



3-year PhD Fellowship in Scientific Database Development

ENAMINE, Research and Development, Kiev, Ukraine and The Computational Drug Design Group (Gloriam group), University of Copenhagen, Copenhagen, Denmark wishes to employ a PhD Fellow in Scientific Database Development. The project starts 1. February 2018 and lasts for 3 years.

Groups

You will first train 1,5 years jointly with all 5 PhD Fellows at the University of Copenhagen (Denmark). Subsequently, the last 1,5 years will be spent with two other fellow PhD students at ENAMINE (Kiev, Ukraine). The employer ENAMINE has the world's largest in-stock catalogue comprising over 2 million compounds and an excellent expertise in chemical databases and structure-based drug/ligand design.

The Gloriam group (gloriamgroup.org) conducts bioinformatics, scientific data analysis and computational drug design, tightly integrated with leading chemists and pharmacologists, and structure-function studies of G protein-coupled receptors (GPCRs) – one of the largest drug target families. The group also heads the GPCR community's main database and web server, GPCRdb (GPCRdb.org) serving ~1700 monthly users. The group currently has 15 members, funded mainly by an ERC Starting Grant and Lundbeck Foundation Fellowship, and has in the last 1,5 years published in e.g. *Nature*, *Nature Chemistry*, *Nucleic Acids Research* and *Bioinformatics*.

Project

The PhD fellowship is one of five that are part of the EU-funded project, SAFER (www.safer-itn.eu). This is an ambitious interdisciplinary European Industrial Doctorates (EID) programme under the Horizon 2020 Marie Skłodowska-Curie Actions (MSCA-ITN-EID, Grant agreement: 765657), which offers positions with competitive salaries and family allowances. PhD students will obtain ample scientific, business and transferrable skills at excellent research environments meriting themselves for international academic or industrial careers.

The ultimate scientific goal for the SAFER program is to gain molecular understanding and improve selectivity in treatments of CNS-related disorders. This will be done with a particular focus on the serotonin 5-HT_{2A} receptor – the primary target for many pharmaceuticals and hallucinogens. SAFER will design and prepare ligands for the receptor, generate and cross-interpret pharmacology and crystallographic data, and construct computational mechanistic models and databases that can explain and guide its experiments. This is fundamental to understand the biological and therapeutic effects, and to develop safer drugs.

Qualification requirements

Mandatory requirements

- A MSc degree in in bioinformatics, computer sciences or similar
- Solid knowledge in shell scripting, programming in Python or other languages, and web development
- Some experience of molecular biology
- Experience of data analysis
- Demonstrated ability to independently learn new concepts and solve biological problems
- Fluency in English and experience in writing scientific texts
- The candidate must have less than 4 years of research experience and must not have resided or carried out

his/her main activity in Ukraine for more than 12 months during the last 3 years immediately prior to the recruitment

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Additional meriting qualifications

Experience of, and skills in:

- G protein-coupled receptors
- Analysis of molecular structures

Key criteria for the assessment of applicants

- Professional qualifications relevant to the project
- Relevant work experience
- Publications
- Other professional activities
- Language skills
- Good interpersonal skills

Terms of employment

General for the Ukraine

Questions

For further information about the post, please contact Associate Professor David E. Gloriam via david.gloriam@sund.ku.dk or (+45) 93 56 54 49; or Professor Igor Komarov via ik214@yahoo.com.

Application

The application, in English, must be submitted in the online application form. The application must include the following appendices:

Appendix 1: curriculum vitae with documentation of education.

Appendix 2: a complete list of publications and list of submitted appendices.

Appendix 3: documentation of additional research qualifications.

ENAMINE and Ukraine

ENAMINE Ltd was founded in 1991 based on the rapidly increasing demand for new chemical compounds due to increased high throughput screening at the time. In over 15 years ENAMINE has been a world leading provider of Screening Compounds and Building Blocks. In ENAMINE, great attention is paid to the development of original and unique chemistry as diverse techniques and methodologies are the main contributors to novel compounds in drug discovery and development. <http://www.enamine.net/>

Kiev, the capital of Ukraine with more than 3 million people is the administrative, economic, scientific, cultural and educational center of the country. The city is known for its beauty and invaluable historical and cultural monuments, the art and architecture of Kiev are considered world treasures. Kiev has a very rich cultural life, with theatre, art and musical events all year a round. Kiev is also the scientific and educational center of Ukraine with several universities and science academies. <http://www.kiev.info/about/general.htm>

University of Copenhagen and Denmark

Founded in 1479, the University of Copenhagen is the oldest university in Denmark. With 37,000 students and 9,000 employees, it is among the largest universities in Scandinavia and one of the highest ranking in Europe. The University consists of six faculties, which cover Health and Medical Sciences, Humanities, Law, Science, Social Sciences and Theology. Read more at www.sund.ku.dk and www.drug.ku.dk.

Copenhagen is a modern capital with plenty of opportunities in culture, design, architecture, restaurants and a diverse nightlife. At the same time, the city offers beaches, beautiful parks and green nature areas, and the Copenhageners bike everywhere. The Danish society prioritises a good work-life balance, and the work culture is well adjusted for families with children. Read more at <http://ism.ku.dk/>.

Deadline: 20-10-2017

Employer: ENAMINE