

EMBL International PhD Programme

Excellence in advanced training

European Molecular Biology Laboratory



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EMBL
Heidelberg,
Germany



EMBL
Barcelona,
Spain



EMBL
Grenoble,
France



EMBL
Hamburg,
Germany



EMBL-EBI,
Hinxton,
UK



EMBL
Rome,
Italy



Welcome to the EMBL International PhD Programme

Unique and waiting for you

The years you spend as a PhD student play a pivotal role in your career as a scientist. The personal friendships and professional networks you make during this time, as well as the spirit of doing science that you encounter during your PhD, will shape the rest of your working life. Clearly, a successful PhD project will also open doors that may otherwise be difficult to step through.

Doing science ‘the EMBL style’ means that you work at the cutting edge of science in one of Europe’s top research institutions. Our research projects are interdisciplinary and offer exciting opportunities for biologists, chemists, physicists, computer scientists, mathematicians and medical graduates who want to pursue a PhD in the molecular life sciences.

Do you want to work in an international environment and in small groups with close contact to mentors? Collaboration and collegiality are hallmarks of the successful and fun EMBL culture. Whether you are looking for a friendly lab with open doors or a powerful scientific network, EMBL offers both.

In addition to hosting open and interactive research groups and providing state-of-the-art equipment, EMBL is a hub for the best scientists in the world. Its seminar programme is matched by few. We are committed to providing a fine balance between carefully mentoring students and fostering early independence. Our students are not only active researchers, but they also take part in many other initiatives: they independently organise the acclaimed EMBL PhD Student Symposia, participate in Science and Society debates and meetings, and relax with the many musical, sports and social activities available at EMBL. Our students also have the privilege of exploring and benefiting from the enriching environments of EMBL’s six sites, located in France, Germany, Italy, Spain and the UK. As EMBL students, you are ambassadors of your culture and country to EMBL, and of EMBL to your home country.

The EMBL International PhD Programme is also unique in the way its students obtain their PhD degree. We have established partnerships with some of the best universities across Europe to award joint PhD degrees with EMBL. Consequently, you may obtain your degree from either one of EMBL’s partner universities or from a national university of your choice.

We invite you to apply to become an active member of the ‘EMBL culture’, so please read on.

We are committed to making these most valuable years of yours a success.

*The Graduate Office Team:
Matija Grgurinovic,
Monika Lachner (Dean of
Graduate Studies) and
Carolina Garcia Sabate*



“EMBL’s International PhD Programme is a key part of the institute. The students create a youthful, dynamic atmosphere in the lab and we give them the resources and help they need to succeed.”

Iain Mattaj, EMBL Director General



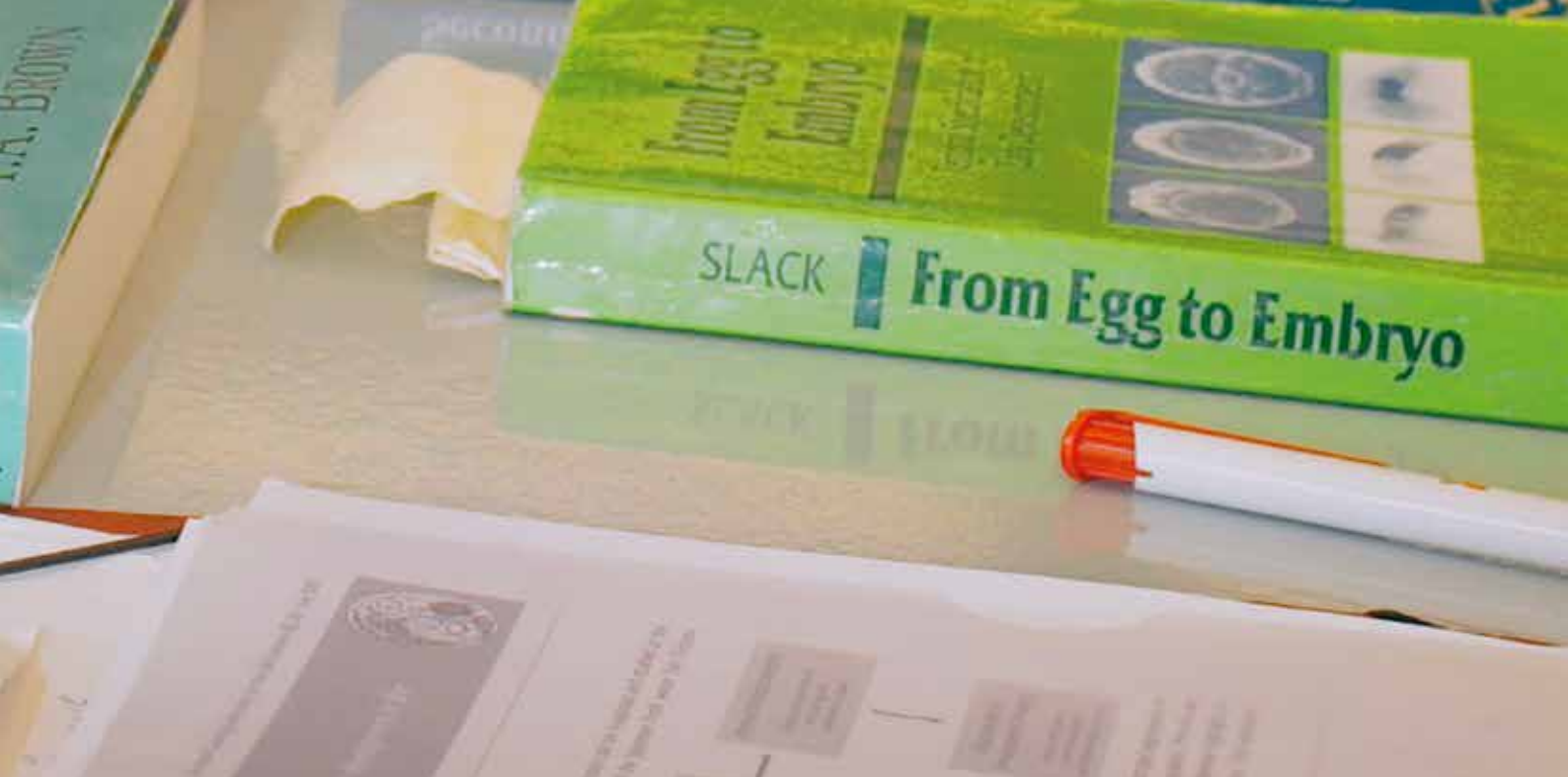
230 students are currently enrolled in the programme

