

### **BARCELONA**

#### **BUILDING BRIDGES 2025**

36th Annual Conference of Academia Europaea Barcelona, Wednesday 15 - Friday 17 October 2025 (All times listed as CET)

#### Main venue:

Barcelona Biomedical Research Park (PRBB), Doctor Aiguader 88, 08003 Barcelona <a href="https://www.prbb.org/?l=en">https://www.prbb.org/?l=en</a>

Location: <a href="https://goo.gl/maps/z3abq4WSSMt7tBDV8">https://goo.gl/maps/z3abq4WSSMt7tBDV8</a>

#### **Tuesday 14 October 2025**

**08:30–15:30** Geological trip to Montserrat Mountain (optional).

**17:00–19:00** Academia Europaea Board Meeting (closed session). Venue: Royal Academy of Sciences and Arts of Barcelona. La Rambla, 115, Barcelona.

#### Wednesday 15 October 2025 - Annual General Meeting and Class Meetings

**08:30–09:00 Check-in** for Class meeting participants at PRBB registration desk

09:00-11:00 Class meetings (A1, A2, B, C) and YAE meeting

Class A1 – Welcome and brief self-presentations by new members at Charles Darwin room

**Class A2** – Welcome and brief self-presentations by new members at Marie Curie room

Class B - Welcome and brief self-presentations by new members at Ramon y Cajal room

Class C – 09:00-09:15 Introduction to Class and its sections at Auditorium 09:15-11:00 Welcome and short introductions by participating new members

11:00-11:20 Coffee break for Class C

11:00-11:30 Coffee break for Class A1, A2 and B

11:30-13:00 Continuation of Class meetings and Hub managers closed session

**Hub managers closed Session**: Meeting of AE Hub managers (Rita Levi-Montalcini room)

**Class A1**: Welcome and brief self-presentations by new members, continued. (Charles Darwin room)

Discussion: The Humanities and the Humanities Class. Challenges and prospects.



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**Class A2**: "Rethinking Social Science in an Age of Rupture: Viable Futures for Democracy, Prosperity, and Sociality within Ecological Limits". (Marie Curie room)

This session invites Class A2 members to reflect critically on the role of the social sciences in addressing today's defining challenges. Rather than only diagnosing crises, how can our disciplines actively shape alternative futures?

Rob van Tulder, MAE, Erasmus University Rotterdam, The Netherlands

Growth and beyond: Social innovation, sustainable prosperity, and global public goods

Jonathan White, MAE, London School of Economics, London, United Kingdom

Democratic resilience and climate breakdown

Chris Hann, MAE, Max Planck Institute, Halle, Germany

Neoliberal economy, involuntary mobilities, and the populist threat

Antje Wiener, MAE, University of Hamburg, Germany

From ruptures to a new global order

**Class B:** Brief presentations by new members, continued. (Ramon y Cajal room)

**Class C**: **Highlight talks from new members in each section** (Auditorium)

#### **Introductions by the Section Chairs**

11:20 -11:45 Julia Vorholt, MAE, ETH Zurich, Switzerland

Establishing causality: Opportunities of synthetic communities for plant microbiome research

Chair: Ray Dixon, MAE, John Innes Centre, Norwich, United Kingdom

11:45-12-10 Jiri Friml, MAE, ISTA, Vienna, Austria

Rewriting the Rules of Plant Signalling: The Surprising Role of cAMP

Chair: Crisanto Gutierrez, Centro de Biología Molecular Severo Ochoa, Madrid, Spain

**12:10-12:35** Monica Di Luca, MAE, University of Milan, Italy

Dynamic synapses and the long arm to the nucleus

Chair: Balázs Gulyás, MAE, Karolinska Institute, Stockholm, Sweden

12:35-13:00 Milan Chytrý, MAE, Masaryk University, Czech Republic



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Biodiversity loss in European vegetation.

Chair: András Báldi, MAE, Centre for Ecological Research, Institute of Ecology and Botany, Vácrátót, Hungary

13:00-14:00 Lunch

#### 14:00-16:00 Continued Class sessions and YAE Meeting

#### Class A1:

14-16 Linguistics section workshop. (Rita Levi-Montalcini room)

14-16 Film, Media and Visual Studies workshop. (Rosalind Franklin room)

14-15 All other A1 sections [session in common] The Humanities and the Humanities Class. Challenges and prospects, continued. (Charles Darwin room)

#### Class A2:

14-15 Coffee & Conversations. Informal discussions- at thematic tables followed by brief reporting from each group. (Marie Curie room)

#### Joint session of Classes A1 and A2 (Marie Curie room)

15-16 Discussion on the 5th EU Freedom/Letta Report.

