

## POSTDOC – BLOOD-BRAIN-BARRIER – CHEMICAL BIOLOGY

Position Title:	Postdoc – Chemical Biology
Organisation Unit:	Faculty of Chemistry Institute of Biological Chemistry Neuropeptide Research Group (A/Prof. Muttenthaler)
Type of Employment:	Part-time (>20h) or full-time (40h)
Further Information:	Applications accepted until position filled <a href="http://www.neuropeptidelab.com">www.neuropeptidelab.com</a>

### THE UNIVERSITY OF VIENNA

**Open to new ideas. Since 1365.** The University of Vienna (15 faculties, 4 centres, >150 fields of study, ~9,500 members of staff, >90,000 students) is a research university with high international visibility and a wide range of degree programs. The University of Vienna is committed to fundamental and applied research, research-led teaching, career development for young researchers and to a dialogue with economy and society. Appointments of high quality researchers is an important strategy of the University of Vienna to contribute to the education of future generations and to the society's ability to innovate.

### Organisational Environment

The **Department of Chemistry** with its young and diverse faculty offers a highly attractive environment for young researchers from around the world starting at the level of PhD students and postdocs towards junior group leaders that establish their own research field here. It is one of the largest postgraduate training centres in Austria and this highly intellectual and well-equipped environment is complemented by strong career development programs of the University of Vienna and other research organisations in Vienna.

The advertised position will be part of **Neuropeptide Research Group at the Institute of Biological Chemistry**. The Institute of Biological Chemistry is a centre for peptide and protein chemistry established in 2011. It is part of the Department of Chemistry at the University of Vienna with a strong link to the Medical University of Vienna (Centre for Physiology and Pharmacology), the Max F. Perutz Laboratories with their focus on Molecular and Structural Biology, and the Department of Food Chemistry and Toxicology. Together these departments form an outstanding environment for research at the interface of synthetic chemistry, molecular biology, pharmacology and medicine.

## POSITION DESCRIPTION

We seek talented postdoctoral fellows with strong experience in Molecular Biology, Peptide and Medicinal Chemistry, Chemical Biology or Pharmacology to join the Neuropeptide Research Group at the Institute of Biological Chemistry at the University of Vienna. The group is focused on the exploration of nature's biodiversity to develop advanced molecular probes and to discover novel therapeutic leads with applications in pain, cancer, memory, autism, gastrointestinal disorders and neurodegenerative diseases. The successful applicant will be responsible for the discovery, synthesis and characterisation of bioactive venom peptides that are able to cross the blood-brain-barrier with the overall aim to develop blood-brain-barrier shuttles.

### Duties

Duties and responsibilities include, but are not limited to:

#### Research Duties

- Establishment of blood-brain-barrier assays to drive drug discovery and target validation
- Synthesis and biophysical characterisation of peptides
- Structure-activity relationship studies
- Supervision and training of students and staff members
- Liaising with team members to promote the achievement of immediate project goals
- Preparation of research reports, manuscripts for publications and oral presentations

#### Administrative Duties

- Support with administrative tasks and grant applications
- Participation at research meetings and maintenance of an accurate lab book
- Chemical purchases and equipment management
- Any other duties as reasonably directed by your supervisor

### Organisational Relationships

The position reports to A/Prof. Markus Muttenthaler.

## SELECTION CRITERIA

### Essential

- PhD in the area of Chemistry, Chemical Biology, Molecular Biology, or Pharmacology
- Experience with cell/tissue culture and bioassays
- Experience in structure-activity relationship studies
- Well-developed laboratory and problem-solving skills
- Ability to work collaboratively with colleagues and across disciplines
- Excellent written and verbal communication skills in English

### Desirable

- Experience with peptide synthesis and characterisation
- Experience with venom peptide discovery
- Experience in medicinal chemistry and peptide drug development
- Experience in GPCR pharmacology (IP-1, cAMP, binding, BRET, FLIPR assays)
- Experience with recombinant expression systems for peptide/protein production
- Experience with peptide structure determination by NMR

## APPLICATION SUBMISSION

Please email your application package (cover letter, CV, statement addressing the individual selection criteria, contact details of two referees) to [markus.muttenthaler@univie.ac.at](mailto:markus.muttenthaler@univie.ac.at) with 'Application for Postdoc – Blood-Brain-Barrier – Chemical Biology' in the email subject line.