CeVV PRE-ERC POSTDOC PROGRAM

Open Postdoc Positions

We are recruiting a group of **postdocs** who are eager to pursue ground-breaking biomedical research, and we will help them to establish themselves as **future scientific leaders**. This postdoc program is designed to prepare postdoctoral researchers for a successful ERC Starting Grant application or equivalent and for an independent research career in top research organisations in Europe and around the world.

The postdoc program is based at the **CeMM Research Center for Molecular Medicine of the Austrian Academy of Sciences in Vienna**, one of Europe's leading centres for basic biomedical research – with clinical translation in mind. Our partners are the Medical University of Vienna and the St. Anna Children's Cancer Research Institute (CCRI). Selected candidates will join one of CeMM's research groups for 3 to 6 years, addressing ambitious research questions in areas such as cancer, immunology, chemical biology, epigenetics, metabolism, genomic medicine, and ageing research. Research projects will focus on medically relevant problems, including disease mechanisms, modern therapeutics, and diagnostic strategies. On top of this, postdocs will receive extensive career development and leadership training from the entire CeMM Faculty and additional experts in a highly collaborative and supportive environment.

What we offer:

- A unique blend of a frontier research environment at top level with a strong medical and translational focus through the hospital setting and the connections to biotech and pharma.
- An international group of highly collaborative colleagues that will help you achieve your scientific and career goals.
- Top-notch environment with the ideas, projects, resources, infrastructure, collaborations, and mindset for ground-breaking research.
- Excellent track record of past postdocs who have become internationally successful principal investigators, professors, entrepreneurs.
- Strong focus on disease biology and translational research: cancer, metabolic disorders, inflammation/infection, aging, drug discovery.
- Interdisciplinary projects connecting biology with medicine, experiments with computation, and discovery with translation.
- Unique opportunity to engage in close interactions with physicians and clinical researchers at the Medical University of Vienna on one of Europe's largest medical campuses.
- Opportunities to collaborate with industry (biotech/pharma) and to get involved in academic start-up/spin-off companies.
- Training program in project management, scientific writing, visual communication, entrepreneurship, leadership, and data science.
- Special training for writing successful ERC Starting Grants as a 'ticket' to an outstanding academic career.



- Being part of a thriving academic and social community in Vienna, one of the cities with the best quality of life in the world.
- A competitive postdoc salary of EUR 4,351.90 gross monthly (following the recommendations of FWF), paid 14 times yearly.
- The CeMM employment contract includes full insurance (health, accident, pension) and a one-off payment for moving from abroad.
- CeMM's HR department and administrative team offer support with relocation, visa applications, onboarding, family support, etc.

Whom we are looking for:

- Candidates who want to pursue innovative biomedical research and substantially advance their scientific career.
- Candidates with international professional experience and enhanced potential to receive an ERC Starting Grant in the future.
- Open to both PhD (natural sciences) and MD (medical sciences) holders.
- From a variety of academic backgrounds: molecular biology, biomedical research, bioinformatics, biochemistry, bioengineering, etc.
- With the motivation, skills, experiences, and initial achievements (subject to academic age) to qualify for a competitive postdoc program.
- Required are scientific quality and originality, as well as a collaborative and interdisciplinary mindset.

Potential projects:

We are open to ideas that fit into the broader scope and mission of the CeMM Research Center for Molecular Medicine and expressions of interest in the research of all groups, but concrete projects and groups offering positions are:

- Bioinformatics for precision medicine (<u>Bock Lab</u>). Integrative analysis of single-cell multi-omics and spatial imaging for cancer, immunology, and epigenetic ageing clocks. Get involved in the Human Cell Atlas (single-cell analytics) and/or the European Lab for Learning & Intelligent Systems (ML/AI).
- Technology Development for Molecular Biomedicine (<u>Bock Lab</u>). "Progress in science depends on new techniques, new discoveries and new ideas, probably in that order" Sydney Brenner. We are open to ideas for exciting new technologies in single-cell & spatial profiling, genome engineering, synthetic biology, organoids, and cell-based therapy.
- Discovery of novel bacterial immunoregulatory metabolites (<u>Campbell Lab</u>).
- Bioinformatics in chronic (vascular) liver disease (<u>de Rooij Lab</u> and <u>Reiberger Lab</u>): Integrative analysis
 of transcriptomics, metabolomics, and radiomics data to unravel novel liver disease and angiogenesis
 mechanisms.
- Metabolic landscapes in the tumour microenvironment controlling anti-tumour immunity (<u>Maier Lab</u>).
 We will employ an in vivo CRISPR screen to modulate metabolite availability at the tumor site and assess resulting immune cell infiltration and polarization by high-dimensional imaging.



- Premetastatic niches in tumor-draining lymph nodes (<u>Maier Lab</u>). We are investigating how the tumor reprograms the draining lymph node, and how altered lymph node niches translate into suppressed anti-tumor immunity. Areas of interest include proteomics of tumor-derived factors, high-dimensional imaging, mouse models, and patient derived material including primary lymph node cell culture.
- Chromatin modifiers in haematopoiesis and leukaemia (<u>Seruggia Lab</u>). We use in vitro and in vivo
 genome editing to identify and characterize new cancer vulnerabilities. We are interested in cancer
 dependencies, in non-mutational cancer evolution and in the role of enhancers in disease.
- Exploiting membrane transporters to target manganese neurotoxicity (<u>Superti-Furga Lab</u>).
- Molecular glues to target gene control (<u>Winter Lab</u>). We are interested in the synthesis, identification, and characterization of small-molecules that functionally rewire transcriptional circuits in cancer. To this goal, we leverage various functional genomics and proteomics tools, aiming to holistically address molecular mechanisms of drug action at high resolution and precision.

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. CeMM's research is based on post-genomic technologies and focuses on societally important diseases, such as immune disorders and infections, cancer, and metabolic disorders. An additional focus lies on ageing research. 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 on the campus of the General Hospital and the Medical University of Vienna. More than 150 people from 49 nationalities are working at CeMM. CeMM promotes equal opportunity and harbours a mix of different talents, backgrounds, competencies, and interests. cemm.at

Eligibility criteria:

- You must hold a PhD (or will have been awarded your PhD by the time of starting the Pre-ERC Postdoc Program) and your PhD defence date must be no earlier than 2021.
- You must have at least one first-author publication published by the time of starting the Postdoc.

Please apply online at https://cemm.onlyfy.jobs/job/jwkv54co with 1) a cover letter including a short summary of research interests and mentioning which research group(s) at CeMM you would be potentially interested in joining, 2) curriculum vitae (CV), 3) academic transcripts, 4) contact details of three referees and 5) candidates will be asked to record a short video answer explaining their motivation to join the CeMM Pre-ERC Postdoc Program. Applications received by 3 October 2023, at 11:59 pm CEST will be considered. The preferred starting date is March 2024 or earlier.





Selection process:

Shortlisted candidates will be invited to participate in online panel interviews with CeMM Faculty members, which will take place in the middle of November 2023. At the end of the selection process, candidates will be asked to submit their preference regarding research groups they would like to work with, which may be identical or different from the original choice indicated in the cover letter.

Information session:

At 10:00 am and 5:00 pm CEST on 13 September 2023, CeMM will host an online information event where you will be able to find out more about doing a postdoc at CeMM and applying to the program as well as have the chance to meet and talk directly with current pre-ERC program postdocs. To take part in this event, please sign-up here Postdoc Open Day - CeMM or visit the postdoc program page of the CeMM website.