

## **PH.D. POSITION IN MOLECULAR PATHOLOGY RESEARCH GROUP**

Join our lab to help identify biomarkers associated with acute diverticulitis severity and predict disease course already at hospital admission using non-invasive sampling. Our research focuses on the relationship between the microbiome, host molecular profiles, and disease progression, with the aim of improving diagnostics. This project combines multiple omics approaches to uncover clinically relevant signatures linked to disease severity. Ph.D. student will receive hands-on training in modern molecular and computational methods at the interface of microbiology, biochemistry, and translational biomedical research.

**Project:** Multi-omic analysis of microbiome for predicting diverticulitis severity

**Supervisor:** assoc. prof. Jan Lochman, PhD

**Host institution:** Masaryk University, Brno, Czech Republic

**Department:** Faculty of Science, Department of Biochemistry

**Starting date:** September 2026 or February 2027

**We accept applications in two rounds:** by April 30, 2026 (preferred deadline)  
by November 30, 2026 (if the position remains unfilled)

**Candidate profile:** We are seeking a highly motivated, curious student eager to master state-of-the-art omics approaches and to contribute to the discovery of biomarkers with potential clinical relevance.

### **Requirements:**

- Master's degree in Biochemistry, Molecular Biology, Biotechnology, or related field.
- Good oral and written English communication skills.
- Proactive, well-organised, and systematic approach to scientific work
- Genuine interest in interdisciplinary research.
- Experience with molecular biology, sequencing techniques, and programming (e.g. Python, R) is an advantage.

### **We offer:**

- 4-year fully funded position in a study program Biochemistry.
- Opportunity to work on a clinically relevant project with translational potential.
- Close collaboration with our colleagues across Europe (Poland, Austria, Hungary).
- Support for short-term research stays abroad, international workshops and conferences.
- Highly supportive and positive environment at the department and the lab.
- Participation in teaching, mentoring students and outreach activities.
- Professional growth and the development of essential transferable and soft skills.

**Want to apply?** Please send a structured CV (max 2 pages) and a motivation letter (max 1 page) to [jllochman@sci.muni.cz](mailto:jllochman@sci.muni.cz). Do not hesitate to ask for specific details.