

## Senior Postdoc & Scientific Project Manager for an EU-funded Human Cell Atlas project focusing on single-cell sequencing of human organoids

We are recruiting an ambitious scientist who will play a central role in the scientific implementation and management of an **EU-funded contribution to the Human Cell Atlas**, in a project that seeks to build an "organoid cell atlas" by **massive-scale single-cell genomics and epigenome sequencing of human organoids** for brain, colon, and several other human organs.

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**. It will involve close collaborations with many leading scientists in the organoids and single-cell sequencing fields.



### The Project

Single-cell technologies provide a fundamentally new perspective for understanding biology, with profound potential to drive therapeutic advances. To foster swift progress in this important field, the [Human Cell Atlas](#) provides global coordination for the establishment and utilization of a single-cell reference atlas comprising all human cells / cell types. As a European contribution to the Human Cell Atlas, the EU has selected a project coordinated by CeMM that will establish an initial "Organoid Cell Atlas" with comprehensive single-cell sequencing and single-cell imaging of human organoids, large-scale computational analysis, and case studies on the biomedical relevance of this community resource (including CRISPR single-cell sequencing and high-content drug screening). The advertised position provides excellent opportunities for pursuing and publishing high-impact research, while also involving important project management tasks in the context of an international consortium.

### 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, stem cell research, genomics, or biomedicine (wet-lab based) or in bioinformatics and computational genomics. Initial postdoctoral experience and relevant publications in organoid research and/or single-cell technologies are a plus, as is initial experience in consortium research, international collaborations, and scientific project management.

### The Lab (<http://epigenomics.cemm.oeaw.ac.at/>)

The Medical Epigenomics Lab at CeMM pursues interdisciplinary, highly collaborative research aimed at understanding disease biology and advancing precision medicine through wet-lab and computational methods. The lab is internationally well connected and active in several fields:

- *Single-cell genomics/epigenomics*. Many diseases show deregulation of epigenetic and transcription-regulatory cell states. As a member of the [Human Cell Atlas](#), we use single-cell sequencing to dissect the molecular basis of cancer, immunity, and organoid biology.
- *Machine learning in bioinformatics*. Massive biomedical datasets pose new analytical challenges. As a fellow of the [European Laboratory for Learning and Intelligent Systems \(ELLIS\)](#), we develop methods for interpretable deep learning and AI in biomedicine.
- *High-throughput technology*. Many groundbreaking biomedical advances are driven by new technologies. Our lab thus invests heavily into technology development, including single-cell sequencing, CRISPR screens, epigenome editing, and synthetic biology.
- *Personalized medicine*. Emerging technologies enable a new paradigm of patient-centric medicine with deep biological understanding. We develop and validate assays and algorithms for translating the value of personalized medicine into routine clinical practice.

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

Christoph Bock is a principal investigator at CeMM. His research group combines experimental biology (high-throughput sequencing, epigenetics, CRISPR screening, synthetic biology) with computer science (bioinformatics, machine learning, artificial intelligence). He is also a guest professor at the Medical University of Vienna and scientific coordinator of the Biomedical Sequencing Facility at CeMM. He is the coordinator of an upcoming EU Horizon 2020 project on the 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 is a member of the Young Academy of the Austrian Academy of Sciences (since 2017) and recipient of several major research awards, including the Max Planck Society's Otto Hahn Medal (2009), a New Frontier Group grant by the Austrian Academy of Sciences (2015-2020), 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 single-cell methods for high-throughput 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** (<http://the-scientist.com/2012/08/01/best-places-to-work-academia-2012>). 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 in-house cafeteria, relocation reimbursement, and an annual gross salary in the range of EUR 55,000 to 60,000 (depending on qualification and relevant professional experience).

Please apply online (<https://cemm.jobbase.io/job/c2jh6wuy>) with cover letter, CV, academic transcripts, and contact details of three referees. Applications will be reviewed on a rolling basis. Any application received by 6 October 2019 will be considered. Start dates are flexible.