Tech Developer (genomics): Research scientist with expertise and interest in developing cutting-edge genomics technology (single-cell, CRISPR, etc.)

Apply now

We are recruiting an ambitious scientist who wants to develop and apply cutting-edge technology for biomedical research. Key areas of interest include genome/epigenome profiling, single-cell sequencing, CRISPR technology, chemical biology, and synthetic cell engineering. The position will be based in the laboratory of Christoph Bock at the CeMM Research Center for Molecular Medicine of the Austrian Academy of Sciences in Vienna.

The Project

The successful applicant will identify and pursue opportunities for developing breakthrough genomics technology, in areas such as single-cell sequencing, CRISPR technology, epigenome editing, and mammalian synthetic biology. He or she will work with a small team of research technicians on establishing proof-of-concept for exciting new assays and technologies, and will collaborate with highly motivated PhD students and postdocs to demonstrate their impact for biology and biomedical research. Our laboratory has a proven track record in genomics technology development, which includes the CROP-seq method for CRISPR screening with single-cell RNA-seq readout (Nature Methods 2017), ChIPmentation for low-input chromatin profiling (Nature Methods 2015), scWGBS for single-cell DNA methylation profiling (Cell Reports 2015), and scifi-RNA-seq for ultra-high throughput single-cell RNA sequencing (bioRxiv 2019). Moreover, we are applying genomics technology to biomedical questions, for example in immunology (Nature 2020, in press; Science 2016), leukemia (Nature Communications 2020; Nature Chemical Biology 2019), and solid tumors (Nature Medicine 2018; Nature Medicine 2017). With the co-localized but separate team of the Biomedical Sequencing

Facility, we serve a large medical campus with biomedical sequencing service, and we contribute to the Human Cell Atlas. Within this broader scope, specific projects will be developed together with the successful applicant, focusing on potentially groundbreaking ideas.

The Candidate

We are looking for candidates who want to be part of groundbreaking research and advance their scientific career in one of the most exciting areas of biomedicine. A typical background would be a PhD in molecular biology or a related field, with proven expertise in wet-lab technology development. Initial postdoctoral experience and relevant publications in the broader field of genomics technology development are a plus.

The Lab (https://www.medical-epigenomics.org/)

The Medical Epigenomics Lab at CeMM pursues interdisciplinary and highly collaborative biomedical research, focusing on the following areas:

- Single-cell biology. Many diseases show deregulation of epigenetic cell states. As a member of the Human Cell Atlas, we use single-cell sequencing and human organoids to dissect the gene-regulatory foundations of cancer & immunity.
- High-throughput technology. Many groundbreaking discoveries are driven by new technologies. We
 invest heavily into technology development, including single-cell sequencing, CRISPR screens,
 epigenome editing, and synthetic biology.
- Machine learning. Huge datasets pose new analytical challenges. As a fellow of the European
 Laboratory for Learning and Intelligent Systems, we develop methods for interpretable deep learning
 and artificial intelligence in biology.
- *Immune cell engineering*. CAR T cells have shown dramatic efficacy for blood cancers and may spearhead a broad shift toward personalized, cell-based therapies. We use high-throughput technology to design synthetic immune cells.

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. His research focuses on cancer and immunology, combining experimental biology with high-throughput technology and computational methods. He is also a guest professor at the Medical University of Vienna, scientific coordinator of the Biomedical Sequencing Facility at CeMM, group leader at the Ludwig Boltzmann Institute for Rare and Undiagnosed Diseases, and an elected member of the Young Academy of the Austrian Academy of Sciences. He coordinates the HCA|Organoid project pursuing single-cell analysis of human organoids, which constitutes part of the European contribution to the Human Cell Atlas, and he co-founded Genom Austria, a citizen science project that is the Austrian partner in the International Network of Personal Genome Projects. He has received major research awards, including the Max Planck Society's Otto Hahn Medal (2009), an ERC Starting Grant (2016-2021), and the Overton Prize of the International Society of Computational Biology (2017). He co-founded Aelian Biotechnology, a Vienna-based startup company that develops and applies single-cell methods for high-throughput biology and drug discovery.

The Institute (http://www.cemm.at/)

CeMM is an international research institute of the Austrian Academy of Sciences and a founding member of EU-LIFE. It has an outstanding track record of top-notch science and medical translation (last few years: >10 papers in Nature/Cell/Science/NEJM, >25 papers in Nature/Cell sister journals). With ~150 researchers, CeMM provides a truly collaborative and personal environment, while maintaining critical mass and direct access to all relevant technologies. Research at CeMM focuses on cancer, inflammation, and immune disorders. CeMM is located at the center of one of the largest medical campuses in Europe, within walking distance of Vienna's historical city center. A study by "The Scientist" placed CeMM among the top-5 best places to work in academia world-wide (https://www.the-scientist.com/features/best-places-to-work-academia-2012-40676). Vienna is frequently ranked the world's best city to live. It is a United Nations city with a large English-speaking community. The official language at CeMM is English, and more than 40 different nationalities are represented at the institute. CeMM promotes equal opportunity and harbors a mix of different talents, backgrounds, competences, and interests. We are offering an excellent employee benefits package including full insurance coverage (health, accident, retirement), health care services, daily bonus for the inhouse cafeteria, relocation reimbursement, and an annual gross salary in the range of EUR 54,000 to 60,000 (depending on qualification and relevant experience).

Please apply online: https://cemm.jobbase.io/job/9fyeo3vp with cover letter, CV, academic transcripts, and contact details of three referees. Applications will be reviewed on a rolling basis. Any application received by 5 August 2020 will be considered. Start dates are flexible.

Additional informa	on
City	Vienna
Position type	Full-time employee
Start of work	01.12.2020

Responsible		
Christoph Bock		

Apply now