Biomedical Data Scientist / Bioinformatician: Immunotherapy & AI (m/f/d)

Apply now

We are recruiting an ambitious Biomedical Data Scientist or Bioinformatician for EU-funded research that employs AI methods to accelerate development and clinical translation of CAR T cell immunotherapies. The successful candidate will join the research group led by Christoph Bock at the CeMM Research Center for Molecular Medicine (Austrian Academy of Sciences) and the Institute of Artificial Intelligence (Medical University of Vienna), broadly contributing to several European consortia through data-driven biomedical research, analysis of complex datasets, support and co-mentoring of students and postdocs, computational methods development, and contributions to project and data management.

Your Profile

We are seeking researchers eager to contribute to cutting-edge research, with a strong commitment to scientific excellence and collaboration. We are open to candidates pursuing a classical academic career, but also to those looking for opportunities outside the PhD → postdoc → professor track, who may be interested in building the foundations for a start-up company or a career in AI-driven biomedical and translational research. We welcome early-stage candidates who have recently completed their PhD, as well as candidates with initial postdoctoral research experience who are ready for the next challenge. Final-year PhD students are encouraged to apply early; the contract will start once the PhD has been completed.

Required skills

- PhD in bioinformatics, computational or quantitative biology, machine learning / artificial intelligence, data science, or a related field
- Strong programming and data analysis skills (Python and/or R) and experience analyzing complex biological or biomedical datasets
- Prior experience with high-throughput biology data, such as single-cell, spatial, or other multi-omics datasets, or with biomedical research
- Good communication skills in English and the ability to work collaboratively in an interdisciplinary, international team

Desirable skills

- Experience with machine learning / deep learning frameworks and AI methods for biomedical data
- Software and data engineering skills, including workflow management tools and good software development practices
- Familiarity with FAIR principles and data standards, and with integrating data across multiple sites
- Experience with clinical or health data, including GDPR-compliant data handling

- Publications in the field, and experience in mentoring or co-supervising students

The project

This position sits at the computational center of several European research consortia that together pursue one goal: making CAR T cell immunotherapy faster to develop, better understood, and more broadly applicable. The main focus is on data science — analyzing complex multi-omics and clinical datasets produced across partner sites, developing AI methods for predicting immune cell function and therapeutic response, and establishing the data infrastructure and standards that let partners throughout Europe work together effectively, contributing expertise from fundamental biology to clinical practice. The role is correspondingly broad: deep analytical work on research questions, development of computational methods and software systems, and close interactions with biologists, clinicians, and computational colleagues across Europe.

The Bock Lab (https://bocklab.org)

We seek to advance biomedicine with technology-driven research, combining experimental and computational approaches to understand and program epigenetic cell states and to develop cell-based therapies for cancer and immune diseases.

Main areas of research include:

- *Bioinformatics*. Computational methods are essential for data-driven biomedical research. We develop algorithms and software for large-scale data analysis, and we pursue clinical collaborations to establish medical impact.
- *Single-cell biology*. Epigenetic cell states contribute broadly to the regulation of human organs. As part of the Human Cell Atlas, we use single-cell and spatial sequencing to dissect their role in tissue homeostasis and pathogenesis.
- *Machine learning*. Huge datasets pose new analytical challenges. As part of the European Laboratory for Learning and Intelligent Systems, we develop methods for interpretable deep learning and artificial intelligence in biomedicine.
- *Biotechnology*. Groundbreaking discoveries are often enabled by new technology. We develop and apply innovative methods in the areas of single-cell sequencing, CRISPR screening, epigenome editing, and synthetic biology.
- *Cell therapy*. CAR T cells have shown dramatic efficacy for blood cancers and spearhead a broader shift toward personalized cell-based therapies. We use high-throughput technology to design synthetic immune cells as therapeutics

The Principal Investigator (https://scholar.google.com/citations?user=9qSsTcIAAAAJ)

Christoph Bock is a Principal Investigator at the CeMM Research Center for Molecular Medicine of the Austrian Academy of Sciences and Professor of [Bio]Medical Informatics at the Medical University of Vienna. He is also the scientific coordinator of the Biomedical Sequencing Facility at CeMM, member of the Human Cell Atlas Organizing Committee, fellow of the European Lab for Learning and Intelligent Systems (ELLIS), and co-founder of two Vienna-based start-up companies (Myllia, Neurolentech). He has received major research awards, including consecutive ERC Starting, Consolidator, and Advanced Grants (2016 to 2032), the Otto Hahn Medal of the Max Planck Society (2009), Overton Prize of the International Society for Computational Biology (2017), and the Erwin Schrödinger Prize of the Austrian Academy of Sciences (2022), and he has been

included in the global list of “Highly Cited Researchers” by Clarivate Analytics (ISI Web of Science) each year since 2019.

The Institutes

CeMM

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 49 nationalities are working at CeMM. www.cemm.at

The Medical University of Vienna

The *Medical University of Vienna* is Europe’s largest medical school and one of the oldest in the world. It was founded in 1365 as the medical faculty of the University of Vienna, and it has operated as an autonomous university since 2004. Within the university’s data science department, the Institute of Artificial Intelligence focuses on machine learning / artificial intelligence for biomedical research and clinical applications. https://meduniwien.ac.at/ai

CeMM and the Medical University of Vienna are committed to equal opportunities and diversity. We welcome applications from all qualified candidates regardless of gender, age, ethnic and cultural background, religion, sexual orientation, or disability, and we particularly encourage applications from underrepresented groups.

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
- Yearly gross salary of €70.000

- Visa and relocation support provided

Please apply online (https://cemm.onlyfy.jobs/job/tprl66gz) with cover letter, CV, academic transcripts, PhD certificate (or, for final-year PhD students, confirmation of the expected completion date), and contact details of three referees. Applications will be reviewed on a rolling basis. Any application received by 6 January 2027 will be considered. Anticipated start date: flexible.

Additional information

City	**Vienna**
Position type	**Full-time employee**
Start of work	**01.03.2027**

Responsible

Memo Mokhles

Apply now