 Implementation of the recommendations in Module 3

The evaluated unit will briefly describe how it has implemented the recommendations for Module 3 from the previous evaluation period, if applicable.

Maximum 1000 words.

Self-assessment:

In terms of the implementation of the recommendations from the previous evaluation, it is possible to distinguish the general level of innovations concerning the faculty as a whole from partial recommendations linked to specific departments or research programmes. At the global level, a breakthrough was noted in the field of international research cooperation that is not only at the level of individual scientific contacts (e.g., partial International Research Teams, individual research trips, etc.) but is also organized on a faculty-wide institutionalized platform. The participation in international KA2 programmes in the form of the Teaching Humanities project which resulted in both scientific outputs oriented towards shifts in modern didactics of social sciences and humanities and a number of international workshops represented an important institutionally anchored form of research faculty cooperation. The Czech-Polish collaboration, based on long-term research contacts and common focus on identical topics of several faculty departments in the fields of history, philosophy or digital humanities, has also developed, especially through joint membership in the Czech-Polish Scientific Society, in which a number of regionally related Polish universities (Wroclaw, Opole) participate. This cooperation includes joint scientific projects and workshops organized at the PhF, as well as regular nation-wide Czech-Polish conferences. Finally, a shift in the field of international cooperation has also been recorded in the field of the double degree programmes, under which it is possible to study the joint English programme Political Science in cooperation with the Pontificia Universidad Javeriana in Cali, or the follow-up Master's programme History in cooperation with the University in Nitra.

Recommendations in the area of increasing intra-university cooperation between individual faculties were reflected at the PhF by developing cooperation between the Department of Archaeology of the PhF and various workplaces at the UHK's Faculty of Science that enabled to share an expensive electron microscope and other laboratory equipment. Preparation of various common scientific and grant projects has also become common, especially in the case of TA ČR projects where researchers specialized to social work, sociology and philosophy are involved in joint programmes organised mainly by the Faculty of Informatics and Management. Examples also include the preparation of a joint project within the framework of the Johannes Amos Comenius Programme (OP JAK) titled Excellence in Social Sciences and Humanities: the PhF co-prepared a project dedicated to the phenomenon of urban settlements and the PhF team included experts in IT technologies and Smart Cities from the FIM. The interconnection of faculties on the basis of Digital Humanities which is focused on the Department of Auxiliary Historical Sciences and Archives and which, however, requires overlapping into other disciplines, has been a significant challenge. It is also reflected in the planning of new joint study courses with the Faculty of Education of the UHK (FEdu) and the Faculty of Science (FSci) (e.g., a course focused on artificial intelligence, the so-called "green programme", etc.).

Within the framework of a more systematic penetration of the PhF experts into the public media, or the use of the media to shape the social impact of research results, the cooperation between the university PR department, faculty PR office and individual workplaces was strengthened with an effort to cover topics that resonate in the public environment but, at the same time, are not professionally treated at a similar level at other Czech academic workplaces. This good position for the PR presentation of the PhF scientific outputs is based, for example, on the profile of the Department of Archaeology which, in cooperation with the faculty's CETA workplace, carries out a number of

researches related to the strategic building of the infrastructure of the Hradec Králové Region. An important role in the field of media presentation is played by both the Department of Political Science with its invaluable staff potential thanks to its unique orientation towards Latin America and Africa, as well as the two historical departments that include experts specialising in media-interesting topics (military history) and important regions (Poland).

Within the framework of partial recommendations, a number of scientific projects have begun to be developed not only in an interdisciplinary manner, but above all as a challenge to start cooperation with other domestic universities or academic institutions. This fact concerns both the basic research projects within the GA ČR and the application fields in the context of TA ČR projects. A specific boom was experienced in the monitored period by joint cooperation within the framework of projects of the Ministry of Culture (NAKI), the successful implementation of which by the PhF required multi-level cooperation with key research institutes across the CR (e.g., cooperation with various institutes of Czech Academy of Science). Thanks to the establishment of these inter-institutional links, three multi-institutional projects were prepared at the end of the period under review under the OP JAK Excellence in Social Sciences and Humanities call, two of which were accepted for funding with the PhF departments as co-investigators. This fact was also reflected in the strengthening of the application potential of the PhF, both in the context of sociological surveys carried out within the framework of the TA ČR project, or in the context of research carried out upon the order of regional structures, and with regard to the orientation of the research projects of the Institute of Social Work towards improving the possibilities of communication in the provision of social services. The applicability of scientific findings at the PhF can also be identified in the case of overlapping into the field of culture or tourism, especially in the case of the long-term development of the Všestary Archaeological Park in the context of implemented experimental archaeology procedures and popularization of its outputs for the public. In addition to this well-established project, a number of partial activities have been launched, such as the popularisation of research sites in the form of nature trails in cooperation with public entities (e.g., the Češov complex) or the implementation of the Visegrad project which resulted in a mobile tourist application making the Hanička and Osowka fortresses accessible in the form of augmented reality.

A LIST OF SUPPORTING DOCUMENTS/LINKS FOR MODULE 3

Document name	No. criteria	Location (link in HTML)
Strategy of Research Organisation	-	https://www.uhk.cz/file/edee/university-of-hradec-Králové/uhk/official-board/internal-regulations-guidelines-and-decrees/strategic-documents/strategy-of-research-organisation-of-the-uhk-2023.pdf

SELF-EVALUATION REPORT FOR MODULE 3

THE NAME OF THE UNIT BEING EVALUATED:
University of Hradec Králové, Faculty of Science

FORD: 1 - Natural sciences

SOCIAL CONTRIBUTION OF THE EVALUATED UNIT

3.1 Introductory information about the unit under evaluation

The evaluated unit will describe its mission and vision and provide a general self-reflection of the societal contribution of R&D&I, along with its long-term goals in the fields it develops. The distribution of research activities by type of research will also be commented on.[1] The evaluated unit will describe its organisational structure and size (staffing, number of students, number of study programmes implemented, etc.) based on the data provided in annex tables 3.1.1 to 3.1.6.

Maximum 1000 words.

This is a non-rated indicator that serves as an introduction to the evaluated unit, providing context for data in indicators 3.2-3.7.

Self-assessment:

The Faculty of Science (FSci) of the University of Hradec Králové (UHK) is the youngest faculty of the UHK, founded in 2010. It is developing dynamically and growing qualitatively in many areas. Since 2017, it has been based in a new modern building in the Na Soutoku campus and has used well-equipped research and teaching laboratories. It educates specialists in biology, chemistry and physics as well as future teachers of natural science, mathematics and computer science.

The mission of the FSci is to spread education and knowledge in the fields of natural science, mathematics and computer science within the regional, national and international environment. The FSci wants to be a respected educational institution with an attractive offer of study programmes and other forms of education that meets the social and labour market demand. The FSci aims to develop highly valued and socially beneficial scientific, research and innovation activities in all cultivated fields and related technical applications. The aim of the FSci is to be a fully internationalised faculty in the field of international educational and scientific cooperation, integrated into international scientific research teams. At the same time, it wants to be a socially responsible, open faculty contributing to the solution of society-wide issues.

The FSci consists of five departments: Biology, Physics, Chemistry, Applied Cybernetics, and Mathematics. The Faculty Dean's Office is divided into the following offices and departments: the Secretariat, the Strategy and Project Office, the Department of Publicity and Communication, the Study Department, the Science and Research Office, and the International Office. In addition, two centres have been established at the FSci, namely the Subjects Didactics Centre (SDC) and the Centre of Advanced Technology (CAT).

[1] Basic, applied, contract, artistic research (see Definition of Terms in Methodology HEI2025+).

The faculty deals mainly with basic research (mathematics and mathematical physics, physics, biology, chemistry, and medicinal chemistry) including socially relevant applications (antidotes to nerve paralytic substances, potential drugs for Alzheimer's disease, study of fruit trees' adaptation to drought, etc.), but also with applied research (biomedical issues, sensors for use in health care or veterinary medicine, etc.) and didactics of natural science subjects. In particular, the CAT focuses on applied and contract research and has produced, together with other departments, several patents, utility models or functional samples.

Specifically, the CAT focuses on biomedical signal processing with an emphasis on smart technologies and healthy aging, data analysis in human and veterinary medicine, and the design and construction of sensors and sensor networks. In these areas, it cooperates with regional industrial partners (e.g., Trilab Group s.r.o., Retia a.s.) and other partners in the Czech Republic (CR) (Essence line. s.r.o.).

The Department of Physics has been engaged intensively in research in the field of biomedical signal evaluation with a focus on the external mechanical manifestations of the autonomous body systems of humans and animals (cooperation with Linet, spol. s r.o.). The department is involved in the development of didactics as a scientific field, particularly by researching methods of teaching critical and scientific thinking and analysis of disinformation in physics teaching. It investigates solid-state physics, focusing on the assessment of micro-plastics occurrence in diverse environments with the Department of Biology. It is also involved in black hole physics and cosmology and spectral theory.

The Department of Mathematics is devoted to the study of geometric structures on pseudo-Riemannian manifolds or algebra and number theory. It is also interested in optimization methods with emphasis on stochastic approaches. Moreover, it focuses on didactics of mathematics where it addresses conceptual and procedural knowledge of students and their flexibility in problem solving.

The Department of Chemistry investigates the processes of aging and neurodegenerative diseases at the molecular level, and protection against intoxication by organophosphates (i.e., chemical warfare agents and insecticides), for which it develops new medicines (antidotes). It also develops anticancer drugs and therapeutics for the diagnosis and treatment of cancer.

The Department of Biology deals with dendrological and physiological research on fruit trees, and conservation biology based on the study of selected species of invertebrates and vertebrates or endangered plant species. It also investigates mycotoxins in food and deals with high-risk agents and toxins.

The Department of Applied Cybernetics deals with modelling and developing algorithms and creating information systems predicting population trends.

In 2023, the faculty had a total of 61.77 FTE academic staff which meant the increase by 39% from 44,42 in 2019, indicating the faculty growth. Between 2019 and 2023, the numbers of young staff increased mainly in the under-40 categories, while the numbers of staff over 40 stagnated or declined. This indicates a good age structure of the workforce and holds promise for the future.

There are 780 students studying at the faculty. The study programmes can be divided into two areas: teaching-oriented and professional. The faculty trains future secondary school teachers with the qualifications corresponding to all its departments. In cooperation with other faculties, it also offers uncommon combinations of future teachers' qualifications. In addition to Bachelor and Master courses aimed at teaching, a related doctoral programme in Didactics of Physics is accredited there. Among the professional study programmes, the faculty offers studies in, for example, Applied Physics, Biology and Ecology, or Toxicology and Analysis of Pollutants. The faculty has also accredited the programmes of Toxicology and Biology and Ecology in its doctoral studies, which can be studied in English.

The FSci plans to accredit new socially necessary programmes (e.g., a professionally oriented Bachelor's study programme General Nursing or Bachelor's and follow-up Master's programmes focused on sustainable development and corporate ecology). The disciplinary capacities were determined according to the publication activity in the period under review and the allocation of funding for specific university research (SPEV) and long-term conceptual development of the research organisation (LCDRO). Given its focus, the faculty has the largest capacities in Ford 1 Natural Sciences and Ford 3 Medical and Health Sciences.

In the evaluated period (2023), the FSci established an International Advisory Panel (Dean's Decision 6/2022), which is currently preparing for a new model of cooperation, and its recommendations will be implemented in the next evaluation period.

Table 3.1.1 - Staffing per FTE[2]

Academic/ Professional position	Total / Of which women					
	2019	2020	2021	2022	2023	Total
Professor	4.21/1.00	5.43/1.00	5.44/1.00	5.71/1.00	5.72/1.00	10/1
Associate Professor	9.38/0.34	13.59/1.00	14.28/1.00	13.21/1.00	14.83/1.00	21/1
Assistant Professor	30.83/12.86	35.50/13.28	36.73/12.87	40.15/15.73	41.22/18.12	68/33
Assistant	0.00/0.00	0.00/0.00	0.00/0.00	0.00/0.00	0.00/0.00	0/0
R&D Personnel[3]	4.13/4.13	7.80/7.80	7.13/7.13	6.80/6.80	7.00/7.00	11/11
Researchers in other categories[4]	29.05/7.42	30.45/10.28	22.23/9.51	21.26/9.77	15.79/8.41	110/41
Technical and economic staff[5]	3.00/3.00	3.58/3.00	4.00/3.00	3.95/2.95	4.08/2.08	5/4
Scientific, research and development staff involved in teaching activities	49.65/16.75	62.83/19.72	64.41/20.34	63.38/21.34	64.99/22.63	117/47
Early career researchers[6]	26.40/7.45	26.62/6.85	24.08/7.02	23.67/5.27	21.30/5.42	62/22
Total[7]	80.60/28.75	96.35/36.36	89.81/34.51	91.08/37.25	88.64/37.61	225/91/ 446.48/174.48

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

[2] The average number of hours worked is calculated as the ratio of the total number of hours actually worked during the reference period, from 1 January to 31 December, by all staff (including agreement on work activity, excluding agreement on work performance) to the total annual working time pool per full-time employee. The full- time status of the worker in the evaluated unit is always reported. If an employee holds more than one type of full-time job within the evaluated unit, the total sum of the two shall be reported.

[3] The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

[4] The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

[5] Who participates in the management and support of R&D&I in the institution.

[6] See Definition of Terms in Methodology HEI2025+.

[7] Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

3.1.2 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2019 (numbers of physical employees and personnel)[8]

Academic/ professional position	Under 29 years		30-39 years old		40-49 years old		50-59 years old		60-69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	2	0	1	0	1	0	4	1
Associate Professor	0	0	1	0	6	1	5	0	1	0	3	0
Assistant Professor	0	0	12	3	23	12	6	2	2	0	1	1
Assistant	0	0	0	0	0	0	0	0	0	0	0	0
R&D Personnel[9]	3	3	3	3	1	1	1	1	0	0	0	0
Researchers in other categories[10]	2	1	22	9	9	0	3	0	1	0	1	0
Technical and economic staff[11]	1	1	0	0	1	1	1	1	0	0	0	0
Scientific, research and development staff involved in teaching activities	1	0	21	8	31	13	12	2	5	0	8	2
Early career researcher[12]	0	0	19	7	13	6	1	0	0	0	0	0
Total[13]	6	5	38	15	42	15	17	4	5	0	9	2

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D Personnel, Researchers in other categories and Technical and economic staff are mutually exclusive, i.e. one staff member is reported in only one category. The categories of scientific, research and development staff involved in teaching activities and early career researchers are reported collectively for all the above-mentioned categories.

[8] The total number of employees/workers as of 31st December of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

[9] The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

[10] The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

[11] Who participates in the management and support of R&D&I in the institution.

[12] See Definition of Terms in Methodology HEI2025+.

[13] Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I Personnel, Researchers in other categories and technical and economic staff.

3.1.3 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2023 (numbers of physical employees and personnel)[14]

Academic/ professional position	Under 29 years		30-39 years old		40-49 years old		50-59 years old		60-69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	3	0	2	0	1	0	2	1
Associate Professor	0	0	1	0	7	1	3	0	2	0	3	0
Assistant Professor	0	0	24	11	15	6	8	4	1	0	1	1
Assistant	0	0	0	0	0	0	0	0	0	0	0	0
R&D Personnel[15]	2	2	2	2	2	2	1	1	0	0	0	0
Researchers in other categories[16]	14	11	13	6	4	2	3	0	1	0	1	0
Technical and economic staff[17]	0	0	3	2	0	0	2	2	0	0	0	0
Scientific, research and development staff involved in teaching activities	0	0	28	14	25	7	13	4	5	0	6	2
Early career researcher[18]	0	0	24	6	3	0	4	1	0	0	0	0
Total[19]	16	13	43	21	31	11	19	7	5	0	7	2

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

[14] The total number of employees/workers as at 31.12. of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

[15] The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

[16] The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

[17] Who participates in the management and support of R&D&I in the institution.

[18] See Definition of Terms in Methodology HEI2025+.

[19] Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

Table 3.1.4 – Students

Type of study	2019		2020		2021		2022		2023		Total	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Undergraduate	572	370	535	360	646	407	578	398	564	381	1427	915
Master's[20]	167	106	141	98	218	122	131	93	127	95	443	276
Doctoral	70	38	69	40	76	47	80	52	77	50	124	73
Lifelong Learning Courses	0	0	0	0	0	0	18	12	16	11	18	12
Total	806	511	743	496	936	572	802	550	780	533	-	-

Table 3.1.5 - Study programmes in Czech/English

Type of study programme	Total[21] / Of which professional study programmes											
	2019		2020		2021		2022		2023		Total	
Undergraduate	7/2	0/0	16/5	0/0	16/5	0/0	16/5	0/0	16/5	0/0	16/5	0/0
Master's	6/0	0/0	9/2	0/0	14/2	0/0	14/2	0/0	14/2	0/0	14/2	0/0
Doctoral	8/4	0/0	10/4	0/0	14/6	0/0	16/6	0/0	16/8	0/0	16/8	0/0
Lifelong Learning courses	0/0	0/0	0/0	0/0	0/0	0/0	1/0	0/0	1/0	0/0	1/0	0/0
Total	21/6	0/0	35/11	0/0	44/13	0/0	47/13	0/0	47/15	0/0	-	-

Note: For each SP type, enter the number of SPs in Czech language in the first cell and insert the number of SPs in English language after the slash in the same cell (e.g. 15/3), enter the number of professional SPs in Czech language in the second cell and insert the number of professional SPs in English language after the slash. Follow a similar procedure in the last column of the table (Total).

3.1.6 – R&D&I capacities

R&D&I field	FORD	FORD share [%]	Predominant type of research	Total share of industry group [%]
1. Natural Sciences	1.1 Mathematics	14,4	Basic Research	65,9
	1.2 Computer and information sciences	10,5	Balanced basic and applied research	
	1.3 Physical sciences	9,7	Basic Research	
	1.4 Chemical sciences	7,7	Basic Research	
	1.5 Earth and related environmental sciences	3,2	Basic Research	
	1.6 Biological sciences	20,2	Basic Research	
	1.7 Other natural sciences	0,2	Basic Research	
2. Engineering and	2.1 Civil engineering	0,3	Basic Research	7,8

[20] All master's degree students are listed, regardless of the length of their programme of study.
[21] The total number of study programmes for which admissions have been announced in a given academic year.

Technology	2.2 Electrical engineering, Electronic engineering, Information engineering	1,9	Basic Research	
	2.3 Mechanical engineering	0,3	Basic Research	
	2.4 Chemical engineering	0,2	Basic Research	
	2.5 Materials engineering	2,5	Basic Research	
	2.6 Medical engineering	0,3	Basic Research	
	2.7 Environmental engineering	0,4	Basic Research	
	2.8 Environmental biotechnology	0,3	Basic Research	
	2.9 Industrial biotechnology	0,3	Basic Research	
	2.10 Nanotechnology	0,4	Basic Research	
	2.11 Other engineering and technologies	0,9	Basic Research	
3. Medical and Health Sciences	3.1 Basic medicine	17,7	Basic Research	20,2
	3.2 Clinical medicine	1,6	Basic Research	
	3.3 Health sciences	0,9	Basic Research	
4. Agricultural and veterinary sciences	4.1 Agriculture, Forestry, and Fisheries	2,8	Basic Research	3,1
	4.2 Animal and Dairy science	0,1	Basic Research	
	4.3 Veterinary science	0,1	Basic Research	
	4.4 Other agricultural sciences	0,1	Basic Research	
5. Social Sciences	5.1 Psychology and cognitive sciences	0,0	Zvolte položku.	3,0
	5.2 Economics and Business	0,1	Basic Research	
	5.3 Education	2,7	Basic Research	
	5.4 Sociology	0,0	Zvolte položku.	
	5.5 Law	0,0	Zvolte položku.	
	5.6 Political science	0,1	Basic Research	
	5.7 Social and economic geography	0,0	Zvolte položku.	
	5.8 Media and communications	0,0	Zvolte položku.	
	5.9 Other social sciences	0,1	Basic Research	
6. Humanities and the Arts	6.1 History and Archaeology	0,0	Zvolte položku.	0,0
	6.2 Languages and Literature	0,0	Zvolte položku.	
	6.3 Philosophy, Ethics and Religion	0,0	Zvolte položku.	
	6.4 Arts (arts, history of arts, performing arts, music)	0,0	Zvolte položku.	
	6.5 Other Humanities and the Arts	0,0	Zvolte položku.	
	Total	100 %	-	100 %

RECOGNITION BY THE RESEARCH COMMUNITY

3.2 Recognition by the research community

The evaluated unit will briefly comment on its position in the research community. It shall consider individual and other prestigious R&D&I awards, participation of its academic staff in the editorial boards of international scientific journals, elected membership in professional societies, major invited lectures given by the evaluated unit's academic staff abroad or by foreign scientists and other relevant guests at the evaluated unit. Additionally, it will address the involvement of staff in the evaluation of national or European project/programme calls over the period of 2019–2023 based on the data provided in annex tables 3.2.1 to 3.2.5 (max. 10 most relevant items). If necessary, the evaluated unit shall list any additional services to the scientific community that it considers relevant.

Maximum 1000 words.

Self-assessment:

The FSci and its staff received significant awards in the period under review.

Prof. PharmDr. Kamil Musílek, Ph.D. received the Runner-up for EFMC Prize for a Young Medicinal Chemist in Academia 2019, PharmDr. Ondřej Benek, Ph.D. received the Jan Bures Award. The projects of prof. PharmDr. Kamil Musílek, Ph.D. and Ing. Richard Cimler, Ph.D. were evaluated by the Czech Science Foundation (GA ČR) and the Ministry of Industry and Trade of the Czech Republic (MPO) as excellent. The joint project of the Technology Agency of the Czech Republic (TA ČR), Linet, spol. s r.o. and the UHK (investigator doc. RNDr. Filip Studnička, Ph.D.) was awarded the TA ČR award in the Business category in 2022. Prof. Ing. Kamil Kuča, Ph.D., prof. PharmDr. Kamil Musílek, Ph.D. and Assoc. prof. RNDr. PaedDr. Pavel Trojovský, Ph.D. were ranked among the top 2 percent of the most cited scientists in the Standford/Elsevier list.

The UHK as a whole began to appear in prestigious world rankings in the period under review, and the FSci contributed significantly to this. In Life Sciences it was ranked 401st-500th in 2023, which corresponds to 2nd-3rd place in the Czech Republic, in Physical Sciences (physics, chemistry, mathematics) it was ranked 1001st+ in 2023, which corresponds to 6th-13th place in the Czech Republic. In the QS World University Rankings 2023, the UHK is ranked 801st-1000th place, which corresponds to 8th-11th place in the Czech Republic (1001-1200th place in 2025, 9th-14th place in the Czech Republic). In the Shanghai Ranking, the UHK achieved 401th-500th place in Pharmacy & Pharmaceutical Sciences in 2023 (2nd-3rd place in the Czech Republic).

The staff also serve as members of editorial boards of major international journals, such as Medicinal Chemistry, Frontiers of Pharmacology, Physics, Analysis and Mathematical Physics, Ecological Chemistry and Engineering S, Journal of Insect Conservatory, and European Journal of Entomology.

The academic staff of the faculty have delivered invited lectures at major international conferences, such as the 17th International Symposium on Cholinergic Mechanisms, 14th International Meeting on Cholinesterases, 8th International Conference on Paraoxonases, Challenges in Spectral Theory of Differential Operators, or 14th Serbian Congress of Pharmacology and 4th Serbian Congress of Clinical Pharmacology with International Participation.

During the evaluation period, many foreign experts, such as Prof. Jens Pahnke, Prof. Karin Melnick and Prof. Ali Mostafazadeh, gave lectures at the faculty.

Table 3.2.1 - Prestigious R&D&I awards granted during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the award	Awarding institution
prof. PharmDr. Kamil Musílek, Ph.D.	Runner-up for EFMC Prize for a Young Medicinal Chemist in Academia 2019	The European Federation for Medicinal Chemistry (EFMC)
PharmDr. Ondřej Benek, Ph.D.	Prize of Dr. Jan Bures 2020	Czech Alzheimer's Foundation
prof. Ing. Kamil Kuča, Ph.D.	Highly cited researcher 2021	Clarivate Analytics
Assoc. Prof. Pavel Trojovský, Ph.D.	Top 2% Scientists in 2023	Stanford/Elsevier Top 2 % Scientists List 2024
prof. PharmDr. Kamil Musílek, Ph.D.	Top 2% Scientists in 2022	Stanford/Elsevier Top 2 % Scientists List 2023
prof. Ing. Kamil Kuča, Ph.D.	Top 2% Scientists in 2020, 2021, 2023	Stanford/Elsevier Top 2 % Scientists List 2021, 2022, 2024
Assoc. prof. RNDr. Filip Studnička, Ph.D.	Award in the Business category for the Intelligent Medical Bed for Critically Ill Patients (collaboration with Linet company)	TA ČR
Ing. Richard Cimler, Ph.D.	Excellent project of Industry and Trade FV40231	MPO
Faculty of Science UHK	Rank 401-500 in Shanghai ranking in the year 2022 in Pharmacy & Pharmaceutical Sciences, 2nd to 3rd place among Czech universities	Shanghai ranking
Faculty of Science UHK	Rank 401-500 in Times in Higher Education ranking in the year 2023 in Life Sciences, 2nd to 3rd place among Czech universities	Times in Higher Education

Note: Provide up to 10 examples.

Table 3.2.2 Participation of academic staff of the evaluated unit in editorial boards of international scientific journals during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of scientific journal, ISSN
prof. Ing. Kamil Kuča, Ph.D.	Letters in Drug Design and Discovery (Bentham; 2019-2021), 1570-1808, Editor-in-Chief
prof. Ing. Kamil Kuča, Ph.D.	Journal of Agriculture and Food Research (Elsevier, 2023-2024), 2666-1543, Associate Editor
prof. Ing. Kamil Kuča, Ph.D.	Journal of Animal Science and Biotechnology (BMC, 2022-today), 1674-9782, Editorial Board Member
prof. PharmDr. Kamil Musílek, Ph.D.	Medicinal Chemistry, ISSN: 1875-6638, Editorial Board Member
prof. PharmDr. Kamil Musílek, Ph.D.	Frontiers in Pharmacology, ISSN: 1663-9812, Editorial Board Member
Miloslav Znojil, DrSc.	Physics, ISSN: 2624-8174, Editorial Board Member
prof. Anton Galaev, DrSc.	Analysis and Mathematical Physics, ISSN: 1664-2368, Editorial Board Member
doc. Mgr. Petr Bogusch, Ph.D.	Journal of Insect Conservation, ISSN: 1366-638X, Editorial Board Member
Doc. Mgr. Petr Bogusch, Ph.D.	European Journal of Entomology, eISSN 1802-8829, Editorial Board Member
doc. RNDr. Jan Kříž, Ph.D.	Ecological Chemistry and Engineering S, ISSN: 1898-6196, Editorial Advisory Board Member

Note: Please provide up to 10 examples of academic staff participation in editorial boards of international scientific journals (e.g. editor, editorial board member, etc.).

Table 3.2.3 The most important invited lectures delivered by the academic staff of the evaluated unit at foreign institutions during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Invited lecture title	Name of host institution, or name of conference or event	Year
prof. PharmDr. Kamil Musílek, Ph.D.	Modification of Oxime Nucleophiles for Enhanced Reactivation of Cholinesterases	17th International Symposium on Cholinergic Mechanisms	2022
prof. PharmDr. Kamil Musílek, Ph.D.	Cholinesterase reactivators after 70 years of research and development: new promises and challenges	14th International Meeting on Cholinesterases and 8th International Conference on Paraoxonases	2022
prof. PharmDr. Kamil Musílek, Ph.D.	HSD10 inhibitors for treatment of Alzheimer´s disease or other mitochondrial related diseases	University of California San Diego	2019
doc. Mgr. Petr Bogusch, Ph.D.	Evaluation of identities of island species of bees	Universidad de La Laguna, Tenerife, Canary Islands, lecture for the public and employees of Biology departments)	2023
prof. Anton Galaev, DrSc.	Losic classes of codimension-one foliations	Frankfurt Airport Seminar on Groups, Geometry and Dynamics, Germany	2019
Oleksii Kotov, Dr.	Some constructions from graded geometry	Program: "Higher Structures and Field Theory", The Erwin Schrodinger International Institute for Mathematics and Physics, Vienna, Austria	2022
Andrii Khrabustovskyi, Ph.D.	Operator estimates for some problems in perforated domains	Conference "Challenges in Spectral Theory of Differential Operators", TU Graz, Austria	2022
doc. RNDr. Jiří Lipovský, Ph.D.	Spectral asymptotics of the Laplacian on Platonic solids graphs	Conference „Quantum Mechanics of Artificial Material Structures, Sochi, Russia"	2020
prof. Ing. Kamil Kuča, Ph.D., prof. PharmDr. Kamil Musílek, Ph.D.	Cholinesterase reactivators for organophosphate intoxication treatment	University of California at San Diego, Skaggs School of Pharmacy & Pharmaceutical Sciences, San Diego, USA	2019
prof. Ing. Kamil Kuča, Ph.D.	Development of Novel Acetylcholinesterase Reactivators	14th Serbian Congress of Pharmacology 4th Serbian Congress of Clinical pharmacology with International Participation, Novi Sad, Serbia	2019

Note: Provide up to 10 examples.

Table 3.2.4 - The most important lectures by foreign scientists and other guests relevant to R&D&I at the evaluated unit during the evaluation period

Name, surname and title(s) of the lecturer	Lecturer's employer at the time of the lecture	Invited lecture title	Year
Dr. Youg-Sik Jung, Ph.D.	Korean Research Institute of Chemical Technology, South Korea	Novel butyrylcholinesterase reactivators for pseudo-catalytic scavenging of organophoshates	2019
Prof. Jens Pahnke, M.D., Ph.D., E.F.N.	University of Oslo, Norway	ABC Transporters: Role in Neurodegeneration & Treatment	2023
Prof. Karin Melnick	University of Maryland, USA	SL(n, R)-actions on closed n-manifolds	2022
Prof. Ramiro Lafuente	University of Queensland, Australia	Einstein manifolds and symmetry	2022
Prof. Daniel Fox	Universidad Politécnica de Madrid, Spain	From affine spheres to Griess algebras	2022
Prof. Monika Ludwig	TU Wien, Austria	Geometric Valuation Theory	2019
Assoc. Prof. Petr Siegl, Ph.D.	TU Graz, Austria	The damped wave equation with singular damping	2022
Prof. Ali Mostafazadeh	Koc University, Istanbul, Türkiye	Renormalization of point scatterers in two and three dimensions and its coincident-limit problem	2022
Prof. Mauricio Pato	Universidade de Sao Paulo, Brasil	Dyson map and the pseudo-Hermitian entanglement of random states	2022
Assoc. Prof. Jari Taskinen	University of Helsinki, Finland	Spectral Laplace problem and heat equation in periodic domains	2023

Note: Provide up to 10 examples.

Table 3.2.5 - Involvement in the evaluation of national/European research project/programme calls relevant to the R&D&I area at the unit during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the research project/programme call	Name of the contracting authority/guarantor of the project/programme call	Year
prof. PharmDr. Kamil Musílek, Ph.D.	Horizon 2020	European Research Executive Agency – European Commission	2019
prof. PharmDr. Kamil Musílek, Ph.D.	Industry-Driven Research	Central Finance and Contracting Agency Latvia	2020, 2022
prof. PharmDr. Kamil Musílek, Ph.D.	Public call for the (co-financing of research projects)	ARRS Slovenian Research Agency	2021, 2022, 2023
prof. PharmDr. Kamil Musílek, Ph.D.	Standards projects, Postdoc individual fellowships, International projects	Czech Science Foundation	2021, 2022, 2023
doc. Ing. Miroslav Lísa, Ph.D.	Standards projects, Postdoc individual fellowships, International projects	Czech Science Foundation	2021, 2022, 2023
doc. RNDr. Lucie Zemanová, Ph.D.	Interreg AT-CZ	Interreg Europe	2023
prof. Anton Galaev, DrSc.	P201 Mathematics	Czech Science Foundation	2019-2020
prof. Ing. Kamil Kuča, Ph.D.	Chair of the P303 Panel	Czech Science Foundation	2019-2020
prof. Ing. Kamil Kuča, Ph.D.	Chair of the P306 Panel	Czech Science Foundation	2020-2021
prof. Ing. Kamil Kuča, Ph.D.	Chair of the Discipline Committee - OK3 – Medical and Biological Sciences	Czech Science Foundation	2019-2021

Note: Provide up to 10 examples.

RESEARCH PROJECTS

3.3 Research projects

The evaluated unit shall list at most 10 (considered most significant by the evaluated unit) research projects/activities (regardless of whether they are supported by public funds or based on contract research[22]) that it has implemented or participated in during the period of 2019–2023[23]. This should be done from the full list in annex tables (Table 3.3.1-3.3.2)[24], regarding particularly the results achieved or the application potential of the projects. The unit should also describe how the research projects contributed to the mission and purpose of the evaluated unit. If the evaluated unit has been a participant in listed project, it shall indicate which other entities were involved and describe its contribution to the project. The interdisciplinary aspects of the projects will also be commented on, along with any collaboration with other units of the evaluated HEI.

Maximum 300 words per project.

Self-assessment:

Below we select the most significant projects in terms of results and application:

Targeting Circadian Clock Dysfunction in Alzheimer's Disease (TClock4AD)

The Marie Skłodowska-Curie Actions (MSCA) TClock4AD project (no. 101072895, 2023-2027) is focused on basic research on the relationship between circadian rhythms and Alzheimer's disease (AD) with the possibility of therapeutic impact on AD. The project aims to create and educate a multidisciplinary network of PhD students collaborating on the understanding and possible treatment of AD. To participate in the TClock4AD project, the FSci was approached by collaborators from the University of Bologna who are also the coordinators of the project. The consortium consists of a total of 13 partners with financial contribution and other partners from the commercial sphere.

Within the project, the FSci (in the role of a beneficiary) is training two PhD students in the framework of a double degree programme in collaboration with the University of Bologna (Italy) and Ankhar Pharma (Spain). Both PhD students are studying in the Toxicology doctoral programme at the FSci and in the Biotechnological, Biocomputational, Pharmaceutical and Pharmacological Science doctoral programme at the University of Bologna. At the same time, they are trained by experts from the commercial sector to apply the knowledge gained in practice.

The TClock4AD research project clearly contributes to the mission of the FSci in the education of PhD students and, at the same time, to the acquisition of research knowledge. Furthermore, the project involves close collaboration between PhD students of all project partners and their supervisors, which has created an international research network focused on the societal and multidisciplinary problem of AD and ageing. The consortium includes multidisciplinary experts from biological, chemical, economical, pharmaceutical, physical, managerial, medical, technical, and other disciplines and contributes to the multidisciplinary mission of the FSci in international educational and research activities.

SmartVet

The UHK has long been engaged in research in the field of sensory technologies focused on the measurement of vital functions. Thanks to earlier unique results in the field of ballistocardiography, Deeplab company was founded and renamed ANUME, after the name of its product, focusing on

[22] For the definition of contract research for the purposes of evaluation in the HE segments, see Article 2.2.1 of the Community Framework for State Aid for Research, Development and Innovation 2014/C 198/01.
[23] Regardless of whether the projects are completed or still ongoing, provided that at least part of the project was implemented during the evaluation period.
[24] The evaluated unit shall only fill tables that are relevant to it.

personal monitoring. In the field of animal vital signs research, the SmartVet project was implemented, resulting in a unique animal vital signs monitoring pad using the microvibrations of the animal's body for monitoring. This result allows to measure not only the activity but also the exact course of heart and breathing rate in animals just by placing them on the measuring pad. The result has been licensed to TallWell Ltd who are subsequently working to commercialise it. The company is targeting veterinary stations where the pad provides real-time information to the veterinarian regarding the animal's heart rate, respiratory rate and also activity. Animal activity is a highly sought-after functionality that indicates, for example, waking up from anaesthesia, which is otherwise difficult to react to immediately, especially during the night hours. The joint research between the UHK and TallWell Ltd. will further focus on the use of machine learning in the detection of changes in health status and the prediction of its deterioration. In this area, the UHK already has publications in WoS Q1 and D1, especially in the area of human data.

Research and development of a complex antidrone system

As a result of the joint project of the UHK and RETIA a.s. (and also the Ministry of Defence of the Czech Republic – MO), a total of 5 prototypes were produced which the company used in its business. Within the project, a comprehensive anti-drone system was successfully created. The specific results were: prototype of an optical sensor; prototype of a comprehensive anti-drone system; prototype of an evaluation and control workstation; prototype of a multisensor radar system; and prototype of a power supply unit, including power cabling of KAS elements.

The UHK has led parts of projects focused mainly on the development of algorithms for real-time image processing and decision-making algorithms that evaluate the sensor data and present the results to the system operator, and, furthermore, algorithms for fusion of data in the system coming from different sources. The collaboration was successful and led to the creation of the company's innovative product. The collaboration was also effective thanks to the involvement of students from the UHK who obtained job in the company and thanks to the long-lasting cooperation which led to other successfully implemented projects such as OP PIK MIT 25141/19/61200/107 or contract research.

Wearable sensors for the assessment of physical and eating behaviours

A unique HealthReact system has been created at the UHK. It enables data collection from cloud APIs, real-time data processing and response using pre-set rules. This system also consists of a questionnaire in the form of a mobile application for Android and iOS phones. Combining the ability to react to data and send questionnaires allows for detailed research to be conducted on the behaviour of individuals and to obtain subjective information in the context of their behaviour. This system has been used in an international project and deployed to collect data from FitBit users' fitness trackers in Germany (Bremen Institute of Epidemiology), Ireland (University of Limerick) and France (Sorbonne University), and the data was processed in collaboration with Belgium (Ghent University). Besides this project, the HealthReact system has been used in other research studies in collaboration with Charles University, Masaryk University, University of Ostrava, Palacký University in Olomouc and other partners. In total, over 3,000 people have already been measured in this way.

In this Wealth 8F22001 project, the research focused mainly on participants' healthy behaviours and eating habits. In addition to standard time-based mobile phone questionnaires and fitness tracker-measured data, self-initiated questionnaires focused on self-reported eating episodes were used.

