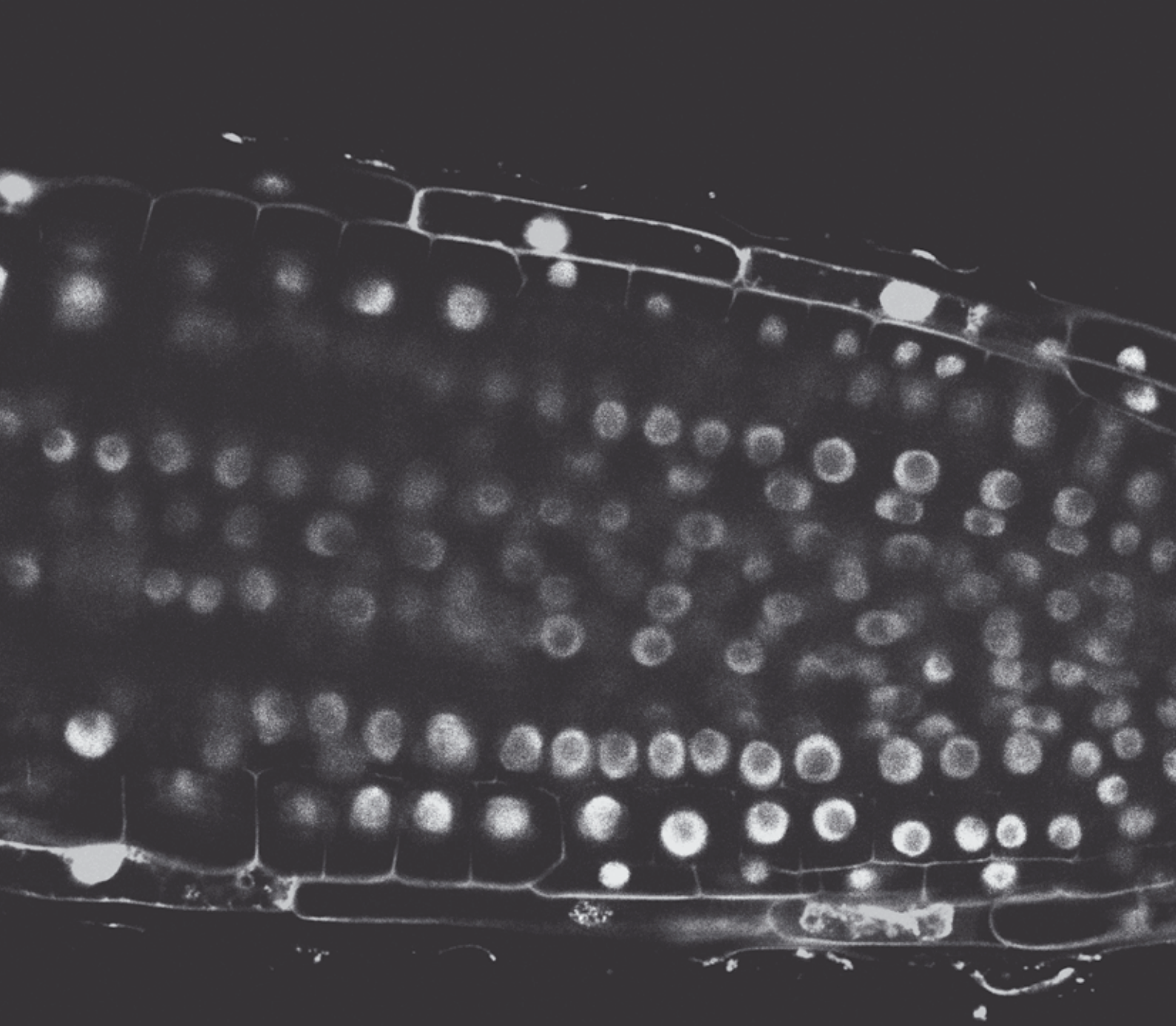
EMBO

2021

Facts & figures

with annual report

EMBO Facts & figures
with annual report 2021



Original image courtesy of
EMBO Member Paula Duque and Romana Yanez

Preface

I am writing this in summer 2022 as the sixth EMBO Director. I succeeded Maria Leptin in January, and I am most grateful to her for handing over a thriving organization. I am committed to ensuring that EMBO stays true to its established mission.

In this brochure, we report on the programmes and activities in 2021. I am delighted that EMBO, thanks to funding from EMBC, has been able to support many excellent scientists in a year that was significantly affected by the COVID pandemic and its economic repercussions.

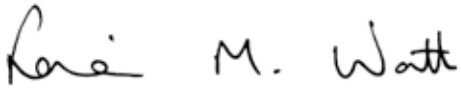
2021 saw the launch of initiatives to increase participation in EMBO Programmes throughout Europe. For the next three years, life scientists in or going to Croatia, Czech Republic, Estonia, Greece, Hungary, Italy, Lithuania, Luxembourg, Poland, Slovenia, and Turkey are eligible to apply to new and adapted schemes. We look forward to reporting on these important activities in the future.

224 postdoctoral fellowships, 202 scientific exchange grants, and three core facility fellowships were awarded in 2021. In addition, three EMBO New Venture Fellowships to support young scientists to enter a new field were awarded in memory of passionate scientist and EMBO Member Suzanne Eaton. EMBO also welcomed group leaders who are in the early stages of setting up their laboratories: 26 young investigators, six installation grantees, and eight global investigators. These awardees, together with 55 new EMBO Members and Associate Members, joined our growing global communities.

I am pleased that the EMBO Courses & Workshops Programme continued to stimulate scientific exchanges and provide training despite the limitations imposed by the pandemic. Four practical courses and nine workshops took place in 2021. Conference organizers and participants responded flexibly to changing requirements throughout the year, for example by adopting virtual and hybrid formats. Guided by discussions with meeting organizers, EMBO introduced measures for sustainable conferencing beyond the pandemic.

Open Science remains high on our agenda. EMBO Press continues to promote FAIR (findable, accessible, interoperable, reusable) data, accelerates the dissemination of scientific results by preprints through Review Commons, and is currently preparing for a full transition of its journals to Open Access.

Finally, I thank all EMBC Delegates, the EMBO Members serving on Council and Committees, and all EMBO staff for their dedication to promote excellence in life sciences in Europe and beyond. It is a privilege to lead such a wonderful organization.



Fiona Watt
EMBO Director

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Cover: Original image courtesy of EMBO Member Marie-Hélène Verlhac

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EMBOpress

EMBO SOLUTIONS

Facts & figures 2021

Mission

EMBO stands for excellence in life sciences.

EMBO is an organization of more than 1,900 leading researchers that promotes excellence in the life sciences in Europe and beyond. The major goals of the organization are to support talented researchers at all stages of their careers, stimulate the exchange of scientific information, and help build a research environment where scientists can achieve their best work.

EMBO helps young scientists to advance their research, promote their international reputations and ensure their mobility. Courses, workshops, lectures and EMBO Press publications disseminate the latest research and offer training in techniques to maintain high standards of excellence in research practice. EMBO helps to shape science policy by seeking input and feedback from our communities and by following closely the trends in science.

EMBO supports talented researchers, selected through impartial evaluation processes, to allow them to do great science. The wide scientific scope across the full range of life science research coupled with the broad geographical reach of more than 1,900 members and associate members – some of the best researchers in Europe and around the world – positions EMBO optimally to serve the life science community.

Original image courtesy of EMBO Member Luca Jovine

Achievements 2021

Launch of the initiative to increase participation in the EMBO Programmes throughout Europe

Launch of the EMBO New Venture Fellowships that support early career scientists to enter a new field

'Acknowledgements of Excellence' provided to all applicants for EMBO Postdoctoral Fellowships who met the funding criteria, irrespective of an award

EMBO supports hybrid formats to enhance inclusiveness, accessibility, and sustainability of scientific events

The EMBO survey: a major survey of life scientists across Europe and beyond about their needs and perceptions of the EMBO Programmes

Original image courtesy of Anh Hoang Le

EMBO impact in numbers 2021

>97,000 preprints accessible via Early Evidence Base

12,064 figure-data packages from **364** papers curated by SourceData

11,840 preprint-linked peer reviews accessible via Early Evidence Base

1,934 members altogether in **34** countries with **90** Nobel laureates among them

890 articles published in EMBO Press journals

570 submissions submitted to Review Commons

425 posted as preprints

220 published in a partner journal

138 posted as refereed preprints

224 postdoctoral researchers funded in **19** countries

202 scientific exchanges funded between researchers from **24** countries

75 courses and workshops funded or co-funded in **22** countries

26 EMBO Young Investigators awarded in **8** countries

9 European-level project stakeholder meetings attended

8 EMBO Global Investigators awarded in **3** countries

6 EMBO Installation Grantees awarded in **4** countries

9 further grants awarded to scientists in **5** countries

Original image courtesy of EMBO Member François Nédélec

EMBC

EMBC Member States | *Delegates and Advisors*

Austria	*Hemma Bauer*
Belgium	*Maria-Helena Bosschaerts*
Croatia	*Lovorka Barać Lauc*
Czech Republic	*Jan Buriánek*
Denmark	*Line Bekker Poulsen*
Estonia	*Maia Kivisaar*
Finland	*Johanna Myllyharju*
France	*Elena Hoffert*
Germany	*Barbara Ohnesorge*
Greece	*Emmanouil Dermitzakis*
Hungary	*Gergely Boehm*
Iceland	*Zophonías Oddur Jónsson*
Ireland	*Maria Nash*
Israel	*Iris Eisenberg*
Italy	*Lucia Banci*
Lithuania	*Milda Jodinskiene*
Luxembourg	*Stephanie Schott*
Montenegro	*Danilo Mrdak*
Malta	*Joseph Borg*
Netherlands	*Peter Steenhuis*
Norway	*Line M. Grønning-Wang*
Poland	*Leszek Kaczmarek*
Portugal	*Luisa Igreja*
Slovak Republic	*Marcel Sládok*
Slovenia	*Tomaz Boh*
Spain	*Cristina Bauluz*
Sweden	*Björn Andersson*
Switzerland	*Doris Wohlfender-Bühler*
Turkey	*Ahmet Ademoglu*
United Kingdom	*Hugh Dunlop*

EMBC Associate Member States

India
Singapore

EMBC/EMBO co-operation partners

National Agency for Research and Development (ANID; former CONICYT) of Chile

National Science and Technology Council (NSTC; former MOST) of Taiwan

Christa Schleper
Laurent Ghys — *Alain Heynen*
Krešimir Pavelić
Zdena Palková
Michael Sandgreen — *Kaare Teilum*
Toivo Raim
Sirpa Nuotio
Anne Paoletti
Peter Becker
George A. Garinis — *Panagiota Katsafana*
Ferenc Nagy
Eiríkur Steingrímsson
Noelle Waldron
Joel Sussman
Alessandro Boero
Virginijus Sikšnyš

Djurdjina Bulatović

Anna Akhmnova
Inge Jonassen
Maria Klimkiewicz
Cláudio Sunkel
Ján Turňa
Andrej Ograjenšek — *Boris Turk*
Angela Nieto
Maria Thuveson
Anna Jazwinska-Müller — *Laurent Salzarulo*
Jale Sahin
Mark Palmer — *Tim Willis*

Leszek Kaczmarek
EMBC President

EMBC

The European Molecular Biology Conference (EMBC) is an inter-governmental organization comprising 30 member states. It funds the EMBO Programmes and activities that support excellent life scientists. EMBC and EMBO also co-operate with countries and organizations beyond Europe to foster interactions with international scientific communities.

EMBO Membership

In 2021, 64 life scientists were elected to the EMBO Membership:

As a membership organization, EMBO owes its reputation and impact to the quality and dedication of its community of more than 1,900 EMBO Members. The members apply their expert insight to guide the execution of all EMBO initiatives through scientific peer review and by serving on EMBO Council, Committees and Advisory Boards. As a result, EMBO Members collectively influence the future direction of life science research and strengthen the research communities across Europe.

Complementing the EMBO Members working in the EMBC Member States, a number of EMBO Associate Members join the organization from countries in other parts of the world each year. The EMBO Associate Members add a global perspective to the current activities and future directions of EMBO.

While EMBO Membership is a lifelong honour, an efficient annual nomination and election process ensures that the scope of EMBO remains broad and open, with the flexibility to expand into emerging areas and to embrace new concepts in the life sciences. As a consequence, the scope of the organization has grown and evolved from its deep historical roots in the “molecular biology” of the 1960s to the postgenomic life sciences that pervade and improve the lives of people today.

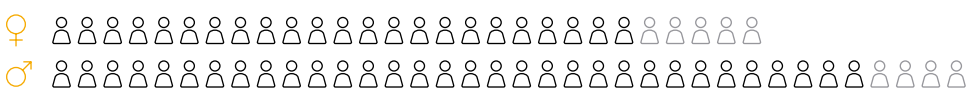
EMBO MEmbers’ Meeting 2021, Heidelberg, Germany

55 EMBO Members and nine Associate Members. The newly elected members reside in 21 countries, and 28 of them (44 %) are women.

New EMBO Members 2021

New EMBO Members 2021

New EMBO Associate Members 2021



New EMBO Members 2021

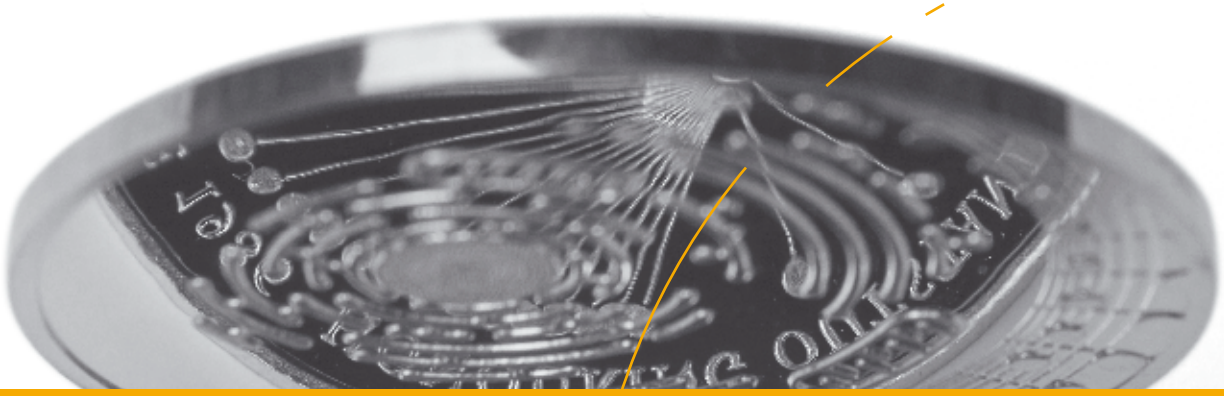
Nathalie Q. **Balaban**	Hebrew University, Jerusalem, IL
Alex **Bateman**	European Bioinformatics Institute (EMBL-EBI), Hinxton, UK
Martin **Beck**	Max Planck Institute of Biophysics, Frankfurt am Main, DE
Laurent **Blanchoin**	Interdisciplinary Research Institute of Grenoble, FR
Adrian P. **Bracken**	Trinity College, Dublin, IE
Inês **Cardoso Pereira**	Instituto de Tecnologia Química e Biológica António Xavier, Oeiras, PT
Petr **Cejka**	Institute for Research in Biomedicine, Bellinzona, CH
Jacqueline **Cherfils**	École Normale Supérieure, Paris, FR
Rosa **Cossart**	Aix Marseille University, Inserm, INMED, Marseille, FR
Peter J. **Cullen**	University of Bristol, UK
Karin E. **de Visser**	Netherlands Cancer Institute, Amsterdam, and Oncode Institute, Utrecht, NL
Miguel A. **Del Pozo**	Centro Nacional de Investigaciones Cardiovasculares (CNIC), Madrid, ES
José Antonio **Enríquez**	Centro Nacional de Investigaciones Cardiovasculares (CNIC), Madrid, ES
Tobias J. **Erb**	Max Planck Institute for Terrestrial Microbiology, Marburg, DE
Jiří **Fajkus**	Masaryk University, Brno, CZ
Rebecca C. **Fitzgerald**	MRC Cancer Cell Unit, Cambridge, UK
Ervin **Fodor**	Sir William Dunn School, Oxford, UK
Toni **Gabaldón**	Barcelona Supercomputing Centre (BSC-CNS) and Institute for Research in Biomedicine (IRB), Barcelona, ES
Julie E. **Gray**	University of Sheffield, UK
Takashi **Hiiragi**	EMBL, Heidelberg, DE
Corinne **Houart**	King's College and Francis Crick Institute, London, UK
Evelyn **Houliston**	Villefranche-sur-Mer Developmental Biology Laboratory, FR
Matthew E. **Hurles**	Wellcome Sanger Institute, Cambridge, UK
Matteo **Iannacone**	San Raffaele Scientific Institute & University, Milano, IT
Kim B. **Jensen**	BRIC, University of Copenhagen, DK
Robert J. **Klose**	University of Oxford, UK
Alwin **Köhler**	Max Perutz Laboratories Vienna, AT
Cris **Kuhlemeier**	University of Bern, CH
Gianni **Liti**	IRCAN, Université Côte d'Azur, Nice, FR
Robbie **Loewith**	University of Geneva, CH
Ilaria **Malanchi**	Francis Crick Institute, London, UK
John C. **Marioni**	EMBL-EBI and University of Cambridge, UK
Elisa **Martí**	Instituto de Biología Molecular de Barcelona (IBMB), ES
Massimiliano **Mazzone**	VIB – KU Leuven Center for Cancer Biology, BE
F. Nina **Papavasiliou**	Deutsches Krebsforschungszentrum (DKFZ), Heidelberg, DE
Balázs **Papp**	Biological Research Centre and HCEMM, Szeged, HU
Diego **Pasini**	European Institute of Oncology IRCCS and University of Milan, IT
Andrea **Pauli**	IMP, Vienna, AT
Rosa **Rademakers**	VIB-UA Center for Molecular Neurology, University of Antwerp, BE
Markus **Ralser**	Charité - Universitätsmedizin, Berlin, DE and Francis Crick Institute, London, UK
Juri **Rappsilber**	Technische Universität, Berlin, DE
Oded **Rechavi**	Tel Aviv University, IL
Beatriz **Rico**	Centre for Developmental Neurobiology, King's College London, UK
Uğur **Şahin**	Johannes-Gutenberg-Universität, Mainz, DE
Liliane **Schoofs**	KU Leuven, BE
Zofia **Szweykowska-Kulińska**	Adam Mickiewicz University, Poznan, PL
Kristin **Tessmar-Raible**	Max Perutz Laboratories, University of Vienna, AT
Özlem **Türeci**	BioNTech SE, Mainz, DE
Wim **Vermeulen**	Erasmus University MC, Rotterdam, NL
Raphael **Voituriez**	CNRS / Sorbonne Université, Paris, FR
Eilika **Weber-Ban**	ETH Zurich, CH
Karsten **Weis**	ETH Zurich, CH
Karina B. **Xavier**	Instituto Gulbenkian de Ciência, Oeiras, PT
Eleftheria **Zeggini**	Helmholtz Zentrum München, Neuherberg, DE
Denise **Zickler**	Institute for Integrative Biology of the Cell (I2BC), University of Paris-Saclay, Orsay, FR

New EMBO Associate Members 2021

Yasmine **Belkaid**	NIAID, NIH, Bethesda, US
Hugo J. **Bellen**	Baylor College of Medicine, Houston, US
María Fernanda **Ceriani**	Fundación Instituto Leloir, IIB-BA/CONICET, Buenos Aires, AR
Mark **Dawson**	Peter MacCallum Cancer Centre, Melbourne, AU
Akiko **Iwasaki**	Yale University School of Medicine/HHMI, New Haven, US
Roop **Mallik**	Indian Institute of Technology, Mumbai, IN
Keiko **Sugimoto**	RIKEN Center for Sustainable Resource Science, Yokohama, JP
Masayo **Takahashi**	Kobe City Eye Hospital, Kobe, JP
Leonard **Zon**	Boston Children's Hospital, US

Find all 2021 EMBO Members' research interests on page 74.

EMBO Gold Medal



The EMBO Gold Medal is awarded annually to young scientists for outstanding contributions to the life sciences in Europe. The awardee receives a medal and a bursary of 10,000 euros. The EMBO Gold Medal acknowledges and highlights remarkable achievements of this group.

© Photolab/EMBL

Innate immunity | Andrea Ablasser

2021 EMBO Gold Medalist
Professor at EPFL, the Swiss Federal Institute of Technology Lausanne, CH

Andrea Ablasser received the EMBO Gold Medal 2021 for her pioneering work on how cells recognize inappropriate presence of double-stranded DNA in the cytoplasm as a danger signal and how the sensing of DNA initiates powerful innate immune responses. Her scientific work provided insights into newly discovered mechanisms of innate immunity and may pave the way for therapeutic opportunities for the treatment of inflammatory conditions and cancer in humans.

Ablasser has been exploring the mechanisms and regulation of the DNA sensor cGAS, which upon activation produces the messenger molecule cGAMP. This messenger activates the receptor STING, which eventually activates the immune system through the production of cytokines. More recently, she has elucidated mechanisms by which this pathway is suppressed when encountering host DNA to avoid autoreactivity.

EMBO Member Douglas Hanahan, Distinguished Scholar of the Ludwig Institute for Cancer Research and former Director at the Swiss Institute for Experimental Cancer Research (ISREC), EPFL, says: “Andrea Ablasser is a remarkably creative and accomplished scientist. Each of her publications is a conceptual tour de force, clearly establishing her as an exceptional biomedical scientist of her generation.”

The EMBO Gold Medal recipient presented her research at Cell Bio 2021, a joint online meeting by ASCB and EMBO, in December 2021.

FEBS | EMBO Women in Science Award

The FEBS | EMBO Women in Science Award highlights major achievements by female scientists in Europe. Awardees are inspiring role models for future generations of women in science. The award is a joint initiative of EMBO and the Federation of European Biochemical Societies (FEBS). Each year one woman working in the life sciences is rewarded. The awardee is required to give a plenary lecture at the FEBS Congress. She receives 10,000 euros and a bronze sculpture designed by Marloes Eerden.

Innovation and inspiration | Molly Stevens

2021 FEBS | EMBO Women in Science Awardee
Professor at Imperial College London, UK

Molly Stevens received the award for innovating biomaterials and inspiring future generations of scientists. She talks about her unusual career choices and passion for using technology to address health inequality.

Early in your career, you made two dramatic changes of direction—from a degree in pharmacy to a PhD in single molecule biophysics, and then from there to a postdoc and subsequent career in tissue engineering and biosensing. How did that come about? • The choice of PhD was very much because I love learning. I wanted the intellectual challenge of doing something difficult, and I thought single molecule biophysics was about the hardest thing I could possibly do! The next switch was rather different; it was about wanting to transfer things I'd learnt into an opportunity to do something that could really impact on people's lives and health—how one could use principles of materials science to actually help save lives. I know they were unusually drastic switches, but you learn so much more if you throw yourself in at the deep end, because your learning curve is so enormous. You also see things from a different angle to people with a more traditional training. For me, it's been absolutely invaluable, no question about it.

You run a large multidisciplinary group. How do you make that work? • It is without a doubt the friendliest most collaborative group in the world! I think the types of challenges we're tackling benefit from having lots of disciplines coming together as this fosters a creative environment. It's very interactive, social and a platform where anyone can put forward an idea. And seeing people come through my group, do well and then set up on their own and continue to be successful is one of the things that gives me the most pleasure. Over 45 of them are now professors in their own right, which is amazing! Many of them have created companies or got senior roles in industry. The knowledge that our group has played some part in supporting that is really rewarding, and I'm so proud of them.

What drives your research? • Our world is very unequal, and as a scientist I'm motivated to do what I can to help remedy that. We always ask 'how can we make these things that are a fantastic feat of engineering, but design them so that they could be manufactured cheaply enough to work for the developing world?' So we're using our technologies to develop low-cost yet exceptionally sensitive diagnostics for things such as HIV, Ebola and malaria, and we're also doing a lot of work with the Bill & Melinda Gates Foundation looking at new types of vaccines.

How have you and your lab coped during the pandemic? • I think the fact that our group is so collaborative and supportive has really shone during the pandemic. People's ability to work through it has been helped by that supportive environment. Scientifically, a lot of the group came together to help develop low cost diagnostics for detection of COVID-19, and that work is going very well. From a personal point of view, I'm home schooling three kids, so that's interesting! My husband is helping a lot, so we're doing OK.

What advice would you give someone starting out now? • First, choose a topic that you are passionate about, that has really important consequences, because it's a big endeavour, being a scientist; it's not a side job, it's a full-time commitment of your thoughts in many ways.

Second, believe in yourself, and feel free to ignore advice if you don't agree with it! It's less the case for me now, but when I started, people were always telling me what I wouldn't be able to achieve. Thankfully I also had amazingly supportive mentors and a brilliant group.

When I had my children—I had twins just after starting a faculty job at Imperial, and subsequently another baby— I surprised myself by being able to successfully combine a career and a family. So thirdly, I think I want to reassure young potential parents that you can find ways to combine both—go for it, if that's what you want!

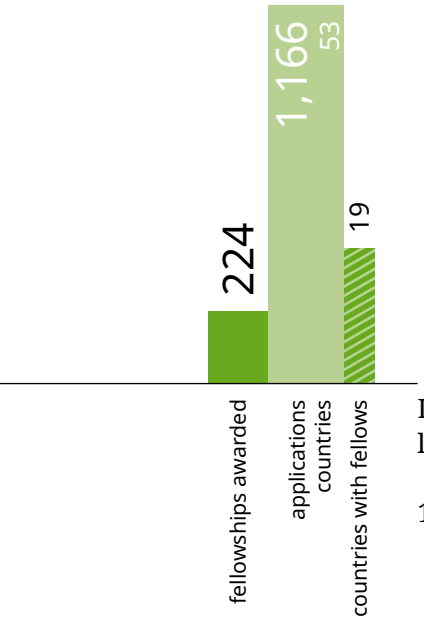
What does winning the FEBS | EMBO Women in Science Award mean to you? • I'm humbled by this award, which recognizes the work of our multidisciplinary team over many years.

Programmes & schemes

EMBO Postdoctoral Fellowships

EMBO Postdoctoral Fellowships support excellent postdoctoral researchers throughout Europe and the world for a period of up to two years. International mobility is a key requirement. The fellowship includes a salary or stipend, a relocation allowance, and support for fellows with children. Awardees can attend an EMBO Laboratory Leadership course and become part of the global network of EMBO Fellows.

Supporting internationally mobile postdoctoral researchers in Europe and around the world



In 2021, 224 EMBO Postdoctoral Fellowships were awarded to life scientists in 19 countries.

1,166 life scientists from 53 countries had applied.

Bridge building | Vanessa Linke

2021 EMBO Postdoctoral Fellow at the International Institute of Molecular Mechanisms and Machines, Polish Academy of Sciences, Warsaw

As an EMBO Postdoctoral Fellow, Vanessa Linke has crossed borders and disciplines. "It's a very exciting time to be a scientist in Poland," says Linke, who was born in Germany and conducted her PhD research in the USA. "People are very open to collaboration, there are lots of opportunities and a very international mindset."

Linke's research in the laboratory of EMBO Member Agnieszka Chacinska explores the mechanisms underpinning the stress responses of mitochondria, cellular structures that power eukaryotic cells and carry out several important functions. "Because mitochondria are so important for our cells, it's really bad when something goes wrong," she explains. "The hope is that it will be possible to inform better treatments for inherited diseases and neurodegenerative disorders."

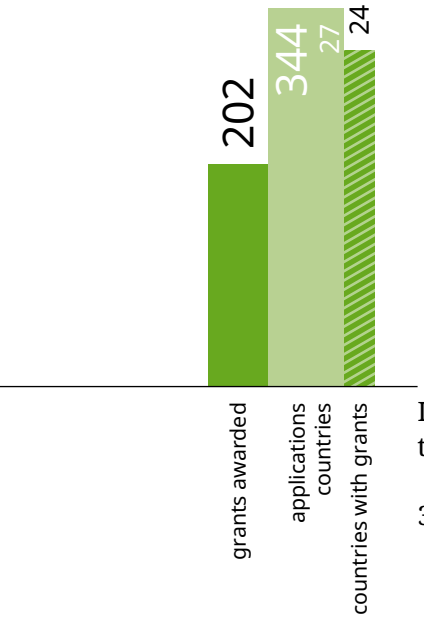
A mass spectrometrist by training, Linke integrates fields such as biochemistry, biology, analytical chemistry, biotechnology, and data science. "One of the best aspects of my EMBO Postdoctoral Fellowship is the opportunity for cross-disciplinary interactions: this is something that has shaped and defined me as a scientist," Linke adds. "Thanks to EMBO, I'm part of a fantastic scientific community that extends across Poland, Europe, and the world. It's been a terrific experience so far."

Find all 2021 EMBO Postdoctoral Fellows on page 78.

EMBO Scientific Exchan Grants

EMBO Scientific Exchange Grants fund research exchanges of up to three months between laboratories in eligible countries. The grants facilitate collaborations with research groups with expertise, techniques, or infrastructure that is unavailable in the applicant's laboratory. They cover travel and subsistence costs of the fellow.

Supporting international collaborations that enable the transfer of expertise



In 2021, 202 EMBO Scientific Exchange Grants were awarded to life scientists in 24 countries.

344 life scientists from 27 countries had applied.

From Sardinia to Denmark | Giulia Fabbri

2021 EMBO Scientific Exchange Grantee at the GLOBE Institute in Copenhagen, Denmark; PhD student at the University of Sassari

Giulia Fabbri's PhD project focusses on the genetic make-up of wild boar and wolf populations on Sardinia and in mainland Italy. "I want to understand why these populations are genetically very different from all other populations in Europe," she explains. "One theory we have is occasional mixing and breeding with individuals of their domesticated forms, i.e. pigs and dogs. We are looking for evidence of this in the genomes of the wild forms." Her group's research in Italy aims to inform conservation measures.

At the GLOBE Institute, where she is an EMBO Scientific Exchange Grantee, Fabbri has been taking a deeper dive into her data to explore the evolution of the populations. "I have realized I am really interested in genome assembly and the evolution of these populations. Being in Copenhagen has opened up new possible future research directions." Coming from a small group in Italy, Fabbri is also enjoying the support and sense of community she has found in Copenhagen. The weekly lab meetings in which challenges are discussed have been particularly helpful. She is keen to keep in touch once she heads back to Sardinia: "We have so many ideas on the table we want to develop!"

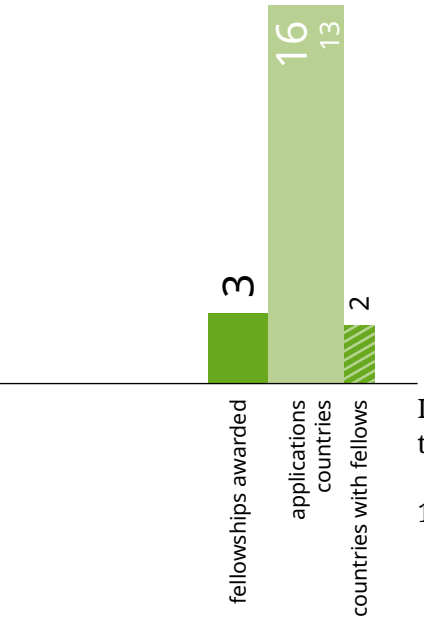
Find all 2021 EMBO Scientific Exchange Grantees on page 94.

EMBO New Venture Fellowships

EMBO New Venture Fellowship support early career life scientists to enter a new field of research. In memory of a bright-minded and passionate scientist, the fellowship helps researchers to pursue a new direction and transform their research trajectory by exploring feasible projects outside their current area or generating preliminary data.

Supporting young scientists to enter a new field

Suzanne Eaton was an internationally acclaimed scientist and EMBO Member. She was actively engaged in multi-disciplinary research and encouraged others to overcome the challenges of entering a new field for the benefit of intellectual and scientific advancement. With the desire of many to honour Suzanne as a scientist, mentor, and friend a fund was established in her memory.



In 2021, three EMBO New Venture Fellowships were awarded to life scientists in two countries.

16 young life scientists from 13 countries had applied.

