Welcome to the EMBL Scientific Visitor Programme

EMBL performs fundamental research in molecular biology, studying the story of life. We offer services to the scientific community, train the next generation of scientists and strive to integrate the life sciences across Europe.

We are international, innovative and interdisciplinary. We are more than 1600 people, from over 80 countries, operating across five sites in Grenoble (France), Hamburg (Germany), Heidelberg (Germany), Hinxton (UK) and Monterotondo (Italy). Our scientists work in independent groups and conduct research and offer services in all areas of molecular biology.

Our research drives the development of new technology and methods in the life sciences. We work to transfer this knowledge for the benefit of society.

Every year EMBL welcomes scientists and students from all over the world who establish collaborations with group leaders across our research units.

These scientific visitors range from trainees seeking to gain experience with the best scientists in the world to principal investigators who wish to carry out a specific project. Others come for a period of study and reflection. Access to our broad seminar and conference programme often enrich a scientist’s stay with us.

The scientific visitor programme provides visitors with logistical and organisational support, to make their stay at EMBL a productive and pleasant experience.

EMBL International Centre for Advanced Training

The scientific visitor programme is supported by the EMBL International Centre for Advanced Training (EICAT), which coordinates integrated training activities for scientists at different levels at all five EMBL sites. EICAT supports one of EMBL’s core missions, the provision of advanced training.

EICAT also manages the international PhD and Postdoctoral programmes and delivers an outstanding programme of courses and conferences. Find out more about these via the EMBL website: embl.org
Guide to the Scientific Visitor Programme

How to apply

If you would like to apply to become a scientific visitor at EMBL, please contact the Group Leader of your choice directly. Information about our research groups, including contact details, is available via the EMBL website: embl.org

Acceptance to the programme will depend on the availability of places, ongoing projects, and manpower in the respective lab. There are no specific deadlines but early planning facilitates administration, such as housing or visa applications.

Your application letter should include:

- your CV highlighting your research experience so far
- a short statement about your research interests and why you are interested in the chosen group
- information about the purpose and intended duration of your internship
- contact details for a faculty member at your home institute who is prepared to support your candidature
- information about the funding situation for your visit

Accommodation

EMBL supports scientific visitors in finding accommodation. Scientific visitors to EMBL’s main site in Heidelberg may use the ISG Hotel in the nearby Boxberg. Single and double rooms are available as well as apartments in the Guesthouse, all in walking distance from the laboratory. A free shuttle also operates in the mornings and in the evenings.

ISG-Hotel Heidelberg
Im Eichwald 19, 69126 Heidelberg
Tel: +49 6221 3861-0
www.isg-hotel.de
Research Units

Cell Biology and Biophysics

Cells are the smallest autonomous units of life. In order to understand how living organisms are organised and how they function, we need to understand the underlying physical principles. By default, the molecular machinery that performs cellular function and organisation is complex and combinatorial at the single protein, protein complex, and pathway level. To unravel that complexity, new ways of thinking and new ways of integrating traditionally separate scientific disciplines are required. Network biology, quantitative theoretical methods to generate mechanistic and predictive models that rely on realistic physical principles at the cellular, subcellular and molecular scale; as well as the development of new instruments and technologies need to be combined. In the Cell Biology & Biophysics Unit, physicists and chemists work closely together with biologists to elucidate the fundamental rules that govern cellular functions.

www.embl.de/research/units/cbb

Developmental Biology

The development of living organisms requires precise coordination of all basic cellular processes, in space and time. Groups seek to elucidate the principles, mechanisms and dynamics of fundamental developmental events. Using animal and plant models, research in the Unit integrates numerous complementary approaches to understand how cellular and morphological processes are coordinated, evolve to shape and maintain living organisms in their environment. Research includes understanding the regulatory mechanisms of developmental cellular processes; studying simple marine organisms to understand the evolution of our central nervous system; elucidating the temporal organisation of embryonic development; understanding patterning in plant development; studying both normal development and its deviations in disease.

www.embl.de/research/units/dev_biology

Genome Biology

The genome encodes the genetic blueprint that coordinates almost all cellular processes. Genome Biology studies how this information is expressed and utilized to give rise to form and function. The field of Genome Biology is at a very exciting stage: Technology has advanced at multiple fronts, with increased sensitivity allowing for single cell measurements and increased resolution allowing for mechanistic insights. Groups within the Unit are using, and pushing, these technologies to understand multiple aspects linking genome regulation to cellular and disease states. They apply systems-level approaches, integrating experimental and computational methods, to unravel these complex processes at different scales, yielding new insights into how our genetic information is read. The Unit combines genomics, proteomics, genetics, microfluidics and bioinformatics.