Freedom for your independent spirit

GENOMES

GENOMES





Imagine a career that takes you anywhere you want to go. Where you can focus on bold questions whose answers will shape the future of science. This is a PhD in molecular biology, a frontier wide-open for discovery, which offers young people from many disciplines wonderful career opportunities all over the world.

Choosing the right career path is not easy. As you finish your undergraduate degree, you will likely find yourself facing many opportunities. A PhD is one option that stands out above the rest. It allows you to develop your independent scientific thinking, exercise your creativity, solve

fundamental biological problems and surround yourself with like-minded colleagues and advisors.

Choosing where to do your PhD degree is another important decision. Many factors come into play when you look for an institution. EMBL's excellent resources and solid funding mean that you have the security to focus on your project. The lack of barriers between research units gives you a chance to collaborate with scientists from different disciplines, bringing out the best ideas and solutions to problems. An 'open door' policy gives you the chance to discuss projects and the challenges that are invariably

associated with novel research. And camaraderie among your colleagues gives you the support you need to become an independent thinker and researcher.

The EMBL International PhD Programme provides the ideal environment for ambitious students. Our resources, facilities, and staff are second to none. We continually strive to make this the best possible place for creative PhD students. Over the course of your studies, you will develop new insights, mature into a modern researcher and make important contributions to the life sciences.

150 applicants (out of ~1800)
are invited for an interview every year

Modelling spindle positioning in the *C. elegans* embryo



Cleopatra Kozlowski

Nationality: British/Japanese/Polish
 Graduated from EMBL in 2007. Cleo is now a Scientist at Genentech Inc, a large biotech company in San Francisco, California

“Being among people in the pure pursuit of knowledge is very important in learning to ask the right questions.”

As a child, Cleo was always curious about how things worked – “especially the weird things,” she says. “What first motivated me to study biology may have been the images of a two-headed fly in a first year molecular biology course about the role of Hox genes in development.”

While studying at Cambridge University in the UK, Cleo decided that EMBL was the place to continue building her scientific career, so she applied to the Cell Biology and Biophysics Unit. There she pursued her PhD in the modelling of spindle positioning in the *C. elegans* embryo using computer simulations. “Although I had worked as a summer student and undergraduate in several institutions, EMBL was the first place where I found everybody – from masters students to the heads of labs – to be truly dedicated to basic science,” she says. “It was very motivating to be among an international group of people who are united by their interest in understanding life. For a PhD student, being among people in the pure pursuit of knowledge is very important in learning to ask the right questions. That’s why I’m very glad that I was at EMBL at the PhD stage of my scientific career.”

Cleo also enjoyed her EMBL experience outside the lab. “As a ‘hybrid’ myself (I’m half Japanese, half Polish), I felt really comfortable in the international environment,” she says. “I also truly enjoyed my time in Heidelberg, and visiting the surrounding beautiful German villages.”

Taking science from the bench to society



Giuseppe Testa

Nationality: Italian
 Graduated from EMBL in 2001. Giuseppe is now at the Laboratory of Stem Cell Epigenetics, European Institute of Oncology, Milan. He is a recipient of the Branco Weiss Fellowship ‘Society in Science’.

