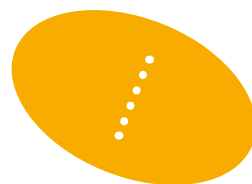
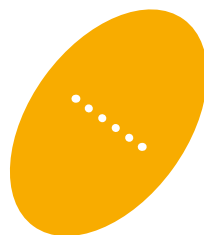
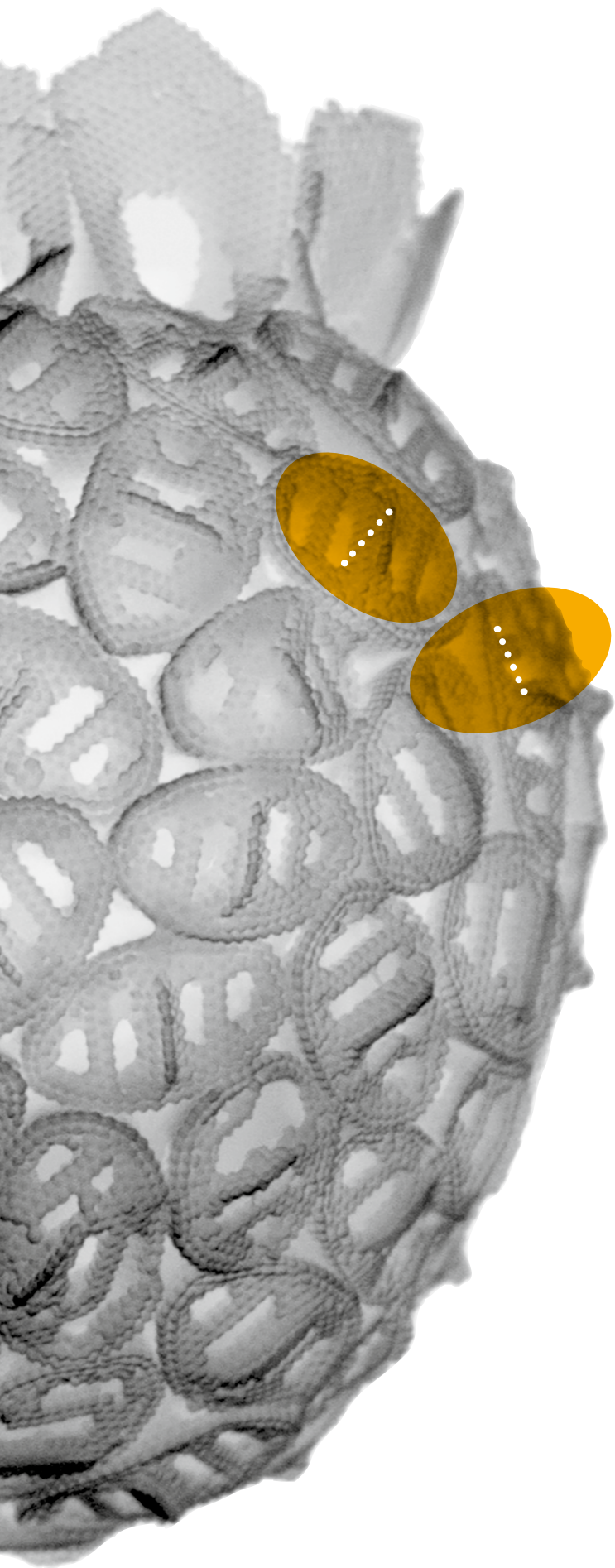




Annual Report

24

EMBO Annual Report 2024



Original image courtesy of EMBO Installation Grantee Jelena Godrijan

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Yeast cells repairing their DNA
Original image courtesy of Ronald Wong

ABOUT EMBO

60 years of excellence in the life sciences

EMBO is an organization of more than 2,100 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.

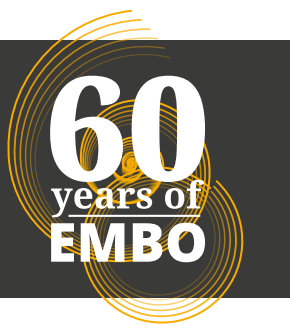
EMBO helps young scientists to advance their research, promote their international reputations and ensure their mobility. Courses, workshops, lectures and EMBO Press publications disseminate the latest research and offer training in techniques to maintain high standards of excellence in research practice. EMBO helps to shape science policy by seeking input and feedback from our communities and by anticipating 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 the members and associate members – some of the best researchers in Europe and around the world – positions EMBO optimally to serve the life science community.

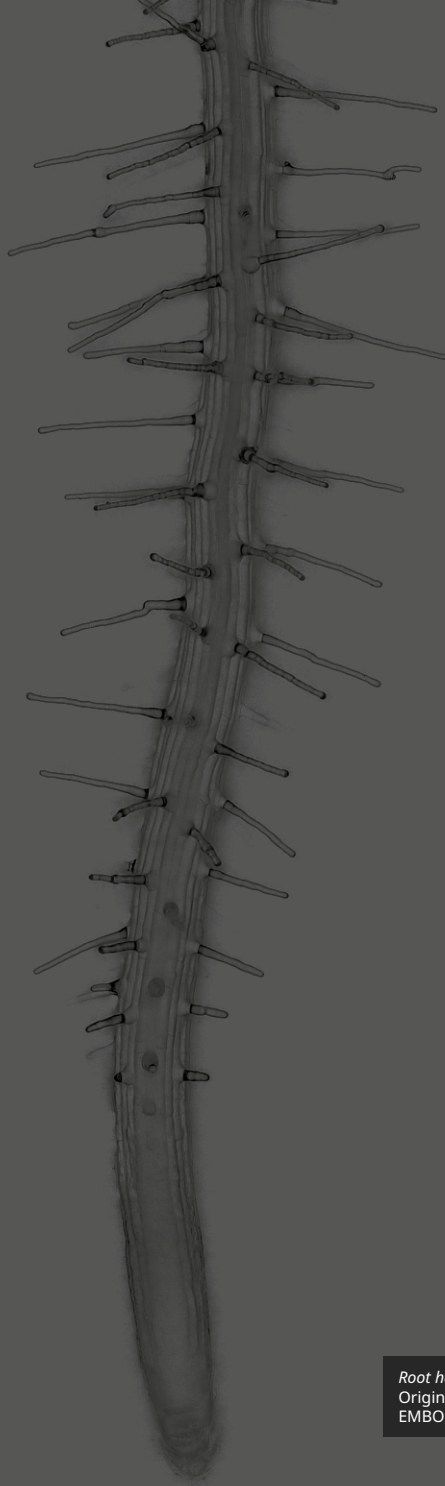
EMBO staff, October 2024



© Lys Y. Seng for EMBO



◦ Taiwan (<i>associate membership</i>)	2024	<ul style="list-style-type: none"> EMBO Lab Sustainability Award launched Maria Leptin EMBO Science Journalism Fellowships launched
◦ Latvia	2023	
◦ Japan (<i>EMBO cooperation agreement</i>)	2022	<ul style="list-style-type: none"> Fiona Watt started her mandate as Director
	2021	<ul style="list-style-type: none"> Initiative to increase participation in the EMBO Programmes across Europe launched
	2019	<ul style="list-style-type: none"> EMBO Global Investigator Network launched Review Commons launched
◦ Montenegro	2018	<ul style="list-style-type: none"> Life Science Alliance launched by EMBO Press, Rockefeller University Press and Cold Spring Harbor Laboratory Press
◦ Chile (<i>cooperation agreement</i>)	2017	<ul style="list-style-type: none"> First joint meeting with the American Society for Cell Biology
◦ Lithuania, Malta	2016	<ul style="list-style-type: none"> SourceData launched
◦ India (<i>associate member state</i>)	2015	
◦ Singapore (<i>associate member state</i>)	2014	<ul style="list-style-type: none"> EMBO Membership expanded to the fields of neuroscience and ecology & evolution
	2013	<ul style="list-style-type: none"> EMBO Press launched Founding member of the San Francisco Declaration on Research Assessment (<i>DORA</i>)
◦ Taiwan (<i>cooperation agreement</i>)	2012	
◦ Singapore (<i>cooperation agreement</i>)	2011	<ul style="list-style-type: none"> EMBO Science Policy Programme launched
	2010	<ul style="list-style-type: none"> Publication of source data introduced by EMBO scientific publishing Maria Leptin started her mandate as Director
	2009	<ul style="list-style-type: none"> The EMBO Meeting launched Transparent Peer Review introduced by EMBO scientific publishing
	2008	<ul style="list-style-type: none"> FEBS EMBO Women in Science Award launched EMBO Molecular Medicine launched
◦ Belgium (<i>ratification</i>), Luxembourg, Slovakia	2007	<ul style="list-style-type: none"> Hermann Bujard started his mandate as Director
◦ Estonia	2006	<ul style="list-style-type: none"> Installation Grants launched
	2005	<ul style="list-style-type: none"> Molecular Systems Biology launched EMBO Laboratory Management Courses launched
	2001	<ul style="list-style-type: none"> Permanent EMBO building established in Heidelberg
	2000	<ul style="list-style-type: none"> EMBO Reports launched EMBO Young Investigator Programme launched
◦ Poland	1999	
◦ Croatia	1998	
◦ Slovenia	1997	
	1996	<ul style="list-style-type: none"> EMBO Lectures launched EMBO Members' Meeting established
	1995	
◦ Czech Republic, Portugal	1994	<ul style="list-style-type: none"> Frank Gannon started his mandate as Executive Director
◦ Türkiye	1993	
◦ Hungary	1992	
	1986	<ul style="list-style-type: none"> EMBO Gold Medal launched
	1982	<ul style="list-style-type: none"> The EMBO Journal launched
◦ Iceland	1978	
◦ Finland	1977	
	1976	<ul style="list-style-type: none"> Statement on recombinant DNA technology published
◦ Ireland	1974	
	1973	<ul style="list-style-type: none"> John Tooze started his mandate as Executive Secretary
◦ Greece, Italy	1972	
◦ Austria, Belgium (<i>observer</i>), Denmark, France, Israel, The Netherlands, Norway, Spain, United Kingdom	1970	
◦ Germany, Sweden, Switzerland	1969	
	1966	<ul style="list-style-type: none"> First Fellowships awarded: 21 short and nine long term Support secured from the Volkswagen Stiftung
	1965	<ul style="list-style-type: none"> Raymond Appleyard started his mandate as first Executive Secretary
	1964	<ul style="list-style-type: none"> EMBO registered as a non-profit organization



Root hairs in Arabidopsis
Original image courtesy of Jos Wendrich and
EMBO Young Investigator Bert De Rybel/VIB/Ghent University

GOVERNANCE AND LEADERSHIP

Message from the EMBO Director

The year 2024 was for all of us in the Heidelberg office and for the EMBO community worldwide the time to celebrate our 60th anniversary: it was in 1964 that a group of eminent scientists turned their vision of the first transnational institution for molecular biology into an organization (EMBO), leading, in the following years, to the establishment of its funding body, EMBC.

In its first 60 years, EMBO has become the pre-eminent European organization for the promotion of excellence in the life sciences. As this Annual Report shows, in 2024 EMBO continued to fulfil its mission by making an impact in scientists' career development (through its membership, funding programmes and schemes) and on the broader research environment (through policy and innovation, as well as scientific publications and other knowledge-sharing platforms). To be able to deliver on our mission and meet the needs of the communities we serve, our organization continues to grow and innovate.

Our positive results are made possible by a collective effort. I would like to thank the EMBC delegates, our Council, all the EMBO Members serving on committees and boards, for their support and expert guidance, and the EMBO staff, for their dedication and commitment to the EMBO mission.

Among the many achievements of 2024 presented in the following pages, I would like to highlight a few because of what they represent for the EMBO history, current strategic priorities and future goals:

Meeting of the EMBO communities

Every year, the EMBO programmes, such as Membership, Young Investigators and Fellows, host an annual meeting to welcome and connect the community they federate. This year, we decided to celebrate the 60th anniversary by merging our annual meetings into one plenary event.

In October, we were delighted to welcome to Heidelberg over 400 members of the global EMBO community, representing a wide range of career stages, research areas, institutes and countries. The high participation and vibrant engagement demonstrated once more the vital role that EMBO plays in catalyzing and connecting experts, providing a unique platform in Europe where different generations of scientists can interact and exchange knowledge and ideas, in formal and informal ways, nurturing the science leaders of tomorrow.

Approval of the Indicative Scheme 2025–2029

In November 2024, the EMBC approved the new five-year funding cycle ("Indicative Scheme"), for the period 2025–2029. Through this financing mechanism, our Member States provide the organization with the financial support needed to secure continuity of the programmes and schemes, benefiting the science community in Europe and beyond.

A balanced and proactive engagement with our Member States was also achieved through the successful Increasing Participation initiative that steered the underspend resulting from pandemic travel restrictions in 2020 and 2021 into additional opportunities made available to scientists in countries with lower participation in EMBO programmes and schemes. Increasing participation is fully embedded in the new Indicative Scheme.



Innovation for sustainable science

In spite of its longevity, EMBO stays agile, designing, incubating and pioneering innovative solutions in the world of scientific publications, policy, training and programme management. Notable examples are the EMBO Press journals, all published under the Open Access license, and the pre-print review platform Review Commons, which is steadily developing and broadening its impact on the peer-review process.

EMBO is also providing a platform for discussions with key stakeholders about Artificial Intelligence (AI) in the life sciences.

In the area of environmental sustainability, EMBO launched the EMBO Lab Sustainability Award, to recognize innovative contributions to the development of sustainable wet and dry labs, and the *Heidelberg Agreement on Environmental Sustainability in Research Funding*, to ensure that research funders take a proactive approach to promoting sustainability in scientific research.

As firm believers in the importance of transparent and accurate communication for building trust between science and society, in May we launched the first call for the Maria Leptin | EMBO Science Journalism Fellowships. Funded by a personal donation from former EMBO Director Maria Leptin, Science Journalism fellowships will promote constructive interactions between scientists, journalists and the public.

EMBO and science advocacy, for the benefit of all

As many parts of the world face unprecedented political and financial instability, EMBO holds firm to its mission to promote excellence in the life sciences. In parallel to the delivery of our programmes and activities, EMBO is uniquely positioned to shape science and society by influencing policy, promoting scientific literacy, and advocating for research and evidence-based decision-making.

We continue to be part of science advice mechanisms at European level, convene experts and provide a neutral platform for relevant debates. In December, together with EMBO Secretary General Paul Nurse, I hosted a workshop to discuss how life scientists can be more effective at making the case for funding, provide trustworthy advice to governments and look at synergies between the private and public sector for the benefit of science and society.

As we wrap up the celebrations for the first 60 years of EMBO, I am confident that EMBO will continue to deliver excellent programmes and innovative solutions, for the benefit of all.

Fiona M. Watt
EMBO Director

60th anniversary



Photos by Andreas Herr for EMBO/Lys Y. Seng for EMBO

Participants of the meeting of the EMBO communities



Audience of a scientific session



Martin Farley receives the EMBO Lab Sustainability Award from EMBO Director Fiona Watt



Soft skills training delivered by EMBO Solutions



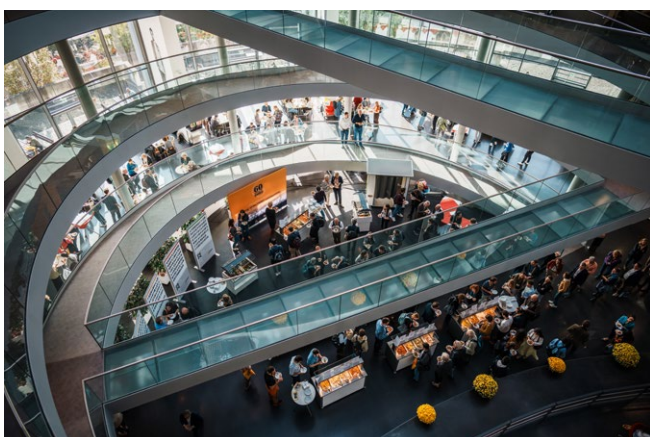
Panel discussion with EMBO Young Investigator Elias Barriga, EMBO Global Investigator Yasunori Saeki, EMBO Associate Member James Liao, and EMBO Members Maria Leptin, Katalin Karikó and Ottoline Leyser (left to right), chaired by EMBO Director Fiona Watt



EMBO Member Katalin Karikó met community members and signed her autobiography



EMBO Fellows' poster session



Networking scientists during the breaks



Networking scientists during the breaks



88 newly elected EMBO Members and Associate Members received their certificates at the meeting. Here: Nenad Pavin, Philippe Pasero, Elif Nur Firat-Karalar, Arnaud Echard, George Davey Smith, James Liao and Gou Young Koh (left to right).



More than 100 EMBO Fellows from 17 countries came together

EMBO Council

EMBO is governed by its Council which has the mandate to manage and direct the organization. The Council consists of 15 EMBO Members who serve for a period of three years and may be re-elected for one additional term of office.

The Council elects its Chair and Vice-chair, both chosen among its members, and a Secretary General, who may be chosen from outside the Council.

In 2024, the EMBO Council met in May for their annual meeting and in October for a Strategy meeting.



Maria Rescigno
Chair, EMBO Council

EMBO Officers 2024

EMBO Secretary General	Paul Nurse
Chair, EMBO Council	Maria Rescigno (<i>as of May 2024</i>)
Vice Chair, EMBO Council	Marta Miaczynska (<i>as of May 2024</i>)

EMBO Council members 2024

Elected for term(s) of office ¹	Name	Country/Town
2023-2025	Silvia Arber	CH-Basel
2022-2024	Naama Barkai	IL-Rehovot
2021-2023, 2024-2026	David Baulcombe	UK-Cambridge
2021-2023, 2024-2026	Déborah Bourc'his	FR-Paris
2022-2024	James Briscoe	UK-London
2023-2025	Ivan Dikic	DE-Frankfurt
2019-2021, 2022-2024	Eileen Furlong	DE-Heidelberg
2020-2022, 2023-2025	Crisanto Gutierrez	ES-Madrid
2023-2025	Johanna Ivaska	FI-Turku
2019-2021, 2022-2024	Jiri Lukas	DK-Copenhagen
2024-2026	Zoi Lygerou	GR-Patras
2021-2023, 2024-2026	Marta Miaczynska (<i>Vice chair</i>)	PL-Warsaw
2020-2022, 2023-2025	Maria Rescigno (<i>Chair</i>)	IT-Milan
2022-2024	Brenda A. Schulman	DE-Munich
2024-2026	Harald Stenmark	NO-Oslo

Ex officio Council members

Fiona M. Watt	Director, EMBO
Paul Nurse	Secretary General, EMBO

Observers

Leszek Kaczmarek	President, EMBC
Barbara Ohnesorge	Secretary General, EMBC
Edith Heard	Director General, EMBL
Lori Passmore	Chair EMBO Membership Committee
Guillermina López-Bendito	Chair EMBO Young Investigator Committee
Nicolas Tapon	Chair EMBO Course Committee
Malcolm J. Bennett	Chair EMBO Fellowship Committee (Spring 2024 selection round)
Lea Sistonen	Chair EMBO Fellowship Committee (Autumn 2024 selection round)
Cayetano González	Chair EMBO Global Investigator Network Committee
Karim Labib	Chair EMBO Installation Grants Committee
Paul Nurse	Chair EMBL SAC

¹ EMBO Council members are elected for a three-year term of office and may be re-elected for one additional term.

