

Postdoctoral Fellow (m/f/d) in Fungal Pathophysiology and Microbial Biofilms and Disease Modeling

Location: Vienna

Research group:Thomas Lion Group

Working hours:

Full-time

To strengthen our excellent research team, which is focused on understanding virulence and pathophysiology of human fungal pathogens and mixed microbial biofilms, we are looking for a highly motivated **postdoctoral researcher (m/f/d)**. The position is the frame of a collaboration between the Thomas Lion group at **St. Anna Children's Cancer Research Institute (CCRI)** and the Karl Kuchler group from **Max Perutz Labs Vienna (MPL)** at the Campus Vienna Biocenter. You will have the unique opportunity to be part of an interdisciplinary research effort aimed at studying fungal pathogenesis and the role of mixed microbial biofilms in microbial infections funded by a joint collaborative Austrian Science Fund FWF grant to Thomas Lion and Karl Kuchler.

Nogueira F, Pereira L, Jenull S, Kuchler K & Lion T (2019) *K. pneumoniae* prevents spore germination & hyphal development of *Aspergillus* spp; **Sci. Rep**, 9:218. doi: 10.1038/s41598-018-36524-8.

Nogueira MF, Jenull S, Tscherner M, Kuchler K[#] & Lion T[#] (2021). Multi-omics identifies biomarkers for fungal-bacterial co-infections (#corresponding authors).

Nogueira MF, Sharghi S, Kuchler K & Lion T (2019) Pathogenetic impact of bacterial-fungal interactions. **Microorganisms** 7(10). pii: E459. doi: 10.3390/microorganisms7100459.

Your responsibilities

- · Conduct competitive research at the highest level in inspiring and motivating environment at CCRI and MPL
- Collaborate with scientists at both MPL and CCRI and spent bench time at the MPL
- Join a highly cooperative team, dedicated to support your personal and professional development
- Take charge of projects and bring in your own ideas and expertise to make the projects your own. In parallel, you will have scope and are encouraged to develop your own ideas
- Independently monitor the literature and community resources to keep abreast latest developments and to identify information, data, and methods to integrate in your own work
- Write papers, visit conferences, review papers, apply for fellowships, and contribute to grants
- Contribute to the supervision of junior group members

Your profile

- PhD (or equivalent) in a relevant life sciences field, preferably experienced in working with fungal pathogens
- Strong background in genetics, molecular biology and fungal physiology (Candida spp and/or Aspergillus spp)
- Experience with state-of-the-art NGS methods and basic bioinformatic workflows would be an asset

- Depending on your career stage, at least one published first-author paper in a peer-reviewed scientific journal
- Excellent verbal and written communication skills in English (German not required)
- Proactive, independent, out-of-the box thinker and problem-solver
- Enthusiasm, self-motivation, and creativity and interactive personality with social skills

Our offer

- A FWF-funded postdoctoral position for three years (initial limitation of the contract for 1 year) with a contract at the CCRI
- International competitive research environments at the CCRI and the MPL at the Vienna Biocenter
- Outstanding working atmospheres in strong teams with excellent research and development opportunities
- · Access to state-of-the-art infrastructure at CCRI and MPL, including Vienna Biocenter core facilities
- Flexible working hours and other great benefits
- Great location in the center of Vienna, a capital of biomedical research in Europe with excellent quality of life
- A fair and attractive salary package according to salary scheme of the Austrian Science Fund FWF (https://www.fwf.ac.at/en/research-funding/personnel-costs/)

Who we are

The **St. Anna Children's Cancer Research Institute (CCRI)**, located in the center of Vienna, the world's most livable city and one of Europe's most important places for biomedical research and life sciences, is an international and multidisciplinary competence center striving to improve treatment of children and adolescents with cancer by connecting translational and clinical research with open-minded exploration of basic disease mechanisms. Through close cooperation between clinic and research, the CCRI provides an ideal environment for cutting-edge research and its translation into clinical practice. To achieve our ultimate goal of advancing the well-being of patients, the CCRI constantly pushes scientific boundaries and strongly promotes close collaboration and exchange with external institutions like the Medical University of Vienna, CeMM Research Center for Molecular Medicine of the Austrian Academy of Sciences, the Institute of Molecular Biotechnology of the Austrian Academy of Sciences (IMBA) and the Institute of Molecular Pathology (IMP).

The CCRI is an equal opportunity employer. We value diversity and are committed to providing a work environment of mutual respect to everyone without regard to ethnicity, religion, national origin, age, gender identity or expression, disability, or any other characteristic protected by applicable laws, regulations and ordinances.

Find more information here: https://science.ccri.at/ or https://kinderkrebsforschung.at/.

The Max Perutz Labs Vienna (MPL), a joint venture of the University of Vienna and the Medical University of Vienna (https://www.maxperutzlabs.ac.at/), located at the Campus Vienna Biocenter (VBC). The VBC hosts several private and public research institutes, and more than 20 biotech startup companies, all in all with almost 4000 scientists and staff from 70 nations, including some 300 PhD students and about the same number of postdoctoral researchers. The Karl Kuchler group has access to the world-class research infrastructure present at the VBC (see below).

Max Perutz Labs Vienna researchers have access to all routine molecular biology equipment as well as state-the-art equipment such as confocal-laser-scanning microscopes for live-cell imaging, small animal PET, spinning-disk and PALM microscopes, 600, 800 MHz NMRs, life-cell imaging with FRET, FRAP and microinjection systems, PALM, TIRF super-resolution microscopes. A new cryo-EM equipment park has just been added to the campus in 2018. Finally, MFPL also provides research support through a MoAb facility, and a dedicated animal infection rooms for mouse models of microbial pathogenesis and virulence experiments.

The **Vienna Biocenter Core Facility (VBCF)** (https://www.vbcf.ac.at/home/) is a government-funded state-of-the-art non-profit core service facility, offering a variety of services to VBC Research groups, including bioptics, high-end HTS robotics, genome-wide siRNA screening, animal model (mouse) phenotyping, NGS with Illumina IIGx, Ion-Torrent, Hi-Seq2500 /4000 / PacBio and all other state of the art next generation deep-sequencing techniques for RNA-Seq, Chip-Seq or ATAC-seq, as well as cutting-edge electron microscopy and a new cryo-EM machine. Importantly, one of the best-equipped and state-of-the-art proteomics facilities in Europe (ESI- LTQ, ESI-Q-STAR Elite, MALDI-TOF/TOF, iTRAQ quantifications, SILAC, SRM, ESI FT-ICRLTQ, Q-trap4000, OrbiTrap Velos with ETD, LTQ compatible with ETD for PTM determinations) is available through the VBCF. A national collaborator is a renowned proteomics expert, Markus Hartl (see CV), who has been in charge of the MFPL proteomics facility (LTQ-ETD, Q-STAR Elite, MALDI-TOF/TOF, Q-trap 5500, OrbiTrapVelos with ETD) before the merger with the VBCF. This expertise has been instrumental for the proteomic analysis establishing the acetylomes of T cells and *Candida albicans*.

Your application

We are looking forward to your application! Applications should at least contain your Curriculum Vitae, a cover letter, list of publications (please mark / explain your three top contributions), and the contact details of three references. The application deadline is the 30th of September 2021. Applications will be reviewed on a rolling basis until the position is filled.