Based on the very positive feedback from the international consortium, a joint Horizon MSCA follow-up project has been submitted, with HealthReact at the centre of all research. International teams of PhD students will be formed, always with a specific focus on a particular disease or aspect of wellbeing, and will have their own workspace in which to process and respond to data. The project was submitted at the end of 2024 and is now undergoing evaluation.

Prevention of aging – simultaneous modulation of ABAD and mTOR signalling pathway

The project focused on the development of a new generation of drugs targeting the slowing of ageing through modulation of the ABAD enzyme and the mTOR signalling pathway. Dozens of compounds were synthesized and tested as part of the research, with the most promising compounds subjected to physicochemical analysis, *in vitro* and *in vivo* evaluation.

The key results of the project include:

- Identification of several promising ABAD-mTOR inhibitors with cytotoxic and senolytic properties;
- Patent application for the newly discovered substance K1091 with an unexpected anti-cancer effect;
- Pharmacokinetic analysis has demonstrated the ability of some substances to cross the blood-brain barrier;
- Publication of 12 peer-reviewed articles with impact factor in internationally recognized journals;
- The project has significantly contributed to the direction of the FSci in the field of interdisciplinary research and the connection between science and practice;
- The research results have potential for application in the field of pharmacy, particularly in the treatment of cancer and ageing;
- The project led to the creation of new research activities in the LONGEVITY issue (we have subsequently obtained three more national projects on this or similar issues);
- We are trying to present the results in the LONGEVITY community, thus trying to attract investors and commercialise the results ideally through licensing agreements with pharmaceutical companies.

The project demonstrated the faculty's ability to generate applicable scientific results with high overlap into practice, thus strengthening its role in the development of innovative therapeutics and strategic technology transfer.

IT4Neuro(degeneration)

The project was carried out between 2019 and 2022 and focused on pre-application research in the areas of medical applications. It was a multidisciplinary project based on the cooperation of 3 institutions, i.e., the UHK, the University Hospital in Hradec Králové (FN HK) and the University of Pardubice. The FSci was the main coordinator of the project and was represented by the principal investigator Assoc. prof. Ing. Miroslav Lísa, Ph.D. The Faculty of Informatics and Management of the UHK also participated in the project. The central topic of the project was to use the potential of advanced IT technologies for top research in the field of neurodegenerative diseases that represent a major socio-economic challenge for society in the future. The multidisciplinary approach of the project included the design and testing of new compounds in the preclinical development of new drugs against neurodegenerative diseases, the development of clinical diagnostics using high-performance ICT to evaluate advanced imaging methods, and socio-economic analysis in the field of neurodegeneration and the practical implications of the introduction of new drugs and diagnostic procedures. More than 70 scientific publications in high impact factor international scientific journals including participation of foreign co-authors, two international patent applications for the preparation of potential drugs for neurodegenerative diseases, and a software solution for processing and evaluation of imaging data to improve the efficiency of clinical diagnostics were the main outputs of the project. The project enabled to improve the research infrastructure of the FSci and to build a stable scientific team for top research in the field of medical applications. An important part of the project was to intensify the involvement of undergraduate and postgraduate students in all phases of scientific research.

Butyrylcholinesterase reactivators for the preparation of pseudo-catalytic scavengers useful in organophosphorus intoxications

The project of the GA ČR GA18-01734S (2018-2020) focused on basic research of low molecular weight drugs with the ability to reactivate cholinesterases inhibited by highly toxic organophosphates. More specifically, it focused on butyrylcholinesterase reactivators that could serve in combination with butyrylcholinesterase as pseudo-catalytic organophosphate scavengers, i.e., to re-uptake organophosphates in a living organism and prevent the inhibition of a key enzyme (acetylcholinesterase) for the maintenance of neurotransmission.

The project was carried out in collaboration between the FN HK (principal investigator), the FSci (co-investigator) and the MO (co-investigator). The role of the FSci consisted in the design, preparation and characterization of low molecular weight drugs that were tested by the partners to reactivate cholinesterases using *in vitro* and *in vivo* methodologies. Several PhD students and postdocs also participated in the project. The project produced 16 impacted papers, including a paper published in the Journal of Medicinal Chemistry (https://doi.org/10.1021/acs.jmedchem.8b01398) which published a new family of reactivators highly effective against a wide range of organophosphorus compounds. The project was evaluated as excellent by the GA ČR. The results of the project contributed to obtaining another project of the GA ČR (GA21-03000S, 2021-2023) and to establishing cooperation with foreign partners which resulted in a European multilateral project of the European Defence Fund (Resilience, No. 101168024, 2024-2027).

The research project GA18-01734S has clearly contributed to the development of a biomedically important research topic at the FSci in collaboration with national project partners and has produced a number of excellent and widely cited publication results. The project has also contributed to the education of PhD students and postdocs at the FSci. In the longer term, the project has created a research environment that has been used by other national and international research projects. The results of the project have also had an obvious societal impact in the development of antidotes for highly toxic organophosphorus compounds and have been widely publicised to introduce the general public to this topic.

Design of non-destructive methods for nitrogen stress analysis in fruit production

The research project Design of Non-Destructive Methods for the Analysis of Nitrogen Stress in Fruit Growing (in cooperation with the Research and Breeding Institute of Pomology Holovousy, Ltd.) has developed and verified innovative methods for evaluating the nutritional status of fruit trees. It has linked academic research with practical applications and contributed to sustainable development and innovation in agriculture. The aim of the project was to refine the application of nitrogen fertilisers and enable growers more efficient farming in precision agriculture.

The project delivered a functional system based on multispectral imaging of vegetation by drones and neural network analysis of the images. The results of the mineral analyses confirmed a strong correlation between the spectral images and the nitrogen content in the leaves of important stone fruits (strawberry, apple, plum, grapevine), which is a novelty – previously, remote sensing methods were mostly used for cereals or forests.

The developed technology allows targeted application of fertilisers in the necessary parts of the planting only, thus reducing the ecological burden, reducing the risk of soil salinization and nitrogen leakage into water sources. It also contributes to higher and more stable yields. The project has thus effectively combined traditional laboratory analysis with modern digital methods, which resulted in more accurate and efficient data processing.

The open research report and the publication of the results in the Open Access European Journal of Horticultural Science ensure the availability of the results to the professional and lay public. The

results contribute to the development of innovation in Industry 4.0 and promote smart solutions for efficient farming.

The project also brings new opportunities for education – remote sensing, multispectral analysis and neural networks can be integrated into teaching. This gives learners the opportunity to work with real data and learn modern methods of data analysis. In this way, the project not only develops scientific knowledge but also brings advanced technologies to growers and the general public.

Singular spaces from special holonomy and foliations

This is a project of GA ČR, with prof. Anton Galaev, DrSc. (Department of Mathematics of the FSci) as a principal investigator. The project was also participated by the Institute of Mathematics of the Academy of Sciences of the Czech Republic (AV ČR), co-investigator Hong Van Le. The project was theoretical in nature and contributed to the development in the following areas of geometry and its applications in theoretical physics: special groups of holonomy, construction of new Einstein metrics, geometry of foliations of spaces, characteristic classes of foliations, partial differential equations, homogeneous spaces, contact and symplectic geometry, supergeometry, supersymmetry, and supergravity. The project resulted in a large number of results. A total of 35 papers have been published in impacted journals, including top journals in mathematics and physics such as J. Inst. Math. Jussieu, Comm. Contemp. Math., Comm. Math. Phys., Fortschr. Phys., CHAOS, and J. High. Energ. Phys. In the framework of the project, a joint Prague-Hradec Králové seminar Cohomology in algebra, geometry, physics and statistics was established in 2018 (https://researchseminars.org/seminar/PHK-cohomology-seminar). The seminar has a hybrid form, thanks to which mathematicians from all over the world participate in the seminars. Recordings of the lectures are posted on Youtube. Thanks to the project, the collaboration with the Institute of Mathematics AV ČR has been strengthened considerably. In 2019, the UHK hosted the traditional international conference with 140 participants from all over the world, where many results related to the project were presented. Thanks to the project, several foreign experts were hired at the UHK on a part-time basis, which served to develop research activities at the Department of Mathematics. A large number of foreign experts visited the UHK for scientific cooperation on the project topic.

Next, we select the following contract research activity:

Contract research for the University of Ostrava 4HAIE

The CAT at the FSci has long specialised in research and development in the field of remote monitoring of vital functions. In this area, it has been the principal investigator of many projects, but also supplies its services to other entities from among commercial partners or other research organizations. In 2019-2022, the FSci supplied services to the 4HAIE project of the University of Ostrava, reg. No. CZ.02.1.01/0.0/0.0/16_019/0000798. This involved the use of the HealthReact system for data collection and evaluation of study participants in the planned size of 1,500 people. The service consisted of collecting data from wearable devices, evaluating this data in near real time and sending questionnaires to the mobile application to the study participants. The study focused on healthy ageing of the population in industrial environments and compared the behaviour of people in the least and most polluted regions of the Czech Republic, namely České Budějovice and Ostrava. Together with experts in the field of kinanthropology and psychology from the University of Ostrava, questions were created for questionnaires that were sent automatically to the mobile application of the study participants. For the purposes of the research, detailed, more than 10-page reports of the behaviour of the people over the one year they were enrolled in the study were created, containing, for example, detailed information on circadian rhythms, analysis of sleep cycles or detailed evaluation of the answers to the questionnaires. As part of the service delivery, algorithms were also created to analyse behavioural anomalies in participants, focusing on changes in stereotypic behaviour, and if an anomaly was detected, questionnaires were sent automatically and details were queried. The service delivery included access to detailed compliance reports that contained vital information

about the study process and engagement of each participant. The data from these reports was used to catch early problems with participants (non-response, non-synchronisation of data, etc.) that could lead to unnecessary early termination and therefore unnecessary financial costs. The system is being further expanded at the FSci to enable participation in many national and international projects. Currently, around 4,000 people in 5 EU countries have been measured in various projects thanks to this system.

Table 3.3.1 Projects supported by public funds

In the role of beneficiary						
Provider[25]	Project name	Support (in thousands CZK/EUR)[26]				
		2019	2020	2021	2022	2023
MŠMT	Wearable sensors for the assessment of physical and eating behaviours (2022-2025)	-	-	-	2,997/118	4,079/161
MŠMT	Novel butyrylcholinesterase reactivators for pseudo-catalytic scavenging of organophoshates (2017-2020)	1,014/40	1,014/40	-	-	-
GA ČR	Trade-off between radial trunk growth and fruit yield and its relationship to xylem traits in composite apple and pear trees (2018-2020)	2,544/100	2,448 /97	-	-	-
GA ČR	Singular spaces from special holonomy and foliations (2018-2020)	2,092/83	2,092/83	-	-	-
TA ČR	Treatment and care of people with Alzheimer's disease - economic burden in the context of the development of new drugs (2018-2021)	301/12	319/13	82/3	-	-
GA ČR	Development of methods for comprehensive monitoring of metabolite changes in central nervous system disorders (2022-2024)	-	-	-	1,996/79	2,044/81

25 If the provider is from abroad, please indicate the provider's country of origin in brackets. For the determination of the country of origin of the provider, the place of residence of the provider is decisive.
26 Indicate the total amount expressed in thousands of CZK and the conversion of the total amount into Euro.

GA ČR	Asymptotic and spectral analysis of operators in mathematical physics (2022-2025)	-	-	-	2,706/107	2,706/107
GA ČR	Biodistribution and real-time monitoring of free or apoferritin-encapsulated charged cholinesterase reactivators (2022-2024)	-	-	-	3,524/139	3,908/154
GA ČR	Research of multifunctional compounds targeting neuroinflammation and cholinergic deficit in Alzheimer's disease (2023-2025)	-	-	-	-	2,053/81
GA ČR	Alzheimer´s disease and aging: can mTOR inhibitors kill two birds with one drug? (2023-2025)	-	-	-	-	2,891/114
AZV	Small-molecule inhibitors of mitochondrial permeability transition for treatment of myocardial ischemia-reperfusion injury (2022-2025)	-	-	-	1,257/50	1,895/75
GA ČR	Encapsulation of cholinesterase reactivators using apoferritin for enhanced bioavailability in central nervous system	2,600/103	2,799/110	2,597/102	-	-
GA ČR	Ancient landslides: really inactive?	1,424/56	1,481/58	1,481/58	-	-
GA ČR	Special metrics in supergravity and new G-structures	2,762/109	2,762/109	2,762/109	-	-
GA ČR	The coupling of supercritical fluid chromatography with mass spectrometry as a new tool for characterization of lipids and polar metabolites	-	1,480/58	1,480/58	1,480/58	-
GA ČR	The therapeutic potential of novel mTOR inhibitors within the process of ageing	-	1,848/73	1,948/77	1,555/61	-

GA ČR	Delicate analytical and topological tools for variational problems and modelling	-	2,221/88	2,208/87	2,196/87	-
TA ČR	Smart Vet	1,739/69	2,289/90	502/20	-	-
TA ČR	Design of non-destructive methods for analysis of nitrogen stress in fruit plants	-	1,875/74	2,432/96	598/24	-
AZV	AGING PREVENTION – Simultaneous modulation of ABAD and mTOR signalling pathway	1,988/78	3,066/121	3,282/129	3,318/131	-
MŠMT	IT4Neuro(degeneration)	2,984 /118	4,706/186	3,981/157	4,806 /190	-
Capital of Prague	Biological and inventory survey of lichens, mosses and vascular plants in the forests of Prague	51/2	219/9	-	-	-
Capital of Prague	Biological and inventory survey of selected animal groups in forest biotopes of Prague	53/2	347/14	-	-	-
Capital of Prague	Survey of the fauna of intensively mown Prague lawns in comparison with their unmown parts	-	-	46/2	204/8	-
Total		19,552/771	30,966/1.222	22,801/899	26,637/1.051	19,576/772
In the role of another participant						
Provider[27]	Project name	Support (in thousands CZK/EUR)				
		2019	2020	2021	2022	2023
EU	Targeting Circadian Clock Dysfunction in Alzheimer's Disease (2023-2027)	-	-	-		3,701/146
EU	Cooperation between the UO and UHK expanding the possibilities of graduates' employment on the cross-border labour market (2017-2021)	1,910/75	-	-	-	-
MŠMT	PERSONMED – Centre for the Development of Personalized Medicine	1,271/50	895/35	1,444/57	958/38	445/18

27 Ibid.

	in Age-Related Diseases (2018-2023)					
MŠMT	PharmaBrain (2018-2023)	1,126/44	1,130/45	1,076/42	2,336/92	-
MŠMT	Toxicology (2017-2021)	989/39	968/38	417/16	-	-
MŠMT	Toxicology – infrastructure (2017-2021)	479/19	350/14	274/11	-	-
GA ČR	Localized Electronic Effects of Antibody Binding on NanoComposite Materials (LEEFAB) (2017-2019)	1,105/44	-	-	-	-
GA ČR	Inhibition of JAK/STAT3 signalling pathway in cancer therapy (2018-2020)	1,077 /42	886/35	-	-	-
GA ČR	Butyrylcholinesterase reactivators for preparation of pseudo-catalytic scavengers applicable for organophosphorus intoxications (2018-2020)	1,186/47	911/36	-	-	-
GA ČR	Research of oxime-CB(7) complexes for central nervous system penetration of quaternary acetylcholinesterase reactivator (2018-2020)	1,081/43	925/36	-	-	-
TA ČR	Making a modern modular system for teaching mechatronics in line with the Industry 4.0 challenge (2017-2020)	501/20	500/20	-	-	-
TA ČR	Development and manufacturing of quadcopter prototype with four-stroke combustion engine (2018-2020)	762/30	603/24	-	-	-
TA ČR	Development of intelligent electronic control system for specialized hospital beds for critically ill patients (2018-2020)	1,106/44	672/27	-	-	-
TA ČR	In vitro sensitization testing - a	754/30	755/30	355/14	-	-

	comprehensive approach (2018-2021)					
TA ČR	Use of haemocompatibility tests for medical devices based on advanced materials (2018-2022)	918/36	918/36	918/36	375/15	-
AZV	STAT3 inhibitors as a tool for eliminating negative effects of chemotherapy (2018-2022)	1,242/49	1,267/50	817/32	-	-
AZV	mHealth intervention delivered in general practice to increase physical activity and reduce sedentary behaviour of patients with prediabetes and type 2 diabetes (2021-2026)	-	-	448/18	663/26	663/26
GA ČR	Research on toxicity mechanism of S-conjugates of aminophenolic drugs	1,215/48	1,365/54	1,141/45	-	-
MZE	Modern practices in irrigation regime of fruit trees grown in water deficit conditions	733/29	496/20	510/20	533/21	512/20
TA ČR	Research of laboratory method for prediction of tolerance of fruit crops to drought	534/21	691/27	120/5	-	-
MPO	Research and testing of new stent materials	200/8	521/21	-	-	-
MPO	Innovative platform for determination of bioactive compounds	705/28	1,261/50	1,232/49	1,243/49	-
MPO	The development of the new generation Radar System	1,279/50	1,252/49	-	-	-
MPO	Research and development of a complex anti-drone system	-	655/26	1,320/52	1,574/62	20/1
TA ČR	SMART Solutions Across Continuum of Care for the Elderly	-	311/12	582/23	498/20	317/13
GA ČR	Modified nucleophiles for reactivation of cholinesterases inhibited by	-	-	1,396/55	1,420/56	1,243/49

	organophosphorus compounds					
MZE	Breeding of fruit species with the resistance against abiotic influences in combination with high content of antioxidant substances inside the fruits	-	-	394/16	471/19	471/19
MPO	Intelligent neurorehabilitation devices for the development of cognitive functions of the brain	-	-	-	779/31	434/17
Total		20,173/796	17,332/684	12,444/491	10,850/428	7,806/308

Table 3.3.2 - Contract research activities

Client[28]	Activity name	Revenue (in thousands CZK/EUR)				
		2019	2020	2021	2022	2023
C2P s.r.o.	Innovation voucher: Creation of software for monitoring and management of premises using advanced decision-making methods	395/16	-	-	-	-
Trilab Group s.r.o.	Innovation Voucher: Extending the printing possibilities for Trilab printers	398/16	-	-	-	-
Trilab Group s.r.o.	Innovation voucher: Creation of a comprehensive solution for software control of TRILAB 3D printers	-	463/18	-	-	-
DERS Medical s.r.o.	Innovation voucher: Research and evaluation of a solution using wearable sensors for current vital signs monitoring	-	330/13	-	-	-
Grant Detection s.r.o.	Innovation voucher: Development of an information and positioning module for the detection of living organisms and persons	-	400/16	356/14	-	-
Mediatrade s.r.o.	Innovation voucher: Analysis of stimulating impulses with respect to parameters and impulse properties	-	-	-	490/19	-
YAKNA s.r.o.	Innovation Voucher: Chemical analysis of material and creation of a biological evaluation draft for individual product models including packaging materials and labels	-	-	-	410 /16	-
MDDr. Adam Mísař	Innovation voucher: Cloud system development	-	-	-	-	412/16
STIMVIA s.r.o.	Innovation voucher: Research report on the design and implementation of the measurement and analysis of the results	-	-	-	-	490/19

28 If the client is from abroad, indicate in brackets the country of origin of the client.

Trilab Group s.r.o.	Contract research: Structural and electronics design, development	184/7	-	-	-	-
Pardubice City	Contract research: Curriculum development	248/10	-	-	-	-
University of Ostrava	Contract research: Providing comprehensive collection, aggregation, management and long-term evaluation of data related to physical activity and vital functions of subjects monitored for the duration of the project, including providing access to and enabling the use of server and mobile applications	1 151/45	392/15	392/15	534/21	20/1
Retia, a.s.	Contract research: Multi-agent simulations to solve the problem of exploration vehicle positioning using GIS data	285/11	545/21	-	-	-
STEP s.r.o.	Contract research: Innovation of an educational tool for pre-schoolers	-	497/20	-	-	-
University of Defence	Contract research: Analysis of samples of tested materials	-	-	165/7	-	-
Trilab Group s.r.o.	Contract research: Software for controlling 3D printers	-	-	120/5	-	-
Trilab Group s.r.o.	Contract research: Extension of functionalities of the comprehensive solution of software control of TRILAB 3D printers and their accessories	-	-	-	464/18	271/11
Ghent University (Belgium)	Contract research: Cloud system	-	-	70/3	117/5	145/6
Retia, a.s.	Contract research: Development of algorithms for an optical tracking system of an aerial target trajectory – an optical tracker	-	-	-	-	740/29
FN HK	Contract research: Chemical data management	-	-	-	-	107/4
FN HK	Contract research: Data processing for a research study	-	-	-	-	313/12
Charles University in Prague	Contract research: Data analysis and processing	-	-	-	-	81/3
Total		2,661/105	2,627/104	1,103/44	2,015/79	2,579/102

Note: List and describe contract research activities with a revenue in a given calendar year, regardless of the amount of financial revenue.

3.4 Research results with existing or prospective impact on society

The evaluated unit shall briefly comment on a maximum of 10 (considered most significant by the evaluated unit) research results already applied or realistically heading towards application during the period of 2019–2023, based on the overview annex table 3.4.1 (it is recommended to indicate results with a link to projects listed in indicator 3.3). The evaluated unit must demonstrate in its description that the research results have led or will soon lead to positive impacts[29], on society (e.g. description of how the results are used by various users, the range of persons/institutions for which the result is relevant, measurable economic impacts, etc.). The evaluated entity shall indicate in its commentary whether the gender dimension is considered in these results and discuss the impacts of the results regarding sustainability.

Maximum range 300 words/result.

Self-assessment:

Below are the most important research results with a prospective impact on society. All teams involved in the results mentioned below included both men and women. In particular, the results applied in the field of social care (see below) facilitate significantly the work of staff in nursing care facilities and thus contribute to the sustainability of this care. In general, the outcomes we have presented have a clear potential for further development and are not a one-off terminated activity. They are being further developed and are fully sustainable in terms of their future activity in the relevant application area.

Results applied in 2019-2023:

1. Spin-off ANUME s.r.o**. (formerly Deeplab s.r.o.)** In 2019, an employee spin-off company was established without the property participation of the UHK in order to commercialize the research result achieved at the FSci – a pad for monitoring vital functions of patients. The company has been established successfully; it is testing and starting to market the products developed based on the research results of the FSci. The social relevance is mainly seen in the fact that, with regard to the aging population in the Czech Republic, the clients include mainly nursing care facilities, other facilities providing social services and, prospectively, medical facilities. The company generates revenue and makes royalty payments to the UHK.
2. **Spin-off TallWell s.r.o.** In 2023, an employee spin-off company without the UHK participation acquired the rights to exploit commercially the results of research achieved at the FSci: 1) technology for veterinary medicine, and 2) technology for clinical trials conducting (evaluation of data from wearable electronics). Ad 1) The product is under development, supported by a grant from the CzechInvest agency. Ad 2) The first orders for clients have been implemented, sales generated and royalties paid to the UHK. In particular, clinical studies evaluating data from wearable electronics can contribute significantly to the well-being of aging.
3. **Patent No. 308752 Method for Detection of Organisms, Especially Vertebrates, in Enclosed and Partially Enclosed Spaces and Equipment for its Implementation.** In 2018, a license for exclusive commercial use of technology was granted to the employee spin-off company of the UHK, Grant Detection s.r.o. It includes a patent granted in 2021. It is the TA ČR project GAMA reg. No. TG02010020 (2015-2019). The result has already found application as a compact mobile detector MMD01 with security forces, e.g., for detecting persons crossing illegally state borders. It generates revenue and royalty income for the UHK. The result is used by the Czech Police and its

[29] See Terms definition.

sale abroad is under negotiation. We see the social relevance in strengthening the security of the society.

4. **Know-how related to the monitoring of vital functions of persons (including the software System for the Evaluation of Vital Functions).** In 2019, a licence for exclusive commercial use of technology was granted to the employee spin-off company UHK, ANUME s.r.o. (formerly Deeplab s.r.o.). It is the TA ČR GAMA project reg. No. TG02010020 (2015-2019). The result has already found application in form of a patient vital signs monitoring pad and is used in social care facilities, generating sales and royalty income for the UHK. Medical device certification is underway and will further expand the potential use of the technology in healthcare. The project has been improved in the joint project of the TA ČR TL03000520 (2020-2023) and ANUME s.r.o. The social relevance of the result is again in the promotion of active ageing, especially in social care facilities.
5. **Prototype Intelligent System of Electronic Control of a Specialised Hospital Bed.** In 2021, the rights to exclusive commercial use of technology were granted to the domestic manufacturer of beds for advanced care LINET spol. s r.o. It was a transfer for consideration of the rights to a share in the result of the joint research project of the TA ČR Epsilon 3 reg. No. TH03010415 Development of an Intelligent System of Electronic Control of a Specialised Hospital Bed for Patients in Critical Condition (2018-2020). This project was awarded by the TA ČR as the best project in the Business category. Non-invasive and non-intrusive medical devices such as the mentioned prototype increase significantly the patient comfort.
6. **Pilot production System for Monitoring Vital Functions of Animals in Veterinary Clinics and the utility model System for Monitoring of Locomotor Activity and Vital Functions of Animals.** In 2023, a license for exclusive commercial use of technology/pilot production and a transfer for consideration of the utility model No. 36821 to TallWell s.r.o., an employee spin-off company of the UHK dealing with data collection and evaluation, was granted. It was the TA ČR Zeta project reg. No. TJ02000155 Smart Vet (2019-2021). The results are being further developed into products/services for veterinary medicine and will be marketed with the support of the Technological Incubation programme from the CzechInvest agency.
7. **Functional sample of the system for collecting vital functions of multiple individuals, industrial design of the case/briefcase No. 38072 Case, utility model No. 36635 Portable Storage Case.** In 2023, a license for exclusive commercial use of technology was granted to the employee spin-off company of the UHK TallWell s.r.o. It is the TA ČR GAMA project reg. No. TP01010032 (2020-2022), sub-project Portable Patron. The results are being further developed into products/services for veterinary medicine and will be marketed with the support of the Technological Incubation programme of the CzechInvest agency.

8. **Software Mobile Questionnaire Application for Android OS and Cloud System for Gathering Data from Wearables and Sending Questionnaires.** In 2023, a license to the results of the project (software whose function is to retrieve data from cloud APIs and respond to these data) was granted for exclusive commercial use to the newly created employee spin-off company of the UHK TallWell s.r.o. It is the TA ČR GAMA project reg. No. TG02010020 (2015-2019), sub-project Health React. The result has already found application in conducting customer research/clinical studies; it generates sales and royalty income for the UHK.

Other results with application potential (selection):

1. **Patent Derivatives of Arylbenzothiazolylurea, Method of their Preparation and Use, Document No. 307796.** A cooperation agreement with the Korean partner KRICT is under negotiation. They are interested in using the know-how of the UHK for development of low molecular weight inhibitors of HSD10 enzyme. The result may be important in the treatment of AD which is one of the most common causes of death in the Czech Republic.

2. **Patent Method for Monitoring the Condition of a Bridge Structure and Device for Monitoring the Condition of a Bridge Structure, Document No. 309836.** In 2023, negotiations with a potential partner for commercialization were held. It is a very simple system without the need for intervention in bridge structures.

Table 3.4.1 - Overview of research results in the period under evaluation

Type of result[30]	Year of application	Name
Spin-off	2019	ANUME s.r.o. (formerly DeepLab s.r.o.), without the UHK participation, with the participation of the UHK researchers/employees, 2019
Spin-off	2023	TallWell s.r.o., without the UHK participation, with the participation of the UHK researchers/employees, 2022
Patent: Licence granted	2021	Patent No. 308752: Method for Detection of Organisms, Especially Vertebrates, in Enclosed and Partially Enclosed Spaces and Equipment for its Implementation
Know-how, software: Licence granted	2019	Know-how Related to the Monitoring of Vital Functions of Persons (including the software System for the Evaluation of Vital Functions)
Prototype: Transfer of rights to IP for consideration	2021	Prototype: Intelligent Electronic Control System for Specialized Hospital Beds
Pilot production: Transfer of rights to IP and licence granted for consideration	2023	Pilot production: System for Monitoring Vital Functions of Animals in Veterinary Clinics and the utility model System for Monitoring of Locomotor Activity and Vital Functions of Animals
Functional sample + Industrial design + Utility model: License granted	2023	Functional Sample of the System for Collecting Vital Functions of Multiple Individuals, Industrial Design of the Case/Briefcase No. 38072 Case, Utility Model No. 36635 Portable Storage Case
Software: Licence granted	2023	Software Mobile Questionnaire App for Android OS and Cloud System for Gathering Data from Wearables and Sending Questionnaires
Other results with potential for application:		
Patent No. 307796	2018 (2019)	Derivatives of Arylbenzothiazolylurea, Method of their Preparation and Use (patent application 2018; patent granted 2019)
Patent No. 309329	2019 (2022)	Monopyridine Salts for Reactivation of Organophosphate-Inhibited Acetylcholinesterase (patent application 2019; patent granted 2022)
Patent No. 309588	2021 (2023)	Method of Tracking Foetal Movement and Device for Tracking Foetal Movement (patent Application 2021; patent granted 2023)
Patent No. 309589	2021 (2023)	Method for Monitoring Peristalsis of the Gastrointestinal Tract Organs and Device for Monitoring Peristalsis (patent Application 2021; patent granted 2023)
Patent No. 309836	2022 (2023)	Method for Monitoring the Condition of a Bridge Structure and Device for Monitoring the Condition of a Bridge Structure (patent application 2022; patent granted 2023)
Patent No. 310144	2022 (2024)	Derivatives of 2-Arylbenzothiazol, Method of their Preparation and Use (patent application 2022; patent granted 2023)
Patent No. 310092	2023 (2024)	Heterocyclic Compound for Inhibition of Malignant Tumour Growth (patent application 2022; patent granted 2023)

Note 1: Please list and describe the results already applied in practice or heading towards application in practice with existing or prospective impact on the society (e.g. domestic or foreign patents, sold licenses, spin-offs, prototypes, varieties and

[30] Specify the specific type of result. Add rows as needed.

breeds, methodologies, significant analyses, surveys, expert outputs for policymaking or other forms of non-publication outputs, etc.). Indirect results of research, development and creative activities with documented societal impact, e.g. expert activities, services to the public/government/scientific community, may also be reported.

TRANSFER OF RESULTS INTO PRACTICE

3.5 Transfer of results into practice

The evaluated unit shall briefly describe its system for transferring results into practice. It shall also indicate up to five of the most typical users of its results, whether in the university environment or in the non-university application/corporate sphere, detailing how it collaborates with them and how it seeks out new users (using a maximum of five specific examples).

It will also indicate whether and how it commercialises R&D&I results (e.g. selling licences, setting up start-up or spin-off companies, etc.)[31], providing brief description of the commercialisation methods used. The effectiveness of the transfer of results and the commercialisation of R&D&I results will be described using a selection of results (max. five) listed in annex table (Table 3.4.1).[32]

Additionally, the evaluated unit shall briefly comment on the funds received during the period of 2019–2023 from non-public, non-grant sources (e.g. licences sold, spin-off revenues, donations, etc.). A full summary shall be provided in annex table (Table 3.5.1).

Maximum 500 words plus 200 words for each provided example of finding a new user of results and commercialization.

Self-assessment:

The system of transferring the results of the FSci into practice is carried out in several ways: 1) Commercialization of original R&D results/intellectual property objects; 2) Participation in joint/collaborative research projects; 3) Performance of contract research, including the provision of R&D services within the European digital EDIH NEB hub.

The search for new users of the FSci research is carried out at many levels – monitoring of grant calls, professional conferences, activities in industry platforms, direct approaching of selected potential partners based on own search, networking or use of the network of contacts of partners, e.g., regional development agency KHK (Center for Investment, Development and Innovation – CIRI), Regional Development Agency Liberec (EDIH NEB).

Typical users of the FSci research include:

1. Facilities providing social services (senior centres, retirement homes);
2. Small and medium-sized enterprises;
3. Large companies;
4. Other research institutions;
5. Municipalities and organisations involved in nature conservation, breeding, etc.

Ad 1) For example, cooperation in the field of care for elderly with Senecura a.s. and an employee spin-off company ANUME s.r.o. (formerly Deeplab s.r.o.) founded by the FSci researchers, where the results of research and development are transferred into practice in order to facilitate the care for elderly and improve its quality. Digitalisation services were provided to the retirement homes in Rokytnice nad Jizerou and Jindřichovice pod Smrkem, see https://www.edih-northeast.cz/en/2024/06/29/smart-pads-that-monitor-positioning-and-vital-signs-of-seniors-help-in-nursing-homes/.

[31] In the case of military HEIs, their specific position is taken into account when evaluating the commercialisation/evaluation of R&D&I results.
[32] If the commercialisation of R&D&I results is carried out in this way.

Ad 2) Contract custom research or research within the framework of OPPIK/OPTAK Innovation Vouchers, e.g., for Tesla Medical and YAKNA s.r.o. (chemical analysis of material and creation of a draft of biological evaluation of products), MEDIATRADE s.r.o. (analysis of stimulation impulses of a medical device). Furthermore, digitization services were provided for clients within the European digital EDIH NEB hub, e.g., Lightly Technologies Ltd.

Ad 3) Long-term research cooperation with major technology companies, e.g., Retia a.s. (2 OP PIK projects, significant contract research in the field of artificial intelligence for classification of airborne targets), or LINET spol. s r.o. (TA ČR Epsilon project focused on the development of an electronic control system for a specialized hospital bed).

Ad 4) For example, cooperation with the FN HK – joint IT4Neuro and BIPOLE projects, grants from GA ČR and Czech Health Research Council (AZV). Cooperation with the University of Defence, Military Faculty of Medicine (e.g., contract research – measurement of various samples on demand). Furthermore, cooperation with the University of Ostrava: the FSci supplies research services for the HAIE and LERCO projects. Collaboration with foreign entities within international projects, e.g., University of Bologna (MSCA TClock4AD project), University of Limerick and Sorbonne (HDHL WEALTH project). An example of a project with other research institutions: IT4Neuro project (OP VVV, reg. No. CZ.02.1.01/0.0/0.0/18_069/0010054, participated also by the FN HK and the University of Pardubice), was focused on pre-application research in the field of medical applications, design and testing of new substances in the framework of preclinical development of new drugs, socio-economic analysis in the field of neurodegeneration and practical implications of the introduction of new drugs and the introduction of new diagnostic procedures using high-performance ICT to evaluate modern imaging methods. The project has helped to establish and stabilize the system for the generation and validation of promising multidisciplinary research results with high potential for the application of the obtained scientific outputs to therapeutic and diagnostic procedures using IT technologies. The results include 2 international PCT patent applications.

Ad 5) For example, joint solution of research projects with the Research and Breeding Institute of Fruit Growing Holovousy s.r.o., solution of projects within the Programme for Support of Projects to Improve the Environment of the Capital City of Prague.

Commercialisation, technology transfer and knowledge transfer are among the strategic priorities of the UHK. A unified commercialisation system has been in place at the UHK since 2011. Since 2020, the UHK has its own Technology Transfer Office (TTO) which provides support in verifying the practical applicability of R&D results, protecting intellectual property and carrying out activities necessary for the commercialisation process. The Strategy and Project Office plays an important role in the process of technology transfer at the FSci.

At the UHK, there is a system of searching, evaluation, verification, industrially-legal protection and commercialization of R&D results. Technology and knowledge transfer at the UHK is regulated by the following internal documents:

- Strategy of Research Organisation;
- Rector's Decree No. 01/2024: Intellectual Property Exploitation at the UHK;
- Rector's Decree No. 17/2020: Treatment of Intellectual Property at the University of Hradec Králové
- Rector's Decree No. 22/2021: Rewards for Originators of Industrial Property Rights
- Rules for the Internal Governance of the UHK
- Rules of Procedure of the of the Commercialisation Board of the UHK

Relevant staff with expertise in the field of technology transfer from the Legal Office and the FSci are involved in the commercialization process. The commercialisation process usually includes the following stages: Draft of the commercialisation model and the future product/service, including the

IP protection strategy; identification and approaching of potential commercialisation partners, or assistance in establishing a spin-off company of the UHK; business negotiations, negotiation of terms and conditions and preparation of draft contracts (licence agreements, agreements on the transfer of industrial property rights for consideration, etc.). In implemented commercialisation cases, the TTO keeps records of the concluded contracts, ensures control of the fulfilment of the obligations arising from the contracts, and prepares documents for payment of remuneration to the originators. In cooperation with the Legal Office, the TTO prepares related contractual documentation (contracts with originators, etc.). Within the framework of the commercialisation system, the TTO, in cooperation with the FSci, provides executive activities; decision-making activities are the responsibility of the UHK Commercialisation Board.

On the basis of negotiated and concluded licence agreements, agreements on the transfer of industrial property rights and agreements on the transfer of rights to shares in the results of joint research projects with commercialisation partners, the FSci receives annual revenues that gradually increase as products and services using the R&D results of the FSci are marketed and sales revenues grow. In the medium term, the FSci expects an increase in royalty income in the order of several million CZK per year. The revenues from commercialisation are distributed according to the Rector's Decree No. 01/2024 Intellectual Property Exploitation at the UHK (formerly No. 17/2020 Treatment of Intellectual Property at the University of Hradec Králové) between the originator and the UHK (faculty) which reuses the funds to finance intellectual property protection and technology transfer activities.

Table 3.5.1 - Summary of non-public revenues received during the period under evaluation

Type of revenue	Revenue (in thousands CZK/EUR)				
	2019	2020	2021	2022	2023
ANUME, s. r. o.	-	-	-	363/14	503/20
Deeplab, s. r. o.	-	968/38	363/14	-	-
Grant Detection, s. r. o.	108/4	484/19	431/17	-	221/9
Linet, spol. s. r. o.	-	-	363/14	-	-
TallWell, s. r. o.	-	-	-	-	121/5
Donations	232/9	-	56/2	733/29	66/3
Total	340/13	1 452/57	1 213/47	1 096/43	911/37

Note: Enter funds raised for R&D&I from non-public sources besides grants or contract research (e.g. licences sold, spin-off company revenues, donations, etc.) in the calendar year.

