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Greetings from the President

Χαίρετε, أَمْ لُكْيَ لُعْ مُ أَلُّ سُل أُ, greetings, in my native and adopted languages! And a hearty welcome to the 2025 meetings of ISHPSSB, the Porto, Portugal edition. We have been gathering like this every other year for nearly forty years now, each time at a carefully selected place conducive to social and intellectual interactions. Our community is inclusive. It is open to all, and it is multidisciplinary, enabling all kinds of interdisciplinary approaches to the scientific study of life. Best of all, we are international in scope, growing in regional representation with each meeting, and though we rely on English, we speak in many other languages.



Our meeting this year is especially exciting; we are in a beautiful, historic city and our hosts have been especially attentive to our needs. They've done everything possible to make our meetings a success. They have chosen stunning venues, important themes, and all with

meticulous organization designed to inform us about Portuguese history and celebrate Portuguese culture. I am grateful to Maria Strecht Almeida and her local arrangements team who have made this meeting possible. It wasn't that long ago that we had so much uncertainty stemming from the pandemic, that no one wanted to take this meeting on. Maria and her colleagues stepped up to help us out, with a marvelous proposal for this meeting that has finally materialized. I am also grateful to Kate MacCord and Charles Pence, the chairs of the program committee. They have assiduously organized an enormous, and especially complex program full of papers, sessions and plenaries, that will last for the entire five days. It is stunning in its breadth and in the diversity of

topics, and approaches, and from scholars at all career stages, from many international and institutional settings. The plenary and mini-plenaries promise to be especially engaging. Inevitably, there will be conflicts on a program this big, but Kate and Charles have done everything possible to minimize them. I strongly recommend reading the program in advance and planning around the sessions and papers that interest you most.

I am also grateful to our Treasurer, Don Opitz and the travel support committee who went through an unprecedented two rounds of applications when economic instability threatened the attendance of some of the participants, our Secretary Lloyd Ackert who enabled us to coordinate meetings between organizers located in a number of time zones, and Lucie Laplane, always ready to fire off quickly some important piece of information to us all, and always with good cheer. A special note of thanks to Michel Durinx who kept our website current with all manner of changes, and David Suárez Pascal our Newsletter editor for his artistry in layout design and his patience in copy editing and extracting information from us all. It really does take a village to make a meeting like this a success, and I encourage all of you to thank each of these volunteers for their devotion to ISHPSSB. You can best do that by attending the members' meeting on Thursday morning, where you can catch up on developments in the society, and you can volunteer to serve on committees in the coming year, and especially in the afternoon when we hold our special recognition and awards ceremony.

Finally, I encourage you all to attend the conference dinner, whose location will probably prove the most memorable of all. Our hosts have made a special effort to celebrate the end of what promises to be a wonderful, productive and fun meeting. Thank you all for joining us and again, welcome to ISHPSSB 2025!

Vassiliki Betty Smocovitis

Word from the Program Committee

On behalf of the Program Committee, we welcome you to ISHPSSB 2025 in scenic Porto, Portugal. We hope these few days we spend together are full of thought-provoking conversations, laughter, and joy.

Our main goal with this program has been to highlight the diversity that makes ISH one of the most eclectic and interesting meetings on our calendars. In prior years, philosophy was seen as cornering a large part of the ISH market. By extending our call for papers to various local, national, and interna-



tional organizations, we sought to bring the program back to a robust, truly interdisciplinary venture. It is the breadth of our community that makes us great, and we have worked tirelessly to showcase just how broad this community is.

One new feature you will notice on the program aims to push our focus on breadth and interdisciplinarity – our new mini-plenaries. These mini-plenaries were developed to give a platform to scholars who work on overlapping topics, but from different perspectives. We have selected topics that we hope will have broad appeal – as well as being a bit off the beaten track. We look forward to the lively discussions that will ensue.

Discussions and social interactions have long been on behalf of the Program Committee

one of the crowning features of ISH meetings. Following the Toronto meeting, our survey of ISH members found this to be a widely held tenet. And, while people enjoyed many of the benefits of being able to attend virtually, the majority of respondents indicated that the lively and diverse in-person aspects of our meetings were what they valued most. As such, we did not plan to support a large, virtual conference – instead, focusing our efforts on the in-person experience.



