

Place: University of Gdansk, Gdansk, Poland

Position: PostDoctoral Researcher (Investigator) in grant SONATA 15 *Lipophilic Prodrug Charge Masking (LPCM) as a novel strategy to enhance oral bioavailability of charged active peptides. Optimization and generalization of the method.*

The aim of the project is modification of peptides with known therapeutic value (e.g. oxytocin, octreotide), to obtain prodrugs with increased lipophilicity applying LPCM (Lipophilic Prodrug Charge Masking) method. This strategy assumes improvement of oral bioavailability of certain hydrophilic peptide drugs by masking their charge attaching various lipophilic groups.

Requirements:

- PhD degree in chemistry or biochemistry (obtained not earlier than in 2016);
- Basic knowledge of chemistry and biochemistry of biologically active peptides;
- Knowledge of permeability test on Caco-2 cell model and PAMPA test;
- Documented experience in experimental work in organic chemistry or/and in performing aforementioned biological assays (as an authorship or co-authorship of research papers in Journals from JCR list)
- Knowledge of chromatographic techniques and mass spectrometry;
- Knowledge of spectroscopy and its application for identification of organic compounds;
- Fluency in spoken and written English;
- Reliability, creativity, good ability to organize and plan experimental work,
- Good interpersonal skills, ability to work in group, commitment in research project, self-motivation;

Research tasks:

- Active participation in research work planned within this project;
- Development of the synthesis methodology of guanidinylating reagents for synthesis of planned prodrugs;
- Synthesis of planned peptides and prodrugs;
- Optimization of synthesis of prodrugs;
- Physicochemical analysis of obtained compounds;
- Permeability examination of obtained compounds (PAMPA test and Caco-2 model);
- Interpretation and analysis of obtained results, results of biological research and planning of further work;
- Participation in preparation of research papers;
- Presentation of obtained results on scientific conferences and symposia;

Final term for submitting offers: December 1, 2022

Decision term: December 7, 2022

The form of submitting offers: e-mail

Employment conditions: Employment contract for a period of 12 months

Salary: 10 000 PLN gross income (per month)

Additional information:

Preferred start date: January 2023.

Selected candidates will be invited for interview.

Please submit the following documents to Dr. Agata Gitlin Domagalska, agata.domagalska@ug.edu.pl
(with subject: PostDoc, Sonata)

1. Curriculum Vitae;
2. Cover letter describing research interest;
3. List of scientific achievements;
4. Copy of PhD Diploma;
5. Reference letter (opinion of at least one academic researcher with degree of professor regarding candidate's research skills and activities);