Harnessing nature's machines

Godwin Aleku

2021 EMBO New Venture Fellow at ETH Zürich, Switzerland; Postdoctoral researcher at the University of Cambridge, UK

In pharmaceutical production, the development of environmentally-friendly catalytic methods is critical to more sustainable practices. Godwin Aleku, a postdoctoral researcher at the University of Cambridge, UK, aims to harness naturally-occurring enzymes and adapt them to the manufacturing of medicines and agrochemicals. Aleku's EMBO New Venture Fellowship saw him spend three months at ETH Zürich, Switzerland, in the group of Roland Riek, whose team uses nuclear magnetic resonance spectroscopy to study proteins and other biological molecules.

"Nature provides many abundant and versatile biological catalysts – also known as enzymes – that can be utilized to manufacture medicines sustainably," says Aleku, whose fellowship enabled him to gain mechanistic insight into the selectivity and function of a novel enzyme family, imine reductases. "We are trying to move away from hazardous ways of producing drugs and develop solutions using biocatalysts to support this transition. These clean technologies can make our drug manufacturing processes greener, provide access to safer medicines, and reduce negative environmental effects."

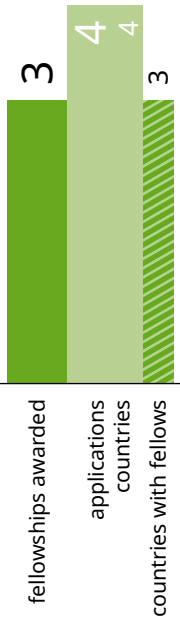
"My fellowship provided me with a unique opportunity to develop my ideas in the context of a new field. It allowed me to get a broader understanding of their potential uses and learn diverse new skills from a very talented team. During the fellowship I sourced preliminary data that I am now building into a bigger story here in Cambridge," Aleku says. "The EMBO New Venture Fellowship celebrates the life of Suzanne Eaton, a remarkable scientist who embraced interdisciplinarity. I feel excited and humbled to have been selected as a fellow."

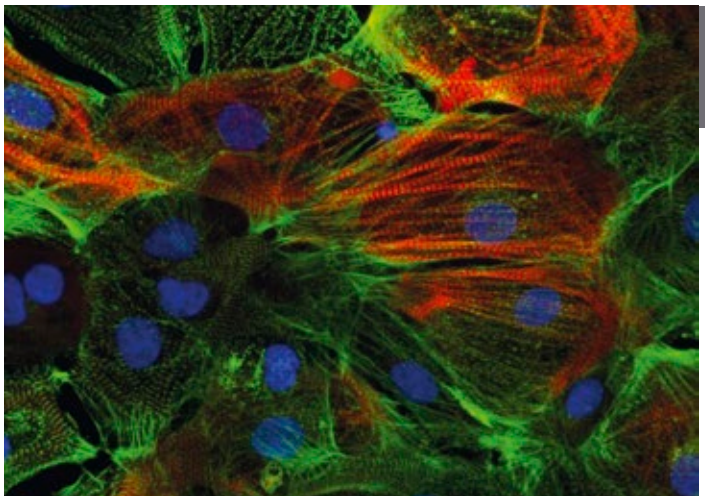
Find all 2021 EMBO New Venture Fellows on page 108.

EMBO Core Facility Fellowships

EMBO Core Facility Fellowships fund international exchanges of up to one month between core research facilities in eligible countries. They are intended for the training of core facilities staff, including scientists and technicians, in specific techniques used in facilities that provide services to research institutions or universities. The fellowships contribute towards travel and subsistence of the fellow.

Supporting training of core facilities staff by funding international exchanges





© Carolin Genehr

Cardiac cells immunostained for cardiac markers

In 2021, three EMBO Core Facility Fellowships were awarded to life scientists in three countries.

Four life scientists from four countries had applied.

Core abilities | Duncan Miller

2021 EMBO Core Facility Fellow at the Institute of Molecular Biotechnology, Vienna, Austria; Postdoctoral researcher at the Max Delbrück Center for Molecular Medicine, Berlin, Germany

To study how the cardiac system responds to disease, scientists can turn to tiny heart-like models grown from stem cells in the lab. Duncan Miller, a postdoctoral researcher at the Max Delbrück Center for Molecular Medicine's pluripotent stem cell technology platform in Berlin, Germany, works together with other scientists at the institute to help them develop models for a variety of needs. Staying up-to-date with the latest approaches is a key part of the job, and Miller took part in a ten-day visit to the stem cell core facility of the Institute of Molecular Biotechnology in Vienna, Austria, funded by an EMBO Core Facility Fellowship.

"Core facilities play an ever-increasing role in fundamental and translational research," says Miller, whose objective was to learn more about advanced laboratory information management systems, quality control, and 3D cardiac cultures. "Researchers use stem cell models in areas such as regenerative medicine, therapies, and heart disease modelling. As their science advances, so too does the need for more sophisticated models. That's where stem cell core facilities come in.

"My EMBO Fellowship enabled me to spend time at another of Europe's best stem cell core facilities. I met a wide range of professionals such as data managers, technology infrastructure coordinators, and service users. It was extremely useful in furthering my expertise and in building a network of colleagues who I can exchange ideas and best practices with. Collaborative networking is essential for great science, and my fellowship has nurtured that in a really effective way," Miller explains.

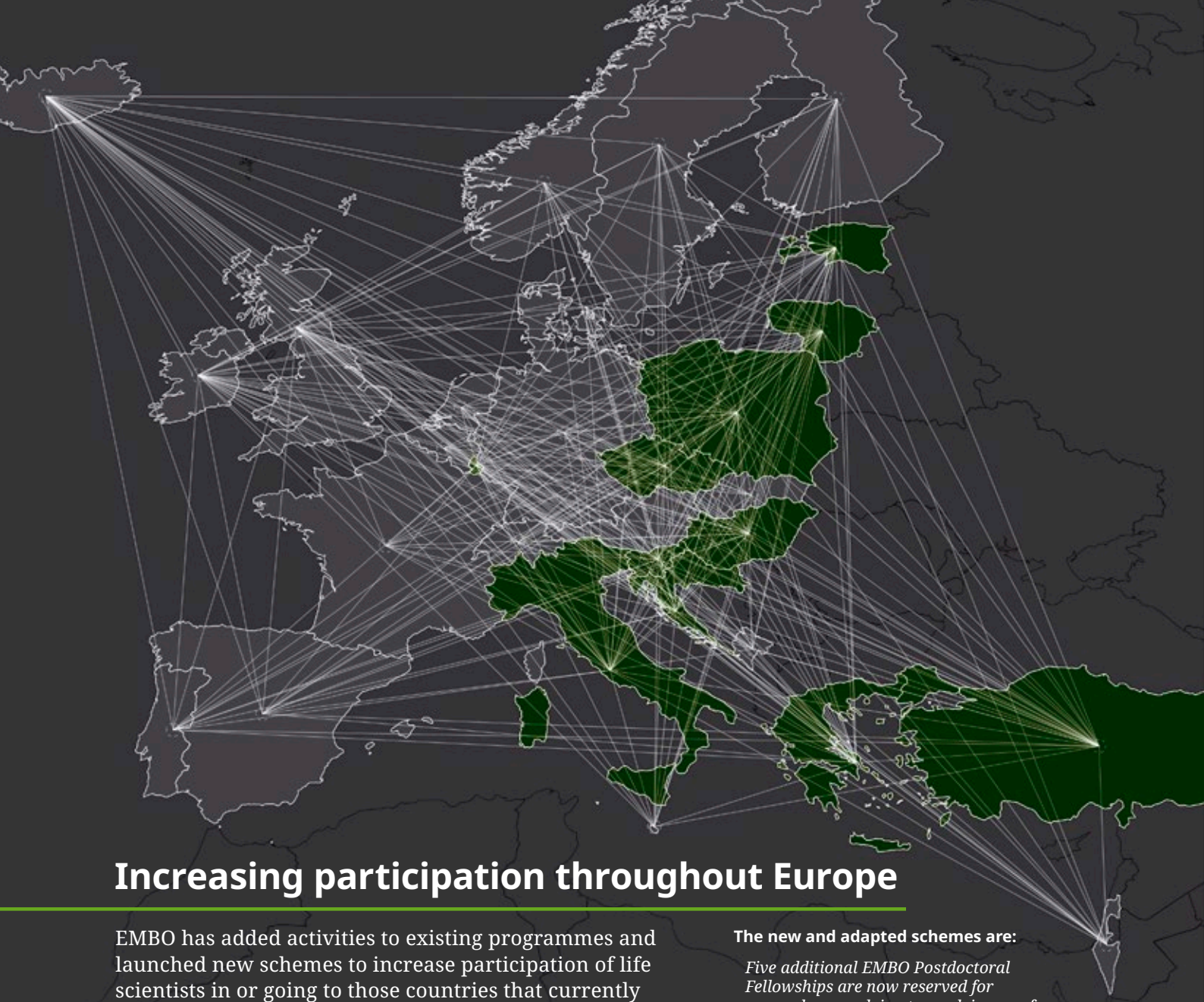
Find all 2021 EMBO Core Facility Fellows on page 109.

EMBO Advanced Collaboration Grants

EMBO Advanced Collaboration Grants are a new scheme for group leaders in participating countries who wish to engage in exchange visits with scientists in other EMBC Member States to develop or carry out collaborative projects or prepare joint grant proposals. The participating countries are: Croatia, Czech Republic, Estonia, Greece, Hungary, Italy, Lithuania, Luxembourg, Poland, Slovenia, and Turkey.

Supporting group leaders in participating countries to develop collaborative projects

This scheme has started accepting applications at the end of 2021. No grants have been awarded yet.



Increasing participation throughout Europe

EMBO has added activities to existing programmes and launched new schemes to increase participation of life scientists in or going to those countries that currently benefit less from its programmes compared with others. "Our aim is to counterbalance this uneven spread in participation", said Maria Leptin, former EMBO Director.

Life scientists in EMBC Members States and beyond have access to the EMBO Programmes. But researchers from the different member states do not participate equally: application and success rates vary between the countries. With the new and adapted schemes, EMBO facilitates a more even participation.

For the next three years, life scientists in or going to Croatia, Czech Republic, Estonia, Greece, Hungary, Italy, Lithuania, Luxembourg, Poland, Slovenia, and Turkey are eligible to apply to these schemes. Other EMBC Member States can join this set of participating countries by decision of the EMBC.

The new and adapted schemes are:

Five additional EMBO Postdoctoral Fellowships are now reserved for researchers applying to work in one of the participating countries. In addition, an interview by an EMBO Member or Young Investigator is now guaranteed to the researchers applying to work in those countries, provided their application passes initial screening for overall quality. These will thereby enter the final shortlist for consideration by the Fellowship Committee.

EMBO Advanced Collaboration Grants.

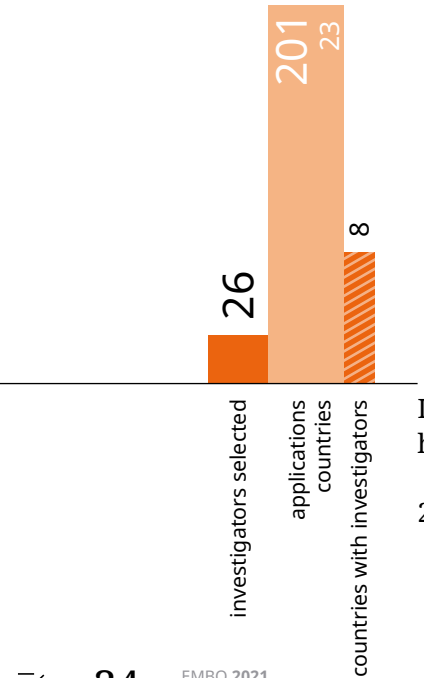
The EMBO Lecture Courses scheme provides funding for lecture courses to train PhD students and postdoctoral researchers in the participating countries.

The EMBO Lecture Series scheme provides funding to invite EMBO Members and Young Investigators to give lecture series in institutions in the participating countries.

EMBO Young Investiga Programme

The EMBO Young Investigator Programme supports life scientists who have been group leaders for less than four years at the time of application in setting up their laboratories. Young Investigators receive financial support for networking for four years and benefit from training opportunities, support for their lab members and mentoring. They become part of an international network of more than 600 current and former EMBO Young Investigators, Installation Grantees and Global Investigators.

Supporting young group leaders in Europe and beyond



In 2021, 26 EMBO Young Investigators in eight countries have been selected.

201 young life scientists from 23 countries had applied.

Unravelling the mechanisms of plant symbioses

Pierre-Marc Delaux

2021 EMBO Young Investigator at the Plant Science Research Laboratory, Toulouse, FR

tor

While analyzing plant hormones during his PhD research in biochemistry, Pierre-Marc Delaux began to take an interest in the plants themselves and was hooked. Now, based at the Plant Science Research Laboratory in Toulouse, the new EMBO Young Investigator uses a combination of experimental and computational approaches to study plant-microbe mutualistic associations. “We want to know what molecular mechanisms are involved when a plant recruits and accommodates microbes within its cells, and why some associations have evolved in just a few groups, while others are widespread,” he explains.

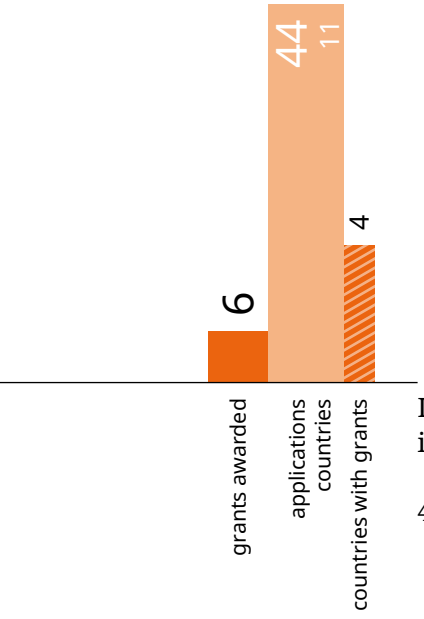
Delaux hopes that this knowledge can lead to novel plant products one day. Legumes, for example, associate with nitrogen fixing bacteria. “Legumes are in effect self-fertilizing. If we could make nitrogen fixing work in cereals, there would be no need for chemical fertilizer,” he says. “This would completely change agriculture and benefit ecosystems and our climate.” Delaux is looking forward to meeting fellow young investigators from different fields: “The EMBO Young Investigator Network is a great way to make new links with colleagues using novel approaches. Furthermore, as a plant biologist, I think this is an excellent opportunity to demonstrate that we can learn a lot from studying plants too. They are amazing organisms!”

Find all 2021 EMBO Young Investigators on page 110.

EMBO Installation Grants

EMBO Installation Grants support group leaders establishing laboratories in the participating countries in order to strengthen life sciences there. In the 2021 call, grants were available in the Czech Republic, Estonia, Lithuania, Montenegro, Poland, Portugal, and Turkey. Installation Grantees become part of an international network of more than 600 current and former EMBO Young Investigators, Installation Grantees, and Global Investigators.

Supporting group leaders who move to host countries that are part of the scheme



In 2021, six EMBO Installation Grants were awarded in four countries.

44 life scientists from 11 countries had applied.

Closing the back door in cancer cells

Katerina Rohlenova

2021 EMBO Installation Grantee at the Czech Academy of Sciences, Vestec, CZ

Nucleotides, the building blocks of DNA and RNA, are crucial for cell growth. Blocking their synthesis has been used as a cancer treatment for decades. But cells can not only make nucleotides internally, they can also get them from outside. New EMBO Installation Grantee Katerina Rohlenova studies how this back door could be closed. She investigates metabolic interactions and differences between cancer and healthy cells and hopes her results can help to develop more effective and less toxic treatments. Rohlenova, a native Czech, is a junior group leader at the Institute of Biotechnology (IBT) of the Czech Academy of Sciences. She returned to IBT, where she carried out her PhD research, at the end of 2020, finding excellent facilities, but facing the challenge of starting a group amidst the coronavirus pandemic.

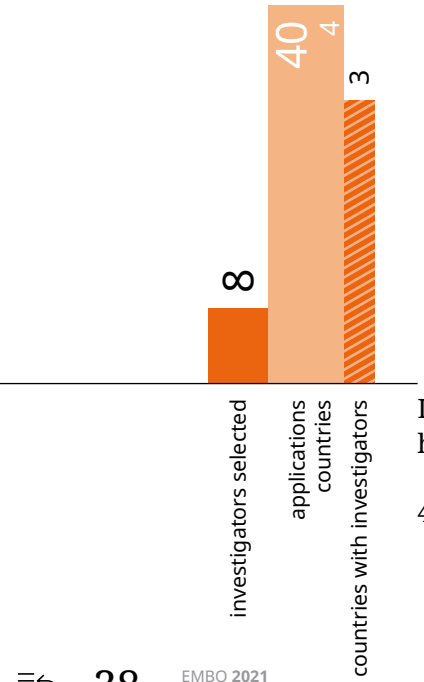
Collaboration is hugely important for Rohlenova's research and she highlights the value of working with clinician scientists. As a postdoctoral researcher in a large laboratory in Belgium she had already built a network of contacts now spread across Europe, and plans to develop it further. "The EMBO Installation Grant really gives me the opportunity to be involved with the community," she explains. "The networking is what I appreciate most: having people who do great science around you and access to discussions." She says that funding schemes that are only open to applicants from certain countries can encourage more people to apply.

Find all 2021 EMBO Installation Grantees on page 114.

EMBO Global Investiga Network

The EMBO Global Investigator Network supports group leaders who, at the time of application, are within their first six years of setting up their laboratories in Chile, India, Singapore or Taiwan. Global Investigators receive financial support for four years for training and networking activities, providing them with opportunities to form collaborations with scientists in their region and in Europe. They become part of an international network of more than 600 current and former EMBO Young Investigators, Global Investigators, and Installation Grantees.

Supporting young group leaders in Chile, India, Singapore, and Taiwan



In 2021, eight EMBO Global Investigators in three countries have been selected.

40 life scientists from 4 countries had applied.

Connecting the dots | Hsu-Wen Chao

2021 EMBO Global Investigator at Taipei Medical University, TW

tor

Crossing disciplines is at the heart of new EMBO Global Investigator Hsu-Wen Chao's research career. "I like to study different things and to re-organize all of this knowledge to try something new," explains Chao, an associate professor at Taipei Medical University. After initial training in neuroscience in Taiwan, four years as a postdoctoral researcher in chronobiology at Kyoto University turned out to be formative. "I went back to Taiwan and tried to connect circadian rhythms to metabolism and liver disease," he says. Now Chao studies circadian genes in the liver, how liver cells can get more than two sets of chromosomes, a condition termed polyploidy, and how this can develop into cancer in mice. He hopes that the results will help to find new treatments for human patients.

Collaboration is key for Chao. In Japan, he established connections he still maintains, although travel restrictions and quarantine measures during the pandemic made visits difficult. Luckily, his experiments in Taiwan have not been affected much: laboratory work continued as there was no shutdown. The EMBO Global Investigator Network will help Chao to establish new collaborations, but, he notes, it is not well known in Taiwan. Keen to raise awareness, he says: "The first thing for me will be to let young researchers know that there is this opportunity for international collaboration and training." Chao plans to invite global investigators from Taiwan to exchange findings, and maybe organize a workshop to let others know about the network and share experiences.

Find all 2021 EMBO Global Investigators on page 115.

EMBO Global Activities

EMBO Global Activities promote engagement with researchers beyond Europe to strengthen mutually beneficial interactions and provide access to EMBO Programmes. Co-operation agreements have been set up with India, Singapore, the National Agency for Research and Development (ANID; former CONICYT) of Chile and the National Science and Technology Council (NSTC; former MOST) of Taiwan. Discussions are underway with further potential partners. In recent years, EMBO has intensified its interactions with the scientific community in Japan. For example, EMBO | Japan Virtual Lectures, which are open to scientists in Japan and Europe, facilitated continued exchanges despite travel restrictions in 2021.

Promoting interactions within the scientific community worldwide

Find all 2021 EMBO | Japan Virtual Lectures on page 116.

Connecting global communities online

EMBO and global partners delivered online seminars to train researchers in key skills and to spread the word about opportunities provided by the EMBO Programmes

Strengthening skills

In May 2021, travel restrictions were still in place across much of the globe. María Paulina Correa, an associate professor of social epidemiology at the University of Chile, spontaneously decided to take part in an EMBO online seminar on grant writing – organized locally by the Chilean Societies for Neuroscience, Biochemistry & Molecular Biology, and Cell Biology.

"I did not know what to expect at first, but my first experience of an online workshop was very positive," recalls Correa, who is based in Santiago. "I learned a lot and had the chance to interact with experts from all over the world."

Correa promptly signed up for three more sessions, taking part in open sessions alongside an average of 50 other researchers and more personalized sessions with 10 to 15 participants. She was in the middle of applying for a major grant at the time, and credits skills she learned for helping to strengthen her successful application and for inspiring side projects such as podcasts, videos, and a popular science article co-authored with EMBO Associate Member Christian González-Billault.

The professor in cell biology at the University of Chile and local organizer of the webinars says:

"Chile is a long way from Europe, and travel restrictions during the pandemic have made this feel even more so. The webinars have provided an opportunity to democratize science, and essentially close gaps such as distance, language, and other communication barriers."

Confidence and clarity

Sunil Laxman, an EMBO Global Investigator at the Institute for Stem Cell Science and Regenerative Medicine in Bangalore, India, says that it is important to recognize that effective communication is a learned skill.

"Being able to communicate science in a clear and engaging way is not some mystical natural talent: it is a skill that can be learned and improved," says Laxman, who was a mentor during an oral communication webinar. The event formed part of a new EMBO | India Bioscience series that was launched in the wake of the pandemic in 2020. So far, three open seminars have attracted more than 750 participants. Smaller groups have taken part in more personalized training.

Laxman explains: "Shorter presentations are often the hardest. But by the end of the seminars, it was clear attendees were embracing our key points, which included clarity, messaging, identifying with audiences, and practice."

Building connections

EMBO has also co-developed online courses with Taiwan's national academy, Academia Sinica. Yen-Ping Hsueh, an EMBO Young Investigator, was a host and a moderator on seminars in March and June 2021.

"It was a wonderful experience," says Hsueh, who helped guide participants and give them personalized feedback. "Skills such as writing papers or grants are not typically part of scientific training. But they are invaluable across all career stages."

A total of 18 young principal investigators took part in training on grant writing, while more than 100 PhD students of the Taiwan International Graduate Program took part in training on scientific writing. Participants in a more personalized session also received constructive feedback from trainers and peers.

"Lecturers provided a terrific combination of skilled teaching, interesting assignments, and individual guidance," she says. "I hope that the seminar series will become a regular fixture in our academic calendar."

EMBO Workshops

EMBO Workshops bring together scientists who present and discuss their latest findings in different aspects of the life sciences. The meetings last between two and five days and attract up to 450 participants. EMBO provides funding and assists organizers in promoting the workshop and creating a webpage with a registration and abstract submission system. Additional funding is provided to cover additional cost of hybrid (combined in-person and virtual) meetings.

Funding for meetings that stimulate exchanges of the latest scientific knowledge

Funding for 53 EMBO Workshops in 2021 was awarded.
Ten took place, 43 were postponed due to the pandemic.

EMBO | The Company of Biologists Workshops

EMBO and The Company of Biologists fund workshops, practical courses and lecture courses in Brazil, Canada, China, Japan, Mexico, and South Korea. Organizers can be of any nationality and be based in any country in the world.
The scientific organizing committee must be geographically diverse and come from more than one institute representing the topics covered in the meeting.

Childcare grants

Organizers of an EMBO Workshop or Practical Course can allocate funds to offset additional childcare costs incurred by participants or speakers while participating in the meeting. The childcare grants can be used to cover fees for a babysitter or childcare facility, or for travel costs of a caregiver or for taking the child to the meeting.

EMBO Practical Courses

EMBO Practical Courses provide training in experimental techniques for researchers and core facility staff, enabling them to implement the techniques in their laboratories. The courses should last between five and ten days and are limited to 25 participants. EMBO provides funding and assists organizers in promoting the courses and creating webpages with a registration and abstract submission system.

Funding for courses that provide training in experimental techniques and promote the transfer of methodologies

Funding for 22 EMBO Practical Courses in 2021 was awarded. Four took place, 18 were postponed due to the pandemic.

Find all 2021 EMBO Workshops and Practical Courses on page 117.

EMBO Lecture Courses

Funding for meeting organizers to invite speakers

© Dmitry Chetverukhin

EMBO Lecture Courses

The EMBO Lecture Courses scheme provides funding for lecture courses to train PhD students and postdoctoral researchers in participating countries. The participating countries are: Croatia, Czech Republic, Estonia, Greece, Hungary, Italy, Lithuania, Luxembourg, Poland, Slovenia, and Turkey.

EMBO Global Lecture Courses

EMBO Global Lecture Courses enable scientific exchange beyond European borders. They teach participants, primarily PhD students and postdoctoral researchers. The courses can take place in EMBC Associate Member States, in countries and territories with which EMBO has signed a co-operation agreement, or in countries eligible for support by EMBO and The Company of Biologists.

EMBO | FEBS Lecture Courses

EMBO and the Federation of European Biochemical Societies (FEBS) support lecture courses on timely topics in biochemistry, molecular biology, and related areas. They focus on career development of PhD students and postdoctoral researchers.

India | EMBO Lecture Courses

EMBO and the DBT/Wellcome Trust India Alliance jointly fund lecture courses in India. They teach participants, primarily PhD students and postdoctoral researchers.

Find all 2021 EMBO Lecture Courses on page 120.

Lecture and travel grants

Funding for meeting organizers to invite speakers and for participants to travel to EMBO events

© Susanne Seiler

EMBO Member Keynote Lectures

EMBO Member Keynote Lectures are given by an EMBO Member or Associate Member at a major international scientific meeting. Organizers receive funding to cover travel and accommodation costs of the speaker, or costs associated with a virtual meeting platform.

EMBO Young Investigator Lectures

EMBO Young Investigator Lectures are given by an EMBO Young Investigator at a scientific meeting. Organizers receive funding to cover travel and accommodation costs.

EMBO Global Lecture Series

EMBO Global Lecture Series enhance collaboration between scientists worldwide. They are given by EMBO Members or Young Investigators at institutions outside Europe, or by leading researchers from outside Europe who visit European institutions.

EMBO Lecture Series

The EMBO Lecture Series scheme provides funding to invite EMBO Members, Associate Members, and Young Investigators to give lecture series at institutions in participating countries. The participating countries are: Croatia, Czech Republic, Estonia, Greece, Hungary, Italy, Lithuania, Luxembourg, Poland, Slovenia, and Turkey.

Policy Lectures

Policy Lectures address policy implications of science and technology. They are given at scientific meetings. Organizers receive funding to cover travel and accommodation costs of the speaker.

Women in Science Lectures

Women in Science Lectures address issues related to gender and diversity in science. They are given at scientific meetings funded by EMBO. Organizers receive funding to cover travel and accommodation costs of the speaker.

Travel grants and registration fee waivers

Travel grants and registration fee waivers support participants who have been selected to attend a scientific meeting funded by EMBO. They are available for EMBO Workshops, EMBO Practical Courses, EMBO | FEBS Lecture Courses, and EMBO | EMBL Symposia.

Find all 2021 lectures on page 113.

Policy

EMBO supports excellence in research in the life sciences by providing analyses, tools and information

© Andreas Henn

Biotechnology

EMBO works to facilitate improvements in biotechnology governance. Emerging biotechnologies often evoke concerns about good governance, including those related to best research practices and ethics. We perform policy research, assess technologies, interact with decision makers and institutions at the European level, and engage the EMBO communities in this work.

Research integrity

EMBO works with life scientists to create environments in which research is pursued responsibly, with integrity and to the highest standards. We help scientists to embed research integrity principles in their work. We engage internationally with stakeholders such as research integrity offices, academies, and funders to improve the governance of research integrity.

Research assessment

EMBO engages in policy work on research assessment and its impact on evaluations of scientists and their work. Fair assessment of applications and project proposals can be compromised through the inappropriate use of quantitative indicators such as publications metrics or through biases. We foster the sharing of best practices for conducting research assessments and initiatives for improving them.

Women in Science

EMBO has long queried the basis of gender imbalances in the life sciences. We carry out policy analyses and use the results to propose practical measures to mitigate gender imbalances in the life sciences. We also draw attention to positive stories and role models.

Engagement

EMBO engages with the EMBO communities and other researchers in Europe and beyond. We gather and evaluate their feedback and transpose it into actions to foster their research. EMBO works with decision-makers at the European level to understand their goals and how we can contribute to achieving them. We assure that they are aware of the views and needs of researchers in the life sciences.

Reports

EMBO analyses questions in the areas of biotechnology, Open Science, research integrity, research assessment and women in science, and makes the results openly available as reports, publications and consultation responses.

EMBO Press

The journals of EMBO Press publish important advances in the life sciences from around the globe, ranging from structural biology, biophysics and systems biology to cell- and developmental biology, biomedicine and ecology. EMBO Press editors execute the editorial process of Review Commons.

EMBO Press is an editorially independent publishing platform for the development of EMBO scientific publications. It is founded on the principle that scientific publishing should be transparent, fair, and ethical and must support reliable, reproducible literature.

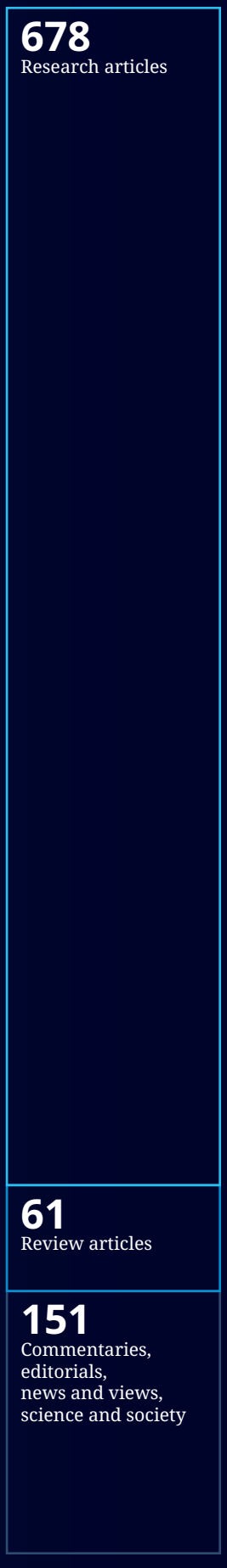
THE EMBO JOURNAL | EMBO reports | molecular systems biology | EMBO Molecular Medicine | Life Science Alliance

EMBOpress

DORA Sustainer

Publishing output in 2021

890
total articles published



Key innovations and milestones

2009 Transparent peer review process;
EMBO Molecular Medicine launch

2010 SourceData; scooping protection

2013 Systematic pre-publication image integrity checking;
DORA signatory

2014 Referee cross-commenting

2015 Structured research integrity process;
differentiated corrections policy

2016 Scooping protection extended to preprints

2018 Informed manuscript transfer process;
data and preprint citation;
data availability section;
structured methods

2019 Correction article types expanded;
transparent finances;
Refereed Preprints;
journal-independent peer review: Review Commons launch;
Life Science Alliance launch with consultative transfer process

2021 Author preconsultation

The EMBO Journal

The EMBO Journal has been the EMBO flagship publication since its launch in 1982. With a scope that spans all areas of molecular, cell and developmental biology, the journal has an international reputation for quality and originality. The journal publishes research papers and reviews of broad general interest - a particular emphasis is placed on conceptual advance, molecular mechanism and physiological relevance.

The journal encourages Open Access publication.

Find all 2021
editorial and advisory board members
on page 127.

THE EMBO JOURNAL


THE EMBO JOURNAL
Oligomerization toggles Cullin-RING ligase
CDK1/5 in transcription-coupled damage sensing
Reverse fountain flow of phospholipids polarises cells
Nucleoprotein antibodies promote T-cell immunity via TRIM21
tRNA modification for C. elegans heat adaptation
Small GTPase guardian for ciliary barrier
Active state of the post-translational Sec translocon
Cohesin deprotection at meiosis II
NAD+ couples mitochondrial to lysosomal function
Neutrophils induce paracrine senescence
Non-specific and specific determinants of Myc target recognition
Variable lethality of T cell - tumor cell contacts
Drosophila mushroom body zone formation
Cortical expansion and improved cognition by human-specific ARHGAP11B
Gating mechanism of potassium-chloride transporters
LncRNA modulation of endothelial permeability
Cross-species ACE2 binding by pangolin coronaviruses
Novel pilus superfamily from pathogenic Bacillus endospores
Autophagic organ wasting feeds tumors
Nanobodies targeting SARS-CoV-2 variants
Tumor cell adaptation to amino acid deprivation
Mapping brain astrocyte heterogeneity

EMBO reports

EMBO reports publishes both long- and short-format papers that communicate major findings in all areas of molecular, cell and developmental biology, offering novel physiological/functional insight that is robustly documented by independent lines of evidence. The journal publishes reviews as well as commentary on the broader issues affecting science and society.