When we made this decision two years ago, it seemed like the best option to give our community the best Portuguese experience possible. But, of course, the world has changed, and we have had to adapt our program as best we can. We hope you will bear with

us through our heavier-than-anticipated use of Zoom, as some of our scholars now find themselves unable to travel. While they may not be able to join us in Porto, their contributions are valuable assets to the richness of our culture. So, patience please, in the face of technological difficulties, and grace towards our brave chairs who have agreed to host our Zoom rooms.

We hope that you'll enjoy attending the Porto meeting as much as we have enjoyed preparing its program!

Kate MacCord and Charles H. Pence

Welcome from the Local Arrangements Committee

We are happy to welcome you to Porto for the 2025 biennial meeting of the International Society for the History, Philosophy, and Social Studies of Biology (ISHPSSB).



The meeting is locally organized by the School of Medicine and Biomedical Sciences (ICBAS) of the University of Porto in partnership with the Natural History and Science Museum of the University of Porto (MHNC-UP). The Local Arrangements Committee is a team gathering people from diverse disciplinary backgrounds (life and health sciences, history and philosophy of science, social sciences) and institutions (schools, research units, and a natural history and science museum), from the University of Porto, University of Coimbra, NOVA University Lisbon, and University of Lisbon.

Located along the estuary of the Douro River and facing the Atlantic Ocean, Porto is a vibrant and welcoming city. We believe that many stimulating conversations will extend from the conference rooms to

cafés, terraces, riverside walks, or at the seafront.

ISHPSSB 2025 will take place mainly at and nearby ICBAS, in the city center. The welcome session is a short bus ride away, in the Hall of Biodiversity and Botanical Garden on the Campo Alegre campus. At ICBAS, the rooms reserved for the parallel sessions are all located close to each other. On Thursday, we will cross the street to the Super Bock Arena conference center, where the sessions designed to bring all the participants together will take place. We believe conferences are also about meeting people and establishing contacts, which is why we have devoted special attention to preparing different networking opportunities and social events and have been working towards an informal conference dinner in the Hall of Nations at Palácio da Bolsa on Thursday evening.

We are committed to accessibility and you can find detailed information about accessible routes on the conference website. We are also committed to environmental sustainability and will work towards minimizing the environmental impact of our event by reducing the use of disposable materials.

With the ISHPSSB 2025 meeting we hope to honor the traditions of ISHPSSB in fostering informal, collegial, co-operative exchanges and on-going collaborations.

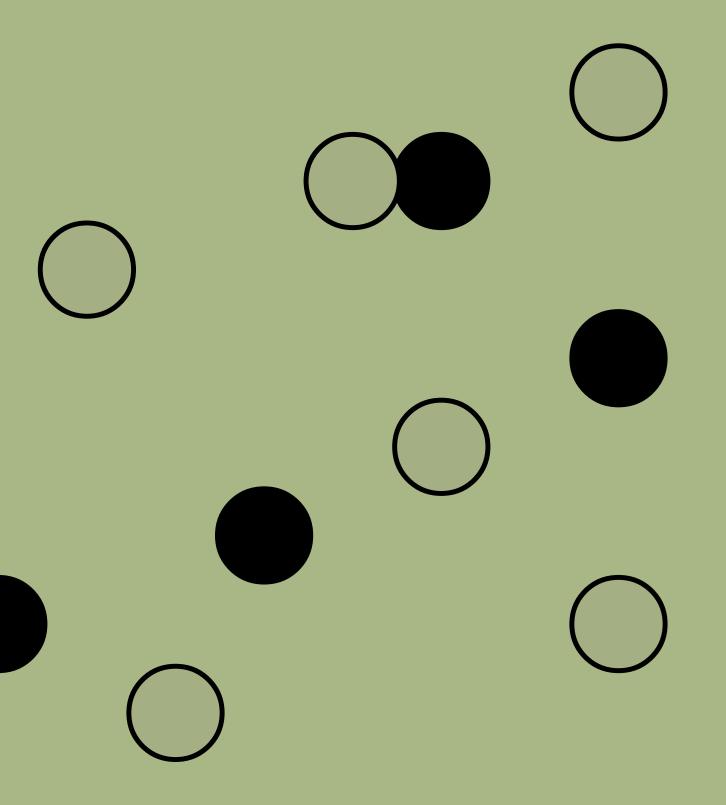
We look forward to meeting you in Porto, hoping you may find this conference stimulating and insightful.

