

REGISTRATION FORM FOR CZECH SCIENTIFIC INSTITUTION

1. Research institution data (name and address):

Faculty of Arts
Charles University
Náměstí Jana Palacha 2
116 38, Praha 1

2. Type of research institution: State university (státní vysoká škola)

3. Head of the institution: prof. MUDr. Milena Králíčková, Ph.D. - Rector

4. Contact information of designated person(s) for applicants:

Martin Pehal, Ph.D. - Vice-Dean for Grant and Project Management
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5. Research discipline in which the strong international position of the institution ensures establishing a Dioscuri Centre:

Arts, Humanities and Social Sciences: *Culture* - literary theory and comparative literature, history of literature, linguistics, library science, cultural studies, arts, architecture

6. Description of important research achievements from the selected discipline from the last 5 years including a list of the most important publications, patents, or other results:

Outside of the below mentioned selected publications, the most important research achievement at the CU Faculty of Arts (CUFA) consists in the establishment of a research eco-system dedicated to the study of linguistics, literature and philology from a large variety of perspectives. At the centre is a group of theoretical-experimental linguistic departments and work-groups: (1) Czech National Corpus focuses on compiling carefully designed data-sets, processed with state-of-the-art tools and accompanied by ample metadata. (2) The research lab EPoCC (Empirical Perspectives on Communication and Cognition), focuses on the study of language as a uniquely human phenomenon based in our general cognitive abilities and social practices. In one of its major long-term projects, the lab is building a multimodal searchable corpus of Czech language interactions, annotated in ELAN on various levels across modalities. (3) LABELS laboratory focuses on experimental research in early language acquisition, especially early sensitivity to speech and to grammatical categories. It has been using deep neural networks in visual experiments to aid the recognition and classification of visual stimuli. (4) Institute of phonetics focuses predominantly on the acoustic analysis of speech, on the perceptual testing of the function of sound patterns in communication, and on articulatory modifications of ordinary speech. The topic of speech styles is most important in the application domain, along with phonetic analyses aimed at improving algorithms used in speech technology.

In addition to these departments, the Faculty of Arts specializes in teaching dozens of modern (save Maltese, all remaining 23 EU official languages are being taught at CUFA – along with many others) and ancient languages (including ancient Egyptian, Assyrian etc.).

Publication pattern: over the last five years, 113 articles in the Web of Science database were published by faculty members in linguistics: 9 articles were published in the top-ranked journals in the first quartile (Q1), such as *Language Learning*, *Journal of Phonetics*, *Corpus Linguistics and Linguistic Theory*, *Natural Language Semantics*, *Studies in Second Language Acquisition*, or *Journal of Speech, Language and Hearing Research*. Another 13 papers appeared in Q2 journals, such as *Language and Speech*, *Journal of Psycholinguistic Research*, *Frontiers in Psychology*, *International Journal of Bilingualism*, *Journal of the Acoustical Society of America*, or *Journal of Cultural Heritage*. Monographs published with the most prestigious publishing houses (Brill, De Gruyter, Edinburgh University Press, Palgrave Macmillan, Peter Lang, or Routledge) are also a crucial mark of excellence. Dozens more publications appeared in peer-reviewed journals not indexed by WoS (Scopus, ERIH+ etc.).

Selected publications:

- Fidler, M. – Cvrček, V. (2019): Keymorph analysis, or how morphosyntax informs discourse. *Corpus Linguistics and Linguistic Theory*. 15(1), 39–70. DOI: 10.1515/cllt-2016-0073
- Kovářiková, D. - Škrabal, M. - Cvrček, V. - Lukešová, L. - Milička, J. (2020): Lexicographer's Lacunas or How to Deal with Missing Representative Dictionary Forms on the Example of Czech. *International Journal of Lexicography*, Volume 33(1), 90–103. DOI: 10.1093/ijl/ecz027
- Cvrček, V. - Laubeová, Z. - Lukeš, D. - Poukarová, P. - Řehořková, A. - Zasina, A. J. (2020): Author and register as sources of variation: A corpus-based study using elicited texts. *International Journal of Corpus Linguistics* 25(4), 461–488. DOI: 10.1075/ijcl.19020.cvr
- Milička, J. – Cvrček, V. – Lukešová, L. (2021): Modelling crosslinguistic n-gram correspondence in typologically different languages. *Languages in Contrast* 21(2), 217–249. DOI: 10.1075/lic.19018.mil