“EMBL unleashes your scientific curiosity and encourages you to take science beyond the bench.”

During his studies at medical school in Perugia, Italy, Giuseppe became increasingly fascinated with molecular biology – seeing it as the real future of medicine. He knew that EMBL was the place he wanted to be. “When EMBL called me for an interview, I didn’t hesitate,” he says.

At EMBL, Giuseppe enjoyed the vibrant mix of languages, cultures and people. “You feel really immersed in Europe at EMBL, and the friendships that you build during your PhD stay with you long after you leave the lab,” he says.

As a PhD student at EMBL, Giuseppe felt encouraged to pursue his intellectual curiosity and push boundaries. His research focused on establishing a mouse model of an acute form of leukaemia and led to the breakthrough development of a new approach for the engineering of the mouse genome. This project gave him the tools with which to pursue his current work on the differentiation of embryonic stem cells.

Giuseppe also took an active role in the laboratory’s ‘Science and Society’ activities. He helped to open the dialogue between science and the public, and pursued the social implications of biotechnology through reading clubs, study sessions, conferences and workshops, while doing postdoctoral research in Dresden. This involvement led him to start a similar initiative while in Dresden, where he chaired the Dresden Forum on Science and Society at the Max Planck Institute of Molecular Cell Biology and Genetics. For his interdisciplinary project on the legal and ethical framing of cloning and stem cell research in different political cultures, he was awarded the prestigious Branco Weiss Fellowship ‘Society in Science’ in 2003.

Straight from the students: What's the best thing about doing your PhD at EMBL?

“The Predoc course let me experience various relevant fields, from concepts in biology to computer programming” – Jun Hee Kang, EMBL PhD student from South Korea.

Every year, EMBL accepts about 60 students into its International PhD Programme. These students will work at any of the EMBL sites, taking up positions in Heidelberg, Barcelona, Grenoble, Hamburg, Hinxton, or Rome. But before they start working in their labs, the students are brought together in Heidelberg for the two-month Core Course in Molecular Biology to get an overview of the research at EMBL and to hear about new areas of science. Students learn where to go if they need help on a certain problem or technique during their PhD. They also participate in practical activities, journal clubs and discussions.

Many of our students come from physics, mathematics and

chemistry backgrounds and the course gives them a good idea of problems facing molecular biologists. Students are guaranteed close contact with EMBL group leaders, giving them a chance to learn more about their research and expertise. And perhaps most importantly, the students get to know each other during the courses and in the many social events that are organised for and by the new predocs. EMBL students have a wide social network in the lab, which often leads to fruitful scientific collaborations.

“What struck me is that people actually listen to what you have to say” – José Afonso Assunção, EMBL PhD student from Portugal.

When it comes to science and research, there are few molecular biology institutes that can be compared to EMBL. The fact that many group leaders are also beginning their scientific careers

and only stay at EMBL for a limited number of years guarantees a young, dynamic and informal environment. This open and collegial atmosphere encourages students to share their opinions and ideas. They feel that what they say really matters.

Students are given guidance and supervision by group leaders, but are encouraged to look independently for expertise and collaborative projects in their area of research. Students are encouraged to take their projects in the direction that interests them most.

“The vast network of collaborations creates a hotbed for creative science” – Hernando Martínez, EMBL PhD student from Spain.

EMBL gives students exposure to the most exciting research in molecular biology. With experts in the fields of bioinformatics, gene expression, cell biology

Straight from the students: What's the best thing about doing your PhD at EMBL?

and biophysics, developmental biology, structural and computational biology and mouse biology, students have a wealth of knowledge from which to draw. Because the institution has a training mentality, EMBL scientists are easily reachable to discuss scientific projects, hear about a student's work or develop collaborative projects. Doors are always open, questions welcome and help available when you need it. The relaxed atmosphere in the lab enables easy communication with scientists and provides many opportunities to make connections and establish collaborations.

“Organising the PhD symposium broadened my knowledge and offered inspiration” – Alex De Marco, EMBL PhD student from Italy.

PhD students are also given a very unique opportunity – to independently organise their own conference. The EMBL

International PhD Symposium is organised by students from beginning to end. They decide the topic, select and invite the speakers, and secure funding. Previous symposia have dealt with a variety of interdisciplinary themes, such as ‘From Genes to Thoughts’, ‘Evolution’ and ‘Design of Life: Learning from Nature’. Every year, this event brings together hundreds of students and the feedback from the participants and the speakers has been very enthusiastic.

“Life at EMBL doesn't stop at the bench; it's fun to check out some of the clubs on offer” – Lucía Herrera, EMBL PhD student from Guatemala.