Bem-vindos!

Maria Strecht Almeida

on behalf of the Local Arrangements Committee

LOCAL THEORMATION



A host of additional information is available on the conference website: https://ishpssb2025.icbas.up.pt/

Wi-Fi— Anywhere within the University of Porto campus, you can connect to the WiFi network eduroam. For those who do not have access to eduroam, another WiFi network will be available. Participants will receive information WiFi at registration. If you have trouble connecting, you can ask for support at the registration desk.

Exhibition— Throughout the conference, the exhibition *From Artifacts to Facts*, exploring the work of Manuel Teixeira da Silva on bacterial mesosomes in the 1970s, will be on display in the ICBAS Foyer. The exhibition is supported by ICBAS – School of Medicine and Biomedical Sciences and i3S – Institute for Research and Innovation in Health, University of Porto.

Conference Venues

The Galeria da Biodiversidade (Hall of Biodiversity) and the Botanical Garden of the University of Porto (part of the Natural History and Science Museum, UPORTO/MHNC-UP) will be the venues on the opening day.

Galeria da Biodiversidade

Rua do Campo Alegre, 1191 4150-181 Porto

Phone: +351 220 408 700

The School of Medicine and Biomedical Sciences (ICBAS) of the University of Porto will host most of the sessions. The building is located next to the Palácio de Cristal Gardens, a large public garden.

ICBAS - School of Medicine and Biomedical Science

Rua Jorge Viterbo Ferreira, 228 4050-313 Porto

Phone: +351 220 428 000

The Super Bock Arena Conference Center, located in Palácio de Cristal Gardens, will host the plenary, poster session, and committee meetings on Thursday.

Super Bock Arena Conference Center

Rua D. Manuel II 4050-346 Porto

Phone: +351 220 503 257

The conference/celebration dinner will take place at the Hall of Nations, Palácio da Bolsa.

Palácio da Bolsa

Rua Ferreira Borges 4050-253 Porto

Phone: +351 223 399 000

A limited number of seats will be available for bus transportation from the Super Bock Arena to the Palácio da Bolsa on Thursday evening. Information about how to make the trip via public transportation is available at the conference website.

Helpful Information

(Consult the PDF version of this document for clickable hyperlinks.)

- Information on the city of Porto is available at the conference website: https://ishpssb2025.icbas.up.pt/planning/city-of-porto/
- The city of Porto's tourism information can be found here: https://visitporto.travel/en-GB. You may also be interested in the New York Times' Guide to Porto (2023).
- Additional information on pastries/bakeries, coffee shops, restaurants, and breweries will be provided at the registration desk. There is also a dedicated website for gluten-free dining information.

Banks— Most banks operate from 8:30 am to 3:00 pm. There are cash points near or in the conference venues.

Pharmacy— Farmácia Cardona is the nearest to the main conference venue, ICBAS.

Farmácia Cardona Rua D. Manuel II, 81 4050-342 Porto

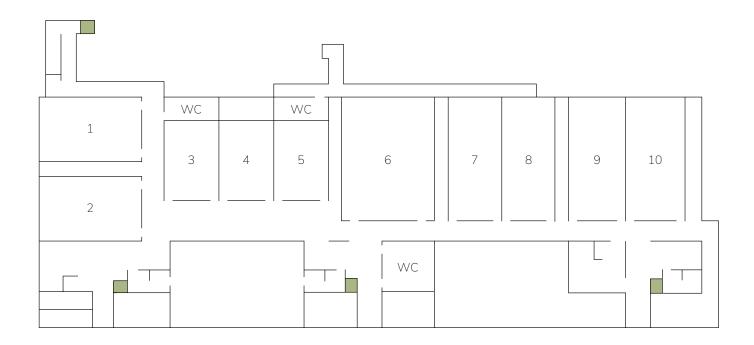
Phone: +351 226 069 807

Hospital/Urgent Care— Hospital de Santo António (ULS Santo António) is the nearest to the venues.