Committees and advisory boards

EMBO Members and other experts serve on committees and advisory boards to guide the EMBO programmes, schemes and publications.

Course Committee

2020 Nicolas Tapon *UK Chair*
 2023 Andrés Aguilera ES
 2024 Buzz Baum UK
 2024 Ana Martin-Villalba DE
 2022 Guillermo Montoya DK
 2023 Gioacchino Natoli IT
 2023 Tracy Palmer UK
 2023 Franck Perez FR
 2022 Panayiota Poirazi GR
 2024 Eugenia Russinova BE
 2023 Maya Schuldiner IL
 2023 Eric Westhof FR

Scientific Exchange Grants Advisory Board

2020 Claudio Alfieri UK
 2023 Miguel de Lucas UK
 2023 Ilaria Elia DE
 2023 Sandrine Etienne-Manneville FR
 2024 Stephanie Ganai-Vonarburg CH
 2024 Maria Georgiadou GR
 2024 Sarah Guziou UK
 2020 Robert Hänsel-Hertsch DE
 2020 Bruno Hudry FR
 2020 Gabriel Ichim FR
 2024 Eleanna Kara US
 2020 Marketa Kaucka Petersen DE
 2020 Nataly Kravchenko-Balasha IL
 2024 Elvira Mass DE
 2020 Patricia Monteiro PT
 2023 Teresa Rayon UK
 2020 Jörg Renkawitz PL
 2020 Adrien Rousseau UK
 2020 Julia Santiago Cuellar CH
 2024 Christian Schwartz DE
 2020 David Schwefel DE
 2020 Erdinc Sezgin SE
 2020 Mehmet Somel TR
 2023 Courtney Stairs SE
 2020 Daan Swarts DE
 2023 Alexander Von Appen DE
 2020 Melissa Vos DE
 2023 Yotam Bar-On IL
 2023 Aude Bernheim FR
 2023 Eduardo Bonivita IT
 2023 Fong Kuan Wong UK
 2023 Tatjana Kleele CH
 2023 Andrea Puhar UK
 2023 Florent Murat FR
 2024 Robertas Ursache ES
 2024 Ramesh Yelagandula IN

Fellowship Committee

2018 Malcolm J. Bennett *UK Chair*
 2024 Canan Atilgan TR
 2024 Patricia Bassereau FR
 2023 Sigal Ben-Yehuda IL
 2020 Mario de Bono AT
 2023 Filippo Del Bene FR
 2023 David Drew SE
 2024 Luisa Miranda Figueiredo PT
 2021 Alain Goossens BE
 2023 Ian Henderson UK
 2021 Gilles Laurent DE
 2024 Edward Lemke DE
 2021 Maria Dolores Martin-Bermudo ES
 2022 Danijela Matic Vignjevic FR
 2022 Brian McStay IE
 2024 Balazs Papp HU
 2021 Rosario Rizzuto IT
 2024 Sabrina Sabatini IT
 2020 Raffaella Santoro CH
 2021 Bruno Silva-Santos PT
 2024 Mariana G. Pinho PT
 2020 Robert Tampé DE
 2021 Boris Turk SI
 2021 Štěpánka Vaňáčová CZ

Young Investigator Committee

2021 Guillermina López-Bendito *ES Chair*
 2021 Alexander Aulehla DE
 2023 Urs Jenal CH
 2024 Gaëlle Legube FR
 2024 Jean-Christophe Marine BE
 2023 Giles Oldroyd UK
 2022 Stefan Raunser DE
 2021 Michael Sixt AT
 2023 Sara Wickström DE

Installation Grants Committee

2022 Karim Labib *UK Chair*
 2022 Melanie Blokesch CH
 2022 Andrew Carter UK
 2022 Karin de Visser NL
 2022 Carsten Janke FR
 2023 Andreas Ladurner DE
 2022 Giampietro Schiavo UK
 2022 Katja Sträßer DE
 2022 Miguel Torres ES
 2022 Dolf Weijers NL

Global Investigator Network Committee

2019 Cayetano González *ES Chair*
 2024 Rosa Cossart FR
 2022 Toni Gabaldón ES
 2022 Gillian M. Griffiths UK
 2024 Alwin Köhler AT
 2023 Ilaria Malanchi UK
 2024 Ruth Massey IE
 2024 Christoph Müller DE
 2023 Simona Radutoiu DK
 2023 Wim Vermeulen NL

Membership Committee

2020 Lori Passmore *UK Chair*
 2023 I. Sadaf Farooqi GB
 2022 Stephan Grill DE
 2022 Anja Groth DK
 2024 Birgitta Henriques Normark SE
 2021 Ben Lehner ES
 2024 Anna Obenauf AT
 2021 Jane Parker DE
 2018 David Ron UK
 2023 Pavel Tomancak DE
 2024 Henrique Veiga-Fernandes PT
 2023 Manuel Zimmer AT

Policy Advisory Board¹

2024 Canan Atilgan TR
 2024 Elias Barriga DE*
 2024 Monica Bettencourt-Dias PT
 2024 Paola Bovolente ES
 2024 Janusz Bujnicki PL
 2024 Sonja Lorenz DE*
 2024 Sean Morrison US
 2024 Lluís Montoliu ES

EMBO | EMBL Symposia Committee¹

2022 Fiona M. Watt *DE Chair*
 2019 Edith Heard *DE, EMBL Chair*
 2023 Gautam Dey *IT, EMBL**
 2024 Anja Groth DK
 2022 Kristina Haase *ES, EMBL**
 2021 Duncan Odom DE
 2023 Nicoletta Petridou *DE, EMBL**
 2022 Markus Ralser DE
 2022 Nicolas Tapon UK
 2022 Iva Tolic HR
 2022 Athanasios Typas *DE, EMBL*

Publications Advisory Board¹

2019 Blanche Schwappach *DE Chair*
 2018 Pedro Beltrao UK
 2021 Iain Cheeseman US*
 2019 Ulrich Dirnagl DE*
 2017 Kristian Helin UK
 2021 Louise Page US*
 2018 Maya Schuldiner IL
 2022 Laura Machesky *UK/US*

FEBS | EMBO Women in Science Committee¹

2022 Caroline Dean *UK Chair*
 2020 Anne Dejean FR
 2024 Susan Gasser CH
 2020 Bassem Hassam FR
 2024 Sara Linse SE*
 2020 Thomas Nyström SE
 2023 Karel Riha CZ
 2023 Inaki Ruiz-Trillo ES

Lab Sustainability Award Advisory Board¹

2024 David Baulcombe UK
 2024 Talia Caplan *UK**
 2024 André Estevez-Torres FR*
 2024 Karim Labib UK
 2024 Brendan Rouse *DE, EMBL**
 2024 Gabrielle Samuel *UK**
 2024 Christa Schleper AT
 2024 Gisou van der Goot CH

Science Journalism Fellowships Advisory Board¹

2024 Ulrika Björkstén *SE**
 2024 Michele Catanzaro *ES**
 2024 Renata Dacinger *SI**
 2024 Fiona Lethbridge *UK**
 2024 Volker Stollorz *DE**

Review Commons Advisory Board

David Baulcombe
 Stefano Bertozzi*
 Gautam Dey, *EMBL**
 Pierre Gönczy
 Ruth Lehmann
 Maria Leptin
 Ron Vale

Internal Auditor EMBL

Kai Kircher

External Auditors EMBC

Tribunal de Contas Portugal

EMBO Audit

KPMG

¹ Committee includes EMBO Members and external advisors (*)

The European Molecular Biology Conference (EMBC), an intergovernmental organization comprising 31 member states in 2024, is the funding body of EMBO. The EMBC was founded in 1969 to support the activities of EMBO. EMBC and EMBO share a common commitment to quality research and cooperation at the European level.

The EMBC President in 2024 is Leszek Kaczmarek (PL).

In 2024, the EMBC met in July and November.



Leszek Kaczmarek
EMBC President

EMBC Member States – *delegates and advisors*

Austria	Hemma Bauer – Federal Ministry of Education, Science and Research Christa Schleper – University of Vienna, Archea Biology and Ecogenomics Unit
Belgium	Maria-Helena Bosschaerts – Belgian Science Policy Office Laurent Ghys – Belgian Science Policy Office Alain Heynen – Belgian Science Policy Office Cédric Blanpain (Adv.) – Université Libre de Bruxelles (ULB) Savvas Savvides (Adv.) – VIB Center for Inflammation Research
Croatia	Lovorka Barać Lauc – Croatian Science Foundation Vesna Boraska Perica – Split University Medical School
Czech Republic	Jan Buriánek – Ministry of Education, Youth and Sports Zdena Palková – Charles University
Denmark	Mads Rugaard Christensen – Ministry of Higher Education and Science Christina Nellemann Sorensen – Ministry of Higher Education and Science Poul Nissen – Aarhus University
Estonia	Elin Org (Adv.) – University of Tartu Toivo Raim – Ministry of Education and Research Priit Tamm (Adv.) – Estonian Research Council Jaak Vilo – University of Tartu
Finland	Sirpa Nuotio – Academy of Finland, Biosciences, Health and Environment Research Olli Silvennoinen – University of Helsinki
France	Nacer Boubenna – Ministère de l'Enseignement Supérieur et de la Recherche, Direction Générale de la Recherche et de l'Innovation Elena Hoffert – Ministère de l'Education Nationale, de l'Enseignement Supérieur et de la Recherche
Germany	Barbara Ohnesorge – Federal Ministry of Education and Research Peter Becker – Ludwig-Maximilian University Andreas Ladurner – Ludwig-Maximilian University
Greece	Nektarios Tavernarakis – Foundation for Research and Technology-Hellas (FORTH) Eleftheria Zeggini – Helmholtz Zentrum München Panagiota Katsafana – Ministry for Development and Investments
Hungary	Gergely Boehm – Hungarian Academy of Sciences Ferenc Nagy – Hungarian Academy of Sciences
Iceland	Zophonías Oddur Jónsson – University of Iceland Eiríkur Steingrímsson – University of Iceland
Ireland	Maria Nash – Science Foundation Ireland Brendan O'Reilly – Department of Further and Higher Education, Research, Innovation and Science
Israel	Iris Eisenberg – Ministry of Innovation, Science and Technology Joel Sussman – Weizmann Institute of Science Barak Gatenyo – Ministry of Innovation, Science and Technology
Italy	Lucia Banci – University of Florence Alessandro Boero – Ministry of University and Research Riccardo Valenti (Adv.) – Ministry of Economy and Finance
Latvia	Uldis Berkis – Ministry of Education and Science of the Republic of Latvia Janis Klovins – Latvian Biomedical Research and Study Centre

Lithuania	Milda Jodinskiene – Research Council of Lithuania Virginijus Sikšnyš – Vilnius University
Luxembourg	Stephanie Schott – Ministère de l'Enseignement Supérieur et de la Recherche Bruno Rodrigues – Ministère de l'Enseignement Supérieur et de la Recherche
Malta	Melissa Formosa – University of Malta
Montenegro	Ivana Lagator – Ministry of Science and Technological Development Lidija Vukčević – Ministry of Science and Technological Development
Netherlands	Anna Akhmnova – Utrecht University Jennifa Dorleijn – Ministry of Education, Culture and Science Mirjam Lieshout-Vijverberg – Ministry of Education, Culture and Science
Norway	Line M. Grønning-Wang – The Research Council of Norway Inge Jonassen – University of Bergen
Poland	Leszek Kaczmarek – Nencki Institute of Experimental Biology of the Polish Academy of Science Kamila Kowalska – Ministry of Education and Science Agnieszka Mierzynska – Ministry of Education and Science
Portugal	Luisa Igreja – Ministry of Science, Technology and Higher Education Claudio Sunkel – Universidade do Porto
Slovak Republic	Marcel Sládok – Ministry of Education, Science, Research and Sport of the Slovak Republic Ján Turňa – Science Park of Comenius University in Bratislava
Slovenia	Tomaz Boh – Ministry of Education, Science and Sport Andrej Ograjenšek – Ministry of Education, Science and Sport Boris Turk – Josef Stegan Institute
Spain	Ignacio Baanante – Ministry of Science and Innovation M. Angela Nieto – Instituto de Neurociencias CSIC-UMH Inmaculada Figueroa – Ministry of Science and Innovation
Sweden	Suparna Sanyal (Adv.) – Uppsala University Maria Thuveson – The Swedish Research Council Helena Berglund – The Swedish Research Council
Switzerland	Doris Wohlfender-Bühler – State Secretariat for Education, Research and Innovation Susan Gasser – ISREC Kevin Reymond – State Secretariat for Education, Research and Innovation
Türkiye	Güliz Sütçü – TÜBİTAK Sule Nur Sarper – TÜBİTAK
United Kingdom	Mark Palmer – Medical Research Council, UKRI Tim Willis – Biotechnology and Biological Sciences Research Council, UKRI

EMBO/EMBC global partners

India	<i>Associate Member State agreement with EMBC/EMBO (executing agency: Department of Biotechnology, DBT)</i> Jyoti Logani – Department of Biotechnology (DBT)
Singapore	<i>Associate Member State agreement with EMBC/EMBO (executing agency: Agency for Science, Technology and Research, A*STAR)</i> Benjamin Toh – A*STAR
Taiwan	<i>Associate Membership agreement with EMBC/EMBO (executing agencies: National Science and Technology Council, NSTC/Academia Sinica)</i> Ching-Mei Tang – Academia Sinica, National Science and Technology Council (NSTC)
Chile	<i>Cooperation agreement with EMBC/EMBO (executing agency: National Agency for Research and Development, ANID)</i> Gonzalo Arenas – Ministry of Science, Technology, Knowledge and Innovation Andrea Cibotti Ortiz – National Agency for Research and Development (ANID)
Japan	<i>Japan – Memorandum of cooperation between EMBO and the Japan Agency for Science and Technology (JST)</i> Yuta Kawashima – Japan Science and Technology Agency (JST)

EMBC Officers 2024

President	
Leszek Kaczmarek	Poland
Vice Presidents	
Hemma Bauer	Austria
Virginijus Šikšnys	Lithuania
Secretary General	
Barbara Ohnesorge	Germany
Finance Committee <i>Chair</i>	
Claudio Sunkel	Portugal
Finance Committee Vice <i>Chair</i>	
Milda Jodinskienė	Lithuania

EMBC Strategic Working Party 2024

The Strategic Working Party considers topics of strategic relevance to the EMBC and provides advice.

Anna Akhmanova	Netherlands
Lucia Banci	Italy
Hemma Bauer	Austria
Elena Hoffert	France
Leszek Kaczmarek (<i>Chair</i>)	Poland
Angela Nieto	Spain
Barbara Ohnesorge	Germany
Mark Palmer	United Kingdom
Eiríkur Steingrímsson	Iceland
Boris Turk	Slovenia



EMBC Finance Committee

The Finance Committee advises the EMBC on all matters concerning the management of financial funds and on all audit tasks..

Permanent members	
France	
Germany	
Italy	
Spain	
United Kingdom	
Elected members (2022–2024)	
Israel	
Lithuania	
Norway	
Portugal	
Poland	
The Netherlands	
Türkiye	

Financial contributions

EMBC Member States budget 2024: Euro 29,900,001	
	% of total contributions

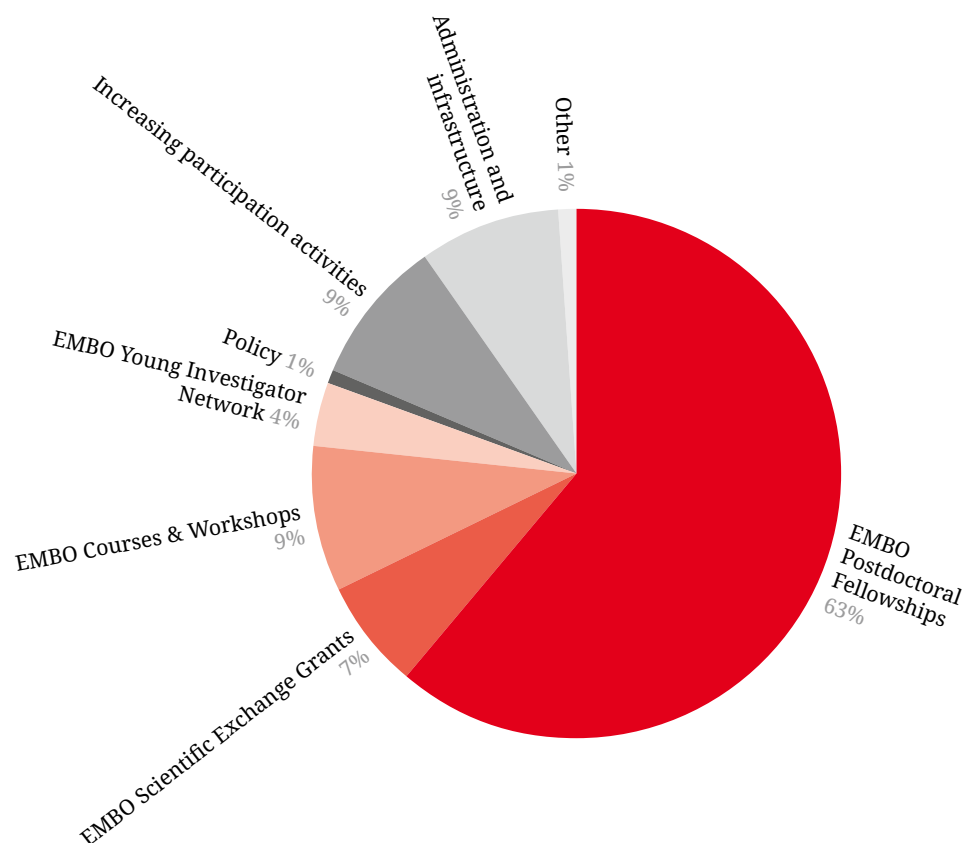
Austria	2.15
Belgium	2.60
Croatia	0.30
Czech Republic	1.10
Denmark	1.76
Estonia	0.15
Finland	1.27
France	13.45
Germany	20.08
Greece	0.98
Hungary	0.72
Iceland	0.13
Ireland	1.23
Israel	2.05
Italy	9.98
Latvia	0.10
Lithuania	0.28
Luxembourg	0.24
Malta	0.07
Montenegro	0.03
Netherlands	4.40
Norway	2.02
Poland	2.94
Portugal	1.08
Slovakia	0.51
Slovenia	0.25
Spain	7.01
Sweden	2.77
Switzerland	3.51
Türkiye	2.72
United Kingdom	14.09

EMBO/EMBC global partners budget 2024: Euro 3,919,552	
	% of total contributions

ANID of Chile	3.89
India	79.83
Singapore	8.65
NTSC of Taiwan	2.55
JST of Japan	5.08

Breakdown of budget for EMBO programmes and schemes in 2024

Rounded to full percent.