POPULARIZATION OF VAVAI

3.6 The most important activities in the field of popularization of R&D&I and communication with the public

The evaluated unit shall briefly describe its main activities related to the popularisation of R&D&I and communication with the public (e.g. popularisation lectures, citizen science initiatives, etc.) during the period of 2019–2023 and provide up to 10 examples that it considers the most significant.

Maximum 500 words plus 200 words for each example given.

Self-assessment:

Popularization and Educational Activities of the FSci in 2019-2023

The FSci has long been dedicated to the popularization of science and education of the general public and young people. Key activities include organizing lectures, workshops, competitions, interactive events and international conferences. These activities are aimed not only to promote science, but also to inspire young people to get involved in natural science discovery. The FSci targets young people as potential future students. Research results are presented on social networks, in the media and recently in the popularization magazine Modern Science (started to be published after the evaluation period).

Below are 10 key examples of activities that the FSci implemented in the given period:

1. Let's play Using our Brains

This annual event connects science with everyday life through interactive stations focusing on physics, chemistry, biology and robotics. With a playful and easy-to-understand format, it addresses the general public, including children, parents and teachers, and promotes interest in science. The programme shows how scientific findings affect everyday life and motivates young people to explore science. This is a faculty event with the highest outreach. Several thousand people from the general public, especially primary and secondary school students, attend the event each year.

2. Devil Experiments

The Devil Experiments is an annual event of the FSci which introduces science to children and parents in an entertaining way. In the pre-Christmas atmosphere, visitors can try out simple physical and chemical experiments, solve logic puzzles and discover interesting facts about biology. Popular activities include "devil labs" with experiments with liquid nitrogen or a thermal camera, math problems in the escape room and demonstrations of large insects. The event attracts school groups in the morning and families in the afternoon, bridging academia with the public. Faculty students actively demonstrate experiments here, developing their skills in popularizing science. The Devil Experiments are an example of how science can be brought to the younger generation in a funny and effective way.

3. European Olympiad of Experimental Sciences (EOES)

In 2022, the FSci hosted the European Olympiad of Experimental Sciences (EOES) where 120 secondary school students aged 17 and under from 20 EU countries competed in experiments integrating knowledge and skills in biology, chemistry and physics. The Czech representatives won silver medals. The EOES not only supports young scientific talents, but also connects scientists across Europe and brings science to the general public. The event was publicised widely, thus contributing to the popularisation of natural science and generating interest in international scientific cooperation. The competition builds on the EUSO (European Union Science Olympiad) and thus has a tradition of more than twenty years. The Czech representatives are among the most successful, having achieved

absolute victory four times in its relatively short history. Traditionally, the FSci has been selecting and preparing secondary school students for this competition every year.

4. Summer school for international students

The FSci regularly organizes summer schools that serve to popularize natural sciences among international students. In 2019, for example, the first Summer School of Toxicology was held, with 26 students from China. During one month, they attended lectures and laboratory exercises that allowed them to understand the basics of toxicology. Similarly, the Summer School of Geometry and Topology was held with students from Ukraine, Greece and Russia. Lectures on differential geometry and topology were given by renowned experts. In addition to these schools, the Summer School of Applied Biology and the Summer School of Cybernetic Systems – IoT in Practice were also held regularly. The faculty is thus building a prestigious position in the international academic environment. These activities popularise the Czech science and educational system among a wide international audience. They promote the faculty's top research and increase the interest of young people in natural sciences, which contributes to international cooperation strengthening and the scientific community connecting.

5. Promotion of faculty research to the public

The Faculty of Science communicates regularly the results of its research to the general public through the media, popularization articles, and outputs from the projects of GA ČR, TA ČR and other grant activities. These results appear not only in professional publications, but also in the media and at public events. In this way we show the benefits of research for the society and motivate young people to study natural sciences.

6. Junior Hub

The Junior Hub is an international competition in mathematics and physics which is organized regularly by the FSci for pupils of primary schools and lower secondary schools. The competition has an international dimension which allows pupils to compare with peers from other countries and motivates them to a deeper interest in natural sciences. The event contributes significantly to the popularisation of science and links academia with schools. The Faculty involves both teachers and students in the organisation of the event, thus creating a platform to promote education and interest in science among the younger generation.

7. Conference Not a Single Mathematical Talent Wasted

The FSci organizes regularly the conference Not a Single Mathematical Talent Wasted which focuses on supporting talented students and popularizing mathematics among the young generation. The event brings together secondary school and university students, mathematics teachers and experts from various fields, creating an inspiring environment for sharing ideas and experience.

The aim of the conference is to show that mathematics is not just a theoretical discipline but has practical applications in many fields, from technology through natural sciences to finance. The programme includes lectures on current trends in mathematics, problem-solving workshops and presentations of successful projects in which students have been involved.

Participants can try out different mathematical problems and models and discuss them with experts, which deepens their interest in the field. The event also provides an opportunity for secondary school students to connect with the university environment and consider further study in mathematics. The conference is of key importance in the popularisation of science as it motivates young people to develop a deeper interest in mathematics, fosters their talents and helps to develop the next generation of scientists and professionals.

8. Scientific competitions and Olympiads

The faculty hosts regularly various scientific competitions and Olympiads focused on biology, chemistry, mathematics, and physics. These competitions provide a unique opportunity for talented students to test their skills in solving challenging problems and to get acquainted with the academic environment. The Faculty is home to the Central Commission of the Physics Olympiad, and each year the selection and preparation of the team for the International Physics Olympiad and the European Physics Olympiad takes place here.

The organization of the 60th Physics Olympiad where we welcomed dozens of talented secondary school students from all over the country was one of the significant milestones. This competition focused on solving theoretical and experimental problems that simulated real-world challenges physicists face in their practice. This gave students the opportunity not only to showcase their knowledge, but also to develop skills such as analytical thinking and teamwork.

Olympiads and competitions of this type play a key role in the popularisation of science as they stimulate interest in science among the younger generation and show the practical value of scientific research. Hosting these events also allows the faculty to showcase its professional facilities, modern laboratories and academic programmes, thus contributing to motivating students to continue their studies in our sciences.

9. The Night of Scientists and Open Days

The FSci participates regularly in the national event the Night of Scientists where it presents its scientific activities to the public through interactive workshops, lectures and demonstrations of experiments. For example, at the physics and chemistry stands, visitors had the opportunity to observe experiments with liquid nitrogen, learn about the non-Newtonian fluid or explore radiation using a fog chamber. The event attracts the general public, including families with children, effectively promoting interest in natural sciences.

Open Days are of similar importance. The faculty makes its laboratories available during them and shows the latest instrumentation and the results of research projects. These activities offer interested parties the opportunity to interact directly with scientists and students, which helps to demystify scientific work and bring it closer to the general public.

10. Practical workshops for teachers and the public

The faculty participated actively in the Elixir for Schools programme which is aimed at supporting the education of science teachers. Within this programme, workshops are organised regularly where teachers can try out practical experiments in chemistry and physics. These workshops focus on activities that are easy to implement in the school environment and promote pupils' interest in science.

In the workshops, participants learn how to effectively use simple experiments to explain more complex science concepts, such as how to make chemical reactions visible with coloured indicators, how to demonstrate the principles of combustion or electrolysis, or how to create an entertaining chemistry show. In this way, the faculty supports teachers in improving the quality of teaching and motivates them to disseminate scientific findings among students.

This programme not only increases the professional competence of teachers, but also contributes to the development of interest in natural sciences among the younger generation through high-quality and inspiring teaching.

IMPLEMENTATION OF RECOMMENDATIONS

3.7 Implementation of the recommendations in Module 3

The evaluated unit will briefly describe how it has implemented the recommendations for Module 3 from the previous evaluation period, if applicable.

Maximum 1000 words.

Self-assessment:

In the evaluated period, the FSci managed to improve its applied research with an impact on the region and the whole Czech Republic. Two more spin-off companies, ANUME, s.r.o. and TallWell, s.r.o., were established and the FSci obtained seven new patents; some related licences have already been sold (e.g., to the spin-off company Grant Detection, s. r. o.). Thus, revenues from spin-off companies and sales of licence are starting to be a substantial source of income for the faculty.

Faculty staff develop prototypes, functional samples, software, and pilot productions. They are motivated to create applied results and to establish spin-off companies. In case of commercialization, they are entitled, according to the Rector's Decree 01/2024 Intellectual Property Exploitation at the University of Hradec Králové, to a remuneration of 70% of the net proceeds. It was 90% according to the Rector's Decree valid in the evaluated period (No. 17/2020 Treatment of Intellectual Property at the University of Hradec Králové). Support for the commercialisation of results is provided by the Science and Knowledge Transfer Office at the UHK Rectorate. The head of the faculty's Strategy and Project Office is a prominent expert in technology transfer. The Faculty has also expanded the volume of contract research, including consultancy services in the field of sample analysis, e.g., for the automotive industry. Sample analysis for industry is one of many examples of collaboration with the non-academic and business sectors.

In the field of international cooperation, we would like to emphasize the participation of the FSci in the international applied research grant project WEALTH of a consortium of 6 institutions from 5 countries (EU Research and Innovation Programme Horizon 2020, solved from 2021), the international grant project First Research Action for Medical Counter Measures Performed in the Framework of the RESILIENCE FPA of 42 institutions (Horizon 2020, solved from 1 November 2024) and bilateral international projects of the GA ČR (see above). Thanks to its participation in the WEALTH consortium, the FSci is currently applying for another grant project under Horizon 2020.

The Faculty has also received a large number of external projects from national providers such as GA ČR, TA ČR, or AZV. Many of these projects address global interdisciplinary problems in biomedicine and/or support active ageing (AD and ageing, prevention of ageing, PERSONMED, intelligent systems for hospital beds, etc., see above).

In the period under review, the FSci organized many scientific workshops and conferences, but these do not represent a source of income for the faculty. However, income from educational programmes of the lifelong learning means such a source of income. In addition to the educational programmes to broaden the qualifications of teachers, a course in an interdisciplinary field (physics – biomedicine – law – economics) titled Regulation of Medical Devices was also held at the FSci in 2022. Proceeds from such training events are a great potential for the faculty income.

The science at the FSci is developing significantly, which can be evidenced both by an increase in the number of young academic and scientific staff and a large increase in the number of publications, especially in the first quartile of journals according to AIS. The development of the faculty has also been recognised by the fact that the university as a whole as well as the faculty disciplines have appeared in international rankings, e.g., Shanghai ranking and Times in Higher Education ranking. In the fields of Biological Sciences, Chemistry, Physics & Astronomy and Pharmaceutical Sciences, the

faculty even occupies the top positions among the Czech universities. Some faculty members appeared among the top two percent of the most cited scientists.

Faculty research results are promoted in social and regional media. The faculty has started publishing a magazine Modern Science in which the results of faculty research are popularly presented. Research at the faculty respects and partly focuses on sustainable development. The UHK's Sustainable Development Strategy until 2030 has been approved and the faculty is starting to draw from it and follow its vision. For example, trees have been planted on campus that will also be used to teach biology students, and the faculty as a whole is striving to be sustainable, low-waste and environmentally responsible in many aspects of its activities.

Academic and scientific staff and students are rewarded systematically for their publications; now these rewards are governed by the Dean's Decision No. 16/2024 Measures to Strengthen Excellent Creative (Research) Activity of Academic and Scientific Staff of the FSci; in the period under review, these were Dean's Decisions Nos. 14/2023, 08/2023, 5/2022, 04/2021, and 14/2019. In the new Dean's Decision, the faculty puts great emphasis on the quality of outputs and motivates staff who are able to produce a larger number of articles to target articles in journals in the first decile according to AIS according to Web of Science.

The FSci also analysed the attractiveness of its study programmes and decided to reduce those that are not attractive to applicants. On the contrary, it has opened several new study programmes and is currently preparing other socially necessary study programmes (general nursing, an interdisciplinary programme in laboratory archaeology, a study programme focused on corporate ecology, etc.).

A LIST OF SUPPORTING DOCUMENTS/LINKS FOR MODULE 3

Document name	No. criteria	Location (link in HTML)
Constitution of the Faculty of Science, University of Hradec Králové	3.1	https://www.uhk.cz/file/edee/prirodovedecka-fakulta/prf/uredni-deska/aj-web/internal-regulations/statut-prf-uhk-eng_ms.pdf?v20210907123709
Dean's Decision no. 6/2022 International Advisory Panel of the FSci UHK	3.1	https://www.uhk.cz/file/edee/prirodovedecka-fakulta/prf/uredni-deska/aj-web/governing-acts/2022/06-mezinarodni-poradni-panel-prf-uhk-eng.pdf?v20220308112815
Rector's Decree 01/2024: Intellectual Property Exploitation at the University of Hradec Králové	3.5, 3.7	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/internal-regulations/intellectual-property-exploitation-at-the-university-of-hradec-kralove.pdf
Strategy of Research Organisation	3.5	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/strategic-documents/strategy-of-research-organisation-of-the-uhk-2023.pdf
Rector's Decree No. 17/2020 Treatment of Intellectual Property at the University of Hradec Králové	3.5	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/treatment-of-intellectual-property-at-the-university-of-hradec-kralove-2020.pdf
Rector's Decree No. 22/2021 Reward for Originators of Industrial Property Rights	3.5	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/reward-for-originators-of-industrial-property-rights-2021.pdf

Rules for the Internal Governance of the University of Hradec Králové	3.5	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/internal-regulations/rules-for-the-internal-governance-of-the-university-of-hradec-kralove.pdf
Dean's Decision No. 16/2024 Measures to Strengthen Excellent Creative (Research) Activity of Academic and Scientific Staff of the FSci	3.7	https://www.uhk.cz/file/edee/prirodovedecka-fakulta/prf/uredni-deska/aj-web/governing-acts/2024/16-opatreni-k-posileni-excelentniho-tvurciho-vykonu-akademickych-a-vedec.pdf?v20250109081847
Dean's Decision No. 14/2023 Measures to Strengthen Excellent Creative (Research) Activity of Academic and Scientific Staff of the FSci	3.7	https://www.uhk.cz/file/edee/prirodovedecka-fakulta/prf/uredni-deska/aj-web/governing-acts/2023/14-opatreni-k-posileni-excelentniho-tvurciho-vykonu-akademickych-a-vedec-eng.pdf?v20231220125227
Dean's Decision No. 08/2023 Measures to Strengthen Excellent Creative (Research) Activity of Academic and Scientific Staff of the FSci	3.7	https://www.uhk.cz/file/edee/prirodovedecka-fakulta/prf/uredni-deska/aj-web/governing-acts/2023/08-opatreni-k-posileni-excelentniho-tvurciho-vykonu-akademickych-a-vedec.eng.pdf?v20230607094050
Rules for the Internal Governance of the University of Hradec Králové	3.5	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/rules-for-the-internal-governance-of-the-university-of-hradec-kralove-11_2024.pdf
Rules of Procedure of the Commercialisation Board of the University of Hradec Králové	3.5	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/rules-of-procedure-of-the-commercialisation-board-of-the-university-of-hradec-kralove-2022.pdf
Sustainable Development Strategy of the UHK until 2030	3.7	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/strategic-documents/sustainable-development-strategy-of-the-uhk.pdf
Dean's Decision 5/2022 "Measures to Support Excellent Creative Activity of the FSci Academic Staff and Researchers	3.7	https://www.uhk.cz/file/edee/prirodovedecka-fakulta/prf/uredni-deska/aj-web/governing-acts/2022/05-opatreni-k-posileni-excelentniho-tvurciho-vykonu-akademickych-a-vedeckych-pracovniku-prf-uhk-eng.pdf?v20220221124239
Dean's Decision no. 4/2021 "Measures to Support Excellent Creative Activity of the FSci Academic Staff and Researchers"	3.7	https://www.uhk.cz/file/edee/prirodovedecka-fakulta/prf/uredni-deska/aj-web/governing-acts/2021/04-2021-measures-to-support-excellent-creative-activity-of-prf-uhk-academic-staff-and-researchers.pdf?v20210316095451
Dean's Decision No. 14/2019 "Dean's measures to strengthen the excellent creative performance of academic and research employees of the Faculty of Science of UHK"	3.7	https://www.uhk.cz/file/edee/prirodovedecka-fakulta/prf/uredni-deska/aj-web/governing-acts/2019/14-2019-deans-measures-to-strengthen-the-excellent-creative-performance-of-academic-and-research-employees-of-the-faculty-of-science-of-uhk.pdf?v20210210122458

SELF-EVALUATION REPORT FOR MODULES 4 AND 5

HIGHER EDUCATION INSTITUTION NAME: University of Hradec Králové

COMPANY REGISTRATION NUMBER (CRN): 62690094

MODULE 4 - VIABILIT Y

ORGANISATION AND MANAGEMENT OF R&D&I

4.1 Organisation and management of R&D&I

The HEI will briefly describe its organisational structure[1] and describe the R&D&I management system including the role of the HEI´s central management, the management of faculties, and the HEI´s institutes in organizing and managing R&D&I. It should also describe the role and structure of the technical and economic apparatus.

Maximum 1000 words.

Self-assessment:

The University of Hradec Králové (UHK) is composed of four faculties – the Faculty of Education (FEdu), the Faculty of Informatics and Management (FIM), the Philosophical Faculty (PhF) and the Faculty of Science (FSci) that together form a diverse academic environment enabling effective cooperation between the humanities, social sciences and natural sciences. The organisational structure is based on a central management that coordinates and supports the activities of the autonomous faculties. The Rectorate provides the effective strategic management of inter-sectoral, international, research, development, and innovation activities.

The system of research, development and innovation (R&D&I) management at the UHK complies with Act No. 111/1998 Sb., on higher education institutions and on amendments and supplements to other acts (Higher Education Act). The Rector is the highest governing body of UHK, responsible for strategic management, development and R&D&I. He is assisted by Vice-Rectors focused on various areas including science, creative activity, international cooperation, strategy and development, quality, studies, and digitisation. The scientific and research activities of the UHK are managed by the Vice-Rector for Science, Research and Knowledge Transfer. She is responsible for the implementation of the Strategic Plan of the University of Hradec Králové 2021+ (SP UHK) in the field of R&D&I and addresses conceptual issues in these areas. In matters of research management, she communicates with state administration authorities – in particular with the Ministry of Education, Youth and Sports of the Czech Republic (MŠMT) and the Czech Government Council. The Vice-Rector for Science, Research and Knowledge Transfer is the direct superior of the Director of the UHK University Library, the Head of the Science and Knowledge Transfer Office (OVTZ) and the Head of the Open Science Office (OOS).

Framework of decision-making structures

- The **UHK Board of Trustees** is a UHK body whose members are appointed and removed by the Minister of Education, Youth and Sports of the Czech Republic. The Board of Trustees discusses e.g. the report on the internal quality assessment of educational, creative and related activities (Report on Internal Quality Assessment), approves the budget of the UHK and the SP UHK, and discusses the annual reports of the UHK.

[1] A graphical representation of the organisational structure will be provided as an annex.

- The **UHK Research Board** **(RB UHK)** is the highest research body of the UHK. It is composed of prominent representatives of the fields of study cultivated at the UHK. At least one third of the members must consist of external experts. The RB UHK e. g. discusses the SP UHK, the annual reports of the UHK, and the Report on Internal Quality Assessment. It exercises competence in the procedure for granting associate professorship and appointment as professor.
- The **faculty Research Boards** discuss the strategic plans of the faculties and deal with procedures for granting associate professorship and appointment as professor.
- The **UHK Academic Senate (AS UHK)** is a self-governing body of the UHK that approves the budget of the UHK in the area of R&D&I, the annual reports of the UHK, the report on the internal quality assessment, and the SP UHK; they give the Rector prior approval for the appointment and removal of the members of the RB UHK.
- The **faculty Academic Senates** approve the strategic plans of the faculties and the allocation of funds to individual departments, and give prior approval to the Dean for the appointment and removal of members of the faculty Research Board.
- The **UHK Internal Evaluation Board** is active in the field of quality assurance and evaluation of educational, creative and related activities.
- The **Rector's Board** (permanent advisory body) includes the Rector, the Vice-Rectors, the Bursar, the Chancellor, the Deans, the Head of the Legal Office and the representatives of the AS UHK.
- The **Rector's Close Board** is an operational advisory body of the Rector, consisting of the Rector, the Vice-Rectors, the Bursar, the Chancellor and the Head of the Legal Office.
- The **UHK Commercialisation Board (Board)** is an advisory body to the Rector; it assesses and proposes the UHK strategy in the field of commercialisation. For more information, see chapter 4.4.
- The **UHK Research Ethics Committee** **(Research Committee)** deals with ethical standards in research. For more information, see chapter 4.3.
- The **International Advisory Board** **(IAB)** which was established in 2020 within the project Development of Capacities for Research and Development at the University of Hradec Králové has been playing the role of external feedback and mediation of international experience.

Each faculty is managed by the Dean (elected by the faculty Academic Senate and appointed by the rector) who, in cooperation with the Vice-Dean for Science and Research, is responsible for the faculty's scientific and research activities.

The Vice-Rector for Science, Research and Knowledge Transfer, the Heads of the OVTZ and the OOS cooperate with the faculty Vice-Deans for Science and Research. Administration is provided by R&D officers at the Rectorate and faculties.

The Vice-Rector for Science, Research and Knowledge Transfer coordinates the creative activities of the faculties, especially those focusing on university-wide research projects (see below) and the establishment of inter-faculty teams.

Administrative support

- The **OVTZ** organizes and coordinates activities related to the agenda of creative activity and knowledge transfer at the UHK.
- The **OOS** is responsible for building the Data Science environment, including the Open Science, Open Access and the management of the institutional repository of scientific data where the research outputs of academic staff and students of the UHK are stored.

- The **Strategic Project Office** provides administrative support in the area of strategic projects. The core of the activity lies in the area of EU structural funds and development grants of the MŠMT.
- The **UHK University Library** provides information support for studies, teaching and R&D&I, including management of access to scientific databases.
- The Management Information System (MIS) has contributed to more effective data and supporting information collecting for evaluation and strategic management.

Each faculty has built specific research centres that support strategically the interdisciplinarity and the applicability of research results.

- **FEdu:** **Educational Research Centre** (CPV)
- **FIM:** **Centre for Basic and Applied Research** (CZAV)
- **PhF:** **Centre of Field Archaeology** (CETA)
- **FSci:** **Subject Didactics Centre** (SDC) and **Centre of Advanced Technology** (CAT)

R&D&I QUALITY MANAGEMENT AND SUPPORT SYSTEM

4.2 System of support for a quality R&D&I environment and incentive measures for quality science

The HEI will briefly describe the systemic incentive measures/tools to support quality R&D&I (if applicable). For each measure/tool described, an example will be provided to illustrate the effectiveness of the measure/tool in practice (e.g. number of projects supported by internal grants, statistics on the use of advisory systems, number of newly established research teams, etc.). The description will pay particular attention to:

- A system of support for attracting national and international projects of projects.
- A system for project consultancy/management/administrative support.
- Science management (e.g., personnel and financial capacity for R&D&I transfer, personnel and financial capacity of the project acquisition support system, science managers, data analysts, business and innovation advisors, etc.).
- The existence of internal funding schemes.
- Strategy/opportunities for establishing new research teams (including international ones) and supporting them within the HEI (e.g. sharing of R&D&I equipment, laboratory and information facilities, administrative support, etc.).
- Support system for students and early career researchers[2].
- A system to support excellent science (e.g. support for excellent scientists, research teams, PhD students, collaborations, infrastructure, etc.).
- A system of support for interdisciplinary research and collaboration within the HEIs.
- The concept of providing conditions for the emergence of new, high quality research directions/topics, especially those with application potential.

Maximum 300 words per point.

Self-assessment:

- A system of support for attracting national and international projects of projects.

Support for the preparation and acquisition of national scientific, strategic and development projects is provided at a central (Rectorate) and faculty level. The central support is focused on monitoring of appropriate national grant calls; emphasis is placed on ensuring compliance with the strategic objectives of the UHK and achieving maximum competitiveness. Various incentive schemes operate at the faculty level. Faculties have set up a system of extraordinary rewards for submitting

[2] Student grants, support for PhD students, postdocs and early career scientists.

and obtaining a project. All faculties also increase the employee's wage temporarily for the period of the research project solving.

The UHK considers the internationalisation of R&D&I a key long-term priority. Despite the progress, reserves have been identified, especially in the involvement in international projects. Support for the formation of international research teams has so far been implemented at the faculties through the excellence supporting projects, postdoctoral projects and researcher mobilities, as well as through incentive strategies, which have been beneficial but not sufficient for systematic progress. In 2025 already, new central internal grant schemes are being prepared for the preparation of prestigious international projects.

The UHK receives funding mainly from the Czech Science Foundation (GA ČR), the Technology Agency of the Czech Republic (TA ČR), the MŠMT, the Ministry of Industry and Trade of the Czech Republic (MPO), the Czech Health Research Council (AZV), the Ministry of Health of the Czech Republic (MZ) and the NAKI programme of the Ministry of Culture of the Czech Republic (MK).

Throughout the evaluation period, the UHK addressed and participated in the solution of following projects:

- 41 GA ČR projects in the total amount of CZK 190,006,555, of which CZK 60,178,475 were intended for co-investigators.
- 27 TA ČR projects in the total amount of CZK 169,615,590, of which CZK 96,529,616 were intended for co-investigators.

In contrast, in the previous evaluation period (2015-2019), the UHK addressed and participated in the solution of following projects:

- 33 GA ČR projects in the total amount of CZK 102,049,000, of which CZK 40,507,000 were intended for co-investigators
- 17 TA ČR projects in the total amount of CZK 108,801,259, of which CZK 86,065,511 were intended for co- investigators

- A system for project consultancy/management/administrative support.

In 2024, the Rector's Decree No. 17/2024 Science and Research Project Management (formerly Rector's Decree No. 8/2015 Project Management) was issued. It defines the project management process, the responsibilities of individual actors and the rules for R&D&I funding.

In the period under review, a OVTZ was established to provide comprehensive project consultancy, management and administrative support. It monitors calls for national and international projects, analyses the conditions of calls and provides key information to the faculty Vice-Deans for R&D. Within the financial management of projects, the OVTZ cooperates with the Finance Office and the faculties. It is responsible for the collection and analysis of statistical data on projects that is reported regularly to the Czech Statistical Office and subsequently used for decision-making processes of the University management. At the faculty level, project-related activities are coordinated by the project offices or delegated staff.

The OVTZ sets internal deadlines for the submission of project applications, provides methodological guidance, coordinates the preparation of applications, assists faculties with administration, and communicates with grant providers. During the proposal preparation, researchers and faculty officers are supported on funding, cost eligibility and legal aspects. The proposal is approved by the Faculty's Vice Dean for R&D, after which the OVTZ carries out a formal check and the Vice-Rector for Science, Research and Knowledge Transfer evaluates the content. After final approval, the OVTZ sends the proposal to the provider and ensures administrative follow-up.

To ensure effective management, all proposals are registered in the Grants and Projects information system. From 2025, the Project and Contract Register system will be implemented; it will enable complete digital management of the project agenda, including the progress monitoring and automated approval and preparation of analyses for strategic management in the field of R&D&I.

The UHK lacks specialized staff capacity at the University and faculty level to support the preparation and implementation of international projects. This lack has been a major limiting factor leading to limited involvement in Horizon Europe, ERC and MSCA programmes. The UHK plans to create a professional position focused on supporting the preparation and implementation of international projects, which should increase the chances of obtaining these projects and thus increase the scientific excellence of the UHK.

- Science management (e.g., personnel and financial capacity for R&D&I transfer, personnel and financial capacity of the project acquisition support system, science managers, data analysts, business and innovation advisors, etc.).

During the period under review, the capacity to provide a support system for R&D&I project acquisition was strengthened both in terms of staff and funding; 3 new OVTZ employees have been recruited.

Knowledge transfer is provided administratively by the TTO (part of the OVTZ) in cooperation with the staff of the UHK Legal Office and specialists from the faculties. These capacities proved to be insufficient, so in 2022, the UHK made a cooperation agreement with one of the leading transfer offices in the Czech Republic, and it also had to use external legal services in the period under evaluation. The external services were covered financially by the LCDRO funds. The situation is currently being analysed and proposals are being prepared on how to make knowledge transfer more efficient; however, this cannot not be done without increasing the number of employees.

The role of science managers and data analysts is played (given the size of the UHK) by academic officials – the Vice-Rector for Science, Research and Knowledge Transfer and the Faculty Vice-Deans for Science and Research.

The role of business and innovation advisors is played by the Board (see section 4.4 below for more details) and, at the faculty level, by the Councils for Cooperation with Practice.

- The existence of internal funding schemes.

The UHK supports internal grant schemes that enable the development of excellence in science and research and interdisciplinary collaboration. These programmes are in accordance with the SP UHK and the Rector's Decree No. 15/2020 Programmes to Support Science and Research at the University of Hradec Králové. In the period under review, the following calls were announced at the central level:

- **Call for competition for international mobility within the project International Mobilities for Research Activities at the University of Hradec Králové II** which was announced twice in 2021 and 2022. The competition was funded by the European Structural Funds project, a total of 9 arrivals of international experts for 6 months to two years were supported.
- **Call for Competition for Postdoctoral Job Positions at the University of Hradec Králové** which was announced four times in 2021, 2022 and 2023 (2x). The competition was funded from LCDRO funds; a total of 30 postdocs were supported.
- **Student grant competition for PhD students Igráček UHK** which was announced in 2021. The competition was funded by the European Structural Funds and focused on the development of research and teaching skills of PhD students. Seven projects of UHK doctoral student teams were supported, the total allocation being CZK 7,379,064 CZK.

- **Competition for Proof of Concept projects within the TA ČR programme of applied research, experimental development and innovation GAMA 2, sub-programme 1 – Proof of Concept Project (GAMA 2)**. Fifteen sub-projects were successfully implemented in 2020-2022, achieving 44 results. The total volume of the competition was CZK 21,626,706.

Faculty internal grant schemes:

- **Student grant competition for specific higher education research projects** announced annually at all faculties. The total amount of funds in the mentioned period amounted to CZK 56,863,899.
- **Faculty excellence projects** that support scientific teams focused on collaboration with national and international partners at the FSci and the FIM.
- **International Research Teams (IRT**) that support the PhF's international research teams. In 2023, the PhF guaranteed the progress of three IRT projects.

- Strategy/opportunities for establishing new research teams (including international ones) and supporting them within the HEI (e.g. sharing of R&D&I equipment, laboratory and information facilities, administrative support, etc.) + A system of support for interdisciplinary research and collaboration within the HEIs.

The UHK develops and supports systematically the strategy of establishing and operating research teams with a focus on internationalisation, shared research infrastructure and administrative support. The strategic documents of the UHK set long-term priorities in the field of R&D&I, including the institutional evaluation of research teams, development of shared instrumentation and motivation of researchers. None of the central schemes to support the establishment of new interfaculty teams in accordance with the Rector's Decree No. 15/2020 Programmes to Support Science and Research at the University of Hradec Králové were used at the central level in the period under review. Therefore, the building of the teams depended on the faculties supported by the Rector's Office within the distribution of LCDRO funds.

International cooperation is a key part of the development of science at the UHK. The faculties stimulate excellence and research funding through their own support systems. At the FEdu, this role is supported by the CPV; at the FIM, the CZAV has been restructured as a centre for international cooperation and project proposals. At the PhF, the IRT programme is the main platform for international teams and its effectiveness has been confirmed in the period 2023-2024. In 2023, excellence projects at the FSci led to new international contacts and the formation of research teams, which resulted in the acquisition of one bilateral GA ČR project (Czech-Poland) and the continuation of cooperation within the Horizon Europe programme.

Sharing research infrastructure enables more efficient use of laboratory equipment. Projects such as IT4Neuro(degeneration) and other grants of the **Operational Programme Research, Development and Education** (OP VVV) ensured the development of instrumentation, including laboratory equipment (3D microscopy, laser confocal microscopy, X-ray imaging, electron microscopy, Raman spectroscopy, nuclear magnetic resonance, liquid chromatography, etc.). Agreements between faculties guarantee the sharing of resources across the University.

Administrative support includes methodological assistance in the submission and solution of projects, funding for publications, conferences and internships abroad.

In 2024, the **UHK Doctoral School** was established and a platform for meeting young scientists was introduced, which allows for interdisciplinary and international knowledge sharing and networking.

- Support system for students and early career researchers.[3]

The UHK provides comprehensive support to students and young scientists in the areas of funding, methodological assistance and institutional background. Incentives for scientists include financial rewards and bonuses.

- The UHK faculties have established discipline-specific internal systems for evaluation of research and publication activities, including financial support for significant publication outputs. Financial support includes students as well.
- The Rector awards excellent scientists, exceptional students and outstanding personalities with the Rector's Medal.
- Researchers can receive funding for proof-reading of scientific texts, publication fees, open access to scientific information or active participation in international conferences.

Within the framework of the already mentioned competition Igráček UHK, seven projects of doctoral student teams at three faculties (FIM, PhF and FSci) were supported in 2022 with a budget of CZK 7,379,064. The Superdoctoral programme at the FIM accelerates the research of PhD students, supporting five students in 2022 with a total amount of CZK 150,000. Bursaries are awarded for research activities, conference participation and open access to information. In 2021, the FSci announced the Superdoctoral Student programme as well, supporting seven students with a total amount of CZK 560,000.

Methodological and institutional support includes seminars and workshops on grants and publication strategy.

To develop doctoral studies, the UHK has introduced an incentive system for supervisors for the successful completion of doctoral students' studies.

Since 2021, the UHK has been organizing a Ph.D. Summit for Ph.D. students. It is a three-day seminar on scientific careers, ethics and publishing. For more information, see Rector's Decree No. 2/2021 Incentive System to Stabilize/Develop Doctoral Study Programmes and Procedures for Granting Associate and Full Professorship at the UHK.

The University also supports mobility programmes, enabling internships abroad and scientific cooperation.

Student Grant Competition for specific research projects at the UHK supports research by students of Master's and doctoral programmes (2020-2024). See above.

Postdocs have a competition to fill postdoctoral positions. Since 2021, a total of 30 postdocs have been supported.

- A system to support excellent science (e.g. support for excellent scientists, research teams, PhD students, collaborations, infrastructure, etc.).

The UHK supports transparently excellent science through strategic and motivational measures for research teams, junior scientists, cooperation with the application sphere and development of infrastructure. See above and chapter 5.4.

The UHK has long implemented the Research Faculties programme which funds excellent research teams and supports interdisciplinary research:

- **Excellence Competition.** Publishing of Professional Books at the FEdu supports the publication of monographs by prestigious publishers. At the FIM and FSci, the competition focuses on excellent research projects and at the PhF, the IRT operates.
- **Support for PhD students.** For example, the superdoctoral status, see above.

[3] Student grants, support for PhD students, postdocs and early career scientists.

- **Open Access (OA) support.** APC fees for OA publications are paid for by free tokens within scholarly databases and faculty funds according to internal decrees.
- **Financial rewards for R&D results.** Specifically, according to faculty focus. At the faculties, prestigious publications or monographs and chapters are rewarded. It is also complemented by rewards for positive evaluation of outputs within the M1 Module. The FSci and the FIM reward applied results as well.

The support includes social and societal awards:

- **The Rector's Medal** awarded to faculty personalities and students during the Day of the Struggle for Freedom and Democracy and the International Students' Day (to alumni as well since 2024);
- **Faculty awards for teachers and students** during social evenings, e.g., successful FEdu scientists can receive the Praemium Scientificum award.

The UHK develops a modern research infrastructure which includes:

- **Laboratories:** For example, analytical chemistry, experimental biology, data science and artificial intelligence, digital laboratory for cultural heritage analysis or CETA laboratories. For more information, see the Self-Evaluation Reports – Module 3;
- **Scientific databases:** WoS, Scopus, SpringerLink, ScienceDirect or JSTOR;
- **Software support**: MATLAB, R, Python, SPSS, Simuling, Anylogic, GitHub/GitLab, NVivo, Atlas.ti, Power BI, EndNote, Zotero, Overleaf, COMSOL Multiphysics, and GIS.

- A system of support for interdisciplinary research and collaboration within the HEIs.

A key goal of the UHK is to develop interdisciplinary research directions and to strengthen the institutional measures for effective collaboration of research teams; see also research directions below.

As part of the implementation measures, the UHK supports interdisciplinary research topics through internal competitions and regular benchmarking in the field of R&D. Unfortunately, no such competition was announced centrally in the period under review (while it was before) but it is planned to be announced in the next 18 months. Interdisciplinary research was, therefore, supported in this period on a rather *ad hoc* basis, taking advantage of external opportunities. In a few cases, the UHK management decided to allocate a single slot in a project call on behalf of the UHK, where the interdisciplinarity of the research played a major role in the decision. At the PhF, there was a call for specific research projects in 2020 and 2021, for which interdisciplinarity was a requirement. Two projects in the field of archaeology – physics – biology (PhF-FSci) were supported, which resulted in two impacted publications, and one project in the field of auxiliary historical science – IT (PhF-FSci) was supported.

Examples of interdisciplinary projects carried out in the period under review include:

- The **IT4Neuro project** (European Structural Funds) which ran in 2019-2022 and linked research in the fields of medical applications, socio-economic analysis and ICT data evaluation. The UHK decided strategically to allocate a free slot in this call to this interdisciplinary project. The FSci, the FIM, the University Hospital in Hradec Králové (FN HK) and the University of Pardubice participated.
- In the internal competition (GAMA 2) for **Proof of Concept** projects, the interdisciplinary nature of the project Software for the Detection of Viruses from Electron Microscopy Images and Related Methodological Procedures, on which the FIM and the FSci collaborated in 2020-2021, was taken into account.
- The **Bipole project** (European Structural Funds) which started in 2024 under the Cross-Sectoral Cooperation for IT call. Interdisciplinarity is not within the UHK (the FSci only is

involved) but between partners – the FN HK, Charles University, the University of Pardubice, and Generi Biotech s.r.o.

- The concept of providing conditions for the emergence of new, high quality research directions/topics, especially those with application potential.