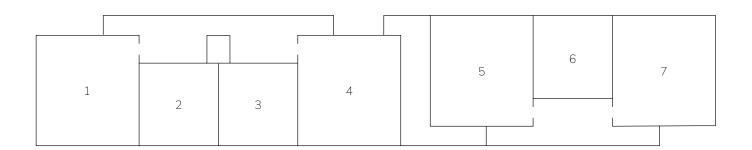
Hospital de Santo António Largo do Prof. Abel Salazar 4099-001 Porto

Phone: +351 222 077 551

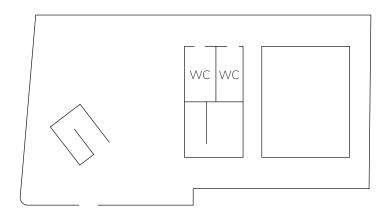
Floor 0 – Anfiteatros



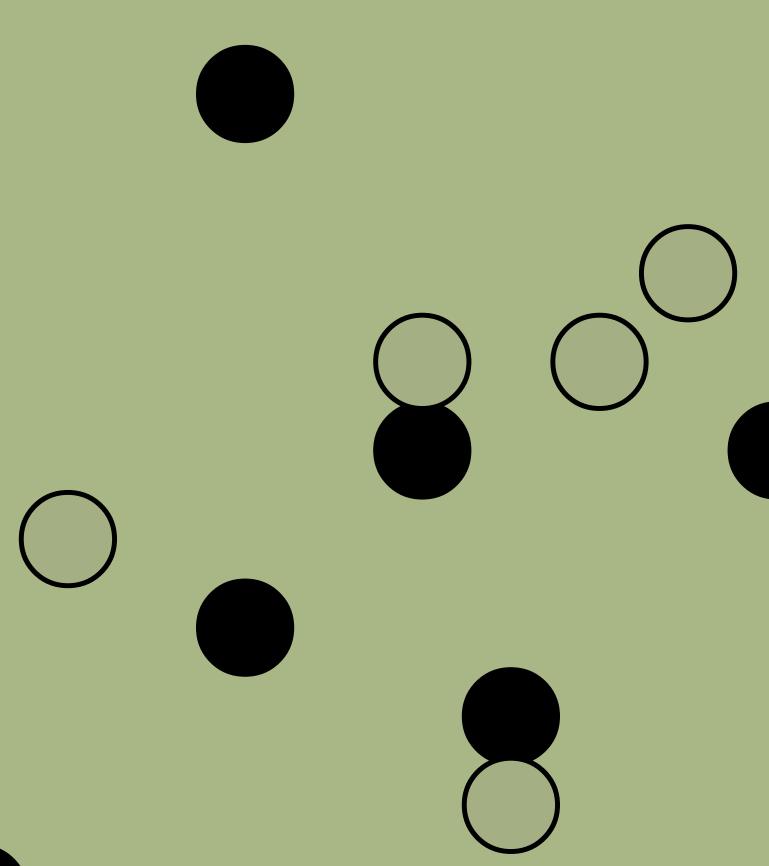
Floor 0 – Monoblocos (BLA and BLB)



Floor 4 – Foyer, Salão Nobre



PLEHARIES



Plenary Talk: The New Biology: How Post-Genomic Research Is Changing the Narratives of Life