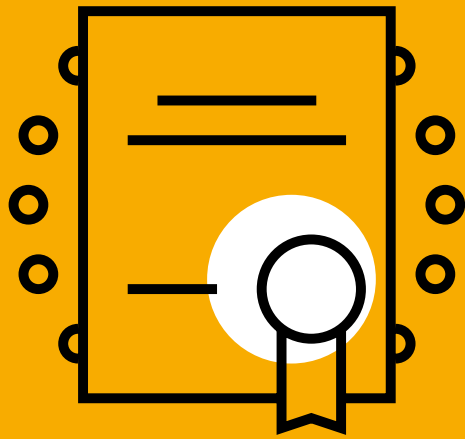
Multicolor barcoding of zebrafish myofibers
Original image courtesy of Uday Kumar and EMBO Global Investigator Chen-Hui Chen/ICOB, Academia Sinica

ACTIVITY REPORT 2024

In 2024, EMBO continued to fulfil its mission of enabling excellent science by delivering programmes, schemes, and initiatives for the benefit of the scientific communities in the EMBC Members States and beyond.

In the following pages, the broad range of EMBO activities and achievements for 2024 are presented according to five areas of work and impact:

1. *Recognize and catalyze excellence:*
Membership and awards
2. *Grow and connect talents:*
Programmes and schemes
3. *Accelerate knowledge-sharing:*
Journals, courses and training
4. *Innovate in the research ecosystem:*
Policy and innovation
5. *Maintain an effective organization fit for purpose:*
The organization



MEMBERSHIP AND AWARDS

Membership and awards

Recognize and catalyze excellence

Since its inception in 1964, EMBO has been federating a community of eminent scientists, recognizing their significant contributions, and transferring their wealth of knowledge and expertise to the next generation of science leaders.

Through the annual election of EMBO Members, new eminent scientists join the EMBO community and engage in the execution of EMBO activities by serving on Council, Committees and Advisory Boards.

In this way, EMBO Members collectively influence the global research ecosystem, promoting scientific excellence for the benefit of all.

Through its awards, EMBO celebrates remarkable achievements and initiatives for the advancement of science and the research ecosystem.

Membership

EMBO is a membership organization of more than 2,100 eminent scientists residing in EMBC Member States (EMBO Members) or outside (EMBO Associate Members). Through their active engagement, ranging from serving on EMBO Council, Committees and Advisory Boards, EMBO Press and policy-related work, members contribute to the execution of EMBO activities, and strengthen the ties with research communities across Europe and all over the world.

EMBO membership is a lifelong recognition, and every year new scientists are elected and welcomed to the community of EMBO Members, which provides a platform to catalyze excellence and facilitate networking across regions and disciplines.

In 2024, EMBO celebrated its 60th anniversary with a special election, increasing the election of new members to 120. The 100 new EMBO Members and 20 Associate Members not only bring scientific excellence but also enrich the community with regard to research areas, geographical spread and noteworthy individual contributions.

They reside in 37 different countries and territories and cover a wide spectrum of topics in the life sciences, including infectious disease epidemiology, analysing ocean nutrient cycles, modelling cellular signalling networks at scale, understanding the robustness of plants in extreme environments, and deciphering the links between brain biology and emotions.

EMBO welcomed the new members at a joint meeting of the EMBO communities held in Heidelberg, Germany, in October. The meeting offered networking opportunities and exposed the participants to a wide range of new developments spanning life sciences fields.

100

Total number of
new Members elected

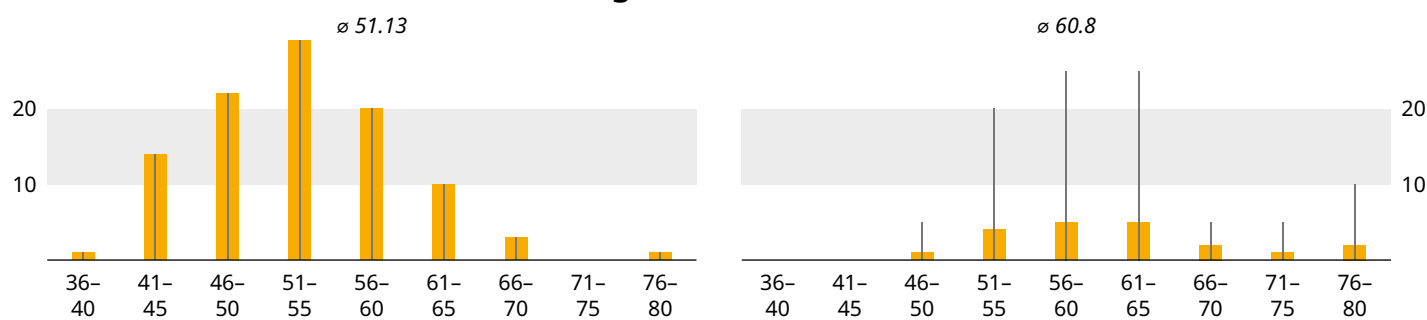
20

Total number of
new Associate Members elected

Gender distribution

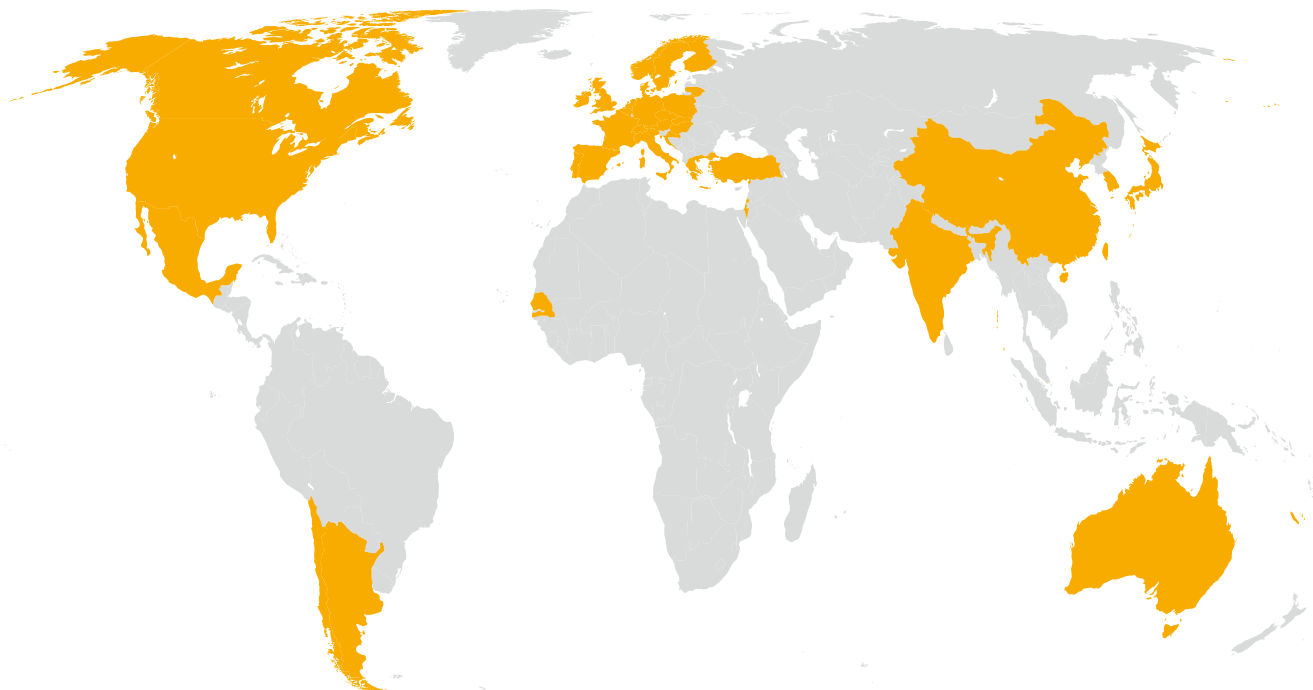


Age distribution



■ total | ■ percentage

Geographical reach¹



¹ Map layout based on United Nations map. Overseas territories and similar regions without residing EMBO Members or Associate Members have not been highlighted.

EMBO Members elected in 2024

Name ▼	Institute	Research interest
David J. Adams	Wellcome Sanger Institute, Cambridge United Kingdom	Genetics and functional genomics of cancer
Asaph Aharoni	Weizmann Institute of Science, Rehovot Israel	Biosynthesis and function of plant metabolites
Ariel Amir	Weizmann Institute of Science, Rehovot Israel	Biophysical modeling of microbial growth
Pavel Baranov	University College, Cork Ireland	Diversity of genetic decoding and mRNA translation
Wendy S. Barclay	Imperial College, London United Kingdom	Respiratory viruses with pandemic potential
Allison J. Bardin	Institut Curie, Paris France	Stem cell regulation and tissue homeostasis
Eduard Batlle	Institute for Research in Biomedicine, Barcelona Spain	Leading advances in colorectal cancer research
Oded Béjà	Technion, Haifa Israel	Environmental genomics of marine microbes
Pedro Beltrao	ETH Zurich Switzerland	Cellular consequences of genetic variation
Oliver Billker	Umeå University Sweden	Plasmodium development and mosquito transmission
Valérie Borde	Institut Curie, Paris France	Yeast meiotic and somatic homologous recombination
Joshua M. Brickman	University, Copenhagen Denmark	Transcriptional variation, cell fate & plasticity
Silvia Bulgheresi	University, Vienna Austria	Environmental cell biology
Megan R. Carey	Champalimaud Centre for the Unknown, Lisbon Portugal	Cerebellar control of learned & coordinated movement
Susana M. Coelho	MPI für Entwicklungsbiologie, Tübingen Germany	Algal development and evolution
Lucia Colombo	Università degli Studi di Milano Bicocca, Milano Italy	Regulatory networks controlling plant reproduction
Alessandro Costa	Francis Crick Institute, London United Kingdom	Mechanisms of eukaryotic chromosome replication
Vincenzo Costanzo	Istituto FIRC di Oncologia Molecolare, Milano Italy	DNA replication and repair in vertebrates
László Csanády	Semmelweis University, Budapest Hungary	CFTR and TRPM2 ion channel structure and function
George Davey Smith	University of Bristol United Kingdom	Epidemiology, causality & Mendelian randomization
Christos Delidakis	IMBB - FORTH, Heraklion Greece	Stem cell biology in Drosophila
Ádám Dénes	HUN-REN Research Centre for Natural Sciences, Budapest Hungary	Inflammation and glia in brain disorders
Stefan Diez	Technische Universität, Dresden Germany	Molecular transport in cell biology and nanotechnology
Guillaume Duménil	Institut Pasteur, Paris France	Host-pathogen interactions within blood vessels
Myrielle Dupont-Rouzeyrol	Institut Pasteur de Nouvelle-Calédonie, Nouméa New Caledonia	Virus-vector-host interactions
Arnaud Echard	Institut Pasteur, Paris France	Molecular mechanisms of cell division
Maria Falkenberg	Göteborg University Sweden	Human mitochondrial DNA maintenance
Elif Nur Firat-Karalar	Koc University, Istanbul Türkiye	Centrosome/cilium complex biogenesis and function
Uri Frank	National University of Ireland, Galway Ireland	Stem cells and regeneration in cnidarians
Jonathan Gershenson	MPI für Chemische Ökologie, Jena Germany	Chemical mediation of plant-herbivore interactions
René Geurts	Wageningen University Netherlands	Engaging plants with nitrogen-fixing rhizobia
Angela Giangrande	Institute of Genetics and Molecular and Cellular Biology (IGBMC), Illkirch France	Glia and macrophages in immunity and beyond
Sebastian Glatt	Jagiellonian University, Krakow Poland	tRNAs and gene expression control
Nadine Gogolla	Max Planck Institute of Psychiatry, München Germany	Neuronal mechanisms of emotion
Nick Goldman	European Bioinformatics Institute, Hinxton, Cambridge United Kingdom	Computational molecular evolution and genomics

Name ▼	Institute	Research interest
Inbal Goshen	Hebrew University, Jerusalem Israel	Astrocytes and neurons in high brain function
Nir S. Gov	Weizmann Institute of Science, Rehovot Israel	Theoretical models for cell shapes and migration
Ita Gruic-Sovulj	University, Zagreb Croatia	Mechanisms of aminoacyl-tRNA synthesis in bacteria
Ilona C. Grunwald Kadow	Universität Bonn Germany	Neural circuits of state-dependent behavior
Georg Halder	KU Leuven, Leuven Belgium	Hippo signaling in cancer and development
Olivier Hamant	École Normale Supérieure, Lyon France	Functions of mechanical signals in plants
Ricardo Henriques	Instituto Gulbenkian de Ciência, Oeiras Portugal	Cellular mapping through nanoscale imaging and AI
Martin W. Hetzer	Institute of Science and Technology Austria (IST), Klosterneuburg Austria	Protein homeostasis and aging
Susan P. Holmes	Stanford University United States	Statistics for multidomain and graph data
Martin Howard	John Innes Centre, Norwich United Kingdom	Mathematical modelling in molecular biology
Juha T. Huiskonen	Helsinki Institute of Life Science, Helsinki Finland	Structures of endogenous macromolecular complexes
Denis Jabaudon	University of Geneva Switzerland	Brain development and plasticity
Martin Jínek	University of Zurich Switzerland	RNA biology and genome editing
Marko Kaksonen	University of Geneva Switzerland	Mechanisms and evolution of membrane trafficking
Ewelina Knapska	Nencki Institute, Warsaw Poland	Circuit-level neuroplasticity in social behavior
Lumír Krejčí	Masaryk University, Brno Czech Republic	DNA recombination, replication and genome stability
Nick Lane	University of London, London United Kingdom	How energy flow shapes life's origin and evolution
Claudia Langenberg	Queen Mary, University of London United Kingdom	Genetic regulation of human metabolism
Zdeněk Lánský	Prague, Institute of Biotechnology Czech Republic	Mechanisms of intracellular transport
Tuuli Lappalainen	Royal Institute of Technology, Stockholm Sweden	Functional variation in the human genome
Melissa H. Little	University, Copenhagen Denmark	Kidney organoids from human pluripotent stem cells
Ingrid Lohmann	Universität Heidelberg Germany	Hox control of development in Drosophila
Sally Lowell	University of Edinburgh United Kingdom	Cellular decision-making
Wenbo Ma	The Sainsbury Laboratory, Norwich United Kingdom	Molecular mechanisms of microbial pathogenesis
Ivan Matić	Max Planck Institute for Biology of Ageing, Cologne Germany	Proteomics and ADP-ribosylation signalling
Zoltán Molnár	University of Oxford United Kingdom	Cerebral cortex development and evolution
Anna Moroni	Università degli Studi, Milano Italy	Ion channel biophysics
László G. Nagy	HUN-REN Biological Research Centre, Szeged Hungary	Fungal evolutionary genomics
Kathy K. Niakan	University of Cambridge United Kingdom	Mechanisms of early human embryo development
Mats Nilsson	Science for Life Laboratory, Solna Sweden	Spatially resolved transcriptomics
Ruth Nussinov	National Cancer Institute (NCI), Frederick United States	Functional mechanisms on the conformational level
Snezhana Oliferenko	King's College, London United Kingdom	Evolutionary cell biology
Rui Oliveira	Instituto Gulbenkian de Ciência, Oeiras Portugal	Evolutionary and comparative social neuroscience
Isabel M. Palacios	Queen Mary, University of London United Kingdom	Tissue biomechanics in flies and human organoids
Philippe Pasero	CNRS Institute of Human Genetics, Montpellier France	Cellular responses to replication stress