EMBL's Staff Association generously supports different activities outside the lab. The music club organises concerts for EMBL scientists who enjoy playing or singing to share their music with others. The various sports clubs, including diving, climbing

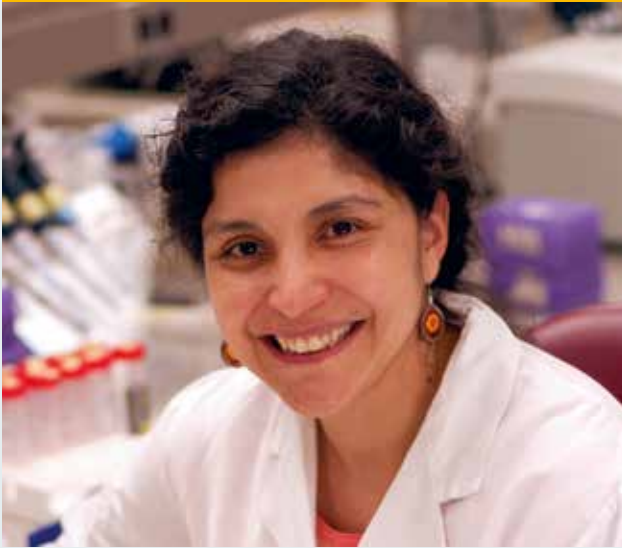
and waterskiing, offer special rates and even trips to exotic locations. Throughout the year, parties bring all the departments together to enjoy the mix of cultures at EMBL. In January, the Scots throw a traditional ‘Burns’ night’, the Germans celebrate ‘Oktoberfest’ in the autumn and the Greek community has been known to bring all nationalities together for great food and traditional dancing.

“All the EMBL sites offer superb scenery and access to great European cities” – Romain Gibeaux, EMBL PhD student from France.

Whether it be skiing on the local hills in Grenoble, enjoying the classic student town of Cambridge, biking through the forest in Heidelberg, strolling along the famous Hamburg harbour, or touring around Rome, students get to know and enjoy the beautiful European locations of EMBL.

~50 different nationalities
are currently represented
by the student body

Opening doors to a career in science



Marina Ramirez-Alvarado

Nationality: Mexican

Marina was the first student representative at EMBL and graduated in 1998. She is now an Assistant Professor at the Mayo Clinic in Rochester, Minnesota, USA.

“Doing my PhD at EMBL opened every door for my career.”

Now an Assistant Professor at the Mayo Clinic in Minnesota, Marina is studying diseases associated with misfolded proteins. Her interest in protein structure began at EMBL. She was drawn to the lab by its world-class facilities, interdisciplinary environment and international staff.

“EMBL trained me to exercise my creativity and to believe in what I do. It gave me the confidence to set my goals high and the knowledge to reach those goals.”

Marina’s PhD work at EMBL involved the design and characterisation of different peptides using a variety of spectroscopy. The work of Marina and her colleagues was an important first step towards understanding the beta-sheet structure of proteins, which plays a key role in Alzheimer’s and other diseases. After finishing her PhD, Marina went to Yale University to do postdoctoral research – to study how infectious proteins form very stable beta-sheet structures called amyloid. At the Mayo Clinic, she is studying the molecular mechanisms underlying a rare amyloid disease called light chain amyloidosis.

In addition to her work at the lab bench, Marina enjoys teaching courses in molecular biology to graduate students at the Mayo Clinic.

A fusion of physics and biology for a developmental blueprint



Philipp Keller

Nationality: German

Philipp graduated from EMBL in 2009 and is now a fellow at Howard Hughes Medical Institute’s Janelia Farm Research Campus.

“It’s much more important to think about what you really enjoy doing, rather than making a decision based on what you might or might not achieve.”

Philipp started out as a physicist, but found himself becoming interested in a fusion of biology and physics after getting involved in practicals at Heidelberg’s Max Planck Institute for Medical Research. “When I was deciding where to do my PhD, someone suggested that I check out what the groups at EMBL were doing. I looked at the website and was really interested in EMBL’s multidisciplinary projects – I found they were exactly the kind of topics I wanted to pursue.”

During his PhD, Philipp achieved a groundbreaking result – the first complete developmental ‘blueprint’ of a vertebrate – with his reconstruction of zebrafish embryonic development using a Digital Scanned Laser Light Sheet Microscope. The resulting video gained huge interest from the media and was named one of the top ten ‘breakthroughs of 2008’ by Science. “The technology we developed at EMBL was the key to producing the data needed to achieve this,” he says. “But from a scientific point of view, all my projects were just as invaluable in helping me develop my skills.”

Philipp was impressed by the possibilities offered at EMBL. “I pursued several projects during my PhD, which allowed me to explore entirely different areas of biology and find out for myself what I might want to continue with in the future,” he says. “The amazing thing about EMBL is that you can just go to a lab next door or down the hall and start a collaboration in whatever area interests you. It’s also great to come to EMBL at the beginning of your career and to be exposed early on to all the different topics, and to be involved in research at the cutting edge of science.”

