## Project Scientists to join the Superti-Furga Lab at CeMM (m/f/d)

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# Do you want to be part of a very large multidisciplinary effort committed to understand human membrane transporters governing the interface between biological systems and the environment?

We are looking for five dynamic individuals to complement the existing team and drive the effort to interpret, validate, publish and communicate the output of the public-private partnership RESOLUTE, comprising six pharmaceutical companies, one biotech and six academic research institutions (Superti-Furga et al, Nat Rev Drug Discov. 2020). Using hundreds of isogenic cell lines with loss and gain of function for each human SLC transporter, we obtained metabolomic/ionomic, transcriptomic and proteomic large-scale data sets annotated with subcellular localization. We also have single and combinatorial genetic data and a large collection of assays (Dvorak et al, Front. Pharmacol. 2021). You will work in the Giulio Superti-Furga group (CeMM, Vienna) in close collaboration with other project and data scientists. Together we want to bring knowledge on human transporters to the next level by turning data into biological insights.

## Project scientist in network biology and metabolism

Computational and systems biologist with an interest in integrative approaches to deorphanize transporters and derive a novel functional map linking using multidimensional data sets.

## Project scientist in metabolism and transporters

Biochemist/ molecular biologist/ cell biologist to validate selected transporter-metabolite relationships of a novel functional map using a variety of approaches.

## **Project scientist in protein biochemistry**

Protein biochemist to characterize and functionally validate new high-affinity binders to transporters.

## Project scientist in molecular cell biology

Molecular biologist / cell biologist to validate biochemically and functionally the most intriguing findings of the large-scale transporter interactome.

## Project scientist responsible for communication and business development

Scientist responsible for divulgation of the consortium output (data, reagents, technologies) and possible continuation/expansion of consortium activities.

## Requirements & desired qualifications

#### Project scientist in network biology and metabolism

- · PhD in computational biology, bioinformatics or similar experience
- Experience in systems biology research
- Experience in integrative, biological network analysis
- Strong data visualization skills
- Understanding of basic statistics and experience in application of advanced statistical approaches

#### Project scientist in metabolism and transporters

- PhD in cell biology, biochemistry, molecular biology or similar
- Proficient knowledge in mammalian metabolism
- Experience in mammalian cell culture (immortalized cell line models) and viral delivery systems
- Experience with biochemical/pharmacological analysis of transporters or membrane proteins desired
- Experience in at least one field of systems biology research is plus (genomics, transcriptomics, proteomics, metabolomics)

#### Project scientist in protein biochemistry

- PhD in biochemistry, biophysics, cell biology or similar
- Experience in quantitative biophysics
- Familiarity with validation technologies such as IF, WB, IP-MS
- Knowledge in structural biology is an advantage
- Experience with biochemical/pharmacological analysis of transporters or membrane proteins is a plus

#### Project scientist in molecular cell biology

- PhD in molecular biology, cell biology, biochemistry or similar
- Experience in site-directed mutagenesis and with CRISPR/Cas9 technologies
- Experience in mammalian cell culture (immortalized cell line models) and viral delivery systems
- Experience in validation technologies such as IF, WB, IP-MS
- Experience with biochemical/pharmacological analysis of transporters or membrane proteins is desirable

#### Project scientist responsible for communication and business development

- PhD in natural sciences or equivalent
- Excellent communication and writing skills
- Interest to travel on a regular basis
- Prior experience in promoting businesses or large initiatives

#### For all positions

- Inclination to work in a team is important
- A proactive attitude is required
- Excellent written / oral communication skills in English

#### The RESOLUTE Consortium

Starting on July 1<sup>st</sup> of 2018, the RESOLUTE consortium is supported by the Innovative Medicines Initiative (IMI, www.imi.europa.eu) with 13 partners from academia and the pharmaceutical industry and is coordinated

by the Superti-Furga laboratory. The RESOLUTE consortium's mission is to de-orphanize human SLC transporters at a large scale and unlock them as potential pharmacological targets (Superti-Furga et al, Nat Rev Drug Discov. 2020). With a well-defined action plan, we are currently pushing towards a paradigm-shift in the science of human cellular transporters by creating a massive, historical advance in knowledge on hundreds of individual transporters and the way they act together.

## The Superti-Furga Laboratory

The Superti-Furga group (http://superti-furga-lab.at/) is composed of an international and highly productive team of more than 30 scientists. As a leader in the field, the laboratory investigates how cells and biological systems in general manage access to the environment through cellular transport. In particular how access to nutrients and energy source is tuned to metabolism and need of individual cell types. Moreover, the lab has pioneered approaches for functional precision medicine. The laboratory operates on a truly multidisciplinary basis and involves functional genomics and proteomics, structural analysis, chemical biology, high-content imaging, bioinformatics and physiology, reflecting the blend of expertise of the laboratory members (Heinz et al, Nature. 2020; Girardi et al, Nat Chem Biol. 2020; Girardi et al, Nat Commun. 2020; Li et al, Nat Metab. 2021; Pemovska et al, Nat Commun. 2021).

### **About the Institute**

CeMM is one of Europe's leading biomedical research institutes. CeMM researchers routinely publish important discoveries in top journals. Over the last seven years, this included >10 papers in Nature/Cell/Science/NEJM and >30 papers in Nature/Cell sister journals – with a team of 120-150 scientists. Research at CeMM is exceptionally collaborative and has strong focus on medical impact, based on a profound molecular understanding of diseases such as cancer and immune disorders. CeMM is part of the Austrian Academy of Sciences and a founding member of EU-LIFE. It is located at the center of one of the largest medical campuses in Europe, within walking distance of Vienna's historical city center. A study by "The Scientist" put CeMM among the top-5 best places to work in academia worldwide (https://www.the-scientist.com/features/best-places-to-work-academia-2012-40676). Vienna is frequently ranked the world's best city to live. It is a United Nations city with a large English-speaking community. The official language at CeMM is English, and >49 different nationalities are represented at the institute. CeMM promotes equal opportunity and harbors a mix of different talents, backgrounds, competences, and interests.

### We offer

- Work within an experienced, interdisciplinary, and international team at one of Austria's leading research institutes
- Ample opportunities to contribute and gain experience in a key area of biomedical research and precision medicine
- An inspiring workplace with an international setting, strong team spirit, and an excellent work climate
- A wide range of social, cultural, and sports activities organized by the institute
- Excellent employee benefits including full insurance coverage (health, accident, retirement), health care services, subsidized cafeteria
- Starting monthly gross salary of at least EUR 3.945,90 (following the recommendations of FWF)
- Support for relocating to Vienna is provided (relocation reimbursement, visa support, etc.)

The contract for the position will be initially limited to 2 years, matching the project's duration until December 2023.

## **Application details**

Please apply online (https://cemm.jobbase.io/job/m3htrrf0) with cover letter, CV and contact details of 2 referees, all in a single PDF document with up to 3 pages. Applications are evaluated on a rolling basis and the starting date for all positions is as soon as possible.

Additional informa	tion	
City	Vienna	
Position type	Full-time employee	
Start of work	01.02.2022	

Responsible

Memo Mokhles

Apply now