The journal encourages Open Access publication.

Find all 2021
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on page 128.

EMBO *reports*


EMBO reports
Bax-binding protein MOAP-1 disassembles p62 bodies
EMBOpress
EMBO reports
HAT1 succinylates histones and non-histones
EMBOpress
EMBO reports
Turning flies into models for novel traits in mammals
EMBOpress
EMBO reports
Kinetochore fibers fine-tune acentrosomal spindles
EMBO reports
Kinetochore fibers fine-tune acentrosomal spindles
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Fibrotic enzymes alter skin tumorigenesis
EMBOpress
EMBO reports
PI3KC2β inactivation preserves blood-brain barrier following stroke
EMBOpress
EMBO reports
Centrosomal OCRL regulates lysosome positioning
EMBO reports
Centrosomal OCRL regulates lysosome positioning
EMBOpress
EMBO reports
Muscle-derived exophers promote reproductive fitness
EMBOpress
EMBO reports
Secreted NimB4 promotes phagocytosis of apoptotic cells
EMBOpress
EMBO reports
ATG9A and ATG13 cooperate to drive basal autophagy
EMBO reports
IRGM depletion induces restriction of pathogenic viruses
EMBO reports
Formin protein Daam2 regulates astrocyte morphology
EMBOpress

Molecular Systems Biology

Molecular Systems Biology is an Open Access journal that publishes high-quality research papers and reviews in the fields of systems biology, synthetic biology and systems medicine.

Find all 2021
editorial and advisory board members
on page 128.

molecular systems biology


molecular systems biology
Extracting mechanisms from multi-omics data
Expression characteristics of fly promoter types
Genotype-phenotype landscape of an allosteric protein
MicroRNAs control bistable cell differentiation
HMGB1 affects genome folding in senescence
Behavioral fingerprints predict drug mode of action
Immune response in infected human intestinal organoids
Coevolution of a mutualistic community
Regulators and Inhibitors for COVID19-induced Cytokine Release
An engineered bacterium to fight S. aureus
SARS-CoV-2-host interactome reveals drug targets
EMBOpress

EMBO Molecular Medicine

EMBO Molecular Medicine is the top Open Access journal in the field of experimental medicine dedicated to science at the interface between translational and clinical research and basic life sciences. Its scope ranges from studies performed in cells and/or animals provided that they demonstrate human disease relevance to first-in-human studies and analyses of patient samples.

Find all 2021
editorial and advisory board members
on page 129.

EMBO
Molecular
Medicine


EMBO Molecular Medicine
Prevascularized islet organoids improve islet transplantation
EMBOpress
EMBO Molecular Medicine
Gene therapy rescues SYNE4 deafness
EMBOpress
EMBO Molecular Medicine
Extracellular matrix and LOXL1 drive lobular breast cancer
EMBOpress
EMBO Molecular Medicine
In vitro and in vivo models to pre-clinically test malaria interventions
EMBOpress
EMBO Molecular Medicine
Neuropilin-1-expressing Mononuclear Phagocytes Promote AMD
EMBOpress
EMBO Molecular Medicine
High-throughput screening identifies suppressors of mitochondrial fragmentation
EMBOpress
EMBO Molecular Medicine
Repurposing iNOS inhibitors to refuel muscle during cachexia
EMBOpress
EMBO Molecular Medicine
Cathelicidin protects against gluten-induced small intestinal enteropathy
EMBOpress
EMBO Molecular Medicine
Adjunctive phage therapy for chronic osteoarticular infection
EMBOpress
EMBO Molecular Medicine
MAPK drives CRC cell development
EMBOpress
EMBO Molecular Medicine
A microRNA signature for cognitive decline
EMBOpress
EMBO Molecular Medicine
Gene therapy rescues Wwox null phenotypes
EMBOpress

Life Science Alliance

Life Science Alliance is a global, open-access, editorially independent, and peer-reviewed journal founded by an alliance of EMBO Press, Rockefeller University Press, and Cold Spring Harbor Laboratory Press. Life Science Alliance is committed to rapid, fair, and transparent publication of valuable research from across all areas in the life sciences. The journal publishes research articles, methods, resources and follow ups.

Papers published in Life Science Alliance meet high scientific and editorial standards established by the alliance partners. It welcomes new results, datasets, screens, and new methods as well as important confirmatory and refuting data.

Manuscripts can be submitted to Life Science Alliance directly or by seamless transfer without reformatting from nine partner journals: The EMBO Journal, EMBO reports, Molecular Systems Biology, EMBO Molecular Medicine, Journal of Cell Biology, Journal of Experimental Medicine, Journal of General Physiology, Genes & Development, and Genome Research.

Authors of papers invited to transfer their manuscript to Life Science Alliance with or without referee reports are given a commitment for either publication, when necessary subject to revision, or peer review. Timely editorial decisions are made through collaborative consultation between the editorial team and leading academic scientists. No more than one round of experimental revision are requested.

Life Science Alliance

Achievements 2021

- *97% of invited revisions are ultimately accepted for publication*
- *Rapid decisions made on manuscripts submitted with external referee reports*
- *Convenient transfer from Life Science Alliance partner journals*
- *Early Career Researchers (ECRs) encouraged to participate in peer review*
- *27% growth in published articles 2021 over 2020*
- *Authors are encouraged to record short videos to summarize their work, for use to amplify their publication on Twitter*

Find all 2021 editorial and advisory board members on page 129.

EMBO SOLUTIONS

The EMBO wholly owned, not-for-profit subsidiary EMBO Solutions is in editorial charge of the journal.

EMBOpress

Rockefeller University Press

CSH PRESS Cold Spring Harbor Laboratory Press


Life Science Alliance

Open Science

EMBO considers openness and transparency to be key values in scientific research and publishing. Making research outputs accessible, transforming peer review into a transparent process and sharing scientific knowledge openly benefits researchers as well as decision-makers and enhances scientific progress.

EMBO Press

An editorially independent publishing platform for the development of EMBO scientific publications

EMBO endorses the principles of Open Access publishing and FAIR data. Through the work of the EMBO Press journals, improving transparency, efficiency and objectivity of peer review is a major focus.

In 2021, EMBO Press published three completely Open Access journals: EMBO Molecular Medicine, Molecular Systems Biology and Life Science Alliance*. The EMBO Journal published 57% of its papers Open Access. EMBO reports published 46% of its papers Open Access. On average, 57% of research papers across EMBO Press journals had source data associated with one or more figures (does not include deposition in structured community databases).

*Life Science Alliance is co-published with Rockefeller University Press, and Cold Spring Harbor Laboratory Press.

Policy

Promoting open dissemination of knowledge

EMBO conducts policy work to identify real and potential obstacles to researchers fully participating in Open Science, defines options for decision-makers, and develops tools that contribute to eliminate those obstacles.

Review Commons

The preprint peer-review platform

Review Commons speeds up the dissemination of peer-reviewed scientific research by providing authors with journal-agnostic expert peer-review of preprint manuscripts. Refereed preprints are posted on a preprint server along with one round of referee reports and the authors' response. Review Commons also facilitates transfer to 17 partner journals published by EMBO Press, PLOS, The Company of Biologists as well as eLife, Molecular Biology of the Cell and Journal of Cell Biology. These partner journals make use of the peer reviews from Review Commons without starting the process afresh.

During 2021, 570 submissions were submitted to Review Commons, 425 were posted as preprints, 138 as refereed preprints, and 220 were published in a partner journal.

Early Evidence Base

Navigating and assessing preprints

Early Evidence Base is an experimental platform that combines artificial intelligence with human curation and expert peer-review to highlight results posted in preprints. The platform's search results prioritise preprints that are peer-reviewed in order to provide rich context and in-depth analysis of the content. Early Evidence Base automatically highlights and organizes preprints around scientific topics and emergent areas of research.

Early Evidence Base was launched in 2021 and provides access to over 97,000 preprints and 11,840 preprint-linked peer reviews.

SourceData

Making data discoverable

SourceData makes the deposition of the raw data behind scientific publications simple and makes the data itself findable and citeable. SourceData can be integrated into the publication process so that figures and data submitted with a scientific paper are curated and annotated with searchable metadata describing the entities and causal relationships under investigation. Images and data files are seamlessly transferred to BioStudies where they can be cited with a DOI number and downloaded for reuse and reanalysis.

During 2021 12,064 figure-data packages from 364 papers were curated by SourceData.

SOURCEDATA
Making data discoverable

SDash

The SourceData Dashboard

SDash enables scientists to generate and share SmartFigures that link a scientific figure to the underlying source data and structured machine-readable metadata. Users can manage their SmartFigures to share them with groups of colleagues or make them public to share with the whole scientific community. Users can comment and discuss initiating an early scientific dissemination of results.

In 2021, SDash was in active beta testing with the “SFB 1315 Mechanisms and Disturbances in Memory Consolidation: From synapses to systems” research consortium.

SDash

Aiding Open Science through technology

EMBO and EMBO Press consistently work both within the organization and with partners to develop innovative methods and technologies to make the outputs of scientific research accessible and transparent, and to extract added value from published scientific material.

EMBO has worked with Cold Spring Harbor Laboratory Press, eLife/Sciety and Knowledge Futures to pilot a machine-readable description of the peer-review workflow. This makes it possible to record the steps in the peer-review process in a standardised form that can be transferred between different publishing platforms.

EMBO is also developing methods using Artificial Intelligence technology in the scientific publishing sphere, including curating and aggregating published material at a large scale and providing feedback to article reviewers on their report content.

EMBO Training

The training offered by EMBO Solutions includes the flagship EMBO Lab Leadership course, delivered for group leaders and early career researchers, and a range of other project management, communication, and scientific skills courses. The latter include foundational training in research integrity for PhD students and early career researchers. All training can be delivered online or in-person, both in Heidelberg, Germany, where the EMBO offices are based, and worldwide.

Leadership, communication, scientific writing, research integrity and other professional and soft skills

EMBO Solutions GmbH is an EMBO wholly owned, non-profit daughter company. The company works to help make the research environment more productive, open, and fairer for all by delivering professional-development training to scientists, and by providing editorial services to the Open Access journal Life Science Alliance.

EMBO SOLUTIONS

Achievements 2021

Delivered 40 open-registration trainings hosted in Heidelberg or online, and 51 trainings for specific universities and institutions worldwide or online.

Provided training for approximately 1,000 scientists worldwide.

Trainings attended by scientists from 33 countries.

Re-convened in-person courses in Heidelberg after 15 months of exclusively online delivery owing to the COVID pandemic.

"I had an incredibly illuminating and fulfilling week at the EMBO Lab Leadership course for group leaders, developing leadership skills with my peers. I truly believe in the transformational power of these high-quality training courses on the future of our science; this is only the beginning. Inspire and empower people."

Dr. Serena Ding
Genes and Behavior Research Group Leader, Max Planck Institute of Animal Behavior, Konstanz, Germany

In-person

Leadership training

- EMBO Lab Leadership for group leaders
- EMBO Lab Leadership for postdocs

EMBO Lab Leadership training

Online

Leadership training

- EMBO Lab Leadership for group leaders
- EMBO Lab Leadership for postdocs
- Negotiation for scientists
- Self-leadership for scientists
- Project management for scientists

Scientific skills training

- Scientific integrity: how to publish reproducible results
- Communicating Research: paper writing and short presentations
- How to review a scientific paper
- Applying design principles to schematic figures

Facts & figures 2021

EMBC Delegates and advisors

Austria	Hemma Bauer	Christa Schleper	
Belgium	Maria-Helena Bosschaerts	Laurent Ghys	Alain Heynen
Croatia	Lovorka Barać Lauc	Krešimir Pavelić	
Czech Republic	Jan Buriánek	Zdena Palková	
Denmark	Line Bekker Poulsen	Michael Sandgreen	Kaare Teilum
Estonia	Maia Kivisaar	Toivo Raim	
Finland	Johanna Myllyharju	Sirpa Nuotio	
France	Elena Hoffert	Anne Paoletti	
Germany	Barbara Ohnesorge	Peter Becker	
Greece	Emmanouil Dermitzakis	George A. Garinis	Panagiota Katsafana
Hungary	Gergely Boehm	Ferenc Nagy	
Iceland	Zophonías Oddur Jónsson	Eiríkur Steingrímsson	
Ireland	Maria Nash	Noelle Waldron	
Israel	Iris Eisenberg	Joel Sussman	
Italy	Lucia Banci	Alessandro Boero	
Lithuania	Milda Jodinskiene	Virginijus Sikšnyš	
Luxembourg	Stephanie Schott		
Montenegro	Danilo Mrdak	Djurdjina Bulatović	
Malta	Joseph Borg		
Netherlands	Peter Steenhuis	Anna Akhmnova	
Norway	Line M. Grønning-Wang	Inge Jonassen	
Poland	Leszek Kaczmarek	Maria Klimkiewicz	
Portugal	Luisa Igreja	Cláudio Sunkel	
Slovak Republic	Marcel Sládok	Ján Turňa	
Slovenia	Tomaz Boh	Andrej Ograjenšek	Boris Turk
Spain	Cristina Bauluz	Angela Nieto	
Sweden	Björn Andersson	Maria Thuveson	
Switzerland	Doris Wohlfender-Bühler	Anna Jazwinska-Müller	Laurent Salzarulo
Turkey	Ahmet Ademoglu	Jale Sahin	
United Kingdom	Hugh Dunlop	Mark Palmer	Tim Willis

EMBC Officers 2021

President

Leszek Kaczmarek	Poland

Vice Presidents

Lucia Banci	Italy
Virginijus Siksnys	Lithuania

Secretary General

Anne Paoletti	France

Finance Committee Chair

Elene Hoffert	France

Finance Committee Vice Chair

Barbara Ohnesorge	Germany

Finance Committee

Permanent members

France
Germany
Italy
Spain
United Kingdom

Elected members (2019–2021)

Croatia
Denmark
Poland
Sweden
Switzerland
Netherlands
Turkey

Strategic Working Party 2021

Lucia Banci	Italy
Hemma Bauer	Austria
Elena Hoffert	France
Leszek Kaczmarek *Chair*	Poland
Angela Nieto	Spain
Barbara Ohnesorge	Germany
Mark Palmer	United Kingdom
Anne Paoletti	France
Jale Şahin	Turkey
Eirikur Steingrimsson	Iceland
Boris Turk	Slovenia

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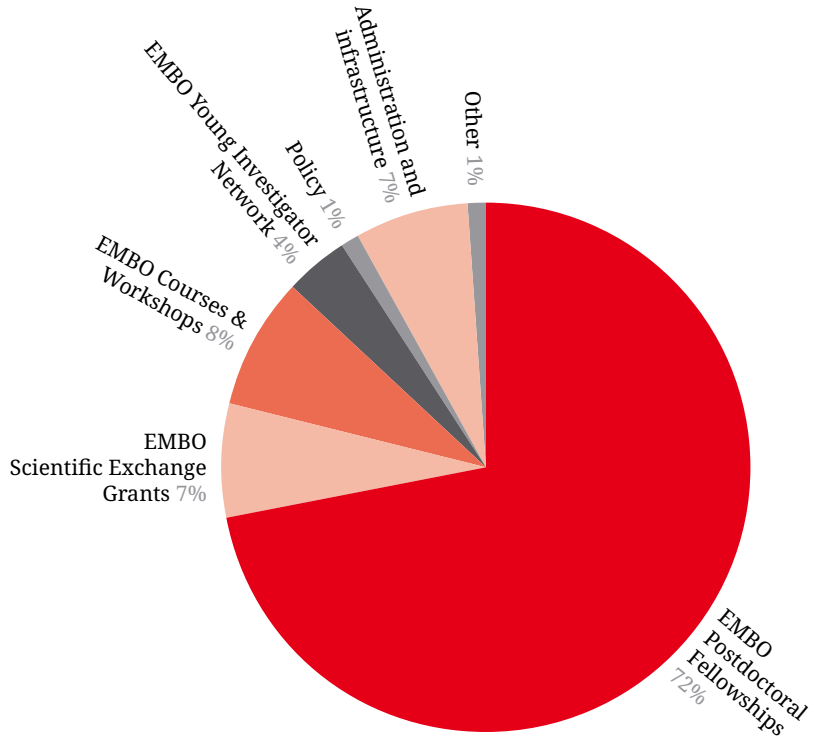
Financial contributions and use for EMBO Programmes

Entire EMBC Member States budget 2021: **Euro 27,531,213**	% of total contributions
Austria	2.00
Belgium	2.38
Croatia	0.26
Czech Republic	0.85
Denmark	1.64
Estonia	0.12
Finland	1.18
France	13.26
Germany	18.63
Greece	1.03
Hungary	0.57
Iceland	0.09
Ireland	1.05
Israel	1.63
Italy	9.74
Lithuania	0.23
Luxembourg	0.19
Malta	0.05
Montenegro	0.02
Netherlands	4.11
Norway	2.20
Poland	2.54
Portugal	1.00
Slovak Republic	0.44
Slovenia	0.20
Spain	6.44
Sweden	2.69
Switzerland	3.69
Turkey	4.46
United Kingdom	17.31

Entire EMBC Associate Member States and Cooperation Partners budget 2021: **Euro 2,901,870**	% of total contributions
Chile	4.80
India	80.82
Singapore	10.93
Taiwan	3.45

Budgeted use for EMBO Programmes

Rounded to full percent.



EMBO Council

EMBO Officers 2021

EMBO Secretary General	Paul Nurse
Chair, EMBO Council	Michael N. Hall
Vice Chair, EMBO Council	Titia Sixma

EMBO Council members 2021

*Elected for term(s) of office **	*Name*	*Country/Town*
2016-2018, 2019-2021	Karen B. Avraham	IL-Tel Aviv
2021-2023	David Baulcombe	UK-Cambridge
2017-2019, 2020-2022	Adrian Bird	UK-Edinburgh
2021-2023	Deborah Bourc'his	FR-Paris
2018-2020, 2021-2023	Matthew Freeman	UK-Oxford
2019-2021	Eileen Furlong	DE-Heidelberg
2017-2019, 2020-2022	Michael N. Hall	CH-Basel
2020-2022	Crisanto Gutierrez	ES-Madrid
2018-2020	Michel Labouesse	FR-Paris
2019-2021	Jiri Lukas	DK-Copenhagen
2021-2023	Marta Miaczynska	PL-Warsaw
2016-2018, 2019-2021	László Nagy	HU-Debrecen
2020-2022	Maria Rescigno	IT-Milan
2016-2018, 2019-2021	Titia Sixma	NL-Amsterdam
2017-2019, 2020-2022	Claudio E. Sunkel	PT-Porto

Ex officio Council members

Maria Leptin	Director, EMBO
Paul Nurse	Secretary General, EMBO

Observers

Leszek Kaczmarek	President, EMBC
Anne Paoletti	Secretary General, EMBC
Edith Heard	Director General, EMBL
Peter Scheiffele	Chair EMBO Membership Committee
Christoph Dehio	Chair EMBO Young Investigator Committee
Zoi Lygerou	Chair EMBO Course Committee
Malcolm J. Bennett	Chair EMBO Fellowship Committee
Noel F. Lowndes	Chair EMBO Global Investigator Network Committee
Paul Nurse	Secretary General, EMBO

* EMBO Council members are elected for a three-year term of office and may be re-elected for one additional term.

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Sophia Hercus
Assistant
Council_Office@embo.org

EMBO Committees

EMBO Course Committee

2015 Zoi Lygerou GR *Chair*
2020 Eva Benkova AT
2020 Carmen Buchrieser FR
2020 Janusz M. Bujnicki PL
2019 Kristina Djinovic-Carugo AT
2019 Anne-Claude Gavin CH
2021 Elina Ilkonen FI
2018 Klaus-Armin Nave DE
2020 Freddy Radtke CH
2020 Michael Sieweke DE
2021 Petr Svoboda CZ
2020 Nicholas Tapon UK

Scientific Exchange Grants Advisory Board

2020 Claudio Alfieri UK
2020 Arkaitz Carracedo ES
2020 Robert Hänsel-Hertsch DE
2020 Bruno Hudry FR
2020 Gabriel Ichim FR
2020 Marketa Kaucka Petersen DE
2020 Patrycja Kozik UK
2020 Nataly Kravchenko-Balasha IL
2020 Patricia Monteiro PT
2020 Silvia Portugal PT
2020 Jörg Renkawitz PL
2020 Adrien Rousseau UK
2020 Julia Santiago Cuellar CH
2020 Anne Schütz DE
2020 David Schwefel DE
2020 Erdinc Sezgin SE
2020 Marta Shahbazi UK
2020 Mehmet Somel TR
2020 Daan Swarts DE
2020 Melissa Vos DE
2020 Michael Zimmermann DE

EMBO Fellowship Committee

2018 Malcolm J. Bennett UK *Chair*
2018 Frédéric Berger AT
2020 Sarah Butcher FI
2017 Francesco Cecconi DK
2019 Ian Chambers UK
2020 Mario de Bono AT
2018 Fatima Gebauer Hernández ES
2021 Alain Goossens BE
2019 Isabel Gordo PT
2018 Magda Konarska PL
2021 Gilles Laurent DE
2019 Ben Luisi UK
2020 Vivek Malhotra ES
2021 Susan E. Mango CH
2021 Maria Dolores Martin-Bermudo ES
2021 Rosario Rizzuto IT
2020 Raffaella Santoro CH
2017 Virginijus Siksnys LT
2021 Bruno Silva-Santos PT
2019 Lea Sistonen FI
2020 Robert Tampé DE
2021 Boris Turk SI
2021 Štěpánka Vaňáčová CZ

EMBO Young Investigator Committee

2016 Christoph Dehio CH *Chair*
2021 Alexander Aulehla DE
2018 Buzz Baum UK
2019 Pascal Genschik FR
2019 Ana-Maria Lennon-Duménil FR
2021 Guillermina López-Bendito ES
2021 Marcin Nowotny PL
2020 Jan-Michael Peters AT
2021 Michael Sixt AT

EMBO Global Investigator Network Committee

2019 Noel F. Lowndes IE *Chair*
2019 M. Madan Babu US
2019 Manuela Baccarini AT
2019 Cosima T. Baldari IT
2019 Chris Bowler FR
2019 Cayetano González ES
2019 Marc Lecuit FR
2019 Ramesh S. Pillai CH
2019 Iris Salecker FR
2019 Blanche Schwappach DE

EMBO Membership Committee

2016 Peter Scheiffele CH *Chair*
2020 Ralf Bartenschlager DE
2019 Cédric Blanpain BE
2019 Dana Branzei IT
2021 Ben Lehner ES
2019 Susanne Mandrup DK
2021 Jane Parker DE
2020 Lori Passmore UK
2018 David Ron UK
2018 Claire Rougeulle FR
2020 Miguel Soares PT
2019 Kate Storey UK

Policy Advisory Group*

2012 Geneviève Almouzni FR
2012 Ioannis Economidis BE**
2013 Anne Ephrussi DE
2012 Toivo Maimets EE**
2012 Claudio Sunkel PT
2015 Gerrit van Meer NL

EMBO | EMBL Symposia Committee*

2010 Maria Leptin DE *Chair*
2019 Edith Heard DE, EMBL *Chair*
2017 Alexander Aulehla DE, EMBL
2020 Ian Baldwin DE
2020 Alba Diz-Muñoz DE, EMBL
2008 Anne Ephrussi DE, EMBL
2020 Cornelius Gross IT, EMBL
2020 Zoi Lygerou GR
2021 Duncan Odom DE
2019 Helle Ulrich DE

EMBO Publications Advisory Board*

2009 Ivan Dikic DE *Chair*
2018 Pedro Beltrao UK**
2021 Iain Cheeseman US**
2019 Ulrich Dirnagl DE**
2017 Kristian Helin UK
2017 Chonnettia Jones US**
2021 Louise Page US**
2018 Maya Schuldiner IL
2019 Blanche Schwappach DE

FEBS | EMBO Women in Science Committee*

2013 Cecilia Arraiano PT
2017 Thomas Boehm DE
2017 Anne-Lise Boerresen-Dale NO**
2020 Frances Brodsky UK
2020 Anne Dejean FR
2020 Bassem Hassam FR
2019 Frauke Melchior DE
2020 Thomas Nyström SE
2017 Isabelle Vernos ES
2014 Maciej Zylicz PL

Internal Auditor EMBL

Tomasz Smolarek

EMBC audit

KPMG

EMBO audit

KPMG

*Committee includes EMBO Members and external advisors (**)

EMBO Members

Name ▼	Institute	Research interest
Nathalie Q. **Balaban**	The Hebrew University | Jerusalem, Israel	Single cell variability of antibiotic response
Alex **Bateman**	European Bioinformatics Institute | Hinxton | Cambridge, United Kingdom	Analysis of proteins and non-coding RNAs
Martin **Beck**	MPI für Biophysik | Frankfurt, Germany	Molecular sociology
Laurent **Blanchoin**	Interdisciplinary Research Institute of Grenoble (IRIG), France; and Interdisciplinary Research Institute of Grenoble (IRIG), France	Physics of cytoskeleton and morphogenesis
Adrian P. **Bracken**	Trinity College | Dublin, Ireland	Chromatin biology in development and disease
Inês **Cardoso Pereira**	Instituto de Tecnologia Química e Biólogia | Oeiras, Portugal	Bioenergetics and biocatalysis in anaerobes
Petr **Cejka**	Institute for Research in Biomedicine | Bellinzona, Switzerland	Mechanism of DNA repair homologous recombination
Jacqueline **Cherfils**	Université Paris-Saclay | Gif-sur-Yvette, France	Biochemistry of peripheral membrane signaling
Rosa **Cossart**	Institut de neurobiologie de la méditerranée | Marseille, France	Developmental scaffolding of hippocampal circuits
Peter J. **Cullen**	University of Bristol, United Kingdom	Cargo sorting in the endosomal-lysosomal network
Karin E. **de Visser**	Netherlands Institute for Neuroscience | Amsterdam, Netherlands; and Oncode Institute | Utrecht, Netherlands	Impact of the immune system on breast cancer
Miguel A. **Del Pozo**	Centro Nacional de Investigaciones Cardiovasculares (CNIC) | Madrid, Spain	Cell mechanoadaption and remodeling mechanisms
José Antonio **Enríquez**	Centro Nacional de Investigaciones Cardiovasculares (CNIC) | Madrid, Spain	The OXPHOS system as an integrator of metabolism
Tobias J. **Erb**	MPI für terrestrische Mikrobiologie | Marburg, Germany	Principles of natural and synthetic CO_2 metabolism
Jiří **Fajkus**	Masaryk University | Brno, Czech Republic; and Institute of Biophysics | Brno, Czech Republic	Plant telomere biology and epigenetics
Rebecca C. **Fitzgerald**	MRC Cancer Unit | Cambridge, United Kingdom	Esophagus cancer pathogenesis for early diagnosis
Ervin **Fodor**	University of Oxford, United Kingdom	Molecular mechanisms of virus replication
Toni **Gabaldón**	Barcelona Supercomputing Center (BSC) | Barcelona, Spain; and IRBB - Institut de Recerca Biomedica | Barcelona, Spain	Comparative and evolutionary genomics
Julie E. **Gray**	University | Sheffield, United Kingdom	Control of stomatal development and aperture
Takashi **Hiiragi**	Hubrecht Institute | Utrecht, Netherlands	Self-organization in mammalian development
Corinne **Houart**	King's College | London, United Kingdom; and Francis Crick Institute | London, United Kingdom	Neuronal fate specification and connectivity
Evelyn **Houliston**	Sorbonne University | Paris, France	Developmental mechanisms in cnidarians
Matthew E. **Hurles**	Wellcome Trust Centre for Stem Cell Research | Cambridge, United Kingdom	Genetic causes of neurodevelopmental disorders
Matteo **Iannacone**	San Raffaele Institute (HSR/ TIGET) | Milano, Italy	Dynamics of immune responses
Kim B. **Jensen**	Biotech Research and Innovation Centre (BRIC) | Copenhagen, Denmark	Development and maintenance of epithelial tissues
Robert J. **Klose**	University of Oxford, United Kingdom	Epigenetic control of gene expression
Alwin **Köhler**	Max Perutz Labs | Vienna, Austria	Nuclear envelope biology: gates, chromatin and lipids
Cris **Kuhlemeier**	University | Bern, Switzerland	Plant development and evolutionary genetics
Gianni **Liti**	Institute for Research on Cancer and Aging (IRCAN) | Nice, France	Yeast population genomics
Robbie **Loewith**	University of Geneva, Switzerland	Target of rapamycin (TOR) signaling

Name ▼	Institute	Research interest
Ilaria **Malanchi**	Francis Crick Institute | London, United Kingdom	Tumour microenvironment and metastatic progression
John C. **Marioni**	European Bioinformatics Institute | Hinxton | Cambridge, United Kingdom; and University of Cambridge, United Kingdom	Computational single cell biology
Elisa **Martí**	Instituto de Biología Molecular de Barcelona (IBMB) | Barcelona, Spain; and Instituto de Biología Molecular de Barcelona (IBMB) | Barcelona, Spain	Development of the spinal cord in health and disease
Massimiliano **Mazzone**	KU Leuven | Leuven, Belgium; and Università | Torino, Italy	Immune cell fitness in cancer and inflammation
F. Nina **Papavasiliou**	Deutsches Krebsforschungszentrum (DKFZ) | Heidelberg, Germany	Trypanosoma brucei: specific mechanisms of immune evasion
Balázs **Papp**	Biological Research Centre | Szeged, Hungary; and Hungarian Centre of Excellence for Molecular Medicine (HCEMM) | Szeged, Hungary	Evolution of molecular systems
Diego **Pasini**	European Institute of Oncology (IEO) | Milano, Italy; and University of Milan | Milan, Italy	Epigenetic control of transcriptional identity
Andrea **Pauli**	IMP | Vienna, Austria	Molecular control of the egg-to-embryo transition
Rosa **Rademakers**	University | Antwerp, Belgium	Applied and translational neurogenomics
Markus **Ralser**	Charité - Universitätsmedizin | Berlin, Germany; and Francis Crick Institute | London, United Kingdom	Function principles of the metabolic network
Juri **Rappsilber**	Technische Universität | Berlin, Germany; and Wellcome Centre for Cell Biology | Edinburgh, United Kingdom	Structural biology in cells, by mass spectrometry
Oded **Rechavi**	Tel Aviv University, Israel	Transgenerational small RNA inheritance
Beatriz **Rico**	MRC Centre for Developmental Neurobiology | London, United Kingdom	Assembly of neural circuits and brain disorders
Uğur **Şahin**	Johannes-Gutenberg-Universität | Mainz, Germany; and BioNTech SE | Mainz, Germany	Personalized medicine and high-precision immune therapies
Liliane **Schoofs**	KU Leuven | Leuven, Belgium	Role of neuropeptides in learning and memory
Zofia **Szweykowska-Kulińska**	Adam Mickiewicz University | Poznan, Poland	MicroRNA biogenesis and function in plants
Kristin **Tessmar-Raible**	Max Perutz Labs | Vienna, Austria	Clocks and light: from genes to behavioral ecology
Özlem **Türeci**	BioNTech SE | Mainz, Germany; and Helmholtz Institute for Translational Oncology (Hi-TRON) | Mainz, Germany	Personalized medicine and high-precision immune therapies
Wim **Vermeulen**	Erasmus University MC | Rotterdam, Netherlands	DNA repair mechanisms and biological significance
Raphaël **Voituriez**	Sorbonne University | Paris, France	Physical models of cell migration
Eilika **Weber-Ban**	ETH Zurich, Switzerland	Protein turnover, quality control and regulation
Karsten **Weis**	ETH Zurich, Switzerland	Intracellular transport and organization
Karina B. **Xavier**	Instituto Gulbenkian de Ciência | Oeiras, Portugal	Interspecies cell-cell signaling in bacteria
Eleftheria **Zeggini**	Helmholtz Zentrum München | Neuherberg, Germany; and Technische Universität | München, Germany	Translational genomics
Denise **Zickler**	Université de Paris-Sud | Orsay, France	Meiotic recombination and pairing