The UHK supports the establishment of new research directions with application potential through strategic documents and measures:

1. **University-wide research directions** – the UHK defined multidisciplinary topics linking the faculties:
   - **Healthy Aging and Quality of Life;**
   - **Security and Sustainable Development in the Digital Society;** and
   - **New Challenges in Education.**
2. **Cooperation with the application sphere –** partnership with the TECHNOLOGY CENTRE Hradec Králové z. ú., Centre for Investment, Development and Innovation (CIRI), CzechInvest, and Transfera.cz, including faculty boards for cooperation with practice;
3. **Knowledge transfer and innovation** – support for patent protection and commercialisation of research results;
4. **Intersectoral mobility** – cooperation with companies, professional seminars, and internships within the Erasmus+ programme;
5. **Promoting excellence in research** – strengthening the quality of publications, participation in international projects, grant support.

The SP UHK reflects these goals in the priority the *UHK Dynamic and Excellent*. It is developed in the *Implementation Plan of the Strategic Plan of the UHK 2024* which emphasizes interdisciplinarity, internationalization and effective evaluation of research.

The Strategy of the UHK Research Organisation (SRO) sets out the key areas of research including applied research and TT. Managing acts such as Rector's Decree No. 01/2024 Intellectual Property Exploitation at the University of Hradec Králové (formerly Rector's Decree No. 17/2020 Treatment of Intellectual Property at the University of Hradec Králové) set out rules for intellectual property protection and technology transfer.

At the faculty level, research directions are adapted to current trends and challenges, e.g., digital humanities at the PhF, new research projects in psychology, or applied technologies at the FSci. Faculties support new directions through Excellence grants, departmental budgets and administrative support for grant procedures.

4.3 Quality control system for R&D&I environment

The HEI will briefly describe the system of internal and external evaluation of research units, including the following aspects:

- Internal and external evaluation of R&D&I quality: This includes the evaluation of R&D&I by the HEI´s authorities, the evaluation of research teams (if such a system exists), and the involvement of international scientific councils or other independent advisory bodies in quality control and of R&D&I management.
- The ethical aspects of research: this includes adherence to ethical principles and good scientific practice, compliance with related legislation (codes of ethics, ombudspersons, ethics committees and ethics hotlines, and systems for reporting whistleblowing and ethical misconduct).

The HEI shall demonstrate the functioning of the quality control systems in the R&D&I environment by examples (e.g., brief information on the evaluations carried out and their results, specific examples of the use of whistleblowing or the handling of ethical violations, etc.).

Maximum 500 words plus 200 words for each example described (max. five).

Self-assessment:

Information on the system of quality assurance and internal evaluation of creative activities is provided in Articles 10 to 12 of the internal regulation *Rules of the System of Quality Assurance and Internal Quality Evaluation at the University of Hradec Králové*. The quality assurance of creative activities at the UHK includes the processes of evaluation of creative activities at the level of the University, faculties, individual workplaces and at the level of academic and research staff involved in creative activities. Benchmarking is used at the university level and various indicators related to the allocation of funds for research activities or incentive schemes are monitored. Data is also collected for annual reports and academic meetings, or to monitor the fulfilment of indicators identified in the SP UHK. In particular, the UHK evaluates centrally the University programmes to support research. The University evaluation also includes self-assessment reports on the creative activities of the faculties that are drawn by the faculties at least once every five years and are submitted to the Internal Evaluation Board (IEB). The indicators monitored by the UHK reflect the national approach to the evaluation of research activity and the criteria used to fund research organisations. More detailed evaluation of research results takes place at the faculties where detailed criteria for such evaluation are also established. Activities and outputs of research activity are included in the annual evaluation of academic staff. Faculties autonomously set rules for rewarding the research output of their staff, thereby motivating them to develop their creative activity, as well as applying a minimum standard for publication outputs.

Since 2020, the UHK has had its own IAB which is a five-member advisory body to the Rector. It provides the UHK with an external perspective and mediates international experience (see the Rules of Procedure of the IAB). At regular meetings, the IAB has provided feedback on the UHK's strategy, especially in the area of doctoral studies, the involvement of postdoctoral students, the internal evaluation of the research organisation and the identification of excellent outputs, the evaluation of international cooperation in R&D&I, the internal structure of the UHK, and human resources issues. The IAB recommendations also contributed to the prepared strategic documents of the UHK, such as the SRO.

During this period, the UHK also underwent an international external evaluation through the Institutional Evaluation Programme (IEP) which is linked to the European University Association (EUA). While the UHK chose an evaluation focused mainly on research and the exploitation of its results, it was still a comprehensive evaluation that covered the whole spectrum of University activities, including management and decision-making processes, educational activities, quality

assurance, third role fulfilment and internationalisation. The process was initiated in 2021 and the first step included a self-assessment phase, the output of which was a self-assessment report. Based on the visits of the international evaluation team to the UHK in 2022, an evaluation report was sent to the University. It contained a total of 26 recommendations. Based on this, the UHK submitted a report in the following year summarising the implementation of these recommendations.

The Ethics Committee of the University of Hradec Králové (Committee) was established in 2022 by the Rector on the basis of the UHK Code of Ethics and in accordance with the Rules for the Internal Governance of the UHK as an advisory body to the Rector. It assesses cases of possible violations of the principles formulated in the UHK Code of Ethics (for more information, see the Rules of Procedure of the Ethics Committee) on the basis of submitted complaints. During its term of office, the Committee examined a total of seven complaints. It is an integral part of the system for quality assurance and compliance with ethical standards at the University. Further details and requirements for submitting a complaint are defined in the Rules of Procedure of the University of Hradec Králové. Basic information about the Committee activities and related documents are provided at this link.

The Research Ethics Committee is established by the Rector in accordance with the Rules for the Internal Governance of the UHK. The Research Ethics Committee deals with the ethical aspects of research conducted at the UHK involving mainly human subjects (including work with biological material of human origin), but also other activities requiring ethical consideration. The Research Ethics Committee works according to the Rules of Procedure determined by the Rector's decree 13/2018. The mission of the Research Ethics Committee is to ensure the protection of the dignity, freedoms, health, quality of life, and safety of all persons involved in research. Basic information about the activities of the Research Ethics Committee, including the contact for sending a request for consideration and related documents are provided at this link. A total of 53 applications were submitted to the Research Ethics Committee for consideration between 2020 and 2024.

Since February 2024, the UHK ethics infrastructure has included a University ombudsperson who is available to all persons employed at the UHK and to students. His/her operation at the UHK is regulated by Rector's Decree No. 14/2024 Ombudsperson of the University of Hradec Králové. The Ombudsperson is an institution that should help to make the environment of the UHK safer, more open and welcoming. The main task of the UHK's Ombudsperson is to set up prevention and awareness-raising activities so that, ideally, no actions contrary to the University's ethical principles occur. The basic mission of the Ombudsperson is addressing complaints from students and employees of the UHK that show signs of inappropriate behaviour or violations of ethical principles at the UHK; providing facilitation and mediation of dialogue between the parties concerned; identifying options for resolution in accordance with the needs of the parties as well as university procedures; and covering activities contributing to the prevention of negative phenomena related to possible violations of the UHK ethical principles. More information is available at this link.

The UHK has a system for reporting whistleblowing in accordance with Directive (EU) 2019/1937 of the European Parliament and of the Council of 23 October 2019 on the protection of persons who report breaches of Union law, and Act No. 171/2023 Sb., on the protection of whistleblowers. Rector's Decree No. 6/2024 Whistleblower Protection at the University of Hradec Králové then further defines who, when, for what reason and in what manner may submit a notification. In order to ensure the anonymity of the whistleblower, the UHK has decided to allow the submission of a notification in particular via the platform Do Not Let It Be (NNTB).

4.4 Sustainability and resilience of R&D&I

The HEI will describe the arrangements for sustainability and increasing the resilience of R&D&I, if such a system exists, and provide examples of its implementation. These include:

- The sustainable development concept (strategy, objectives, plan and implementation).
- Social responsibility strategy.
- A knowledge transfer system, if it is established at central level.[4]
- The third role, the transfer of R&D&I results to society and interaction with local actors.
- The concept of research data management (data collection, access and sharing of data, use of the information obtained for R&D&I management, responsibility for data files, archiving and backup of data).
- Ethics and personal data protection.
- Intellectual property protection.
- Ensuring institutional resilience (resistance to foreign influence, cyber security, risk prevention, prevention of misuse of R&D&I and knowledge transfer results, a system to prevent or mitigate the negative impacts of R&D&I and knowledge transfer in society).
- Digitisation and the use of smart technologies.
- The institutional strategy for Open Science 2.0/Open Access (if one exists), including information on the operation of the institutional repository or similar tools.
- A system for training undergraduate and postgraduate students as well as staff in the field of intellectual property protection and technology transfer.

The HEI will demonstrate the effectiveness of its procedures by examples (e.g., the number of people trained in intellectual property protection and technology transfer, data on the usage of Open Access repositories, handling of risk incidents, etc.).

Maximum 300 words per point.

Self-assessment:

- The sustainable development concept (strategy, objectives, plan and implementation).

During 2024, the UHK developed the Sustainable Development Strategy of the UHK until 2030 (Sustainability Strategy) which uses a holistic approach and integrates sustainability principles into all key areas of the University's operations. It focuses on the transformation of teaching, R&D&I, management, infrastructure and communication, with the aim to maximise practical impact and contribute to the global Sustainable Development Goals (SDGs).

The sustainability strategy emphasizes innovation of study programmes (Pillar I – Education) where the sustainability topics will be integrated into existing courses. A new study programme will be developed and training activities for staff will be implemented. The aim is to raise awareness of sustainability among students and staff and thus strengthen their role in its implementation.

In the second pillar of the Sustainability Strategy (Pillar II – Science and Research), the UHK supports interdisciplinary cooperation and sharing of research outputs on sustainability not only with the academic community but also with the public. The aim is to apply scientific findings in practice in addressing global challenges.

The implementation of the University governance (Pillar III – University Governance) forms an important part. The sustainability rules will be integrated systematically into the management processes. A working group including faculty and student representatives will be established. The sustainability strategy also emphasises the improvement of the working environment and regular evaluation of progress.

[4] If the knowledge transfer system is decentralised to the unit level, the HEI shall describe how the system works.

Optimization of infrastructure (Pillar IV – Infrastructure) is one of the key objectives. The UHK plans to reduce the carbon footprint of the campus through energy savings, renewables and circular economy. Measures such as charging stations for electric vehicles, a zero-waste approach and waste sorting infrastructure are being implemented.

The proper communication of the Sustainability Strategy (Pillar V – Dialogue and Cooperation) forms another important point. The popularisation of sustainability will be done through social networks, workshops and public engagement. The students will be involved through a new association focused on sustainable activities.

An Action Plan that will be developed in 2025 will be used to implement and monitor the progress with specific actions, responsibilities and indicators of success, as well as the University participation in international evaluations such as the UI GreenMetric.

- Social responsibility strategy.

The UHK social responsibility strategy is not an independently formulated document. It emphasises sustainable development, inclusiveness, quality of education and responsible partnership with the surrounding community. This strategy is based on existing strategic documents, such as the SP UHK, the Strategy of Research Organisation, the Gender Equality Plan of the University of Hradec Králové for the period 2023-2025 (GEP), and the international framework, e.g., the UN Sustainable Development Goals (SDGs).

The main pillars of the UHK social responsibility strategy are based on the following principles:

- **Education for the future:** The UHK is committed to preparing students not only for professional careers, but also for active citizenship and involvement in solving societal challenges. Emphasis is placed on interdisciplinary approaches, support of critical thinking and linking academia with practice.
- **Sustainable development and environmental responsibility:** The UHK is committed to sustainable practices, reducing its ecological footprint and efficient use of resources, to which it has subscribed by formulating the Sustainability Strategy.
- **Inclusion and Diversity:** The UHK promotes equal opportunities for students and staff without regard to gender, age, disability, religion or socio-economic status. The UHK creates an environment that promotes diversity and inclusiveness in all areas of activity. It has clearly articulated this in all its strategic documents.
- **Involvement in regional development:** The UHK cooperates intensively with the City of Hradec Králové, the Hradec Králové Region and regional organisations, schools and businesses on projects that contribute to the development of the region. These include, e.g., support for innovation, scientific activities, and social initiatives that respond to the needs of the regional community.
- **Ethical culture and transparency:** The UHK prides itself on ethical principles and a high level of transparency in all processes. The aim is to foster trust not only between the UHK and its partners through responsible governance and communication but also within the University's own community.
- **Supporting global challenges:** The UHK is involved actively in addressing global challenges such as climate change, poverty, inequality, and digitalisation. International cooperation and sharing good practice in the field of social responsibility is also part of this.

The mission of the UHK is to spread knowledge within the regional and global community.

- A knowledge transfer system, if it is established at central level.[5]

Since 2020, the UHK has a TTO where the process support of the TT system is provided by one authorized employee. The commercialisation process also involves staff with expertise in TT from the Legal Office and individual faculties. The TT system is governed by Rector's Decree No. 01/2024 Intellectual Property Exploitation at the University of Hradec Králové (formerly Rector's Decree No. 17/2020 Treatment of Intellectual Property at the University of Hradec Králové).

As part of the commercialisation process, the TTO provides support in verifying the practical applicability of R&D results, protecting intellectual property and carrying out activities necessary for the process of results transferring (support in selecting an appropriate commercialisation model, most often licensing or sale; preparation of contract proposals; support in applying results in practice with overall benefit to society). Negotiations with commercial companies and industrial partners are dealt with on the basis of cooperation with external experts. In 2022, the UHK entered into a cooperation agreement with a prominent external transfer centre to assess and select technology for commercialisation, analyse and verify its applicability, negotiate contract terms, etc. The commercialisation system includes a Board that recommends approval/ disapproval of the submitted cases and makes further recommendations. Members are external experts from the financial and application sectors.

The UHK is a member of Transfera.cz, a national platform defending the interests of the transfer community in the Czech Republic.

In the period 2020-2024, 11 invention applications were filed, 15 patents were granted, 14 utility models and 18 industrial designs were registered. Significant commercialisation cases include licensing agreements with ANUME s.r.o. and Grant Detection, s.r.o., as well as the establishment of a new spin-off company TallWell s.r.o.

The University participated in the **GAMA 2** programme, the aim of which was to validate R&D&I results with commercialisation potential. Under this programme, **15 Proof of Concept sub-projects** were implemented successfully between 2020 and 2022, leading to **44 new results**. The University cooperates with a number of major companies and institutions, including **ŠKODA AUTO, EY, Unicorn, Česká spořitelna, MONETA Money Bank, and Continental**.

- The third role, the transfer of R&D&I results to society and interaction with local actors.

The UHK strives to popularize R&D&I and communicate with the general public and regularly organizes or participates in public social-popularization events.

Examples include the Night of Scientists organised by the Academy of Sciences of the Czech Republic (AV ČR), or competitions for students. These are not only for higher education students but also for secondary and primary school students. At the UHK, the Central Committee of the Physics Olympiad is based, and Mathematics, Chemistry and Biology Olympiads are held here. In the period under review, the UHK hosted the national round of the Physics and Biology Olympiads. In 2022, the UHK hosted the European Olympiad of Experimental Science. The UHK organizes the Philosophy and History Olympiads and co-organises the Logic Olympiad. Examples include visits to selected secondary schools to present the specifics of the studies in order to simplify the decision-making process for applicants.

The Hradec Economic Days, EDU Days, Humanities Week and the Hradec Days of Social Work are also organised at the UHK.

The UHK fulfils the third role by the presence of leading experts in the media, e.g., in the form of popularization articles. The UHK cooperates with Czech Television and Czech Radio in the form of

[5] If the knowledge transfer system is decentralised to the unit level, the HEI shall describe how the system works.

commentaries and interviews. The FEdu cooperates with the Study and Research Library and the Hradec Králové City Library. Several departments of the FEdu have developed cooperation with the Hradec Králové Drak Theatre. We would also like to mention the long-term cooperation of the PhF with the Museum of East Bohemia.

The results of applied research, especially at the FSci, help to solve social (e.g., patent Method for the Detection of Organisms, Especially Vertebrates, in Enclosed and Partially Enclosed Spaces and Device for its Implementation) or medical (Toxicology and Development of Antidotes, Monitoring of Foetal Movement in Pregnancy) societal challenges. We can also mention the PhF projects Analysis of the Social Situation in Relation to Automotive Production in the Industrial Zone Solnice-Kvasiny-Rychnov n/Kněžnou or Use of Artificial Intelligence in the Provision of Professional Social Counselling.

The UHK representatives are members of expert bodies at the national, regional or municipal level. Examples include membership in the expert panel for the revision of the framework educational programmes for primary education, membership in the committee for the occurrence of the gray wolf in the Hradec Králové Region, or membership in the committee for education and training of the city of Hradec Králové.

- The concept of research data management (data collection, access and sharing of data, use of the information obtained for R&D&I management, responsibility for data files, archiving and backup of data).

Managing research data according to FAIR principles is an integral part of Open Science. While OA publishing has long been supported at the UHK, a unified data policy for research data is still lacking and its formulation and implementation will be a major challenge.

Research data is collected and managed in accordance with generally accepted standards of data care. In accordance with the institutional IT policy of the UHK, all data are stored appropriately on operating computers and archived and backed up on external storage regularly. Responsibility for data files and their security rests with the Department of Information Technology Services (DITS) which is governed by the Rules of Operation of Information and Communication Technology (ICT) that are in the process of being updated, and by cybersecurity policies that include, for example, the secure user behaviour policy, the secure information transfer and exchange policy, the privacy policy, etc. For data analysis and use for R&D&I management, the role of the MIS is crucial, linking data sources and enhancing data availability and visibility for monitoring and evaluation of science and research activities.

The management of the UHK is aware of the limitations that exist in the area of research data management and are growing in connection with the implementation of Open Science principles, and the management is addressing them actively. Relevant departments (OOS, DITS, Strategic Project Office, Legal Office, etc.), in cooperation with faculties, create strategic documents that will define comprehensively the Open Science institutional policy including the data policy. Furthermore, it will be necessary to build the required infrastructure (sufficient and secure repositories), to ensure adequate staff capacity in terms of support staff at both the university and faculty level (Open Science coordinators, Data Stewards, Data Curators), and to obtain funding for the implementation of the given objectives (e.g., through projects).

- Ethics and personal data protection.

There is a Data Protection Officer (DPO) at the UHK who is accessible to all employees and other data subjects, especially students and participants in lifelong learning.

The UHK fulfils its information obligations towards the data subjects regarding the protection and processing of personal data (PD), both through general information on the UHK website and

information forms and specific wording in individual agendas. These forms are available to all employees on the UHK official notice board.

The UHK also has a mechanism in place for dealing with requests and complaints in matters of PD protection and processing. The DPO (available here) is a key body involved in this process.

The UHK has developed internal rules for the protection and processing of PD (see above). In the area of cybersecurity (which is related to the PD protection and processing), the UHK has established a Cybersecurity Committee whose members include representatives of the UHK management, the DPO, and the Cybersecurity Manager. The UHK has also adopted an overarching rules and set of policies to guide it in the area of cybersecurity (policies can be provided on request).

The UHK maintains an overview of the PD processing agendas where the details of PD processing are described in detail. For the archiving of documents that may contain the PD, the UHK has established the rules laid down in the Filing and Shredding Regulations and the Filing and Shredding Plan.

Following the introduction of staff training in the area of cyber security, the UHK, aware of the gap in this area, also plans to introduce regular training in the area of PD which will be part of the cybersecurity training.

- Intellectual property protection.

The protection of intellectual property at the University of Hradec Králové is governed by Rector's Decree No. 01/2024 Intellectual Property Exploitation at the University of Hradec Králové (formerly Rector's Decree No. 17/2020 Treatment of Intellectual Property at the University of Hradec Králové) which ensures a unified procedure for the application and protection of intellectual property rights created within the UHK so that the legitimate interests of the UHK and its employees are protected as best as possible; it is aimed at promoting the application of the creative potential of the UHK and its employees.

Processes related to the protection of intellectual property at the UHK are provided by the TTO which is designed as a support unit ensuring all processes necessary for the protection of intellectual property. The TTO provides full administration of the process of notification of R&D results creation and the application of the UHK's right to employee inventions, provides advice on the choice of an appropriate form of protection of the created results, keeps records and administration of patents, utility models, industrial designs and trademarks, and ensures their validity maintenance. As part of the process of industrial legal protection securing, the TTO cooperates with external patent specialists and ensures all communication with the Industrial Property Office. In cooperation with the Legal Office, patent specialists and external consultants, the TTO provides consulting and educational activities for the UHK researchers. The TTO keeps records of concluded licence agreements (or agreements on transfer of industrial property rights), ensures control of the fulfilment of obligations arising from these agreements, and prepares documents for payment of remuneration to originators.

The UHK has set up significant incentive rules for rewarding creators of intellectual property. The rules are enshrined in the managing acts of the UHK.

An Intellectual Property Protection Fund has been established at the UHK. A portion of the UHK's net income from commercialisation revenues (in particular from licences granted) is transferred to is and industrially-legal protection and its maintenance and the implementation of activities in the process of R&D results commercialisation are funded from it.

All R&D results produced at the UHK are entered into the central database for the management of scientific research results, i.e., the OBD.

- Ensuring institutional resilience (resistance to foreign influence, cyber security, risk prevention, prevention of misuse of R&D&I and knowledge transfer results, a system to prevent or mitigate the negative impacts of R&D&I and knowledge transfer in society).

In the area of institutional security, the UHK follows the rules and materials of the Financial Analytical Office and the Ministry of Interior (MV).

Cybersecurity is considered a priority and the activities of the UHK are adapted to changing threats and challenges. It is the process of protecting systems, networks and programmes from digital attacks. To protect itself, the UHK has implemented and strengthened security measures:

1. **Firewalls and antivirus software**: Implementation of software that monitors and protects networks from unauthorized access and malware. In 2024, the UHK implemented another set of penetration tests, on the basis of which it implemented appropriate measures.
2. **Security Policies:** Development and compliance with security policies and procedures that define how sensitive information should be protected. The UHK has issued 23 security policies on this topic. They form annexes to the Rector's Decree No. 09/2024 Cybersecurity Security Policy.
3. **Employee training:** In 2024, the UHK agreed on a procedure and, commencing from 2025, has introduced regular training for employees on security threats and correct procedures when working with sensitive data. The initial training on the issue was conducted with the participation of CESNET security expert Jan Kolouch. In the period under review, the UHK also cooperated with experts from the Security Information Service of the Czech Republic and the National Cyber and Information Security Agency.
4. **Data encryption:** Since 2024, data protection during its transmission and storage using advanced encryption techniques has been introduced gradually at the UHK.

Risk treatment: Based on the analysis, the Risk Assessment Report was prepared in 2024 by the DITS in collaboration with the Cybersecurity Manager. It is currently being reviewed by the Cybersecurity Committee and the UHK management. Risk treatment is a systematic process of identifying, assessing and managing risks that could impact the institution negatively. This process involves several steps:

1. **Risk identification**: Identifying and recording potential risks that could threaten the institution. Risks may be internal (e.g., system failures) or external (e.g., natural disasters).
2. **Risk assessment:** Determining the likelihood and impact of each risk. This step involves analysing the risk factors and their potential impact on the institution.

- Digitisation and the use of smart technologies.

Digitisation and integration of SMART technologies are among the main strategic priorities of the UHK. These innovations bring benefits and simplification for students and staff while increasing the efficiency and quality of education and services provided.

Digitisation of processes: Strategic materials for digitisation of processes are being developed under the responsibility of the Vice-Rector for Strategy, Development and Digitisation, in cooperation with faculty representatives. Subsequently, after consolidating the requirements, priorities have been identified and analyses and technical specifications have been created followed by development/purchase, testing, training and deployment of digital processes, which leads to increased efficiency and elimination of bureaucracy.

E-learning and online platforms: The UHK has implemented modern e-learning platforms allowing students to access learning materials, online lectures and discussion forums from anywhere and at any time. These platforms also support interactive learning and communication between students and lecturers.

Smart classrooms: The UHK has been using financial instruments of operational programmes for a long time and has been deploying new SMART technologies in equipping classrooms with modern multimedia devices. These technologies enhance the learning environment and facilitate the presentation and sharing of information.

Data management and analysis: The UHK has introduced and is further developing an MIS. The digitisation of administrative processes enables efficient data management, e.g., on employees, students, courses and research activities. Advanced analytical tools help the school management to make informed decisions based on the data.

Support for research and development: Smart technologies such as the Internet of Things (IoT), artificial intelligence (AI) or big data are used in research and development. Academics and students have access to state-of-the-art laboratories equipped with top technologies that support innovation and the development of new solutions. Thanks to these measures, the UHK is not only a modern and technologically advanced institution, but also an environment that supports actively education and research for the 21st century.

- The institutional strategy for Open Science 2.0/Open Access (if one exists), including information on the operation of the institutional repository or similar tools.

A comprehensive strategy for the sustainable development of the research organisation and the implementation of Open Science ideas are the key to the success of the development of top and internationalised science at the UHK. So far, the issue of Open Science was addressed at the UHK in a rather decentralised manner. Part of the agenda was handled by the University Library, part was under the Rectorate's OVTZ, and part was carried out by the faculty Science and Research Offices, especially in the framework of OA issues and support in the preparation and implementation of projects. In order to create a unified university-wide Open Science strategy, anew professional position of Open Science Specialist and subsequently the OOS were created in 2024. The main task of this new workplace is not only to set up institutional mechanisms to help make research at the University more open, transparent and reusable, but also to support academics and researchers to apply Open Science principles in their scientific activities. Among other things, the OOS provides advice on research data management and the development of Data Management Plans (DMPs), offers consultation and training, and prepares manuals and other training materials.

Open science encompasses a wide range of different practices designed to lead to greater collaboration in research and societal engagement in science. In addition to open access (OA) publications, this includes the management of research data (FAIR data), the timely sharing of research results, citizen science, open peer review, the use of open licensing, etc. OA publishing is promoted systematically at the UHK, in particular through the services of the UHK University Library (CzechElib, management of the university repository, etc.) and by providing funding to cover OA publication fees (APCs). In 2023, the Vice-Rector's Instruction No. 09/2023 Open Access Publishing was issued to motivate researchers and academics to seek actively to expand OA and uphold ethical and research standards.

The UHK uses the DSpace repository, available at https://digilib.uhk.cz/ to store, preserve and share publications openly. Records in the repository are publicly available and publishing under Creative Commons licenses is allowed.

- A system for training undergraduate and postgraduate students as well as staff in the field of intellectual property protection and technology transfer.

Continuous education of undergraduate and postgraduate students and employees in the field of intellectual property protection and TT is provided by the UHK's OVTZ. The information is provided by the OVTZ staff themselves, by other competent UHK employees and/or by external experts in TT.

In 2022, the OVTZ organised a workshop on TT at the UHK to ensure that all persons involved in the production of R&D results at the UHK are aware of the internal process that follows the production of a result. Due to the nature of the workshop, the topic was presented by the UHK employees who ensure this process. Representatives of the Legal Office were also invited to the workshop to answer questions on legal issues. All persons involved in the process of the creation of R&D results at the UHK were trained.

Within the framework of the projects managed by the OVTZ, three multi-day events were implemented at the UHK, focused directly on TT. In 2022, 2023 and 2024, it was the Summer School 4 TTCamp, the Hradec Spring Tech 4TTCAMP and the UHK Bootcamp, respectively. The programme of these events included lectures by experts from the Czech Republic and abroad. These activities were open, among others, to students of doctoral studies at the UHK and at foreign partner universities.

Since 2021, the OVTZ has been organising a specialised annual PhD course called Ph.D. Summit, primarily for newly recruited PhD students at the UHK and, in case of vacancies, also for PhD students from higher years. The course is usually held in form of away days and part of the programme is also focused on TT and intellectual property. At the Ph.D. Summit, lectures are always given by external experts in TT. The aim is that students know, from the beginning of their scientific career, how to handle, protect and commercialize R&D results.

The UHK has an educational course on intellectual property protection and knowledge transfer for students, PhD students, researchers and academics. The course is available online and reflects different groups of researchers in relation to the level and potential of commercialisation.

PERSONNEL POLICY

4.5 Structure of human resources

The HEI shall describe the current state, age structure, degree of internationalization and development trends of the staff involved in R&D&I, along with their distribution by a job title and gender for the period of 2020-2024 as detailed in annex tables (Tables 4.5.1 to 4.5.3) (including the provision of technical and economic facilities).

Maximum 1000 words.

Self-assessment:

Table 4.5.1 provides an overview of the changes in the number of employees involved in R&D&I at the UHK between 2020 and 2024. The total number of employees in R&D&I remains relatively stable but there are noticeable changes in individual categories.

- The increase is evident in the categories of *Professors* (from 30.73 to 31.60), *Associate Professors* (from 68.23 to 71.38) and *Assistant Professors* (from 203.53 to 207.69).
- However, the categories *R&D Personnel* (from 25.66 to 15.5), *Early Career Researcher* (from 119.48 to 101.45) and *Researchers in Other Categories* (from 133.37 to 113.51) have declined.
- There is also a significant increase in the category *Total Number of Foreign Nationals*. The total number of researchers from abroad is increasing. There is an increase in the share of international employees between 2020 and 2024 in all categories represented but most significantly in the categories *Early Career Researcher* and *Researchers in Other Categories*. We consider this fact to be a consequence of the efforts of the UHK to internationalise and to open selection procedures for international applicants as well.
- The representation of women increased most in the categories of *Professors* (from 21.97% to 27.85%) and *Assistant Professors* (from 50.02% to 52.81%).
- On the contrary, there is a decrease in the share of women in the categories *Associate Professors* (from 33.15% to 30.58%) and *R&D Personnel* (from 66.64% to 60.38%).
- The category *Technical and Economic Staff* has the highest proportion of women in the long term. This proportion has increased further over the years under review (from 82.8% to 83.94%).

In terms of age structure (Table 4.5.2), the 2024 data show slight changes in the representation of different age groups in academic and professional positions as compared to 2020.

- The representation of professors in the lower age groups (categories *Under 29* and *30-39 Years*) is zero, and the representation in the older age groups is still very low. There has been no significant change in the proportion of professors over the four years.
- The proportion of associate professors was very low in 2020, with the largest representation in the categories *40-49 Years* and *50-59 Years*. In 2024, the share in the *40-49 Years* and *50-59 Years* categories increased slightly to 4.87% and to 3.20%, respectively.
- Assistant professors had the highest proportion in the age group *40-49 Years*. In 2024, the share of assistant professors remains relatively stable with a similar distribution in the older age categories, but staff aged up to 29 has appeared in this category and there has been an increase in the *30-39 Years* category.
- The category *Early Career Researchers* was most strongly represented in the age category *40-49 Years* in 2020. In 2024, there was a large increase in the *30-39 Years* category (from 7.88% to 12.52%).
- There are no significant changes in the category *R&D Personnel*.

- For the category *Researchers in Other Categories*, there is an increase in the category *Up to 29 years* in 2024. Changes in the older age categories are not so great.
- The category *Technical and Economic Staff* shows no significant changes.
- The category *Scientific, Research and Development Staff Involved in Teaching Activities* is the most represented in the 40-49 age group in both monitored years. There was an increase in the *30-39 Years* and *40-49 Years* categories.

4.5.1 Staff involved in R&D&I of the university (FTE) in the period under review

Academic/professional position	Total 2020	Of which women [%]	Of which foreign [%][6]	Total 2024	Of which women [%]	Of which foreign [%]
Professor	30.73	21.97	0.26	31.60	27.85	1.19
Associate Professor	68.23	33.15	4.25	71.38	30.58	4.49
Assistant Professor	203.53	50.02	2.13	207.69	52.81	4.69
Assistant	0.00	0.00	0.00	0.00	0.00	0.00
R&D Personnel[7]	25.66	66.64	0.00	15.00	60.38	0.00
Researchers in other categories[8]	133.37	45.03	14.65	113.51	45.88	26.47
Technical and economic staff[9]	32.77	82.8	0.00	32.38	83.94	0.00
Early career researcher[10]	119.48	46.00	4.35	101.45	47.79	16.39
Scientific. research and development staff involved in teaching activities	358.25	45.52	3.02	351.47	46.33	4.29
Total number of foreign nationals	42.86	12.88	100.00	75.	10.35	100.00

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, research and development staff, scientific staff not falling into other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.
Note: The average number of hours worked is calculated as the ratio of the total number of hours actually worked during the reference period, from 1 January to 31 December, by all staff (including agreement on work activity, excluding agreement on work performance) to the total annual working time pool per full-time employee. The full- time status of the worker in the evaluated unit is always reported. If an employee holds more than one type of full-time job within the evaluated unit, the total sum of the two shall be reported.

[6] Researchers with Slovak citizenship are not considered foreign.
[7] The category "Other scientific, research and development personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).
[8] The category "Researchers not falling under other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).
[9] Who participates in the management and support of R&D&I in the institution.
[10] See Definition of Terms in Methodology HEI2025+.

4.5.2 Percentage of HEI´s staff involved in R&D&I, categorized by age structure, job title, and gender in the year 2020 (number of physical employees and staff)

Academic/ professional position	Under 29 years [%]		30-39 years [%]		40-49 years [%]		50-59 years [%]		60-69 years [%]		70 years and over [%]	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	0.53	0	0.40	0	1.20	0.40	2.80	0.53
Associate Professor	0	0	0.13	0	3.20	0.80	2.80	0.80	1.47	0.80	3.20	0.93
Assistant Professor	0	0	5.34	2.00	13.35	5.74	8.14	4.94	3.74	2.27	0.67	0.27
Assistant	0	0	0	0	0	0	0	0	0	0	0	0
Early career [11]	0	0	7.88	3.07	9.08	4.01	3.07	2.00	0.93	0.93	0	0
R&D [12]	2.14	1.20	1.60	0.80	0.27	0.13	0.53	0.40	0	0	0	0
Researchers in other [13]	0.80	0.40	10.28	4.14	6.81	2.94	1.87	0.80	1.87	0.80	0.67	0.13
Technical and economic [14]	0.93	0.93	1.34	1.07	1.87	1.34	0.80	0.67	0.27	0.27	0	0
Scientific. research and development staff involved in teaching activities	0.40	0.27	8.95	3.74	19.36	8.41	12.28	6.41	7.48	4.01	6.81	1.87

Note: The total number of employees/workers as of 31.12. of the calendar year in question is to be given, irrespective of the proportion of full-time equivalents, but only in an employment relationship, i.e. not including persons working parttime agreements. Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

[11] See Definition of Terms in Methodology HEI2025+.
[12] The category "Other scientific, research and development personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).
[13] The category "Researchers not falling under other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).
[14] Who participates in the management and support of R&D&I in the institution.

4.5.3 Percentage of HEI´s staff involved in R&D&I, categorized by age structure, job title, and gender in the year 2024 (number of physical employees and staff)

Academic/professional position	Under 29 years [%]		30-39 years [%]		40-49 years [%]		50-59 years [%]		60-69 years [%]		70 years and over [%]	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	0.97	0.14	0.97	0.28	0.83	0.28	2.09	0.56
Associate Professor	0	0	0.42	0	4.87	1.11	3.20	1.11	0.97	0.70	2.36	0.83
Assistant Professor	0.42	0.42	8.62	4.17	13.63	7.09	7.51	4.73	2.78	1.25	0.42	0.28
Assistant	0	0	0	0	0	0	0	0	0	0	0	0
Early career [15]	0.97	0.56	12.52	5.56	4.17	2.50	2.36	1.39	0.42	0.42	0	0
R&D [16]	0.70	0.56	1.25	0.70	0.56	0.28	0.28	0.14	0	0	0	0
Researchers in other [17]	6.40	3.89	8.21	3.20	4.87	2.23	2.09	0.83	1.11	0.14	0.28	0
Technical and economic [18]	0.14	0.14	1.53	1.25	2.23	1.81	0.70	0.70	0.56	0.42	0	0
Scientific. research and development staff involved in teaching activities	1.67	0.97	11.13	5.29	21.14	9.46	12.80	6.82	5.29	2.36	4.87	1.67

Note: The total number of employees/workers as of 31.12. of the calendar year in question is to be given, irrespective of the proportion of full-time equivalents, but only in an employment relationship, i.e. not including persons working parttime agreements. Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

[15] See definitions in Methodology HEI2025+.
[16] The category "Other scientific, research and development personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).
[17] The category "Researchers not falling under other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).
[18] Who participates in the management and support of R&D&I in the institution.

4.6 Academic and Research Careers

The HEI will briefly describe the central system for HR recruitment, placing particular emphasis on recruitment from outside the HEI, especially from abroad, as well as system of career development of academic and research staff, if such system exists. Information will be provided on:

- Career development rules and legislation related to the recruitment and career development of domestic and foreign employees (e.g. Career Code, HR Award, OTMR policy, etc.).
- International tenders.
- The process of new employee adaptation and mentoring.
- Transparent distribution of institutional time, attitudes towards chaining of contracts and senior academic positions.
- Rules for filling senior positions in the context of R&D&I.
- The rules and support system of sabbaticals.
- Measures for the return of workers after a stay in an external workplace, including a foreign workplace.
- Arrangements for workers to return after maternity/parental leave or other career breaks (e.g. caring for family members).
- Other relevant information at HEI discretion.

The HEI shall provide a reference to an existing career code or similar document (if one exists). The HEI shall describe the effectiveness of the systems used with examples (e.g. a model example of the adaptation process, a specific anonymised example of an academic's career path, statistics on the return after maternity/parental leave or career breaks before and after the implementation of the measures, etc.).

Maximum 300 words per point.

Self-assessment:

- Career development rules and legislation related to the recruitment and career development of domestic and foreign employees (e.g. Career Code, HR Award, OTMR policy, etc.).

The UHK has a systematic approach to recruitment and career development of academic and research staff, which corresponds to the principles of openness, transparency and fairness. The key documents in this area include the Career System and Regular Evaluation of Academic Staff of the University of Hradec Králové (Career System), HR Award, OTM-R Policy and the Code of Procedure for Selection of Academicians of the University of Hradec Králové.