EMBL Research

EMBL is Europe's flagship laboratory for the life sciences. Our interdisciplinary, curiosity-driven research programme fosters early independence and encourages collaboration. We are more than 1600 people, from over 80 countries, operating across six sites. Research at EMBL emphasises a multifaceted, collaborative and creative approach.

Biologists, physicists, chemists, mathematicians, computational scientists and more come together in a stimulating environment to push boundaries.

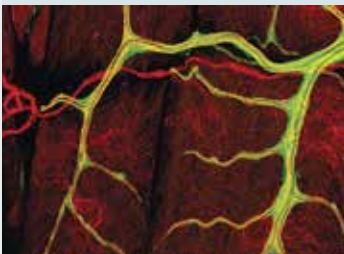
Increasingly, this involves generating, analysing and integrating vast amounts of data. We are entering the era of Digital Biology. Cutting-edge experimental

approaches now visualise and quantify molecular processes. Computational technologies integrate data across scales. By combining the two, researchers at EMBL strive to understand and make predictions about life, in health and disease.

~60 students are accepted
into the programme each year

EMBL Heidelberg, Germany

Directors' Research



Research groups led by EMBL Director and EMBO Director

- What are the connections between gene expression, cell metabolism and disease?
- What determines cell shape in *Drosophila*?



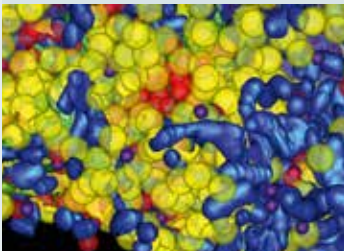
Matthias Hentze
EMBL Director



Maria Leptin
EMBO Director

EMBL Heidelberg, Germany

Cell Biology and Biophysics



Discovering molecular and biophysical mechanisms of cell structure and function

- How do macromolecular machines and protein networks drive cell division, cell migration and cell communication?
- How do proteins and mechanical forces regulate the formation of organelles, cells, tissues and organisms?
- How do a cell's molecular architecture and genetic programme change when it differentiates?



Jan Ellenberg
Head of Unit

EMBL Heidelberg, Germany

Developmental Biology



Studying how cellular processes are coordinated in space and time to shape living organisms

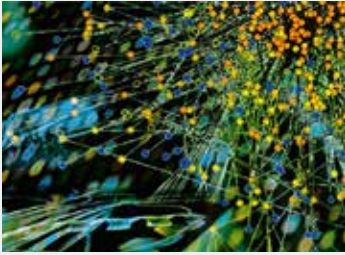
- How do cell dynamics, signalling and timing shape a developing embryo?
- Can we trace a cell type's developmental or evolutionary history?
- How does tissue-specific gene expression regulate cell fate and behaviour?



Anne Ephrussi
Head of Unit

EMBL Heidelberg, Germany

Genome Biology



Understanding the molecular processes leading from genotype to phenotype

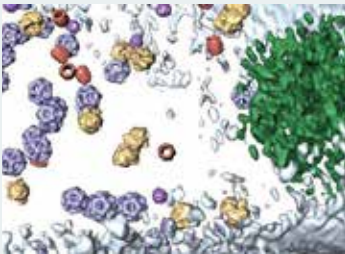
- What are the mechanisms governing genetic, epigenetic and genome regulation?
- How are transcriptional, metabolic and protein networks regulated and interconnected?
- How do differences in genomes translate to differences between individuals?



Eileen Furlong
Head of Unit

EMBL Heidelberg, Germany

Structural and Computational Biology



Understanding the molecular basis of biological function, from proteins and cellular processes to species interactions

- How are biomolecular networks organised in space and how are they regulated?
- How do molecular interactions define different cell states in individuals and in disease?
- How does dynamics of protein interactions and higher order assemblies determine functionality within and between cells?



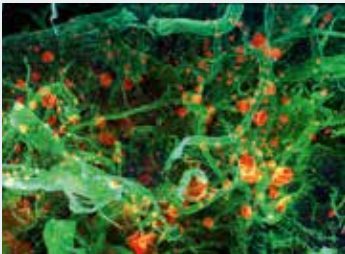
Peer Bork
Joint Head of Unit



Christoph Müller
Joint Head of Unit

EMBL Barcelona, Spain

Tissue Biology and Disease Modelling



Exploring how genes, molecules and cells come together to form tissues and organs

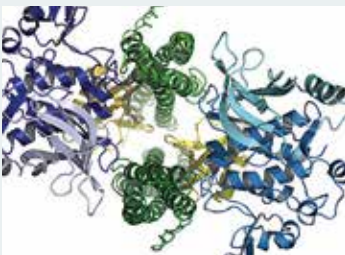
- How do molecular and genetic networks ultimately build, regulate and control tissues and organs?
- How do changes in genes percolate through cells, tissues and organs to result in disease?