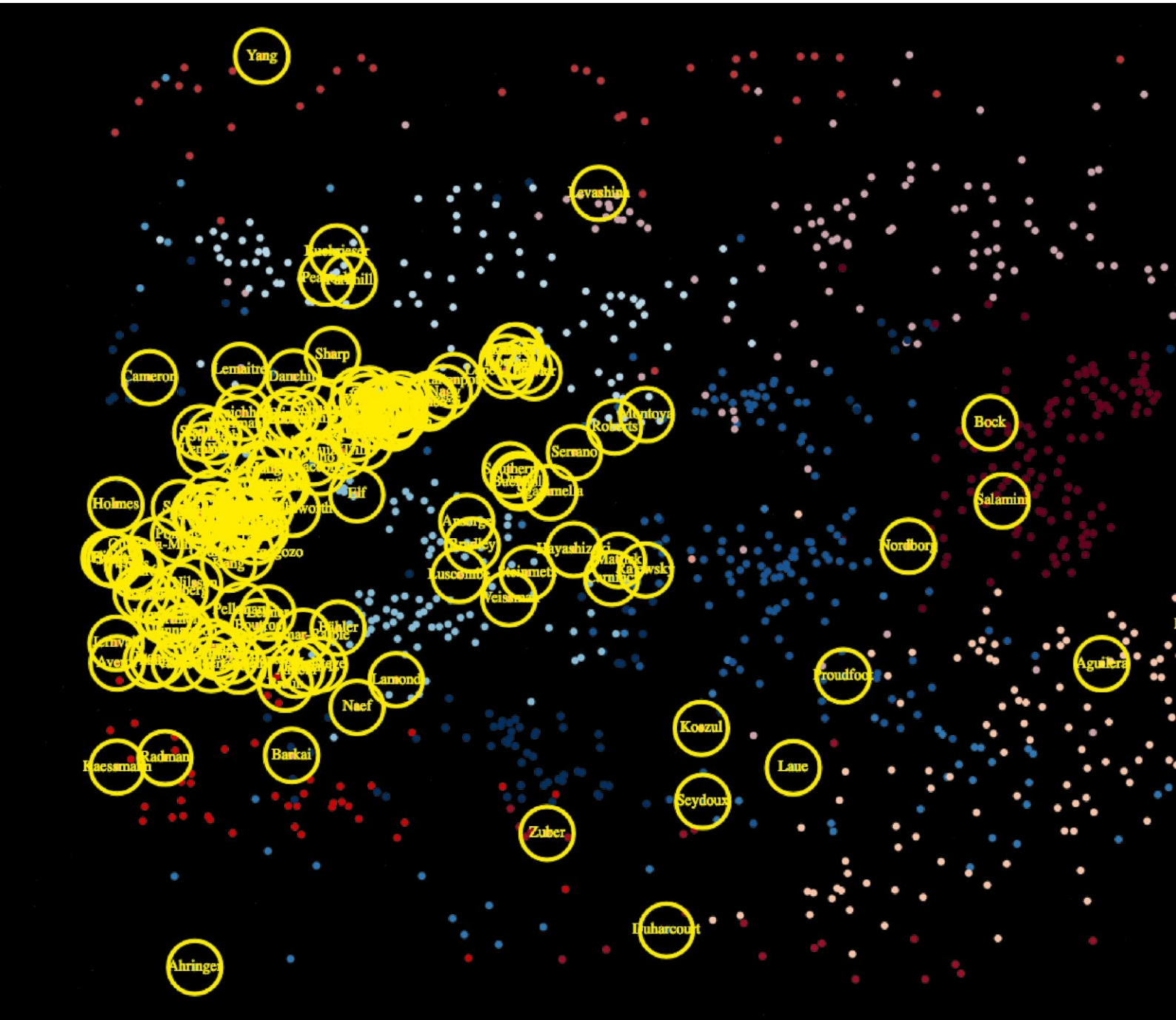
Name ▼	Institute	Research interest
Silvia Pastoreková	Slovak Academy of Sciences, Bratislava Slovakia	Hypoxia and acidosis in the tumour microenvironment
Nenad Pavin	University, Zagreb Croatia	Mechanobiology of living cells
Arturas Petronis	Vilnius University Lithuania	Chrono-epigenetics of disease, aging and development
Corné M.J. Pieterse	Utrecht University Netherlands	The root microbiome and plant immunity
Benjamin Podbilewicz	Technion, Haifa Israel	Cell fusion and tissue sculpting
Gabriele Procaccini	Stazione Zoologica Anton Dohrn, Naples Italy	Molecular and evolutionary ecology of seagrasses
Britta Qualmann	Friedrich-Schiller-Universität, Jena Germany	Membrane shaping and actin dynamics
Emma L. Rawlins	University of Cambridge United Kingdom	Developmental and stem cell biology in the lung
Jochen C. Rink	MPI für Multidisziplinäre Naturwissenschaften, Göttingen Germany	Planarian regeneration: mechanisms and evolution
Asya Rolls	Technion, Haifa Israel	Brain-immune communication
Owen J. Sansom	Cancer Research UK Scotland Institute, Glasgow United Kingdom	Colorectal cancer and Wnt signalling
Mikhail M. Savitski	EMBL, Heidelberg Germany	Post-translational regulation
Paola Scaffidi	European Institute of Oncology (IEO), Milano Italy	Epigenetic mechanisms of cancer evolution
Mónica M. Sousa	Instituto de Investigação e Inovação em Saúde (i3S), Porto Portugal	Axon growth and regeneration
Maria Grazia Spillantini	University of Cambridge United Kingdom	Tau and synuclein aggregates in neurodegeneration
Tanja Stadler	ETH Zurich, Basel Switzerland	Computational evolution
Ulrich Technau	University, Vienna Austria	Tracing key bilaterian traits in cnidarians
Aleksandra Trifunovic	University of Cologne Germany	Regulation of mitochondrial stress response
Leoš Shivaya Valášek	Academy of Sciences of the Czech Republic, Prague Czech Republic	Translation control and tRNA biology
Jacco van Rheenen	Netherlands Cancer Institute, Amsterdam Netherlands	Intravital microscopy of cancer
Teva Vernoux	École Normale Supérieure, Lyon France	Plant hormones and shoot development dynamics
John Vontas	IMBB - FORTH, Heraklion Greece	Molecular genetics of insecticide resistance
Steven West	University of Exeter United Kingdom	Transcriptional termination of RNA polymerase II
Jonathan R. Whitlock	Norwegian University of Science & Technology (NTNU), Trondheim Norway	Neural representation of posture and actions
Joachim Wittbrodt	Centre for Organismal Studies (COS), Heidelberg Germany	Genetics of individuality
Emre Yaksi	Norwegian University of Science & Technology (NTNU), Trondheim Norway	Sensory computations in the vertebrate forebrain
Karina Yaniv	Weizmann Institute of Science, Rehovot Israel	Vascular formation in development, regeneration and disease
Leonie S. Young	Royal College of Surgeons in Ireland, Dublin Ireland	Epi-alterations in breast cancer brain metastasis
Peijun Zhang	Wellcome Centre for Human Genetics, Oxford United Kingdom	Structural biology of host-pathogen interactions
Alena Ziková	Institute of Parasitology, Biology Centre Czech Academy of Science Czech Republic	Cellular signaling and metabolism in trypanosomes

EMBO Associate Members elected in 2024

Name ▼	Institute	Research interest
Karen Adelman	Harvard Medical School, Boston United States	Control of coding and non-coding RNA biogenesis
Dominique Bergmann	University, Stanford United States	Pattern, polarity and flexibility in plant tissues
Helen M. Blau	Stanford University School of Medicine United States	Role of gerozymes in muscle aging
Miguel L. Concha	Universidad de Chile, Santiago Chile	Cell and tissue morphogenesis in embryonic development
Rodrigo A. Gutiérrez	Pontifical Catholic University of Chile, Santiago de Chile Chile	Plant systems biology of environmental responses
Luis Herrera-Estrella	Center for Research and Advanced Studies, Irapuato Mexico	Functional genomics of abiotic stress in plants
Oliver Hobert	Columbia University, New York United States	Development and plasticity of the nervous system
Erika L.F. Holzbaur	University of Pennsylvania, Philadelphia United States	Organelle dynamics and quality control in neurons
Gou Young Koh	Institute for Basic Science, Daejeon Korea, Republic of	Meningeal lymphatics for CSF drainage
Rong Li	National University of Singapore Singapore	Cell dynamics and mechanics in aging and disease
James C. Liao	Academia Sinica, Taipei Taiwan	New-to-nature C1 metabolism in microbes and plants
Tak W. Mak	University Health Network (UHN), Toronto Canada	Molecular biology of cancer and the immune system
Moustapha Mbow	Cheikh Anta Diop University, Dakar Sénégal	Geographical differences of the immune system
Hozumi Motohashi	Tohoku University, Sendai Japan	Redox metabolism and gene expression regulation
Zihe Rao	Tsinghua University, Beijing China	Structure of pathogen-associated protein machinery
Aviv Regev	Genentech, South San Francisco United States	Cell and tissue circuits and atlases
Shubha Tole	Tata Institute of Fundamental Research, Mumbai India	Cell fate specification in the developing brain
Pablo Wappner	Leloir Institute Foundation, Buenos Aires Argentina	Autophagy and vesicle traffic in fly development
Zhenbiao Yang	Shenzhen Institute of Advanced Technology, Shenzhen China	Plant signaling: from cell to synthetic biology
Alpha S. Yap	The University of Queensland, Brisbane Australia	Epithelial mechanobiology and homeostasis

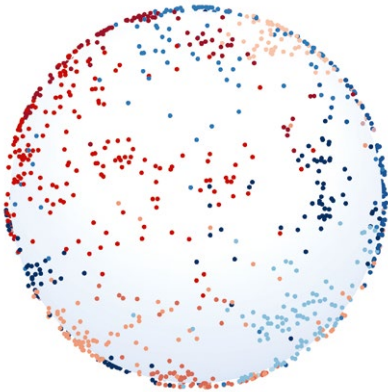
Science Map – mapping the research landscape

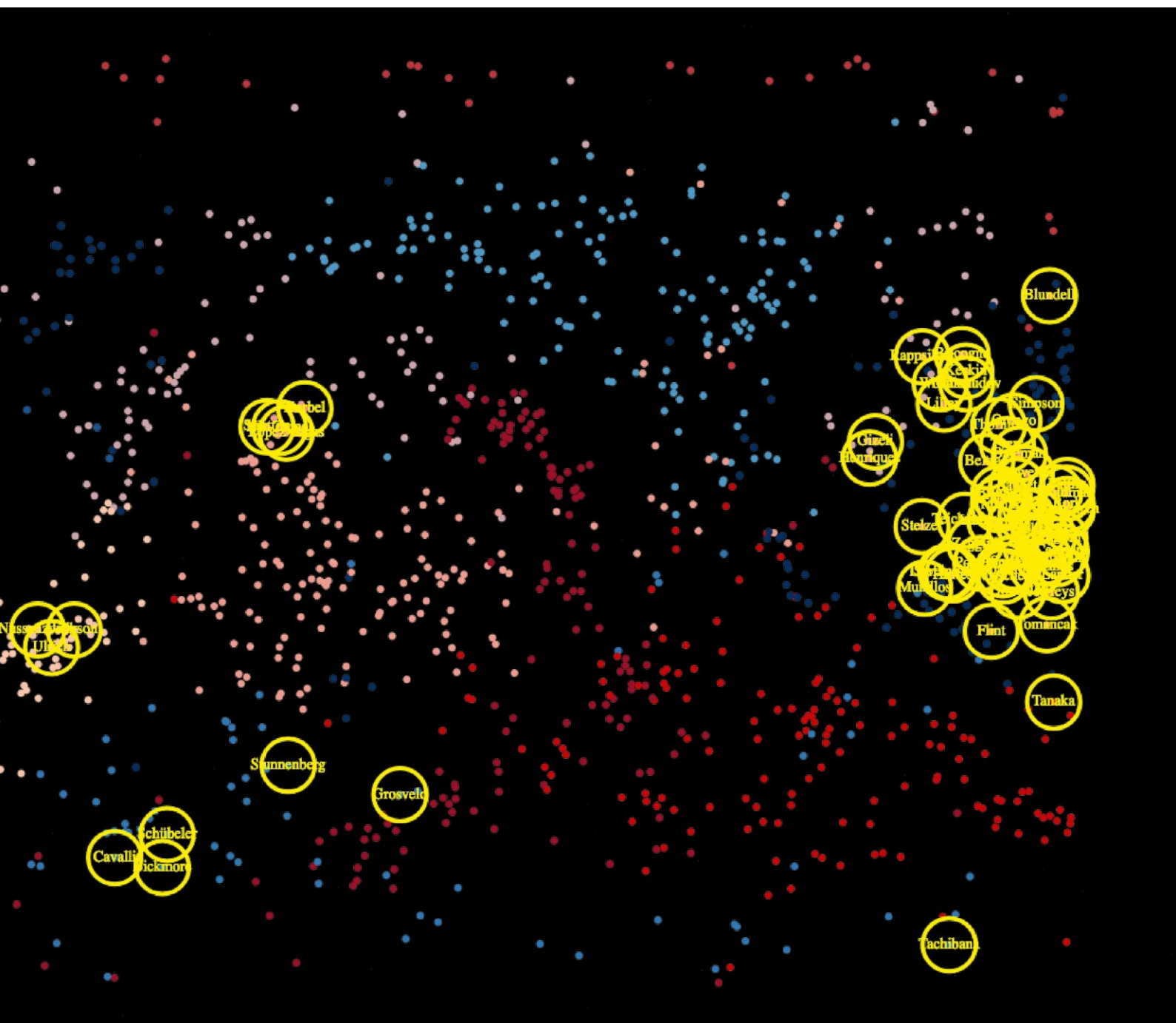
An experimental visualization of the expertise of EMBO Members



In 2024, a collaboration between the Membership and Open Science Implementation teams led to a preliminary analysis and visualization of the EMBO Members' expertise in relation to the global research landscape.

In these views of the EMBO Science Map, each EMBO Member is represented by a dot. Members with similar expertise are clustered together as indicated by the colors.





Above: Two-dimensional projection of the keyword "genome". Yellow circled names indicate linked EMBO Members.
Left: Spherical, three-dimensional projection of the same keyword.

Test the pilot web application:
sciencemap.embo.org

EMBO Gold Medal

The EMBO Gold Medal is awarded annually to young scientists for outstanding contributions to the life sciences in Europe. Young independent group leaders play a major role in building a strong research environment. The EMBO Gold Medal acknowledges and highlights remarkable achievements of this group. The awardee receives a medal and a bursary of 10,000 euros.

Elvan Böke is the EMBO Gold Medalist 2024. She is a group leader at the Centre for Genomic Regulation in Barcelona, Spain, and was recognized for her pioneering research on physiological mechanisms that enable oocytes to stay healthy over decades of dormancy.

Böke was an undergraduate student at Middle East Technical University in Ankara, Türkiye, and a graduate student at the Cancer Research UK Manchester Institute, before becoming a postdoctoral researcher at the Department of Systems Biology, Harvard Medical School, Boston, US. Since 2017, she has been leading a group in the quantitative cell biology programme at the Centre for Genomic Regulation.

Böke was awarded the EMBO Gold Medal and gave an award lecture at Cell Bio 2024, the ASCB | EMBO meeting that took place in San Diego, USA, from 14 to 18 December 2024.



FEBS | EMBO Women in Science Award

The FEBS | EMBO Women in Science Award is a joint initiative of the Federation of European Biochemical Societies (FEBS) and EMBO. It recognizes and highlights major contributions to life sciences research by female scientists working in Europe. The awardee receives a prize of 10,000 euros as well as a bronze statuette and gives a plenary lecture at the FEBS Congress.

Anne Ephrussi, emerita of EMBL Heidelberg, Germany, is the FEBS | EMBO Women in Science Awardee 2024. She received the award for elucidating mechanisms of mRNA transport from the site of transcription to specific locations within polarized cells and the regulation of translation. She was also honoured for excelling in mentoring young scientists as well as overseeing scientific training, conferences, education and public engagement.

Ephrussi has an AB degree from Harvard University, US (1979), and a PhD degree (1985), which she conducted at the Massachusetts Institute of Technology (MIT). She carried out postdoctoral research at Harvard University and then joined the Whitehead Institute, US, and MIT (1989-1992). Ephrussi moved to EMBL Heidelberg in 1992 to set up her own research group. She was director of the EMBL International Centre for Advanced Training (2005-2023) and head of the EMBL Developmental Biology Unit (2007-2021).



© EMBL Photolab/Marietta Schupp



It is a huge honour and most humbling to receive the FEBS | EMBO Women in Science Award. This recognition is truly due to the numerous bright scientists—lab members and colleagues—with whom I have had the great fortune to work, each with their own ideas and skills, their generous and open minds.

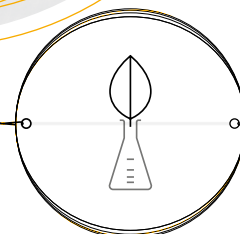


EMBO Lab Sustainability Award

The EMBO Lab Sustainability Award was introduced in 2024 to recognize new and significant contributions to the development of sustainable wet and dry labs with a focus on their environmental impact. The awardee presents their initiative or project at scientific events, and the project is supported with a grant of 10,000 euros.

Martin Farley, associate director of Environmental Sustainability Programmes at UK Research and Innovation (UKRI), was honoured with the EMBO Lab Sustainability Award 2024. He received it for his pioneering work in driving lab sustainability across the sector, including developing tools to promote and incentivize sustainability in laboratories. Farley founded the Laboratory Efficiency Assessment Framework (LEAF) at University College London (UCL), UK. LEAF provides standardized guidelines to enhance efficiency and sustainability.

Throughout his career, Farley has led initiatives that focus on identifying actions that can reduce the environmental impact of research, and on incentivizing organizations and teams to adopt them. He developed criteria that link sustainable research practices to improved scientific outcomes, including reproducibility and Open Access, and contributed substantially to the broader international movement toward sustainable science. At UKRI, Farley takes a broad approach to advancing sustainability in research, building on his previous work at the University of Edinburgh, King's College London, and UCL.



Winning the EMBO Lab Sustainability Award is an amazing feeling and a fantastic honour. I'm thrilled to see how the landscape has changed since I started working in sustainable science more than a decade ago. The EMBO award recognizes the work we and others have been doing to improve the sustainability of science across Europe and provides a great platform for us to do more in future.





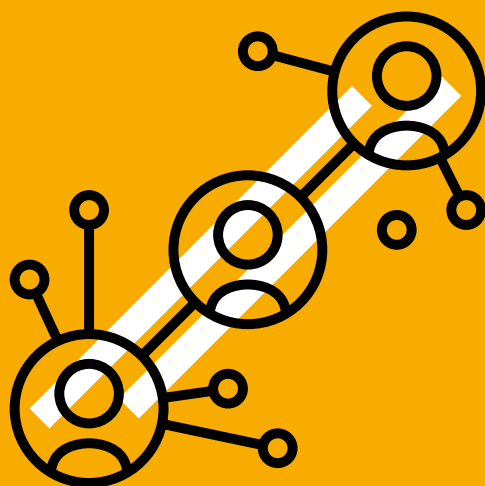
Anne Ephrussi (*right*) at the “Development and Morphogenesis: Symposium in honour of Maria Leptin” in Heidelberg in July



2024 EMBO Gold Medalist Elvan Böke

Martin Farley speaking during the “Meeting of the EMBO communities” in Heidelberg in October





PROGRAMMES AND SCHEMES

Programmes and schemes

Grow and connect talents

One of the core missions of EMBO is to support and connect outstanding talents, nurturing the next generation of life scientists in Europe and beyond. Through well-established programmes and pioneering initiatives, EMBO enables life scientists to unlock their full potential and maximize their impact on the scientific community at large.

Every year, thanks to the EMBO Programmes and schemes, scientists from every career stage benefit from financial support to develop their research, access high-quality lectures and unique training, and become part of networks of excellence at European and global level.

Postdoctoral Fellowships

The EMBO Postdoctoral Fellowships are awarded to highly qualified early career scientists for postdoctoral training of up to two years. The fellowships allow recipients from EMBC Member States to carry out a research project in a laboratory anywhere in the world. The fellowships are also open to applicants from outside EMBC Member States for postdoctoral training in an EMBC Member State. Applicants moving to and from EMBO/EMBC global partners (Chile, India, Singapore, Taiwan) are also eligible.

Evaluation and selection of applicants are carried out by the Fellowship Committee. During the selection process the host laboratories and institutes are evaluated in addition to the scientific qualification of the applicants to ensure that awardees will benefit from the best training available.