Contact:
membership@embo.org

EMBO Associate Members

Name ▼	Institute	Research interest
Yasmine **Belkaid**	NIH | Bethesda, United States	Role of the microbiota and nutrition in immunity
Hugo J. **Bellen**	Baylor College of Medicine | Houston, United States	Rare and common neurological diseases in flies
María Fernanda **Ceriani**	Fundación Instituto Leloir | Buenos Aires, Argentina	Circadian remodeling of adult networks
Mark A. **Dawson**	Peter MacCallum Cancer Centre | Melbourne, Australia; and University of Melbourne, Australia	Epigenetic regulation in development and cancer
Akiko **Iwasaki**	Yale University School of Medicine | New Haven, United States	Immunity against viruses and tumors
Roop **Mallik**	Indian Institute of Technology | Mumbai, India	Membranes and motors: from physics to physiology
Keiko **Sugimoto**	RIKEN Center for Sustainable Resource Science | Yokohama, Japan	Cellular basis of plant growth and regeneration
Masayo **Takahashi**	Kobe City Eye Hospital | Kobe, Japan; and RIKEN Center for Developmental Biology | Kobe, Japan	Development of cell therapy for retinal diseases
Leonard I. **Zon**	Children's Hospital Boston | Boston, United States; and Harvard University | Cambridge, United States	Developmental biology of hematopoiesis

Contact:
membership@embo.org

EMBO Postdoctoral Fellowships

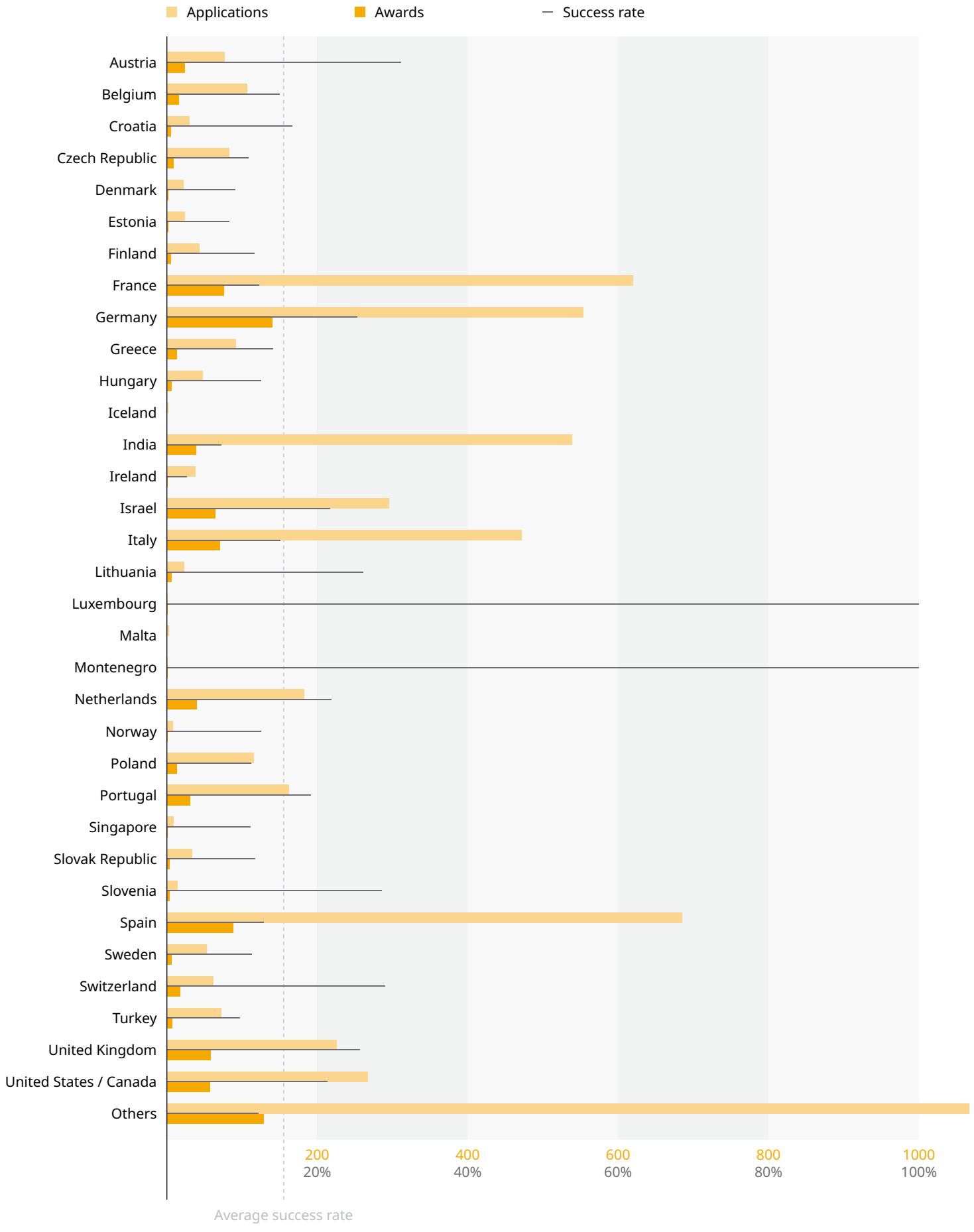
Applications and awards 2017–2021

Nationality	Applications (total)	%	Awards (total)	%	Success rate (%)
Austria	77	1	24	3	31
Belgium	107	2	16	2	15
Croatia	30	0	5	1	17
Czech Republic	83	1	9	1	11
Denmark	22	0	2	0	9
Estonia	24	0	2	0	8
Finland	43	1	5	1	12
France	620	10	76	8	12
Germany	554	9	140	15	25
Greece	92	2	13	1	14
Hungary	48	1	6	1	13
Iceland	2	0	0	0	0
India	539	9	39	4	7
Ireland	38	1	1	0	3
Israel	295	5	64	7	22
Italy	472	8	71	8	15
Lithuania	23	0	6	1	26
Luxembourg	1	0	1	0	100
Malta	3	0	0	0	0
Montenegro	1	0	1	0	100
Netherlands	183	3	40	4	22
Norway	8	0	1	0	13
Poland	116	2	13	1	11
Portugal	162	3	31	3	19
Singapore	9	0	1	0	11
Slovak Republic	34	1	4	0	12
Slovenia	14	0	4	0	29
Spain	685	11	88	9	13
Sweden	53	1	6	1	11
Switzerland	62	1	18	2	29
Turkey	72	1	7	1	10
United Kingdom	226	4	58	6	26
United States / Canada	267	4	57	6	21
Others	1067	18	129	13	12
Total	6032		938		16

Year	Applications (total)	Awards (total)	Success rate (%)
2021	1166	224	19
2020	1287	150	12
2019	1189	185	16
2018	1200	190	16
2017	1190	189	16

Contact:
Kelly Sheehan-Rooney
Programme Head
fellowships@embo.org

Applications and awards 2017–2021
(graphical representation)



Geographical distribution 2021

To \ From *(refers to nationality)*	Austria	Belgium	Croatia	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Iceland	India	Ireland	Israel	Italy	Lithuania	Luxembourg	Malta	Montenegro	Netherlands	Norway	Poland	Portugal	Singapore	Slovak Republic	Slovenia	Spain	Sweden	Switzerland	Turkey	United Kingdom	USA / Canada	Others	Total
Austria	1	1		1				1	3 1				5 1		1 1		1				1		3			1	1	1				1 1		6 2	28 6
Belgium				1				7 1	1	2	1		2			4 1					3		1			1		5 1			2		2	6 1	38 4
Croatia			2																																2
Czech Republic				2 1																								3 1						2 1	7 3
Denmark	1	1		3	1	2 1	1	4 1	4 2		1		4 1	1		4	1				2 1		1					4				6	2	5 1	48 7
Estonia																																			
Finland				1		2		2 1		2			1																1			1		0	10 1
France		3 1	1	3				9 1	5 2	1			9 1		4	5						1	3 1					9 1	1		1		4	23 3	82 10
Germany	2 1	2 1		1	1 1			6 1	10 4	2 1	1		14 1	2	7 3	2 1					4 2		2 1	1		1		9		4 1	1 1	1	9 2	27 7	109 28
Greece										3			1																				2	5
Hungary																																			
Iceland																																			
India													1																						1
Ireland		1						1					2													1		1						1	7
Israel		1		2				1	2				1			1															1	1	3 1	13 1
Italy		1											1			8 2							3 1					2 1				1 1	3 2	2	21 7
Lithuania																																			
Luxembourg																																			
Malta																																			
Montenegro																																			
Netherlands	2 2							4 1	3				7			2					3 1		1			1 1	1 1	5				2 1	3	12 1	46 8
Norway																										1 1		2 1		1		1	1	1 1	6 2
Poland									1 1				1															1							3 1
Portugal							2	3 1	1 1															6										4	16 2
Singapore													1													1						1			3
Slovak Republic																																			
Slovenia																											1								1
Spain		1		1				9 1	8 3	1			6			5					1 1			3 2				10 1	1		2		3 2	18 1	69 11
Sweden		1		1			1	3	6 2		1		5		1 1	4	1 1				1		1	1	1	2		6					4 2	11	51 6
Switzerland	3 1	3		2		1	1	25 4	16 3				13 2	2	2	12 4					4 1	3	2	3 2	1	1		17 8	1	2	1	8 2	10 2	25 5	158 34
Turkey																																			
United Kingdom	1	2		1	1		1 1	14 2	17 4	1	1		33 4	2	3 1	11 1					2	2 1	1 1	3 1				19 4	3 1	4 3	4	3 2	13 4	50 10	192 40
USA / Canada	6 3	6 1	2 1	3	3	1		39 6	24 8	5	2	1	3	2	26 8	25 3	1				10 2		4	6	1	1 1		28 5		5 2	3 1	11 7		2	220 48
EMBL*									5	1 1			4 1			1					3 1			1 1										2 1	17 5
Others		1						2								1					1	1						3		1		1		2	13
Total	16 7	24 3	5 1	22 1	6 1	6 1	6 1	130 20	106 31	18 2	7	1	113 11	9	44 14	85 12	4 1				35 9	7 1	22 4	24 6	3	10 2	3 1	125 23	7 1	17 6	14 2	38 14	55 14	204 35	1166 224

applications top btm awards

*EMBL (all sites) are not counted towards the country the respective site is located in.

EMBO Postdoctoral Fellowships awarded in 2021

Nationals of EMBC Member States

Name ▼	Home institute	Group leader	Host institute	Project
Andrea **Adden**	Lund University, Sweden	Lucia Prieto-Godino	Francis Crick Institute | London, United Kingdom	Evolution of tsetse fly olfactory pheromone sensing circuits
Arantxa **Agote Aran**	Institute of Genetics and Molecular and Cellular Biology (IGBMC) | Illkirch, France	Karsten Weis	ETH Zurich, Switzerland	How does the nuclear pore complex punch a hole in the nuclear envelope?
Alla **Aharonov**	Weizmann Institute of Science | Rehovot, Israel	James M. Turner	Francis Crick Institute | London, United Kingdom	Identification of conserved mammalian X-inactivation regulators by comparative analysis in the marsupial
Catarina **Albergaria**	Champalimaud Centre for the Unknown | Lisbon, Portugal	Tiago Branco	Sainsbury Wellcome Centre for Neural Circuits and Behaviour | London, United Kingdom	Role of basal ganglia in flexible navigation
Minia **Antelo**	Ernst-Moritz-Arndt-Universität Greifswald | Greifswald, Germany	Dirk Bumann	Biozentrum | University of Basel, Switzerland	Phage activation in Staphylococcus aureus during deep-seated human infections
Coline **Arnould**	Centre de Biologie Integrative | Toulouse, France	Nadav Ahituv	University of California San Francisco, United States	Contribution of DNA Double-Strand Breaks and chromatin organization to Alzheimer disease
Aurelia **Balestra**	University of Geneva, Switzerland	Boris Striepen	University of Pennsylvania | Philadelphia, United States	The cell biology of gamete interaction in Cryptosporidium
Moritz **Bauer**	Centro de Regulación Genómica (CRG) | Barcelona, Spain	Jop Kind	Utrecht University, Netherlands	Connecting the dots going backwards: An epigenetic memory recorder to trace ancestry during mouse gastrulation
Jonathan **Bayerl**	Weizmann Institute of Science | Rehovot, Israel	Diana Laird	University of California San Francisco, United States	Aging and its reversibility in the ovary
Maarten **Bebelman**	VU University | Amsterdam, Netherlands	Marino Zerial	MPI für molekulare Zellbiologie und Genetik | Dresden, Germany	Mechanisms underlying hepatocyte polarity and anisotropic lumen expansion during liver tissue morphogenesis
Tom **Beneke**	Oxford Genetics Limited (OXGENE) | Oxford, United Kingdom	Markus Engstler	University | Würzburg, Germany	Inadequate migration of Leishmania-infected macrophages – The driver of parasite dissemination?
Gabriel **Berdugo-Vega**	Technische Universität | Dresden, Germany	Johannes Gräff	Swiss Federal Institute of Technology | Lausanne, Switzerland	The index awakens: Promoting memory recovery in Alzheimer's disease
Eva **Berlot**	University of Western Ontario | London, Canada	Floris De Lange	Radboud University | Nijmegen, Netherlands	The neurobiology of active statistical learning
Adi **Biram**	Weizmann Institute of Science | Rehovot, Israel	Jason Cyster	University of California San Francisco, United States	Antigen recognition machineries of gamma delta T cells in the skin during health and disease
Alexander **Blackwell**	University of Cambridge, United Kingdom	Sander van den Heuvel	Utrecht University, Netherlands	Single-cell analysis of chromatin dynamics during animal development
Giulia **Boezio**	Max-Planck-Institut für Herz- und Lungenforschung | Bad Nauheim, Germany	James Briscoe	Francis Crick Institute | London, United Kingdom	Investigating the cellular dynamics and lineage relationships in the vertebrate neural tube
Jonathan **Bohlen**	Deutsches Krebsforschungszentrum (DKFZ) | Heidelberg, Germany	Jean-Laurent Casanova	Institut des Maladies Génétiques Imagine | Paris, France	Inborn errors of translation reinitiation in humans with Mendelian susceptibility to mycobacterial disease
Felix **Boos**	Universität | Kaiserslautern, Germany	Anne Brunet	Stanford University, United States	Inter-organ communication of protein homeostasis stress responses in vertebrate aging

Name ▼	Home institute	Group leader	Host institute	Project
Pierre **Bost**	Institut Pasteur | Paris, France	Bernd Bodenmiller	University of Zurich, Switzerland	A novel approach for profiling the in-vivo topology and heterogeneity of viral infections and associated immune response in human tissues
Esther **Brielle**	The Hebrew University | Jerusalem, Israel	David Reich	Harvard Medical School | Boston, United States	Familial relatedness among ancient human genomes to investigate prehistoric population demographics
Laura **Broglia**	Max Planck Unit for the Science of Pathogens | Berlin, Germany	Gian Gaetano Tartaglia	Italian Institute of Technology | Genova, Italy	Unveiling the role of untranslated regions in recruiting proteins to control physiological and neuro-pathological phase separation
Jesús **Cámara Almirón**	University of Malaga, Spain	Jan-Willem Veening	University | Lausanne, Switzerland	The role of genetic competence as a defense mechanism against mobile genetic elements and the proliferation of genomic parasites
Nicolò **Carrano**	Università degli Studi | Milano, Italy	Patrik Verstreken	KU Leuven | Leuven, Belgium	The identification of synaptic resilence mechanisms in hibernating hamsters to tackle Tau-induced synaptopathy
Federica **Cella**	Istituto Italiano Di Tecnologia | Napoli, Italy	Mustafa Khammash	ETH Zurich | Basel, Switzerland	Embedding high sensitivity to tumor-antigen density in T cells to avoid on-target off-tumor toxicity
Alice Dimitra **Cezanne**	MPI für molekulare Zellbiologie und Genetik | Dresden, Germany	Buzz Baum	MRC Laboratory of Molecular Biology | Cambridge, United Kingdom	Membrane remodelling during cell division in the thermoacidiophilic archaeaon Sulfolobus acidocaldarius
Aymeric **Chorlay**	École Normale Supérieure | Paris, France	Daniel Fletcher	University of California | Berkeley, United States	Oil droplet sensor to characterize adhesion energetic landscape of macrophage interfaces
Cajsa **Classon**	Karolinska Institutet | Solna, Sweden	Vassilis Pachnis	Francis Crick Institute | London, United Kingdom	Effect of maternal infection on the development of the enteric nervous system
Francisco Javier **Colina Ruiz**	Instituto de Recursos Naturales y Agrobiologia de Salamanca | Salamanca, Spain	Michael Wrzaczek	Biology Centre | Ceske Budejovice, Czech Republic	CRK2 integrates stress responses with flowering time control through interaction with the autonomous pathway
Jack **Collier**	University | Newcastle upon Tyne, United Kingdom	Heidi McBride	McGill University | Montreal, Canada	Uncovering how Parkinson's disease-related proteins regulate innate and adaptive immunity
Julia María **Coronas-Serna**	Complutense University of Madrid (UCM) | Madrid, Spain	Sophie G. Martin	University | Lausanne, Switzerland	Deciphering the functions of Cdc42 effectors in ensuring irreversible cell-cell fusion
Marco **D'Ario**	John Innes Centre | Norwich, United Kingdom	Andrew Leslie	University | Stanford, United States	Cell size-dependent sex determination
Henry **De Belly**	University College London, United Kingdom	Orion Weiner	University of California San Francisco, United States	Role of cell mechanics in coupling information within and between cells
Steven **De Munck**	Ghent University, Belgium	Jonathan Elegheert	Interdisciplinary Institute for Neuroscience (IINS) | Bordeaux, France	Engineering and structure of transient ionotropic glutamate receptor complexes
Kamila **Delaney**	University of Geneva, Switzerland	Geneviève Almouzni	Institut Curie | Paris, France	The role of histone variant H3.3 recycling in mammalian cell fate transitions
Maria Rosaria **Dello Stritto**	Max Perutz Labs | Vienna, Austria	Petr Cejka	Institute for Research in Biomedicine | Bellinzona, Switzerland	The functions of BRCA proteins during DNA replication
Astrid **Deryckere**	KU Leuven | Leuven, Belgium	Maria Tosches	Columbia University | New York, United States	Timing the generation of neuronal diversity in the vertebrate brain
Gabriela **Desdín-Micó**	Centre for Molecular Biology 'Severo Ochoa' | Madrid, Spain	Alejandro Ocampo	University | Lausanne, Switzerland	In vivo reprogramming as a new approach to restore immune function at old age
Júlia **Domingo**	Centro de Regulación Genómica (CRG) | Barcelona, Spain	Tuuli Lappalainen	Genome Center | New York, United States	Characterising dosage-pheno-type functions in cancer

Name ▼	Home institute	Group leader	Host institute	Project
Handan Melike **Donertas**	European Bioinformatics Institute | Hinxton | Cambridge, United Kingdom	Dario Riccardo Valenzano	Leibniz-Institut fuer Altersforschung | Jena, Germany	Systems-level characterisation of gut microbiota dynamics throughout host's ageing using network and information theory-based approaches
Jérémy **Dufloo**	Institut Pasteur | Paris, France	Rafael Sanjuán	I2SYSBIO | Paterna, Spain	Experimental evolution of wildlife viruses' human cell tropism
Mikolaj **Dziurzynski**	University | Warsaw, Poland	Marco Fondi	University of Florence | Firenze, Italy	Fungi-bacteria symbiosis – The first genome-scale reconstruction of fungi-endosymbiont metabolic model
Jessica **Eira**	Instituto de Investigação e Inovação em Saude (i3S) | Porto, Portugal	Anissa Kempf	Biozentrum | University of Basel, Switzerland	Deciphering mechanistic details underlying dSUR/ SUR2-mediated sleep regulation
Geniver **El Tekle**	Ente Ospedaliero Cantonale | Bellinzona, Switzerland	Wendy Garrett	Harvard School of Public Health | Boston, United States	Fusobacteria-stromal cells-immune cells interactions in the colon cancer tumor microenvironment
Stefan **Fattinger**	ETH Zurich, Switzerland	Russell Vance	University of California | Berkeley, United States	Type I and II IFN crosstalk during Mycobacterium tuberculosis infection
Marion **Ferren**	Université Claude Bernard Lyon 1 | Lyon, France	Rory De Vries	Erasmus University MC | Rotterdam, Netherlands	Characterization of cross-reactive T-cells recognizing endemic and zoonotic coronaviruses
Helen **Fewlass**	MPI für evolutionäre Anthropologie | Leipzig, Germany	Pontus Skoglund	Francis Crick Institute | London, United Kingdom	Extending the proteomic record of human evolution with non-destructive pre-screening
John **Fielden**	University of Oxford, United Kingdom	Jacob Corn	ETH Zurich, Switzerland	Dissecting the molecular mechanisms of nucleophagy
Helen **Foster**	MRC Laboratory of Molecular Biology | Cambridge, United Kingdom	Gaia Pigino	Human Technopole | Milano, Italy	Structural characterization of non-ciliary intraflagellar transport complexes
Mélanie **Foulon**	Nantes | Center for Research in Cancerology and Immunology Nantes-Angers (CRCINA), France	Thierry Soldati	University of Geneva, Switzerland	Host-derived lipids: Access, transport and utilization by Mycobacteria during their intracellular life
Arie **Fridrich**	The Hebrew University | Jerusalem, Israel	Frédéric Berger	Gregor Mendel Institute of Molecular Plant Biology | Vienna, Austria	Characterizing the ancestral function of chromatin remodelers controlling genome stability
Charalampos Chrysovalantis **Galouzis**	Aix-Marseille Université | Marseille, France	Eileen Furlong	EMBL | Heidelberg, Germany	Elucidating the genetic determinants of enhancer-promoter communication
Martí **Garçon**	University | Girona, Spain	John Hartwig	University of California | Berkeley, United States	Artificial metalloenzymes for biocatalytic aziridination reactions and their incorporation into artificial metabolic pathways
Mathilde **Gauchier**	CNRS Institute of Human Genetics | Montpellier, France	Todd MacFarlan	NIH | Bethesda, United States	Characterizing novel modifiers of STR instability in mammals
Luca **Ghita**	Twincore | Zentrum für Experimentelle und Klinische Infektionsforschung GmbH, Germany	Shirit Einav	University | Stanford, United States	Deciphering the pathogenesis of severe dengue in children by an integrated single cell approach
Sónia **Gomes Pereira**	Instituto Gulbenkian de Ciência | Oeiras, Portugal	Paul Guichard	University of Geneva, Switzerland	Revealing the naked cartwheel structure and function
Rubén **González**	I2SYSBIO | Paterna, Spain	Marie-Anne Felix	École Normale Supérieure | Paris, France	Microbiome impact on Caenorhabditis elegans viral infection and evolution of Orsay virus
Daniel **González Acosta**	Centro Nacional de Investigaciones Oncológicas (CNIO) | Madrid, Spain	Massimo Lopes	University of Zurich, Switzerland	A novel genomic approach to probe the 3D organization of DNA replication and its re-shaping upon genotoxic stress
Mark **Greenwood**	University of Cambridge, United Kingdom	Pulin Li	Whitehead Institute | Cambridge, United States	Reconstituting dynamic signal decoding in the reproductive system of mammals

Name ▼	Home institute	Group leader	Host institute	Project
Esther **Griesbach**	Sir William Dunn School | Oxford, United Kingdom	Jeffrey Chao	Friedrich Miescher Institute | Basel, Switzerland	Studying the molecular mechanisms underlying selective mRNA export using a novel small molecule inhibitor
Marta **Gross**	University | Gdansk, Poland	John F.X. Diffley	Francis Crick Institute | London, United Kingdom	Unravelling the mechanism of eukaryotic helicase activation
Gregor **Gryglewski**	Medical University of Vienna, Austria	Flora Vaccarino	Yale University | New Haven, United States	Developmental mechanisms of cortical structure variation investigated using cerebral organoids
Roni **Haas**	Technion | Haifa, Israel	Paul C. Boutros	University of California | Los Angeles, United States	Associating germline changes in cancer hallmark pathways with tumour evolution and lethality
Joanna **Hagen**	Francis Crick Institute | London, United Kingdom	Robert Johnston	Johns Hopkins University | Baltimore, United States	Establishing non-human primate organoids to understand the developmental mechanisms underlying the evolution of trichromatic colour vision
Jakub **Hajný**	Institute of Science and Technology Austria (IST) | Klosterneuburg, Austria	Miroslav Strnad	Palacký University | Olomouc, Czech Republic	Identifying a role of non-coding RNAs in auxin-dependent plant hormonal regulation
Annika **Hausmann**	ETH Zurich, Switzerland	Kim B. Jensen	Biotech Research and Innovation Centre (BRIC) | Copenhagen, Denmark	Deciphering immune cell/epithelial crosstalk driving epithelial dedif-ferentiation in Ulcerative Colitis
Hannah **Heil**	University | Würzburg, Germany	Ricardo Henriques	Instituto Gulbenkian de Ciência | Oeiras, Portugal	Mapping the early stages of HIV-1 infection by live-cell 4D Super-Resolution Microscopy
Coralie **Hérent**	Université Paris-Saclay | Gif-sur-Yvette, France	Megan Carey	Champalimaud Centre for the Unknown | Lisbon, Portugal	Cell-specific functional connectivity of cerebellar outputs for locomotor learning
Andres Manuel **Herrero Ruiz**	Centro Nacional de Inves-tigaciones Oncológicas (CNIO) | Madrid, Spain	Ritwick Sawarkar	MRC Toxicology Unit | Cambridge, United Kingdom	Mechanisms underlying proteostatic stress-mediated upregulation of RNA Polymerase III target genes
Patrick **Hoffmann**	MRC Laboratory of Molecular Biology | Cambridge, United Kingdom	Martin Beck	MPI für Biophysik | Frankfurt, Germany	Role of biomolecular condensation during interphase nuclear pore assembly
Anna **Holthenrich**	University of Münster, Germany	Verena Ruprecht	Centro de Regulación Genómica (CRG) | Barcelona, Spain	Actomyosin driven force-generation at the egg surface during fertilization
Alexander **Hooftman**	Trinity College | Dublin, Ireland	Andrea Ablasser	Swiss Federal Institute of Technology | Lausanne, Switzerland	Metabolic regulation of the cGAS-STING pathway
Caroline **Hoppe**	University of Manchester, United Kingdom	Antonio Giraldez	Yale University | New Haven, United States	Elucidating how pioneer transcription factors and chromatin structure regulate genome activation
Miles **Huseyin**	University of Oxford, United Kingdom	Anders Hansen	Massachusetts Institute of Technology (MIT) | Cambridge (MA), United States	Mechanistic dissection of dynamics of transcriptional regulation by chromatin looping
Tomer **Illouz**	Bar-Ilan University | Ramat Gan, Israel	Francisco Quintana	Harvard Medical School | Boston, United States	Analysis of connectome perturbations in aging and Alzheimer's disease
Martin **Jaeger**	Austrian Academy of Sciences | Vienna, Austria	Benjamin Cravatt	The Scripps Research Institute | La Jolla, United States	Chemical modulation of transcription factor (TF)-coactivator interactions
Karola **Kaefer**	Institute of Science and Technology Austria (IST) | Klosterneuburg, Austria	Francesco Battaglia	Radboud University | Nijmegen, Netherlands	The mechanisms of multisensory integration in the hippocampal network
Sharon **Kaisari**	Technion | Haifa, Israel	Michele Pagano	New York University, United States	Mechanisms of ER-associated degradation regulation by DeSI-1 the novel downstream effector of cyclin D1-CDK4/6 complex
Sabina **Kanton**	MPI für evolutionäre Anthropologie | Leipzig, Germany	Sergiu Pasca	Stanford University | Palo Alto, United States	Modeling long-range serotonergic modulation and neurodevel-opmental disease in a novel human assembloid system

Name ▼	Home institute	Group leader	Host institute	Project
Noa **Katz**	Technion | Haifa, Israel	Xiaojing Gao	University | Stanford, United States	Homeostasis circuit for studying and treating gene dosage-dependent disorders
Daniel **Koch**	King's College | London, United Kingdom	Aneta Koseska	caesar (center of advanced european studies and research) | Bonn, Germany	Dynamical basis of cellular processing of complex signals by stable heteroclinic channels
Dimitrios - Georgios **Kontopoulos**	Imperial College London | Ascot, United Kingdom	Michael Hiller	Senckenberg Research Institute | Frankfurt am Main, Germany	Genomic, physiological, and ecological drivers of dormancy across birds and mammals
Michaela **Krafcikova**	Institute of Biophysics | Brno, Czech Republic	Marc Baldus	Bijvoet Center for Biomolecular Research | Utrecht, Netherlands	G-quadruplexes as selective transcription modulators of mitochondrial (tRNA) genes
Lara **Krüger**	Institut Curie | Paris, France	Emmanuel Derivery	MRC Laboratory of Molecular Biology | Cambridge, United Kingdom	Molecular mechanism of central spindle symmetry breaking in mammals
Nils **Kurzawa**	EMBL | Heidelberg, Germany	Patrick Aloy	Institute for Research in Biomedicine | Barcelona, Spain	Determining species-specific effects of chemical compounds on gut microbiota using small molecule bioactivity descriptors and machine learning
Jules **Lavalou**	Institut de Biologie du Developpment de Marseille (IBDM) | Marseille, France	Eugenia Piddini	University of Bristol, United Kingdom	Unmasking the competitive loser status of epithelial tumours with ribosomal mutations
Feline **Lindhout**	Utrecht University, Netherlands	Madeline A. Lancaster	MRC Laboratory of Molecular Biology | Cambridge, United Kingdom	Identifying human mechanisms of axonal transport in health and disease using brain organoids
Vanessa **Linke**	University of Wisconsin | Madison, United States	Agnieszka Chacinska	International Institute Molecular Mechanisms & Machines PAS | Warsaw, Poland	Homeostatic plasticity of the mitochondrial proteome and lipidome upon stress
Hon Wing **Liu**	Francis Crick Institute | London, United Kingdom	Stephan Gruber	University | Lausanne, Switzerland	Investigating the roles and mechanisms of SMC complexes in DNA anti-maintenance
Kadi **Lõhmussaar**	Hubrecht Institute | Utrecht, Netherlands	Kim B. Jensen	Biotech Research and Innovation Centre (BRIC) | Copenhagen, Denmark	Controlling cell fate decisions in homeostasis and disease
Franziska **Lorbeer**	University of California | Berkeley, United States	Alexander Stark	IMP | Vienna, Austria	Regulating transcription by modulating burst kinetics
Martyna **Lukoseviciute**	University of Oxford, United Kingdom	Jonas Frisén	Karolinska Institutet | Stockholm, Sweden	Identification of spinal cord immune niche interactions dictating endogenous neural stem cell fates upon injury
Donald Iain **MacDonald**	University of Zurich, Switzerland	Alexander Chesler	NIH | Bethesda, United States	Synaptic mechanisms of chronic pain in the parabrachial nucleus
Dora **Mahecic**	Swiss Federal Institute of Technology | Lausanne, Switzerland	Johan Paulsson	Harvard Medical School | Boston, United States	Investigating plasmid localization and replication control with super-resolution fluorescence imaging
Mathilde **Mathieu**	Institut Curie | Paris, France	Johanna Ivaska	University | Turku, Finland	Mechanisms of negative durotaxis in cancer cells
Sara **Mederos**	Cajal Institute | Madrid, Spain	Sonja Hofer	University College London, United Kingdom	Pathways for regulating escape decisions through the ventral lateral geniculate nucleus
Nicolas **Meirhaeghe**	Massachusetts Institute of Technology (MIT) | Cambridge (MA), United States	Thomas Brochier	Aix-Marseille Université | Marseille, France	Neurobiological basis of predictive cortical computation
Julia **Meng**	University of Chicago, United States	David A. Lyons	University of Edinburgh, United Kingdom	How are action potential conduction properties established and refined in development in vivo?
Mieke **Metzemaekers**	KU Leuven | Leuven, Belgium	Ralph Stadhouders	Erasmus University MC | Rotterdam, Netherlands	Dissecting the molecular basis of immunological memory in human T cells