www.embl.de/research/units/genome_biology
EMBL Heidelberg, Germany

Structural and Computational Biology

The Structural and Computational Biology unit aims to bridge between biomolecular entities (such as proteins, nucleic acids) and larger biological systems (such as cells, organisms and even ecosystems). Different spatial scales (molecules, complexes, organelles, cells and organisms) are studied by using different structural biology techniques such as X-ray, NMR and EM, and their integration requires a wide range of heterogeneous computational approaches as well as application of a number of large-scale biochemical and biophysical methods like proteomics and metabolomics. The groups in the unit make use of this methodological framework to pursue a number of research topics, often in collaboration.

www.embl.de/research/units/scb

EMBL Grenoble, France

Structural Biology

EMBL Grenoble is a key player in the Partnership for Structural Biology (PSB) through which the Grenoble EPN Campus institutes (EMBL, ESRF, ILL, IBS) provide a uniquely comprehensive range of structural biology platforms for sample production, characterisation and structure determination for in house research and external users. In particular, the Outstation closely interacts with the ESRF, in operating high brilliance X-ray beamlines for macromolecular crystallography and small-angle scattering, developing the associated instrumentation, and providing expert help to visitors. Upstream of crystal structure determination the Outstation runs a very successful robotic platform for nanovolume crystallisation. The recently developed CrystalDirect system for automated crystal mounting enables fully automated pipelines from protein to X-ray data collection, including ligand and fragment screening, which external users can access supported by the EU funded iNEXT project.

www.embl.fr

EMBL Hamburg, Germany

Structural Biology

EMBL Hamburg is situated on the campus of The German Synchotron Research Centre (DESY), which hosts leading facilities for synchotron radiation (PETRA III) and free electron lasers (FLASH, XFEL - under construction). The EMBL@PETRA3 infrastructure for life science applications encompasses two macromolecular beamlines, one BioSAXS beamline and facilities for sample preparation, characterisation and crystallisation, and X-ray data processing and evaluation. Research activities focus on state-of-the-art structural biology methods using synchotron radiation, combining cutting-edge technology with an ambitious research programme for structures of multifunctional proteins and protein complexes of biomedical relevance, enabling access to a large variety of in vitro and in vivo functional techniques, including cellular imaging techniques.

www.embl-hamburg.de
Mouse Biology

The Unit studies critical mammalian physiological phenomena from a molecular perspective in the context of the whole organism. The work of the research groups is bound together by the exploitation of technological advances that have increased the ease and rapidity with which genetic and epigenetic perturbations can be introduced into the mouse genome to allow increasingly sophisticated causal experimental approaches in this organism. Currently research groups at EMBL Monterotondo are investigating the epigenetic control of early development, blood cell development, neural circuits and behavior, neural computation, and somatosensation. Increasingly the research in the Unit is being re-focused around neurobiology and epigenetics.

EMBL Monterotondo, Italy

Heidelberg Core Facilities

The EMBL model for Core Facilities has developed a first-rate reputation in the European life sciences community. The facilities contribute significantly to internal and external training courses and workshops, often in collaboration with industrial partners. The support of EMBL Council has enabled significant development of EMBL’s Core Facilities into a number of high-level support teams that help focus diverse sets of expertise and multiple cutting edge technologies on specific biological problems. Currently, facilities cover the following areas:

Advanced Light Microscopy, Chemical Biology, Electron Microscopy, Flow Cytometry, Genomics, Metabolomics, Protein Expression and Purification, Proteomics

In line with EMBL’s mission to provide services to Member States, Core Facilities are open to both internal and external scientists, who benefit significantly from the contributions and advice and are able to conduct research at and beyond normal state-of-the-art. Core Facilities are staffed by technology experts who focus entirely on service provision, delivering technologies to be used in research projects designed and run by others. Close attention is given to the delivery of quality services, fast reaction times to user demands, affordable prices and the complete integration of Core Facilities with the scientific objectives of EMBL.

EMBL Heidelberg, Germany
Who’s a visitor?

