

**Doctoral study program:**

**Form:** *doctoral present*

**Department:** Anatomy

**Supervisor:** Alemeh Zamani, PhD

**Ph.D. position:** Study the role of choroid plexus in Alzheimer's disease

**Annotation**

Early diagnosis of Alzheimer's Disease (AD) is one of the most demanding challenges in healthcare. It is, thus, crucial to discover the pathological pathway cascades or causality involved in the development and progression of the disease. The dissertation thesis aims to uncover the role of the choroid plexus, one of the most understudied and yet essential structures of the brain in physiologically normal and disease settings. The candidate will use cutting-edge techniques such as next-generation sequencing and mass-spectrometry-based proteomics to investigate the molecular events alterations in the choroid plexus during Alzheimer's disease development.

**Funding of the research**

MUNI/11/JRG/1143/2023

**Information on funding PGS positions**

It will include 15,000 CZK (provided by basic monthly scholarship + the specific research project of the Department of Anatomy) + 10,000 CZK from a 0.34 FTE provided by MUNI/11/JRG/1143/2023

**Requirements for the student according to the Board for the PhD studies in Healthcare**

**Simulation at MU**

- Graduate student of Medical School, Molecular Biology, Biochemistry, or relevant disciplines • Hands-on experiences with WB, PCR, and cell culture • Previous research experience in Alzheimer's disease studies is preferred • Active knowledge of English (min. B2)

**Supervisor**

- Appointed as Assistant professor at Masaryk University-Anatomy Department, Ph.D. and postdoctoral study in Japan, Experienced in electrophysiology and optogenetics, Publications in high-ranked journals
- Collaboration with institutes and academic stages: International collaboration with high-profile laboratories, as well as other faculties of Masaryk University
- Possible stage for the student: Participation in a dynamic and motivated research team, Opportunity to gain expertise in cutting-edge techniques

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