The Career System sets out the rules for career development of academic staff, including regular evaluation, professional development planning and support for international experience. The employees have the opportunity to plan their career progression individually and to benefit from institutional support in the habilitation and professorship procedures. The HR Award also plays an important role, which confirms the UHK's commitment to excellence in human resource management in research and includes measures to improve the working environment and equal opportunities.

The OTM-R policy (Open, Transparent, Merit-Based Recruitment) ensures transparent selection procedures that are also open to international candidates. This approach is supported by standardised advertisements, selection methodology and training of evaluation committees. Selection procedures are conducted according to precisely defined rules set out in the Code of Procedure for Selection of Academicians of the University of Hradec Králové which defines the procedures for filling academic positions and the composition of the committees.

- International tenders.

International selection procedures at the UHK are conducted according to the Code of Procedure for Selection of Academicians of the University of Hradec Králové which guarantees the transparency of the process and ensures that academic positions can be advertised not only in the Czech Republic but also in international databases of job offers, such as Euraxess or specialized portals of scientific institutions. Applicants have equal access to information on the requirements for the position, the selection criteria and the evaluation process.

Language is also an important element in the openness of selection procedures. The UHK is expanding actively the number of positions available to international academics, and, therefore, key information about the positions on offer is published not only in Czech but also in English. The composition of the selection committee is open and emphasises equality. The involvement of international experts is preferred, thus ensuring objectivity and international comparability of the applicants' qualifications.

The University also supports the mobility of researchers and offers flexible conditions for international academics, including assistance with the administrative process, obtaining visas and adaptation to the academic environment. These steps help to attract top experts from all over the world and contribute to strengthening international cooperation and the quality of research at the UHK.

- The process of new employee adaptation and mentoring.

As part of the adaptation of new employees, the UHK uses the Edunio system which ensures compliance with the statutory Occupational Health and Safety (BOZP) and Fire Protection (PO) training. There is also a Guide for New Employees available in both Czech and English. The adaptation process also includes an e-course for new employees. The employees receive it on the day of joining. This course is also available in both Czech and English.
Both the guide and the e-course are designed to facilitate the adaptation of new employees. They introduce them to the UHK environment and internal systems and provide links to important documents or websites.

In addition, the UHK has implemented a Code of Ethics course. The employees should pass it one month after their start date. This course introduces employees to the ethical infrastructure of the organisation. Academic and scientific staff also have a follow-up course Code of Ethics II which focuses on the principles of ethical conduct in creative and teaching activities.

Currently, an analysis of the onboarding process is being prepared, on the basis of which the UHK plans to create a personnel portal. This portal will be part of the Intranet and its aim will be to simplify the orientation in the onboarding steps for new employees and managers.

Since 2022, the UHK has been building a mentoring programme called UHK Mentoring, targeting Czech and international PhD students and postdocs. The main purpose of the programme is to support doctoral students in their studies, in the start of their professional career and in a successful transition from doctoral studies to further career in academia and beyond. It is, therefore, suitable for PhD students in all years of study. It aims to connect less experienced PhD students, as well as postdoctoral students (mentees), with more experienced academics (mentors) who can pass on valuable experience and guidance to younger colleagues. The first round of the programme started with an introductory workshop for mentees in June 2022 and lasted until March 2023. A total of 5 mentees participated in it.

- Transparent distribution of institutional time, attitudes towards chaining of contracts and senior academic positions.

At the UHK, contracts are normally chained and made for a fixed period of time, as allowed by Czech legislation, especially the Labour Code. In addition, the UHK has an agreement with the UHK Trade Union on a different procedure for the establishment of fixed-term employment which defines the 'special nature of the work' and allows for a different procedure for chaining contracts than that provided for in the Labour Code. This agreement is applied to the negotiation and renewal of employment for activities that depend on the duration and conditions of a project. The employment contract made under this agreement may be repeated or extended indefinitely. The agreement also defines the range of staff to whom it applies – specifically, staff working on scientific or research tasks in the framework of specific projects, employees recruited to carry out specific contracts financed by time-limited resources, or employees carrying out seasonal work.

Transparent distribution of institutional working time is related to the rules for career advancement and evaluation of staff at the UHK. According to the Career System, a uniform methodology for the evaluation of academic staff has been established since 2020. The document defines the aspects of evaluation, including the possibility of adjusting the employment contract, and the evaluation of educational activities. It also takes into account the specific needs within individual faculties.

- Rules for filling senior positions in the context of R&D&I.

The filling of senior academic positions is governed by the Code of Procedure for Selection of Academicians of the University of Hradec Králové**.** According to this Code, the filling of academic staff and managerial positions in the context of R&D&I is always associated with the obligation to conduct a selection procedure. In case of a person with exceptional scientific erudition, the Dean may decide not to open the selection procedure. The positions of visiting and emeritus professors are filled on the basis of the provisions of Annex 5 of the Constitution of the University of Hradec Králové. The UHK monitors gender balance in the management and decision-making but statistics show that men are still more often represented than women in the highest academic positions. The GEP sets out measures to promote gender balance in the University management, including training and development programmes.

- The rules and support system of sabbaticals.

The requirements for a sabbatical of academic staff are governed by Section 76 of the Act and Article 17 of the UHK Wages Regulation.
The provision of a sabbatical is particularly encouraged in staff in the final stages of preparing to submit a proposal to initiate the procedure to attain associate and full professorships.

At the FEdu, for example, the progress of fulfilling the conditions for the procedure to attain associate professorships is monitored regularly during the annual evaluation of the career development plan of individual academic staff. On the basis of this evaluation by the heads of departments and an interview with specific academic staff members, while assessing the possibilities of a particular department, especially regarding the provision of teaching in a given period, it is possible to grant the staff member partial or complete relief from teaching duties. If the possibilities of the relevant department allow, an agreement is signed with the individual staff member, on the basis of which he/she is exempted from teaching for a precisely defined period of time and undertakes to devote himself/herself fully to the finalisation of all the necessary requirements for the commencement of the procedure to attain associate professorship, i.e., in particular, the completion of the habilitation thesis, during this defined period. The relevant period usually consists of one semester. This system requires not only the support of the faculty management but also collegial approach at the relevant department.

At the PhF, staff members preparing to start the procedure to attain associate professorship are supported under PhF Dean's Decree No. 22/2021 Announcement of the HSP – Habilitation Support Programme which aims to increase the number of associate professors from among the permanent staff employed by the PhF. An agreement is drawn up with an employee enrolled in this programme, under which, among other things, relief from teaching duties are agreed. Either a 6-month sabbatical or a 12-month reduction in teaching obligations can be requested. Teaching relief will only be granted if the habilitation thesis is the only missing condition for submitting a proposal to initiate the procedure to attain associate professorship.

- Measures for the return of workers after a stay in an external workplace, including a foreign workplace.

Support for long-term stays of academic staff abroad is an integral part of the career system, or is dealt with by the Rector's or Dean's managing acts.

Support for return from an external workplace or from abroad is not yet addressed systematically at the central level at the UHK, but it is provided at the level of faculties and specific departments according to the individual needs of employees.

- Arrangements for workers to return after maternity/parental leave or other career breaks (e.g. caring for family members).

The University plans to introduce measures in its SP UHK to support the return of employees from maternity or parental leave or in the event of long-term care for a loved one and other steps to reconcile personal and professional life. This includes access to flexible working conditions and a personalised approach to returning to the workplace. The measures are implemented gradually by the faculties according to the diversity of each faculty.

Under the Collective Bargaining Agreement, employees caring for a child under the age of 15 or for a loved one may take up to 10 days of unpaid leave during the summer holidays and may request one day of unpaid leave every month outside of this period.

The UHK has also adopted measures to enable the use of flexible working hours and home office working. For more information, see chapter 4.7.

The possibility of negotiating shorter working hours can also be used to reconcile the work and family. The adjustment of working conditions of employees after returning from maternity or parental leave is part of the indirect support for career development of academic staff and is enshrined in the Career System.

Some academic staff can adapt their teaching schedule to suit their own needs (e.g., selecting a specific day or part of a day for teaching), or they can use online or distance teaching.

Within the framework of cooperation with the Faculty of Pharmacy of Charles University, the UHK offers the services of the Fafík Children's Group. For older children, it is possible to use After-School Activities for Children of Employees that are provided as part of employee benefits.

We consider important that the UHK is a place where professional development can be combined with personal commitments, and where conditions are created for a return to a scientific career that meet the individual needs of our staff, and we are, therefore, making efforts to obtain further support for our employees by using the so-called "return to work" projects.

- Other relevant information at HEI discretion.

In autumn 2024, a large-scale questionnaire survey was conducted for all UHK employees and doctoral students. A total of 444 respondents took part, which represents a return rate of over 42%. The main objective was to determine the level of satisfaction of this group. The survey also focused on career growth opportunities and work-life balance. The responses are currently being processed

by the Department of Sociology at the PhF, and the results of the survey will be available in April 2025. On the basis of these results, a discussion will be initiated, leading to proposals and the adoption of specific measures to improve working conditions.

4.7 Gender equality measures

The HEI will briefly describe the measures relating to the application of gender equality in the areas required for assessment criteria 4.5, 4.6, with an emphasis on:

- Gender equality in recruitment and career development.
- Legislation and documents regulating gender equality (e.g. Gender Equality Plan, Action Plans, strategic documents for equality, including links to overarching strategies, etc.).
- The filling of leadership positions (including gender balance in leadership positions, see Table 4.7.1).
- Nominations to professional bodies.
- Evaluation and remuneration.
- Measures to reconcile the work and family life of researchers (flexible working hours, flexible forms of work, maternity/parental leave management, facilitating child/dependent care, age management in relation to gender).
- Measures to eliminate negative workplace behaviour such as mobbing and sexual harassment.

The HEI shall provide evidence of the examples from practice (e.g. use of flexible working hours, dealing with cases of mobbing or sexual harassment, compliance with the principles of gender equality in HEI professional bodies, etc.).

Maximum 300 words per point.

Self-assessment:

- Gender equality in recruitment and career development.

In 2020, the UHK signed up to the principles enshrined in the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers, and since November 2021, the UHK has been a holder of the European HR Award, within which it implements the principles of open and transparent selection procedures for new employees. In 2023, the UHK OTM-R (Open, Transparent and Merit-based Recruitment) policy was published.

All job vacancies are advertised in gender-sensitive language and in accordance with the OTM-R policy of open, transparent and fair recruitment and selection procedures.

The UHK is committed to implementing measures to promote gender equality in recruitment and career development.

Gender-sensitive communication is an essential element, including a template for advertising job offers and training for selection committees on unconscious biases in candidate evaluation. The UHK also monitors systematically the gender composition of selection committees and decision-making bodies.

In the area of career development, the University is introducing training programmes for potential senior employees, with a focus on supporting underrepresented groups, and is developing mentoring programmes for early career researchers.

Gender pay gap: Ensuring equality in pay is also a key objective. This is why the UHK has got involved in testing with the Logib analytical tool which aims to analyse gender pay equality. Equal remuneration is an important topic for the UHK and, therefore, the cooperation established within the framework of the project of the Ministry of Labour and Social Affairs of the Czech Republic (MPSV) 22% Towards Equality continues. In September 2022, the UHK received a certificate of successful completion of the equal pay analysis (see the press release).

Gender statistics are included in the annual reports. Furthermore, all measures are monitored regularly and evaluated through strategic documents and annual reports on gender equality. The UHK thus contributes actively to creating a fair and inclusive academic environment.

- Legislation and documents regulating gender equality (e.g. Gender Equality Plan, Action Plans, strategic documents for equality, including links to overarching strategies, etc.).

The UHK also has a GEP which is currently valid until the end of 2025. The main areas of action of the GEP UHK are:

1. Work-life balance and organisational culture;
2. Gender balance in the management and decision-making;
3. Gender equality in recruitment and promotion;
4. Integration of gender into the content of research and education;
5. Measures against gender-based violence, including sexual harassment.

The implementation of the GEP is evaluated annually.

In connection with the HR Award, the UHK has an updated Action Plan (2024-2026) with specific measures on ethical and professional aspects, recruitment and selection of employees, etc.

The UHK has published the OTM-R Policy, supports the development of the international dimension of the institution and increases the attractiveness of research positions.

Legislative and strategic documents regulating gender equality at the UHK include:

1. **GEP.** A document focusing on equal opportunities and setting a fair institutional environment. It includes measures in the areas of reconciliation of work and family life, gender balance in the management, equality in recruitment and promotion, integration of the gender in research and education, and prevention of gender-based violence.
2. **Analysis of Gender Equality at the UHK.** This document provides a detailed overview of the current situation of gender equality at the UHK and includes statistical data, analyses and proposals for measures for its improvement. It forms the basis for the implementation of the GEP.
3. **SP UHK.** It includes measures aimed at openness and inclusion, including gender equality, as part of the vision of the UHK to become an open and tolerant institution.
4. **UHK Code of Ethics.** It includes the principles of equality, diversity and responsible behaviour that also apply to gender equality and prevention of discrimination.

- The filling of leadership positions (including gender balance in leadership positions, see Table 4.7.1).

Table 4.7.1 summarising gender balance in the management shows that in some areas (e.g., Deans, Board of Trustees) there have been positive changes towards a greater gender balance, while in others (e.g., Research Board), there has been a decline.

- Nominations to professional bodies.

Nominations to professional bodies are governed by the general rules supporting gender and the OTM-R Policy.

- Evaluation and remuneration.

The annual evaluation of academic staff is regulated by the Career System. The amount of the personal incentive bonus for the next period (12 months) is based on the results of the evaluation.

In academic and research staff, evaluation is the responsibility of heads of departments/institutes, heads of research centres and deans of faculties. The criteria for the evaluation of academic and research staff are set by the Dean through a Dean's managing act which is published on the faculty's website. For the evaluation of academic staff, the Personal and Career Development Plan is used. It is discussed with the staff once a year by their superior. On its basis, the superior both evaluates the previous period and plans the activities of the following period with the staff member. The evaluation is comprehensive and includes teaching activities, creative activities and activities related to the fulfilment of the third role of the University. The evaluation of staff involvement in R&D&I is also part of the evaluation of project proposals, their success, and the results of publication activities, or, among other things, it is used in the preparation of the documents for the Quality Bonus (QB) programme, for which the most prestigious R&D outputs for the previous year are evaluated annually. At the same time, the Rector evaluates annually the most successful researchers for the previous period, and similar evaluations are also carried out at the faculties according to faculty rules.

Equal remuneration of men and women at the UHK was commented above.

- Measures to reconcile the work and family life of researchers (flexible working hours, flexible forms of work, maternity/parental leave management, facilitating child/dependent care, age management in relation to gender).

The UHK offers flexible forms of work that help employees reconcile their family and work life. The working hours of academics at the UHK are scheduled in accordance with the law, especially Section 70 of the Act. For other employees, working hours are scheduled primarily through flexible working hours in accordance with Rector's Decree No. 8/2024 Working Hours Scheduling, Flexible Working Hours and Telework of the UHK Employees.

Flexible forms of work include, in particular, flexible working hours and the possibility of working remotely (home office). Flexible working combines periods of core and optional working time, allowing employees to adjust flexibly the start and end of their working hours to best suit their needs. Working from home is possible upon a written agreement and with the consent of the superior. This arrangement allows employees to do their work from a location of their choice. However, it is only possible to use these flexible forms of work provided that the nature of the job and the type of work performed allow it.

A handbook on reconciling work and family life is currently being finalised to provide staff with an overview of the opportunities offered by the UHK. The handbook contains practical information on maternity, parental and paternity leave, the relevant benefits, administrative procedures and the legislative context. It aims to help employees better navigate the procedures and processes associated with various life situations that require a balance between family and work duties.

See chapter 4.6 for more details.

- Measures to eliminate negative workplace behaviour such as mobbing and sexual harassment.

The UHK has adopted a number of measures to eliminate negative workplace behaviour such as mobbing and sexual harassment. These measures are part of the GEP, the UHK Code of Ethics and the UHK Gender Equality Analysis that define the strategy for prevention, support for victims and mechanisms for dealing with these problems. The procedure for dealing with employee complaints and incentives is regulated in the Collective Bargaining Agreement. Complaints related to inappropriate behaviour or breaches of ethical principles at the UHK are also dealt with by the Ombudsperson whose position has been anchored by Rector's Decree No. 14/2024 Ombudsperson of the University of Hradec Králové.

The development of rules and mechanisms for dealing with cases of sexual harassment and bullying is one of the key measures. The University has established clear procedures for filing and resolving complaints, including anonymous channels for reporting inappropriate conduct. Students and staff can contact a specially designated contact person who provides methodological and psychological support. Training and awareness-raising sessions further contribute to the prevention of sexual harassment, helping staff and students to recognise and respond effectively to inappropriate behaviour.

Although according to the preliminary results of the survey, the UHK employees perceive the environment as safe, the UHK is strengthening measures aimed at a safe working environment and conflict prevention in the area of fighting against mobbing and other forms of bullying. The University has been implementing internal protection mechanisms for people who feel they have been bullied and offers counselling services aimed at psychological and legal support. The emphasis on collegial behaviour and mutual respect as set out in the UHK Code of Ethics is also an important part of prevention.

To ensure the sustainability of these measures, the University monitors regularly and evaluates the policies in place. In this way, the UHK builds systematically a safe and inclusive environment in which negative behavioural phenomena are eliminated, equal opportunities are promoted and protection against any form of discrimination or harassment is ensured.

4.7.1 Gender balance in management positions

Senior staff	2020		2024	
	Men	Women	Men	Women
Rector	1	0	1	0
Vice-Chancellor	3	3	4	3
Dean [1]	4	0	4	3
Academic Senate	15	11	18	13
Scientific/Artistic/Academic Council	30	11	46	9
Quaestor	1	0	1	0
Board of Directors	11	1	14	3

Note: If one person holds more than one of these positions within the HEI, he/she will be counted in each.

[1] or other head of a relevant work unit of a higher education institution under Section 22(1) of the Higher Education Act performing R&D&I activities, regardless of the designation.

4.8 Mobility of academic and research staff (including sectoral and inter-sectoral mobility)

The HEI shall describe in a concise and structured manner its strategies and objectives for the mobility of academic and research staff (including PhD students), with particular emphasis on mobility related to the development of excellent science and interdisciplinary (intersectoral) mobility. The HEI shall identify potential barriers to mobility, including gender-based barriers. The HEI shall provide information on long-term stays abroad by its own academic staff or, conversely, by foreign staff at the HEI being evaluated.[19]

The achievement of the set objectives will be demonstrated by the HEI by describing specific examples of mobility or by brief statistics on mobility during the period of 2020–2024.

Maximum 500 words plus 200 words for each example given (max. five examples with a specific description of the relevance of mobility to the stated objectives).

Self-assessment:

The aim of mobility at the UHK is to support career growth and creative activity of academic and research staff including PhD students, creation of international teams, international projects, and involvement in international consortia, networks and professional associations.

The UHK's strategy consists of internal anchoring of support and prioritization, obtaining financial support, sending employees and students on mobility, effective use of mobility results in further professional development of employees/students, their teams and the faculty, development of international cooperation of individuals, professional teams and institutions.

Priorities and tools are anchored in the strategic documents of the University, such as the SP UHK, the Internationalisation Strategy, Career System and decrees and decisions (Vice-Rector's Instruction No. 04/2023 Support for Mobility of Staff and Doctoral Students of the University of Hradec Králové, Rector's Decree No. 14/2022 Internationalization of the Hradec Králové University Environment, or Vice-Rector's Instruction No. 06/2022 Supporting Erasmus+ Priorities at the University of Hradec Králové).

The UHK obtains funding for mobility mainly from the Erasmus+ (KA 131, KA 171), CEEPUS, Strategic Management Support, Fulbright scholarships, DAAD scholarships, Aktion, etc. The funding for mobility from the Erasmus+ project has significantly increased. The fact that the UHK received the most financial resources within the Czech Republic for the International Credit Mobility in 2023 should be highlighted. This was more than a quarter (28%) of the budget for the whole Czech Republic. The UHK also has a portfolio of more than 350 partnership agreements with universities in Europe, Asia, Africa, Latin America and elsewhere.

The UHK is involved in the following networks:

1. European University Association;
2. Visegrad University Association;
3. European University Information Systems;
4. International Centre for Archival Research and, within its framework, in the Time Machine Europe;
5. Comenius Association – Association of European Teaching Institutions.

In 2021-2024, the UHK was involved in the preparation of the European University Alliance project. Although it was not financially supported, cooperation was set up and continues with some partners.

[19] Long-term mobility means an uninterrupted period of more than three months.

Approximately a quarter of UHK employees go on mobility every year. Mobility trips longer than 1 month make up a smaller part of these trips (about 1% of employees). There are the following main barriers to longer-term mobility:

1. Family reasons;
2. Difficult substitutability at the home institution;
3. Limited financial resources to support long-term mobility.

For all doctoral studies, there is a requirement for an internship of at least 1 month abroad. Every year, 30-40 PhD students thus go on mobility.

International cooperation, the formation of professional teams and scientific research contacts are also supported through visiting experts at the UHK. In 2023 and 2024, 71 and 66 experts, respectively, arrived to the UHK.

The provision for excellent science is based primarily on short-term stays, in which contacts are always established with the management of the institution and the relevant research team. Long-term stays help to learn new methods or techniques that require more time to master. Thanks to mobility, the UHK staff gained contacts with top international scientists (e.g., Ali Selamat – Universiti Teknologi Malaysia, Jon R. Star – Harvard University).

Examples of long-term mobility:

1. From 2019 to 2021, Mgr. Zdenka Sokolíčková, Ph.D. (FEdu) implemented the project *Overheating in the High Arctic – a Qualitative Anthropological Analysis* which was inspired by her previous collaboration with a prominent Norwegian scientist Thomas E. Eriksen from the University of Oslo who was also her mentor. The project was carried out in Longyearbyen, Spitsbergen. The research investigated, in the form of interviews, how people living in environmentally vulnerable environments perceive the processes of 'overheating', how they re-/de-/construct their local identity and how they understand the changing world. The project aimed to collect comprehensive cultural anthropological data on the study community and to analyse and interpret it. During two years in Svalbard, the researcher collected unique data that allowed for a closer understanding of the global processes at play in the locality. The work allowed her to specialize more closely in the areas of Arctic anthropology, climate and environmental change, migration and tourism. The researcher has taken full advantage of the potential for academic networking, as evidenced by numerous publication opportunities, participation in conferences, planned or ongoing collaborations, and membership in professional organizations. Sokolíčková, Z. (2023). The Paradox of Svalbard: Climate Change and Globalisation in the Arctic. London: Pluto Press.
2. From September 2021 to January 2022, Prof. Dina Frutos-Bencze from Saint Anselm College, USA, was a Fulbright Scholar at the FIM. She worked at the Department of Management, where she collaborated in activities of research teams and taught two courses: Introduction to Social Innovation and Managerial Methods. Her work contributed to the internationalization of not only the courses she taught in which she introduced the teaching methods used in the USA, such as Design Thinking which is relatively short in its social nature, or introduced the X-Culture platform which is partly linked to the courses International Management and Human Resource Management. Within this platform, students work in global virtual teams of approximately 4 to 5 members. These teams then interact virtually with real companies in the world and try to find ways to expand to other countries. Students must then conduct analyses, design a marketing plan and find ways to establish themselves in a market full of competition. Within her research activities, joint academic publications have been drawn, e.g., Frutos-Bencze, D., Bachmann, P., Gigliotti, R., & Ježek, B. (2024). Posting to Impress? Organizational Impression Management Tactics

Multinational Firms Employ to Showcase Innovations supporting SDGs. Journal of Cleaner Production, 144055. https://doi.org/10.1016/j.jclepro.2024.144055.

3. Thanks to the Fulbright-Masaryk scholarship, Mgr. Lukáš Vízek, Ph.D. (FSci, Department of Mathematics) undertook research mobility in 2019-2020 at the Graduate School of Education which is part of Harvard University, USA. There he worked on flexibility in school geometry in collaboration with Professor Jon R. Star. He aimed to innovate his teaching for students at the UHK, future teachers of mathematics. By working abroad he started his professional work in the field of contemporary mathematics education. He presented his partial results focused on geometric constructions at the Czech Centre in New York during his internship and then at the UHK and Charles University in Prague. The mobility gave rise to an ongoing international scientific collaboration that has resulted in publications in the International Journal of Mathematical Education in Science and Technology (2023, Q3 in WoS) and Educational Studies in Mathematics (2024, D1 in WoS).
   - Vízek, L., Samková, L., & Star, J. R. (2023). Investigating how Lower Secondary School Students Reason about Quadrilaterals Emerging in Dynamic Constructions. International Journal of Mathematical Education in Science and Technology. https://doi.org/10.1080/0020739X.2023.2255184
   - Vízek, L., Samková, L., & Star, J. R. (2024). Assessing the Quality of Conceptual Knowledge through Dynamic Constructions. Educational Studies in Mathematics, 177(2), 167-191. https://doi.org/10.1007/s10649-024-10349-x
4. From September to December 2020, Dr. Joan Pinar Gil spent several months in Ragusa, Italy, in conjunction with an archaeological expedition focused on researching local early medieval catacombs. This mobility included the involvement of several students PhF, whose stays were supported both by the specific research platform of the PhF and the Erasmus+ programme. The mobility/expedition abroad resulted in a total of 11 scientific texts with PhF affiliation, in which Dr. Gil was an author or co-author. We are only listing the 3 that we consider to be the most significant:
   - PINAR GIL, Joan, M. PLESKA. Two Unusual Funerary Deposits from the Migration Period at Hypogeum D, Modica-Scorrione W (prov. Ragusa, Sicily/I). Archäologisches Korrespondenzblatt. 2022, 52 (4), 545-562. ISSN 0342-734X.
   - PINAR GIL, Joan, A. SAMMITO, S. SCERRA, M. BEGHELLI, A. CRISCIONE, S. FIORILLA, Z. HUKEL'OVÁ, M. PLESKA, D. SCHMIDTOVÁ. Modica RG. Notizie preliminari sugli scavi della catacomba di C.da Scorrione. In: Hyblaea: Studi di archeologia e topografia dell'altopiano ibleo, Oxford: Archaeopress, 2022. ISBN 978-1-80327-314-3.
   - PINAR GIL, Joan, M. PLESKA, A. SAMMITO, S. SCERRA. Migration Period Finds at Hypogeum D, Modica-Scorrione W (prov. Ragusa, Sicily). In: Presenze barbariche nel V secolo in Italia e regioni contermini. Mantova: SAP, 2022. ISBN 978-88-99547-63-9.
5. Dr. Toshitaka Hayashi has been working at the UHK since 2022 within CAT where he has been conducting interdisciplinary research linking machine learning and biosignal analysis, especially of vital signs, in the research team of Ing. Richard Cimler, Ph.D. His work is closely related to international collaboration, especially with Prof. Hamido Fujita from Japan, which contributes to the high quality of the outputs. Thanks to this collaboration, the IEA/AIE conference was organized at the UHK in 2024 where Dr. Hayashi held the role of Organizing Chair. During his postdoctoral fellowship, Dr. Hayashi published seven scientific articles, including one in D1, five in Q1 and one in Q3 according to AIS evaluation. He participated actively in the I-Somet 2022, Somet 2023 and Somet 2024 conferences. He currently has two papers (T5, D1) under review and three papers (Q1) in preparation. The publications are simultaneously supervised by Prof. Fujita (h-index 78), which ensures a high standard of outputs.

RESEARCH INFRASTRUCTURE

4.9 Research infrastructure

The HEI will describe the system for acquiring/optimizing expensive instruments and equipment, as well as refurbishing outdated expensive instruments. The HEI will also briefly present the internal organisation of the research infrastructure (including technology, expensive instruments, and instrumentation)[20]. The HEI will describe the system of sharing (including external research entities) of instruments and instrumentation, including expensive instruments and instrumentation units, referred to as 'core facilities' (if such a system exists). The HEI will demonstrate the effectiveness of the systems with examples (e.g., specific instruments acquired/optimised and their relevance to the achievement of research objectives, examples of sharing of expensive instruments and instrumentation, statistics on sharing of expensive instruments and instrumentation, etc.). The HEI will briefly comment on the data in Table 4.9.1.

The HEI shall also indicate whether it hosts large research infrastructure projects. The name and a brief description will be provided.

Maximum 500 words plus 200 words for each example given (max. five examples).

Self-assessment:

The UHK has a defined system for the acquisition, optimization and renewal of expensive equipment and instruments which is guided by strategic documents and the University's development plan. The aim of this strategy is to provide a modern infrastructure for research and education, with a key focus on the efficient use of financial resources, sharing of equipment and digitisation of processes.

Acquisition, optimisation and renewal of expensive instruments

The UHK plans to modernize the instrumentation within the framework of the SP UHK with emphasis on the needs of researchers and students. Investments are mainly directed to laboratory technologies, top research instruments and digitalisation of administrative processes. The University supports the purchase of high value-added technologies that enable interdisciplinary collaboration and innovative research.

The renewal of instruments is being carried out in accordance with a long-term sustainability plan, with priority being given to the efficient use of existing equipment and its modernisation where this is economically and technologically advantageous. The ergonomics and efficiency of the working environment is another important aspect. It includes both laboratories and offices where modern solutions are implemented with regard to user comfort.

New acquisitions:

- **In 2023**, a modern CETA laboratory was completed and opened. The new laboratories include instruments for advanced archaeological analysis, such as X-ray, CT, magnetometer, devices for optical and 3D microscopy or for geochemical analyses. It is one of the few such conceptually conceived workplaces in the Czech Republic.
- **In 2020,** laboratory equipment at all faculties was upgraded, IT infrastructure was strengthened, and new equipment was purchased for the IT4Neuro(degeneration) project.

Renewal of outdated devices

- **In 2020, a** generational renewal of the server infrastructure and disk storage was implemented (CZK 11 million).

[20] The definition of research infrastructure is set out in the Framework for State Aid for Research, Development and Innovation (2014/C 198/01) and Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in accordance with Articles 107 and 108 of the Treaty.

Sharing instruments and instrumentation

The UHK places great emphasis on the efficient sharing of expensive instrumentation, both within the university and with external research entities. Sharing takes place mainly in the following areas:

- **Inter-faculty use of instruments** where individual units of the University have access to specialised equipment without the need for duplication of purchases. See section 4.2 for more details.
- **Cooperation with external entities**, including commercial companies and research institutes, where the UHK tries to use its equipment for the needs of application research as well.
- **Integration of modern IT systems** for the management and reservation of instrumentation, allowing more efficient planning and optimisation of the use of individual devices.

Thanks to these measures, the UHK is not only minimizing operating costs, but also increasing the availability of top equipment for research teams. The strengthening of international cooperation and the University's involvement in European research infrastructures, which enable the sharing of know-how and the use of top facilities at a global level represents another important step in this area.

The UHK is not a direct host of a large research infrastructure but participates in international projects such as:

- **EU COST Action** (*Indoor Air Pollution Network*);
- **Time Machine Organization** for Digital Humanities Research.

Examples of the system efficiency

- **Development of the shared infrastructure of the Na Soutoku campus** where the key research facilities are concentrated and instrumentation is integrated across faculties.
- **Virtualisation of research IT laboratories** allowing more efficient management and maximum utilisation of instrumentation.
- **Involvement of the University in national and international research consortia**, which brings new funding opportunities and increases the prestige of the UHK as a research institution.

4.9.1 Summary of expenditure/costs on research infrastructure and equipment for the period under review (including related non-investment and personnel costs).

Costs/expenses in thous. CZK/EUR/year	2020	2021	2022	2023	2024	Total value of assets[21]
Costs/expenses related to the acquisition of small fixed assets for R&D&I	5 097/ 201	3 175/ 125	2 162/ 85	4 500/ 178	822/ 32	15,756/ 622
Cost of repairs and maintenance of equipment	238/ 9	274/ 11	183/ 7	106/ 4	189/ 7	990/ 39
Acquisition of tangible (DH) and intangible (DN) assets for R&D&I (investments)						
Of which software	-	-	-	331/ 13	-	331/ 13
Of which other intangible fixed assets	-	-	-	-	-	-
Of which land, buildings and structures	-	-	-	-	-	-
Other intangible fixed assets (machinery, apparatus, equipment, etc.)	-	-	-	10 258/ 405	-	10,258/ 405
Total infrastructure spending in years [22]	-	-	-	10 589/ 418	-	10,589/ 418

[21] Enter the sum of the row.
[22] Enter the sum of the column.

FINANCE S

4.10 Budget and structure of financial resources

The HEI shall provide and comment on an overview of the total R&D&I budget in the period of 2020–2024, broken down by organisational units of the evaluated HEI and by source of funds (Table 4.10.1). The HEI shall also comment on the shares of total costs/outputs covered by public and non-public sources by type of R&D&I for the period under evaluation as shown in Table 4.10.2.

As complementary data, the university will provide an overview of prestigious research projects obtained during the period of 2020–2024 (ERC[23], MSCA[24], HHMI[25], HFSP[26], NSF[27], Horizon Europe[28], NIH[29], Wellcome Trust[30], EDF[31], OP JAK[32], OP TAK[33], NPO[34], GA ČR[35], TA ČR[36] etc.). Include information on the amount of funding received and whether the HEI were principal investigator or co-investigator in Tables 4.10.3, 4.10.4 and 4.10.5.[37]

In addition, the HEI will describe in more detail up to five of the most important projects from the list of prestigious individual projects abroad (ERC, MSCA, HHMI, HFSP, NSF, etc.), providing basic information at the HEI's discretion and regardless of the funder: title, field of expertise, agency, amount of funding, other project participants, and other relevant information as appropriate.

A maximum of 500 words plus 200 for each example of a prestigious international individual project given.

Self-assessment:

In 2020-2024, the R&D&I budget at the UHK was fully covered by the public resources of the Czech Republic, without a significant share of foreign funding or private funds. The funding was divided between the individual faculties and the Rectorate, with the largest share going to the FSci, followed by the FIM and the PhF. An overview of the total R&D&I budget for the period under review, broken down by organisational units of the University and funding sources, is shown in Table 4.10.1.

[23] The European Research Council (ERC) is part of the 'Excellent Science' pillar of Horizon Europe. The ERC funds cutting-edge research by supporting individual Principal Investigators and their research teams.
[24] Marie Skłodowska-Curie Action (MSCA) is part of the "Excellent Science" pillar of Horizon Europe and is also aimed at supporting young researchers, including PhD students.
[25] Howard Hughes Medical Institute - a non-profit organization in the USA significantly supporting international biomedical research.
[26] Human Frontier Science Program - an international programme to support research, particularly in the natural sciences and computer science.
[27] National Science Foundation (USA).
[28] Horizon Europe - the EU's 9th Framework Programme for research and innovation, running from 2021-2027.
[29] National Institutes of Health (NIH) - an agency under the United States Department of Health and Human Services. NHI is a major player in project support for biomedical research.
[30] major UK private foundation supporting mainly biomedical research.
[31] European Defence Fund.
[32] Operational Programme Jan Ámos Komenský - Priority 1 - Research and Development - multiannual programme under the Ministry of Education, Youth and Sports. Within the framework of the OP JAK it is possible to draw financial resources from the European Structural and Investment Funds (ESIF) in the period 2021-2027.
[33] Operational Programme Technologies and Applications for Competitiveness. The European Regional Development Fund (ERDF) is available in the period 2021-2027 to co-finance business projects in the areas of research, development and innovation, digitalisation and digital infrastructure, business development, smart and sustainable energy and the circular economy.
[34] National Recovery Plan - under Pillar 5 - Research, Development and Innovation of the National Recovery Plan, the Recovery and Resilience Facility (RRF) is available for the period 2022-2026.
[35] Grant Agency of the Czech Republic.
[36] Technology Agency of the Czech Republic.
[37] The military and the police HEIs, as parts of the organisational unit of the state, are treated specifically in terms of the possibility to participate in the projects.

The basic and applied research and experimental development were funded exclusively from public sources in each year of the evaluation period. The proportion of total costs and outputs paid for from public and non-public sources by type of R&D&I is shown in Table 4.10.2.

Overview of prestigious research projects

During the period under evaluation, the UHK was awarded prestigious research projects funded by both Czech providers (GA ČR, TA ČR, OP JAK) and international institutions (e.g., MSCA within Horizon Europe, International Visegrad Fund, or European Defence Fund). An overview of these projects, including information on the amount of funding received and the role of the UHK as principal investigator or co-investigator, is presented in Tables 4.10.3, 4.10.4 and 4.10.5.

Notable projects include:

- **Targeting Circadian Clock Dysfunction in Alzheimer's Disease** (MSCA doctoral networks, CZK 3,701 thousand);
- **First Research Action for Medical Countermeasures Performed in the Frame of the RESILIENCE FPA Consortium** (European Defence Fund)

Details of the key projects:

The UHK has participated in several key international projects, especially in the fields of biomedicine, health technologies, and digital innovation. The implementation of projects within the framework of the OP JAK, focused on personalised medicine and digital technologies, was a significant step towards strengthening excellence in research

4.10.1 Total budget of the HEI

Name of the HEI unit	Total budget in thous. CZK/EUR	Percentage of public funding in the Czech Republic	Share of public funding from abroad in %	Percentage of funding from other sources
FEdu	98,123/ 3,871	100	-	-
FIM	195,451/ 7,710	100	-	-
PhF	182,425/ 7,196	100	-	-
FSci	225,502/ 8,896	100	-	-
REK	78,104/3,081	100	-	-
Total	779,606/ 3,0754	100	-	-

4.10.2 Share [%] of total costs/outputs by type of R&D&I paid from public and non-public sources

	2020	2021	2022	2023	2024	Total
Basic research	43.02	38.21	39.68	50.43	55.43	44.14
Applied Research	36.38	36.18	39.29	34.65	32.54	36.12
Experimental development and innovation	20.60	25.61	21.03	14.92	12.03	19.74
Total	100	100	100	100	100	100

Note: For definitions see Definition of Terms in Methodology HEI2025+.