James Sharpe
Head of EMBL Barcelona

EMBL Grenoble, France

Structural Biology



Revealing the 3D structure of proteins and their interactions with the genome

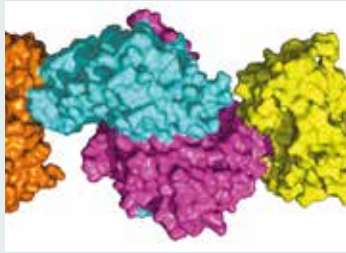
- How do viral polymerases replicate and transcribe the viral genome?
Can this be blocked with drugs?
- How do the proteins that bind to DNA regulate what gene is transcribed?
- What are the interactions involved in RNA processing, transport and degradation?



Stephen Cusack
Head of EMBL Grenoble

EMBL Hamburg, Germany

Structural Biology



Unravelling the structure of challenging molecules that impact human health

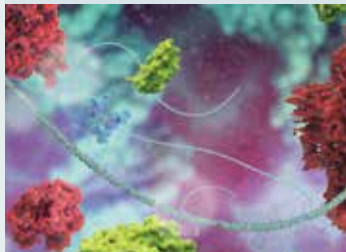
- Which host-pathogen interactions are most crucial for infection?
- What are the molecular mechanisms of transport across cell membranes?
- How can these findings drive new approaches to drug discovery and therapy?



Matthias Wilmanns
Head of EMBL Hamburg

EMBL-EBI, Hinxton, UK

Bioinformatics and Computational Biology



Transforming life science through novel analysis methods and data-driven discovery

- How do novel cellular functions arise and diverge during evolution?
- How do genomes, transcriptomes, proteomes and their interactions vary between cells, tissues and individuals?
- How do variations in cancer genomes lead to differences in therapy success?



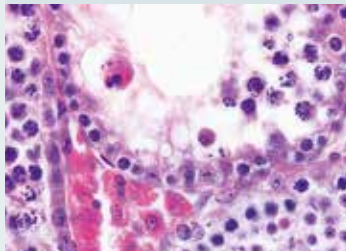
Rolf Apweiler
Director of EMBL-EBI



Ewan Birney
Director of EMBL-EBI

EMBL Rome, Italy

Epigenetics and Neurobiology



Exploring connections between genome, environment and neural function

- How do neural pathways form and function, in health and disease?
- How do genome and environment shape an animal's behaviour?
- What exactly has an impact on the genetic information we express and pass on to the next generation?



Philip Avner
Head of EMBL Rome





Associate Member State
Argentina



Associate Member State
Australia



EMBL sites

Heidelberg

EMBL Heidelberg is nestled in the woods above Germany's oldest university city. Alongside the labs and facilities, the EMBL Advanced Training Centre hosts courses and conferences – many organised with campus partner EMBO – that attract thousands of scientists every year, making the campus a hotbed of discussion, innovation and collaboration. A short ride uphill from a town that has been an international tourist destination for centuries, EMBL fits right into Heidelberg's welcoming, international spirit.

Barcelona

EMBL Barcelona will be located in the Barcelona Biomedical Research Park (PRBB), one of the largest infrastructures in Southern Europe dedicated to translational research. In this highly collaborative, interdisciplinary and international environment, EMBL researchers will benefit from a partnership with the Centre for Genomic Regulation (CRG) and opportunities for collaboration with other pioneering research institutes, both on campus and in the region. Perched on the Barcelona seafront, and within walking distance of the city's iconic architecture, the site is bathed in the energy of this bustling, creative metropolis.

Grenoble

EMBL Grenoble is located on the European Photon and Neutron (EPN) Campus, and is a key player in the campus-wide Partnership for Structural Biology. Close interactions with campus partners like the European Synchrotron Radiation Facility (ESRF) create the ideal conditions for EMBL researchers and instrumentation developers to push boundaries. Within view of the Alps, the site is on the outskirts of the lively university town of Grenoble, where a multitude of cultural events and outdoor activities are on offer year-round.

Hamburg

EMBL Hamburg is located on the campus of the German photon science research centre DESY. Access to and collaboration with the campus' world-leading synchrotron and laser facilities – PETRA-III, FLASH and X-FEL – enables researchers and instrumentation developers at EMBL Hamburg to drive state-of-the-art structural biology methods and cutting-edge technology. Just half an hour away from Germany's largest port, the site echoes the vibrant, international atmosphere of the city that has something for everyone.

EMBL-EBI Hinxton

EMBL-EBI is located on the Wellcome Trust Genome Campus, which provides a stimulating environment in which to conduct top-quality research, and is regularly visited by some of the greatest minds in the biomedical sciences. EMBL-EBI is housed in modern buildings in a beautiful rural setting and is only a stone's throw from the historic university town of Cambridge, where ancient college buildings sit alongside peaceful meadows.

Rome

EMBL Rome shares a campus with the European Mouse Mutant Archive (EMMA) and research groups from the Italian National Research Council (CNR). In this site just outside Rome, researchers can draw inspiration from the historical city and from the mountains, lakes and medieval towns of the Lazio countryside.