Name ▼	Home institute	Group leader	Host institute	Project
Bartul **Mimica**	Norwegian University of Science & Technology (NTNU) | Trondheim, Norway	Mala Murthy	Princeton University, United States	Mapping behavioral and neural predictors of social communication
Marte **Molenaars**	University Medical Centre (UMC) | Amsterdam, Netherlands	Richard Possemato	New York University, United States	Delineating control of translation upon iron starvation
Jasmin **Morandell**	Institute of Science and Technology Austria (IST) | Klosterneuburg, Austria	Marta Biagioli	University | Trento, Italy	CircHtt, a novel circular RNA molecule from the Htt locus: Role in brain development and aging with implications for Huntington`s Disease (HD)
Annika **Niehrs**	Leibniz Institute for Experimental Virology (HPI) | Hamburg, Germany	Niklas Björkström	Karolinska Institutet | Stockholm, Sweden	Dissecting tissue-resident NK cell homeostasis in humans
Lise **Noack**	École Normale Supérieure | Lyon, France	Staffan Persson	University | Copenhagen, Denmark	How phosphoinositides and sterols direct secondary cell wall deposition in Arabidopsis thaliana
Filipe **Nunes Vicente**	Université de Bordeaux | Bordeaux, France	Alba Diz-Muñoz	EMBL | Heidelberg, Germany	Hold the line: How spectrins interact with surface mechanics to control cell morphology
Gal **Ofir**	Weizmann Institute of Science | Rehovot, Israel	Detlef Weigel	MPI für Entwick-lungsbiologie | Tübingen, Germany	Discovery of new immune systems in plants
Anouk **Olthof**	University of Connecticut | Storrs, United States	Jesper Q. Svejstrup	University | Copenhagen, Denmark	The role of RNAPII protein levels in transcription regulation
Marlies **Oomen**	University of Massachusetts | Worcester, United States	Maria Elena Torres Padilla	Helmholtz Zentrum | München, Germany	The interplay of transposable elements and transcriptional regulation during embryonic gene activation across mammalian species
Özge Demet **Özçete**	Universität | Göttingen, Germany	Pascal Kaeser	Harvard Medical School | Boston, United States	Molecular and functional architecture of serotonin neuromodulation
Nathan **Palmer**	Institute of Molecular and Cell Biology (IMCB) | Singapore, Singapore	Joao Matos	Max Perutz Labs | Vienna, Austria	Regulation of meiotic crossing-over by the chromatin remodeler Chd1
Katarzyna **Parys**	Austrian Academy of Sciences | Vienna, Austria	Martin Parniske	Ludwig-Maximilians-Universität (LMU) | Martinsried, Germany	Functional analysis of Symbiosis Receptor Kinase (SymRK) in plant root endosymbiosis
Eudald **Pascual**	Universitat de Barcelona | Barcelona, Spain	Patrick Steinmetz	Sars International Centre for Marine Molecular Biology | Bergen, Norway	Nutritional control of animal stem cell proliferation
Nalle **Pentinmikko**	University of Helsinki, Finland	Jean-Paul Vincent	Francis Crick Institute | London, United Kingdom	Heterotypic cell interactions in the patterning and repair of damaged epithelium
Julia **Peukes**	MRC Laboratory of Molecular Biology | Cambridge, United Kingdom	Eva Nogales	University of California | Berkeley, United States	Understanding the regulation of microtubule dynamic instability by plus-end binding proteins
Anna-Katharina **Pfitzner**	University of Geneva, Switzerland	Tom A. Rapoport	Harvard Medical School | Boston, United States	Molecular mechanism of ERAD-M by in vitro reconstitution
Martina **Proietti Onori**	Erasmus University MC | Rotterdam, Netherlands	Franck Polleux	Columbia University | New York, United States	The role of human-specific gene duplications in shaping the human brain
Karin **Prummel**	University of Zurich, Switzerland	Judith Zaugg	EMBL | Heidelberg, Germany	Unraveling the gene regulatory mechanisms involved in bone marrow niche remodeling upon leukemia, using single cell profiling in patient samples and mouse models
Eduard **Puig**	Institute for Research in Biomedicine | Barcelona, Spain	Lars Hangartner	The Scripps Research Institute | La Jolla, United States	Analysis of the polyclonal antibody response to viral antigens using an integrated EM-proteogenomics approach

Name ▼	Home institute	Group leader	Host institute	Project
Alina **Pushkarev**	Technion | Haifa, Israel	Peter Hegemann	Humboldt University | Berlin, Germany	Shrimp Rhodopsins as new far-red absorbing optogenetic tools
Timo **Rey**	Swiss Federal Institute of Technology | Lausanne, Switzerland	Michal Minczuk	MRC Mitochondrial Biology Unit | Cambridge, United Kingdom	Understanding clonal expansion through mutant-specific tracking of mitochondrial DNA
Melissa **Rinaldin**	Brandeis University | Waltham, United States	Jan Brugues	MPI für molekulare Zellbiologie und Genetik | Dresden, Germany	Physical basis of early embryonic organization by mitotic waves
Gonçalo **Rodrigues**	Weill Cornell Medical College | New York, United States	Joan Seoane	Universitari Vall d'Hebron | Barcelona, Spain	Deciphering the impact of IL6 and TGFb families of cytokines on the tumor microenvironment of bone metastases
Jorge **Roel**	Utrecht University, Netherlands	Enrique Marcos Benteo	Instituto de Biología Molecular de Barcelona (IBMB) | Barcelona, Spain	De novo design of tunable immunoglobulin-like bodies
Jakob **Rosenbauer**	Forschungszentrum Jülich GmbH | Jülich, Germany	Jean Hausser	Karolinska Institutet | Solna, Sweden	A data-driven analytical framework of the cellular interactions responsible for tumor architecture
Jakob **Rostøl**	Rockefeller University | New York, United States	José R. Penadés	Imperial College | London, United Kingdom	Parasitising the parasite – Discovering novel anti-phage defence systems by tapping into PICIs, small bacterial genetic elements that exploit the phage life cycle
Sergei **Rudnizky**	Technion | Haifa, Israel	Taekjip Ha	Johns Hopkins University | Baltimore, United States	Deciphering the nature of genomic conflict using locus-specific chromatin perturbation and capture
Philip Mm **Ruppert**	Wageningen University, Netherlands	Jan-Wilhelm Kornfeld	University of Southern Denmark | Odense, Denmark	Dietary methionine-chromatin crosstalk in brown adipose tissue function
Yoann **Santin**	Institut de Microbiologie de la Méditerranée | Marseille, France	Geraldine Laloux	de Duve Institute | Brussels, Belgium	Shedding light on the molecular determinants underlying inter-bacteria predation
Dvir **Schirman**	Weizmann Institute of Science | Rehovot, Israel	Johan Elf	Uppsala University, Sweden	The 4D genome: High-resolution temporal dynamics of bacterial chromosome organization
Guy **Schleyer**	Weizmann Institute of Science | Rehovot, Israel	Christian Hertweck	Leibniz-Institute for Natural Product Research | Jena, Germany	Elucidating the ecological role of bacterial specialized metabolites in bacteria-microalgae interactions
Thomas **Schlichthärle**	MPI für Biochemie | Martinsried, Germany	David A. Baker	University of Washington | Seattle, United States	Spatio-temporal control of nanotemplated receptor activation
Jakob **Schnabl**	IMBA | Vienna, Austria	Marc Bühler	Friedrich Miescher Institute | Basel, Switzerland	Biochemical characterization of ChAHP and ChAHP2 complex activity
Florian **Schober**	Karolinska Institutet | Solna, Sweden	Matthias Mann	MPI für Biochemie | Martinsried, Germany	The architecture of extracellular matrix in human liver at the transition from regeneration to cirrhosis
Marco **Seehawer**	Universität | Tübingen, Germany	Kornelia Polyak	Dana-Farber Cancer Institute | Boston, United States	The role of histone methyltrans-ferases KMT2C and KMT2D in breast cancer metastases
Xènia **Serrat Farran**	Hospital Duran i Reynals | L'Hospitalet de Llobregat, Spain	Andrew Fraser	University of Toronto, Canada	Identification and characterization of new anthelmintic drugs targeting rhodoquinone-dependent metabolism in C. elegans
Kiyan **Shabestary**	Science for Life Laboratory | Solna, Sweden	Rodrigo Ledesma Amaro	Imperial College | London, United Kingdom	Genome-wide analysis and targeted control of isogenic heterogeneity in the model eukaryote S. cerevisiae
Lara **Shahidian**	Helmholtz Zentrum München | Neuherberg, Germany	Alvaro Rada-Iglesias	Universidad de Cantabria | Santander, Spain	Deciphering the role of PcG and TrxG as topological facilitators of enhancer function
Andreas **Sichert**	Massachusetts Institute of Technology (MIT) | Cambridge (MA), United States	Uwe Sauer	ETH Zurich, Switzerland	Eco-physiology of fucose degradation pathways in marine bacteria

Name ▼	Home institute	Group leader	Host institute	Project
Daniel **Sobrido Cameán**	Universidade | Santiago de Compostela, Spain	Matthias Landgraf	University of Cambridge, United Kingdom	Transient embryonic experiences specify neuronal properties of the mature nervous system
Adria **Sogues Castrejon**	Institut Pasteur | Paris, France	Han Remaut	Vrije Universiteit (VUB) | Brussels, Belgium	Unveiling the molecular coordination between cell division machinery and S-layer biogenesis in Bacillus anthracis
Megan **Sørensen**	Stockholm University, Sweden	Eva Nowack	Heinrich Heine University | Düsseldorf, Germany	From endosymbiont to organelle: Mechanisms of cellular integration between Paulinella and its chromatophores
Maximilian **Stammnitz**	University of Cambridge, United Kingdom	Ben Lehner	Centro de Regulación Genómica (CRG) | Barcelona, Spain	Massively parallel drug target and resistance mutation mapping by deep mutational scanning
Heike Claudia **Stein**	Universitat de Barcelona | Barcelona, Spain	Alex Cayco Gajic	École Normale Supérieure | Paris, France	Co-evolution of multi-area cerebellar and cerebello-cortical population codes during motor learning
Johannes **Stein**	MPI für Biochemie | Martinsried, Germany	George Church	Harvard University | Harvard, United States	PAINTing the Central Dogma – Toward multiplexed super-resolution microscopy of the genome, the transcriptome and the proteome
James **Swann**	University of Oxford, United Kingdom	Emmanuelle Passegue	Columbia University | New York, United States	Role of emergency myelopoiesis mechanisms in development of acute myeloid leukaemia
Quentin **Szabo**	CNRS Institute of Human Genetics | Montpellier, France	Lucas Pelkmans	University of Zurich, Switzerland	Multiscale control of nuclear states through cell lineage trajectories
Giulia **Tarquini**	Università degli Studi | Udine, Italy	Olivier Voinnet	ETH Zurich, Switzerland	Accessing the contextuality and cellular biology of antiviral-silencing in plants
Ana **Teijeiro García-Quijada**	Centro Nacional de Investigaciones Oncológicas (CNIO) | Madrid, Spain	Yasmine Belkaid	NIH | Bethesda, United States	Role of dietary intervention in bone metastasis
Ilan **Theurillat**	Institut Pasteur | Paris, France	Nikolaus Rajewsky	Max-Delbrück-Centrum | Berlin, Germany	Deciphering tumor initiation, progression and metastasis in the context of a complex micro-environment using a patient-relevant murine model of triple-negative breast cancer
Océane **Tournière**	University | Bergen, Norway	Irene Miguel-Aliaga	Imperial College | London, United Kingdom	Exploring the links between neuronal reproductive plasticity and sexual identity in the 'second brain'
Sergio **Valbuena Alvarez**	Instituto de Neurociencias | San Juan de Alicante, Spain	Pico Caroni	Friedrich Miescher Institute | Basel, Switzerland	Inhibitory mechanisms regulating the formation of memory engrams
Susanne Carina **Van Den Brink**	Hubrecht Institute | Utrecht, Netherlands	Anna Bigas	Institut Hospital del Mar d'Investigacions Mèdiques (IMIM) | Barcelona, Spain	In vitro reconstruction of the developmental blood stem cell niche using mouse gastruloids (embryonic organoids)
Sjors **Van Der Horst**	Utrecht University, Netherlands	Julia Bailey-Serres	University of California | Riverside, United States	When, where and why do ribosomes collide, and how does this affect flooding resilience?
Luca **Vecchia**	University of Oxford, United Kingdom	Nicolas Thomä	Friedrich Miescher Institute | Basel, Switzerland	Meet and read: How chromatin remodelers engage transcription factors in a chromatinized DNA
Roser **Vilarrasa-Blasi**	Institut D'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS) | Barcelona, Spain	Roser Vento-Tormo	Wellcome Sanger Institute | Cambridge, United Kingdom	Reconstructing the human bone marrow microenvironment
Alexander **Waclawiczek**	Francis Crick Institute | London, United Kingdom	Andreas Trumpp	Deutsches Krebsforschungszentrum (DKFZ) | Heidelberg, Germany	Deciphering immune evasion in Acute Myeloid Leukemia
Johanna **Wagner**	University of Zurich, Switzerland	Stefan Fröhling	Deutsches Krebsforschungszentrum (DKFZ) | Heidelberg, Germany	Characterizing the tumor-associated immune landscape in human fusion-driven sarcoma with focus on mechanisms of immune evasion

Name ▼	Home institute	Group leader	Host institute	Project
James **Walker**	John Innes Centre | Norwich, United Kingdom	Joseph R. Ecker	Salk Institute for Biological Studies | La Jolla, United States	Mechanism and significance of de novo genic DNA methylation in Marchantia
Nathaniel **Yakobov**	Institut de Physiologie et de Chimie Biologique | Strasbourg, France	Robbie Loewith	University of Geneva, Switzerland	Uncovering the crosstalk of TORC2 and infection-apparatus differentiation in Magnaporthe oryzae
Klaas **Yperman**	VIB Center for Plant Systems Biology | Ghent, Belgium	Volker Haucke	Leibniz-Institut für Molekulare Pharmakologie (FMP) | Berlin, Germany	Physiological functions and molecular mechanisms of neuronal ER-phagy
Fides **Zenk**	MPI für Immunbiologie und Epigenetik | Freiburg, Germany	Barbara Treutlein	ETH Zurich | Basel, Switzerland	Epigenetic modifiers controlling differentiation in the developing brain organoid
Jakub **Ziak**	Institute of Physiology | ASCR, Czech Republic	Alex Kolodkin	Johns Hopkins University | Baltimore, United States	Deciphering the mechanisms of interstitial axon branching in the central nervous system
Philipp **Zuber**	University | Bayreuth, Germany	Venki Ramakrishnan	MRC Laboratory of Molecular Biology | Cambridge, United Kingdom	Structural insights into the role of epitranscriptomic RNA modifications in eukaryotic translation initiation during cellular stress
Binyamin **Zuckerman**	Weizmann Institute of Science | Rehovot, Israel	Leor Weinberger	University of California San Francisco, United States	Discovery of post-transcriptional mechanisms regulating intrinsic cell-to-cell variability
Cecilia **Zumajo**	City University | New York, United States	Lucia Colombo	Università degli Studi | Milano, Italy	Deciphering the maternal role in seed formation using transcriptome and genetic variation analyses

EMBO Postdoctoral Fellowships awarded in 2021

Nationals of EMBC Associate Member States or Cooperation Partner States

Name ▼	Home institute	Group leader	Host institute	Project
Felipe **Baeza Lehnert**	Centro de Estudios Cientificos | Valdivia, Chile	Stefan Hallermann	Universität Leipzig, Germany	Glycogen-derived metabolites and their effects on presynaptic function and plasticity
Lakshmi **Balasubramaniam**	Institut Jacques Monod | Paris, France	Magdalena Zernicka-Goetz	University of Cambridge, United Kingdom	Mechanical control of post implantation embryogenesis using an 'embryo on a chip'
Benjamin **Demarco**	University of Lausanne | Epalinges, Switzerland	Jelena Bezbradica	University of Oxford, United Kingdom	Contribution of inflammasomes and cell death to inflammation and tissue damage in rheumatoid arthritis
Santosh Kumar **Kuncha**	Centre for Cellular and Molecular Biology (CCMB) | Hyderabad, India	Ivan Dikic	Klinikum der Universität | Frankfurt, Germany	Impact of phosphoribosyl-linked serine ubiquitination on redox metabolism and selective autophagy upon bacterial infection
Yin-Wei **Kuo**	Yale University | New Haven, United States	Buzz Baum	MRC Laboratory of Molecular Biology | Cambridge, United Kingdom	Keeping archaea young: The roles of proteostasis, secretion and division asymmetry in limiting replicative ageing in Sulfolobus
Babukrishna **Maniyadath**	Tata Memorial Hospital | Mumbai, India	Susanne Mandrup	University of Southern Denmark | Odense, Denmark	Uncovering mechanisms of in-vivo adipogenesis using single-cell transcriptomics and epigenomics
Varsha **Mathur**	University of British Columbia | Vancouver, Canada	Thomas A. Richards	University of Oxford, United Kingdom	The evolution of parasitism in the pseudofungi
Urbi **Mukhopadhyay**	ICMR - National Institute of Cholera and Enteric Diseases | Kolkata, India	Sagar Bhogaraju	EMBL | Grenoble, France	Molecular insights into ubiquitin-dependent intraflagellar transport within the eukaryotic cilium
Nishita **Parnandi**	Dana-Farber Cancer Institute | Boston, United States	Simon Boulton	Francis Crick Institute | London, United Kingdom	Genome-wide profiling and targeted editing of chromatin state at double-strand break sites in cancer
Prashant **Rawat**	MPI für Immunbiologie und Epigenetik | Freiburg, Germany	Matthias Peter	ETH Zurich, Switzerland	Understanding regulation and cellular consequences of nucleolar homeostasis upon stress
Preeti **Sahu**	University | Syracuse, United States	Edouard Hannezo	Institute of Science and Technology Austria (IST) | Klosterneuburg, Austria	Biomechanics of stem cell fate determination
Sundar Ram **Sankaranarayanan**	Jawaharlal Nehru Centre for Advanced Scientific Research | Bangalore, India	Ines Anna Drinnenberg	Institut Curie | Paris, France	Understanding the mechanisms of kinetochore specification and assembly in CENP-A deficient holocentric insects
Kashish **Singh**	MPI für biophysikalische Chemie | Göttingen, Germany	Andrew P. Carter	MRC Laboratory of Molecular Biology | Cambridge, United Kingdom	Investigating molecular mechanisms that govern membrane cargo transport
Kaivalya **Walavalkar**	National Centre for Biological Sciences | Bangalore, India	Raffaella Santoro	University of Zurich, Switzerland	Establishment of nucleolus architecture mapping (NAM) for the identification and functional characterization of nucleolar associated domains in 3D-genome organization

EMBO Postdoctoral Fellowships awarded in 2021

Nationals of other countries

Name ▼	Home institute	Group leader	Host institute	Project
Eric **Aird**	University of Minnesota | Minneapolis, United States	Jacob Corn	ETH Zurich, Switzerland	Genetic hypersensitivity to a single DNA double-stranded break during genome editing
Kamar-Sulu **Atretkhany**	Engelhardt Institute of Molecular Biology | Moscow, Russian Federation	Stathis Stamatiades	Charité - Universitäts-medizin | Berlin, Germany	The distinct functions of invading and tissue-resident macrophages in kidney resilience during invasive candidiasis
Kyungmin **Baeg**	Seoul National University, Republic of Korea	Olivier Duss	EMBL | Heidelberg, Germany	Real-time observation of paraspeckle assembly initiation
Ashley **Bourke**	University of Colorado Denver | Aurora, United States	Erin M. Schuman	MPI für Hirnforschung | Frankfurt, Germany	Plasticity-dependent regulation of synaptic ribosome composition and function
Abdouramane M **Camara**	IBMC | Strasbourg, France	Dinis Calado	Francis Crick Institute | London, United Kingdom	Physiological and pathological plasma cell niches in the context of NF-kB pathway activity
Alexander **Cammack**	Washington University School of Medicine | St. Louis, United States	Adrian Isaacs	UK Dementia Research Institute | London, United Kingdom	Investigation of the human transcription factors OSR1 and OSR2 as novel modulators of pathology and toxicity in C9orf72 FTD/ALS
John **Cowgill**	Washington University | St Louis, United States	Erik Lindahl	Science for Life Laboratory | Solna, Sweden	Computational, structural, and functional characterization of GABAa receptor lipidic modulators
Elena **Dragomir**	MPI für Neurobiologie | Martinsried, Germany	Stephen W. Wilson	University College London, United Kingdom	State-dependent modulation of innate behaviour via asymmetric neural circuits
Christian **Feregrino**	University of Basel, Switzerland	Darío Lupiáñez	Max-Delbrück-Centrum | Berlin, Germany	Molecular and regulatory evolution of the menstrual cycle in the spiny mouse
Timothy **Fuqua**	EMBL | Heidelberg, Germany	Andreas Wagner	University of Zurich, Switzerland	Exploring the neofunctional bias of transposable elements towards promoter activity
Camila **Goldy**	Instituto de Biología Molecular y Celular de Rosario | IBR, Argentina	Marie-Cecile Caillaud	École Normale Supérieure | Lyon, France	Analysis of spatial dynamics of lipid signaling and cytoskeleton in dividing plant cells
Yukihisa **Goto**	RIKEN Center for Sustainable Resource Science | Yokohama, Japan	Cyril Zipfel	University of Zurich, Switzerland	A proteomic pipeline for the identification of pattern recognition receptors in Solanaceae
Edgar **Herrera Delgado**	Francis Crick Institute | London, United Kingdom	Jean-Léon Maître	Institut Curie | Paris, France	Nuclear integration of chemical and mechanical signals during trophectoderm differentiation
Kelsey **Huus**	University of British Columbia | Vancouver, Canada	Ruth E. Ley	MPI für Entwicklungs-biologie | Tübingen, Germany	Vaccination and the human intestinal microbiota
Thapakorn **Jaroentomeechai**	Cornell University | Ithaca, United States	Henrik Clausen	University | Copenhagen, Denmark	Systematic characterization of the humoral response to cancer-specific O-glycosylated mucins
Chen **Jiang**	Philipps-Universität Marburg, Germany	Cédric Blanpain	Université Libre de Bruxelles | Brussels, Belgium	Mechanisms regulating stem cell multipotency during tissue repair and tumor initiation
Nikolai **Klena**	University of Geneva, Switzerland	Gaia Pigino	Human Technopole | Milano, Italy	Unveiling the structure and composition of pancreatic ductal cilia
Solomiia **Korchynska**	Medical University of Vienna, Austria	Charlotte Boccara	University | Oslo, Norway	Maturation of the hippocampal-cortical dialogue across sleep and its role on cognitive development
Ekaterina **Krasnopeeva**	University of Edinburgh, United Kingdom	Calin Guet	Institute of Science and Technology Austria (IST) | Klosterneuburg, Austria	Bacterial cytoplasm glass transition: Passive physiological switch or active survival strategy
Hao **Li**	Swiss Federal Institute of Technology | Lausanne, Switzerland	Nikolaus Rajewsky	Max-Delbrück-Centrum | Berlin, Germany	Spatiotemporal molecular mechanisms of the human stomach and gastric cancer

Name ▼	Home institute	Group leader	Host institute	Project
Wentao **Li**	ShanghaiTech University, China	Christoph Bock	CeMM | Vienna, Austria	Dissecting the SLC transporter code of CAR-T cells
Dawn Shuiping **Lin**	Walter and Eliza Hall Institute of Medical Research | Melbourne, Australia	Andreas Trumpp	Deutsches Krebsforschungs-zentrum (DKFZ) | Heidelberg, Germany	Deciphering the mechanistic basis of minimal residual disease and treatment resistance in acute myeloid leukemia
Xiaodong **Liu**	Monash University | Clayton, Australia	Kathy Niakan	Francis Crick Institute | London, United Kingdom	Investigating human embryonic epiblast transitions during post-implantation in vitro
Yasmine **Liu**	University Medical Centre (UMC) | Amsterdam, Netherlands	Johan Auwerx	Le Centre hospitalier universitaire vaudois (CHUV) | Lausanne, Switzerland	Boosting de novo NAD+ biosynthesis to promote hepatic health
Zhenying **Liu**	Institute of Organic Chemistry | Shanghai, China	F. Ulrich Hartl	MPI für Biochemie | Martinsried, Germany	Real-time imaging and mechanistic analysis of Tau fibril disaggregation in live cells
Agustín Leonardo **Luján**	National University of Cuyo | Mendoza, Argentina	Vivek Malhotra	Centro de Regulación Genómica (CRG) | Barcelona, Spain	Sorting and export of mucins
Neemat **Mahmud**	University of Toronto, Canada	Goncalo Castelo-Branco	Karolinska Institutet | Solna, Sweden	Investigating the role of epigenetic modulators in the regulation of human oligodendrocyte development
Kylie **McPherson**	Oregon Health & Science University (OHSU) | Portland, United States	Miriam Melis	University of Cagliari | Cagliari, Italy	Resolving sex differences in circuit processing of sensory information
Taylor **Mighell**	Oregon Health & Science University (OHSU) | Portland, United States	Ben Lehner	Centro de Regulación Genómica (CRG) | Barcelona, Spain	Comprehensive assessment of allostery in a model GPCR
Juan Facundo **Morici**	University of Buenos Aires, Argentina	Gabrielle Girardeau	Insitut du Fer à Moulin | Paris, France	The role of dorso-ventral hippocampal coordination for the formation and sleep-dependent consolidation of aversive spatial memories
Elise **Needham**	University | Sydney, Australia	Adam Butterworth	University of Cambridge, United Kingdom	Characterising the post-translational control of protein abundance
Dhanushika **Ratnayake**	Monash University | Clayton, Australia	Marvin E. Tanenbaum	Hubrecht Institute | Utrecht, Netherlands	Live-cell single-molecule imaging to unravel the mechanisms driving respiratory syncytial virus (RSV) persistence
Bingjian **Ren**	Humboldt University | Berlin, Germany	Dominique Soldati-Favre	University of Geneva, Switzerland	The preconoidal rings of Apicomplexa: From structure to function and back
Ricardo **Righetto**	Biozentrum | University of Basel, Switzerland	Benjamin D. Engel	Biozentrum | University of Basel, Switzerland	High-resolution automated tomographic reconstruction to enable visual proteomics
Maxwell **Shinn**	Yale University | New Haven, United States	Kenneth Harris	University College London, United Kingdom	Linking structure and function of inhibitory neuron diversity in neural circuits
Barbara **Stokes**	Columbia University | New York, United States	Matthias Marti	University of Glasgow, United Kingdom	Defining molecular determinants of Plasmodium falciparum hematopoietic infection using single cell profiling and genetics
Juan Pablo **Unfried**	Center for Applied Medical Research | Pamplona, Spain	Igor Ulitsky	Weizmann Institute of Science | Rehovot, Israel	Cis-TRAIN: Cis-lncRNA transcrip-tional regulation by activation and inhibition in neurons
Qi **Wang**	Peking University | Beijing, China	Johan Auwerx	Le Centre hospitalier universitaire vaudois (CHUV) | Lausanne, Switzerland	In vivo efficacy of novel tetracycline derivatives on mitochondrial function, neuroinflammation and cognition in AD mouse models
Dane **Wolf**	University of California | Los Angeles, United States	Patrick F Chinnery	University of Cambridge, United Kingdom	Segregation of mutant mitochondrial DNA during embryonic development: Role of mitochondrial membrane potential in primordial germ cell migration and oogenesis
Hon Lun **Wong**	University of New South Wales | Sydney, Australia	Michaela Salcher	Biology Centre | Ceske Budejovice, Czech Republic	Isolation and characterization of virus-host systems in European freshwater lakes

Name ▼	Home institute	Group leader	Host institute	Project
Haoxi **Wu**	University of Colorado | Boulder, United States	Ramanujan S. Hegde	MRC Laboratory of Molecular Biology | Cambridge, United Kingdom	Mechanism of multi-pass integral membrane protein biogenesis
Pengbiao **Xu**	Texas A&M University | College Station, United States	Andrea Ablasser	Swiss Federal Institute of Technology | Lausanne, Switzerland	Visualization of activation-induced STING trafficking mechanisms
Naoya **Yamaguchi**	New York University, United States	Lalita Ramakrishnan	MRC Laboratory of Molecular Biology | Cambridge, United Kingdom	The mechanism of tuberculosis granuloma formation
Taraneh **Zarin**	University of Toronto, Canada	Ben Lehner	Centro de Regulación Genómica (CRG) | Barcelona, Spain	Understanding the effects of mutations on dynamic protein-protein interactions underlying transcriptional regulation
Bohan **Zhao**	Tsinghua University | Beijing, China	Gero Miesenböck	University of Oxford, United Kingdom	Sleep-wake regulation supported by dopaminergic neurons
He **Zhao**	Chinese Academy of Sciences | Beijing, China	Jonathan D.G. Jones	The Sainsbury Laboratory | Norwich, United Kingdom	Structural characterization of immune activation by paired NLRs upon effector recognition

EMBO Scientific Exchange Grants

Applications and awards 2017–2021

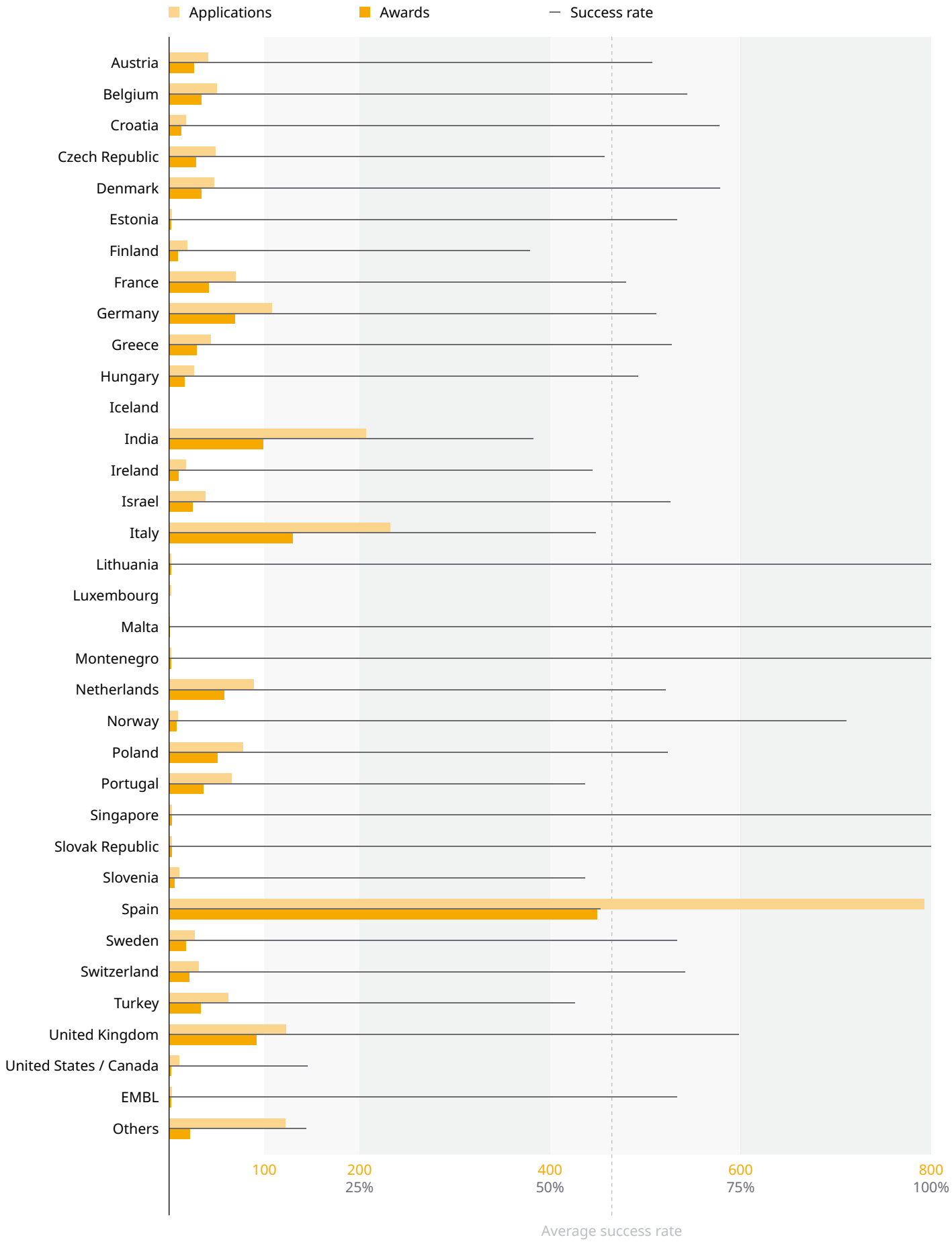
Country *(refers to home institute)*	Applications (total)	%	Awards (total)	%	Success rate (%)
Austria	41	2	26	2	63
Belgium	50	2	34	2	68
Croatia	18	1	13	1	72
Czech Republic	49	2	28	2	57
Denmark	47	2	34	2	72
Estonia	3	<1	2	<1	67
Finland	19	1	9	1	47
France	70	3	42	3	60
Germany	108	4	69	5	64
Greece	44	2	29	2	66
Hungary	26	1	16	1	62
Iceland	0	0	0	0	0
India	207	9	99	7	48
Ireland	18	1	10	1	56
Israel	38	2	25	2	66
Italy	232	10	130	9	56
Lithuania	2	<1	2	<1	100
Luxembourg	2	<1	0	<1	0
Malta	1	<1	1	<1	100
Montenegro	2	<1	2	<1	100
Netherlands	89	4	58	4	65
Norway	9	<1	8	<1	89
Poland	78	3	51	4	65
Portugal	66	3	36	3	55
Singapore	3	<1	3	<1	100
Slovak Republic	3	<1	3	<1	100
Slovenia	11	0	6	0	55
Spain	793	33	449	33	57
Sweden	27	1	18	1	67
Switzerland	31	1	21	2	68
Turkey	62	3	33	2	53
United Kingdom	123	5	92	7	75
United States / Canada	11	0	2	0	18
EMBL	3	<1	2	<1	67
Others	122	5	22	2	18
Total	2408		1375		57

Year	Applications (total)	Awards (total)	Success rate (%)
2021	344	202	59
2020	332	215	65
2019	554	349	63
2018	598	337	56
2017	588	281	48

Please note that EMBO Scientific Exchange Grants were formerly called EMBO Short-Term Fellowships.