4.10.3 Projects supported by a foreign provider

In the role of beneficiary							
Provider / Investor	Programme/ Grant Scheme	Project name	Support (in thousands CZK/EUR)				
				2021	2022	2023	2024
Aktion Renovabis e.V.	Aktion Renovabis	Research project on the dilemma of the crisis of modernism in Central and Eastern Europe; publications and lectures (07/24-12/25)	-	-	-	-	99/ 4
Total			-	-	-	-	99/ 4
In the role of another participant							
Provider / Investor	Programme/Grant Scheme	Project name	Support (in thousands CZK/EUR)				
			2020	2021	2022	2023	2024
MINISTRY OF FINANCE OF THE CZECH REPUBLIC	Fund for Bilateral Cooperation under the EEA and Norway Grants 2014-2021	Usefulness of emerging technologies in formal foreign language education	-	-	-	205/ 8	-
International Visegrad Fund	Visegrad Fund	Visegrad Fund: CEURES - Central European Urban RESiliency	-	-	-	146/ 6	730/ 29
EU	Interreg Czechia-Poland	Cooperation between the UO and UHK expanding the possibilities of graduates' employment on the cross-border labour market (1910 CZK/75 EUR total for 2017-2021)	1,910/ 75	0	-	-	-
EU	MSCA doctoral networks	Targeting Circadian Clock Dysfunction in Alzheimer's Disease	-	-	0	3,701/ 146	0
EU	European Defence Fund	First research Action for Medical Countermeasures performed in the frame of the RESILIENCE FPA consortium	-	-	-	-	0
Alexander von Humboldt Stiftung (Germany)	Research Group Linkage	Framing a unique landscape. Rural catacombs in south-eastern Sicily between Antiquity and the Middle Ages	-	-	203/ 8	330/ 13	5/ 0,2
Total							

Note: For co-sponsorship projects, please only indicate the amount of funding for the evaluated HEI.

4.10.4 Projects supported by the Czech provider

In the role of beneficiary							
Provider / Investor	Programme/ Grant Scheme	Project name	Support (in thousands CZK/EUR)				
			2020	2021	2022	2023	2024
GA ČR			24,295/ 958	18,723/ 739	19,972/ 788	20,724/ 818	24,309/ 959
TA ČR			15,180/ 599	17,665/ 697	7,561/ 298	1,262/ 50	2,373/ 94
M. of Culture			5,113/ 202	2,771/ 109	2,700/ 107	3,631/ 143	3,519/ 139
M. of Education, Youth and Sport			17,210/ 679	15,515/ 612	10,462/ 413	4,507/ 178	1,485/ 59
M. of Health			3,066/ 121	3,196/ 126	4,575/ 180	1,895/ 75	2,391/ 94
M. of Interior			-	-	3,747/ 148	3,648/ 144	3,670/ 145
M. of Industry and Trade			-	-	490/ 19	-	-
OP JAK	EH – Operational Programme Jan Amos Komenský (2021 - 2027)	Development of the environment for doctoral studies at the UHK	-	-	-	11,961/ 472	15,393/ 607
Total			64,864/ 2,559	57,870/ 2,283	49,507/ 1,953	47,628/ 1,879	53,140/ 2,096
In the role of another participant							
Provider / Investor	Programme/Grant Scheme	Project name	Support (in thousands CZK/EUR)				
			2020	2021	2022	2023	2024
GA ČR			6,384/ 252	5,613/ 221	4,049/ 160	3,893/ 154	1,866/ 74
TA ČR			11,051/ 436	7,764/ 306	5,677/ 224	2,267/ 89	2,284/ 90
M. of Culture			-	-	-	891/ 35	1067/ 42
M. of Health			2,534/ 100	2,082/ 82	663/ 26	663/ 23	2,808/ 111
M. of Industry and Trade			4,162/ 164	8,231/ 325	13,892/ 548	8,589/ 339	2,133/ 84
M. of Agriculture			496/ 20	997/ 39	1087/ 43	1043/ 41	554/ 22
OP JAK	EH – Operational Programme Jan Amos Komenský (2021 - 2027)	Research of Excellence on Digital Technologies and Wellbeing	-	-	-	-	4,500/ 178
OP JAK	EH – Operational Programme Jan Amos Komenský (2021 - 2027)	Multi-sector and Interdisciplinary Cooperation in Research and Development of Communication, Information and Detection Technologies for Control and Signalling Systems (CIDET)	-	-	-	-	2,543/ 100
OP JAK	EH – Operational Programme Jan Amos Komenský (2021 - 2027)	Biomedical Indicators for Personalized Medicine	-	-	-	-	6,200/ 245
Hradec Kralove region	Support for talented scientists of the Hradec Králové Region	Oxime nucleophiles and their modifications for efficient reactivation of cholinesterases	-	-	-	-	252/ 10
Total			24,627/ 971	24,687/ 974	25,368/ 1001	17,346/ 684	24,207/ 955

Note: Please summary list GA CR, TA CR and other departmental projects. For co-sponsor projects, please indicate the financial volumes for the HEI. Projects financed from EU structural funds and focused exclusively on R&D&I (e.g. OP JAK, OP

TAK, NPO) and projects financed from regional sources focused exclusively on R&D&I list individually. For co-sponsoring projects, please indicate the financial volumes for the evaluated HEI only.

4.10.5 Projects supported from non-public sources

In the role of beneficiary						
Provider / Investor	Project name	Support (in thousands CZK/EUR)				
		2020	2021	2022	2023	2024
MLSA	An analysis of the impact of the pandemic experience on social workers in public sector. Research report.	-	99/ 4	-	-	-
iSophi education s.r.o.	Prototype of a pedagogical diagnostic tool for school maturity for primary schools	-	500/ 20	-	-	-
Deutsch-Tschechischer Zukunftsfonds	Support for the international conference "Deutsch im interdisziplinären Gefüge" in Hradec Králové	-	-	-	25/ 1	-
Ghent University (Belgium)	cloud system	-	70/ 3	117/ 5	145/ 6	0
Total		-	669/ 26	117/ 5	170/ 7	-
In the role of another participant						
Provider / Investor	Project name	Support (in thousands CZK/EUR)				
		2020	2021	2022	2023	2024
Total						

Note: Indicate, for example, sponsorship donations, resources generated from other own economic activities, foreign subsidy programmes of private entities.

4.11 Rules for the use of institutional support for the LCDRO

The HEI will describe the strategy and rules for the use of institutional support for the LCDRO in the management of institutionally supported research activities (e.g., prioritisation of research topics by the HEI according to individual needs, internal grant agencies, incentive tools, support for excellent science) and the method for distribution of institutional support to individual departments/research teams for the period of 2020–2024. The impact on the management of institutionally supported research activities will be described by the HEI using specific examples (e.g. distribution of institutional support in the period of 2020–2024 depending on the evaluation results, examples of supported excellent science projects, etc.).

Maximum 500 words plus 200 words for each example given (max. five examples).

Self-assessment:

The UHK divides the institutional support of the LCDRO into stabilization and motivational components with an emphasis on research excellence, internationalisation and interdisciplinarity.

1. Prioritisation of research topics

- The distribution of funding reflects the results of bibliometric analysis of research articles, monographs and chapters in monographs.
- The evaluation is based on the current scientific outputs in the last 5 years, which allows flexible response to the development of the quality of research at the UHK.
- Field specifics are respected according to the FORD 1-6 classification (broad spectrum of disciplines).

2. Internal grant agency and support for excellent science

- The UHK has introduced the LCDRO incentive component which supports excellent research outputs in Q1-Q2 journals and publications with top publishers.
- In particular, international collaborations are encouraged, which is reflected in the methodology for allocation of authors' shares.
- The evaluation is not only based on the impact factor (IF), but also on the Article Influence Score (AIS) and SCImago Journal Rank (SJR).

3. Motivational tools

The UHK has introduced specific indicators to support scientific excellence:

- Publications in Q1-Q2 JCR WoS and with prestigious publishers;
- Outputs from international projects, especially Horizon Europe, MSCA, GA ČR, CoFund, TA ČR;
- Number of international PhD students and their mobility;
- Support for mentoring programmes and postdoctoral positions.

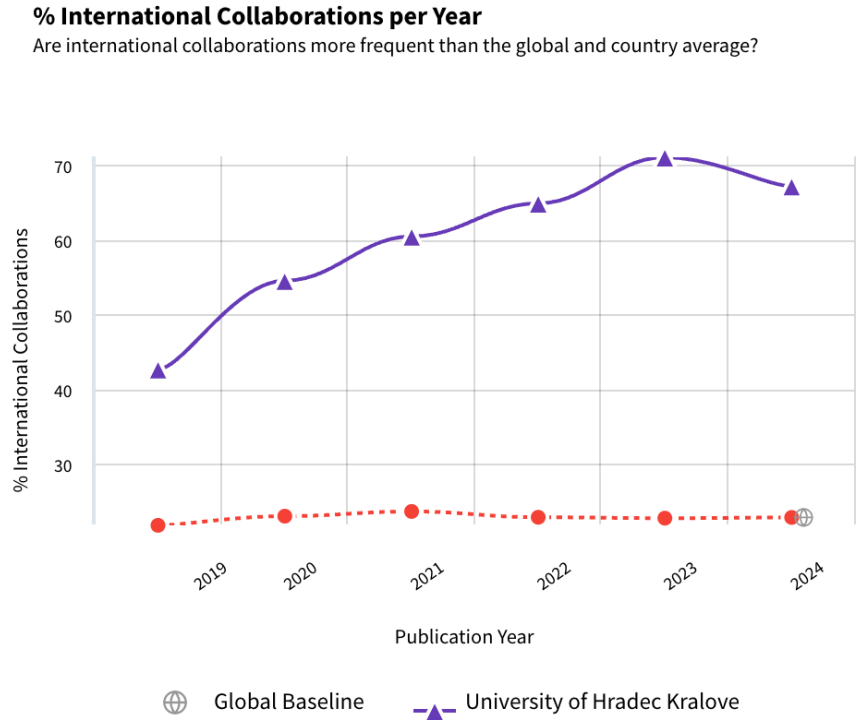
4. Allocation of support to individual sites/research teams

- Stabilisation component (83.23% of support in 2020, 55% in 2024) → ensuring continuity of basic research;
- Incentive component (16.77% of support in 2020, 45% in 2024) → linked to excellence and quality of results;
- Support for young scientists with an emphasis on international scientific networks;
- The possibility of waiving tuition fees for high-quality PhD applicants, with the faculties being compensated for the tuition fees from the LCDRO.

Impact of the strategy on the management of institutionally supported research activities

Specific examples based on the above rules can be given:

- Redirecting financial support towards excellence, e.g., support for articles published in Q1-Q2 journals, increase in international collaborations. See chapter 5.4 for more details.
- Introducing a transparent evaluation methodology. Funding is distributed according to authors' shares, weight of outputs and international involvement.
- Supporting talented PhD students, e.g., creating financial incentives for involvement in international projects.
- Examples of supported excellent science projects. Outputs supported by this strategy include international grants obtained, interdisciplinary research teams and highly rated monographs.



Indicators: % International Collaborations.**Organization Name**: University of Hradec Kralove. **Collaborates With ID Type Group**: name. **Collaborates With ID Type**:fullName. **Schema**:Web of Science. **Dataset**: InCites Dataset
InCites dataset updated Feb 28, 2025. Includes Web of Science content indexed through Jan 31, 2025.Export Date: Mar 10, 2025.

NATIONAL AND INTERNATIONAL COOPERATION

4.12 Important collaborations in R&D&I

The HEI will describe specific cases of R&D&I collaboration at the national level (maximum five examples) and the international level (maximum five examples), including examples of concrete results and impacts in the field of R&D&I beneficial for the HEI during the period of 2020–2024.

Maximum 300 words per example.

Self-assessment:

International cooperation

1. **The international project based on the COST Action Consolidating Research in Tsunami Hazard through the Application of Systems Approach** was implemented by the FIM in 2020-2023. Twenty-six European countries represented by various research, governmental and educational institutions were involved in the project. These countries were joined by several research organisations operating outside Europe. As part of the research, the FIM team was a member of two working groups. The most intensive collaboration was established with the German and Norwegian COST Action management. The team communicated mainly with Slovak, Greek and English partners. At the end of the project, representatives of the Indian government institution in charge of natural disasters also joined the team. Research on the comprehensive phenomenon of tsunami is, therefore, dealt with not only by natural sciences such as geology, seismology or environmental science, but also by technical sciences such as civil engineering, computer science, energy, transport engineering, or social sciences such as psychology or public administration. The project team has developed several comprehensive models. They include, for example, a model based on system dynamics which links precisely different and quite distinct disciplines such as tsunami wave propagation with respect to the damage caused, the loss of infrastructure or the environmental damage on the coast. The project resulted also in an ontological model which contributes significantly to the unification of research by analysing the terminology used by different research teams in different fields and offering a model of the relationships between different concepts and terms. An agent-based model was also developed showing the propagation of the wave on land and the possibilities of evacuating people to safe areas. The project outputs finally resulted in a web application that offers decision support for users dealing with tsunami issues from a practical perspective, e.g., within communities, cities or municipalities.

2. Since 2011, **the FSci has been cooperating with the Korea Research Institute of Chemical Technology (KRICT)** at research and student exchanges. In 2019-2021, the cooperation was supported by a joint V4-Korea project (8F17004) entitled Novel Butyrylcholinesterase Reactivators for Pseudo-Catalytic Scavenging of Organophoshates in which Jagellonian University Krakow and Semmelweis University Budapest also participated as part of the consortium. Consortium meetings were held at all partners involved in the project, and a 'kick-off meeting' was held at the FSci as the initiator of the project.
   In addition, the project entitled International Credit Mobility Supporting Arrivals and Trips of Academics and Students from both Institutions took place. Exchanges of PhD students (1 PhD student of the FSci at the KRICT, 2 PhD students of the KRICT at the FSci) and academics (1 UHK academic at the KRICT, 2 KRICT academics at the UHK) took place. However, the exchanges were interrupted by the Covid-19 pandemic.
   Mutual cooperation was supported by a number of publications (UHK and KRICT authors are underlined), e.g.:
   - Tekes, K.; Karvaly, G.; Nurulain, S.M.; Kuca, K.; Musilek, K.; Adeghate, E.; Jung, Y.S.; Kalasz, H.* Pharmacokinetics of K117 and K127, two novel antidote candidates to treat

tabun poisoning. Chemico-Biological Interactions. 2019, vol. 310, no. 1, p. 108737. https://doi.org/10.1016/j.cbi.2019.108737 (WoS Q2).

- Lee, H.M.; Andrys, R.; Jonczyk, J.; Kim, K.; Vishakantegowda, A.G.; Malinak, D.; Skarka, A.; Schmidt, M.; Vaskova, M.; Latka, K.; Bajda, M.; Jung, Y.S.*; Malawska, B.*; Musilek, K.* Pyridinium-2-carbaldoximes with quinolinium carboxamide moiety are simultaneous reactivators of acetylcholinesterase and butyrylcholinesterase inhibited by nerve agent surrogates. Journal of Enzyme Inhibition and Medicinal Chemistry. 2021, vol. 36, no. 1, p. 437-449. https://doi.org/10.1080/14756366.2020.1869954%20 (WoS Q1)

Research collaboration has developed at both institutions in terms of both senior and junior researchers. Cooperation continues to take place at both levels.

3. **Wealth-Stamify**

   A unique system was developed at the UHK to collect data from cloud APIs, evaluate it in real time and respond using pre-set rules. This system also includes a questionnaire to collect information from study participants. The questionnaires are triggered on the basis of pre-set rules, e.g., the evaluation of actual data from wearables. Thanks to this system, the UHK is part of a number of projects, e.g., the international project WEALTH https://wealth-stamify.com/ (University of Limerick, Ireland, University College Cork, Ireland, Université Paris 13, France, Leibniz Institut für Präventionsforschung und Epidemiologie, Germany, Ghent University, Belgium) where the HealthReact solution developed at the UHK was used to collect data and evaluate it in several European Union (EU) countries. The system allows data collection from different sources; in this case, these were the FitBit fitness bracelets. The system reacts to the data collected from the wearable bracelets on the basis of pre-set rules. In this research, questionnaire responses were used in reaction to the user's current activities. The questionnaires asked just-in-time questions based on the evaluation of the measured data relating healthy exercise and eating habits. The WEALTH project is part of a wider initiative of the EU joint programme Healthy Diet Healthy Life STAMIFY to support transnational research projects that develop improved methods and tools for assessing and monitoring diet and physical activity to provide better dietary and physical activity recommendations and guidelines. The project monitored 640 people in several EU countries. The research is now being finalised and published in WoS >=Q1 journals together with the international partners of the project. Based on the excellent results and satisfaction with the HealthReact system, a follow-up Horizon project (Marie Curie) has been submitted with these international partners and the system is to become the main pillar of the project for data collection.

4. In 2020-2024, the prestigious five-year GA ČR **EXPRO** project entitled Naturalized Inferentialism: Norms, Meanings and Reasons in the world, reg. no. GX20-05180X, was finalised at the PhF, Department of Philosophy and Social Sciences, under the supervision of prof. RNDr. Jaroslav Peregrin, CSc. Although this is institutionally a domestic project of the GA ČR, its scope and topic (i.e., the global concept of naturalized inferentialism) enabled the establishment of longer-term research links with leading experts across various international environments, even outside Europe (e.g., the USA), coupled with the publication of significant outputs in the first deciles or quartiles of impacted journals, as well as the presentation of the topic at prestigious conferences.

5. Examples of successful international cooperation in the field of science and research at the PhF, Department of Archaeology, include the project led by Joan Pinar Gil, PhD, entitled **Framing a Unique Landscape**. **Rural Catacombs in South-eastern Sicily between Antiquity and the Middle Ages**. This project is funded through the **Alexander von Humboldt Foundation,** with Johannes Gutenberg University Mainz as the foreign partner for the project implementation.

National cooperation

1. Project implemented under the **Operational Programme Entrepreneurship and Innovation for Competitiveness**, funded by the Ministry of Industry and Trade from the European Regional Development Fund, entitled **Smart Parking & Charging**, reg. No. CZ.01.1.02/0.0/0.0/20_321/0024477, is an example of the FIM cooperation at the national level. The project was implemented from January 2021 to May 2023. Its basic premise was that there was currently no software solution on the world market that combined smartparking and electromobility, while allowing integration into the heterogeneous environment of cities of various sizes with different sub-solutions in this area and providing the possibility of comprehensive data analysis related to the movement of cars in cities and the use of car parks and charging stations. The project created a unique software product, ChargePark (https://chargepark.eu/). The application offers drivers to find a suitable parking space with the possibility to pay for parking directly in the application. In addition, it allows EV drivers to search for a free charging station, authorize and pay at the selected charging point. The mobile application has the following key features: (a) Easy navigation to a parking space or charging station; (b) Automatic payment for parking or charging; (c) Support for integration of various parking systems and chargers; (d) Very low barrier to entry for parking operators (easy monetization of parking spaces and chargers); (e) Analytical functionalities to extract maximum information from the huge amount of data from the navigation, parking and charging parts of the system (support of decision-making processes of parking operators and urban agglomerations). The product underwent pilot testing within the Hradec-Pardubice agglomeration on pilot car parks. The cities of Hradec Králové and Pardubice expressed their interest in the target product, and so the FIM cooperated with the University of Pardubice on the project. Vigour Alfa, spol. s.r.o. was a partner from practice.
2. The regular participation in the projects of **the TA ČR in the ETA programme** can be considered to be the key cooperation of the PhF in the field of research with regard to national partners. Due to the overlap into the public application sphere, the cooperation is mainly provided by the Department of Sociology and the Institute of Social Work.
   In this context, we can mention, for example, the following projects:
   - **Changes in the Provision of Basic Services in Rural Municipalities and Impacts on their Inhabitants**, reg. No. TL02000161, which was implemented at the PhF by a research team consisting of PhDr. Miroslav Joukl, Ph.D., RNDr. Mgr. Lucie Vítková, Ph.D. and Mgr. Petra Tlčimuková, Ph.D., in cooperation with the Institute of Sociology of the AV ČR and the Association of Local Self-Governing Bodies of the Czech Republic and the Ministry for Regional Development of the Czech Republic as application guarantors. The main outputs of this project include a series of research reports, complemented by conferences and publications, identifying the deficits in the provision of services in rural municipalities, reflecting on the importance of these facilities for the local population and identifying the social groups most affected by these deficits.
   - Examples of projects from the same competition (i.e., TA ČR ETA) include the project **Use of Artificial Intelligence in the Provision of Professional Social Counselling**, reg. No. TL03000671, implemented in cooperation with the Civic Counselling Centre, o.p.s. The implementation of a specific communication platform based on a chatbot/voicebot (with the final name Chatbot Poradím (I Will Advise)) was the key output of this cooperation. Its main aim is to provide effective professional social counselling across the Czech Republic.

3. The PhF was also involved in the **Ministry of Culture's NAKI** programme. The following projects can be highlighted:
    - NAKI II project **Dowry Towns of Bohemian Queens (Living Part of Historical Consciousness and its Support by Tools of Historical Geography, Virtual Reality and Cyberspace)**, reg. No. DG18P02OVV015, under the leadership of Petr Grulich, with other partners being the Institute of History of the AV ČR and the Czech Technical University. This applied research and experimental development resulted in a map guide based on 3D augmented reality, a mobile application and a web portal serving as a specialized historical manual for the history of dowry towns and their urban landscape.
    - NAKI II project **The Gate of Wisdom is Open. Baroque Cultural Heritage of the Monasteries in Broumov and Rajhrad: Protection, Restoration, presentation,** reg. No. DG16P02R047, under the leadership of Martina Bolom Kotari in cooperation with the Moravian Library in Brno and the University of Pardubice. The project resulted in the implementation of tools for the protection, identification and presentation of the cultural heritage of the Benedictine Order in the Czech lands, represented specifically by the monasteries in Broumov and Rajhrad (i.e., special software for the use of a database of typographic elements of the book block enabling further editorial, analytical and comparative work with the material, a conservation procedure for the protection and care of the library collections of monastic libraries, etc.).
    - Currently ongoing (since 2023) NAKI III project **Historic Spa Settlements as a Cultural, Urban and Landscape Phenomenon**, reg. No. DH23P03OVV075, with the principal investigator Jana Vojtíšková and with the participation of the Historical Institute of the AV ČR and the Museum of East Bohemia. A database (S) in Czech and English and a professional map (Nimap) in the form of a web portal with the use of digital humanities and 3D graphics/animation will be the main output of the project.

4. The FSci, Department of Physics, worked closely with **Linet,** a globally recognized leader in the production of top hospital beds, during the monitored period. Linet specializes in innovative medical technology solutions that improve the comfort and care of patients and the efficiency of medical staff.
   During the monitored period, the Department of Physics participated in a key project supported by **TA ČR in the Epsilon programme entitled Development of Intelligent Electronic Control System for Specialized Hospital Beds for Critically Ill Patients**, reg. No. TH03010415, 2018-2020. This project has produced significant results. Within this project, unique software and algorithm were developed and subsequently integrated into Linet hospital beds. This technology enables:
    - Preventive detection of the risk of pressure ulcers in patients, which improves significantly the quality of care;
    - Automatic positioning of patients through a controlled bed tilt, reducing the physical strain on nursing staff.

   The importance of this project was underlined **by the award of TA ČR in 2022; the TA ČR announced the project to be the best one in the Business category**. This success confirms that the cooperation of the academia with industrial partners has the potential to deliver not only innovations but also practical solutions with global impact. The collaboration between the Department of Physics and Linet is an example of the synergistic link between research and the application sphere that brings tangible benefits not only for the healthcare sector, but also for patients and their families.

5. The UHK has developed and licensed special **ANUME** pads for vital functions monitoring in patients. The long-lasting research (over 10 years) at the UHK was commercialized successfully thanks to the **TA ČR GAMA** project in which special pads for monitoring the microvibrations of the human body were created. Thanks to the developed ballistocardiography algorithms,

the microvibrations are used to calculate the vital functions of people, in particular, heart rate and respiratory rate. On the basis of these results, with the input of an investor, the employee-owned company Deeplab was founded (later renamed ANUME according to the product). The pads can measure the said vital signs contactlessly simply by being inserted under a mattress in a bed or other type of furniture. The subsequent project TL03000520 in which Senecura a.s., a company operating senior centres, and the University of Ostrava were additional partners, led to the creation of a product aimed at monitoring care in senior centres and early notification of nursing staff. In cooperation with the UHK, follow-up research is being conducted on the data, the results of which are published in prestigious Q1, D1 WoS journals. These pads are also part of the project **Biomedical Indicators for Personalized Medicine** (BIPOLE) CZ.02.01.01/00/23_021/0008439 which is being implemented within the framework of the call **OP JAK – Intersectoral Cooperation for IT** in cooperation with the FN HK in 2024-2025. Hundreds of pads have already been used commercially across the country to monitor quality of care in senior centres and are now being adapted for use in neonatal care.

STUDIES

4.13 Doctoral studies

The HEI will briefly describe the organisation of the doctoral studies (if there are any doctoral study programmes[38]). HEI will comment on:

- Structure and organization of studies.
- A system of cooperation between PhD students and their supervisors.
- Basic statistics (including drop-out rate, student workload, etc.).
- Information on promotion and recruitment schemes.
- Cooperation within doctoral studies (e.g., Czech Academy of Sciences, application sphere, building open study programmes for foreign nationals and creating international networks of study programmes, "joint degree", "cotutelle", etc.).
- Student care system (e.g. counselling, wellbeing care, career guidance).
- A system for tracking the future careers of graduates[39].
- Other relevant data, such as the existence of a doctoral school, basic soft skills courses, etc. at the discretion of the HEI.

The HEI shall support this with appropriate examples (e.g. a model example of doctoral student cooperation with their supervisor, statistics on collaboration within doctoral studies, specific examples within doctoral studies, statistics on the use of student care systems, etc.).

Maximum 300 words per point.

Self-assessment:

- Structure and organization of studies.

Doctoral study programmes are offered and organised at all faculties of the UHK. The faculties are responsible for determining the conditions of enrolment, ensuring the course of the admission procedure and subsequently for teaching the study programmes, including doctoral examinations. In 2020-2024, the UHK has successfully increased significantly the number of study programmes offered. While in 2020 there were a total of 26 study programmes (18 in the Czech language and 8 in foreign languages), there were already 36 study programmes in 2023 (25 in the Czech language, 11 in foreign languages). The FIM further increased this number in 2024 by acquiring another accredited doctoral study programme Economics and Management. As regards cooperation with other universities, the FIM offered 2 study programmes in cooperation with other universities in 2023, namely the doctoral study programme Systems Engineering and Informatics together with the University of Pardubice and the Technical University of Liberec and the doctoral study programme Applied Informatics together with the University of Pardubice. The FEdu offered 1 doctoral programme Specialisation in Pedagogy (code 0111 according to ISCED-F) together with the University of South Bohemia in České Budějovice, the University of Ostrava and the University of West Bohemia in Pilsen, and 1 doctoral programme Specialisation in Pedagogy (code 0188 according to ISCED-F) together with the University of West Bohemia in Pilsen and the University of Ostrava. The FSci offered 1 doctoral programme Toxicology together with Palacký University in Olomouc. In addition, the FSci has established a foreign cooperation on a double degree doctoral programme in Toxicology with the University of Bologna. The UHK continues to cooperate on doctoral study programmes with the Academy of Sciences of the Czech Republic.

[38] If the HEI does not organise any doctoral programme, it will explicitly state this information in the self-evaluation report.
[39] The HEI will list the top five highest ranked graduates in academia, the private sector, and public administration over the past five years.

- A system of cooperation between PhD students and their supervisors.

The cooperation between the doctoral student and his/her supervisor has its specifics at each faculty. The joint setting up of an Individual Study Plan (ISP) at the beginning of the study is a common feature. The ISP defines the topic of the doctoral thesis, compulsory and optional courses and the determination of other study and research obligations. The doctoral student's progress in the ISP and his/her cooperation with the supervisor is then evaluated annually through an annual evaluation of the doctoral student which is drawn by the doctoral student and subsequently approved and completed by the supervisor and, finally, by the guarantor of the field of study. The cooperation between doctoral students and supervisors, for example at the PhF, is supported by the Doctoral Seminar which usually takes place 3 times per semester and during which the doctoral student consults the progress of his/her doctoral thesis with the supervisor. In addition to consulting and supervising the doctoral thesis, the supervisor supports the PhD student in publishing, helps with finding suitable journals and also with obtaining financial resources. Since 2023, the UHK has been setting and consolidating a common framework for cooperation between doctoral students and supervisors. As the first step, the UHK published the document Supervisor Standards (Vice-Rector's Instruction No. 6/2023) which came into force in June 2023. The Supervisor Standards define the prerequisites and competences of the supervisor, the method of evaluating the supervisor's work and, in particular, the cooperation between the doctoral student and the supervisor, the principles of supervision, recommendations for the time scope of consultations per year, etc. The implementation of the UHK Supervisor Standards into practice is currently underway. In 2024, the following steps were taken: creation of an initial and follow-up training plan; approaching some potential supervisors; preparation of a questionnaire for supervisors to map the current situation regarding supervisors and PhD students at the UHK from the perspective of supervisors. The UHK plans to build on these activities and develop them in the coming years.

- Basic statistics (including drop-out rate, student workload, etc.)

Drop-out rate:

The drop-out rate in doctoral studies decreased significantly between 2020 and 2023. While in 2020, the drop-out rate was 15% for full-time study, 35% for combined study and 22% overall, in 2023, the drop-out rate was 3.7% for full-time study, 15.8% for combined study and 8.7% overall. In 2021, study failure rate was 4% only.

Numbers of students:

The number of students in doctoral study programmes was around 270 in the period under review, gradually decreasing to approximately 247 at the end of the period. In the academic year 2019/2020, 276 doctoral students were registered and this number changed by a maximum of five students in subsequent years. In the academic year 2023/2024, 247 students were enrolled in doctoral programmes (namely 90 students at the PhF, 78 students at the FSci, 36 students at the FIM and 43 students at the FEdu).

Numbers of graduates:

The number of doctoral graduates is on the rise (except for the last year). In 2020, 2021, 2022 and 2024, there were 17 graduates (8 full-time, 9 combined), 20 graduates, 25 graduates and 20 graduates (12 full-time, 8 combined), respectively.

Teaching provided by the students:

The hourly teaching load of Ph.D. students, based on the qualified estimate of the Vice-Deans for R&D, is approximately 8-14 hours per week (direct and indirect teaching, including preparation for teaching and preparation of teaching materials and participation in the course and evaluation of examinations), depending on the type and difficulty of the course.

- Information on promotion and recruitment schemes.

The promotion of doctoral studies is coordinated at the university level, both for the Czech Republic and abroad. Specialised events such as fairs and open days, social networks such as Facebook and Instagram and personal contacts between academics and potential candidates are used. In 2020-2024, the UHK participated in Gaudeamus, EAIE International University Fair, and IEFT Student Fair in Istanbul (last participation in 2023). At student fairs, the UHK primarily presents programmes taught in English at the UHK, including PhD programmes, and also programmes taught in Czech if there is local potential for them. The promotion of the UHK doctoral programmes is also done through targeted online promotion on selected international portals, through social networks and by participating in promotional activities in selected destinations abroad where we can see interest in our study programmes. At the same time, promotion opportunities are also used within the framework of individual business trips of academic and research staff of the UHK to partner institutions, as well as to domestic and foreign conferences. The UHK also cooperates with international agencies, such as PP EDU Media or Begin Group. The UHK collaborated with FPP EDU Media in 2023 for the last time on a national online student fair focused on the Balkan region and Turkey. Currently, offers of the national agency House of Foreign Cooperation are exploited – organization of national stands and missions to selected countries. As far as recruitment schemes are concerned, the UHK focuses mainly on a clear and high-quality presentation of information about study programmes on the website in Czech and English. Some study programmes offer an overview of doctoral topics and a list of supervisors to make the overview as specific as possible for applicants. Due to the specific nature of doctoral studies, overall recruitment processes are more challenging. Although the UHK plans to further improve the recruitment processes, the best results so far have come from personal recommendations and contacts (also in consultation with other universities such as Charles University).

- Cooperation within doctoral studies (e.g., Czech Academy of Sciences, application sphere, building open study programmes for foreign nationals and creating international networks of study programmes, "joint degree", "cotutelle", etc.).

Within doctoral studies, the UHK cooperates with several universities in the Czech Republic: the University of Pardubice, Palacký University in Olomouc, the University of South Bohemia in České Budějovice, the University of West Bohemia in Pilsen, and the University of Ostrava. The University, and namely the FSci, established an international cooperation on a double degree in Toxicology in 2023 with the Alma Mater Studiorum Universita di Bologna. The student is enrolled at both universities and must spend a minimum of 10 months at the visiting university. The first student was admitted to this study in 2023.

Programmes accredited for teaching in the Czech language are also open to international students who are sufficiently proficient in the Czech language. Another opportunity is provided to PhD students in doctoral programmes accredited for teaching in English. In 2024, the UHK offered a total of 11 programmes. Students from European and non-European countries entered/graduated from doctoral programmes at the UHK. There have been 18 students in English (paid) programmes from 2021 (2 at the FIM, 14 at the PhF, and 2 at the FSci). In Czech programmes, there were 12 students in the same period (2 at the FIM, 6 at the PhF, and 4 at the FSci).

In addition to studying in a field/programme accredited at the UHK, exchange mobility of international PhD students also took place at the UHK. The UHK is involved actively in efforts to integrate all international students into the academic community. Cooperation with the Erasmus Student Network Hradec Králové and the creation of an information environment is very helpful. Participation of PhD students in international research teams and publishing activities of PhD students are also supported intensively. For this purpose, the faculties allocate funds mainly from the PPSŘ or from other sources.

The UHK offers both joint degree and cotutelle options but there are no active joint degrees at the doctoral level now. The last contract for a cotutelle programme was signed in 2023 at the FSci under the leadership of Prof. PharmDr. Kamil Musílek.

- Student care system (e.g. counselling, wellbeing care, career guidance).

Responsibility for the student care system is borne by the Career Centre. It offers a wide range of activities: individual counselling; career counselling; coaching; preparation for the selection procedure (including help with writing a CV, motivation letter, self-presentation training and video training); workshops; discussions and lectures with experts from practice; sharing job offers, temporary jobs, internships, etc.; mediation of contact with organisations (Career Web, Job Start fair). The Career Centre also organises events and meetings to promote the connection between the university environment and practice, such as the Entrepreneurial Warm-up, Career Booster or Talent Consultation that students can join. Psychological support and therapy represent another option offered by the UHK in the context of student care. Each student can benefit from 10 free psychological consultations. Since 2024, the UHK has been offering a Help Zone – a virtual support/guide for students or employees who find themselves in challenging life situations, whether it is psychological difficulties, specific needs, acute crisis, study difficulties, etc. The Augustin Centre provides support for students with specific needs. Students can also contact the Ombudsperson who has been active at the UHK since the beginning of 2024. They can use her help if they find themselves in a situation where they feel that there has been a violation of the University Code of Ethics or, in general, conduct contrary to generally accepted social norms.

- A system for tracking the future careers of graduates.[40]

Supporting students and graduates of doctoral study programmes is an integral part of the SP UHK; the focus is on supporting their research activities, gaining international experience and development in the fields of education and R&D&I, which are also key areas for their successful implementation in practice. The Career Centre and the Alumni Club (which falls under the responsibility of the Vice-Rector for Student Affairs, Quality, and Creative Activities) are mainly responsible for the care and monitoring of the future career of graduates of all studies at the UHK. The Career Centre provides individual career preparation and guidance to graduates for two years from graduation. All graduates, irrespective of the time of graduation, can benefit from the Centre's group activities, such as professional workshops and seminars that focus on general topics (e.g., preparing for a selection procedure; writing a CV and a motivation letter; creating or improving a LinkedIn profile) as well as insights into the application sphere of the field of study that are facilitated by cooperating employers through practical workshops and lectures.

In 2022, 2,414 graduates were registered in the Alumni Club across the UHK. The latest records of 31 December 2024 SHOW 2,870 members OF THE Alumni Club. Unfortunately, data on the specific number of PhD students are not available at present. In 2024, the Alumni Club maintained contact with alumni through newsletters that are sent approximately 6 times a year, communicating with them on social media, and organizing offline activities to deepen relationships. This year, alumni have joined the mentoring programme and are also invited to educational activities organised by the Career Centre.

- Other relevant data, such as the existence of a doctoral school, basic soft skills courses, etc. at the discretion of the HEI.

For newly entering PhD students, the UHK has been organizing a three-day Ph.D. Summit every year, commencing from 2020. Its aim is to prepare students for doctoral studies, whether through professional lectures and workshops, or informal activities. Topics discussed at the Ph.D. Summit

[40] The HEI will list the top five highest ranked graduates in academia, the private sector, and public administration over the past five years.

include, for example, preparing scientific publications and projects; working with scientific databases; ethics in science; science promotion; networking; technology and knowledge transfer; science evaluation; academic career planning, etc. In addition, a Guide for New PhD Students at the UHK was drawn in 2024 to facilitate orientation in the first months of study. The guide contains more than 100 pages of useful information (matters to be dealt with when starting studies, information about the UHK, study and research support opportunities, contacts, etc.).

In 2022-2023, there was a one-year project Development of the Internal Grant Agency of the University of Hradec Králové focused on PhD students, the Student Grant Competition for PhD students Igráček, offering support for team research projects and educational workshops How to Publish Successfully within Ph.D. Studies; Giving a Presentation and Taking Part in a Discussion in English (in English language); Closing of Student Grants and Final Activity Reports (in English language); participated always by about 15-20 PhD students. The Young Scientists Conference was held on 17 May 2023 and 35 PhD students attended it. The students also had the opportunity to participate in other courses provided by the university or faculties, such as the UHK Bootcamp, the use of AI in research and academia, and Online Marketing in Practice. In 2024, a coordination unit of the UHK Doctoral School was established in the form of a professional position called Doctoral School Coordinator. The Doctoral School Coordinator is in charge of the strategy and development of the UHK Doctoral School, courses for doctoral students and the support of informal networking and communication between doctoral students across the university. The aim of the position is, among other things, to create a communication platform and to connect students more with each other, e.g., through informal meetings. The first such meeting called Doctoral Coffee Break was successfully held in November 2024. The plan is to have regular meetings at least 6 times a year.