Chairs: Genoveva Martí, MAE, ICREA at University of Barcelona and Chair Class A1 and Björn Wittrock, MAE, Director AE College of Excellence and Chair Class A2

The discussion will be introduced by Thomas Sturm, MAE, (ICREA at Autonomous University of Barcelona). Comments by Janez Potočnik, former EU commissioner of science and research (2004-2010) and for the environment (2010-2014).

**Class B**: Artificial Intelligence Workshop with presentations by (Ramon y Cajal room)

Metin Sitti, MAE, Koç University, Istanbul, Turkey *ML for Small-Scale Soft Robot Design and Control* 

Lionel Briand, MAE, LERO, University of Limerick, Ireland Automated Testing and Safety Analysis of Deep Neural Networks

Rachid Guerraoui, MAE, EPFL, Lausanne, Switzerland *Towards a Safe AI* 

Erol Gelenbe. MAE, IITIS-PAN, Gliwice, Poland

Random Neural Networks: Parametrization and Learning for Cyberattack Detection



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Class C: (Auditorium)

14:00-14:25 Csaba Szabo, MAE, University of Fribourg, Switzerland

NO, CO, H2S, CN: the growing family of mammalian gaseous transmitters

Chair: Balázs Gulyás, MAE, Karolinska Institute, Stockholm, Sweden

14:25-14:50 Stefan M. Pfister, MAE, German Cancer Research Center, Heidelberg, Germany

Molecular tumor classification - translating discoveries into patient benefit

Chair: Péter Hegyi, MAE, Translational Medicine at University of Pécs, Budapest, Hungary

14:50- 15:55 Future activities and planning; membership and task force topics. Open discussion related to views of the section chairs and potential reform of sections; overview of the membership, including missing candidates and emerging/underrepresented fields; the potential for new task force topics and involvement of YAE.

15:55-16:00 Closing remarks

16:00-16:30 Coffee break

**16:30–17:00 Special lecture** (Auditorium)

Chair: Björn Wittrock, Director AE College of Excellence and Chair Class A2

Philippe Aghion, MAE, Collège de France, Paris ; Erasmus Medal winner 2021

Should we fear AI?

**17:00- 19:00 Annual General Meeting** (includes Hub presentation and SAPEA report) Auditorium

**19:00–20:00 Welcome reception** (Terrace of PRBB, indoors if it rains)



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#### Thursday 16 October 2025 – Plenary Sessions and YAE meeting

Rooms: Auditorium (Rosalind Franklin Room for press and additional meetings)

**08:30–09:00 Check-in** for conference participants not attending Class meetings

#### 09:00-10:30 Opening of Plenary Conference

- Don Dingwell, MAE, President of Academia Europaea
- Jaume Bertranpetit, MAE, Director of the Barcelona Knowledge Hub
- Janez Potočnik, former EU commissioner
- Erasmus Medal Winner 2025

Laudatio by János Pach, MAE, Rényi Institute of Mathematics, Budapest & EPFL, Lausanne

Lecture by László Lovász, MAE, Eötvös Loránd University, Budapest, Hungary *The Beauty of Mathematics* 

#### 10:30-11:00 Coffee break

#### 11:00-13:00 General Sessions by Class B: Exact Sciences

Chair: Paolo Papale, MAE, Instituto Nazionale di Geofisica e Vulcanologia, Italy and Chair Class B

- Hans Oerlemans, MAE and Balzan prize winner 2022, Utrecht University, The Netherlands *The role of glaciers in the evolution of the Earth*
- Licia Verde, MAE, ICREA at University of Barcelona, Spain Precision cosmology: threading a needle from the other end of the Universe
- Eugenio Coccia, MAE, IFAE and Rector of the Gran Sasso Science Institute, Barcelona, Spain *Gravitational Waves: from the Einstein prediction to the Einstein Telescope*

#### 13:00-14:00 Lunch

#### 14:00-15:00 Sydney Brenner Memorial Lecture

Laudatio by Kathryn Lilley, MAE, University of Cambridge, United Kingdom

Lecture by Markus Ralser, Charité, Berlin, Germany The Dynamic Nature of Cellular Metabolism

#### 15:00-17:00 General Sessions by Class C: Life Sciences

Chair: Eva Kondorosi, Biological Research Centre, Hungary and Chair Class C



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- Dennis Lo, MAE, Vice-Chancellor and President, Li Ka Shing Professor of Medicine at The Chinese University of Hong Kong (CUHK).