- Cvrček, V. – Komrsková, Z. – Lukeš, D. – Poukarová, P. – Řehořková, A. – Zasina, A.J.: From extra- to intratextual characteristics: Charting the space of variation in Czech through MDA. *Corpus Linguistics and Linguistic Theory* 17(2), s. 351-382. DOI: 10.1515/cllt-2018-0020
- Jehlička, J. & Lehečková, E. (2020). Multimodal event construals: the role of co-speech gestures in English vs Czech interactions. *Zeitschrift für Anglistik und Amerikanistik*, 68(4), 351–377.
- Fried, M. (2021). Discourse-referential patterns as a network of grammatical constructions. In: R. Enghels & M. S. Sansiñena (eds.), *Constructional approach(es) to discourse-level phenomena: theoretical and methodological challenges*. Special issue of *Constructions and Frames*, 13(1), 21-35. DOI: <https://doi.org/10.1075/cf.00046.fri>

7. List of no more than 3 important research projects in the selected discipline awarded in national and international calls to the institution in the last 5 years:

Project Name: *KREAS Creativity and Adaptability as Conditions of the Success of Europe in an Interrelated World* (CZ.02.1.01/0.0/0.0/16_019/0000734)

Funded by: European Regional Development Fund-Project

PI: Mirjam Fried

Total Budget: 18 700 000 EUR out of which 1 500 000 EUR is dedicated to the linguistics work-group

KREAS is a project of the Operational Programme Research, Development and Education (OP RDE), call: Excellent Research. The project has been awarded for the 2018-2022 period. The project holder is the Faculty of Arts, Charles University, defined by the call as a Research and Development Center. The project covers the main research areas of the Faculty and its chief research agenda is formed on the platform of three research centers (see hrc.ff.cuni.cz). The Principal Investigator of the project is the internationally acclaimed linguist Mirjam Fried. The purpose of the KREAS project is problem-oriented research in the humanities, focused on the foundations and nature of European identity, including a comparative study of non-European civilizations, all in a broader cultural perspective. This perspective includes philosophical, religious, communication, linguistic, and historical contexts.

Project Name: *Czech National Corpus project* (LM2018137)

Funded by: Ministry of Education, Youth and Sports of the Czech Republic within the framework of Large Research, Development and Innovation Infrastructures

PI: Michal Křen

Total Budget: 2 700 000 EUR

Project Name: The Effect of Talker Accent on Speech Sound Learning in Infants (GA18-01799S) **Funded by:** Czech Science Foundation

PI: Kateřina Chládková

Total Budget: 170 000 EUR

8. Description of the available laboratory and office space for a Dioscuri Centre:

CUFA and CUNI has recently reconstructed and equipped a brand-new research centre building in the Voršilská street. It includes approx. 1000 m² of office space, 66 work-stations etc. In case CUFA would be awarded the Dioscuri Centre, it would dedicate an appropriate amount of space to the excellence cluster according to their need.

9. List of the available research equipment for a Dioscuri Centre:

LABELS laboratory:

Besides standard behavioral and cognitive science equipment (computers with response devices for response time measurement), the lab has access to an EEG machine (owner Faculty of Arts). The machine is set up for ERP experiments with adults, children and infants. Eyelink 1000 eyetracker from SR Research (owner Institute of Psychology AS CR). Also, Institute of Psychology AS CR (co-operating research institution) has been funded and is in the process of purchasing an fNIRS (functional near-infrared spectroscopy) machine for optical measurement of cortical oxygenation in infants and adults.