IMPLEMENTATION OF RECOMMENDATIONS

4.14 Implementation of the recommendations in Module 4

The HEI will briefly describe how it has implemented the recommendations for Module 4 from the previous evaluation period, if applicable.

Maximum 1000 words

Self-assessment:

The UHK has made every effort to ensure that the recommendations for Module 4 presented in the Evaluation Report 2020 that the UHK considered to be the most important and effective, are incorporated systematically. These measures were implemented gradually as some changes could not be implemented immediately, whether for procedural, organisational, legislative or financial reasons.

In 2023, **an audit of internal processes** at the Rectorate was carried out. Its results led to adjustments in the organisation of the research activities management.

Since 2021, **the distribution of the LCDRO to faculties** has been based on open and transparent rules agreed by the UHK management. The faculties must define annually the purposes, target indicators and budgets. The new model takes more account of the research productivity of individual departments and the excellence of scientific outputs. As part of the LCDRO incentive component, financial support for authors of articles in Q1 and Q2 WoS journals has been implemented. In addition, incentives have been created within LCDRO to support interdisciplinary projects and university-wide research guidelines have been set up to facilitate interdisciplinary collaboration, which increases collaboration between faculties, see section 4.11.

The faculties **monitor the research performance of individual departments** and provide targeted support for excellent research teams. Internal grant calls have been introduced to motivate high-quality publications, see section 4.2 – programmes to promote excellence). The Quality Bonus programme has been expanded; it takes into account gender aspects and international cooperation. This has also increased the proportion of joint publications with international scientists, which has contributed to the increase in citation response, as documented in the graph provided in section 4.11.

The **UHK has strengthened gender equality in science and research** by introducing the GEP focusing on reconciling work and family life and supporting women in the management. The HR strategies of the UHK also monitor the age balance of academic staff, see section 4.7.

The UHK continued to implement its **internationalisation strategy** and expanded the offer of double degree and cotutelle programmes, including the PhD in Toxicology at the University of Bologna, see section 4.13.

On the basis of the recommendation **to support young postdocs coming from abroad**, a Competition for Postdoctoral Positions has been organised at the UHK since 2021. This competition has contributed, among other things, to building an international environment at the faculties.

The international environment at the faculties is also promoted through the **international competences of doctoral students** that are compulsory and it is not possible to complete the studies without their fulfilment. The internship can take the form of a trip to an institution, participation in a European research project or direct participation in international cooperation in another form. Doctoral students paying tuition fee in programmes taught in English are offered a scholarship to strengthen research at the UHK.

The faculties are also **involved in international professional or scientific networks** corresponding to their field of specialization. Parts of the UHK are involved, for example, in the international

consortium Time Machine, focused on the development of the digital humanities (PhF), in the Czech section of INSEA (International Society for Education in the Arts, FEdu), etc., see section 4.8.

In the period under review, the UHK was also active in the field of **obtaining international projects.** In particular, the international four-year EDF project entitled First Research Action for Medical Counter Measures Performed in the Framework of the RESILIENCE FPA Consortium of researchers from the FSci should be mentioned, as well as the ongoing MSCA project involving researchers from the same faculty, see section 4.10.

The UHK also reflected **the recommendation to create a specific centre for the administration and organisation of all doctoral studies**. In 2024, a coordinating unit of the UHK Doctoral School was established in the form of a professional position called Doctoral School Coordinator whose main activity is to set and implement the strategy and concept of systemic support and development of doctoral students and supervisors, see section 4.13.

The purpose of the Student Grant Competition Igráček UHK was to create a research programme to support the career growth of doctoral students. Through the implementation of student grants, PhD students were given the opportunity to carry out their own research activities, thanks to which they could develop, in particular, their transversal skills (project management, communication, teamwork, problem solving, organization, team leadership, time management, etc.), see section 4.13.

During the evaluated period, **systems for collecting feedback on the quality of education and research activities from students and PhD students** were also strengthened, which led to an expansion of evaluation metrics.

The UHK has long been striving for a **balanced representation of women and men in doctoral studies**. The proportion of women has gradually increased from 43% in the academic year 2019/2020 to 49% in 2023/2024.

In the monitored period, the Alumni Club continued to develop its activities aimed at **improving the brand of the UHK**. The University works with the potential of its alumni and perceives them as an important part of its identity.

The aim of the UHK was also to fulfil the **measures concerning the setting of rules for the support of staff in the management of research data**, their security and archiving; therefore, a new position of the Open Science Specialist and subsequently the OOS were established at the Rectorate, see sections 4.1 and 4.4.

In order **to identify key scientific personalities at the UHK**, an analysis was carried out annually based on the evaluation of the quality and quantity of TOP research results according to specific parameters and links to the WoS and SCOPUS databases, or on the follow-up of statistical evaluations (evaluation of internal research productivity in databases and beyond). These TOP staff were provided with administrative support.

Advanced laboratory infrastructure was provided during the monitored period, see sections 4.2, 4.4 and 4.9.

Finally, it should be mentioned that the UHK also intensified its search for industrial partners and project cooperation with companies. Cooperation with enterprises is developed through strategic projects and participation of the UHK in innovation clusters, see section 4.4.

A LIST OF SUPPORTING DOCUMENTS/LINKS FOR MODULE 4

Document name	No. criteria	Location (link in HTML)
The Strategic Plan of the University of Hradec Králové 2021+	4.1 4.2 4.4 4.6 4.7 4.8 4.9 4.13	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/strategic-documents/the-strategic-plan-of-the-university-of-hradec-kralove-2021.pdf
Rector´s decree No. 13/2018 "Rules of the Procedure of the Research Ethics Commiitee of the University of Hradec Králové"	4.1 4.3	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/rules-of-the-research-ethics-committee-of-the-university-of-hradec-kralove.pdf
Rules of procedure of the Commercialisation Board of the University of Hradec Králové	4.1 4.2 4.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/rules-of-procedure-of-the-commercialisation-board-of-the-university-of-hradec-kralove-2022.pdf
Rector's Decree No. 17/2024 "Science and Research Project Management"	4.2	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/science-and-research-project-management-2024.pdf
Rector´s Decree No. 15/2020 "Programmes to Support Science and Research at the University of Hradec Králové"	4.2	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/programmes-to-support-science-and-research-at-the-university-of-hradec-kralove.pdf
Rector's Decree No. 02/2021 "Motivation System to Stabilize/Develop Doctoral Degree Programmes and Procedures to Attain Associate and Full Professorships at the UHK"	4.2	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/motivation-system-to-stabilize_develop-doctoral-degree-programmes-and-procedures-to-attain-associate-and-full-professorships-at-the-uhk-2021.pdf
Rector's Decree No. 23/2021 "Student Grant Competition for Doctoral Students "Igráček UHK"	4.2 4.13 4.14	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/student-grant-competition-for-doctoral-students-igracek-uhk-2021.pdf
Vice-Rector´s Instruction No. 08/2023 "University of Hradec Králové Student Grant Competition for the Use of Specific Research Funds from 2024"	4.2	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/student-grant-competition-for-the-use-of-specific-research-funds-from-2024-uhk.pdf
Vice-Rector´s Instruction No. 09/2023 "Open Access Publishing"	4.2 4.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/open-access-publishing-2023.pdf
Rector's Decree No. 01/2024 "Intellectual Property Exploitation at the University of Hradec Králové"	4.2 4.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/internal-regulations/intellectual-property-exploitation-at-the-university-of-hradec-kralove.pdf
Rector's Decree No. 17/2020 "Treatment of Intellectual Property at the University of Hradec Králové"	4.2 4.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/treatment-of-intellectual-property-at-the-university-of-hradec-kralove-2020.pdf
Rector´s Decree No. 10/2021 "Call for competition for international mobility within the project "International Mobilities for Research Activities at the University of Hradec	4.2	https://www.uhk.cz/file/edee/univerzita-hradec-kralove/uhk/uredni-deska/vnitrni-predpisy-a-ridici-akty/ridici-akty/rektor/rektorske-vynosy/2021/call-for-competition-for-international-mobility-within-the-project-international-mobilities-for-research-activities-at-the-uhk-.pdf?v20210309110839

Králové II", registration number CZ.02.2.69/0.0/0.0/18_053/0017841"		
Rector´s Decree No. 14/2021 "Modification of the Rector´s Decree No. 10/2021 Call for competition for international mobility within the project International Mobilities for Research Activities at the University of Hradec Králové II"	4.2	https://www.uhk.cz/file/edee/univerzita-hradec-kralove/uhk/uredni-deska/vnitrni-predpisy-a-ridici-akty/ridici-akty/rektor/rektorske-vynosy/2021/modification-of-the-rectors-decree-no.-10_2021-call-for-competition-for-international-mobility-within-the-project-international-mobilities-for-research-activities.pdf?v20210414120518
Rector´s Decree No. 11/2022 "Call for Competition for international mobility within the project "International Mobilities for Research Activities at the University of Hradec Králové II", registration number CZ.02.2.69/0.0/0.0/18_053/0017841"	4.2	https://www.uhk.cz/file/edee/univerzita-hradec-kralove/uhk/uredni-deska/vnitrni-predpisy-a-ridici-akty/ridici-akty/rektor/rektorske-vynosy/2022/call-for-competition-for-international-mobility-within-the-project_international-mobilities-for-research-activities-at-the-uhk-ii.pdf?v20220622154241
Rector's Decree No. 20/2023 "Call for Competition for 2024-2026 Postdoctoral Job Positions at the University of Hradec Králové"	4.2	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Rector's Decree No. 12/2023 "Call for Competition for 2024-2026 Postdoctoral Job Positions at the University of Hradec Králové"	4.2	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Rector's Decree No. 06/2022 "Call for Competition for 2022 Postdoctoral Job Positions at the University of Hradec Králové"	4.2	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Rector's Decree No. 17/2021 "Call for Competition for Postdoctoral Job Positions at the University of Hradec Králové"	4.2	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Rules of the System of Quality Assurance and Internal Quality Evaluation at the University of Hradec Králové	4.3	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/rules-of-the-system-of-quality-assurance-and-internal-quality-evaluation-at-the-university-of-hradec-kralove-2020.pdf
The Rules of Procedure of the International Advisory Commission of the University of Hradec Králové	4.3	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/the-rules-of-procedure-of-the-international-advisory-commission-of-the-uhk.pdf
Strategy of Research Organisation	4.3	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/strategic-documents/strategy-of-research-organisation-of-the-uhk-2023.pdf
Rules of Procedure of the Ethics Committee of the University of Hradec Králové	4.3	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/rules-of-procedure-of-the-ethics-committee-of-the-uhk-2021.pdf
Code of Ethics of the University of Hradec Králové	4.3 4.7	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/code-of-ethics-of-the-university-of-hradec-kralove-2021.pdf
Rules for the Internal Governance of the University of Hradec Králové	4.3	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/rules-for-the-internal-

		governance-of-the-university-of-hradec-kralove-11_2024.pdf
Rector's Decree No. 14/2024 "Ombudsperson of the University of Hradec Králové"	4.3 4.7 4.13	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/ombudsperson-of-the-university-of-hradec-kralove-2024.pdf
Directive (EU) 2019/1937 of the European Parliament and of the Council of 23 October 2019 on the protection of persons who report breaches of Union law	4.3	https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32019L1937
Rector's Decree No. 06/2024 "Whistleblower Protection at the University of Hradec Králové (Whistleblowing)"	4.3	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/whistleblower-protection-at-the-university-of-hradec-kralove-2024.pdf
Rules of Operation of Information and Communication Technology of the University of Hradec Králové	4.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/rules-of-operation-of-information-and-communication-technology-of-the-uhk.pdf
Rector's Decree No. 22/2021 "Reward for Originators of Industrial Property Rights"	4.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/reward-for-originators-of-industrial-property-rights-2021.pdf
Sustainable Development Strategy of the UHK until 2030	4.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/strategic-documents/sustainable-development-strategy-of-the-uhk.pdf
Gender Equality Plan of the University of Hradec Králové for the Period 2023-2025	4.4 4.6 4.7 4.14	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/gender-eguality-plan-of-the-university-of-hradec-kralove-2023-2025-2023.pdf?v20230301143300
Career system and regular evaluation of academic staff of the University of Hradec Králové	4.6 4.7 4.8	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Code of Procedure for Selection of Academicians and Managerial Employees of the University of Hradec Králové	4.6	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/code-of-procedure-for-selection-of-academicians-and-managerial-emloyees-of-the-uhk-2017.pdf
OTM-R Policy at the University of Hradec Králové	4.6 4.7	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/central-departments/human-resources-and-payroll-office/open-transparent-and-merit-based-recruitment/otm-r-policy-at-university-of-hradec-kralove.pdf
Guide for New Employees	4.6	https://www.uhk.cz/file/edee/univerzita-hradec-kralove/uhk/celouniverzitni-pracoviste/osobni-a-mzdove-oddeleni/osobni-a-mzdove-oddeleni/guide-for-new-employees_en.pdf
Constitution of the University of Hradec Králové	4.6	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/internal-regulations/constitution-of-the-university-of-hradec-kralove-11_2024.pdf
Wages regulation of the University of Hradec Králové 2024	4.6	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-

		guidelines-and-decrees/internal-regulations/wages-regulation-of-the-university-of-hradec-kralove-2024.pdf
Collective bargaining agreement 2023-2025	4.6 4.7	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Updated ACTION PLAN University of Hradec Králové 2024-2026	4.7	https://www.uhk.cz/file/edee/univerzita-hradec-kralove/veda-a-vyzkum/hr/dokumenty/uhk-updated-action-plan-2024-26.pdf
Gender Equality Analysis of the UHK	4.7	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Rector's Decree No. 08/2024 "Working Hours Scheduling, Flexible Working Hours and Telework of the UHK Employees"	4.7	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/working-hours-scheduling-flexible-working-hours-and-telework-of-the-uhk-employees-2024.pdf
Vice-Rector´s Instruction No. 04/2023 "Support of Mobility for Staff and Doctoral Students of the University of Hradec Králové"	4.8	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/support-for-mobility-of-staff-and-doctoral-students-of-the-university-of-hradec-kralove-2023.pdf
Rector's Decree No. 14/2022 "Internationalization of the Hradec Králové University Environment"	4.8 4.14	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/internationalization-of-the-hradec-kralove-university-environment-2022.pdf
Vice-Rector´s Instruction No. 06/2022 "Supporting Erasmus+ Priorities at the University of Hradec Králové"	4.8	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/supporting-erasmus-priorities-at-the-university-of-hradec-kralove-2022.pdf
Vice-Rector´s Instruction No. 06/2023 "Supervisor Standards"	4.13	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/uhk-supervisor-standards-2023.pdf

MODULE 5 - STRATEGY AND POLICIES

5.1 Mission and vision of the evaluated institution in R&D&I

The HEI will briefly describe its mission and vision with emphasis on R&D&I in general and its R&D&I capacities in the implemented R&D&I fields[41] (Tables 5.1.1 and 5.1.2). In particular, the HEI's vision covers the following five-year period and must relate to the strategic objectives of the Provider, the National Policy on Research, Development, and Innovation of the Czech Republic 2021+, the Gender Equality Strategy 2021-2030, and other higher national and supranational strategic documents in the field of R&D&I (Table 5.1.3). The HEI shall complement the description with active references to its Strategic plan for the teaching, scholarly, scientific, research, development, artistic, and other creative activities of the higher education institution (regarding the results and recommendations from the previous evaluation period, if the evaluated HEI participated in it). The HEI shall describe how the vision and mission were implemented during the period of 2020–2024.

Maximum 2000 words.

Self-assessment:

The mission of the UHK is to spread knowledge within the regional and global community.

The vision of the UHK:

- To be a respected educational institution with an attractive structure of study programmes and other forms of education reflecting the requirements of the 21st century;
- To be an institution developing highly valued and socially beneficial creative activities and achieving valued scientific and research results in selected areas of research;
- To be a socially responsible and open institution contributing actively to the formation of public space with a significant integrating influence and society-wide impact;
- To be an institution firmly anchored in the region, developing cooperation with external partners and contributing to meeting the needs of the city, the region and their inhabitants;
- To be a fully internationalised institution developing its global potential in the field of international educational and scientific cooperation;
- To be an institution that consistently cares about improving the environment for its students and staff and their development.

In the field of R&D&I, the UHK focuses on improving the quality of results by applying different perspectives. It is involved actively in the solution and preparation of research projects with Czech and foreign researchers, with the aim of achieving multidisciplinary cooperation. The UHK continuously increases the number and quality of publications, including those with international participation. The University has the capacity for knowledge transfer into practice through the TTO which deals with the management of R&D&I results, protection of intellectual property and cooperation with the commercial sphere. The UHK units also develop activities of their technology workplaces. The UHK strives to strengthen its international dimension in R&D&I and supports the creation of international research teams with the aim of transferring know-how and obtaining international projects. It also supports joint publishing and creative results in cooperation with experts from abroad. The UHK also participates in national and international development projects.

The UHK has a wide range of R&D&I capacities that are concentrated in several key disciplines, see Table 5.1.1.

- In natural sciences, the University focuses on mathematics (7.3%), computer science (10.3%), physical sciences (3.6%), chemical sciences (3.6%), and biological sciences (7.3%).

[41] For so-called R&D&I capacities, see Definition of Terms in Methodology HEI2025+.

Research is predominantly basic, with a balanced representation of applied research, particularly in computer science and biological sciences.

- In medical and health sciences, the University develops research in basic medicine (7.3%) and health sciences (1.9%), with a balance between basic and applied research thanks to the cooperation with the FN HK and the Faculty of Medicine and the Faculty of Health Sciences of the University of Defence.
- The University has a strong presence in social sciences, particularly in economics and business (7.8%), education (6.2%), psychology and cognitive science (1.7%), and sociology (4.9%) where there is a balance between basic and applied research. Political science (8.6%) and other social sciences (0.1%) are mainly focused on basic research.
- In the field of humanities and arts, the UHK dominates in research in history and archaeology (10.6%), languages and literature (2.1%), and, in particular, in philosophy, ethics and religious studies (12.4%) where basic research is primarily carried out. Research in artistic disciplines is less strongly represented at the UHK.

We compared these capacities with the share of results in the WoS database for the UHK. We analysed the results of the Article and Review type published by the UHK. With a capacity of 32.1%, the UHK publishes 46.86% of the outputs in the fields below:

Field	Capacity (%)	Share of WoS Outputs (%)
Mathematics	7.3	7.82
Computer Science	10.3	10.99
Physics	3.6	9.90
Chemistry	3.6	9.29
Biological Sciences*	7.3	8.86
Total	**32.1**	**46.86**

*Note: Biological sciences include related fields such as biochemistry, molecular biology, environmental and plant sciences.

We provide the same analysis for the results of the Proceedings Paper, Book and Chapters type for the social sciences. With a capacity of 54.4%, the UHK is able to produce 78.77% of these outputs.

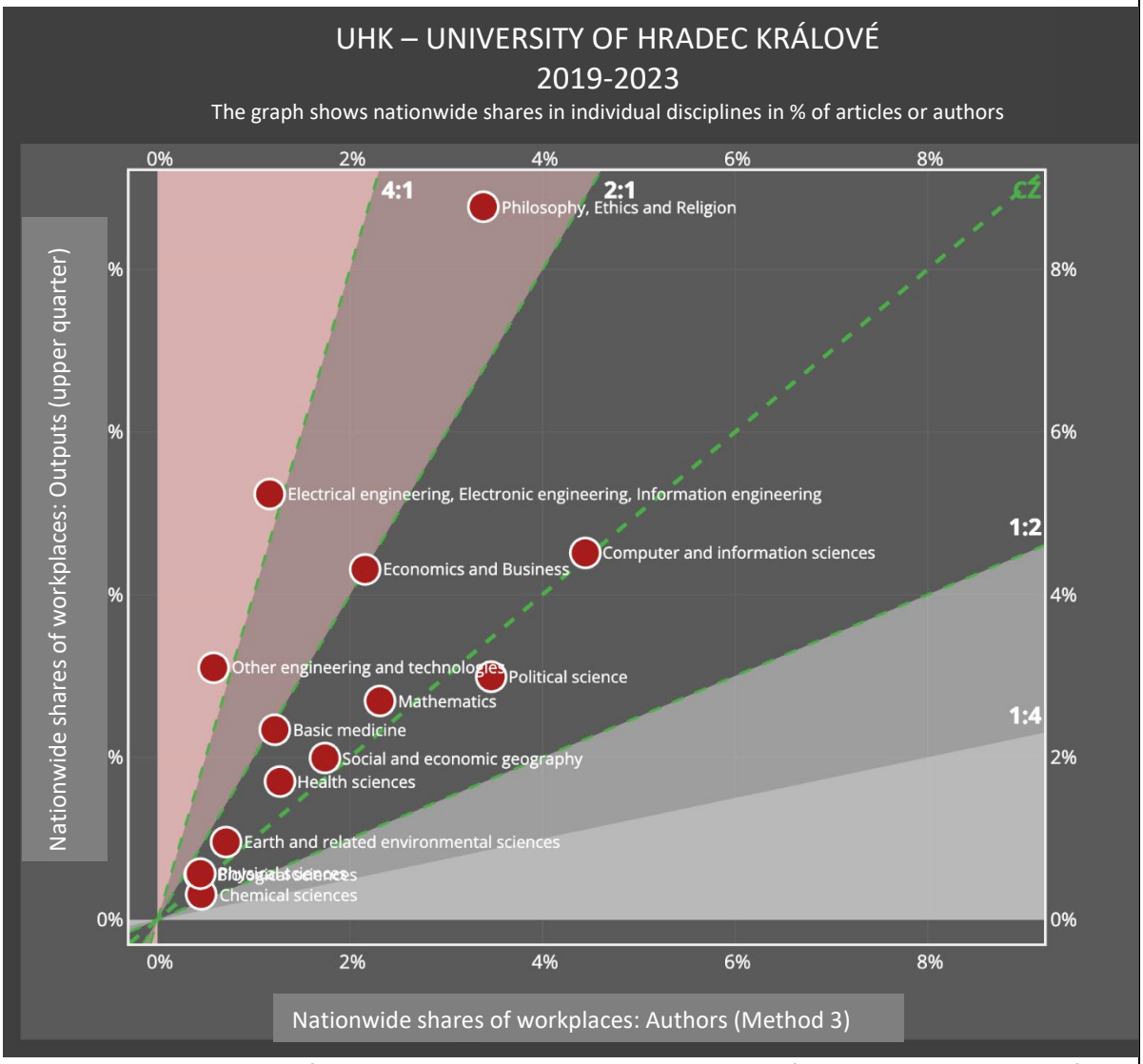
Field	Capacity (%)	Share of WoS Outputs (%)
Business Economics	7.8	28.08
Education	6.2	10.96
Psychology and Cognitive Sciences	1.7	5.48
Sociology, Public Administration	4.9	4.45
Political Sciences and Other Social Sciences	8.7	(partially included)
Philosophy, Ethics, Religious Studies	12.4	20.89
Linguistics	2.1	5.14
Anthropology and History	10.6	3.77
Total Social + Humanities	**54.4**	**~78.77**

The graph below shows the **national share of the UHK in publication outputs** in the top quartile (i.e., Q1) in different scientific fields according to the scientific impact of journals. It shows the **share of the UHK publications in individual disciplines** and their classification in different scientific categories. Almost all disciplines identified by WoS as active for the UHK are above the national average for disciplinary influence. These analyses do not reflect an update of the 2024 input values; results up to 2023 only are shown.

The UHK has the largest share at the national level in the following fields:

- Philosophy, Ethics and Religion – 11.5% in D1, 8.8% in Q1 journals;
- Electrical Engineering, Electronic Engineering, Information Engineering – 2.6% in D1 and 5.2% in Q1;
- Computer and Information Sciences – 1.2% in D1, but 5.4% in Q1;
- Economics and Business – 1.3% in D1, but 4.3% in Q1.

The UHK can thus confirm that it is achieving a noticeable scientific influence especially in the **social sciences (philosophy, ethics, economics, and political science), informatics and medicinal chemistry.**



The strategic documents of the UHK, including the implementation of the principles resulting from the HR Award, reflect key documents at the national and European level, in particular the National Policy on Research, Development and Innovation of the Czech Republic 2021+, the Strategy for

Gender Equality 2021-2030, and the policies of the European Research Area (ERA). The University emphasises social responsibility, internationalisation, equal opportunities and transfer of research results into the application sphere.

The strategic priorities of the UHK for research and innovation are primarily contained in the SP UHK, strategic priority II – UHK Dynamic and Excellent. This priority focuses on the dynamic development of scientific and other creative activities in all developed fields, and emphasizes the interdisciplinary overlap enabling the development of key research topics.

The strategic objective No. 1 within this priority is titled Strategically Controlled and Open UHK in Scientific, Research and Creative Activities. This includes the need to strategically set up and develop the internal evaluation of the research organisation, transparent evaluation of researchers and teams with an emphasis on internationalisation potential and staff training in evaluation of science.

UHK Modern and Efficient is another strategic priority related to innovation. The priorities defined in the UHK 2021 Institutional Plan include also 'development of competences directly relevant to life and practice in the 21st century' that includes support for measures to innovate study programmes reflecting the requirements of practice. There is also the priority 'capacity building for strategic management' which includes support for innovative approaches to the management of the institution.

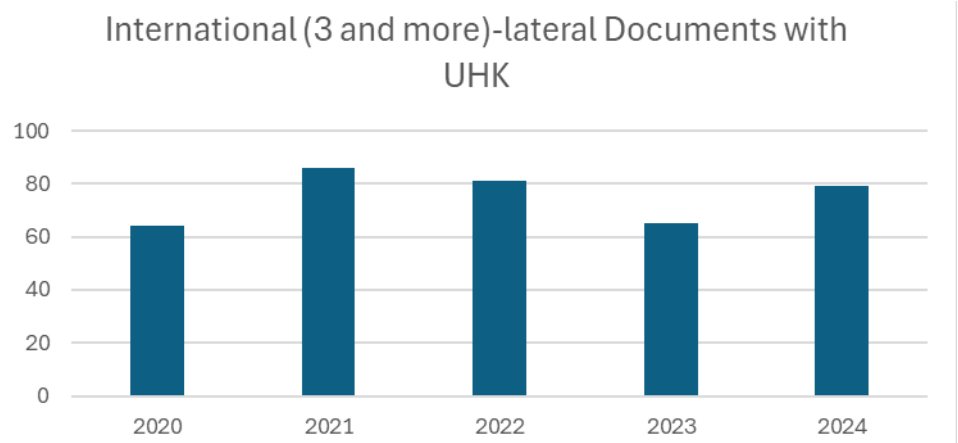
In the past period, the UHK implemented key measures to achieve its missions and visions. The internationalisation of research has been promoted and cooperation with industry and public administration has been strengthened. New strategies (see above) have been introduced to promote scientific excellence, including the LCDRO incentive component and the establishment of international research consortia. The UHK has also strengthened the attractiveness of doctoral studies through the UHK Doctoral School, mandatory international mobility and mentoring programmes.

In 2020-2024, the University of Hradec Králové strengthened its position in international university rankings. It was ranked as the 9th best university in the Czech Republic in THE World University Rankings in 2024, and in 2025, it moved up to the 5th place out of 17 HEIs. It was also ranked in the THE subject rankings (e.g., Education Sciences, Life Sciences, Computer Sciences, Arts & Humanities, and Physical Sciences). In the QS World University Rankings, QS EEA and QS Eastern Europe, it is at the 1001st-1200th place, 403rd place and 41st place, respectively. In the US News Best Global Universities rankings, it reached 1,383rd place in 2025. In addition, scientists from the FSci and FIM were ranked among the top 2% of the world's most cited scientists by Stanford Top 2% Scientists.

During this period, the UHK systematically modified and accredited new study programmes to reflect the needs of practice and technological progress and to strengthen cooperation with enterprises and institutions. The UHK accredits more than 200 programmes annually. The UHK has thus expanded its network of cooperating entities by more than 60 new partners, exceeded 400 cooperating organisations and mediated up to 200 job offers annually. The UHK offered up to 109 full-time LLL programmes and 3 internationally offered programmes with 1,572 participants. Each year, the UHK recorded more than 600 incoming student mobilities and up to 70 incoming staff mobilities, with an average of more than 400 outgoing student mobilities and more than 400 outgoing staff mobilities per year. The UHK offers about 70 study programmes and over 2,000 courses taught in a foreign language and has implemented up to 15 study programmes per year in cooperation with a foreign university.

The University has implemented several key projects to support science and research. The **IT4Neuro(degeneration)** project was among the most important projects. It aimed at developing research infrastructure in the field of neuroscience and toxicology. Despite pandemic restrictions, the UHK has been involved actively in international scientific cooperation. The FIM participated in

four Horizon 2020 Action COST projects, which contributed to significant publication outputs within international research teams. The FSci participated in the **international V4-Korea research project** on biomedical research excellence. Emphasis was placed on interdisciplinary research and **collaboration with the application sphere** which included, for example, linking students with companies in specific research and development projects. The UHK participated in projects of the **GAMA 2** programme which allowed funding of the **Proof of Concept projects** focused on research related to **Covid-19**. These projects were conducted at the FIM and FSci and their results were published in professional journals. The University focused on promoting interdisciplinary research and expanding the participation of academics in prestigious international projects. The UHK expanded its portfolio of **KA2 Erasmus+ projects** that enable international scientific cooperation. The UHK was involved in several new international research projects. The Research Project on the Dilemma of the Crisis of Modernism in Central and Eastern Europe; Publications and Lectures was launched at the FEdu with Prof. PhDr.Tomáš Petráček, PhD, Th.D. as the principal investigator. The FSci implements several projects: The mETamaterial foRmalism approach to recognize cAncer (COST) under the leadership of Toshitaka Hayashi, Ph.D., First Research Action for Medical Counter Measures Performed in the Frame of the RESILIENCE FPA Consortium (EDF), and the pilot project Czech and Slovak Lung Study – Part 1 in cooperation with the FN HK, led by Vladimír Koblížek. The development of international cooperation in science can be shown in the graph below. It is evident that the UHK oscillates around 70 documents in the WoS database on which at least 3 different international departments have collaborated.



The UHK has developed international cooperation within the framework of important academic networks such as the European University Association (EUA), Visegrad University Association (VUA) and the International Centre for Archival Research (ICARUS). The UHK components cooperated actively with universities in Hungary, Lithuania, Bosnia and Herzegovina, and Malta within the COST Action programme. The UHK also participated in the organisation of international scientific conferences, such as the Hradec Economic Days or the Hradec Days of Social Work.

In the period under review, the key server infrastructure and disk storage were renewed at the UHK at a cost of almost CZK 11 million. The University also completed the unification of the property structure at the Na Soutoku site, which enabled the start of project preparation for further development of the campus. The University also focused on expanding laboratory capacity and upgrading IT infrastructure. The completion of the renovation of the historic PhF building which was officially opened on 21 September 2022 was one of the key milestones of 2022. The total cost of the renovation amounted to CZK 216 million. In 2023, the UHK started the renovation of the listed FEdu building on the Liberty Square. The project, with a total cost of CZK 410 million, includes the modernisation of the interiors, the reconstruction of the roof truss and the roof, the enlargement of the underground space and the installation of a new information system. The project is financed by funds from the Ministry of Education, the Hradec Králové Region and the City of Hradec Králové.

During the monitored period, the UHK strengthened its cooperation with companies and institutions in order to transfer scientific knowledge into practice. The network of partners involved in teaching was expanded. They provided expert consultations and supervised student theses. Cooperation with industrial enterprises enabled the application of research results in real conditions. Faculties organised professional seminars, job fairs and student conferences where students had the opportunity to connect with potential employers. The JobStart job fair or the HIT Career fair is held regularly. Students can meet potential employers there. The UHK has thus deepened its cooperation with regional and national institutions in the field of education and research and, thanks to cooperation with industrial enterprises, has enabled students to gain real work experience during their studies.

5.1.1 R&D&I capacities of HEI in the year 2025

Field of Research	FORD	FORD share [%]	Predominant type of research	Total share of field of reaserch [%]
1. Natural Sciences	1.1 Mathematics	7,3	Basic research	32,1
	1.2 Computer and information sciences	10,3	Balanced basic and applied research	
	1.3 Physical sciences	3,6	Basic research	
	1.4 Chemical sciences	3,6	Basic research	
	1.5 Earth and related environmental sciences	0	Zvolte položku.	
	1.6 Biological sciences	7,3	Balanced basic and applied research	
	1.7 Other natural sciences	0	Zvolte položku.	
2. Engineering and Technology	2.1 Civil engineering	0	Zvolte položku.	2,4
	2.2 Electrical engineering, Electronic engineering, Information engineering	2,4	Applied research	
	2.3 Mechanical engineering	0	Zvolte položku.	
	2.4 Chemical engineering	0	Zvolte položku.	
	2.5 Materials engineering	0	Zvolte položku.	
	2.6 Medical engineering	0	Zvolte položku.	
	2.7 Environmental engineering	0	Zvolte položku.	
	2.8 Environmental biotechnology	0	Zvolte položku.	
	2.9 Industrial biotechnology	0	Zvolte položku.	
	2.10 Nanotechnology	0	Zvolte položku.	
	2.11 Other engineering and technologies	0	Zvolte položku.	
3. Medical and Health Sciences	3.1 Basic medicine	7,3	Basic research	9,2
	3.2 Clinical medicine	0	Zvolte položku.	
	3.3 Health sciences	1,9	Balanced basic and applied research	
4. Agricultural and veterinary sciences	4.1 Agriculture, Forestry, and Fisheries	1,8	Basic research	1,8
	4.2 Animal and Dairy science	0	Zvolte položku.	
	4.3 Veterinary science	0	Zvolte položku.	
	4.4 Other agricultural sciences	0	Zvolte položku.	
5. Social Sciences	5.1 Psychology and cognitive sciences	1,7	Balanced basic and applied research	29,3

	5.2 Economics and Business	7,8	Balanced basic and applied research	
	5.3 Education	6,2	Balanced basic and applied research	
	5.4 Sociology	4,9	Balanced basic and applied research	
	5.5 Law	0	Zvolte položku.	
	5.6 Political science	8,6	Basic research	
	5.7 Social and economic geography	0	Zvolte položku.	
	5.8 Media and communications	0	Zvolte položku.	
	5.9 Other social sciences	0,1	Basic research	
6. Humanities and the Arts	6.1 History and Archaeology	10,5	Balanced basic and applied research	25,2
	6.2 Languages and Literature	2,1	Balanced basic and applied research	
	6.3 Philosophy, Ethics and Religion	12,4	Basic research	
	6.4 Arts (arts, history of arts, performing arts, music)	0,2	Balanced basic and applied research	
	6.5 Other Humanities and the Arts	0	Zvolte položku.	
	Total	100 %	-	100 %

5.1.2 Target R&D&I capacities of HEI for the next five-year period

Field of Research	FORD	FORD share [%]	Predominant type of research	Total share of field of reaserch [%]
1. Natural Sciences	1.1 Mathematics	6	Basic research	38
	1.2 Computer and information sciences	13	Balanced basic and applied research	
	1.3 Physical sciences	6	Basic research	
	1.4 Chemical sciences	6	Basic research	
	1.5 Earth and related environmental sciences	0	Zvolte položku.	
	1.6 Biological sciences	7	Balanced basic and applied research	
	1.7 Other natural sciences	0	Zvolte položku.	
2. Engineering and Technology	2.1 Civil engineering	0	Zvolte položku.	0
	2.2 Electrical engineering, Electronic engineering, Information engineering	0	Zvolte položku.	
	2.3 Mechanical engineering	0	Zvolte položku.	
	2.4 Chemical engineering	0	Zvolte položku.	
	2.5 Materials engineering	0	Zvolte položku.	
	2.6 Medical engineering	0	Zvolte položku.	
	2.7 Environmental engineering	0	Zvolte položku.	
	2.8 Environmental biotechnology	0	Zvolte položku.	
	2.9 Industrial biotechnology	0	Zvolte položku.	
	2.10 Nanotechnology	0	Zvolte položku.	

	2.11 Other engineering and technologies	0	Zvolte položku.	
3. Medical and Health Sciences	3.1 Basic medicine	5	Basic research	8
	3.2 Clinical medicine	0	Zvolte položku.	
	3.3 Health sciences	3	Balanced basic and applied research	
4. Agricultural and veterinary sciences	4.1 Agriculture, Forestry, and Fisheries	0	Zvolte položku.	0
	4.2 Animal and Dairy science	0	Zvolte položku.	
	4.3 Veterinary science	0	Zvolte položku.	
	4.4 Other agricultural sciences	0	Zvolte položku.	
5. Social Sciences	5.1 Psychology and cognitive sciences	3	Balanced basic and applied research	30
	5.2 Economics and Business	8	Balanced basic and applied research	
	5.3 Education	6	Balanced basic and applied research	
	5.4 Sociology	4	Balanced basic and applied research	
	5.5 Law	0	Zvolte položku.	
	5.6 Political science	9	Basic research	
	5.7 Social and economic geography	0	Zvolte položku.	
	5.8 Media and communications	0	Zvolte položku.	
	5.9 Other social sciences	0	Zvolte položku.	
6. Humanities and the Arts	6.1 History and Archaeology	12	Balanced basic and applied research	24
	6.2 Languages and Literature	1	Balanced basic and applied research	
	6.3 Philosophy, Ethics and Religion	11	Basic research	
	6.4 Arts (arts, history of arts, performing arts, music)	0	Zvolte položku.	
	6.5 Other Humanities and the Arts	0	Zvolte položku.	
	Total	100 %	-	100 %

5.1.3 Relation to the strategic objectives of the provider and strategic documents in the field of R&D&I

Strategic document	Follow-up
The Strategic Plan of the University of Hradec Králové 2021+	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/strategic-documents/the-strategic-plan-of-the-university-of-hradec-kralove-2021.pdf
Strategy of Research Organisation	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/strategic-documents/strategy-of-research-organisation-of-the-uhk-2023.pdf
Gender Equality Plan of the University of Hradec Králové for the Period 2023-2025	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/gender-eguality-plan-of-the-university-of-hradec-kralove-2023-2025-2023.pdf?v20230301143300
ACTION PLAN University of Hradec Králové 2024-2026	https://www.uhk.cz/file/edee/univerzita-hradec-kralove/veda-a-vyzkum/hr/dokumenty/uhk-updated-action-plan-2024-26.pdf

5.2 Research and development objectives

The HEI will describe its intentions and goals for the next five-year period. The objectives in the field of research development, innovation, and knowledge transfer as well as the objectives in the field of cooperation with public administration, entrepreneurs, and non-profit organisations will be described in relation to the mission, vision and disciplinary capacities of the HEI. Furthermore, the objectives for the development of the HEI as a research organisation will be described, in the areas of human potential development, institutional resilience, the implementation of open science and adherence to the principles of ethics, scientific integrity, and good practice, and their interrelationship with R&D&I objectives. The objectives described must be consistent with the Strategic plan for the teaching, scholarly, scientific, research, development, artistic and other creative activities of the higher education institution.