In 2024, there were 22 members of the Fellowship Committee, with 11 women (50%) and 17 countries represented.

The Fellowship Programme received 1,350 applications, and 145 fellowships were awarded (11% success rate). 50% of the 2024 awardees are females, 49% are males, and 1% chose not to disclose their gender.

Awarded EMBO Fellows going to EMBC Member States receive an employment contract that is issued by the host institution to the awardee and EMBO Fellows going outside EMBC Member States receive a stipend. In addition to the two-year fellowship, EMBO Fellows have the opportunity to attend EMBO Lab Leadership and Scientific Skills courses, and take part in mentorship webinars as well as the annual EMBO Fellows' Meeting in Heidelberg.

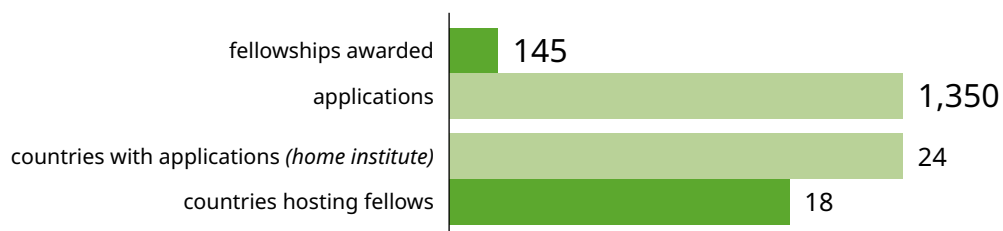
To facilitate connections and knowledge exchange among current and former EMBO Fellows, in 2024 the Fellowship Office established a networking platform. The platform has been highly successful as a networking tool and information channel between the EMBO Fellows community and the Fellowship Office.



© Andreas Henn for EMBO

145

Total number of
new Fellows



Gender distribution



EMBO Fellows during the poster session of the Meeting of the EMBO communities in Heidelberg, Germany

Find additional data at:
embo.org/about-embo/embo-facts-figures

Direct link: embo.org/documents/facts_figures/EMBO_annual_report_2024-Postdoctoral_fellowships.pdf



Scientific Exchange Grants

The EMBO Scientific Exchange Grants have been a highly successful tool to incentivize collaborations between laboratories within EMBC Member States and EMBO/EMBC global partners (Chile, India, Singapore, Taiwan). By financially supporting short-term research visits of up to three months, these grants allow scientists at all career stages to gain access to scientific expertise, technologies or model systems not available in their home laboratories.

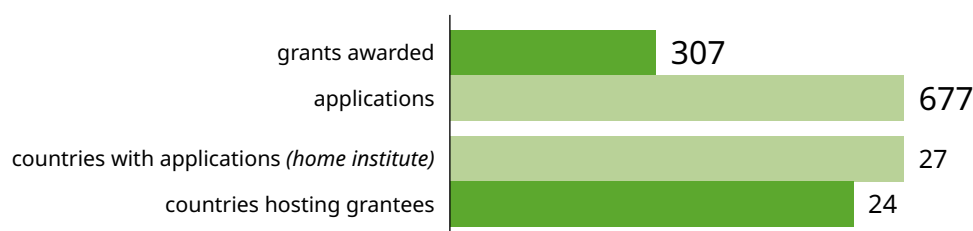
Evaluation of applications is carried out by the Scientific Exchange Grants Advisory Board composed of former EMBO Postdoctoral Fellows who are now leading their own research laboratories.

In 2024, the Scientific Exchange Grants Advisory Board consisted of 33 members, of which 17 are women (52%), from 15 countries.

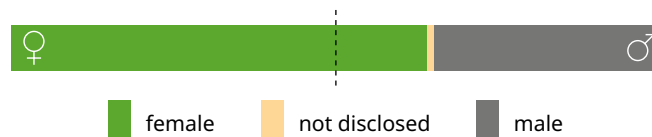
The Scientific Exchange Grants have generally been in high demand, registering a steady increase in the number of applications over the recent years. In 2024, the scheme received 677 applications and awarded 307 grants (45% success rate). Of the 2024 awardees, 64% are females, 35% are males, and 1% chose not to disclose their gender.

In 2024, the fellowship office carried out a survey of 2022 Scientific Exchange Grantees to gain insight into the value of the scheme and to understand if it fulfilled its key objective of promoting scientific exchange across EMBC Member States and EMBO/EMBC global partners.

Of 370 awardees, 197 (57%) responded to the survey. The responses showed that the grants promote collaborations, knowledge transfer, and joint publications, and have a positive impact on the awardees' careers.



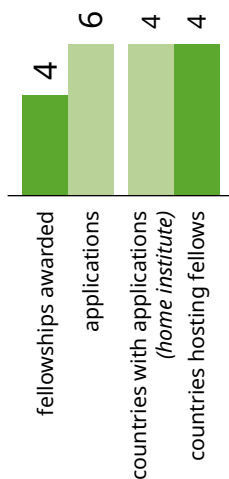
Gender distribution



Find additional data at:
embo.org/about-embo/embo-facts-figures

Direct link: embo.org/documents/facts_figures/EMBO_annual_report_2024-SEG_NVF_CFF_ACG.pdf

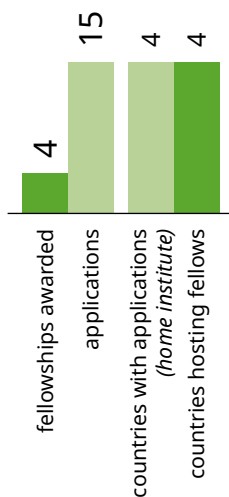
Core Facility Fellowships



In 2020 EMBO launched the Core Facility Fellowships to support training of up to a month for core facility staff, including scientists and technicians, in specific techniques used in core research facilities that provide services to research institutions or universities. The scheme was not intended for exchanges between individual research laboratories or development of joint research projects as these are covered by Scientific Exchange Grants.

In 2024, six applications were received, of which four were funded (67% success rate).

New Venture Fellowships



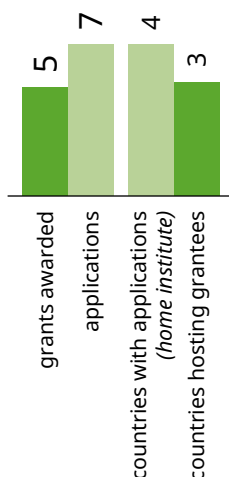
The EMBO New Venture Fellowships were launched in March 2021 to support early career scientists who want to enter a new field or bring a new direction to their research efforts. These fellowships were financed by the Memorial Fund dedicated to the memory of EMBO Member Suzanne Eaton in honour of her multi-disciplinary research career. Fellows could spend up to 90 days with a host group, working on joint projects and generating preliminary data to help transform their research trajectory.

In 2021, the EMBO Council and EMBC delegations supported continuation of the scheme until December 2024.

In 2024, 15 applications were received, of which four were awarded (27% success rate).

Given the low uptake of the schemes, in 2024 it was decided that the Core Facility Fellowships and the New Venture Fellowships would be integrated into the framework of the Scientific Exchange Grants, as of 2025.

Advanced Collaboration Grants



In December 2021, EMBO added a new type of short-term grant (EMBO Advanced Collaboration Grant) financed by the Increasing Participation Initiative, which was terminated by the end of 2024. The goal of EMBO Advanced Collaboration Grants was to support group leaders in participating countries to engage in international collaborations and strengthen their laboratories' research efforts. Optionally, this award came with a Scientific Consolidation Subsidy providing funding for an additional member of the home laboratory to work in the host group for up to three months (90 days) to help consolidate the collaboration.

In 2024, seven applications were received of which five were awarded (71% success rate).

Young Investigator Network

In its mission to support, enable and connect talents, EMBO offers a rich portfolio of opportunities dedicated to group leaders based in EMBC Member States and in countries and regions that are covered by a formal agreement. All group leaders participating in these programmes and schemes become part of the EMBO Young Investigators Network.

The key programmes and schemes under the EMBO Young Investigators Network are:

- The **EMBO Young Investigator Programme** supports some of the best young group leaders who are within the first four years of having established their first independent laboratory in Europe, or in countries and regions that are covered by a formal agreement. In 2024, eligibility applied to group leaders based in Chile, India, Singapore, Taiwan. In Japan, group leaders funded by certain JST programmes were eligible. Applicants must already have published a last author paper from their lab.
- The **EMBO Installation Grants** support scientists establishing their first independent lab in participating member states. In 2024, grants were available to scientists going to Croatia, Czechia, Estonia, Greece, Hungary, Lithuania, Luxembourg, Montenegro, Poland, Portugal and Türkiye.
- The **EMBO Global Investigator Network** supports scientists who have established their first independent laboratory within the last six years in countries and regions that are covered by a formal agreement. In 2024, scientists from Chile, India, Singapore and Taiwan were eligible. Applicants must already have published a last author paper from their lab.

In 2024 the Young Investigator Network counted more than 700 new and former members, distributed as shown in the map to the right.

Global Investigator Network meeting in Singapore



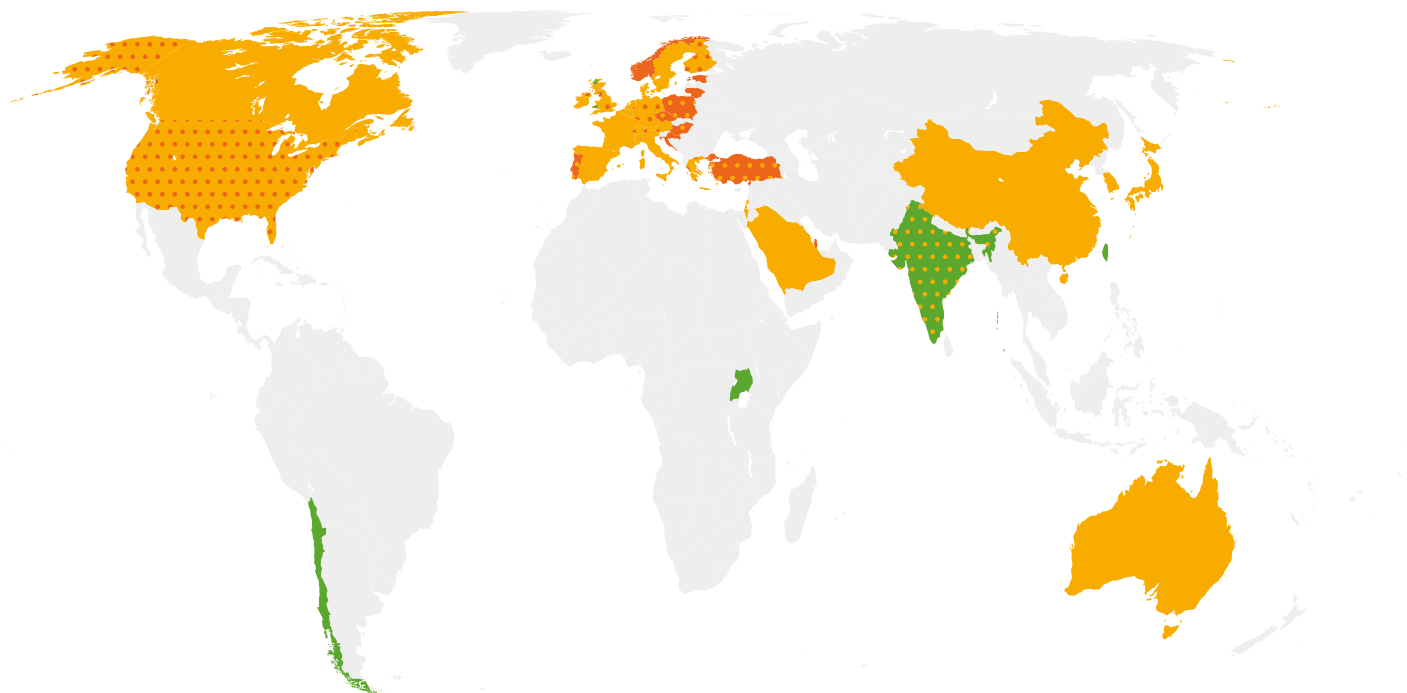
Exchanges between members of various EMBO communities during the meeting in Heidelberg

48

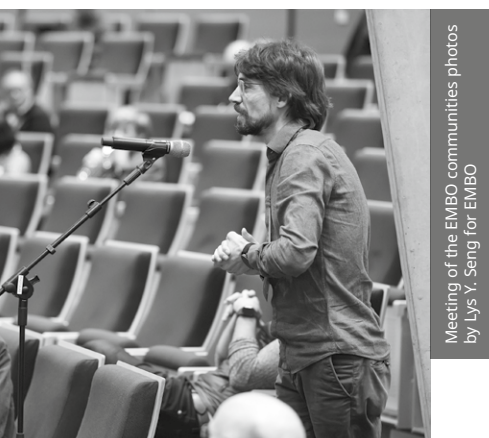
Total number of
new EMBO Young Investigator Network members

Geographical reach¹ – Location of current and former network members

■ EMBO Young Investigators ■ EMBO Installation Grantees ■ EMBO Global Investigators
Dotted patterns indicate the presence of current or former members of several programmes/schemes



¹ Map layout based on United Nations map. Locations as of March 2025. Overseas territories and similar regions without residing network members have not been highlighted.

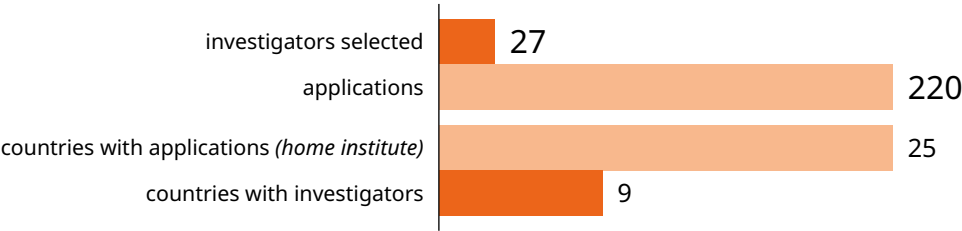


Meeting of the EMBO communities photos
by Lys Y. Seng for EMBO

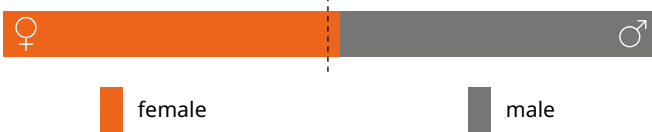
EMBO Young Investigator Marc Güell during
the Meeting of the EMBO communities in Heidelberg

In 2024, the number of applications and selected network members were distributed as follows:

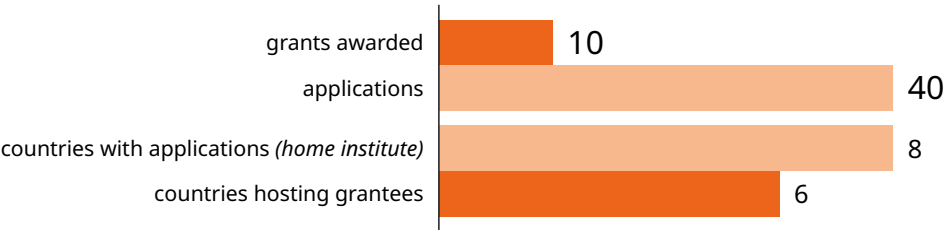
EMBO Young Investigator Programme



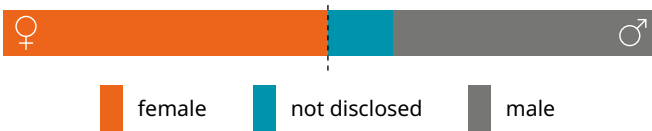
Gender distribution



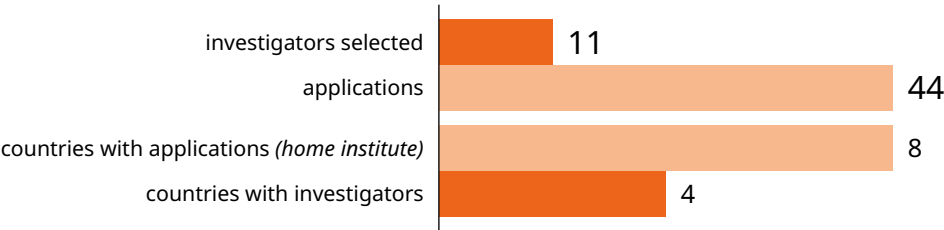
EMBO Installation Grants



Gender distribution



EMBO Global Investigator Network



Gender distribution

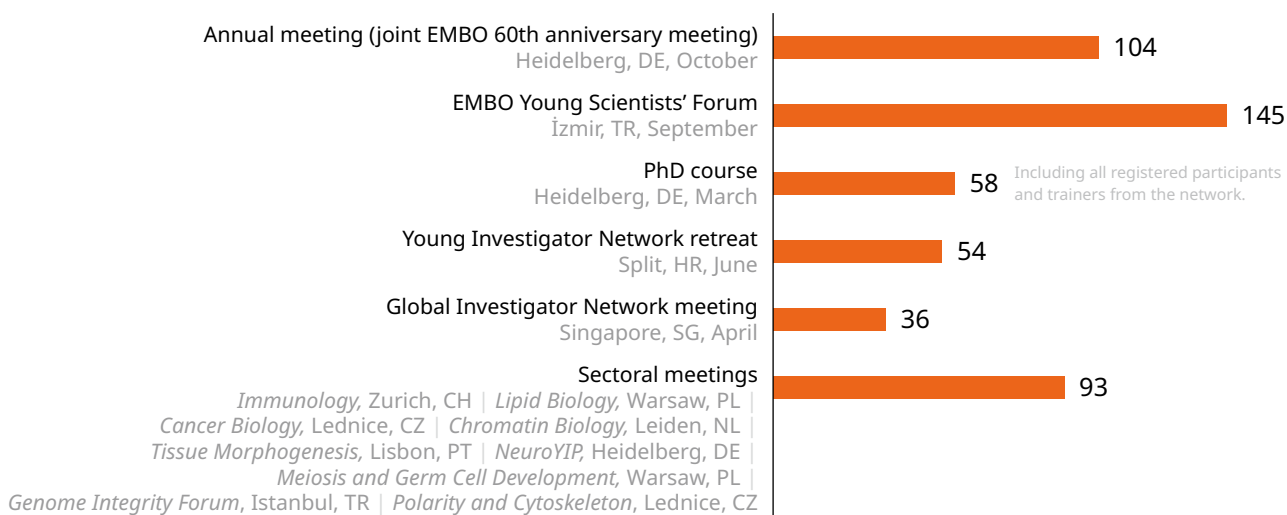


By becoming a part of the EMBO Young Investigator Network, group leaders have the unique opportunity to develop their skills and career through selected learning and training opportunities and participation in dedicated meetings.