Trainee

An undergraduate student from a university or professional school wanting to perform practical work by doing an internship outside of the formal arrangement of an undergraduate thesis. Undergraduate students generally do not receive any remuneration for their work, but may obtain a limited participation towards housing and subsistence upon discretion of the hosting group leader. Trainees must be at least 18 years old to be eligible for training at EMBL. The total stay may not exceed 12 months.

Master Student

An undergraduate student from a university or professional school wanting to perform practical work in order to establish their master thesis (or equivalent) in collaboration with the laboratory. Undergraduate students generally do not receive any remuneration for their work, but may obtain a limited participation towards housing and subsistence upon discretion of the hosting group leader. The total stay may not exceed 12 months.

Master / Bachelor graduated

Someone who has successfully completed their Master or Bachelor programme and is no longer enrolled at a university.

Visiting Pre-doctoral Fellow

A PhD student who is registered with an external institution for their PhD thesis and is not part of the EMBL International PhD Programme. The student wishes to benefit from EMBL technologies and methods for specific parts of their thesis. Visits of more than 6 months need prior approval of the Dean of Graduate Studies. The maximum total training period at EMBL, including any extensions, must be less than half of the entire PhD period.

Visiting Post-doctoral Fellow

A postdoctoral fellow with a contract elsewhere visiting EMBL for a short-term project.

Visiting Researcher

External staff scientist holding a PhD and working above postdoctoral level but below a group leader.

Visiting Technical Expert

All technical assistants and other technical experts (e.g. scientific IT experts).

Visiting Group Leader

Faculty at research institutions coming to EMBL for scientific purposes to pursue collaboration with EMBL staff.
Testimonials

Karen Sørensen, Norway

My impression of EMBL, Heidelberg, during my 2 month visit, is a unique combination of scientific excellence, and a friendly and collaborative atmosphere.

Ana-Matea Mikecin, Croatia

Visiting Principal Investigator in the Cell Biology and Biophysics Unit, EMBL Heidelberg

Visiting Researcher in the Core Facilities, EMBL Heidelberg

During my PhD and postdoctoral training I have visited several institutes around the globe, however, none of them can match hospitality and the scientific atmosphere that EMBL Heidelberg has. From day one I was engaged in the most fruitful yet informal discussions about both my project and other people’s. My visit to EMBL, though rather brief, had an immense influence on the development of my project. In the end, I hope that in the future I will be given an opportunity to return to EMBL and thrive in such inspiring surroundings.
I arrived in Grenoble to determine the structure of two proteins. EMBL took care of everything, so as soon as I arrived I could start working on my project and didn’t have to take care of accommodation or reagents. The atmosphere was very good, and the group that I visited was very friendly and helpful. The stay was extremely productive, since I used state of the art technology in crystallography and returned home with the structure of one of my targets. This experience had a great impact on my professional and personal life.

Thank you for a simply divine time! EMBL is a perfect place to do the best research. Your hospitality was superb! I hope I will be back! I got the necessary experience, new ideas and impetus for new achievements. I realised the main rule for success: make the best the ideal!
Tim Xiaoming Hu, Singapore

EBI provided the best possible intellectual environment and academic support for my research and career development during my time here. Furthermore, my line manager at EBI provided the most productive guidance, supervision and long lasting mentorship that will benefit me for my entire life. I treasure this valuable experience tremendously. I would strongly recommend you to become a visiting PhD student in the EBI, if you have the opportunity to do so.

Itai Toker, Israel

I visited a group with which we have a fruitful collaboration. Everybody at EMBL and at the lab was very welcoming. The state-of-the-art animal and imaging facilities allowed our project to make a substantial leap forward, and I had the chance to attend excellent seminars given by prominent scientists during my stay. Overall, it was a pleasant and very valuable visit.
My stay at EMBL gave me the great opportunity to research in an international, welcoming environment. It was a great place to grow as a scientist.

Helene Altmann, USA

I felt really welcomed by everybody at EMBL-Hamburg and have learned more than I could have wished for. The international community, with people from all around the world sharing their personal and scientific experience made my stay even more special! I am leaving EMBL with a suitcase full of new scientific skills, stories about different countries and cultures, and also new friendships!

Caroline Eigner, Austria

A highly active and advanced scientific society with a strong sense of collaboration towards better science.

Georgios Misailidis, Greece