Contact:
Kelly Sheehan-Rooney
Programme Head
fellowships@embo.org

Applications and awards 2017–2021
(graphical representation)



Geographical distribution 2021

To \ From *(refers to home institute)*	Austria	Belgium	Croatia	Czech Republic	Denmark	Estonia	Finland	France	Germany	Greece	Hungary	Iceland	India	Ireland	Israel	Italy	Lithuania	Luxembourg	Malta	Montenegro	Netherlands	Norway	Poland	Portugal	Singapore	Slovak Republic	Slovenia	Spain	Sweden	Switzerland	Turkey	United Kingdom	USA / Canada	EMBL *	Others	Total
Austria				1 1					1 1				1	1		1						1 1	1 1					4 2							1	11 6
Belgium									2 2	1 1			1			3 3					1 1						4 2			1 1	1				14 10
Croatia													1																							1
Czech Republic																												2 1								2 1
Denmark	2 1															3 3							1	2 2				5 3	1							14 9
Estonia																																				
Finland			1 1			1			2 2				1 1											1 1				2 2								6 5
France	1	2 2	1 1		3 3					2 2		1 1	2		1 1	4 3					1 1		5 4	1 1				19 13							2	45 32
Germany		2		2 1	2 1		1 1	2 2		1 1			4 3								3 2		3 2					19 13				2 2			4 2	45 30
Greece																																				
Hungary																																				
Iceland																																				
India											2 2																	1 1								3 3
Ireland																																				
Israel																																				
Italy				1						1													2 1	2 2				15 9							2	23 12
Lithuania																																				
Luxembourg													1 1																							1 1
Malta																																				
Montenegro																																				
Netherlands	3 2			2	1 1				1 1		1					3 1							1 1	1 1				5 4			3 1	3 2			2 1	26 15
Norway					2 1					1 1																										3 2
Poland													1																							1
Portugal	1 1		1 1						1												2 1		1					5 3							1	12 6
Singapore																																				
Slovak Republic				1 1																																1 1
Slovenia																												1 1								1 1
Spain		1		1 1	1			2								2							2 1							1		2 2		1	13 4
Sweden	1 1						1 1	2 1		1 1	1		1			1 1		1				1 1		2 1				6 3			1 1	2 1			1	22 12
Switzerland		1			2 2			1 1	1 1						1 1	5 1					1							6 4	1 1			1 1				20 12
Turkey																																				
United Kingdom		1		2 1	1 1			1	4 3				2 1	1		3 1					3 1		2 2	1				17 15			2				3 1	43 26
USA / Canada				1					1	1						3					1 1							13 5		1					2	23 6
EMBL *																1 1																	2 2			3 3
Others													3		1			1			2 2		1					3 2				1 1				11 5
Total	8 5	7 2	3 3	11 5	12 9	1	2 2	8 4	13 10	6 4	5 3		17 6	2	3 2	29 14		1			14 9	2 2	19 12	10 8				127 83	2 1	2 1	7 3	14 11			19 4	344 202

applications top / btm awards

*EMBL (all sites) are not counted towards the country the respective site is located in.

EMBO Scientific Exchange Grants awarded in 2021

Name ▼	Home institute	Group leader	Host institute	Project
Aloña **Agirre**	BioDonostia Health Research Institute | San Sebastian, Spain	Gernot Schabbauer	Medical University of Vienna, Austria	Role of the scavenger receptor MARCO in the immuno-oncology of cholangiocarcinoma: new diagnostic, prognostic and therapeutic strategy.
Araceli **Aguilar González**	Universidad | Granada, Spain	Giuseppe Ronzitti	Généthon | Evry, France	Development and study of new gene therapy strategies for Pompe disease
Delan **Alasaadi**	University College London, United Kingdom	Takashi Hiiragi	Hubrecht Institute | Utrecht, Netherlands	Measurement of hydrostatic pressure during neural crest induction
Sergio **Alegre Gómez**	Complutense University of Madrid (UCM) | Madrid, Spain	Alessandra Cambi	Centre for Molecular Life Sciences | Nijmegen, Netherlands	Role of Slingshot-1 on actin cytoskeleton regulation on Dendritic Cells
Harry **Alexopoulos**	National and Kapodistrian University | Athens, Greece	Anna Fogdell-Hahn	Karolinska Institutet | Stockholm, Sweden	Human herpesvirus 6A and 6B infection of human brain cells – links to autoimmunity
Alaa **Alhayek**	Helmholtz Institute for Pharmaceutical Research Saarland | Saarbrücken, Germany	Silja Wessler	University | Salzburg, Austria	Targeting collagenase activity in Bacillus cereus associated pathologies
Inês **Alves**	Instituto de Investigação e Inovação em Saude (i3S) | Porto, Portugal	René E.M. Toes	University Medical Centre | Leiden, Netherlands	Abnormal cellular glycosylation as a target for the development of autoantibodies in autoimmune disease.
Reza **Amini Hounejani**	University of Technology | Delft, Netherlands	Tomohiro Shima	University of Tokyo, Japan	Investigation of the relationship between shape and dynamics of microtubules employing polarized dark-field microscopy
Xinhui **An**	Université Libre de Bruxelles | Brussels, Belgium	Alexis Peaucelle	Institut Jean-Pierre Bourgin | Versailles, France	The role of the cell wall in cadmium hyperaccumulation, low accumulation and exclusion strategies in Arabidopsis halleri
Bastien **Anthoons**	CERTH - Centre for Research and Technology Hellas | Thessaloniki, Greece	Anneleen Kool	University | Oslo, Norway	Targeted enrichment of hundreds orthologous nuclear genes for species discrimination of endangered terrestrial orchids.
Gábor **Apjok**	Biological Research Centre | Szeged, Hungary	Andrey Shkoporov	University College | Cork, Ireland	Exploring and characterizing the Ig-like domain repertoire of human-associated bacteriophages
Paula **Aranda**	Universidad | Granada, Spain	Francesco Argenton	Università di Padova, Italy	Study of the relationship between clock genes, melatonin and parkinsonian neurodegeneration in a zebrafish model of Parkinson disease.
Alberto M. **Arenas Molina**	Center for Genomics and Oncology Research (GenyO) | Granada, Spain	Jacob Mikkelsen	Aarhus University, Denmark	Study of plakophilin-1 (PKP1) knockout's collateral dependencies by CRISPR library screening
Yaiza **Arenas Ortiz**	Centro de Investigacion Principe Felipe (CIPF) | Valencia, Spain	Carlos Duarte	Universidade | Coimbra, Portugal	Identification of mechanisms by which hyperammonemia alters GABAergic synapses in primary cultures of cerebellum containing Purkinje neurons
Alazne **Arrazola Sastre**	University of the Basque Country | Leioa, Spain	Daan van Aalten	University of Dundee, United Kingdom	Role of O-GlcNAc transferase and serine 8 O-GlcNAcylated galectin-1 in the control of microglial migration and phagocytosis
Jaione **Auzmendi**	BioDonostia Health Research Institute | San Sebastian, Spain	Ian C. Wood	University | Leeds, United Kingdom	Role of HDAC1/2 in the interplay between microglia and neural stem cells in brain aging
Olga **Bakina**	Max-Delbrück-Centrum | Berlin, Germany	Botond Roska	Institute of Molecular and Clinical Ophthalmology | Basel, Switzerland	4sU metabolic labelling of dissociation-induced genes in retinal organoids and post-mortem human retinas for single cell RNA sequencing
Daniela **Barro-Trastoy**	Instituto de Biología Molecular y Celular de Plantas | Valencia, Spain	Bertrand Dubreucq	Institut Jean-Pierre Bourgin | Versailles, France	Regulation of ovule development by a DELLA-CUC2 complex in Arabidopsis.

Name ▼	Home institute	Group leader	Host institute	Project
Soufiane **Bel Rhali**	Eötvös Loánd University | Budapest, Hungary	John Cryan	University College | Cork, Ireland	Investigating the link between the nasal and the gut microbiome and their association to dog's olfactory function.
Chiara **Bellomo**	Università | Torino, Italy	Francesca Cecchet	University | Namur, Belgium	Study of the optical response of water in the interaction between submicron silicas and biomembranes.
Manuel **Beltrán**	Universidad | Zaragoza, Spain	Victor Peperzak	University Medical Centre (UMC) | Utrecht, Netherlands	Rational combinations against multiple myeloma in a bone marrow-like environment.
Dawid **Bielewicz**	Adam Mickiewicz University | Poznan, Poland	Cécile Bousquet-Antonelli	Université | Perpignan, France	Global identification of m6A mark 'readers' proteins in plants
Maria Amparo **Blanch Ruiz**	University | Valencia, Spain	Clare Pridans	University of Edinburgh, United Kingdom	Development of a monocytopenic model to study the mechanisms of thrombus formation
Elena **Blanco Romero**	Centro Nacional de Investigaciones Oncológicas (CNIO) | Madrid, Spain	Gheorghe Chistol	Stanford University School of Medicine, United States	Applying KEHRMIT for real-time studies of PrimPol function
Paweł **Borowicz**	University | Oslo, Norway	Johannes Huppa	Medical University of Vienna, Austria	Role of Lck adaptor proteins in T-cell receptor signaling
Maria **Bošković**	University | Split, Croatia	Zdenko Herceg	International Agency for Research on Cancer | Lyon, France	Investigating (epi)genomic changes in the development of progeria and hepatocellular carcinoma in a mouse model of Ruijs-Aalfs syndrome
Inés **Bouzón-Arnáiz**	Institut de Bioenginyeria de Catalunya (IBEC) | Barcelona, Spain	Marcus Lee	Wellcome Genome Campus | Hinxton, United Kingdom	Assessment of resistance evolution in in vitro cultures of the malaria parasite Plasmodium falciparum to the novel antimalarial compound AID-X-2020, which operates through a radically new mechanism via the inhibition of protein aggregation.
Duarte **Brandão**	Universidade NOVA de Lisboa | Lisbon, Portugal	Herve Acloque	INRA | Jouy-en-Josas, France	Intersectional genetics-based system for porcine pluripotent stem cell selection
Carlo **Bravo**	Università degli Studi | Udine, Italy	Oluf Pedersen	University | Copenhagen, Denmark	Influence of intensification of freshwaters browning on iron plaque formation in hydrophytes.
Francesca **Bruno**	Leibniz-Institut fuer Altersforschung | Jena, Germany	Miriam Cnop	Université Libre de Bruxelles | Brussels, Belgium	Analysis of the role of YIPF5 in ER export and microcephaly
Katrine **Bugge**	University | Copenhagen, Denmark	Fabien Ferrage	École Normale Supérieure | Paris, France	Functional implications of chain motions in IDPs: effects of domain tethering
Demian **Burguera**	Charles University in Prague | Prague, Czech Republic	Juan-Ramon Martinez Morales	Centro Andaluz de Biología del Desarrollo (CABD) | Sevilla, Spain	Evolution of regulatory elements governing olfactory receptors expression in teleost fish
Daniele **Capocefalo**	Università degli Studi | Milano, Italy	Laura Cantini	Institute of Biology of the ENS | Paris, France	Pinpointing molecular convergences in Neurodevelopmental Disorders through single-cell multilayered networks and brain organoids
Pablo **Carril**	University of Lisbon, Portugal	Giuseppe Pieraccini	Università degli Studi | Firenze, Italy	A metabolomic study to unravel the chemical crosstalk between plant growth promoting bacteria, plants and seed-borne endophytes
Sergio Miguel **Castaneda Zegarra**	Norwegian University of Science & Technology (NTNU) | Trondheim, Norway	Thomas Helleday	Karolinska Institutet | Stockholm, Sweden	Impact of DNA repair inhibitors on the immune system
Laura **Castilla Vallmanya**	Universitat de Barcelona | Barcelona, Spain	Isaac Canals	Lund University, Sweden	Generation of neuronal models of Schaaf-Yang syndrome: Obtaining human induced pluripotent stem cells (iPSCs) from patients' fibroblasts
Helena **Cavaleiro**	Universidade do Minho | Braga, Portugal	Elisa Zanier	Mario Negri Institute for Pharmacological Research | Milano, Italy	Mesenchymal Stem Cells as a regenerative agent after a controlled cortical impact in organotypic brain slices

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Quentin **Charras**	Aix-Marseille Université | Marseille, France	Alexey Amunts	Science for Life Laboratory | Solna, Sweden	Proposed work at the receiving institute
Marinela **Couselo Seijas**	Clinical University Hospital | Santiago de Compostela, Spain	Laetitia Pereira	Universite Paris-Saclay | Saint-Aubin, France	Epicardial adipose tissue effect in human iPSC-derived atrial cardiomyocyte function
Mattia **D'Agostino**	Università Politecnica delle Marche | Ancona, Italy	Eric Ennifar	CNRS | Strasbourg, France	Structural and biophysical characterization of the IF5A-DHS complex
Andrea **De La Fuente Alonso**	Centro Nacional de Investigaciones Cardiovasculares (CNIC) | Madrid, Spain	Philip Eaton	Queen Mary | University of London, United Kingdom	Regulation of the NO-sGC-PRKGI signaling pathway by oxidative stress in Marfan Syndrome
Kim **De Luca**	Utrecht University, Netherlands	Aaron Streets	University of California | Berkeley, United States	Paired imaging and sequencing of DNA repair in single cells
Svjetlana **Dekić Rozman**	Ruđer Bošković Institute | Zagreb, Croatia	Marko Virta	University of Helsinki, Finland	The use of epicPCR to study bacterial hosts of antibiotic resistance genes in influent and effluent of wastewater treatment plants in Croatia
Sara **Díaz Díaz**	Universidad | Sevilla, Spain	Morten Sommer	The Novo Nordisk Foundation Center for Biosustainability | Kgs Lyngby, Denmark	Effect of SOS response and detoxification systems on collateral resistance/sensitivity in Escherichia coli
Ander **Diaz-Navarro**	University | Oviedo, Spain	Valerio Izzi	University | Oulu, Finland	Microenvironment characterization in tumors with U1 mutations
Kunal **Dixit**	Symbiosis International University (Deemed University) | Pune, India	Paul Wilmes	University | Luxembourg, Luxembourg	Correlating Gut Metabolome Profile with Metagenome Analysis in NCGS & IBS Patients
Amaru **Djurhuus**	University of Copenhagen | Frederiksberg, Denmark	Cindy Morris	INRAE PACA | Avignon, France	The bacteriophage landscape of the Pseudomonas syringae complex and the mechanisms underlying their interactions
Sebastian **Doll**	Helmholtz Zentrum München | Neuherberg, Germany	Clotilde Thery	Institut Curie | Paris, France	Characterization of extracellular vesicles released during ferroptosis
Jonathan **Dragwidge**	VIB Center for Plant Systems Biology | Ghent, Belgium	Lysiane Brocard	Imaging Center | Bordeaux, France	Ultrastructural investigation of phase-separated endocytic compartments in Arabidopsis
Pablo **Duarte**	Autonomous University of Madrid | Madrid, Spain	Erwan Bezard	Institut des Maladies Neurodégénératives | Bordeaux, France	New family of multitarget compounds for the treatment of Parkinson's disease: evaluation of hit compounds in advanced disease-related models
Julia **Eckert**	Leiden University, Netherlands	Benoit Ladoux	Institut Jacques Monod | Paris, France	Role of intercellular tension and traction forces in unjamming transitions of epithelial monolayers
Anja **Ehrmann**	Technical University of Denmark | Lyngby, Denmark	Jean-Marc Daran	University of Technology | Delft, Netherlands	Dissecting B-vitamin metabolism in Saccharomyces cerevisiae using adaptive laboratory evolution and synthetic biology
Paula **España**	Instituto de Biología Molecular de Barcelona (IBMB) | Barcelona, Spain	Giuseppe Testa	Università degli Studi | Milano, Italy	The Contribution of Human-Acquired Centrosome-Cilia Genes in Normal and Pathological Neural Development
Giulia **Fabbri**	University | Sassari, Italy	Shyam Gopalakrishnan	GLOBE Institute | Copenhagen, Denmark	Is adaptive introgression from domestic species contributing to wildlife recolonization?
Veronika **Fedorova**	Masaryk University | Brno, Czech Republic	Zuzana Kadlecova	University of Cambridge, United Kingdom	Roles of NECAP1 in cortical neurons and its pathogenic mutations in epileptic encephalopathy
Anna **Felberg-Mietka**	Medical University | Gdansk, Poland	Robbert Spaapen	Sanquin Research | Amsterdam, Netherlands	Application of CRISPR/Cas9 to accelerate research on the role of the complement system in cancer.
Joel **Fernandes**	MPI für Züchtungs-forschung | Köln, Germany	Thomas Kroj	Campus International de Baillarguet | Montpellier, France	A comparative analysis of immunity-activated stress hormone networks in Arabidopsis and rice (Oryza sativa)

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José **Fernández Martínez**	Universidad | Granada, Spain	Bert Blaauw	University | Padua, Italy	Mechanisms of sarcopenia: connection between chronodis-ruption, inflammation, Akt-mTOR pathway, mitochondrial dysfunction and muscle loss in aging.
Francisco **Figueiredo**	University of Porto, Portugal	Sarah J. Butcher	University of Helsinki, Finland	Nanostructures in the Ataxin-3 self-assembly pathway and their modulation by conformational antibodies
Agnieszka **Fiszer**	Institute of Bioorganic Chemistry | Poznan, Poland	Grzegorz Kudla	University of Edinburgh, United Kingdom	RNA-RNA interactions of CAG repeat tracts in neurological diseases
Anna **Fosch Masllovet**	Universitat Internacional de Catalunya | Barcelona, Spain	Daniela Cota	Université de Bordeaux | Bordeaux, France	Role of CPT1C in the regulation of peripheral metabolism of fats and glucose homeostasis through SF1 neurons.
Elisabet **Frutos Grilo**	University Autonomous of Barcelona | Bellaterra, Spain	Andreas Hensel	University of Münster, Germany	Chemotaxis and infectiveness studies from the nosocomial pathogen Enterobacter cloacae
Erika **Gábor**	Biological Research Centre | Szeged, Hungary	Angela Giangrande	Strasbourg | Institute of Genetics and Molecular and Cellular Biology, France	Real-time analysis of blood cell transdifferentiation in Drosophila melanogaster
Tomasz **Gaczorek**	Jagiellonian University | Krakow, Poland	Joachim Hermisson	University | Vienna, Austria	Investigation of adaptive introgression.
Fengzheng **Gao**	University and Research | Wageningen, Netherlands	João Varela	Universidade do Algarve | Faro, Portugal	Investigation and comparison of three Tisochrysis lutea strains in regulating fucoxanthin and docosahexaenoic acid metabolisms under dynamic climate conditions
Sonia **Garcia**	Institut Botánico | Barcelona, Spain	Tony Heitkam	Technische Universität | Dresden, Germany	Mobility and epigenetics of linked and unlinked 5S ribosomal DNAs in plants
Neris **García González**	I2SYSBIO | Paterna, Spain	Eduardo Rocha	Institut Pasteur | Paris, France	Analysis of plasmid mobility and evolution in a genomic surveillance study of Klebsiella pneumoniae from Comunitat Valenciana (Spain)
Maria Teresa **Garcia Guasch**	Universitat Autònoma de Barcelona | Cerdanyola, Spain	Iola Melissa Fernandes Duarte	University | Aveiro, Portugal	Effect of dietary lipids on metabolism in experimental mammary tumours.
Micaela **Giani Alonso**	University of Alicante | Alicante, Spain	Monica Rosa Loizzo	Universita della Calabria | Arcavacata di Rende, Italy	Evaluation of antioxidant potential of the haloarchaeal carotenoid Bacterioruberin
Sara **Gómez De Frutos**	Centro de Astrobiología (CSIC-INTA) | Torrejón de Ardoz, Spain	Alessandra Carbone	Institut de Biologie Paris Seine (IBPS) | Paris, France	Analytical genomics of day and night cycles in hyperhalophiles microbial populations
Arturo **González De La Aleja**	Centro de Investigaciones Biológicas (CIB / CSIC) | Madrid, Spain	Noelia Alonso González	University of Münster, Germany	LXR nuclear receptors govern phagocytosis-dependent macrophage polarization
Alfonso **Gonzalo De La Rubia**	Universidad | León, Spain	Susana Sáez Aguayo	Andrés Bello National University | Santiago, Chile	Focusing on the role of pectin metabolism in bean defense against halo blight disease
Christoph **Grininger**	University | Graz, Austria	Xiaodong Zou	Stockholm University, Sweden	Structural investigation of methyl transferase and profilins with electron diffraction
Aleksandra **Gruevska**	University | Valencia, Spain	Fabio Marra	Università degli Studi | Firenze, Italy	Rilpivirine's effect on the fibrogenic phenotype of human hepatic stellate cells
Amanda **Guitian Caamaño**	Instituto de Investigación Biomédica | A Coruña, Spain	Patrycja Kozik	MRC Laboratory of Molecular Biology | Cambridge, United Kingdom	New strategies to increase the efficacy of immunotherapy.
Serafima **Guseva**	Institut de Biologie Structurale | Grenoble, France	Remco Sprangers	Universität | Regensburg, Germany	Direct observation of the Nucleop-rotein:RNA binding using NMR.

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Sonja **Hager**	Medical University of Vienna, Austria	Salomé Pinho	IPATIMUP | Porto, Portugal	Investigating the interaction between protein glycosylation, the immune system and the anticancer activity of thiosemicarbazones
Ingrid **Hartl**	Johannes Kepler University | Linz, Austria	Marc Baldus	Bijvoet Center for Biomolecular Research | Utrecht, Netherlands	Dynamic changes in FGFR3 upon receptor activation
Sophia **Hernandez**	Umeå University, Sweden	Mathieu Brochet	University of Geneva, Switzerland	Studying Sequestration in Plasmodium berghei using Formaldehyde Crosslinking Immunoprecipitation and Ultrastructure Expansion Microscopy
Xavier **Hernandez Alias**	Centro de Regulación Genómica (CRG) | Barcelona, Spain	Tao Pan	University of Chicago, United States	The effect of dynamic human tRNAomes on translation efficiency
Alberto **Hernández Barranco**	Centro Nacional de Investigaciones Oncológicas (CNIO) | Madrid, Spain	Karin Tarte	Université de Rennes 1 | Rennes, France	Studying the influence of microenvironmental NGFR in follicular lymphoma.
Ana María **Herruzo Ruiz**	National University of Córdoba | Córdoba, Argentina	Berta Cillero-Pastor	University | Maastricht, Netherlands	Application of spatial "omic" techniques to toxicological environmental studies in the bivalve mollusc Scrobicularia plana
Soyanni **Holness**	University of Rome 'Sapienza' | Rome, Italy	Philip Mullineaux	Essex University | Colchester, United Kingdom	The effect of sequential abiotic stresses on physiological and molecular defense responses in Arabidopsis thaliana
Alina Andrada **Igna**	Rothamsted Research | Harpenden, United Kingdom	Cyril Zipfel	University of Zurich, Switzerland	Proteomic-based identification of Nicotiana benthamiana cell-surface localised immune receptors involved in Zymoseptoria tritici recognition
Rafael **Inigo Jaen**	Instituto Investigaciones Biomédicas (CSIC) | Madrid, Spain	Eoin Brennan	University College | Dublin, Ireland	Analysis of molecular mechanisms of lipoxin-mediated resolution of inflammation in the heart
Liselotte **Jauffred**	University | Copenhagen, Denmark	Sara Mitri	University | Lausanne, Switzerland	How biofilm organization affects horizontal gene transfer within a bacterial community
Arnaud **Jéglot**	Aarhus University, Denmark	Timothy Vogel	Université de Lyon | Lyon, France	Resolving cold weather agricultural drainage water treatment with woodchip bioreactors: Dynamic microbial community response to bioaugmentation with a psychrotolerant denitrifying bacterial strain
Ben **Jenkins**	University of Oxford, United Kingdom	Annika Guse	Centre for Organismal Studies (COS) | Heidelberg, Germany	A cell-sorting approach for single-cell atlas development in a cnidarian-dinoflagellate symbiosis
Yaiza **Jimenez Martinez**	Instituto de Investigación Biosanitaria | Granada, Spain	Mónica Fernandes	Universidade do Algarve | Faro, Portugal	CITED2: Evaluation as new molecular target in cancer stem cells.
David **Jones**	Francis Crick Institute | London, United Kingdom	Maria Bernabeu	EMBL | Barcelona, Spain	Determining Virulence Mechanisms of P. falciparum Malaria with Transgenic Parasites and 3D Brain Microvessel Models
Amalia **Kalampaliki**	National and Kapodistrian University | Athens, Greece	Stefan Knapp	Goethe University | Frankfurt, Germany	Development and rational design of novel Staurosporine – Rutaecarpine and Meridianin – Meriolin analogues and their use as selective protein kinase inhibitors
Nazli Eda **Kaleli**	Dokuz Eylul University | Izmir, Turkey	Sophie Hernot	Vrije Universiteit (VUB) | Brussels, Belgium	Pharmacokinetic analysis of anti-VEGF single domain antibodies at macro- and microscopic level
Albert **Kang**	University of Cambridge, United Kingdom	Cees Dekker	University of Technology | Delft, Netherlands	Direct Detection of Post Translational Modifications by Single-Molecule Protein Sequencing
Adam **Koziol**	GLOBE Institute | Copenhagen, Denmark	Phillip Pope	Norwegian University of Life Sciences (UMB) | Ås, Norway	Investigating the metagenomic convergence to environmental stressors.

Name ▼	Home institute	Group leader	Host institute	Project
Emilia **Kozłowska**	Silesian University of Technology | Gliwice, Poland	Sebastien Benzekry	Aix-Marseille Université | Marseille, France	Application of machine learning and mathematical tools to predict metastases in patients with non-small-cell lung carcinoma
Estee **Kurant**	University of Haifa | Haifa, Israel	Bruno Lemaitre	Swiss Federal Institute of Technology | Lausanne, Switzerland	Harnessing the power of Drosophila to probe the role of the innate immune system in neurodegeneration
Pablo **Laborda Martínez**	Centro Nacional de Biotecnología (CNB) | Madrid, Spain	Søren Molin	Technical University of Denmark | Lyngby, Denmark	The role of Pseudomonas aeruginosa efflux pumps in infection beyond antibiotic resistance
Qing **Li**	Aarhus University, Denmark	Shinichi Sunagawa	ETH Zurich, Switzerland	Does diet and gut physiology shape specific enzymatic activity in animal gut microbiota?
Cristina María **López Vázquez**	National University of Córdoba | Córdoba, Argentina	Saleh Alseekh	MPI für molekulare Pflanzenphysiologie | Potsdam-Golm, Germany	Comparison of the metabolic changes in response to drought in common bean grown under N fixation or fertilized with nitrate
Riccardo **Lorrai**	University of Rome 'Sapienza' | Rome, Italy	Stephane Verger	Umeå University, Sweden	Interplay between plant cell wall and cell wall modifying enzymes during apical hook development
Alejandro **Luarte**	Universidad de Chile | Santiago de Chile, Chile	Werner Zuschratter	Leibniz-Institut für Neurobiologie | Magdeburg, Germany	Unraveling the role of locally synthesized reticulon-1C in mitochondrial metabolism of injured cortical axons through NADH FLIM
Marta **Manco**	Università | Torino, Italy	Massimiliano Mazzone	KU Leuven | Leuven, Belgium	Iron-loaded macrophages: a novel player in the pathogenesis of chronic liver diseases?
Maria-Tsampika **Manoli**	Centro de Investigaciones Biológicas (CIB / CSIC) | Madrid, Spain	Thomas Ellis	Imperial College | London, United Kingdom	Synthetic biology-assisted smart living materials based on controllable bacterial cellulose production by Komagataeibacter genus
Julia **Marente Bernal**	Universidad | Sevilla, Spain	Paul Fraser	Royal Holloway | London, United Kingdom	Metabolite profiling of Fusarium fujikuroi carotenoids mutants
Monniaux **Marie**	École Normale Supérieure | Lyon, France	Cris Kuhlemeier	University | Bern, Switzerland	Evolution of floral morphology in wild Petunia species: finding cis-regulatory changes influencing petal tube and limb size
Constanza **Marin**	University | Sheffield, United Kingdom	Núria López-Bigas	Institute for Research in Biomedicine | Barcelona, Spain	Investigating driver mutations in ameloblastoma to identify novel therapeutic targets
Mari Carmen **Martí Botella**	Instituto de Biología Molecular y Celular de Plantas | Valencia, Spain	George Lomonossoff	John Innes Centre | Norwich, United Kingdom	Virus-like particles as a Trojan Horse for pest control
Samara **Martín Alonso**	Centre for Molecular Biology 'Severo Ochoa' | Madrid, Spain	Mark Helm	Johannes-Gutenberg-Universität | Mainz, Germany	Novel engineered HIV reverse transcriptases for use in limited transcriptome analysis
Leticia **Martin De La Cruz**	Complutense University of Madrid (UCM) | Madrid, Spain	Mihai Netea	Radboud University | Nijmegen, Netherlands	Trained immunity mechanisms induced by polybacterial and fungal vaccines in monocytes of patients suffering from recurrent genitourinary tract infections
Maria Lorena **Martinez Quiles**	Brookes University | Oxford, United Kingdom	Maria Dominguez	Instituto de Neurociencias | Alicante, Spain	Deciphering the role of the Groucho co-repressor in Notch-dependent tumorigenesis
Laura **Martínez Ruiz**	Universidad | Granada, Spain	Felix Oppel	Klinikum | Bielefeld, Germany	Study of oncostatic effect of melatonin in head and neck cell primary cultures: apoptosis and ROS production.
Mathilde **Mathieu**	University | Turku, Finland	Anna Taubenberger	Technische Universität | Dresden, Germany	Durotaxis of cancer cells migrating in a 3D environment
Pablo **Mayoral García**	University | Oviedo, Spain	Aleksandra Trifunovic	University of Cologne, Germany	Structural, functional and energetic characterization of mitochondria in transgenic mouse and worm models overexpressing LONP1
Samuele **Metti**	Università di Padova, Italy	Gisou van der Goot	Swiss Federal Institute of Technology | Lausanne, Switzerland	Dissecting the Collagen VI/ANTXR2 axis in satellite cells and during skeletal muscle regeneration

