

Master Student in Immunometabolism (m/f/d)

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*We are recruiting an ambitious **master thesis student** who wants to pursue groundbreaking research in the areas of immunometabolism. It will be based in the laboratory of Clarissa Campbell at the **CeMM Research Center for Molecular Medicine of the Austrian Academy of Sciences in Vienna**.*

The Project

The Campbell Group is looking for a motivated and passionate master's student to support a project aiming to understand the systemic and tissue specific metabolic adaptations which occur during helminth infection. We will use the model helminth, *Heligmosomoides polygyrus*, to understand the interplay between host-metabolism and the anti-helminthic response. Your tasks will include:

- RNA extraction and quantitative-PCR
- Adipose and immune cell culture
- Lipolysis assays
- Immune cell isolation from tissues – e.g. adipose, liver, small intestine
- Flow cytometry staining and acquisition

You will receive all training required, after which you will carry out experiments independently. You will also participate and present at weekly group meetings.

Your Profile

We are looking for an outstanding Master student with a strong background in immunology/molecular biology with a time commitment of 6 months.

- Currently pursuing a life sciences MSc degree
- Strong interest in the metabolism and immunology fields
- Basic laboratory experience (e.g. PCR, cell culture)
- Excellent written and oral communication skills in English
- Reliable, independent, curious, ability to work in a collaborative environment

The Campbell Lab

We are a highly collaborative team. We enjoy curiosity-driven research (*what if...?*) and want to shift paradigms in biology. We believe that understanding commensal microbes is the key to understanding our own physiology. We combine microbial engineering, synthetic biology, animal models, transcriptional and metabolic profiling and flow cytometry to address the following questions: How do gut bacteria respond to food intake? What metabolites do they produce? How does our immune system interpret these metabolites?

What is the impact of microbiota-derived metabolites and systemic metabolic changes on physiology during health and disease? We are also excited to be the first group to set up a gnotobiotic husbandry operation in Austria!

The Principal Investigator

Clarissa Campbell joined CeMM as a principal investigator in July 2021. She studied biology with a minor in genetics at the Federal University of Rio de Janeiro (UFRJ) and subsequently earned a master's degree from the Oswaldo Cruz Foundation (FIOCRUZ), investigating how bacterial molecules exert immunomodulatory effects on mammalian cells via nuclear receptors, a topic she would continue to explore throughout her career. She joined the Tri-Institutional Immunology and Microbial Pathogenesis Program at Weill Cornell Medical College in New York as a graduate student where she specialized in mucosal immunology and regulatory T (Treg) cell biology. After obtaining her PhD, Clarissa Campbell remained under the mentorship of Dr. Alexander Rudensky at Memorial Sloan Kettering Cancer Center to continue her work on host-commensal interactions and pursue broader scientific questions bridging the fields of immunology and metabolism. Her research has characterized a circuit whereby microbial metabolites including short-chain fatty acids and secondary bile acids facilitate the differentiation of peripherally induced Treg cells, which in turn suppress immune responses to colonization and preserve a niche for a group of intestinal bacteria. More recently, she found that a bile acid sensing nuclear receptor contributes to the cell-intrinsic responsiveness of effector T cells to fasting. Her lab is interested in investigating how changes in microbial and organismal metabolism contribute to regulating immune-cell function. She is the recipient of the 2023 FEBS Excellence Award, the ERC Starting Grant (2023), and is part of the FWF SFB HIT- HDAC modulation in T cells (2023), the FWF Cluster of Excellence Microplanet - Microbiomes drive Planetary Health (2023) and the FWF Research Group NeoGIBA - the Gut-brain-Immune axis in premature neonates (2024).

About the Institute

CeMM is an international research institute of the Austrian Academy of Sciences and a founding member of EU-LIFE. The mission of CeMM, the Research Center for Molecular Medicine of the Austrian Academy of Sciences is to achieve maximum scientific innovation in molecular medicine to improve healthcare. At CeMM, an international and creative team of scientists and medical doctors pursues free-minded basic life science research in a large and vibrant hospital environment of outstanding medical tradition and practice. At CeMM, an international and creative team of scientists and medical doctors pursues free-minded basic life science research in a large and vibrant hospital environment of outstanding medical tradition and practice. CeMM's research is based on post-genomic technologies and focuses on societally important diseases, such as immune disorders and infections, cancer, aging and metabolic disorders. CeMM operates in a unique mode of super-cooperation, connecting biology with medicine, experiments with computation, discovery with translation, and science with society and the arts. CeMM discovers and develops technologies to explore human biology with the purpose of defeating disease at its roots. Because Science is our Medicine! CeMM trains a modern blend of biomedical scientists and is located at the campus of the General Hospital and the Medical University of Vienna. CeMM is a proud recipient of the HR Excellence in Research Award (HRS4R). This award indicates that CeMM takes care of the well-being of its employees, that the recruitment process is open, fair, and transparent, and that CeMM offers professional appraisals and career development procedures. More than 150 people from 47 nationalities are working at CeMM. The institute promotes equal opportunity and harbors a mix of different talents, backgrounds, competences, and interests. www.cemm.at

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
- Monthly gross salary of EUR 1.349,60 for 20 hours/ week (following the [recommendations of FWF](#))
- Support for relocating to Vienna is provided (relocation reimbursement, visa support, etc.)

Please apply online (<https://cemm.onlyfy.jobs/job/k3id78qk>) with cover letter, CV, certificates (high school & university Diploma/grades) and contact details of 2 referees. Any application received by Oct 15th 2025 will be considered.

Additional information

City	Vienna
Position type	Part-time employee
Start of work	01.12.2025

Responsible

Memo Mokhles

Apply now