

Group Leader – Structural Systems Biology

Location:	Heidelberg, Germany
Staff Category:	Faculty Staff
Contract Duration:	5 years
Grading:	9
Closing Date:	12 September 2021
Reference Number:	HD02012

The **Structural and Computational Biology (SCB)** Unit at EMBL Heidelberg pursues an ambitious research program in integrated structural and computational systems biology, bridging between various temporal and spatial scales, in line with EMBL's next scientific programme from Molecules to Ecosystems. The SCB Unit seeks to recruit a highly motivated group leader in the area of structural systems biology to address fundamental questions in life sciences.

Your role

Establish an independent and innovative research programme. The SCB unit is particularly interested in attracting candidates that combine integrated structural biology approaches with chemical biology, (high-throughput) biochemistry or synthetic biology to address fundamental biological questions. Research areas can be diverse such as the control of biological functions by small molecules, mechanistic insight into the impact of chemicals and metabolites on animal, human and planetary health, engineering of enzymatic functions i.e. for green chemistry, introducing new functionalities into biological macromolecules. The research should interface or contribute to systemic approaches in structural biology, a concept that the unit is pursuing, in conjunction with a strong computational biology programme.

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 (see also transversal themes in EMBL's future scientific directions).

You have

The ambition to work on fundamental biological questions, which implies both, biological discoveries or methodological advances. Furthermore, your research complements and synergizes with the 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.

In addition, you should be dedicated to develop friendly and collaborative working atmosphere and to provide support and guidance to team members. High moral standards and embracing diversity and inclusion is desirable, as is pro-active and positive problem-solving mind-set.

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.

The SCB Unit will be happy to host structural systems 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, how they live in communities and interact with their environments, including host organisms.
- [Infection Biology](#) - unravelling new strategies to treat infections by studying pathogens, their molecular machineries, their interface with the host, and their ability to spread in populations and across hosts.
- [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 at EMBL offers access to an outstanding integrated structural biology environment that includes a particularly well equipped cryo-electron microscopy facility. The Unit also interacts closely with the EMBL Imaging Centre that offers access to a broad spectrum of electron and light microscopy technologies with special emphasis on correlative approaches.

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 1800 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. Should you plan to submit your application close to the deadline, please inform your referees in advance so they can be ready to send their LOR preferably by the deadline of the call.

If it is relevant for your research plans, you have the possibility to indicate their potential links to EMBL's [transversal themes](#) or other research Units recruiting in this call:

- [Group Leader - Cell Biology and Biophysics](#)
- [Group Leader - Developmental Biology](#)

Interviews are planned for **3 – 5 November 2021**. Same interview conditions will be applied to all candidates, despite of the potential travel restrictions due to the Covid-19 situation.

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