Thursday, July 24, 2:00–3:30PM, Super Bock Arena, Auditorium

Philip Ball

Chairs: Vassiliki Betty Smocovitis, Ramsey Affifi, and Charbel El-Hani

Ostensibly a description of how sequence information moves between the genome and the proteome, Francis Crick's central dogma carried the implication that the construction and maintenance of organisms was a matter of reading out instructions in the genes – an idea condensed into the popular metaphor of the genome as a blueprint or instruction book. How genotype becomes phenotype increasingly looked, however, to be a question of baffling and perhaps impenetrable complexity. But over the past two decades or so, not only has research in molecular and cell biology begun to reveal some general principles to how biological complexity arises, but those principles make the blueprint metaphor ever less apt. It now appears that there is no privileged level of the biological hierarchy from genes to organisms; information exchange happens between all levels and in all directions. I will discuss some of the key aspects of this new emerging picture of how life works, and will suggest that it might be fruitfully understood as a system that facilitates biological agency.



Bio:

Philip Ball is a freelance writer and author, and was previously an editor at *Nature* for over 20 years. His latest book is *How Life Works* (University of Chicago Press, 2023).

Mini-Plenary Talks

For this meeting, ISHPSSB is trying out a new format: "mini-plenary talks," which are designed to bring together two scholars from different disciplines, working on up-and-coming ISHPSSB topics. We hope you'll find them interesting and attend!

Discovering the Sea in the History, Philosophy and Social Studies of Science

Monday, July 21, 6:15–7:15PM, Salão Nobre

Elis Jones & Sam Muka

Chair: Vassiliki Betty Smocovitis

The fate of humanity is increasingly recognized to be connected to the fate of the ocean: rising sea levels, "Ocean Decades," deep sea mining, and new "blue" disciplines all speak to a rising interest in further understanding and exploiting the sea. But what place do Ocean and the marine sciences have in the various disciplines represented at ISHPSSB? What does it mean for a discipline to be "marine?" Why do marine sciences exist in the first place, and why have some humanities disciplines been slow to engage with the marine environment and the sciences that study it? In this talk, we discuss these issues, drawing together considerations around the nature of the ocean with reflections on the nature of the disciplines that do, or might, study it.

Elis Jones, Postdoctoral Researcher, Technical University Munich

Elis Jones is a philosopher and sociologist of science with an interest in marine systems. His work revolves around topics related to coral reefs, regeneration, ecological change, and how the value attributed to living entities shapes scientific research.



Sam Muka, Associate Professor, Stevens Institute of Technology

Sam Muka is the director of the Science and Technology Studies program at the Stevens Institute of Technology in Hoboken, NJ. Her work examines the way a variety of stakeholders create marine knowledge. Her book *Oceans Under Glass: Tank Craft and the Sciences of the Sea* (University of Chicago Press, 2022) looked at the history of aquariums as modeling systems to better understand the ocean. Her current project focuses on the development of coastal engineering in the United States from 1950–2000.



Ecological Restoration: What Are We Restoring the World To?

Tuesday, July 22, 6:15–7:15PM, Salão Nobre

Alkistis Elliott-Graves & Banu Subramaniam

Chair: Challie Facemire

Over a hundred years old, restoration ecology continues to be imagined, debated and practiced. By now we have a robust history of projects of ecological restoration that offer precarious bridges between academic disciplines but also between academia and the political, public and private spheres. We are currently in the middle of the UN Declared Decade on Ecosystem Restoration (2021-2030), and while there is general agreement that restoration is important, there is little agreement between scientists, historians, philosophers, and other stakeholders on what restoration is, why it is important, how it should be done, and what it should avoid. On the one hand, a central problem underlying many of these debates is a fundamental disagreement about what restoration is/ought to be. Is restoration even possible? Does it give us false hope and the permission to continue to destroy the planet? On the other hand, there has been a steady increase cases of restoration projects which are considered successful on multiple metrics, despite the numerous epistemic and practical difficulties that restoration projects face. How is this possible?

In this session we will start from two different approaches to restoration ecology: a critique of the very feasibility of restoration and an epistemic analysis of the success of particular projects and investigate how these approaches limit each other's scope but also whether they can provide useful insights that can help to advance the theory and practice of ecological restoration.