The EMBL philosophy: open doors and collaboration



Antonio J. Giraldez

Nationality: Spanish

Antonio graduated from EMBL in 2002 and stayed as a bridging postdoc until February 2003. He's now an assistant professor at Yale University in New Haven, Connecticut.

"I know of no other institute quite as special as EMBL, both as a place to do science and a place to have fun."

"From the PhD interviews onwards you're exposed to dozens of different nationalities at EMBL," says Antonio, who studies how RNAs shape embryo development. "Arriving as a student in a foreign country – something that could be intimidating – becomes a fantastic experience, because fifty other students are in the same boat. It's the perfect recipe for firm friendships and camaraderie, as well as a great breeding ground for scientific collaborations and networks."

Antonio spent a summer internship in an EMBL lab before applying to the PhD programme. "I found myself in one of the scientific centres of the world," he says. "I got exposure to amazing science both from my colleagues and from the numerous lectures and courses run by world leaders in their fields."

Antonio admires the tremendous motivation of everyone at EMBL. "After leaving, I came to realise the wisdom of those that played a fundamental role in shaping the EMBL philosophy of open doors, communication and collaboration," he says. "Most importantly, I owe some of my best friends, and even my wife, to my time at EMBL."

A chance to inspire science teaching in schools



Elena Seiradake

Nationality: Greek

Elena graduated from EMBL in 2006 and was the first EMBL recipient of a Marie Curie E-STAR fellowship to defend her thesis. She is now a postdoc in the Division of Structural Biology at Oxford University's Wellcome Trust Centre for Human Genetics.

"The things that make EMBL such a great place are the excellent scientific facilities and the open minded, dynamic and multicultural people."

As a recipient of a Marie Curie Early-Stage Training in Advanced Life Science Research (E-STAR) fellowship, Elena was offered opportunities to learn extra skills to complement her scientific research. One such activity was a 'Learning Lab' for teachers, organised by EMBL's dedicated education facility, the European Learning Laboratory for the Life Sciences (ELLS).

"The teachers were very eager to learn about our work, and this really increased my regard for our own research," says Elena. The experience of communicating science to non-researchers was so positive that she became involved in other such events, including Grenoble's Science Teaching Festival.

When not communicating science, she found her work at the bench very rewarding too. "Besides giving me an exciting project, my supervisor found the perfect balance between giving advice and allowing freedom in the lab," she says. "The freedom motivated me by making me feel responsible for my project, but whenever I got stuck I could always ask him for help."

9 weeks are spent in Heidelberg during the Core Course in Molecular Biology

Our Partner Universities

Both EMBL and its International PhD Programme strive to contribute to the European academic landscape by establishing bonds with national education systems. We are committed to meeting the highest standards for the education and training of PhD students in the molecular life sciences and to seeking innovative solutions to further improvements. In its mission, the EMBL International PhD Programme sees itself as a strong and loyal partner of the

universities in its member states. Based on EMBL's authority to grant PhD degrees, we have initiated a Partnership Programme with some of the most highly respected universities in Europe. An important aspect of this initiative is that EMBL PhD students can obtain joint PhD degrees from us together with our partners.

Our long-term ambition is that these partnerships, which are currently bilateral between EMBL

and specific universities, will grow into a network for the optimal recruitment, training and career support of its PhD students. We are happy that the universities listed below have already become EMBL's partner universities, and look forward to more universities joining in the future. Please see s.embl.org/phd for the latest update.

EMBL International PhD Programme Partner Universities

Belgium

Katholieke Universiteit Leuven

Croatia

University of Zagreb

Finland

University of Helsinki
Åbo Akademi University
Turku University

France

Université Grenoble Alpes
Université de Strasbourg
Université Paris Diderot

Germany

Ruprecht-Karls-Universität
of Heidelberg
Ludwig-Maximilians University
of Munich
Universitätsklinikum Hamburg-
Eppendorf

Greece

University of Crete

Hungary

Eötvös Loránd University

Iceland

University of Iceland

Ireland

University College Cork

Italy

University of Milano
Sapienza – Università di Roma

Netherlands

Radboud University Nijmegen

Norway

University of Bergen
University of Oslo

Portugal

Universidade Nova de Lisboa
Universidade de Lisboa

Spain

Universidad Autónoma de Madrid

United Kingdom

University of Dundee, Scotland

Your questions answered

Are students from non-member states eligible to apply?

Highly qualified students of all nationalities may apply for the EMBL International PhD Programme (EIPP).

What type of degree will I need when I apply?

PhD applicants must hold, or anticipate receiving before enrolment, a university degree that would formally qualify them to enter a PhD or equivalent programme in the country where the degree was initially obtained. All applications are evaluated solely on the basis of qualification and scientific potential.

Can I apply for the PhD Programme before I receive my degree?