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Alba **Miguéns-Gómez**	Universitat Rovira i Virgili (URV) | Tarragona, Spain	Sebastian Barg	Uppsala University, Sweden	Studying the CCK non-stimulated secretion by GLUTag cells trough an optical approach.
Ana Cristina **Millán Placer**	Universidad | Zaragoza, Spain	Damien Portevin	Swiss Tropical and Public Health Institute | Basel, Switzerland	Evaluation of the role of the mycobacterial efflux pump Tap in drug tolerance within a human in vitro granuloma model
Serena **Mirra**	Universitat de Barcelona | Barcelona, Spain	Ivana Trapani	Telethon Institute of Genetics & Medicine (TIGEM) | Pozzuoli, Italy	Generation of AAV-CERKL vector for transduction in CerklKD/KO retinas: a proof-of-concept of gene therapy for retinitis pigmentosa.
Nerea M. **Molina**	Universidad | Granada, Spain	Peter Ruane	University of Manchester, United Kingdom	Insights into embryo-endometrium cross-talk: possible role of commensal microbes in the embryo implantation process
Beatriz **Monterde**	Universidad de Cantabria | Santander, Spain	Raphaël Margueron	Institut Curie | Paris, France	Identification of gene networks directly regulated by ARID2, ARID1A and SMARCA4 SWI/SNF subunits in lung cancer
Piermatteo **Morucci**	Basque Center on Cognition | Brain and Language, Spain	Lucia Melloni	Max Planck Institute for Empirical Aesthetics | Frankfurt am Main, Germany	Decoding Schematic Predictions during Visual and Spoken Narrative Perception
Lara **Muñoz Muñoz**	Universidad | Zaragoza, Spain	Maria Rosalia Pasca	Università | Pavia, Italy	Study of the mechanism of action of '084 compound against Mycobacterium abscessus using a Target Fishing strategy
Paulina **Nastaly**	Medical University | Gdansk, Poland	Giannino Del Sal	University | Trieste, Italy	The interplay between nuclear envelope architecture, glucocorticoid signaling and YAP pathway leading to prostate cancer progression
Elena **Navarro-Carrasco**	Instituto de Biología Molecular y Celular del Cáncer (IBMCC) | Salamanca, Spain	Connie Jimenez	VU University | Amsterdam, Netherlands	VRK1 function and targets in the epigenetic chromatin remodelling during the DNA damage response.
Markéta **Nováková**	Institute of Organic Chemistry and Biochemistry AS CR | Prague, Czech Republic	Jérôme Basquin	MPI für Biochemie | Martinsried, Germany	Structure determination of Saccharomyces cerevisiae THO:Sub2:nucleic acid complexes
Behnaz **Nowrouzi**	University of Edinburgh, United Kingdom	Eduard Kerkhoven	Chalmers University of Technology | Göteborg, Sweden	Integrating systems biology tools into Saccharomyces cerevisiae for enhanced production of diterpenoids in Taxol® pathway
Montserrat **Olivares**	Pontifical Catholic University of Chile | Santiago de Chile, Chile	Rodrigo Young	University College London, United Kingdom	Role of Kdm1a/Lsd1 isoforms during retinal progenitor cell cycle exit and differentiation in Zebrafish
Catarina **Osorio**	Erasmus University MC | Rotterdam, Netherlands	Lynette Lim	KU Leuven | Leuven, Belgium	Spatial transcriptomics profiling of neuronal heterogeneity during cerebellar development
Francisco **Osorio Barrios**	Technische Universität | München, Germany	Martin Turner	Babraham Institute | Cambridge, United Kingdom	Determination of RNAs targeted by the RNA binding protein Stau2 and Roquin1 in germinal center B cells
Kinga **Ostrowska**	Medical University | Lodz, Poland	Milena Hasan	Institut Pasteur | Paris, France	Single-cell multimodal analysis of chemoresistance architecute in high-risk subtype of pediatric leukemia carrying KMT2A rearrangement
Gizem **Özgün**	Dokuz Eylul University | Izmir, Turkey	Maarten van Lohuizen	Netherlands Cancer Institute | Amsterdam, Netherlands	Co-targeting retinoic acid signaling and epigenetic machinery in bladder cancer by the combinational use of EZH2 inhibitors with fenretinide
Ieva **Palubeckaite**	University Medical Centre | Leiden, Netherlands	Carsten Hopf	Center for Mass Spectrometry and Optical Spectroscopy (CeMOS) | Mannheim, Germany	Quantitative chiral imaging of D/L-2-hydroxyglutarate in IDH mutant tumors using Trapped Ion Mobility Spectrometry

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Shivang **Parikh**	Tel Aviv University, Israel	Alexandre Puissant	Saint-Louis Research Institute | Paris, France	Deciphering the molecular target to block the melanosome transport outside melanoma cells.
Thomas **Paß**	University of Cologne, Germany	Richard Wade-Martins	University of Oxford, United Kingdom	Investigation of mtDNA Alterations Upon α-Syn Pathology in Parkinson's Disease Patient Derived Dopaminergic Neurons
Barbora **Pavlatovská**	Masaryk University | Brno, Czech Republic	Petra Heffeter	Medical University of Vienna, Austria	Cellular distribution of albumin-targeted platinum drugs in vivo
Bjarke Haldrup **Pedersen**	Technical University of Denmark | Kongens Lyngby, Denmark	Martin Welch	University of Cambridge, United Kingdom	Metabolic rewiring of P. aeruginosa clinical isolates during within-patient evolution to CF airways.
Jose **Pérez-Navarro**	Basque Center on Cognition, Brain and Language /research San Sebastian, Spain	Miren Itsaso Olasagasti	University of Geneva, Switzerland	Cortical tracking of speech and perceptual anchoring in developmental dyslexia
Manuel **Peris**	University | Wroclaw, Poland	Carmen Domene	University | Bath, United Kingdom	Unveiling mutation-induced effects on p53 structure and dynamics modulating DNA-binding
Vratislav **Peska**	Institute of Biophysics | Brno, Czech Republic	Lubomir Tomaska	Cornenius University | Bratislava, Slovakia	A hidden world of telomerase RNA in Basidiomycota and early diverging fungi.
Juliana **Pocas**	IPATIMUP | Porto, Portugal	Mattias Belting	Lund University, Sweden	Unravelling tumour microenvironment glycan dynamics to fight tumour progression
Adrián **Portalés Montes**	Instituto de Neurociencias | San Juan de Alicante, Spain	Pablo Chamero	Centre Inrae Val De Loire | Nouzilly, France	New approaches to study the olfactory function during normal and pathological aging in mice.
Tomasz **Powrózek**	Medical University of Lublin | Lublin, Poland	Miguel Quintela	Centro Nacional de Investigaciones Oncológicas (CNIO) | Madrid, Spain	PNKP - a novel target for triple-negative breast cancer
Magdalena **Procner**	Jerzy Haber Institute of Catalysis and Surface Chemistry | Krakow, Poland	Johann Heider	Philipps-Universität Marburg, Germany	Exploration of unknown biochemical role of selenocysteine in enzymes
Lauri **Pulkkinen**	University of Helsinki, Finland	Richard Lundmark	Umeå University, Sweden	Characterization of tick-borne encephalitis virus (TBEV) C protein interaction with membrane lipids
Stefano **Raffaele**	University of Milan | Milan, Italy	Kate Lykke Lambertsen	University of Southern Denmark | Odense, Denmark	Unraveling the contribution of TNFR2 signaling in the pro-remyelinating properties of microglia after stroke
Vittoria **Raimondi**	Università di Padova, Italy	Pascal Mossuz	Institute for Advanced Biosciences | La Tronche, France	Identifying new metabolic biomarkers to predict the response of acute myeloid leukemia to a novel Veneto-clax-based therapeutic approach.
Subhash **Rajpurohit**	Ahmedabad University, India	David Hosken	University of Exeter, United Kingdom	Variability in insect hydrocarbons and their role in desiccation tolerance
Marc **Ramos Llorens**	Instituto de Acuicultura de Torre de la Sal | CSIC, Spain	Florian Raible	University | Vienna, Austria	Use of a functionally accessible marine animal model to unlock the biosynthetic capacity for essential fatty acids
Margot **Revel**	Centre de Recherche des Cordeliers | Paris, France	Marius Ueffing	Universität | Tübingen, Germany	Identification of the interactome of complement factor H within tumor cells
Laura **Robles Rodríguez**	University | Valencia, Spain	Rudi Wiesner	University of Cologne, Germany	Evaluation of frataxin implication in the regulation of endoplasmic reticulum-mitochondria associated membranes (MAMs)
Cristina **Rodríguez**	Centro Nacional de Biotecnología (CNB) | Madrid, Spain	Kelly Sullivan	University of Colorado Denver | Aurora, United States	SNX27 contribution to the inflammatory phenotype associated to Down syndrome phenotypes
Paula **Rodríguez**	Universidade de Santiago de Compostela | Santiago de Compostela, Spain	Johannes Kohl	Francis Crick Institute | London, United Kingdom	Elucidating the molecular cues and the vomeronasal pathway underlying sickness conspecific avoidance behaviour

Name ▼	Home institute	Group leader	Host institute	Project
Irene **Rodriguez Arce**	Centro de Regulación Genómica (CRG) | Barcelona, Spain	Melanie Königshoff	Helmholtz Zentrum | München, Germany	Using Precision Cut Lung Slices for ex vivo evaluation of the immuno-modulatory effect of engineered Mycoplasma pneumoniae strains encoding therapeutic interleukins for Idiopathic Pulmonary Fibrosis
Álvaro **Rodríguez Del Río**	Centre for Plant Biotechnology and Genomics (CBGP) | Pozuelo de Alarcón, Spain	Purificacion Lopez	Université de Paris-Sud | Orsay, France	Deciphering the metabolic potential of unknown microbial species from extreme environments
Elena **Rodríguez Sánchez**	Instituto de Investigación Hospital 12 de Octubre | Madrid, Spain	Francesco Paneni	University of Zurich, Switzerland	Unraveling the Epigenetic Landscape Associated with Hypertension and Pharmacological Treatment
Enrique **Rodriguez Sebastian**	Cajal Institute | Madrid, Spain	Juan Alvaro Gallego	Imperial College | London, United Kingdom	Cell-type specific neural manifolds during hippocampal sharp-wave ripples
Sara **Rojas Vázquez**	Universidad Politecnica | Valencia, Spain	Ana O'Loghlen	Queen Mary | University of London, United Kingdom	Study of the extracellular vesi-cle-mediated interaction between senescent endothelial cells and NSCs, and its role in the age-related loss of neurogenesis within the SEZ.
Stefano **Romano**	Quadram Institute | Norwich, United Kingdom	Georg Zeller	EMBL | Heidelberg, Germany	Building a generalizable machine learning model to predict Parkinson's disease from microbiome data (GEMMA)
Alice **Romeo**	Università degli Studi di Roma 'Tor Vergata' | Rome, Italy	Siewert-Jan Marrink	University | Groningen, Netherlands	Coarse-grained molecular dynamics simulations of the SARS-CoV-2 envelope
Raquel **Romero Bueno**	Universidad Pablo de Olavide | Sevilla, Spain	Jordan Ward	University of California | Santa Cruz, United States	CHARACTERISATION OF BAF'S ROLE IN SPERMATOGENESIS IN C. ELEGANS.
Marta **Romo González**	Universidad de Salamanca, Spain	Maria Eugenia Soriano	Università di Padova, Italy	Revealing the role of the NADPH oxidase NOX2 on mitochondrial metabolism: implications for chronic myeloid leukaemia.
Vincenzo **Ronca**	National Institute for Health Research (NIHR) | Birmingham, United Kingdom	Shimon Sakaguchi	Osaka University, Japan	Epigenetic manipulation of CD4 T cells to induce regulatory T cells as a novel therapeutic approach to restore immunotolerance in primary biliary cholangitis.
Doris **Roth**	Helmholtz Zentrum München | Neuherberg, Germany	Anne Van Der Does	University Medical Centre | Leiden, Netherlands	Breathing Smoke: The Effects of Biomechanical Forces on Cigarette Smoke Induced Inflammation and Aberrant Mucociliary Clearance of Airway Epithelium
Diana **Rubio Contreras**	Instituto de Biomedicina de Sevilla | Sevilla, Spain	Daniel Durocher	Mount Sinai Hospital | Toronto, Canada	Screening by CRISPR-Cas9 technology in quiescent cells to identify new factors involved in TOP1-dependent DNA double-strand break formation and repair.
Antonella **Ruggiero**	Stazione Zoologica 'Anton Dohrn' | Napoli, Italy	Detlev Arendt	EMBL | Heidelberg, Germany	Single-cell RNA sequencing to explore cell population heterogeneity during phytoplankton life cycle transitions
Joana **Sabino Pinto**	University | Groningen, Netherlands	Mathieu Chouteau	CNRS Guyane | Cayenne, French Guiana	Love and genes: Do amphibians choose partners based on immune traits?
Ander **Saenz**	BioDonostia Health Research Institute | San Sebastian, Spain	François Guillemot	Francis Crick Institute | London, United Kingdom	Impact of Metallothioneins (MTs) in brain aging
Josue **Saiz Perez**	University of Castilla-La Mancha | Ciudad Real, Spain	Dirk Inzé	Ghent University, Belgium	The regulation of Arabidopsis stomatal development during thermomorphogenesis
Beatriz **Salvador Barbero**	Cardiff University, United Kingdom	Meritxell Huch	MPI für molekulare Zellbiologie und Genetik | Dresden, Germany	Establishment of pancreas organoids as model for cell competition

Name ▼	Home institute	Group leader	Host institute	Project
María **Sánchez**	Centro Nacional de Investigaciones Cardiovasculares (CNIC) | Madrid, Spain	Johnny Kim	Max-Planck-Institut für Herz- und Lungenforschung | Bad Nauheim, Germany	Adaptations of resident cardiac macrophages in the adult regenerative heart
Ferran **Sanchez Sanuy**	Centre for Research in Agricultural Genomics (CRAG) | Cerdanyola del Vallès, Spain	Jian Feng Ma	Institute of Plant Science and Resources | Okayama, Japan	Influence of iron on immunity and disease resistance in rice
Susana **Santos**	Aarhus University, Denmark	Tim Urich	Ernst-Moritz-Arndt-Universität Greifswald | Greifswald, Germany	Unwiring the power of predatory bacteria for control of plant parasitic nematodes
Teresa **Santos**	CE3C - Centre for Ecology | Evolution and Environmental Changes, Portugal	Anders Johannes Hansen	University | Copenhagen, Denmark	Impacts of anthropogenic pressure on genetic and phenotypic diversity of the Savannah elephant (Loxodonta africana) in southern Africa
Ioannis **Sarropoulos**	Zentrum für Molekulare Biologie (ZMBH) | Heidelberg, Germany	Stein Aerts	KU Leuven | Leuven, Belgium	Applying deep learning models to decipher the evolution of gene regulation and gene expression across mammals.
Nicolas **Schmelling**	Heinrich Heine University | Düsseldorf, Germany	Patricia Sanchez-Baracaldo	University of Bristol, United Kingdom	The Origin of Cellulose Synthase
Hemma **Schueffl**	Medical University of Vienna, Austria	Ken Howard	Aarhus University, Denmark	Impact of FcRn expression on the cellular uptake and anticancer activity of albumin-binding oxaliplatin prodrugs
Joaquin **Seras-Franzoso**	Vall d'Hebron Institut de Recerca (VHIR) | Barcelona, Spain	Ario De Marco	University of Nova Gorica | Vipava, Slovenia	Nanobody-based approaches for the study and functionalization of extracellular vesicles
Marina **Serrano Macia**	CIC bioGUNE | Derio, Spain	Zbyněk Heger	Mendel University | Brno, Czech Republic	Unravelling the role of the highly conserved cysteine protease, NEDP1, in the pediatric hepatoblastoma cancer using the Chick Chorioallantoic Membrane (CAM) Assay
Laura **Serrano Ron**	Centre for Plant Biotechnology and Genomics (CBGP) | Pozuelo de Alarcón, Spain	Alexis Maizel	Universität | Heidelberg, Germany	Coupling cell identity acquisition with formative cell divisions and growth dynamics: an integrative view of lateral root formation in Arabidopsis
Murali **Sharaff**	Charotar University of Science and Technology | Changa, India	Corina Vlot	Helmholtz Zentrum München | Neuherberg, Germany	Mechanistic understanding of rhizobacteria induced systemic resistance in fenugreek (Trigonella foenegraceum) against bacterial blight
Swaima **Sharif**	Aligarh M. University, India	Jens Amendt	Goethe University | Frankfurt, Germany	CUTICULAR HYDROCARBONS AS A TOOL FOR ESTIMATING THE WEATHERING AND AGE OF PUPARIA OF FORENSICALLY RELEVANT BLOW FLY SPECIES
David **Silva**	University of Porto, Portugal	Lars Hestbjerg Hansen	University | Copenhagen, Denmark	Grapevine as a host model for the study of population level genomic variation in the modulation of the microbiome
Paloma **Solá**	Institute for Research in Biomedicine | Barcelona, Spain	Sara A. Wickström	University of Helsinki, Finland	Age- associated Mechanical Changes in the Skin Drive Circadian Clock Gene Regulation
Ahmed **Soliman**	University | Groningen, Netherlands	Ulf Diederichsen	Universität | Göttingen, Germany	Targeted silencing of Parkinson's-related LRRK2 by DNA-mimetic Peptide-Nucleic Acid (PNA)
Andres **Tejedor**	Universidad Politécnica | Madrid, Spain	Marisol Ripoll	Forschungszentrum Jülich GmbH | Jülich, Germany	Hydrodynamics and polarity effects on the dynamics of active flexible entangled polymers
Iñigo **Terrén**	Biocruces Bizkaia Health Research Institute | Barakaldo, Spain	Luca Scorrano	Università di Padova, Italy	Mitochondrial dynamics in cytokine-induced memory-like NK cells
Paula **Trigo Alonso**	Instituto Teofilo Hernando | Madrid, Spain	Robert Harris	Karolinska University Hospital | Stockholm, Sweden	Enforced repopulation of the microglial niche as a novel neurodegenerative disease therapy

Name ▼	Home institute	Group leader	Host institute	Project
Laura **Ugalde Díaz**	CIEMAT | Madrid, Spain	Jacob Corn	ETH Zurich, Switzerland	Elucidating the molecular DNA repair pathways involved in Prime Editing
Vinodkumar **Ugale**	Mukesh Patel Technology Park | Shirpur, India	Michael Hollmann	Ruhr-Universität | Bochum, Germany	Development of novel subunit-selective NMDA receptor antagonists and investigation of their functional properties for the treatment of refractory epilepsy
Ines **Valencia Fernandez**	Universidad Autonoma | Madrid, Spain	Ramaroson Andriantsitohaina	Université | Angers, France	Secretory characterization of vascular smooth muscle cells-derived extracellular vesicles (EVs): conveyors of NLRP3 inflammasome and IL-1β as inflammaging mediators in diabetes.
Froukje **Vanweert**	University | Maastricht, Netherlands	Daniel Wilkinson	University of Nottingham, United Kingdom	Investigating mechanistic links between branched-chain amino acids (BCAA), insulin signaling and glucose metabolism in human primary myotubes.
Cecilia **Velasco Dominguez**	Hospitalet de Llobregat | Barcelona, Spain	Gero Miesenböck	University of Oxford, United Kingdom	Measuring the passage of time: circuits for interval timing in the mushroom body
Norma Camila **Vesga Castro**	TECNUN (Escuela De Ingeniería Universidad de Navarra) | Donostia, Spain	Lieven Thorrez	KU Leuven | Leuven, Belgium	Development of a 3D human skeletal muscle model for healthy and dystrophic tissue and its functional evaluation
Raúl **Villanueva Romero**	Complutense University of Madrid (UCM) | Madrid, Spain	Sevérine Morisset-Lopez	Center for Molecular Biophysics | Orleans, France	Finding functional gaps: G protein-coupled signalling pathways for VIP receptors
Javier **Villoch Fernández**	Instituto de Biomedicina (IBIOMED) | León, Spain	Reinhard Fässler	MPI für Biochemie | Martinsried, Germany	Proteomic analysis of the role of p73 in the integrin adhesome
Saruchi **Wadhwa**	Institute of Genomics and Integrative Biology | Delhi, India	Kirmo Wartiovaara	University of Helsinki, Finland	Genetic correction of PRKG2 disease mutation in patient iPSC cell model.
Elisa **Weiss**	Medical University | Graz, Austria	Reinier Boon	VU University | Amsterdam, Netherlands	Influence of maternal cardiovascular risk factors on neonatal endothelial progenitor cells: Do long non-coding RNA play a role?
Agnieszka **Winiarska**	Jerzy Haber Institute of Catalysis and Surface Chemistry | Krakow, Poland	Jan Schuller	Philipps-Universität Marburg, Germany	Structure determination of aldehyde oxidoreductase from Aromatoleum aromaticum by cryo-EM single particle analysis with sample preparation under redox-controlled conditions.
Mohammad **Yaghoubi Khanghahi**	Universita | Bari, Italy	Gerrit T.s. Beemster	University | Antwerp, Belgium	Shifts in Nutrient Transporter Genes Expression and Grain Bacterial Communities in Durum Wheat plant as Affected by Microbiological Fertilization and Stress Conditions
Suleyman **Yildirim**	Medipol University | Istanbul, Turkey	Adil Mardinoglu	Science for Life Laboratory | Solna, Sweden	Development of microbiome based integrative biomarker model for stratification of cognitive impairment spectrum in parkinson's disease
Haris **Zafeiropoulos**	Hellenic Centre for Marine Research (HCMR) | Heraklion, Greece	Karoline Faust	KU Leuven | Leuven, Belgium	Exploiting data integration, text-mining and computational geometry to enhance microbial interactions inference from co-occurrence networks
Antonio **Zandona**	Institute for Medical Research and Occupational Health | Zagreb, Croatia	Vera Neves	Instituto de Medicina Molecular João Lobo Antunes | Lisbon, Portugal	HBEC-5i human blood-brain barrier model for oxime antidote transport studies: cultivation, integrity and penetration
Julia **Zinsmeister**	Institute of Biochemistry and Biophysics | PAS, Poland	Hubert Schaller	CNRS IBMP | University of Strasbourg, France	Unravelling the contribution of spatial metabolites distribution to seed dormancy and longevity

EMBO New Venture Fellowships

EMBO New Venture Fellows 2021

Name ▼	Home institute	Group leader	Host institute	Project
Adel **Al Jord**	Collège de France | Paris, France	Lucas Pelkmans	University of Zurich, Switzerland	Multiplexed protein mapping of growing, cycling, and differentiating cells in Earth's gravity
Godwin **Aleku**	University of Cambridge, United Kingdom	Roland Riek	ETH Zurich, Switzerland	Investigating molecular basis for an unusual 'age'-dependent inversion of stereoselectivity of an imine reductase
Prejaas **Tewarie**	VU University | Amsterdam, Netherlands	Gustavo Deco	Universitat Pompeu Fabra | Barcelona, Spain	Potential trajectories for recovery of neocortical activity in disorders of consciousness

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EMBO Core Facility Fellowships

EMBO Core Facility Fellows 2021

Name ▼	Home institute	Group leader	Host institute	Project
Sara **Garcia Garcia**	Centro Nacional de Investigaciones Oncológicas (CNIO) | Madrid, Spain	Juan Jesus Garcia Vallejo	University Medical Centre (UMC) | Amsterdam, Netherlands	From conventional to spectral cytometry and data analysis
Duncan **Miller**	Max-Delbrück-Centrum | Berlin, Germany	Jennifer Volz	IMBA | Vienna, Austria	Development and deployment of an advanced laboratory information management system (LIMS) within a human induced pluripotent stem cell (hiPSC) facility incorporating cGMP, cell culture automation, and complex workflows
Karolin **Voßgröne**	Biotech Research and Innovation Centre (BRIC) | Copenhagen, Denmark	Robin Ketteler	University College London, United Kingdom	Establishing high-content CRISPR screens at BRIC, University of Copenhagen

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EMBO Young Investigators

Applications and awards 2017–2021

Nationality	Applications (total)	%	Awards (total)	%	Success rate (%)
Austria	20	1.8	7	5.1	35.0
Belgium	27	2.4	2	1.5	7.4
Chile	3	0.3	0	0.0	0.0
Croatia	2	0.2	0	0.0	0.0
Czech Republic	8	0.7	0	0.0	0.0
Denmark	30	2.7	5	3.6	16.7
Estonia	1	0.1	0	0.0	0.0
Finland	9	0.8	0	0.0	0.0
France	81	7.3	14	10.2	17.3
Germany	143	12.9	25	18.2	17.5
Greece	2	0.2	0	0.0	0.0
Hungary	5	0.4	0	0.0	0.0
Iceland	1	0.1	0	0.0	0.0
India	133	12.0	4	2.9	3.0
Ireland	4	0.4	0	0.0	0.0
Israel	43	3.9	7	5.1	16.3
Italy	45	4.0	1	0.7	2.2
Lithuania	0	0.0	0	0.0	0.0
Luxembourg	2	0.2	0	0.0	0.0
Malta	0	0.0	0	0.0	0.0
Montenegro	0	0.0	0	0.0	0.0
Netherlands	45	4.0	6	4.4	13.3
Norway	13	1.2	0	0.0	0.0
Poland	8	0.7	1	0.7	12.5
Portugal	26	2.3	0	0.0	0.0
Singapore	36	3.2	5	3.6	13.9
Slovakia	0	0.0	0	0.0	0.0
Slovenia	0	0.0	0	0.0	0.0
Spain	82	7.4	9	6.6	11.0
Sweden	62	5.6	4	2.9	6.5
Switzerland	62	5.6	18	13.1	29.0
Taiwan	7	0.6	1	0.7	14.3
Turkey	20	1.8	1	0.7	5.0
United Kingdom	184	16.5	27	19.7	14.7
Others	8	0.7	0	0.0	0.0
Total	1112		137		

Year	Applications (total)	Awards (total)	Success rate (%)
2021	201	26	12.9
2020	225	30	13.3
2019	234	27	11.5
2018	195	26	13.3
2017	257	28	10.9

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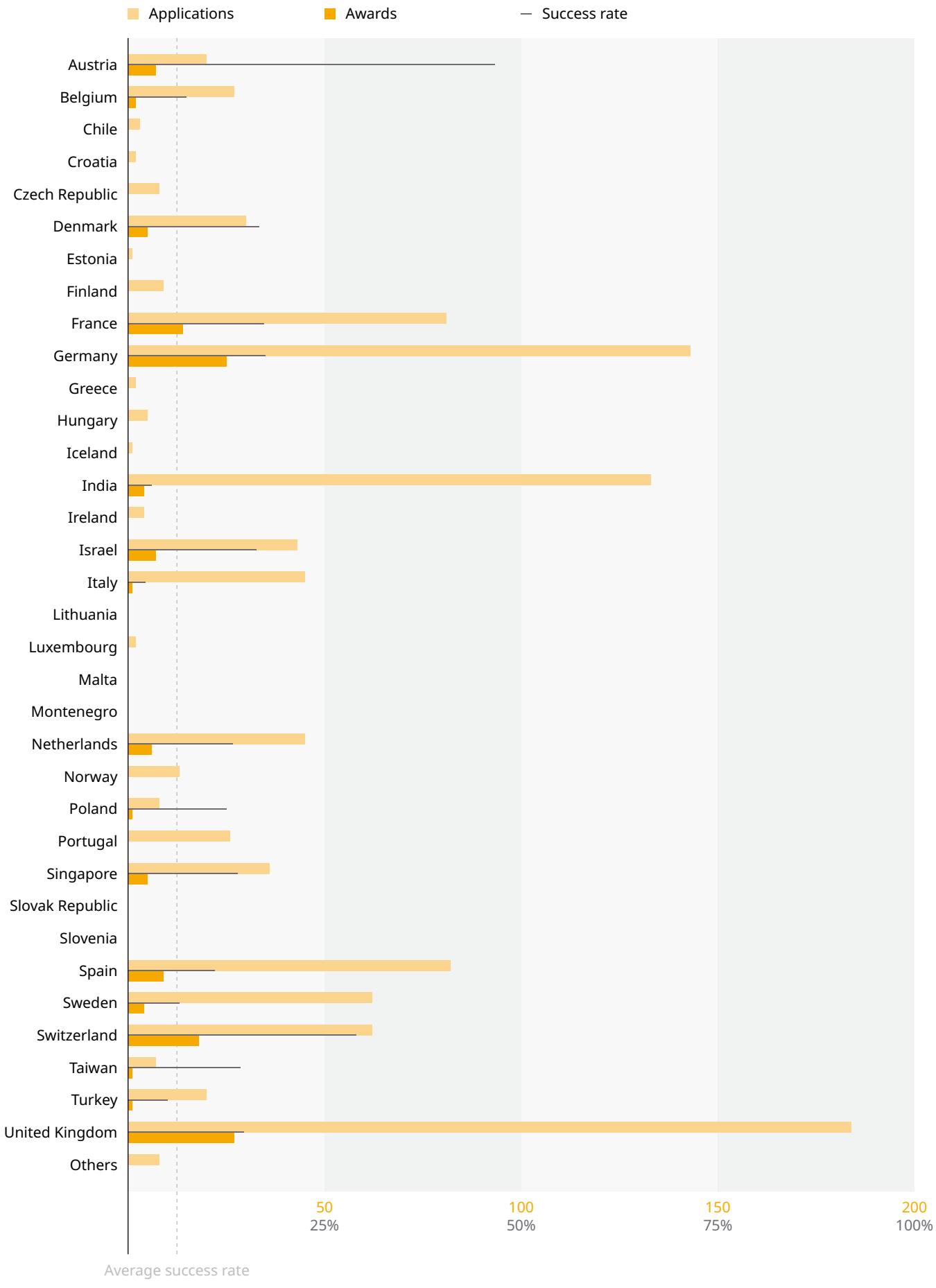
Applications and awards 2017–2021
(graphical representation)



EMBO Young Investigators 2021

Name ▼	Institute	Research Interest
Ori **Avinoam**	Weizmann Institute of Science, Rehovot, IL	Mechanisms of dynamic membrane remodelling
Uri **Ben-David**	Tel Aviv University, Tel Aviv, IL	Understanding and targeting the functional consequences of aneuploidy in cancer
Elvan **Böke**	Centre for Genomic Regulation, Barcelona, ES	Oocyte biology and cellular dormancy
Nina **Cabezas-Wallscheid**	Max Planck Institute of Immunobiology and Epigenetics, Freiburg, DE	Regulation of hematopoietic stem cell dormancy
Gray **Camp**	University of Basel, Basel, CH	Exploring uniquely human development
Pierre-Marc **Delaux**	Laboratoire de Recherche en Sciences Végétales, Castanet-Tolosan, FR	Unraveling the evolution and functioning of plant symbioses
Katrin **Franke**	University of Tübingen, Tübingen, DE	Tracing visual computations from the retina to behavior
Roger **Geiger**	Institute for Research in Biomedicine, Bellinzona, CH	Systems analyses of anti-tumor T cell responses
Melanie **Hamon**	Institut Pasteur, Paris, FR	Bacteria mediated chromatin modifications in health and disease
Lena **Ho**	Duke-NUS Graduate Medical School, Singapore, SG	The power of small: Micropeptides in metabolism and immunity
Stefanie **Jonas**	ETH, Zürich, CH	RNA processing machineries in the nucleus of human cells
Felipe **Karam Teixeira**	University of Cambridge, Cambridge, UK	Molecular mechanisms controlling and protecting the germline
Mounia **Lagha**	Institute of Molecular Genetics of Montpellier, Montpellier, FR	Mechanisms of gene expression precision during development
Darío **Lupiáñez**	Max Delbrück Center, Berlin, DE	3D regulatory landscapes in development and evolution
Elvira **Mass**	University of Bonn, Bonn, DE	Developmental programming of the innate immune system
Christian **Münch**	Goethe University, Frankfurt, DE	Dynamic cellular stress responses
Danny **Nedialkova**	Max Planck Institute of Biochemistry, Martinsried, DE	Context-specific regulation of protein biogenesis
Anna **Obenauf**	Research Institute of Molecular Pathology, Vienna, AT	Rational combination therapies for metastatic cancers
Clemens **Plaschka**	Research Institute of Molecular Pathology, Vienna, AT	mRNA processing and regulation
Edda **Schulz**	Max Planck Institute for Molecular Genetics, Berlin, DE	Quantitative signal processing by gene networks and cis-regulatory landscapes
Benjamin **Schumann**	Francis Crick Institute, London, UK	Precision tools for the new era of quantitative glycobiology
Florian **Schur**	Institute of Science and Technology Austria, Klosterneuburg, AT	Structural biology of cell migration and viral infection
Pontus **Skoglund**	Francis Crick Institute, London, UK	Ancient genomics and human evolution
Yonatan **Stelzer**	Weizmann Institute of Science, Rehovot, IL	Dissecting early embryonic cell-fate decisions at spatio-temporal resolution
Celine **Vallot**	Institut Curie, Paris, FR	Epigenomic evolution of breast cancers towards chemoresistance
David **Zwicker**	Max Planck Institute for Dynamics and Self-Organization, Göttingen, DE	Physical principles of the organization of cellular structures

