

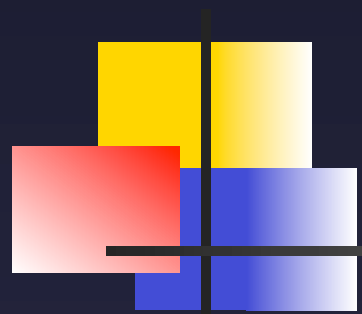
Early markers of bipolar disorder

From genetic risk to first symptoms

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Background

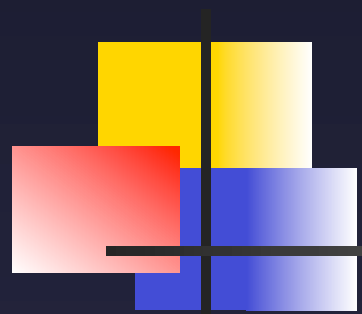
In retrospective studies 60% of adults with bipolar disorder (BD) report onset of the illness before the age of 18 and 28 % before the age of 13 years

There was 25 fold increase in visits to the outpatient clinics in the United States regarding juvenile BD between 1999-2003. The causes for this trend have not been fully clarified

Early diagnosis and therapy of BD arguably improves long term prognosis

on the other hand

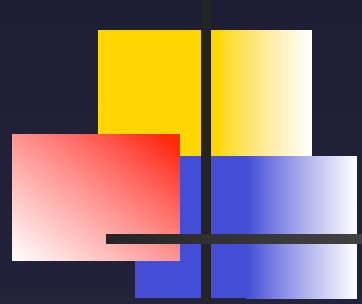
There are significant differences across studies in the USA, Canada and Europe in findings of prepubertal mania



Objectives of our project

- 1) To **identify trait and state markers of bipolar disorder** in the childhood and adolescence with the use of clinical, neuropsychological and neuroimaging methods
- 2) To **check stress level and quality of life of high risk offspring** and identify its relation to the development of psychopathological traits
- 3) To **develop evidence based diagnostic guidelines for risk assessment** and management of juvenile BD

General characteristics of the project



Study design: prospective case control observational study of subjects at risk of developing bipolar disorder

Inter-disciplinary project: Psychiatry (child, adult), Neurology (sleep specialist), Psychology, Neuroimaging

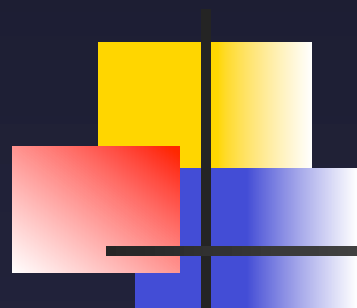
Four institutions collaborating:

Department of Child Psychiatry and Department of Imaging 2nd Faculty of Medicine

Prague Psychiatric Centre 3rd Faculty of Medicine

Department of Neurology 1st Faculty of Medicine

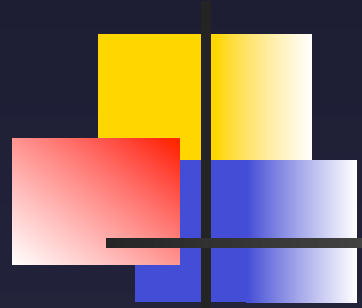
AND PARTNER FROM NORWAY



Method

Sample: offspring of bipolar parents and healthy parent offspring as controls

Timetable: Clinical interview 1/year
Sleep examination 1/year (7 days)
Clinical questionnaires 1/6 month
Neuropsychological examination (in/out)
Neuroimaging (MRI) (in/out)



Tools

Clinical semistructured interview (KSADS)

Neuropsychological examination (NEPSY and ANT batteries)

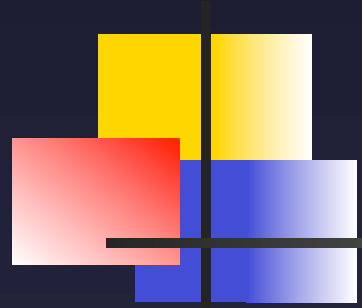
Temperament questionnaires (Rothbart's TMCQ, EATQ)

Affective and anxiety symptoms clinical questionnaires (GBI), MDQ-P, SCARED)

Quality of life and stress interviews and questionnaires (KIDSCREEN, SLES interview)

Actigraphy (Actiwatch)

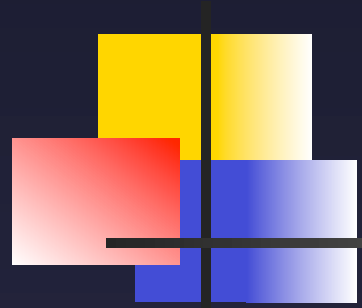
Volumetric analysis of MRI brain scan



Main primary results

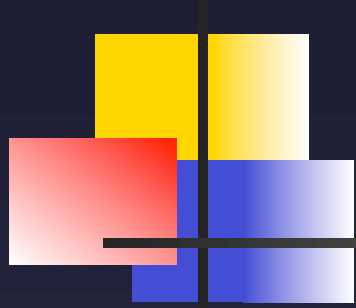
1. Quantitative and qualitative description of psychiatric morbidity in high risk offspring
2. Biological markers of genetic risk of bipolar disorder

Results will be presented at international psychiatric meetings (AACAP, ESCAP) and published in journals with impact factor



Secondary results

1. The project will help to optimize preventive and diagnostic procedures in children and adolescents at risk of developing BD, which will allow to apply early intervention designed to delay and reduce the impact of disease
2. enable the accessibility of screening instruments to pedopsychiatrists
3. a unique connection of international teams in child and adult psychiatry research will built a foundation for further longitudinal studies



Thank you for your interest !