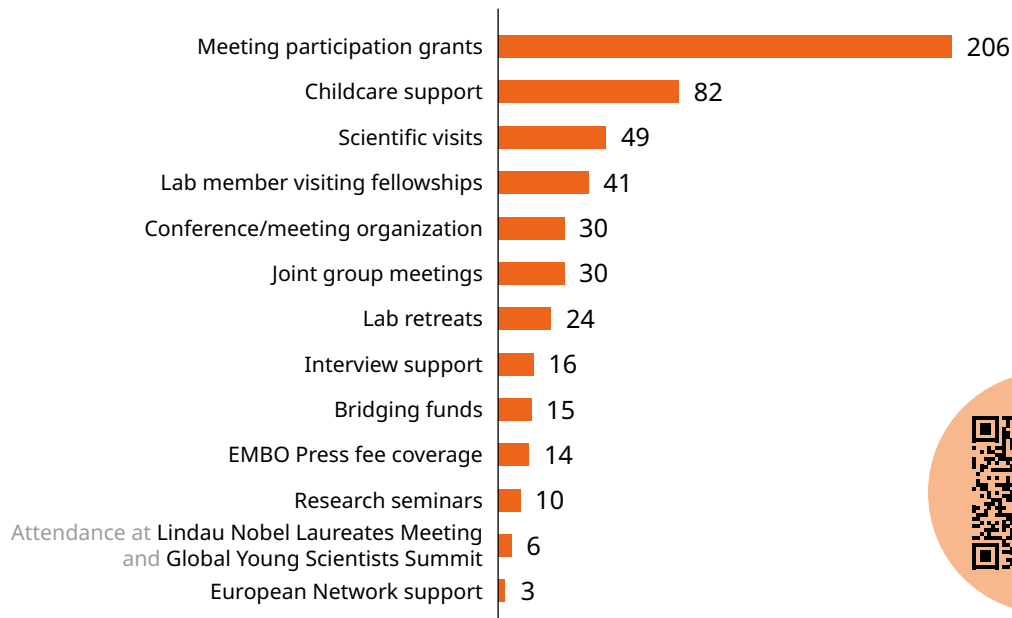
In 2024, key initiatives supporting knowledge sharing were:

- **Young Investigator Network meetings**
- **Lectures and seminars:** In 2024, young investigators were financially supported for the delivery of 133 lectures and 10 institutional seminars. Global investigators were supported for the delivery of two lectures.
- **Networking and support:** In 2024, EMBO provided networking and additional funding opportunities according to the chart below.
- **Training and professional development:** In addition to the training opportunities offered via the Young Investigator Network retreat, in 2024 EMBO supported further training provided by EMBO experts on research integrity, lab leadership and more skills.
- **Solidarity grants:** In response to the war on Ukraine, the EMBO Young Investigator Network launched solidarity grants which supported the stay of scientists displaced by the war in a programme member's lab. In 2024, six grants of € 5,000 were disbursed.

Young Investigator Network meeting participants



Networking and support



Find additional data at:
embo.org/about-embo/embo-facts-figures
Direct link: embo.org/documents/facts_figures/EMBO_annual_report_2024-EMBO_Young_Investigator_Network.pdf



Maria Leptin | EMBO Science Journalism Fellowships

In May 2024, EMBO launched a new fellowship scheme to give current and emerging science journalists an opportunity to embed themselves more deeply in the profession. Funded by a personal donation from former EMBO Director Maria Leptin, and informed by the outcome of preparatory workshops in 2019 and 2021, the initial pilot phase of the scheme had two streams:

- for existing journalists: internships at research institutions of up to three months to allow a deeper and broader understanding of current research processes and technologies,
- for current researchers seeking to transition actively into full time journalism: internships at media organizations of up to 12 months.

The scheme is open to residents of EMBC Member States, and internships must take place in an EMBC Member State. Applications are assessed by EMBO and an independent Advisory Board (*see page 15: “Committees and advisory boards”*).

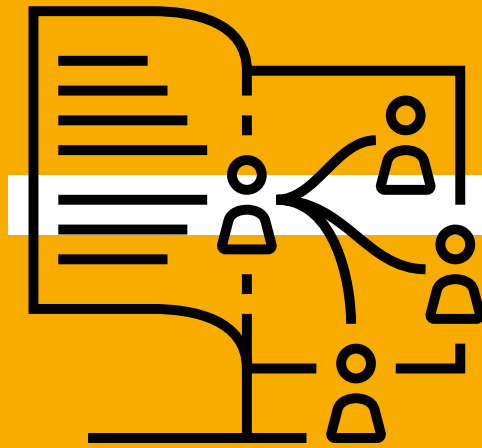
The scheme was positively received by the EMBO community. In the pilot phase from June to December 2024, three fellowships were awarded to:

- **Jens Degett (DK), podcaster**, for internships at the Niels Bohr Institute and EMBL Heidelberg,
- **Tom Kern (DE), life scientist transitioning to journalism**, for placements at the Süddeutsche Zeitung, Spektrum der Wissenschaft and broadcaster WDR,
- **Caroline Barathon (FR), science journalist**, for an internship at the Grenoble Institut des Neurosciences.



© Andreas Henn for EMBO

Poster session during the Meeting of the EMBO communities in Heidelberg in October



JOURNALS, COURSES AND TRAINING

Journals, courses and training

Accelerate knowledge-sharing

EMBO believes that excellence in the life sciences relies on high-quality, modern platforms to disseminate scientific knowledge, acquire state-of-the-art technical skills, and develop leadership and management competencies.

The EMBO journals, courses, conferences, and leadership training are designed to enable scientists worldwide to deliver and share their best work.

EMBO continues to make an impact on the research ecosystem by maximizing knowledge exchange worldwide for the benefit of science and society.

EMBO Press journals

The EMBO impact on knowledge sharing and scientific publications is carried out by EMBO Press, the editorially independent publishing platform founded on the principle that scientific publishing should be transparent, fair and ethical, and must support reliable, reproducible literature.

EMBO Press publishes four scientific journals, with joint publishing service contracts with Springer Nature, with Atypon, for webhosting, and EJP, for manuscript tracking.

- **The EMBO Journal** (EJ), launched in 1982, publishes research papers and reviews on molecular, cell and developmental biology, with a particular emphasis placed on conceptual advance, molecular mechanism and physiological relevance.
- **EMBO Reports** (ER), launched in 2000, 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.
- **Molecular Systems Biology** (MSB), launched in 2005, publishes high-quality research papers and reviews in the fields of systems biology, synthetic biology and systems medicine.
- **EMBO Molecular Medicine** (EMM), launched in 2009, 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.

Life Science Alliance (LSA), launched in 2018, LSA 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. Papers published in Life Science Alliance meet high scientific and editorial standards established by the alliance partners.



EMBOpress



852
total articles
published

691
research articles

Publishing output in 2024¹⁺²

36
review articles

125
commentaries,
editorials,
news and views,
science and
society

United States

China

Germany

United Kingdom

France

Japan

Italy

Switzerland

Spain

Australia

Canada

Israel

India

Belgium

Austria

Sweden

Finland

Others⁴

In 2024 EMBO Press turned fully Open Access, based on an article processing charge (APC) model. EJ, ER, EMM and MSB together continue to generate income for EMBO in 2024.

Since 2019, EMBO makes the finances of its publications publicly available on the EMBO website to provide transparency about the cost and the revenue from publishing the high quality, selective journals.

In 2024, the journals received 6,630 research article submissions, a 12% increase (top 5: 48.8% China, 9.8% USA, 6.1% Germany, 3.4% UK, 3.1% Japan), of which 691 were published, a 5.5% increase (top 5: 18.1% US, 17.7% China, 11.9% Germany, 10.5% UK, 5.8% France). The acceptance rates in 2024 ranged from 8% (EMM) to 12% (ER) and 54% for LSA (including transfers). Including reviews and commentaries, 852 papers were published, a 3.3% increase.

A consultative manuscript transfer process encourages a high flow of transfers between these journals (ER published 68 transfers in 2024, equivalent to 38% of the journal's research papers). In 2024, this was extended to include the Nature "sister" journals. Inter-journal referral rates remained high: 162 research papers were transferred from EJ to ER, 32 to EMM and 8 to MSB, respectively; EMM transferred 40 to EJ, 42 to ER and 19 to MSB, respectively. 25% of ER journal content derived from transfers from EJ. EMBO Press initiated consultative transfers with Springer Nature journals and consequently published 42 transferred papers.

Open Access

At EMBO, the journey towards Open Access (OA) started in 2005 when MSB was launched as one of the first OA journals. EMM converted to full OA in 2012, and in 2024 both EJ and ER converted from "elective OA" to full gold OA.

The financial model at EMBO Press is now entirely based on author charges (Article Processing Charge, APC).

This conversion was made possible by reducing the cost of the publishing process as well as through direct financial support and favourable conditions offered by a switch of the publishing partner to Springer Nature in January 2024.

In 2024, Springer Nature and EMBO Press both considered discount or waiver requests in series (currently well under 5% claims), and EMBO paid fees on behalf of EMBO Young Investigators and Global Investigators.

In addition to this incentive, in 2024 EMBO covered fees for authors from India and EMBC Member States participating in the Increasing Participation initiative.

¹ excludes Life Science Alliance

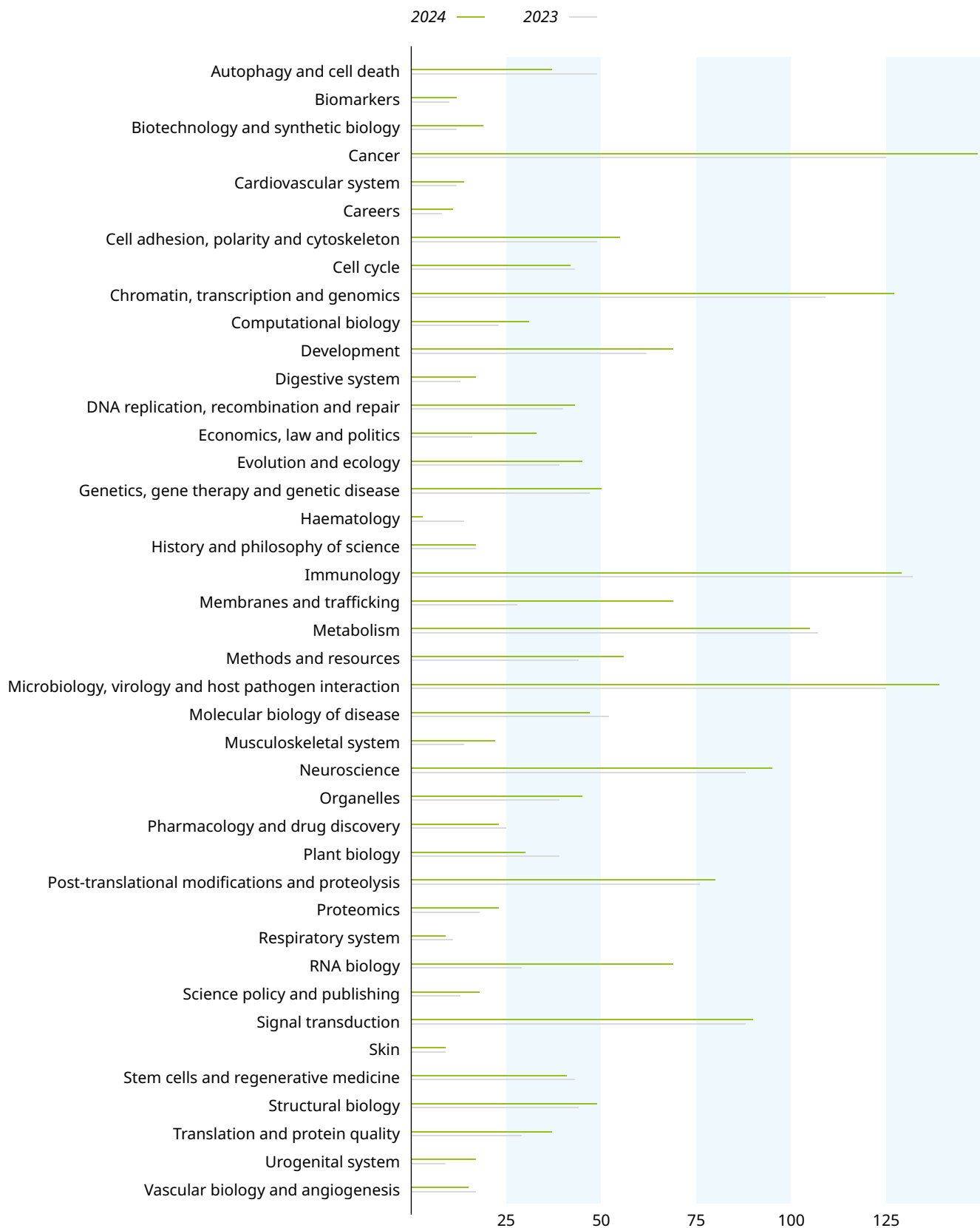
² corrections/retractions are not included

³ based on both published and accepted content

⁴ countries with less than ten articles



Published research articles by subject category¹ (multiple tags per article possible)



¹ excludes Life Science Alliance

THE EMBO JOURNAL

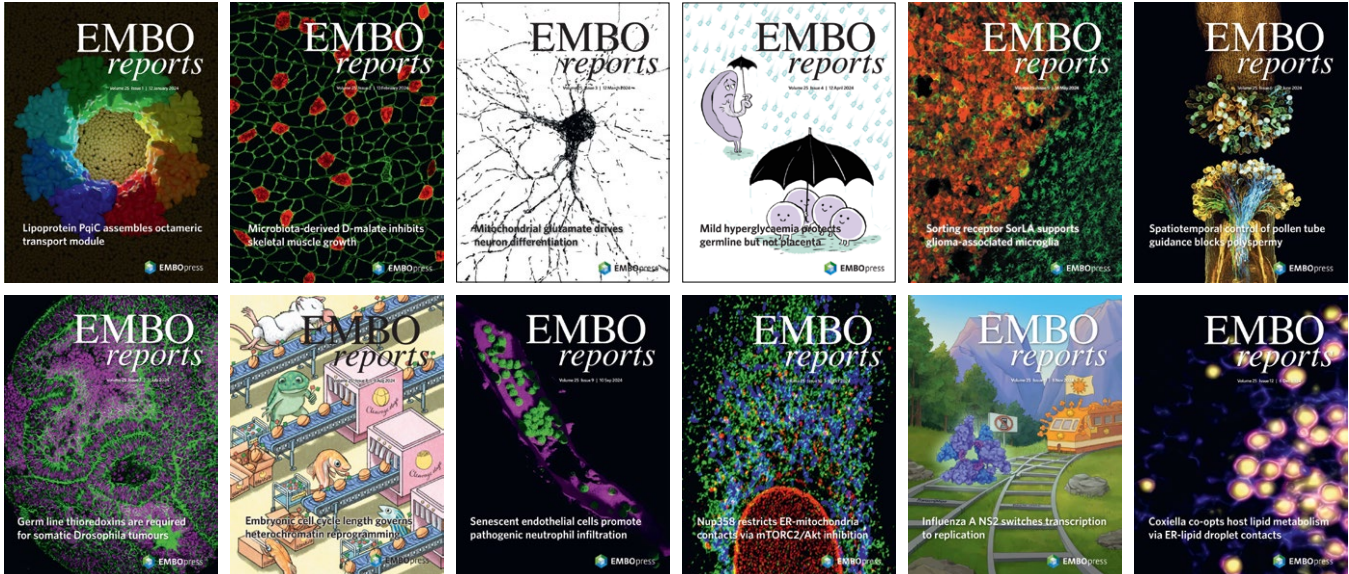


Find additional data at:
embo.org/about-embo/embo-facts-figures

Direct link: embo.org/documents/facts_figures/EMBO_annual_report_2024-EMBO_Scientific_Publications.pdf



EMBO reports



molecular systems biology

EMBO Molecular Medicine



Life Science Alliance



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



Courses, workshops and conferences

EMBO encourages and enables knowledge sharing by funding scientific meetings that stimulate the exchange of the latest scientific knowledge, provide training in new techniques and offer networking opportunities to scientists across career stages. EMBO-funded meetings take place in EMBC Member States, EMBO/EMBC global partners, and countries covered by a partnership between EMBO and The Company of Biologists.

In 2024 EMBO supported meetings that reached nearly 12,000 scientists, from early career researchers to established leaders across diverse life science disciplines and countries, fostering a truly global scientific community.

The type of knowledge sharing meetings funded by EMBO were:

- **EMBO Workshops**, bringing together scientists to present and discuss their latest discoveries, in person, virtually or in a hybrid format,
- **EMBO Practical Courses**, offering hands-on training in new methodologies,
- **Lecture Courses**, disseminating knowledge and new concepts, primarily to early career researchers.

In addition to funding the organization of these meetings, EMBO provided funds that promote inclusive participation, such as travel grants, registration fee waivers and childcare grants.

The EMBO Courses & Workshops team continued to evaluate the participants' and organizers' feedback, and sought input from the Course Committee, to make sure that the programme stays up to date, meeting the needs and expectations of the evolving life science community.

EMBO continued to support organizers of major international scientific meetings by funding keynote lectures by an EMBO Member or Associate Member.

In 2024, EMBO enabled the delivery of 48 keynote lectures.

99
Meetings

7650
Participants

1843
Speakers

Gender distribution (participants)



Gender distribution (speakers)



EMBO | EMBL Symposia

In collaboration with EMBL, EMBO delivers the EMBO | EMBL Symposia. The highly appreciated series of conferences takes place at EMBL in Heidelberg and focuses on interdisciplinary and forward-looking topics. Several of these have become the leading conferences in the fields they cover.