EMBO Young Investigator Lectures 2021

Young Investigator	Conference	Location	Date ▼
John **O'Neill**	SIBBM Seminar 2020: Frontiers in metabolic research: Cell plasticity, epigenetics and new technologies	IT-Padua	7 - 9 June
Benjamin D. **Engel**	Chlamy 2020+1	FR-Six-Fours-les-Plages	29 August - 3 September
Sonja **Lorenz**	FEBS Advanced Lecture Course on "Cellular stress and ADP-ribosylation"	IT-Naples	8 - 13 November
Matteo **Iannacone**	Germinal centres, at the crossroads of health and disease	virtual	7 - 8 June
Ziv **Shulman**	Germinal centres, at the crossroads of health and disease	virtual	7 - 8 June
Ivan **Matic**	FEBS Advanced Lecture Course: "PARP2021": Research on the family of poly(ADP-ribose) polymerases	ES-Barcelona	7 - 10 September
Sebastian **Deindl**	FEBS Advanced Lecture Course: "PARP2021": Research on the family of poly(ADP-ribose) polymerases	ES-Barcelona	7 - 10 September
Ping-Chih **Ho**	EMBO Workshop on "Cancer immunometabolism"	ES-Sitges	28 November - 1 December
Benjamin D. **Engel**	Capturing light to power the planet	SE-Gothenburg	5 - 8 October
Alexey **Amunts**	Mitochondrial homeostasis and human disease	ES-Sant Feliu	21 - 24 September
Prisca **Liberali**	The 9th GSCN Conference	DE-Dresden	6 - 8 October
Guadalupe **Sabio**	EMBO Workshop on "Cancer immunometabolism"	ES-Barcelona	29 November - 1 December
Guadalupe **Sabio**	AHA basic cardiovascular science: Bridging basic and translational science in cardiovascular disease	US-Chicago	25 - 28 July

EMBO Installation Grants

EMBO Installation Grantees 2021

Name ▼	Moving From	Moving to	Research interest
Amirhoushang **Bahrami**	Bilkent University, Ankara, TR	Bilkent University, Ankara, TR	Protein-mediated biomembrane remodeling in cellular and biological processes
Katarzyna **Bandyra**	University of Cambridge, Cambridge, UK	Warsaw University, Warsaw, PL	Towards understanding of the mitochondrial RNA transport and metabolism
Seyit **Kale**	Izmir Biomedicine and Genome Center, Izmir, TR	Izmir Biomedicine and Genome Center, Izmir, TR	Identification of epigenetic mechanisms of mitotic fidelity in chromatin
Waldan **Kwong**	University of British Columbia, Vancouver, CA	Gulbenkian Science Institute, Oeiras, PT	Mechanisms and ecology of inter-microbial interactions in gut microbiomes
Katerina **Rohlenova**	Institute of Biotechnology, Prague, CZ	Institute of Biotechnology, Prague, CZ	Intercellular metabolic crosstalk in nucleotide metabolism: An emerging target
Karolina **Szczepanowska**	International Institute of Molecular Mechanisms and Machines – Polish Academy of Sciences, Warsaw, PL	International Institute of Molecular Mechanisms and Machines – Polish Academy of Sciences, Warsaw, PL	The OXPHOS quality control in cancer

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EMBO Global Investigator Network

EMBO Global Investigators 2021

Name ▼	Institute	Research Interest
Ramray **Bhat**	Indian Institute of Science, Bangalore, IN	Pattern formation and morphogenesis in cancer
Hsu-Wen **Chao**	Medical University, Taipei, TW	The interaction between circadian clock, polyploidization and liver related diseases
Sandeep **Eswarappa**	Indian Institute of Science, Bangalore, IN	Translational recoding of stop codons
Srimonta **Gayen**	Indian Institute of Science, Bangalore, IN	Epigenetic regulation of gene expression during development and disease
Hiyaa **Ghosh**	National Centre for Biological Sciences, Bangalore, IN	Regulation of homeostasis and neuroinflammation in the mammalian brain
Ming-Jung **Liu**	Academia Sinica, Taipei, TW	Transcription and translation control for viral pathogenesis and plant defence
Brandon **Morinaka**	National University of Singapore (NUS), SG	Posttranslational modifications by radical SAM enzymes
Wee-Wei **Tee**	Institute of Molecular and Cell Biology (IMCB), Singapore, SG	Investigating the mechanisms of chromatin plasticity in development and disease

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EMBO | Japan Virtual Lectures

Lectures 2021

Name of Event	Speakers	Japanese Host Institution	Date ▼
Unraveling the mechanisms of cell growth and migration	Michael N. Hall (EMBO Member) Erina Kuranaga	Tohoku University	2 March
Sensory pathways governing locomotion and appetitive behaviour	Claire Wyart (EMBO Member) Hiromu Tanimoto	Tohoku University	11 May
Molecular machineries underlying intracellular lipid distribution and organelle degradation	Elina Ikonen (EMBO Member) Noboru Mizushima (EMBO Associate Member)	The University of Tokyo	22 June
New paradigms of intracellular compartmentalization and trafficking	Anne Spang (EMBO Member) Akihiko Nakano (EMBO Associate Member)	RIKEN	31 August
How do piRNAs defend the germline genome from invasive transposons?	Julius Brennecke (EMBO Member) Petr Svoboda (EMBO Member) Mikiko Siomi (EMBO Associate Member)	Molecular Biology Society of Japan (MBSJ)	1 December
Chromatin dynamics during development and physiology	Edith Heard (EMBO Member) Mitinori Saitou (EMBO Associate Member)	Kyoto University	14 December

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EMBO Courses & Workshops

Practical Courses 2021
EMBC Member States

Title	Organizer	Location	Dates ▼	Status
Developmental neurobiology: From stem cells to circuits	C. Kiecker	UK-London	11–24 July 2021	Postponed to 2023
Single cell genomics: Get started!	A. Mendanha Falcão	PT-Braga	30 August–4 September 2021	Took place
In-situ CLEM at room temperature and in cryo	M. Schorb	Virtual	6–10 September 2021	Took place
Image processing for cryo electron microscopy	G. Zanetti	Virtual	6–16 September 2021	Took place
Flow cytometry of biological nano-particles for multi-omics analysis	O. Fornas	Virtual	27 September–1 October 2021	Took place
Methods for analysis of circRNAs: From discovery to function	V. Benes	DE-Heidelberg	23–29 April 2022	Postponed from 13–19 November 2021
Characterization of macromolecular complexes by integrative structural biology	M. Marcia	FR-Grenoble	28 May–4 June 2022	Postponed from 29 May–5 June 2021
Humanized mice, personalized therapies and big data	R. Stripecke	DE-Heidelberg	12–17 June 2022	Postponed from 13–18 June 2021
Small angle neutron and x-ray scattering from biomacromolecules in solution	F. Gabel	FR-Grenoble	20–24 June 2022	Postponed from 3–7 May 2021
Advanced electron microscopy for cell biology	K. Bowitz Larsen	NO-Tromsø	27 June–6 July 2022	Postponed from 21 June–1 July 2021
High throughput protein production and crystallization	J. Reguera	FR-Marseille	4–12 July 2022	Postponed from 5–13 July 2021
Breathless microbes: Life with no oxygen	D. Rush	NL-Wageningen	26–30 July 2022	Postponed from 26–30 July 2021
Structure, dynamics and function of biological macromolecules by NMR	S. Grzesiek	CH-Basel	5–12 August 2022	Postponed from 6–13 August 2021
Summer school for advanced modeling of behavior	C. Summerfield	ES-Barcelona	1–8 September 2022	Postponed from 1–8 September 2021
Current methods in cell biology	S. Cuylen-Haering	DE-Heidelberg	4–13 September 2022	Postponed from 5–14 September 2021
Synthetic biology in action: Beyond standard metabolism	S. Panke	DE-Heidelberg	11–18 September 2022	Postponed from 12–19 September 2021
Integrative analysis of multi-omics data	B. Velten	DE-Heidelberg	20–23 September 2022	Postponed from 4–7 May 2021
Computational optical biology	R. Henriques	PT-Oeiras	2–7 October 2022	Postponed from 23–28 May 2021
Metabolomics bioinformatics in human health	R. Salek	NL-Wageningen	24–28 October 2022	Postponed from 22–26 February 2021
The fundamentals of high-end cell sorting	D. Ordonez	DE-Heidelberg	30 October–4 November 2022	Postponed from 7–12 November 2021
Volume electron microscopy by automated serial SEM	G. Knott	CH-Lausanne	6–11 November 2022	Postponed from 24–29 October 2021
Practical integrative structural biology	J. Kosinski	DE-Hamburg	6–13 November 2022	Postponed from 7–14 November 2021

Workshops 2021
EMBC Member States

Title	Organizer	Location	Dates ▼	Status
Cell polarity and membrane dynamics	N. Goehring	Virtual	16–21 May 2021	Took place
Cardiomyocyte biology	N. Mercader	Virtual	30 May–2 June 2021	Took place
Predicting evolution	J. Crocker	Virtual	14–16 June 2021	Took place
The mobile genome: Genetic and physiological impacts of transposable elements	O. Barabas	Virtual	29 August–1 September 2021	Took place
DNA Topology in genomic transactions	L. Baranello	Virtual	20–23 September 2021	Took place
The cell cycle: One engine – many cycles	W. Zachariae	DE-Konstanz	20–23 September 2021	Postponed to 2022
Mitochondrial homeostasis and human disease	H. Abeliovich	ES-Girona	21–24 September 2021	Took place
The Great Wall symposium	I. Gomperts Boneca	PT-Sintra	24–26 September 2021	Postponed to 2023
Target of rapamycin (TOR) signaling in photosynthetic organisms	E. Baena-Gonzalez	Virtual	21–24 October 2021	Took place
Recent advances in structural biology of membrane proteins	C. Loew	Virtual	29 November–1 December 2021	Took place
Cancer immunometabolism	C. Muñoz-Pinedo	ES-Barcelona (Hybrid)	29 November–1 December 2021	Took place
Pathogen immunity and signaling	N. Manel	FR-Saint-Malo	4–8 April 2022	Postponed from 26–30 September 2021
Codon usage: Function, mechanism and evolution	Y. Liu	UK-Edinburgh (Hybrid)	8–11 April 2022	Postponed from 17–19 April 2021
Long-distance cell-cell signalling in development and disease	S. Scholpp	UK-Exeter	10–13 April 2022	Postponed from 11–14 April 2021
Dying in self-defense: Cell death signaling in animals and plants	A.J. García-Sáez	GR-Crete	1–5 May 2022	Postponed from 2–6 May 2021
Building networks: Engineering in vascular biology	K. Haase	ES-Barcelona	9–11 May 2022	Postponed from 8–10 November 2021
Autophagy in brain health and disease	P. Verstreken	ES-Sant Feliu de Guixols (Hybrid)	11–14 May 2022	Postponed from 24–27 March 2021
Evo-chromo: Evolutionary approaches to research in chromatin	P.R. Andersen	DK-Aarhus	11–14 May 2022	Postponed from 15–18 September 2021
Molecular biology of mitochondrial gene maintenance and expression	M. Minczuk	SE-Bro	15–19 May 2022	Postponed from 16–20 May 2021
Awakening of the genome: The maternal-to-zygotic transition	K. Tachibana	AT-Vienna (Hybrid)	18–21 May 2022	Postponed from 19–22 May 2021
CD1/MR1-restricted T lymphocytes	S. Cardell	SE-Gothenburg	22–26 May 2022	Postponed from 26–30 September 2021
Reversible phosphorylation, signal integration and drug discovery	Y. Senis	GR-Vouliagmeni (Hybrid)	22–26 May 2022	Postponed from 6–10 June 2021
The ISG15 system in molecular function and disease mechanisms	K.P. Knobeloch	DE-Berlin	1–4 June 2022	Postponed from 24–26 June 2021
Neural stem cells: From basic understanding to translational applications	S. Taraviras	GR-Kyllini	5–9 June 2022	Postponed from 6–10 June 2021
Protein termini: From mechanisms to biological impact	T. Arnesen	NO-Bergen	8–11 June 2022	Postponed from 9–12 June 2021
Integrating the molecular, mechanistic and physiological diversity of autophagy	G. Juhász	HU-Eger	27 June–1 July 2022	Postponed from 27 September–1 October 2021
Dynamic kinetochore	N. Sekulic	NO-Oslo	28 June–1 July 2022	Postponed from 1–4 June 2021
Persistent cancer cell: Molecular mechanisms, dynamic models towards therapy	F. Vallette	HR-Cavtat	28 June–1 July 2022 (Hybrid)	Postponed from 23–26 July 2021

Title	Organizer	Location	Dates ▼	Status
The yin and yang of chromosomal and extra-chromosomal DNA	Y. Barral	CH-Ascona	17–20 July 2022	Postponed from 4–9 July 2021
RNA localization and local translation	J. Chao	ES-Sant Feliu de Guixols	17–21 July 2022	Postponed from 4–8 July 2021
Cell and developmental systems	M. González-Gaitán	CH-Arolla	22–26 August 2022	Postponed from 23–27 August 2021
Membrane transporters as essential elements of cellular function and homeostasis	G. Diallinas	GR-Chania	23–27 August 2022	Postponed from 28 August–1 September 2021
Bacterial networks (BacNet22)	N. Stanley-Wall	ES-Sant Feliu de Guixols	4–9 September 2022	Postponed from 5–10 September 2021
Ubiquitin and ubiquitin-like proteins in health and disease	S. Polo	HR-Cavtat	9–13 September 2022	Postponed from 10–14 September 2021
Phagocytosis of dying cells: Molecules, mechanisms, and therapeutic implications	K. Ravichandran	BE-Ghent	12–15 September 2022	Postponed from 26–29 May 2021
A 20/20 vision of the future of nuclear receptors	J.S. Carroll	MT-Floriana	12–16 September 2022	Postponed from 27 September–1 October 2021
Comparative genomics of unicellular eukaryotes: Interactions and symbioses	J. Lukeš	ES-Sant Feliu de Guixols	12–17 September 2022	Postponed from 11–16 October 2021
New challenges in protein translocation across membranes	D. Rapaport	ES-Sant Feliu de Guixols	17–21 September 2022	Postponed from 20–24 March 2021
RNA 3' end formation and the regulation of eukaryotic genomes	N.J. Proudfoot	UK-Oxford	19–23 September 2022	Postponed from 7–11 September 2021
Energy balance in metabolic disorders	G. Sabio	ES-Malaga	3–6 October 2022	Postponed from 26–29 April 2021
Cilia 2022	B. Schermer	DE-Cologne (Hybrid)	4–7 October 2022	Postponed from 13–16 October 2021
Thiol oxidation in biology: Biochemical mechanisms to physiological outcomes	B. Morgan	ES-Sant Feliu de Guixols	8–13 October 2022	Postponed from 19–24 September 2021
Adherent microbial communities: Quantitative approaches from single cell to ecosystems	T. Mignot	FR-Cargese	10–14 October 2022	Postponed from 2–8 May 2021
The DNA-damage response in cell physiology and disease	G. Legube	GR-Sounio	10–14 October 2022	Postponed from 11–15 October 2021
The 20S proteasome degradation pathway	M. Sharon	IL-Rehovot	8–12 January 2023	Postponed from 21–25 February 2021
From molecules to organisms: An integrative view of cell biology	M. Zerial	AT-Goldegg am See	10–15 January 2023	Postponed from 12–17 January 2021
Protein quality control: From molecular mechanisms to therapeutic intervention	E. Weber-Ban	HR-Srebreno	21–26 May 2023	Postponed from 19–24 September 2021
Meiosis	V. Jantsch	AT-Pamhagen (Hybrid)	18–23 June 2023	Postponed from 20–25 June 2021
Eukaryotic RNA turnover and viral biology	Š. Vaňáčová	CZ-Brno (Hybrid)	20–23 June 2023	Postponed from 28 June–1 July 2021
When biology of endocytosis meets physics: Emerging mechanisms and functions	S. Sigismund	IT-Venice	10–15 September 2023	Postponed from 12–17 September 2021

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Workshops 2021
EMBC Associate Member States

Title	Organizer	Location	Dates ▼	Status
Molecular and physiological basis of behavioural/cognitive defects in neurodevelopmental disorders	J. Clement	IN-Bengaluru	31 October–3 November 2022	Postponed from 19–22 April 2021
Inositol lipids: Signaling platforms for organizing cellular architecture and physiology	R. Padinjat	IN-Bangalore	14–17 November 2022	Postponed from 1–4 March 2021

Workshops 2021
Co-operation partners

Title	Organizer	Location	Dates ▼	Status
Emerging concepts of the neuronal cytoskeleton	C. Leterrier	CL-Santa Cruz	11–15 April 2021	Postponed to 2023

EMBO | FEBS Lecture Courses 2021
EMBC Member States

Title	Organizer	Location	Dates ▼	Status
Molecular mechanisms of interorgan crosstalk in health and disease	S. Rose-John	GR-Spetses	19–27 May 2022	Postponed from 20–28 May 2021
Lipids, proteins and their interactions in organelle biology	E. Breukink	GR-Spetses	29 May–4 June 2022	Postponed from 20–26 June 2021
Molecular mechanisms in signal transduction and cancer	B.M. Burgering	GR-Spetses	16–24 August 2022	Postponed from 16–24 August 2021
Venice summer school 2022: The character concept in metabolic, physiological, and developmental evolution	J. Jaeger	IT-Venice	22–26 August 2022	Postponed from 16–20 August 2021
Mitochondria in life, death and disease	A. Trifunovic	ME-Budva	27 September–1 October 2022	Postponed from 21–25 September 2021

EMBO Global Lecture Courses 2021
Co-operation partners

Title	Organizer	Location	Dates ▼	Status
Small brains, big ideas	J. Ewer	CL-Las Cruces	20–28 October 2022	Postponed from 14–22 October 2021

India | EMBO Lecture Courses 2021
EMBC Associate Member States

Title	Organizer	Location	Dates ▼	Status
RNA binding proteins: From RNA binding to condensation and aggregation	A. Majumdar	Virtual	8–11 February 2022	Postponed from 8–11 February 2021
Malaria molecular epidemiology, population genetics, and evolution: Principles to practices	A. Sinha	IN-New Delhi	17–23 November 2022	Postponed from 3–9 February 2021
Structure, dynamics and interactions in biomolecular systems using NMR spectroscopy	S. Mukherjee	IN-Berhampur	12–16 December 2022	Postponed from 11–15 January 2021
Modeling development and disease with human tissue organoids	S. Tole	IN-Bangalore	6–9 February 2023	Postponed from 1–4 February 2021

EMBO | EMBL Symposia 2021
EMBC Member States

Title	Organizer	Location	Dates ▼	Status
Life at the periphery: Mechanobiology of the cell surface	A. Diz-Muñoz, Z. Gitai, K. C. Huang, E. Paluch	Virtual	2–3 March 2021	Took place
Friend or foe: Transcription and RNA meet DNA replication and repair	A. Aguilera, P. Beli, K. Cimprich, G. Stoecklin	Virtual	9–12 March 2021	Took place
Synthetic morphogenesis: From gene circuits to tissue architecture	J. Crocker, D. Iber, S. De Renzis, D. Tang, V. Trivedi	Virtual	17–19 March 2021	Took place
The identity and evolution of cell types	D. Arendt, C. Baker, M. A. Tosches, G. Wagner	Virtual	4–7 May 2021	Took place
New approaches and concepts in microbiology	P. Cossart, K. C. Huang, M. Laub, N. Typas	Virtual	7–9 July 2021	Took place
Multiomics to mechanisms: Challenges in data integration	N. Krogan, U. Sauer, J. Zaugg	Virtual	15–17 September 2021	Took place
Seeing is believing: Imaging the molecular processes of life	J. Ellenberg, J. Lippincott-Schwartz, A. Miyawaki	Virtual	5–8 October 2021	Took place
The non-coding genome	I. Bozzoni, V. Narry Kim, G. Storz, I. Ulitsky	Virtual	13–15 October 2021	Took place
Metabolism meets epigenetics	T. Alexandrov, A. Ladurner, J. Mellor, E. Pearce	Virtual	17–20 November 2021	Took place

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EMBO Member Keynote Lectures

EMBO Member Keynote Lectures
EMBC Member States 2021

Name of EMBO Member	Title	Location	Date ▼
Johanna **Joyce**	EACR Virtual Conference "Defence is the Best Attack: Immuno-Oncology Breakthroughs"	Virtual	16–17 February 2021
Richard A. **Flavell**	Novel Concepts in Innate Immunity	Virtual	26–28 May 2021
Matthias P. **Lutolf**	Goodbye Flat Biology: Next Generation Cancer Models	Virtual	5–6 October 2021
Janet **Rossant**	9th GSCN Conference	DE-Dresden	6–8 October 2021
Michele **De Luca**	XIX Meeting of the Spanish Society for Cell Biology	ES-Boadilla Del Monte	26–29 October 2021
Elina **Ikonen**	4th Jacques Monod meeting on Membrane Organization and Remodeling	FR-Roscoff	16–20 May 2022*

EMBO Member Keynote Lectures
Non-EMBC Member States 2021

Name of EMBO Member	Title	Location	Date ▼
Sean B. **Carroll**	16th International Zebrafish Conference	Virtual	16–22 June 2021
Jonathan **Weissman**	The Endoplasmic Reticulum Conference: Structure, Function, and Disease (FASEB Science Research Conference)	Virtual	22–24 June 2021
Anne **Bertolotti**	Protein Aggregation: Function, Dysfunction and Disease	Virtual	23–25 June 2021

*Postponed from 17–21 May 2021

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EMBO Global Lecture Series

No EMBO Global Lectures were given in 2021 due to the COVID-19 pandemic.

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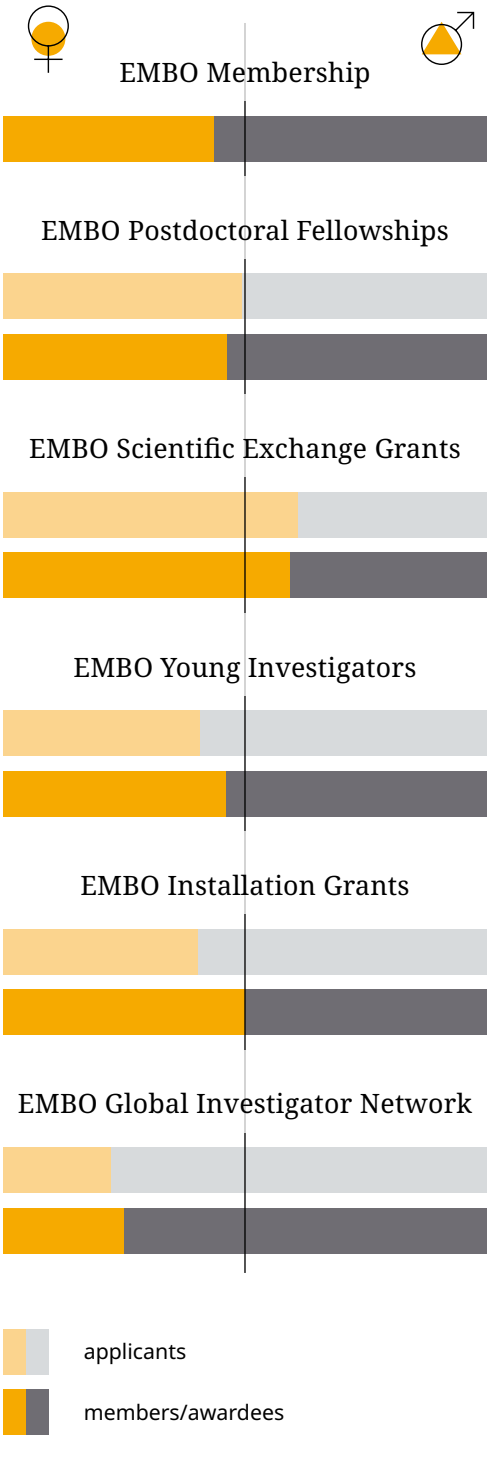
EMBO Women in Science

Visual distribution 2021



Overview 2017 – 2021

	EMBO Postdoctoral Fellowships					EMBO Scientific Exchange Grants				
	Applications (total)	%	Awards (total)	%	Success rate (%)	Applications (total)	%	Awards (total)	%	Success rate (%)
2017										
Female	594	50	80	42	13	335	57	170	60	51
Male	596	50	109	58	18	253	43	111	40	44
Overall	1190		189		16	588		281		48
2018										
Female	575	48	76	40	13	355	59	208	62	59
Male	625	52	114	60	18	243	41	129	38	53
Overall	1200		190		16	598		337		56
2019										
Female	589	50	89	48	15	322	58	199	57	62
Male	600	50	96	52	16	232	42	150	43	65
Overall	1189		185		16	554		349		63
2020										
Female	661	51	66	44	10	195	59	122	57	63
Male	626	49	84	56	13	137	41	93	43	68
Overall	1287		150		12	332		215		65
2021										
Female	578	50	104	46	18	210	61	116	59	55
Male	588	50	120	54	20	134	39	79	41	59
Overall	1166		224		19	344		195		57
2017-2021										
Female	*2997*	*50*	*415*	*44*	*14*	*1417*	*59*	*815*	*59*	*58*
Male	*3035*	*50*	*523*	*56*	*17*	*999*	*41*	*562*	*41*	*56*
Overall	*6032*		*938*		*16*	*2416*		*1377*		*57*

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EMBO Young Investigators

EMBO Installation Grants

EMBO Global Investigator Network

	Applications (total)	%	Awards (total)	%	Success rate (%)	Applications (total)	%	Awards (total)	%	Success rate (%)	Applications (total)	%	Awards (total)	%	Success rate (%)
	88	34	11	39	13	13	30	3	50	23					
	169	66	17	61	10	31	70	3	50	10					
	257		28		11	44		6		14					
	74	38	11	42	15	15	31	4	40	27					
	122	62	15	58	12	33	69	6	60	18					
	196		26		13	48		10		21					
	73	31	7	26	10	18	37	3	27	17	11	28	4	44	36
	161	69	20	74	12	31	63	8	73	26	29	73	5	56	17
	234		27		12	49		11		22	40		9		23
	77	34	11	37	14	19	37	1	13	5	15	24	1	11	7
	149	66	19	63	13	32	63	7	88	22	47	76	8	89	17
	226		30		13	51		8		16	62		9		15
	80	40	12	46	15	18	41	3	50	17	9	23	2	25	22
	118	60	14	54	12	26	59	3	50	12	31	78	6	75	19
	198		26		13	44		6		14	40		8		20
	392	*35*	*52*	*38*	*13*	*83*	*35*	*14*	*34*	*17*	*35*	*25*	*7*	*27*	*20*
	719	*65*	*85*	*62*	*12*	*153*	*65*	*27*	*66*	*18*	*107*	*75*	*19*	*73*	*18*
	1111		*137*		*12*	*236*		*41*		*17*	*142*		*26*		*18*

EMBO Membership (incl. Associate Members)

Year	Members (total)	Women (%)
2017	1779	18.9
2018	1810	19.8
2019	1840	20.5
2020	1877	21.6
2021	1915	22.2

EMBO Courses & Workshops*

Year	Women (%)	Female speakers (%)
2017	50	36
2018	51	37
2019**	49	40
2020***	49	36
2021	50	46

*Including: EMBO | EMBL Symposia, EMBO | FEBS Lecture Courses, EMBO Conference Series, EMBO Global Exchange Lecture Courses, EMBO Practical Courses, EMBO Workshops
**2019 data represents 80% of the events
***2020 data represents 63% of the events

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THE EMBO JOURNAL

*Appointed chief editor February
**Joined editorial team in December
***Departed editorial team in September
****Joined editorial team in September

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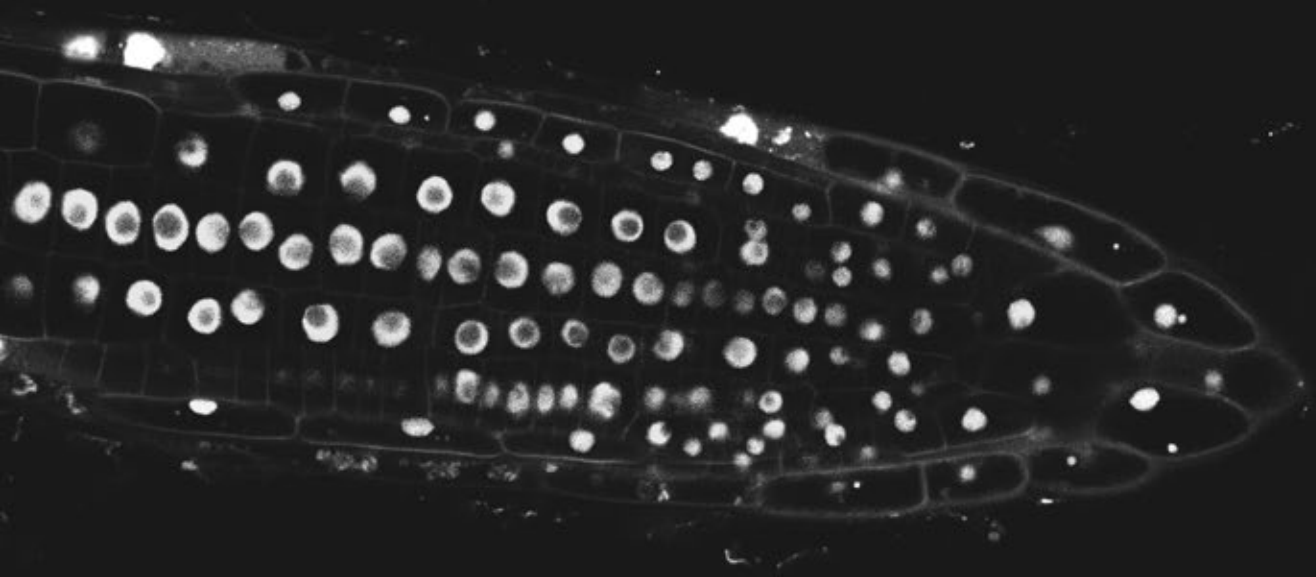
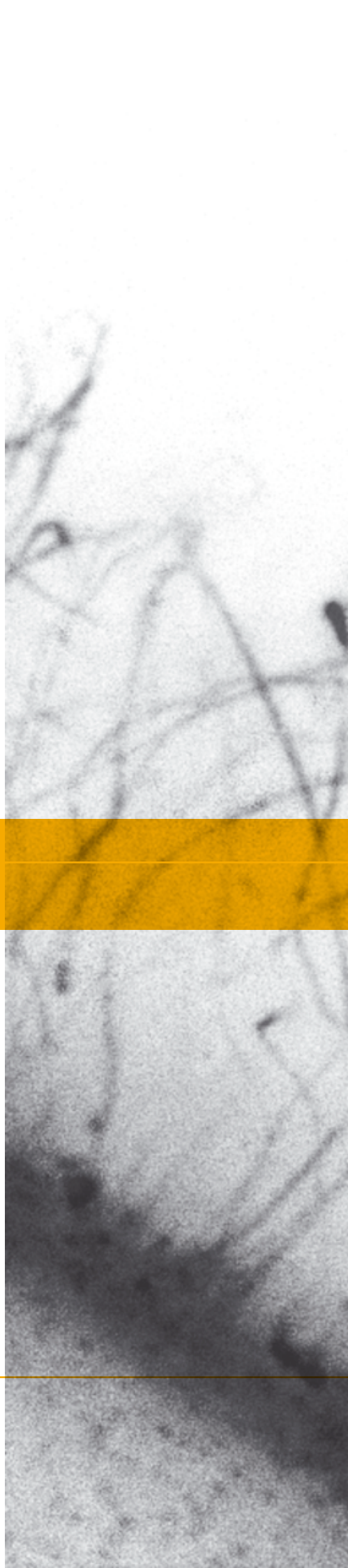
Publication date
October 2022





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