Yes. Applications can be submitted before obtaining the degree, though you must be scheduled to complete your degree by the start of your contract at EMBL.

Do I need to choose and contact a specific group leader with whom I want to work before applying to the EMBL International PhD Programme?

No. It is neither necessary nor recommended to contact group leaders individually. Students wishing to apply for the EMBL International PhD Programme will find all necessary information regarding research projects of the various units on the EMBL website. On the application form, the student may choose one or two units as well as selecting from a list of research keywords and, if invited, is interviewed by all group leaders of either or both of the units. Note that not all group leaders accept students each year.

When do I need to submit my application form?

The application deadlines and all relevant information are published well in advance on the PhD Programme website (s.embl.org/phd). Please note that the entire application procedure is online. There are two application rounds each year.

What is the format of the interviews?

Firstly, each candidate will be interviewed during the Initial Admission Assessment (IAA) interview. This is a 20 minutes pass interview and is the prerequisite to be eligible to join the EIPP. General knowledge questions will be asked taking the applicant's background into account. Everybody who passes this interview is, in principle, eligible to enter the EMBL International PhD Programme, and will be interviewed further in one-on-one discussions with group leaders from the chosen units.

25 is the average age of an incoming PhD student

Will I receive feedback about my application even if I am not invited for an interview?

The very large number of applications to the programme makes it impossible for us to give specific feedback regarding the merits of each application. However, our online application system allows us to offer something unique even to those applicants who are not invited for interview: the Shared Applicant Pool. A question on the application form asks whether the applicant would like his/her application to be made available to other interested colleagues, in case he/she cannot be admitted to the EMBL International PhD Programme. So, with the click of a button, our applicants are given the opportunity to be considered for PhD positions in an even larger group of top-quality research laboratories. These include our Partner Universities and other excellent research groups with

whom EMBL has close ties. The effort of making a good application to the EMBL International PhD Programme can therefore bring extra benefits.

If invited for interview will EMBL cover my travel expenses?

EMBL covers reasonable travel expenses and will reimburse those during the interview week. All claims necessitate receipts.

If I am accepted for the EMBL International PhD Programme, when can I start?

Successful applicants can commence their PhD any time after the interviews and should ideally start by October at the latest of any given year. Starting dates are decided upon in agreement with the respective group leader.

Do I need to register with a university before I start my contract?

No. Students must register with a university during their first year in the EMBL International PhD Programme.

Is there help with finding accommodation?

Yes. EMBL has guesthouse apartments which can be rented for the first few months after your arrival, giving you time to find suitable accommodation. The EMBL housing service has apartments from local landlords on offer as well.

How will I finance my PhD studies?

EMBL provides a competitive stipend, which includes broad health care benefits and pension access. Current stipend rates are published at s.embl.org/phd.

Your questions answered

I have my own funding. Does this guarantee a place in the programme?

All applications are evaluated solely on basis of qualification and scientific potential. All invited candidates must successfully pass the interview procedure in order to be eligible.

What is the predoc course and do all students have to take it?

The predoc course is compulsory for all EMBL PhD students. This course, called the Core Course in Molecular Biology, is taught by EMBL faculty and is held at the beginning of the first academic year (October to December) at the main lab in Heidelberg. The course covers all scientific areas represented at EMBL and includes lectures, practicals and student seminars.

Who will supervise and mentor me during my studies?

In addition to the day-to-day supervision by a group leader, each EMBL PhD student has a Thesis Advisory Committee, consisting of the group leader and up to

three other advisors (typically one additional EMBL group leader from the same unit, one from a different unit and a non-EMBL scientist from the student's university), who guide the student during thesis work. Within the first nine months, students prepare a written outline of their thesis project and discuss it with the committee. At the end of the second and third years, students write an annual report on their work, give a seminar, and discuss the report and seminar with their Thesis Advisory Committee.

How is the PhD thesis evaluated?

This will be affected by the requirements of the university at which you are registered. In general, the thesis is evaluated in terms of scholarly criteria by each member of a Thesis Examination Committee. One criterion is the likely acceptability of the thesis work for publication in international peer-reviewed journals. A decision is delivered by the Chair of the Thesis Examination Committee on the basis of the committee members' written reports.

What type of degree will I receive?

In December 1997, in recognition of the high quality of its International PhD Programme, EMBL was granted the right to award its own PhD degrees. EMBL became the first international institution providing training in molecular biology in Europe with this capability. Currently, EMBL students obtain their degree from a national university or jointly with EMBL.

How long does it take students to complete their PhD?

Students enrolled in the EMBL International PhD Programme must complete their degrees within 3.5 to 4 years.

Join us ...

EMBL is Europe's flagship laboratory for the life sciences. We are an intergovernmental organisation established in 1974 and are supported by over 20 member states.

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 six sites in Barcelona (Spain), Grenoble (France), Hamburg (Germany), Heidelberg (Germany), Hinxton (UK) and Rome (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.

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