

# PhD position in Mathematical Modeling in Biology

at Faculty of Medicine and Faculty of Pharmacy in Hradec Králové, Charles University

## RESEARCH GROUP AND STUDY PROGRAM

The PhD position is available in the research group **Mathematical Pharmacy** at the Faculty of Pharmacy in Hradec Králové, Charles University, from October 1<sup>st</sup>, 2026. Formally, the student will enroll into the doctoral study program **Applied Physics and Mathematics in Medicine and Pharmacy**. For more information visit group's webpage: <https://portal.faf.cuni.cz/Groups/Mathematical-Pharmacy/>.

## PROJECT

The research project/dissertation entitled **Integrating Mathematical Modeling and Experimental Approaches in In Vitro Biology** aims to develop and optimize mathematical models of *in vitro* biology using high resolution experimental data. The student will have the opportunity to choose the field of application, virology or pharmacology.

## REQUIREMENTS

- MSc degree in Mathematics, Physics or Computer Science (or a related quantitative field),
- Experience with scientific computing and programming (MATLAB, Python, R or similar),
- B2 or higher level of English (written and spoken), Czech/Slovak language is an advantage
- Highly self-motivated, exceptionally organized and a team player.

## WE OFFER

- A joint, four-year, tuition-free PhD position at the Faculty of Medicine and the Faculty of Pharmacy in Hradec Králové, Charles University,
- Doctoral stipend (tax-exempt) according to the Czech law on Higher Education Institutions subject to annual valorization
- Additional income through employment at the Faculty of Pharmacy,
- Additional income through paid teaching assistantship in the Department of Computational and Physical Pharmacy – courses to select from include Applied Mathematics, Applied Statistics, Applied Computer Technology, Physical Chemistry and Biophysics
- Opportunity to apply for additional funding through university-wide graduate student grant scheme GAUK – Grant Agency of the Charles University,
- Three-months, funded internship at any of the partner universities through ERASMUS exchange program,
- Opportunity to attend international scientific conferences,
- Accommodation at the dorms available for foreign doctoral students.

## HOW TO APPLY

- Evaluation of candidates will proceed until June 30, 2026.
- Address your **motivation letter**, **CV**, and **contact information of 1-2 referees** to Dr. Veronika Bernhauerová on [bernhauve@faf.cuni.cz](mailto:bernhauve@faf.cuni.cz).
- Informal queries are highly encouraged.