Czech National Corpus:

The CNC project has at its disposal several servers whose hardware configurations correspond to the primary purpose of their use. Apart from the production servers that provide services for users, the project has 2 servers with higher computational capacity (one with several GPUs for neural network research) which are used for processing textual data and creating and training language models. The whole set of servers undergoes regular updates in 4 or 5-years cycles.

Laboratory of Phonetics:

The laboratory of the Institute of Phonetics features, apart from state-of-the-art computer equipment, a soundtreated recording studio for high-quality audio data acquisition and a sound-treated lecture room for administering group perceptual tests, as well as audio and video recording equipment for data acquisition in the field. Dedicated phonetic equipment features specialized software packages (including iVocalise, a i-vector-based speaker recognition software) and hardware/software tools for analyzing the voice source (electroglottograph and lingWAVES Voice Clinic Suite Pro), lingual articulation (electropalatograph and ultrasound) and nasality (nasometer).

10. List of the additional benefits (other than listed in the conditions for hosting a DC, see invitation) that the Institution declares to provide for a Dioscuri Centre (i.e.: additional funds, personal benefits, dual career options, relocation support or other):

Relocation support is provided by the CU Staff Welcome Centre in the following

- arranging residency formalities before and after arriving in the Czech Republic
- searching for accommodation at university facilities and commercial accommodation
- arranging medical services, including health insurance for family members
- finding school facilities for children
- help with opening a bank account, registration in the Charles University library system, orientation in the university environment
- integration into Charles University (workshops, educational seminars, cultural encounters)
- other practical issues relating to life in the Czech Republic
- free translations of relevant documents into English

11. Other information about the internationalization of the research institution, international researchers employed at the institution, the availability of English language seminars etc.:

The array of programmes in humanities and social sciences offered at the Faculty of Arts, Charles University (CUFA), is highly attractive for foreign students and researchers. Currently, CUFA has over 700 Erasmus+ contracts with different European universities and belongs to the most active faculties at Charles University in student and academic exchange. Departments at CUFA regularly offer courses in English for the benefit of exchange students: the number of different English courses offered at CUFA in the years 2019/20–2021/22 exceeded 1,200.

From 1992, CUFA also provides a successful English-taught study abroad programme ECES (East and Central European Studies) with English courses tailored to the needs of international visiting students. Courses are offered in liberal arts fields such as Art and Culture, Economics, History, Literature, Politics, Psychology, Sociology, and Czech language for beginners. The programme also includes a wide variety of extracurricular activities and is overseen by its own Academic Board.

CUFA also welcomes academics and researchers from abroad who wish to pursue their career in Prague. As of 2022, there are 101 foreign nationals employed as lecturers, researchers, or language instructors at the CUFA. Foreign employees hail from 38 different countries of origin, thus highlighting the diversity of international staff at CUFA. The highest numbers of foreign academics and researchers come from nearby countries of the Central and Eastern European region: Slovakia (19), Italy (7), Germany (7), Poland (5) and Russia (5). However, there are also employees from other European countries (e.g., Ireland, Norway, Switzerland etc.) and from countries across the globe, such as South Korea, Brazil, Iran, USA etc.

A majority of these foreign nationals (65 in total) are employed through various research funding schemes (PROGRES – Charles University general research funding scheme; JUNIOR – postdoctoral funding scheme at Charles University aimed at attracting international researchers; Operational Programme „Research, Development and Education“ of the Czech Ministry of Education, Youth and Sports and other external sources of funding).

CUFA also aims to international dimension of its research by attracting international postgraduate students. Due to the lack of PhD programmes accredited in English in the past, many foreign nationals also pursue their PhD studies in Czech language programmes. With the development of new accreditations in English in recent years, the number of PhD students in English language postgraduate programmes increased by 600 %; currently there are 35 students in these programmes. In addition, CUFA co-organizes an international PhD programme H2020 MSCA ITN EJD MOVES – Migration and Modernity: Historical and Cultural Challenges, which is run together with four other European institutions (University of Kent, Freie Universität Berlin, Université Paul Valéry, Montpellier III, Universidade do Porto).