Maximum 2000 words.

Self-assessment:

Future development (2025-2030)

In the coming years, the UHK plans to continue to support **excellent research and interdisciplinarity** (e.g., in the form of new internal grant schemes funded by the LCDRO), to increase the **social and economic impact of research**, to strengthen **technology transfer**, to support systematically the development of entrepreneurship and innovative thinking of students and the establishment of **spin-off companies, and to increase international prestige.**

The University will continue **to develop international cooperation** focused on strategic R&D&I areas and promote **equality and diversity in research** with the aim of becoming a **key player in research and innovation with regional and global impact**.

For the coming five-year period, the UHK has set ambitious strategic goals aimed at developing excellent science, open research, knowledge transfer, and institutional resilience. This strategy is in line with the SP UHK, the national policy on science, research and innovation, and European initiatives such as Horizon Europe and the ERA. The aim is to strengthen the University's position as a key actor in academia, expand international cooperation and deepen interactions with industry and the public sector.

Support of excellent science and innovation

The UHK promotes systematically excellence in scientific activity with a focus on interdisciplinarity, internationalisation and social relevance of research. The key strategic points include:

- **Strengthening participation in international grant programmes** such as Horizon Europe, COST and Marie Skłodowska-Curie Actions. To this end, **grant support** will be extended by **the Rectorate's administrative support** in the preparation of projects. Institutional financial support will be extended as well (see Priority II, our goal No. 2 of the SP UHK);
- **Active support for applications for prestigious grants** (ERC, GA ČR EXPRO, OP JAK) through **internal mentoring programmes** and institutional funding from LCDRO funds aimed at proposal preparation. The PhF has already implemented a pilot programme of **individual consultations for researchers** on ERC grant preparation (see Priority II, our objective No. 2 of the SP UHK);
- **Development of the UHK Doctoral School** which will provide systematic support to PhD students in the field of research methodology, grant applications, publication strategy and knowledge transfer. Cooperation with international doctoral schools will be strengthened as part of this initiative. The Doctoral School was established in 2024 and its form and principles will be further developed (see Priority II, our goal No. 5 of the SP UHK);

- Expansion of internal grant schemes aimed at supporting postdocs and young researchers, including funding for international mobility, internships and access to laboratory and research infrastructures at partner universities;
- **Strengthening cooperation with international partners, especially with strategic partners of the UHK** (University of Wroclaw, University of Granada, Pontificia Universidata Javeriana Cali, and University of Ghana) and **involving UHK scientists in international scientific platforms and associations**, which has already led, from its very start, to the creation of **new research consortia in the fields of biomedical engineering, AI, and social sciences**.

Knowledge transfer and cooperation with practice

The UHK strengthens the transfer of knowledge into practice and cooperates actively with industrial partners, the public sector and non-profit organizations. Key directions of knowledge transfer include:

- **Expansion of contract research and cooperation with industrial partners on applied projects**. Faculties newly involve **regional companies in research activities** in the field of digitalization, artificial intelligence and applied sciences;
- **Creation of a platform for support of start-ups and spin-off companies arising from the research projects of the UHK** which will provide methodological, legal and financial support for academic innovators. The FIM has already started cooperation on technology incubators with partners from abroad;
- **Cooperation with the Hradec Králové Region and the City of Hradec Králové on the development of regional innovations and support for smart solutions**, which includes research in the area of Smart Cities and environmental technologies;
- **Strengthening expert cooperation with public administration in strategic management and policy-making**, especially in the areas of **education strategies, health care and regional development**;
- Last but not least, the introduction of a transfer incubator. The UHK is aware of the reserves in the active search for application talents and transfer opportunities from among the UHK students and researchers working at the UHK. Therefore, the UHK plans to support these activities methodologically, financially, and through popularization.

Institutional resilience and open science

The UHK will continue to develop its institutional capacity to be able to respond effectively to global challenges in science, research and education. Emphasis will be placed on:

- **Digitization of administrative and scientific processes to increase the efficiency of science and research management**. The University has been implementing **modern tools for research data management and open access**, which will enable more effective sharing of scientific results;
- **Strengthening cybersecurity and research data protection in line with GDPR and European data security standards**. The University has been expanding training in **secure data management** and implementing FAIR standards for management of research outputs;
- **Implementation of the Open Science policy** which includes support for open data, open publishing and open collaboration. The UHK is committed to developing an **institutional repository for scientific publications** and supports actively **publishing in the OA mode;**
- The UHK is familiar with the principles of the Financial Analytical Office and the MV in the area of research security and is involved in national activities organized by the MŠMT in this area. The UHK is ready to implement these measures in its internal rules;
- **The UHK established the Ombudsperson in 2023 and will strengthen the principles of scientific integrity and ethics of scientific work through internal guidelines and codes of**

ethics to promote academic integrity that provides methodological support in the field of research ethics.

Human capital development

The development and care of human resources is one of the key factors for the long-term sustainability of scientific excellence, and the UHK will therefore focus on:

- **Supporting scientists at all stages of their career development through mentoring, professional training and mobility**. The UHK will further expand its **international doctoral internship** programme, which enables doctoral students to connect with top research teams abroad;
- **Strengthening gender-balanced policies and equal opportunities in academia**. The UHK continues implementing the **GEP** which includes measures to promote women in science and more balanced representation in academic management;
- **Increasing the attractiveness of academic careers for young scientists and PhD students** through improved funding conditions and support for research mobility. The UHK is preparing **new funding schemes for postdoctoral fellows, PhD students and junior researchers** that will enable stable funding for young researchers in the first years after completing their PhD;
- Facilitating the return for researchers after a career break through internal return projects but also by supporting them in obtaining external return projects. Institutional support in the form of part-time work, individual job settings and support are currently well set up but we will work to improve quality here as well.

5.3 Institutional tools and measures for the implementation of the research and development strategy

The HEI will describe its institutional and strategic tools (e.g., strategic management tools, tools created to support the implementation of research objectives, legal and organisational norms in relation to R&D&I support, etc.) that are designed to fulfil the research and development objectives for the next five-year period (Table 5.3.1), with an emphasis on:

- Supporting quality R&D&I.
- Excellent science.
- Innovative environment and increasing the international or disciplinary competitiveness of the HEI's research activities.
- Development of human potential.
- Institutional resilience.
- Adherence to ethical principles, scientific integrity and good practice in R&D&I.

Maximum 2000 words.

Self-assessment:

In order to meet the research and development objectives for the next five-year period, the UHK will use and strategically develop institutional and strategic tools in the areas of support for high-quality research, development and innovation, strategic management tools or legal and organisational standards in relation to R&D&I support.

The rules for obtaining and distributing research funding are an essential tool for promoting high-quality research. These include the rules for the distribution of the LCDRO, the PPK and, most importantly, the Internal Grant Calls. From the LCDRO perspective, a strategy was set in the previous period that fixed the input variables. From 2025 onwards, we will include more criteria in the LCDRO evaluation. The effect will be divided among Publication Outputs, Journal Outputs, Book Outputs, but also newly Applied Research Outputs. The distribution of institutional support for the long-term conceptual development of a research organisation (LCDRO) at the UHK from 2025 onwards is based on data available for the past 5 years and the methodology for the evaluation of research organisations. The aim is to set up a transparent and predictable funding allocation model that reflects the performance of individual faculties in key indicators of research activity and their strategic development potential. The main principles of support distribution take into account the evaluation of the university by the MŠMT under Module 1, the support of performance and excellence based on bibliometric and grant indicators, and the evaluation of applied results that have a direct impact on innovation, industrial collaboration and research commercialisation. The LCDRO Module 1 reflects the panel assessment of research outputs and other activities in the MODULE 1 evaluation. Outputs that have received a score of 1-3 out of 5 in the previous 4 evaluation periods are awarded. The LCDRO Module 2 is divided into three main categories: Publications in WoS indexed journals with an Article Influence Score (AIS), publications in JSc for FORD areas 5 and 6, Monographs (B) and Book Chapters (C). The LCDRO Module 3 focuses on the evaluation of applied results that have a direct impact on innovation, industrial collaborations and research commercialisation.

The UHK perceives internal grant competitions as an opportunity to provide targeted support to specific groups or phases of scientific development but also to support scientists to demonstrate excellence in the national and international field. Among the internal competitions that will be introduced or optimized in the coming period, we can mention:

- **Restart**. Internal competition to support the return of researchers after a career break. It will use funding from the OP JAK Returns in the first 3 years and subsequently will be funded from internal sources;

- **Postdoc**. Internal competition supporting postdocs in their research activities at the UHK and helping them to integrate into the community. A tool to determine the conditions for funding postdoc positions at the UHK;
- **ERC Incubator**. Internal competition for the preparation of ERC project submissions. Researchers who have not yet attempted to obtain an ERC project and almost or sufficiently meet the basic criteria were selected on the basis of the analysis. Therefore, the UHK will launch an internal grant call enabling researchers to prepare a project call and improve their scientific portfolio;
- **Bridge to Grant**. Internal competition to support positively evaluated but unfunded basic research projects as a bridging tool for the period until an improved project is submitted. The UHK is aware of the low throughput of national grant calls and will support scientists in basic research to achieve their goals at least partly without national funding.

Intellectual property and knowledge transfer rules will be innovated by the UHK through decrees on knowledge transfer that will focus on the current situation relating **patent protection, licensing and spin-off companies. The UHK has been involved in Transfer Platforms for the last 2 years; it collects inspiration and makes contacts there. In addition to the strategic documents that will address the formal side of TT, the UHK will introduce an internal competition** entitled Innovation Sprint **supporting students and scientists starting the transfers.**

Methodologies for supporting PhD students and young scientists, e.g., mentoring programmes, rules for organising **PhD meetings, and scholarships: In 2025, we introduced regular Doctoral Coffee Break under the auspices of the Doctoral School, aimed at sharing interdisciplinary perceptions among PhD students during smaller teambuilding meetings. The UHK perceives doctoral students and young researchers as key person to maintain and enhance excellence. Therefore, we will use, for example, the following mentoring programmes in the coming period:**

- **Peer mentoring,** where senior PhD students mentor newcomers;
- **Academic mentoring, using the experience of senior researchers** for guidance in career and research. This type of mentoring has so far been implemented partially at PhD Coffee Break meetings;
- **Industry mentoring** to connect with professional experts for applied research;
- **Doctoral Roundtables:** thematic roundtables with experienced researchers.

The proven PhD Summit, methodically serving to inspire and introduce first-year PhD students, will certainly be used in the years to come. Within this platform, a handbook for PhD students is being developed and PhD students have the opportunity to meet and discuss with many personalities from the UHK and the external research and transfer world.

To ensure the long-term sustainability of its research ecosystem, the UHK will focus on **modernising its research infrastructure** in line with the requirements of top scientific research. Strategic management of science will be strengthened through **internal evaluation processes** and optimisation of research strategies at faculty level.

In view of the growing demands for transparency in science, the UHK will implement fully Open Science in the coming period, including methodologies for using the national repository and support for open publishing. Emphasis will be placed on the protection of research data and the introduction of new security mechanisms for the management of research outputs.

As part of this commitment, the UHK will implement the following strategic tools:

- **Open Access Funds** as a financial support tool for publishing in open access scientific journals. The UHK perceives the pressure of open science from national funders and thus will support strategically publishing in open access journals beyond the free tokens within the CzechELib consortium;

- **Open Science Academy** methodology for academics and students on the principles of open science has been expanded and implemented gradually according to the expansion of Open Science awareness and the need for its implementation;
- **FAIR Data Hub** system for research data management according to FAIR principles;
- **Secure Data Management System** addressing security mechanisms for managing sensitive research data will build on the regularly expanding Cybersecurity Security Policy tool;
- **Data Stewardship Programme** as a tool for expert advice on data management and protection is currently under development. The positions of dedicated Data Stewards are gradually being created at the faculties, making this tool more and more necessary.

The University will establish a **platform for research ethics** which will include **an ombudsperson for academic integrity** and expert groups for assessing ethical issues in research.

The UHK will further expand its global network of collaborations and will focus on **winning prestigious international grants**, especially within **Horizon Europe and ERC**. An important goal is to **increase the international mobility of researchers**, including strengthening exchange programmes for PhD students and postdoctoral fellows. The University will also pursue further **strategic partnerships** to enable the sharing of research capacities and participation in top research projects. The UHK also plans to resubmit the European University Alliances project once the call is announced by the European Commission or, if this is an option, the UHK will join one of the existing alliances.

The UHK aims to create an **attractive academic environment** that promotes professional growth, belonging and respect for the University and its values. It will enhance the **career development of academic staff** through approaches implemented in the HR award, mentoring, professional training and opportunities for international internships. At the same time, the University will promote **staff wellbeing**, including flexible working arrangements and work-life balance.

Organisation of events for students and staff aimed at networking, multidisciplinary collaboration and sharing of scientific knowledge, such as conferences, workshops and social gatherings will also be an important element. The University will foster the **academic culture** that includes the active involvement of staff and students in the development of the University, building pride in the institution and strengthening the traditions of the UHK.

5.3.1 Institutional tools and measures for the implementation of the research and development strategy

Name of instrument/measure	Description of the tool/measure	Implementation status	Year
International strategic partnerships	Programme to support cooperation with international university partners	Implemented partially	2O27
Internal grant call – ERC Incubator	Programme to support the preparation of ERC projects from LCDRO funds including the funding of an external consultancy firm	Not-implemented	2026
Internal grant call – Restart	Programme to support return of researchers after a career break	Not-implemented	2026
Internal grant call – Postdoc	Programme to support postdoctoral fellows at the. The programme is in place but update in planned.	Implemented partially	2025
Internal grant call – Bridge to Grant	Programme to support high-quality yet unsuccessful grant projects	Not-implemented	2025
Innovation Sprint	Internal tool to support transfer activities and innovations	Not-implemented	2026
LCDRO 2025	New methodology of the LCDRO funding distribution to faculties depending on the success in past 4 years	Implemented partially	2025
Open Access Funds	Methodological tool to support Open Access publishing in excellent journals	Not-implemented	2025
Open Science Academy	Methodological tool to educate academicians in Open Science principles	Implemented partially	2026
PhD Coffee Break	Methodological tool for doctoral students to support interdisciplinary cooperation	Implemented partially	2026
PhD Summit	Platform for first-year doctoral students, including a handbook. The form has been implemented and is updated every year.	Implemented partially	2026
Doctoral mentoring programmes	Mentoring programmes as described above	Not-implemented	2027
Conflict of interest directive	Guidelines defining conflicts of interest at all levels of academia	Not-implemented	2025
Tools relating the safety of research and institutional resilience	Methodological and motivational tools on research safety and institutional resilience	Not-implemented	2026

5.4 Implementation of the recommendations in Module 5

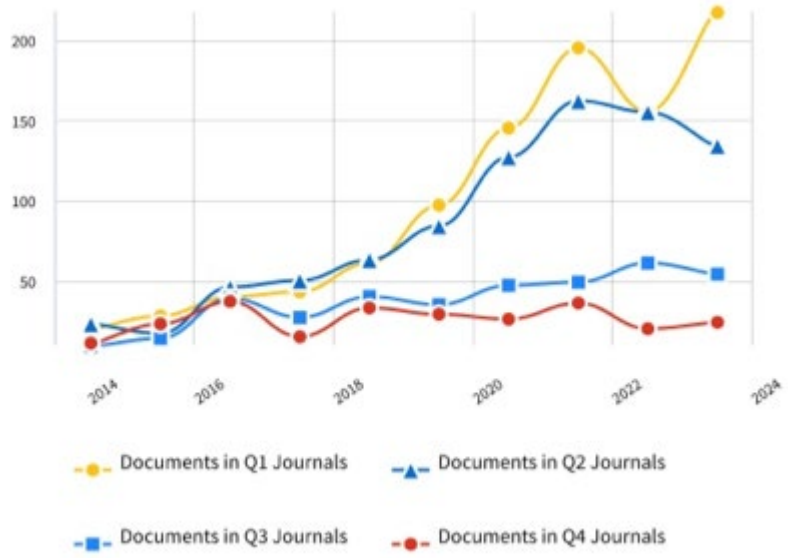
The HEI will briefly describe how it has implemented the recommendations for Module 5 from the previous evaluation period, if applicable.

Maximum 1000 words

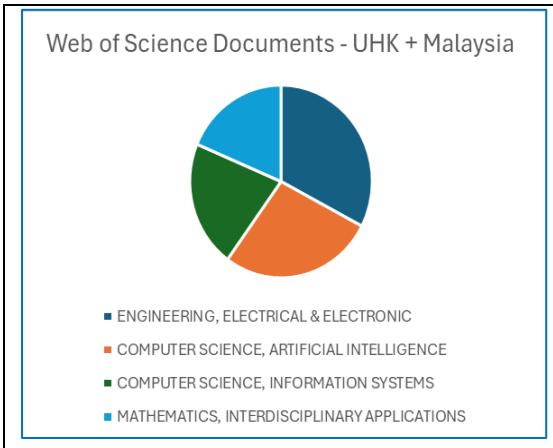
Self-assessment:

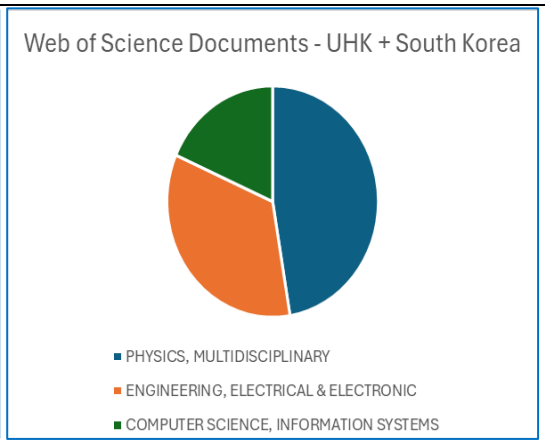
The UHK has appreciated the Committee's recommendations from the previous evaluation period, has implemented them into its strategies, especially into the SP UHK and the SRO, and has set up a number of support measures and activities in accordance with the recommendations. The individual recommendations are commented on in the following text.

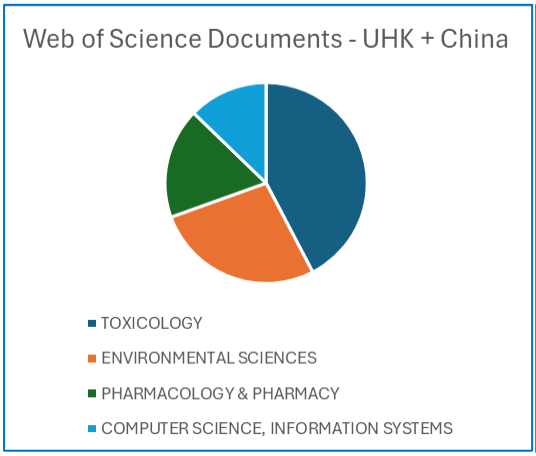
The UHK has taken into account the recommendation to *involve more outstanding scientists from abroad in order to increase gradually the number of excellent scientists* and the recommendation to *target international grant projects*. Experts from abroad were recruited for the UHK through the International Mobility projects at the UHK, but also through projects for postdoctoral positions. Overall, there has been a significant increase in publication activity in top journals, see the graph below (WoS: Letter, Article, Review).

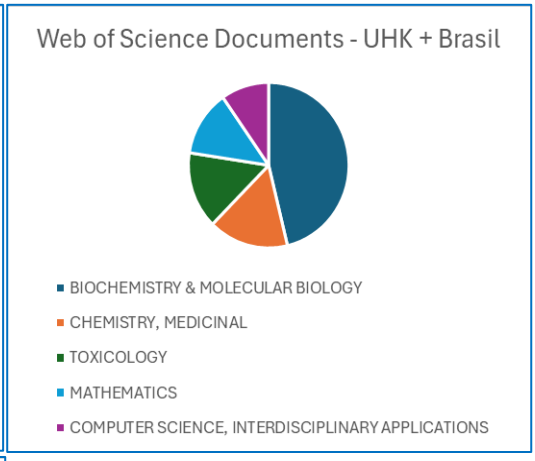


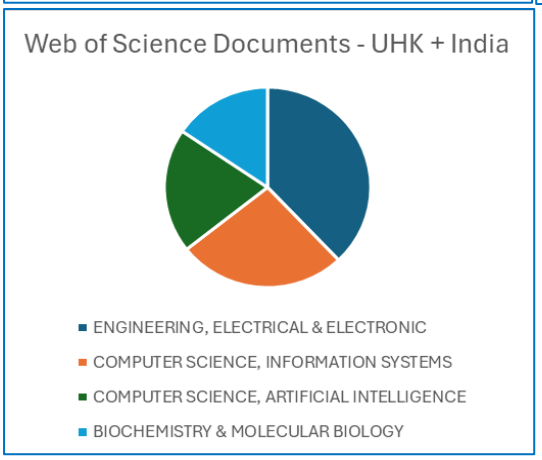
The UHK is participating actively in the international Time Machine consortium focused on digital humanities as well as in the Inter COST and Action COST research initiatives. The UHK has strengthened its cooperation within international research teams, especially in the areas shown below, with experts from Malaysia, South Korea, China, Brazil, and India.



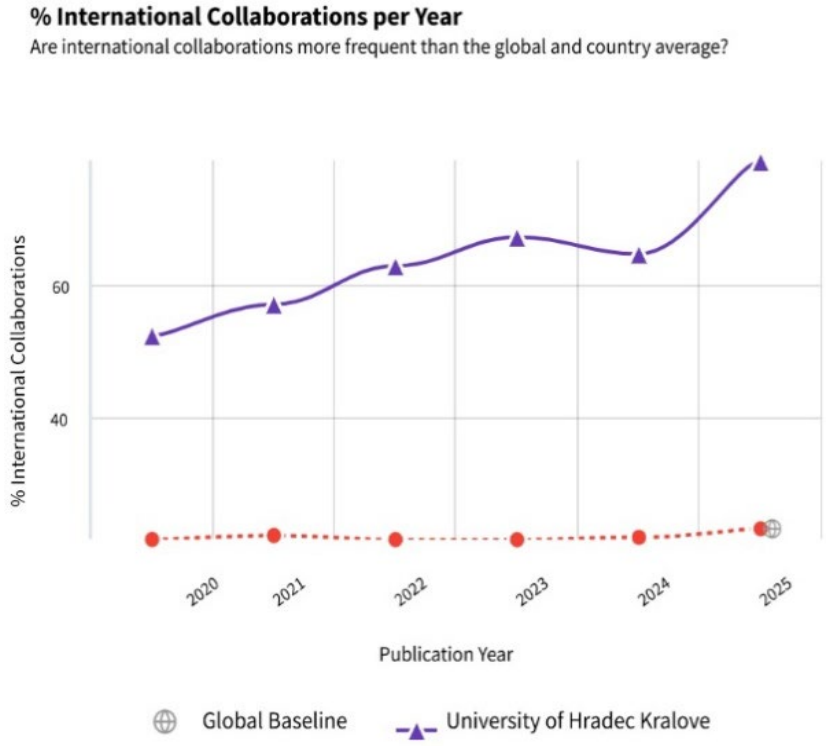








According to WOS, more than 65% of the UHK publications are produced in international cooperation.



Indicators: % International Collaborations.**Organization Name**: University of Hradec Kralove. **Collaborates With ID Type Group**:name. **Collaborates With ID Type**:fullName. **Schema**:Web of Science. **Dataset**: InCites Dataset

InCites dataset updated Feb 28, 2025. Includes Web of Science content indexed through Jan 31, 2025.Export Date: Mar 26, 2025.

The UHK has strengthened its position in international rankings, not only maintaining its position in **THE World University Rankings** (1201-1500th place in 2024, the 9th highest ranked university in the Czech Republic, moving even to the 5th place out of 17 ranked Czech universities in 2025), but was also ranked in the disciplinary rankings (Education Sciences, Life Sciences, Computer Sciences, Arts & Humanities, and Physical Sciences in 2025).

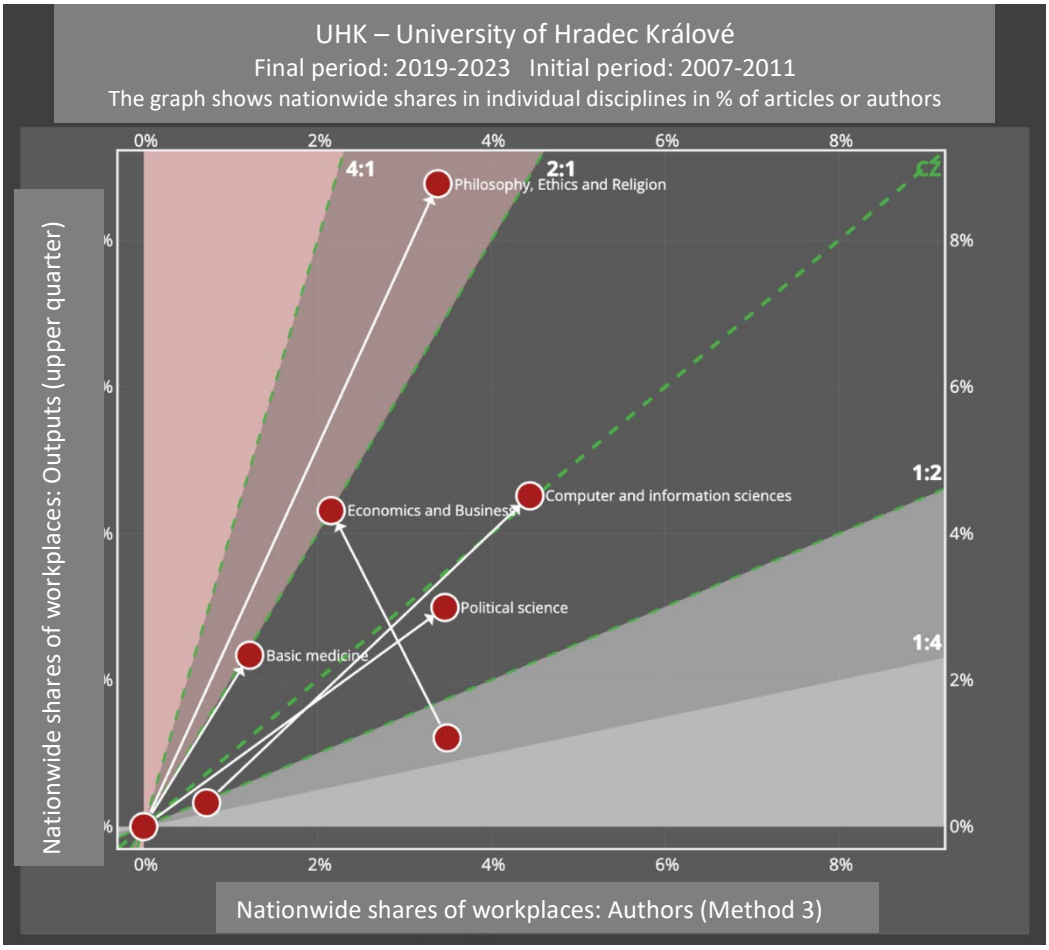
Since 2021, the UHK has also been part of the **QS World University Rankings** where it is in the 1001st-1200th place (403rd place in QS EEA, 41st in QS Eastern Europe). The **US News Best Global Universities 2025** ranks the UHK in 1,383rd place. The UHK is also ranked in the prestigious **Stanford Top 2% Scientists** ranking behind the FSci and the FIM.

The UHK has actively involved experts from the United Kingdom, Colombia, Malaysia, Japan and Spain in its IAB.

Representatives of the UHK, on the other hand, participate in the work of international panels, such as the Expert Evaluator in Horizon 2020, the Shadow Committee of the European Innovation Council and the European Innovation Ecosystems.

The UHK has implemented the recommendation *to focus on narrower specialisation and curriculum development based on research areas.* By developing key research areas, it has achieved an increase in national impact through the ratio of outputs in Q1 journals:

- Philosophy, Ethics and Religion = 11.5% in D1;
- Computer and Information Sciences = 1.2% in D1;
- Economics and Business = 1.3% in Q1;
- Political Science = 6.3% in Q1;
- Basic Medicine = 2.3% in Q1.



The UHK has strengthened its publishing activities in University-wide interdisciplinary research areas. Based on the topic modelling within the SIRIS analysis, 17 out of the 30 UHK research areas fell within the three strategic interdisciplinary research directions, which suggests a substantial concentration of research activities within the University's strategic focus areas (SIRIS, 2024).

As to the recommendation to *increase the number of grants for PhD students*, the UHK first analysed incentive schemes for fulfilling study obligations and timely completion of doctoral studies, established the Doctoral School and introduced an internal Superdoctoral Student project at the FSci and FIM to support excellent PhD students and their involvement in R&D projects. The number of grant opportunities for PhD students was also increased by the University-wide project Igráček (2022-2023) with the final Young Scientists Conference.

Recommendations to *focus on scientific research on areas relevant to sustainable development with national significance and recommendations to integrate a long-term vision to increase sustainable science and technology in student teaching* have been developed at several levels. The UHK has begun to focus on the SDGs and has implemented the Sustainability Strategy, including environmental aspects of research and teaching. The UHK has been working on digital transformation and its impact on the society and industry through the European Digital Innovation Hub project. The UHK also targets the **circular economy, renewable resources,** sustainability in the digital society, **and health innovation. The UHK** has been involved in research on the production of

protective equipment during the pandemic and has organised 3D printing of headbands and the production of face shields. The FIM has been addressing efficient urban mobility and sustainable technologies through its Smart Cities and Smart Transportation Systems projects.

The SIRIS data revealed the UHK's distinctive position across multiple SDGs, significantly outperforming national averages. “While the Czech Republic generally demonstrates lower alignment with SDGs compared to European countries, the UHK emerges as a notable exception, exceeding the national average on every SDG metric” (SIRIS, 2024).

The UHK has worked intensively with the recommendation to *strengthen the University knowledge transfer in terms of the third role of the University – including the sale and distribution of artistic outputs and consideration of objectives related to social inclusion, cultural activities and gender equality*.

The UHK has become a regular organizer of public events, workshops and lectures with the participation of experts, and has also started to use podcasts to inform about scientific activities and projects. It has been involved in initiatives such as the *Night of Scientists*, *Czech Republic Vaccinates*, and the *Sustainability Week.* The UHK organises events such as *Educational Days* for professionals and schools, *Let's Play Using Our Brains* for primary and secondary school pupils, *University Sports Afternoons* with the *Academic Run* (proceeds were donated to charity). Proceeds from student artwork (paintings and prints) are reinvested partially to support the students’ artwork.

The UHK has implemented the GEP and joined the Ministry of Labour and Social Affairs' project entitled 22% to Equality which analysed the gender pay equality. The UHK has created the Safe UHK initiative promoting equal opportunities and minority groups in the academic environment, or the HELP zone web platform improving the accessibility of counselling services at the UHK.

The UHK has also implemented a set of recommendations on *creating spin-off and start-up companies, focusing on creating prototypes, filing patent applications and publishing articles;* recommendations to *add product/prototype development, patenting and article publication to the UHK research motto;* recommendations to *establish a centre for research commercialisation*; and recommendations to *find a balance between the basic and applied research*.

The UHK has established the **TTO and its associated Board** and since 2020, it has been developing systematically support for spin-off and start-up companies, especially through the TAČR GAMA 2 programme focused on research and development with commercial potential, international projects Technology Transfer Together or The Technology and Knowledge Transfer Based on Norway-Czech Cooperation. As a consequence, the UHK has implemented licensing agreements and established cooperation with the application sphere (five new patent applications in 2022, a new spin-off company in 2023). Two licence agreements and one agreement on transfer of industrial property rights have been made. Currently, the UHK registers three spin-off companies (Grant Detection – 2018, ANUME s.r.o. – 2019, and TallWell s.r.o. – 2023) and owns or co-owns 12 patents, 15 utility models and 26 industrial designs. Under the Proof of Concept programme, the University supports the validation of R&D results, including the production and testing of prototypes with a view to their future commercialisation. The faculties benefit from projects focused on **TT** (e.g., the FIM develops artificial intelligence innovations and direct applications of digital transformation in industry). The UHK cooperates with institutions such as FN HK, Czech National Bank, Financial Office for the HK Region, Technology Centre Hradec Králové, Museum of East Bohemia, and Archeopark Všestary. In particular, CETA cooperates with regional museums on archaeological excavations.

The UHK has made a cooperation agreement with CUIP and has become a member of Transfera.cz and Prague.bio.

A LIST OF SUPPORTING DOCUMENTS/LINKS FOR MODULE 5

Document name	No. criteria	Location (link in HTML)
The Strategic Plan of the University of Hradec Králové 2021+	5.1 5.2 5.3 5.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/strategic-documents/the-strategic-plan-of-the-university-of-hradec-kralove-2021.pdf
Strategy of Research Organisation	5.1 5.2 5.3 5.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/strategic-documents/strategy-of-research-organisation-of-the-uhk-2023.pdf
Rector's Decree No. 14/2022 "Internationalization of the Hradec Králové University Environment"	5.1 5.2	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/internationalization-of-the-hradec-kralove-university-environment-2022.pdf
Gender Equality Strategy for 2021-2030	5.1	https://vlada.gov.cz/assets/ppov/gcfge/Gender-Equality-Strategy-2021-2030.pdf
National Research, Development and Innovation Policy of the Czech Republic 2021+	5.1	https://vyzkum.gov.cz/FrontClanek.aspx?idsekce=932081
European Research Area Policy Agenda	5.1	https://commission.europa.eu/system/files/2021-11/ec_rtd_era-policy-agenda-2021.pdf
Rector's Decree No. 01/2024 "Intellectual Property Exploitation at the University of Hradec Králové"	5.1 5.2 5.3 5.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/internal-regulations/intellectual-property-exploitation-at-the-university-of-hradec-kralove.pdf
Rector's Decree No. 17/2020 "Treatment of Intellectual Property at the University of Hradec Králové"	5.1 5.2 5.3 5.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/treatment-of-intellectual-property-at-the-university-of-hradec-kralove-2020.pdf
Rector's Decree No. 22/2021 "Reward for Originators of Industrial Property Rights"	5.1 5.2 5.3 5.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/reward-for-originators-of-industrial-property-rights-2021.pdf
Rules of procedure of the Commercialisation Board of the University of Hradec Králové	5.1 5.2 5.3 5.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/rules-of-procedure-of-the-commercialisation-board-of-the-university-of-hradec-kralove-2022.pdf
Gender Equality Plan of the University of Hradec Králové for the Period 2023-2025	5.2 5.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/gender-eguality-plan-of-the-university-of-hradec-kralove-2023-2025-2023.pdf?v20230301143300
Rector's Decree No. 6/2023 "Definition of Postdoctoral Researchers at the University of Hradec Králové"	5.2 5.3 5.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/internal-regulations/definition-of-postdoctoral-researchers-at-the-uhk-2023.pdf

Rector's Decree No. 20/2023 "Call for Competition for 2024-2026 Postdoctoral Job Positions at the University of Hradec Králové"	5.3 5.4	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Rector's Decree No. 12/2023 "Call for Competition for 2024-2026 Postdoctoral Job Positions at the University of Hradec Králové"	5.3 5.4	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Rector's Decree No. 06/2022 "Call for Competition for 2022 Postdoctoral Job Positions at the University of Hradec Králové"	5.3 5.4	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Rector's Decree No. 17/2021 "Call for Competition for Postdoctoral Job Positions at the University of Hradec Králové"	5.3 5.4	https://www.uhk.cz/en/university-of-hradec-kralove/about/central-departments/science-and-knowledge-transfer-office/evaluation-in-the-higher-education-institutions-segment-2025?dir=%2Fself-evaluation-report-2025-supporting-documents
Rector's Decree No. 14/2024 "Ombudsperson of the University of Hradec Králové"	5.2 5.3	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/ombudsperson-of-the-university-of-hradec-kralove-2024.pdf
Rector´s Decree No. 10/2021 "Call for competition for international mobility within the project "International Mobilities for Research Activities at the University of Hradec Králové II", registration number CZ.02.2.69/0.0/0.0/18_053/0017841"	5.4	https://www.uhk.cz/file/edee/univerzita-hradec-kralove/uhk/uredni-deska/vnitrni-predpisy-a-ridici-akty/ridici-akty/rektor/rektorske-vynosy/2021/call-for-competition-for-international-mobility-within-the-project-international-mobilities-for-research-activities-at-the-uhk-.pdf?v20210309110839
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Rector's Decree No. 08/2024 "Working Hours Scheduling, Flexible Working Hours and Telework of the UHK Employees"	5.3	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/working-hours-scheduling-flexible-working-hours-and-telework-of-the-uhk-employees-2024.pdf

Vice-Rector´s Instruction No. 09/2023 "Open Access Publishing"	5.3	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/open-access-publishing-2023.pdf
Rector's Decree No. 23/2021 "Student Grant Competition for Doctoral Students "Igráček UHK"	5.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/student-grant-competition-for-doctoral-students-igracek-uhk-2021.pdf
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Sustainable Development Strategy of the UHK until 2030	5.4	https://www.uhk.cz/file/edee/university-of-hradec-kralove/uhk/official-board/internal-regulations-guidelines-and-decrees/strategic-documents/sustainable-development-strategy-of-the-uhk.pdf