

Group Leader Computational Biology/Bioinformatics

The **Structural and Computational Biology (SCB)** Unit at EMBL Heidelberg pursues an ambitious and broad research program in integrated structural and computational systems biology, bridging between various temporal and spatial scales, from single molecules to entire ecosystems. The SCB unit is a hub for computational biology at EMBL, with several groups employing (meta) genomic, transcriptomic, proteomic and metabolomic analyses to various biological systems. To expand these activities, the SCB unit seeks to recruit a highly motivated group leader in the broad area of computational biology to address fundamental questions in structural, molecular, cellular or environmental biology.

Your role

Establish an independent and innovative research programme. Research areas can be as diverse as cheminformatics (e.g. chemical-protein-network analysis within cells and between cells), structural bioinformatics (e.g. modeling of protein complexes and their interactions and/or dynamics in a cellular context or molecular interpretations of cryo-electron tomogram or light microscopy data), systems bioinformatics (e.g. network or community modeling), or environmental bioinformatics (e.g. data-driven or theoretical ecology).

The future group leader will be embedded in the multidisciplinary and collaborative environment of EMBL, which provides many opportunities for interaction with other research groups.

You have

The ambition to work on fundamental biological or methodological questions. Furthermore, your research complements and synergizes with the existing activities of the SCB Unit and the whole of EMBL. You should therefore demonstrate a strong motivation to work in the collaborative and multidisciplinary environment of EMBL.

Location: Heidelberg, Germany

Staff Category: Faculty Staff

Contract Duration: 5 years

Grading: 9

Closing Date: 20 September 2020

Reference Number: HD01795

EMBL's future scientific directions

EMBL's future scientific directions, Molecules to Ecosystems, include a vision to advance our understanding of ecosystems at the molecular level, applying expertise in molecular biology to study life in its natural context. New research areas will focus on applying experimental, computational and theoretical approaches to study at multiple levels (molecules, cells, tissues and populations) how organisms interact with each other and respond to environmental change. SCB will be happy to host computational biology activities related to the new [transversal themes](#).

- [Planetary Biology](#) – aiming to understand how microbes, plants, and animals interact with each other and with their abiotic environments at the molecular level.
- [Microbial Ecosystems](#) – studying microorganisms in communities and how they interact with their environments, including host organisms. Infection biology will be an important focus.
- [Human Ecosystems](#) – applying computational and experimental approaches to reveal the impact of the environment on human health and physiology, both at the individual and the population level.
- [Theory](#) – using modelling, mathematical reasoning, and conceptual approaches to study complex and dynamic biological systems.

Why join us

EMBL appoints group leaders from early on in their career and provides a very supportive environment for your first independent position in order to achieve your research goals. The initial “Lead your Lab” management training is provided for all incoming group leaders.

EMBL offers a highly collaborative, uniquely international culture. The various EMBL units are strongly connected and cross-unit collaborations are not only possible but also strongly encouraged. It fosters top quality, interdisciplinary research by promoting a vibrant environment consisting of young independent research groups with access to outstanding graduate students, postdoctoral fellows and core facilities.

The SCB Unit EMBL offers access to an outstanding integrated structural biology environment within the SCB Unit and beyond is embedded in the vibrant research community at EMBL Heidelberg and the other EMBL sites. Excellent core facilities support research activities, for example, in structural biology, biophysics, chemical biology, metabolomics, proteomics and genomics. Further information about research in the SCB Unit and at EMBL can be found at the [EMBL web page](#).

EMBL is an inclusive, equal opportunity employer offering attractive conditions and benefits appropriate to an international research organization with a very collegial and family friendly working environment. The remuneration package comprises a competitive salary, a comprehensive pension scheme, medical, educational and other social benefits, as well as financial support for relocation and installation, including your family and the availability of an excellent child care facility on campus. EMBL is committed to internationality, diversity and equality, and as such encourages applications from underrepresented groups.

What else you need to know

We are Europe's flagship research laboratory for the life sciences – an intergovernmental organisation performing scientific research in disciplines including molecular biology, physics, chemistry and computer science. We are an international, innovative and interdisciplinary laboratory with more than 1700 employees from more than 80 countries,

operating across six sites, in Heidelberg (HQ), Barcelona, Hinxton near Cambridge, Hamburg, Grenoble and Rome. The working language of the institute is English.

In your online application, you will be asked to include a cover letter, your CV, the names and contact details of 3 referees and a concise description of research interests & future research plans, typically not exceeding five pages.

In addition, you will be asked to provide your potential interests in one (max two) [transversal themes](#) and are also invited to apply for multiple positions if relevant:

[Group Leader – Structural Cell Biology/Cryo-Electron Tomography \(HD01794\)](#)

[Group Leader – Cell Biology and Biophysics \(HD01796\)](#)

[Group Leader – Developmental Biology \(HD01798\)](#)

Interviews are planned for 10–13 November 2020.

Same interview conditions will be applied to all candidates, despite of the potential travel restrictions due to the Covid-19 situation. If you provide additional choices, interview might also happen between 10–26 November 2020.

Information on Group Leader appointments can be found here http://www.embl.org/gl_faq.

An initial contract of 5 years will be offered to the successful candidate. This is foreseen to be extended to a maximum of 9 years, subject to an external review.

Further information about the position can be obtained from the Head of Unit, [Christoph Müller](#).

Please apply online through: www.embl.org/jobs