The following EMBO | EMBL Symposia took place in 2024:

Title	Organizer	Dates ▼
Microtubules: from atoms to complex systems	C. Janke, T. Müller-Reichert, S. Niwa, K. Ori-Mckenney	5–8 June
AI and biology	M. AlQuraishi, W. Huber, A. Kreshuk, E. Lundberg, O. Stegle	12–15 March
Biological oscillators: rhythms and synchronisation across scales	A. Aulehla, A. Hastings, H. Herzog, C. Partch	19–22 March
Diversity of plants: From genomes to metabolism	B. A. Halkier, S.E. O'Connor, D. Weigel	9–12 April
The mechanics of life: from development to disease	P. Liberali, N. Petridou, A. Shyer, A. Saric, X. Treppe	15–18 April
Organismal physiology	G. Karsenty, I. Miguel-Aliaga, A. Rolls, M. Soares	23–26 April
Cellular mechanisms driven by phase separation	S. Alberti, S. Cuylen-Häring, D. Dormann, A. Holehouse	14–17 May
Innate immunity in host-pathogen interactions	G. Brown, M. Gack, F. Randow, D. Soldati-Favre, C. Zipfel	18–21 June
Reconstructing the human past: using ancient and modern genomics	J. Krause, I. Moltke, M. Raghavan, P. Skoglund	17–20 September
Defining and defeating metastasis	E. Batlle, J. Joyce, D. Klimmeck, J. Massagué, S. Turajlic	30 September– 3 October
The complex life of RNA	E. Conti, O. Duss, T.H. Jensen, K. Neugebauer	15–18 October
DNA replication: from basic biology to disease	A. Groth, T. Halazonetis, H. Ulrich	5–8 November



Artwork for the EMBO | EMBL Symposium "AI and biology", created by EMBO communications.

Find additional data at:
embo.org/about-embo/embo-facts-figures

Direct link: embo.org/documents/facts_figures/EMBO_annual_report_2024-EMBO_Courses_Workshops.pdf



EMBO Lab Leadership

EMBO provides a sought-after training portfolio through its daughter company, EMBO Solutions. Since 2005, the EMBO Lab Leadership and other EMBO Solutions courses have been designed and delivered to empower skillful, effective and empathetic leadership, scientific rigour and other key career development opportunities.

In 2024, EMBO Lab Leadership delivered 101 relevant and highly appreciated courses to group leaders, senior postdoctoral researchers and PhD students. The courses included the flagship EMBO Lab Leadership course, project management and negotiation training, and research integrity, scientific communication and design workshops.

The positive response from the roughly 1,600 scientists who attended the courses in 2024 confirmed the need for this unique portfolio of training and development resources delivered by EMBO Solutions and the editors of the EMBO Press journals.

The EMBO Lab Leadership course itself was originally created within EMBO almost 20 years ago. With the twentieth anniversary approaching in 2025, a suite of projects was initiated in 2024 for delivery in the anniversary year. Efforts to ensure that EMBO Lab Leadership remains highly effective and relevant include projects to implement the use of modern education management tools to better support participants, a review of course learning aims and content, and stronger brand development, web presence and marketing to strengthen awareness of the course portfolio within the academic community.

The course portfolio's reach continued to expand, both through the EMBO Increasing Participation initiative in Europe and the organization's global activities.

In 2024, EMBO Solutions delivered the following courses:

- EMBO Lab Leadership
- Project Management for Scientists
- Negotiation for Scientists
- Self-leadership for Scientists
- Design Principles for Schematic Figures
- Courses delivered by EMBO Press editors
- Foundations in Scientific Integrity
- Writing Papers & Short-format Presentations
- Peer-Reviewing Research Articles



In 2024, the EMBO Lab Leadership course was delivered in EMBC Member States where the training had not previously been available, including Hungary and Lithuania. For the first time, the course was delivered in Japan at the University of Tokyo and RIKEN Yokohama.

The feedback from researchers was highly positive, and the workshops received high evaluations.

All courses were delivered in person or online.

~1,600

People attended a course

101

Courses delivered

912

People attended a course
in Leimen, Germany, or online

46

Courses delivered
to institutes in other countries

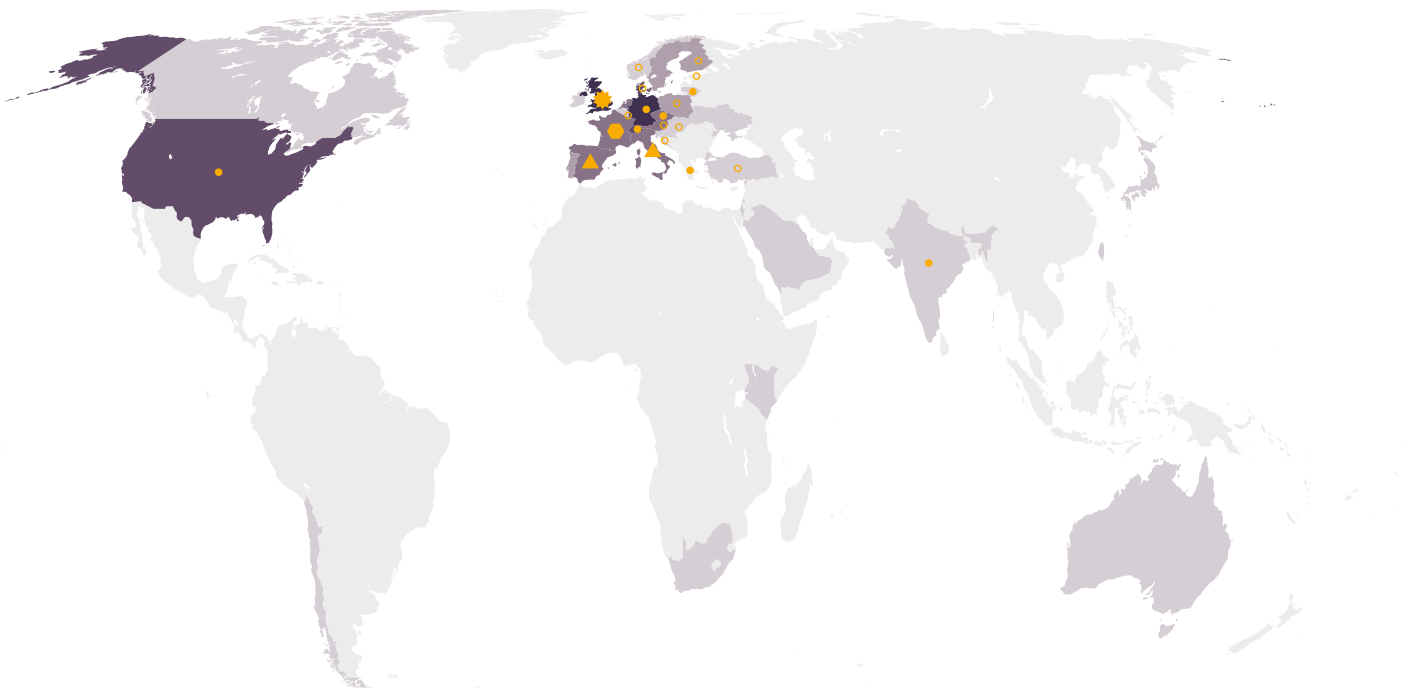
Geographical reach¹

Number of **people attending** a course
in Leimen, Germany, or online, from each country

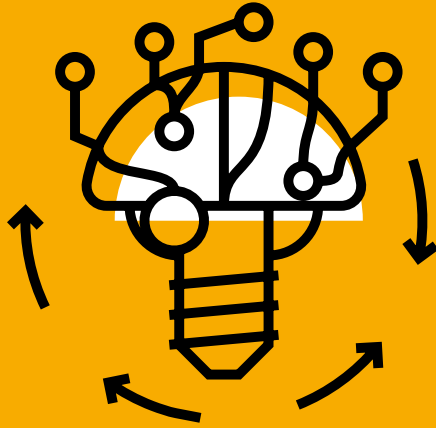
1-10 11-25 26-50 51-100 >100

Number of **courses delivered** to institutes
in each country

1 2 3 6 10



¹ Map layout based on United Nations map. Oversea territories and similar regions have not been highlighted.



POLICY AND INNOVATION

Policy and innovation

Innovate in the research ecosystem

EMBO leads and takes part in initiatives in policy and innovation to build an open, inclusive and fair research ecosystem that enables high-quality, responsible, trustworthy and reproducible outcomes as preconditions for excellence in the life sciences.

Multi-stakeholder by design, EMBO represents a unique hub to convene subject matter experts for forward-looking policy debates, to incubate innovative schemes, and to champion sustainable solutions by integrating them into EMBO Press scientific publications and EMBO programmes.

In 2024, the Policy and EMBO Press teams, the Sustainability officer and other internal stakeholders broadened the EMBO impact on a variety of areas by informing policies, designing tools and pioneering their application.

Research integrity

EMBO commitment to research integrity continued to focus on actions to raise awareness, and to improve institutional policies and research practices via training.

Since 2016, the Policy team has run, in collaboration with EMBO Members, Fora on Responsible Research in the EMBC Member States to provide senior postdoctoral researchers and principal investigators with insights and guidance on policy-related matters.

In 2024, the Policy team gave invited presentations on research integrity and participated in discussions at conferences such as the following:

- EMBO Fellows' Meeting, Heidelberg, October 2024: discussion session on research integrity during the EMBO 60th Anniversary event
- Foundation Cancer Institute, Milan, October 2024: invited presentation at a session on the quality of culture and integrity in research
- EMBO tour of Ireland, November 2024: research integrity talks at multiple institutions
- PhD retreat in Lisbon (virtual), December 2024: invited presentation on research integrity.

The Policy team continued to make resources on research integrity for researchers and institutions available on a dedicated page of the EMBO webpage, and to facilitate access to the Epigeum Research Integrity Course that is provided to members of the EMBO communities.

Former EMBO Council Chair Matthew Freeman during a talk in Ireland on the EMBO funding opportunities, on research integrity and responsible research assessment.



Research assessment

Through a collaboration between the Policy and EMBO Press teams, EMBO continued to push for a systemic change in assessment processes to achieve a more qualitative, informed and transparent method that does not misuse publication-related metrics. The work focused on reviewing internal assessment processes and representing EMBO in international initiatives such as the Declaration on Research Assessment (DORA) and the Coalition for Advancing Research Assessment (CoARA).

In 2024, through the work of internal, CoARA and DORA groups, EMBO:

- developed a policy on the use of artificial intelligence tools in applications to the EMBO Young Investigator Network and the Fellowship Programme, and aligned it with EMBO Press policies
- rephrased the preprint policy for EMBO Postdoctoral Fellowships and extended it to the EMBO Young Investigator Network
- aligned the Young Investigator and Installation Grants Committee and application guidelines in consultation with the programme head
- wrote the first draft of Open Science recommendations for the young investigator network and fellows
- established a CoARA working group on “Recognizing and rewarding peer review”
- submitted an action plan to CoARA (DOI: [10.5281/zenodo.10633942](https://doi.org/10.5281/zenodo.10633942)).

Scientific advice

To capitalize on the scientific expertise of the EMBO Members in support of policy-making, in 2024 EMBO took steps in supporting the Science Advice for Policy by European Academies (SAPEA), which is part of the European Commission's formal Scientific Advice Mechanism. As part of the process, EMBO became a partner of the Federation of European Academies of Medicine (FEAM). Through FEAM and SAPEA, EMBO Members will be able to provide evidence on European matters concerning human and animal medicine, biomedical research and health.

EMBO is a founding member of the Initiative for Science in Europe (ISE), a platform of learned societies and research organizations representing all disciplines for an inclusive design of European science policies and advocacy for independent scientific advice at European level.

In 2024, ISE published letters and position papers aimed at the European Commission for the next Framework Programme, including one on sustainable academic careers.

Government funding for research

As Europe's multilateral organization for the life sciences, in 2024 EMBO continued to convene experts in science management and policy-making to drive discussions on research funding and support a forward-looking debate at national and European level:

- In June, as part of the 60th Anniversary programme, EMBO co-organized the event *EMBO in Norway: Funding opportunities, excellent life science research and innovative publishing policies*, held in Oslo.
- In September, EMBO co-organized the event *From EMBO to ERC: New Strategies for Research Funding in Europe and Italy*, held in Rome.
- In December, EMBO hosted the workshop on *Making the case for life science funding to governments*. Organized by EMBO Secretary General Paul Nurse and EMBO Director Fiona Watt, the workshop explored ways to strengthen the life sciences research ecosystem, win greater public support and secure increased governmental funding. A viewpoint by the EMBO Director outlining the conclusions of the workshop was published in EMBO Reports.



On June 13, the University of Oslo hosted an event celebrating the 60th anniversary of EMBO. Co-organized by EMBO Members Nils Christian Stenseth and Erik Boye from the University of Oslo, this celebration aimed to raise awareness of EMBO within the Norwegian scientific community.



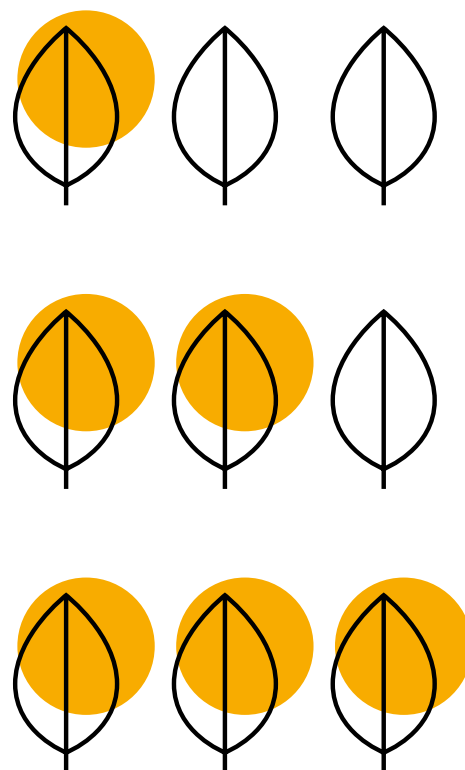
On 3 December 2024, Fiona Watt, the EMBO Director, and Paul Nurse, EMBO Secretary General, hosted an expert workshop in Heidelberg to address pressing questions about governmental support for biomedical research. The participants, from diverse geographical areas, age groups, sectors and genders engaged in extensive discussions.

Sustainability

In 2023, EMBO started its work on sustainability with the goal to better connect the EMBO mission of promoting excellence in life sciences to the Sustainable Development Goals established by the United Nations in Agenda 2030. To promote sustainable excellence in the life sciences, EMBO appointed a Sustainability officer who partnered with the Policy team and others to design multi-stakeholder workshops, promote initiatives and, with EMBO Courses & Workshops, shape the future of scientific conferences.

In 2024, EMBO launched the EMBO Lab Sustainability Award, fostered partnerships and shaped policies by hosting events, and implemented a sustainability badge for scientific conferences. The award recognized Martin Farley for founding the first academic lab certification programme, known as LEAF, at University College London (*see page 34: “EMBO Lab Sustainability Award”*).

During 2024, EMBO took part in European initiatives such as the MSCA Green Charter Update: the Marie Skłodowska-Curie Actions (MSCA), the European Union’s reference programme for doctoral education, is working on updating the MSCA Green Charter and offering more user-friendly thematic guidance on sustainability in research practices to projects.





On 14 and 15 May, EMBO convened a multi-stakeholder workshop “Funders’ role in promoting environmentally sustainable lab research” in Heidelberg to explore the critical role of funders in fostering environmentally sustainable research practices. This event gathered funders, research institute representatives, tool developers, and grassroots initiatives from across Europe, marking the first occasion these stakeholders collaborated on this pressing issue.

The Heidelberg Agreement on Environmental Sustainability in Research Funding

In October 2024, EMBO took an additional step towards promoting sustainability in research practices with the publication of the Heidelberg Agreement on Environmental Sustainability in Research Funding. This agreement represents alignment on sustainability principles among representatives from European funding agencies, research organizations, grassroots initiatives, social scientists and experts from nine European countries.

The collaboration that led to the agreement began at the workshop *Funders’ Role in Promoting Environmentally Sustainable Lab Research*, which EMBO hosted in Heidelberg in May 2024. The Heidelberg agreement provides a framework for research funders to incentivize sustainable practices. It contains six consensus points, and outlines principles and practical recommendations on how to implement sustainability in funding schemes.

The Heidelberg Agreement has been endorsed by the Austrian Science Fund (FWF), Dutch Research Council (NWO), EMBO, European Molecular Biology Laboratory (EMBL), Foundation for Polish Science (FNP), French National Research Agency (ANR), German Research Foundation (DFG), Green Algorithms Initiative, Green Labs Netherlands (GLN), Institute for Bioengineering of Catalonia (IBEC), Medical Research Council (MRC), National Centre for Scientific Research (CNRS), UK Research and Innovation (UKRI) and Wellcome.

The agreement was presented at several conferences and workshops, including the ASCB | EMBO Cell Bio Meeting, San Diego, US. Since its publication, the Heidelberg Agreement has been downloaded more than 3000 times and was featured in a Nature Correspondence piece in October 2024.

Read more about the Heidelberg Agreement:
DOI: [10.5281/zenodo.13938809](https://doi.org/10.5281/zenodo.13938809)



Innovation in scientific publishing

The EMBO Press journals publish research papers selected for high scientific quality and rigour as well as reviews and commentaries: The EMBO Journal (EJ, launched 1982), EMBO Reports (ER, 1990), Molecular Systems Biology (MSB, 2005), EMBO Molecular Medicine (EMM, 2009). Life Science Alliance (LSA, 2018) is published by EMBO Solutions jointly with Rockefeller University Press and Cold Spring Harbor Laboratory Press.

Since the creation of the journals, and consolidation under the EMBO Press brand in 2013, the EMBO impact on scientific publications has gone beyond scientific knowledge dissemination to include the design and implementation of policies and solutions for a fair, transparent and innovative publication process.

As a result, over the years, several key EMBO Press innovations, such as transparent peer review, consultative peer review, “scooping protection”, source data posting and structured methods have been adopted by other major journals, and become standards in scientific publishing.

In areas such as refereed preprints, pre-decision and revision author consultations, and figure panel-level authorship (already adopted by more than 60% of authors), the journals remain largely unique.

The research integrity screening and classification process of EMBO Press has been adopted as a general publishing recommendation by the International Association of Scientific, Technical & Medical Publishers (STM), while its policy to expand the corrections and retractions mechanism to the figure panel-level is under discussion by the National Information Standards Organization (NISO) as another policy standard. EMBO offers a free data curation service built on the source data platform.

Throughout 2024, EMBO Press editors engaged with students and senior researchers through talks, panel discussions and workshops on progressive publishing, open science and research integrity. Over the year, 36 training units were delivered on the EMBL campus in Heidelberg or at partnering research institutions, and as a partner on a number of European network grants, with the administrative support provided by EMBO Solutions.

EMBO Press editors contributed to conferences and workshops organized by EMBO, as well as to events of the EMBO communities such as the ASCB | EMBO meeting, meetings of EMBO Members, Young Investigator Network and Fellows, Molecular Biology Society of Japan (MBSJ) and events at EMBL.