Non-invasive Prenatal Testing and Cancer Detection: From Dream to Reality

- Jens Stougaard, MAE, and winner of the Adam Kondorosi Academia Europaea Prize for Advanced Research 2025, Aarhus University, Denmark Plant perception of microbial signal molecules
- Mart Saarma, MAE, President of the Estonian Academy of Science, University of Helsinki, Finland

New approaches to treat neurodegenerative diseases

#### 17:00-17:30 Coffee break

**17:30–18:30 Welcome to New AE Members** (elected 2025), coordinated by Àlex Fidora, MAE, ICREA at Autonomous University of Barcelona, Spain

#### 18:30-19:00 Networking with drinks

**20:00 President's Dinner** with closing remarks and announcement of Building Bridges 2026 at Cangrejo Loco Restaurant Port Olimpic: Moll de Gregal, 29, Local 4, Barcelona. 10 minutes walk from PRBB.



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#### Friday 17 October 2025 - Plenary Sessions

Rooms: Auditorium and Rosalind Franklin Room (for press and additional meetings)

**09:00–10:00 André Mischke Prize.** Lecture by Agnieszka Wykowska, Istituto Italiano di Tecnologia, Geneva, Italy

Presentation by Scott Bremer, President of YAE, University of Bergen, Norway

Human-robot interaction: how robots can address societal needs

10:00-10:30 Coffee break

**10:30–11:30 Masterclass** by Jordi Savall: *Music as the First Language and Living History of the Human Being* 

#### 11:30-13:30 General Sessions by Class A1: Humanities

Chair: Genoveva Martí, MAE, ICREA at University of Barcelona, Spain and Chair Class A1

- Mark Steedman, MAE, University of Edinburgh, Scotland Natural Language and Artificial Intelligence
- Johan Rooryck, MAE, Leiden University, The Netherlands Towards Equitable Open Access Publishing
- -Louise McNally, MAE, Pompeu Fabra University, Barcelona, Spain Open Access Meets Large Language Models Meets Research Evaluation Policy: A View from the Trenches

#### 13:30-14:30 Lunch break

#### 14:30-16:30 General Session by Class A2: Social and Related Sciences

Chair: Martin Kahanec, Central European University, Vienna, Austria

Panel Theme: Democracy, Prosperity, and Sociality within Planetary Boundaries

This high-level, interdisciplinary plenary brings together perspectives from the natural and social sciences and humanities to consider how societies can live well within planetary boundaries. Rather than seeing ecological limits as constraints, how might they serve as catalysts for democratic renewal, equity, and innovation? Transforming the way we live requires more than technological fixes—it calls for approaches that are culturally grounded, inclusive, and responsive to lived realities. Experiences such as vaccine uptake highlight the limitations of top-down strategies. Climate change, as an anthropogenic and socially embedded phenomenon, illustrates how well-intended actions can produce unintended consequences. Here, the social sciences play a critical role in shaping just and viable pathways forward.

- Guy Midgley, Stellenbosch University, South Africa

Planetary boundaries and the fragility of abundance



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- Nebojsa Nakicenovic, MAE, Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria

Safe, Just and Beautiful Future within Planetary Boundaries

- Hartmut Rosa, MAE, MAX Weber Centre for Advanced Cultural and Social Studies, University of Erfurt, Erfurt, Germany

Running For – Or Listening Towards the Future? Two Alternative Visions of the World to Come

-Isabelle Anguelovski, ICREA at Autonomous University of Barcelona, Barcelona, Spain

Climate (Im)Mobilities Justice: Displacement, Segregation, Resistance, and the Uneven Geographies of Urban Adaptation

16:30-17:30 Open session organized by the Young Academy of Europe (YAE)

Public trust in science and navigating political tensions

Public trust in scientists can help policymaking institutions to decide on the basis of available evidence, but we witness recent political hostilities towards research institutions, and academic freedom and integrity. Indeed, the boundary between science and politics has always been contested, with some seeking to harden this boundary, while others see it as more malleable. And at the same time, most people today trust scientists and agree that they should engage more in society. Against this background, this panel will host multiple perspectives on how scientists – as individuals and as a group - navigate social and political polarization on the role and organisation of science in Europe today. To the extent that scientists work within a politicised context, what affordances and strategies do they deploy to establish science's role in society and relate to political trends.

*Moderator*: Scott Bremer, president of YAE, University of Bergen, Norway

#### Panelists:

- 1. Ruth Rodríguez-Martínez (SH), Pompeu Fabra University, Barcelona, Spain
- 2. Anna Kuppuswamy (LS), YAE, University of Leeds, United Kingdom
- 3. Emilian Mihailov (SH) YAE, University of Bucharest, Romania
- 4. Marta Sánchez de la Torre, University of Barcelona, Spain

17:30-18:30 Art and Science Lecture by Marta de Menezes, Lisboa, Portugal

Art and Immunology - A Love Story

Introduced by Monica Bello, Art Curator, Barcelona

18:30-19:30 Farewell toast with glass of cava



## **BARCELONA**

Saturday 18 October 2025 – Optional Activity

10:00–15:00 Visit to the Spanish Winery Torres: <a href="https://www.torres.es/en">https://www.torres.es/en</a>