POST-DOCTORAL POSITIONS
Rare Immune Disorders | High-content cell imaging | Bioinformatics

at the Ludwig Boltzmann Institute for Rare and Undiagnosed Diseases (LBI-RUD) in Vienna, Austria

LBI-RUD, a young and innovative institute pursuing basic and translational research on rare genetic diseases, is looking for 2 highly motivated postdoctoral fellows to take part in exciting projects at the interface of rare genetic diseases affecting the immune system, network biology and precision medicine.

The projects
Rare and undiagnosed diseases offer unique research opportunities to identify key genes and mechanisms relevant to human physiology and diseases. The overarching goal of both projects is to rationalize patient-specific workflows from gene discovery and underlying pathomechanisms to targeted therapy. The project led by Kaan Boztug will combine state-of-the-art genomic technologies, cellular and molecular approaches and network biology to discover novel disease etiologies underlying rare immunodeficiencies. An interactome-based network biology approach will be implemented to reveal associations between rare disease clusters and more common immune disorders. This approach will also serve as a framework to identify therapeutic strategies aiming at correcting aberrant molecular pathways. The project will benefit from the lab’s strong record in characterizing disorders involving autoimmunity and/or autoinflammation (Ozen, Comrie, Ardy et al., NEJM 2017; Salzer et al., Nat Immunol 2016; Dobbs, Domínguez Conde, Zhang, Parolini et al., NEJM 2015).

The project lead by Loïc Dupré aims at implementing innovative high-content cell imaging assays to systematically identify and dissect lymphocyte defects in immunodeficient patients. Cellular signatures will be integrated on a protein-protein interaction network to assist the identification of novel immunodeficiency-causing genetic variants and to yield maps of the molecular networks controlling fundamental aspects of human lymphocyte biology. Furthermore, the newly developed assays will serve as a basis for small molecule screens aiming at correcting the identified defects. The project will benefit from the group’s expertise in image-based analysis of immune cell function (Pfajfer, Seidel et al., Blood 2017; Malet-Engra et al., Curr Biol 2015, Vasconcelos et al., Cell Rep 2015).

Both projects will be closely connected to the research of the neighboring laboratory of Jörg Menche (CeMM), who will provide expertise in the integration of complex datasets derived from post-genomic technologies through the lens of network science (Menche et al., Science 2015).

The Institute
The Ludwig Boltzmann Institute for Rare and Undiagnosed Diseases (LBI-RUD) is directed by Kaan Boztug, a world-leading expert in primary immunodeficiency research. Its level of excellence is attested by two ERC Starting Grants attributed to Kaan Boztug and Principal Investigator Christoph Bock. The institute is situated in a beautiful, bright, and perfectly designed building with outstanding design and state-of-the-art laboratories and technology platforms, and strategically located next to one of the world’s largest university hospitals in the heart of the city. LBI-RUD is deeply integrated with its renowned partner institutions, namely the CeMM Research Center for Molecular Medicine of the Austrian Academy of Sciences, the Medical University of Vienna, and the Children’s Cancer Research Institute of the St. Anna Children’s Hospital, and, therefore perfectly situated to benefit from strong translational research long established by leading-edge research groups.

For more information visit: www.rare-diseases.at
Why you want to join our team:

• You want to pursue meaningful research at the highest level in an inspiring and international working environment.
• You want to be part of the next generation of scientists that shape the future of medicine and value our numerous possibilities for personal and professional growth.
• You appreciate our young and dynamic working atmosphere and the possibility to join our cultural, social and sports activities.
• You appreciate the help and assistance we offer to all our employees, their spouses and family members in terms of visa and relocation procedures, dual-career and childcare services, and others.
• You wish to receive a competitive salary: your position will be remunerated according to FWF personnel costs (https://www.fwf.ac.at/en/research-funding/personnel-costs/) depending on qualifications and experience.

Why we want you to join our team:

• You are a proactive and independent thinker with a strong background in Immunology, Genetics, Cellular and Molecular Biology, Cell imaging, Bioinformatics, Systems or Network Biology, or similar.
• You are enthusiastic and passionate about science.
• You are motivated to find innovative, creative and free-spirited solutions to open research questions.
• You love to communicate, to collaborate, to connect different scientific disciplines and to contribute to multidisciplinary and multicultural teams.

Application Details

Please apply with a cover letter describing your career goals and explaining why you are the ideal candidate for this position, your detailed CV and contact details of 2-3 referees. Please indicate in your cover letter which lab you would preferably like to join and send your full application in one single PDF file to: application@rud.lbg.ac.at (using the reference code #PD/RUD17).

Initial application deadline is 30th of November 2017, but applications will continuously be reviewed and the call will remain open until the position is filled.

Join Austria’s new research institute for rare and undiagnosed diseases research!