

# Full-time position for Ph.D. candidate in MD simulations of enzymes

We are seeking a motivated colleague to fill in the open position of a Ph.D. student at the **Laboratory of Biomolecular Interactions and Transport** (www.labbit.eu) in SONATA BIS project funded by NCN. The position will be available as of **October 1**<sup>st</sup>, **2018**. The successful candidate will <u>study mechanisms governing the transport of multiple ligands via transport</u> <u>tunnels in enzymes, to disclose roles of direct interactions among ligands as well as allosteric effects on the tunnels mediated</u> <u>by protein-ligand interactions.</u> Such research will lead to the identification of structural features responsible for the cooperativity and interference among ligands. The acquired knowledge will be crucial for enabling discoveries of the molecular origins of transport-related pathologies, improvements of binding kinetics of inhibitors, and engineering of improved biocatalysts. **The laboratory is located in Poznan, Poland**, and is jointly affiliated to *the International Institute of Molecular and Cell Biology in Warsaw* and the *Institute of Molecular Biology and Biotechnology, Faculty of Biology, Adam Mickiewicz University in Poznan* – both rank among the top research institutes in Poland.

### Requirements

- master's degree in biophysics, bioinformatics, biochemistry, computational chemistry or related field; candidates expected to receive their degrees till mid-2018 might also be considered
- good knowledge of Linux OS and molecular dynamics simulations, preferably AMBER
- high motivation and enthusiasm
- basic scripting/programming skills, preferably Python
- fluency in English, both spoken and written

### Our offer

- fully funded position for **36 months** net fellowship **3,000 PLN/month** (about €750); note that living costs in Poland are very favorable
- friendly, dynamic and supportive environment
- training in advanced computational methods
- · opportunity to participate in international courses and conferences
- help with applications for additional funding during your studies

# How to apply

Please send your applications or additional questions to Prof. Jan Brezovsky: <u>janbre@amu.edu.pl</u> by **April 30, 2018**. The selected candidates will be invited for an interview taking place in May 2018. The application should be prepared as **a single PDF file in English** and contain:

- one-page cover letter describing your motivation
- Curriculum Vitae also containing the description of your publications, attended courses and conferences
- two letters of recommendation at least one should be from your direct supervisor
- a scan of your university degree certificates/diplomas, including the obtained grades/scores
- please include the following statement in your application: "I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the Personal Data Protection Act as of 29 August 1997, consolidated text: Journal of Laws 2016, item 922 as amended."

# Selected publications

- ACS Catalysis 6: 7597-7610, 2016
- Methods in Molecular Biology 1685: 25-42,2018
  - Biotechnology Advances 31: 38-49, 2013
- Nature Chemical Biology 10: 428-430, 2014

Nucleic Acids Research 44: W479-487, 2016

• Journal of Chemical Information and Modeling 55: 54-62, 2015



Laboratory of Biomolecular Interactions and Transport International Institute of Molecular and Cell Biology in Warsaw and

Institute of Molecular Biology and Biotechnology, Faculty of Biology Adam Mickiewicz University in Poznan



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IN POZNAŃ

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