Review Commons

Review Commons is the platform created by EMBO to provide high-quality, in-depth peer review of preprints before submission to a journal. Review Commons runs the peer review in a journal-agnostic way and does not make post-review decisions, enabling authors to determine their own publishing strategy. Preprints, together with their reviews and the authors' response, are rapidly posted on bioRxiv or medRxiv making them publicly accessible "reviewed preprints".

Authors can then submit their reviewed preprint to one of the affiliate journals for consideration without starting the peer review process afresh.

By the end of 2024, Review Commons had four new reviewing affiliates: eLife, Journal of Cell Biology, Genetics, and G3, reaching a total of 28 journals.

In 2024, the submission rate remained stable compared to the previous year.

In 2024, 234 papers processed by Review Commons were published in affiliate journals.

In 2024, academic editors of Development and the Journal of Cell Science started to contribute to running the peer review process on behalf of Review Commons for manuscripts in the fields of developmental and cell biology.

389

Papers accepted

81%

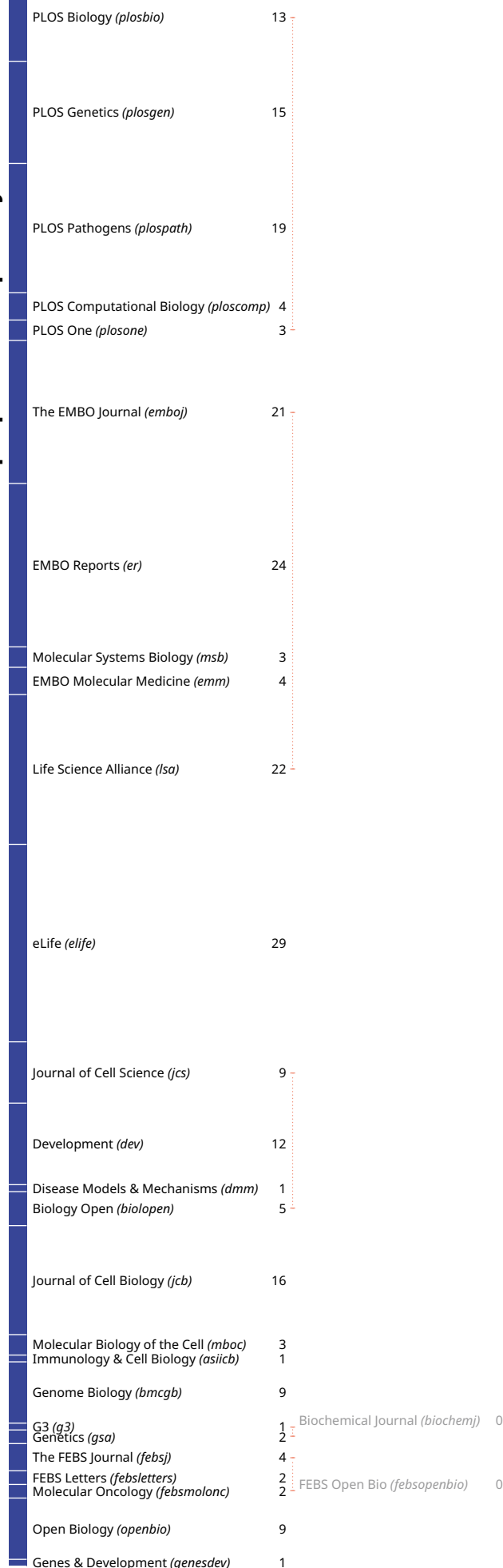
Acceptance rate

Review COMMONS

Review Commons reviewed preprints accepted by affiliates in 2024

234

processed papers published
in affiliate journals



Other Open Science Initiatives

In February 2024, the EMBO Open Science Implementation and Policy teams organized a policy workshop on *Generative AI and foundation models in the life sciences* with King's College London, the German Cancer Research Center and EMBL to foster the dialogue on AI in the life sciences, and explore challenges and opportunities. The initiative successfully convened key stakeholders, including biologists, AI developers, funders, experts in the governance of emerging technologies and publishers, to map areas of the life sciences where AI is used, and to highlight current limits and opportunities.

Working at the interface between policy, technology and publishing standards, EMBO continued to support initiatives to facilitate the adoption and practice of Open Science, including the:

- development of practical tools to disseminate research data
- integration of open science in the scientific publishing workflow
- implementation of credit attribution mechanisms for an open environment, and the development of tools for quality control and integrity standards.

In 2024 the EMBO Open Science Implementation team progressed in the development of platforms and tools, in particular SourceData and Scope2Vec.

SourceData

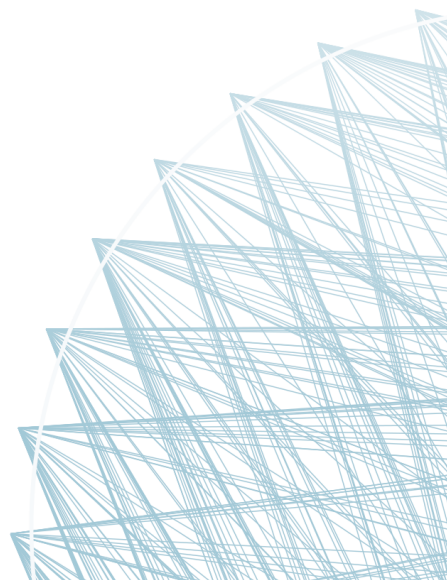
SourceData makes the source data behind scientific publications openly accessible and citable.

At present, the SourceData workflow is integrated into the publication process at EMBO Press. As a result, figures and data submitted with a scientific paper are curated and automatically deposited to the EMBL-EBI database BioStudies. In addition, the data availability section of papers published by EMBO Press automatically includes the accession number of the associated BioStudies record, which provides a single point of entry to the underlying source data.

The SourceData curation workflow has enabled the distribution of a large machine learning training dataset of 68,543 annotated experiments as well as the release of fine-tuned AI language models trained on this dataset.

In 2024, the Open Science Implementation team started developing the Data4Rev platform to make the SourceData workflow more scalable and integrate AI-assisted automation from the outset.

SOURCE→DATA



Scope2Vec

Scope2Vec, the suite of tools designed to represent and compare the scientific scope of journals, preprints, grant applications and individual researchers, was further developed during 2024.

Scope2Vec already supported several EMBO core activities. It has now been employed to assist the EMBO Fellowship Programme and the EMBO Young Investigator Network in assigning applications to reviewers, and to analyze and visualize the scope of the EMBO Press journals and compare them with other scientific publications. Lastly, it is being applied to analyze and visualize EMBO Members' expertise in relation to the global research landscape. A preliminary demonstration of the EMBO Science Map was shown at the EMBO Anniversary Meeting in 2024 (see page 30: "Science Map").



THE ORGANIZATION

The organization

Maintain an effective organization fit for purpose

The EMBO staff establishes, monitors and improves organizational functions to deliver programmes and activities in line with the EMBO mission, strategy and priorities.

In its routine activities, EMBO proactively engages with its key stakeholders to meet their expectations and maximize the positive impact on the research ecosystem at national, European and global level.

The EMBO ways of working are constantly adjusted to secure responsible stewardship of the resources entrusted to the organization while projecting EMBO into the future through effective, innovative and sustainable operations.

Strategy and management

As EMBO enters its seventh decade of promoting excellence in the life sciences across Europe and beyond, one of its core goals is to maximize its impact by operating in an effective and sustainable way. This is a cross-EMBO effort, involving all activities and centralized functions such as those provided by the Director's Office (Governance, Strategy, HR, External relations), as well as Finance, Information Technology, Communications and Engagement.

In 2024, the organization continued to improve its processes, systems and tools to strengthen coordination, integration and optimization of resources in order to deliver on its mission for the benefit of the EMBO community.

This section provides a selection of key organizational activities and achievements in 2024.

Indicative Scheme 2025–2029 and Increasing Participation

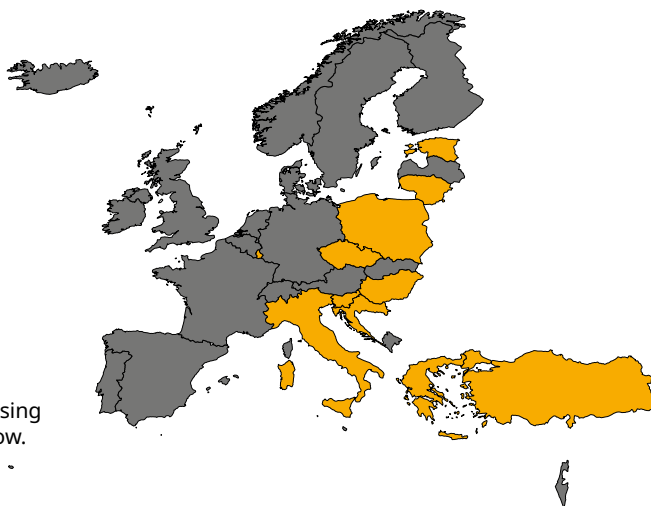
EMBO is funded by its intergovernmental funding body, the European Molecular Biology Conference (EMBC), in five-year funding cycles, the so-called Indicative Schemes.

The Indicative Scheme 2019–2024 was characterized by two important initiatives: the shift from stipends to working contracts for Postdoctoral Fellows based in EMBC Member States, and an initiative to increase participation in EMBO schemes by scientists across the entire EMBC area. Externally, the COVID-19 pandemic and inflationary pressures represented significant challenges, resulting in price increases and disruption of routine operations. EMBO was able to respond well to the pandemic, securing all organizational activities and granting extensions to programme members as needed.

EMBO also steered the underspend resulting from pandemic travel restrictions in 2020 and 2021 into the Increasing Participation initiative, consisting of additional opportunities made available to scientists in countries with lower participation in EMBO programmes and schemes. Scientists based in Croatia, Czech Republic, Estonia, Greece, Hungary, Italy, Lithuania, Luxembourg, Poland, Slovenia, and Türkiye were selected by EMBC as increasing participation countries for 2019–2024.

These actions included, among others, reserved postdoctoral fellowships for scientists moving to the participating countries, solidarity grants for scientists displaced by armed conflict to relocate to an eligible lab, advanced collaboration grants for scientists to initiate collaborations with colleagues in other EMBC countries, as well as additional training and travel support and targeted campaigns to increase the awareness of EMBO schemes.

In November 2024, the EMBC approved the new Indicative Scheme, covering the 2025–2029 period. Building on the success of the Increasing Participation initiative, EMBO will continue to work on ensuring that researchers from all EMBC Member States benefit from its activities with a focus on increasing the geographical footprint of the EMBO schemes.



EMBC Member States in 2024, with Increasing Participation countries highlighted in yellow.

Ways of working, systems and tools

The execution of all EMBO activities relies on efficient processes and robust infrastructure.

To further improve workflows, digitalization and integration, several initiatives were undertaken:

- In Administration and Finance, the transition to a new accounting and finance software was initiated.
- Information, Support and Resources (ISR) rolled out the Asana project management tool for all EMBO-internal users, facilitating not just individual and team-level management but also cross-organizational coordination.
- Significant enhancements were implemented in EMBO Central, the submission management and administration system used by EMBO staff to efficiently process large numbers of online applications and proposals, securely share information and provide data for recurring or ad-hoc statistics and reports.
- ISR undertook a major renewal of its Linux server infrastructure, providing a resilient platform for future growth.

In delivering its work, EMBO must ensure quality and compliance with relevant requirements and regulations. In 2024, EMBO reached a significant milestone by implementing comprehensive General IT Controls (GITC) and establishing associated policies. A comprehensive review of its risk management procedures, establishing a strong foundation for audit compliance, resulted in a marked improvement in the governance framework, as confirmed by the highly positive feedback from external auditors.



Communications, engagement and outreach

The 60th anniversary of EMBO was at the core of many engagement activities, all aimed at strengthening collaboration with the communities that EMBO serves. From staff to Member State representatives to scientific communities, in 2024 EMBO continued to nurture the relations with its key stakeholders who are a defining part of the history of the organization and of its success.

Employee engagement

In 2024 the EMBO Director's Office, with the staff committee, continued to provide a series of actions to guarantee effective information-flow and build a shared understanding of the organization's activities and plans, in line with its mission and strategic priorities:

- On a bi-weekly basis, "EMBO Updates" were shared through the digital internal newsletter.
- Quarterly all-staff meetings were held, focused on sharing information and new developments across the organization, with speakers from different teams and time for interactions.
- Every other year, EMBO holds a one-day all-staff retreat to foster team cohesion and training. The 2024 retreat focused on professional skills development, delivered by external trainers, in the areas of managing difficult conversations, building effective workplace relationships, and building an inclusive workspace. The plenary session focused on the use of AI tools at EMBO.
- The Director continued to have one-to-one annual meetings with every member of staff to gather direct input on the individual employee experience, as well as discussing ideas and opportunities going forward.
- All members of staff were invited to take part in the 60th anniversary meetings, providing opportunities to interact directly with the EMBO Council, EMBC representatives and members of the EMBO scientific communities.

Meeting of the EMBO communities

A highlight of this anniversary year was the Meeting of the EMBO communities, hosted in Heidelberg from 25 October to 1 November 2024. EMBO was delighted to welcome over 400 participants, among them 120 EMBO Members and Associate Members, 119 Postdoctoral Fellows, and 90 members of the EMBO Young Investigator Network who came to Heidelberg to present their research and engage in training and networking activities.

Within the Meeting of the EMBO communities, on 30 October, EMBO Director Fiona Watt chaired the EMBO Forum on “The future of a career in the life sciences”. Maria Leptin, president of the European Research Council and former EMBO Director, Katalin Karikó, 2023 Nobel Laureate in Physiology or Medicine and adjunct professor at the University of Pennsylvania (US), and Ottoline Leyser, chief executive of UK Research and Innovation, gave thought-provoking keynote lectures. They were joined by new EMBO Member James Liao, EMBO Global Investigator Yasunori Saheki and EMBO Young Investigator Elias Barriga for the subsequent panel discussion. The multifaceted conversation explored the many opportunities and challenges of a career in the life sciences.

The celebrations of the EMBO 60th anniversary were supported and promoted with a variety of communications initiatives including the publication of the EMBO historical timeline on the official website and production of the “60 years of EMBO” anniversary movie.

The year of the 60th anniversary was also a time for looking back and bringing the past into the present: for the first time, EMBO employed an archivist to systematically assess, catalogue, and preserve the contents of the EMBO archive. The archivist also set up a series of policies that will in future govern how EMBO handles its physical archive. One tangible outcome has been the creation of an online catalogue available at archive.embo.org.



Impressions from the Meeting of the EMBO communities



Awareness-raising communications and engagement activities

Throughout 2024, EMBO Communications continued its support, promotion and advisory role for all EMBO Programmes, EMBO Press and other key activities to raise awareness about EMBO among various audiences and to showcase the positive impact of EMBO in Europe and beyond.

The EMBO digital presence was maintained through the official website (with most page views coming from India, US, UK, Germany and Spain, followed by Italy, France, Switzerland, Poland and the Netherlands) and social media. Here EMBO continued to grow its presence: by the end of 2024, the EMBO X (Twitter) feed was followed by more than 38,000 scientists (+12% as compared to 2023) and the EMBO LinkedIn page had 23,600 followers (+13% as compared to 2023).



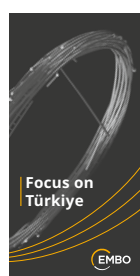
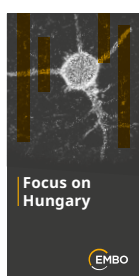
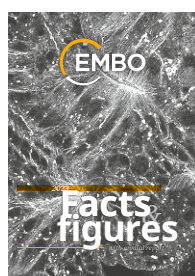
Throughout 2024, visits and meetings focused on deepening connections by listening, learning and responding to community needs. EMBO led several engagement activities across EMBC Member States, reinforcing its presence and influence in scientific and policy arenas.

- EMBO Director Fiona Watt visited EMBC Member States Germany, Portugal and Spain to engage in face-to-face dialogue with local institutions, policymakers and funders.
- Heads of Programmes delivered talks to early-career-researchers at BSRC Alexander Fleming in Varkiza, Greece (February 2024) and at HUN-REN Research Center for Natural Sciences in Budapest (June 2024)
- In parallel to in-person meetings, EMBO expanded its digital outreach to other regions: EMBO held two webinars aimed at the research communities in Chile and Luxembourg.
- To promote awareness of the EMBO funding schemes available to researchers based in Chile, India, Singapore and Taiwan and the benefits the cooperation agreements bring to the national research communities, EMBO organized additional courses, informational webinars, and delegation visits.

EMBO Director Fiona Watt visited Santiago de Chile from 24 to 25 June 2024 to strengthen the cooperation and to learn about Chile's priorities and how they might affect the partnership.



On 7 May, EMBO Director Fiona Watt spoke in the Berlin Museum of Medical History at an event co-organized by EMBO Member Markus Ralser, Charité, Berlin.



2024 CellBio ASCB | EMBO

The American Society for Cell Biology (ASCB) and EMBO hosted their annual meeting in San Diego, California, USA from 11 to 14 December 2024. The meeting brought together cell biologists from around the world to share their research results, explore new collaborations and discuss the latest science and technology in the field.

EMBO contributed to the conference with its presence in the exhibition area and with talks and debates, such as:

- Session on “Sustainable Life Science Research: Best Practices and Funders’ Role”, chaired by the EMBO Director. The session brought together scientists and funders from the US and Europe to explore challenges and opportunities on the journey towards sustainable research.
- Among the panelists were the EMBO Lab Sustainability Award winner Martin Farley and the EMBO Sustainability officer Philipp Weber.
- Session on “AI in Bioimaging: Analyze Anything, Anywhere, Anytime?”, for a cross-domain and constructive debate on responsible development and deployment of AI tools at the service of scientific discovery.
- Lecture by the EMBO Gold Medalist for 2024, Elvan Böke.

EMBO representatives joined other panel discussions and engaged in talks on scientific publishing. EMBO Solutions delivered several modules of the Lab Leadership course.

During the conference, the EMBO Director hosted a reception to foster dialogue among scientists on a broad spectrum of scientific topics.

This event, and other EMBO engagement activities carried out in 2024, confirmed that EMBO continued to add value to the global science landscape by providing a unique and vibrant hub for knowledge-sharing and international collaborations.



The redesigned EMBO Cell Bio 2024 booth, Assistant to the Director Eilish Craddock at the reception.





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The background of the cover is a dark, grayscale microscopic image. It features a dense field of small, dark, circular structures, likely cells, scattered across the left and center. On the right side, there is a larger, more complex cluster of cells, showing intricate internal structures and a more organized arrangement.

2024

EMBO
Annual Report