Alkistis Elliott-Graves, Junior Professor, Bielefeld University

Alkistis Elliott-Graves is Junior-professor in Philosophy at Bielefeld University. Her main research areas are general philosophy of science and philosophy of applied sciences (especially Ecology and Climate Science). She is interested in complex systems: what makes them interesting but also difficult to investigate. Her recent work focused on the difficulty of making precise and accurate predictions in Ecology and Climate Science, and what this means for the scientific status of these disciplines.

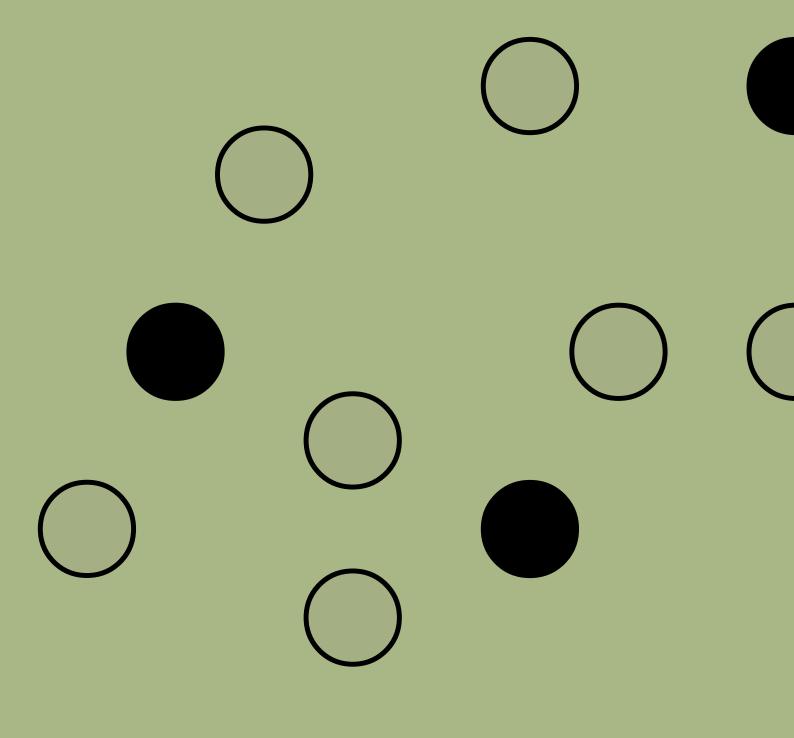


Banu Subramaniam, Professor, Wellesley College

Banu Subramaniam is the Luella LaMer Professor of Women's and Gender Studies at Wellesley College. Trained as a plant evolutionary biologist, Banu engages the feminist studies of science in the practices of experimental biology and is author of Botany of Empire (2024), Holy Science (2019) and Ghost Stories for Darwin (2016).



PARTICIPANT THEORNATION



Information for Speakers and Chairs

Schedule— While all of the information about the schedule is available, below, we would recommend that you follow along with the conference schedule using the website, which is accessible on computers, tablets, or cell phones.



Click here to go there (in the PDF), or scan the QR code at the right. The website will allow you to search through all sessions, talks, and abstracts. If you log into your Oxford Abstracts account (the same account you used to submit your initial talk), you can build your own customized schedule, and see the Zoom links for any virtual talks.

Please note that last-minute changes to the program are always possible, and will be reflected to the best of our ability in the online version. Occasional updates to the PDF version of this document may also be available.

Registration— All conference speakers and other participants need to register. Standard registration times are on Sunday, from 4:00 PM to 6:00 PM at the Hall of Biodiversity, and Monday to Friday, from 8:00 AM to 9:00 AM at the main entrance of the ICBAS building. Registration is mandatory for all participants. At the registration desk, you will receive your welcome package and name tag. The registration desk will remain open all week for latecomers.

You must wear your name tag at all times during the conference. It will give you access to all conference buildings, the sessions, the social events, as well as food and/or drinks served during coffee-breaks.

Speakers— Each room is equipped with a projector. You will need a computer that you can connect to the room's audio-visual system. We recommend that you arrive before your session starts to sort out these technical details. We also recommend that you have a copy of your presentation in PDF format, to avoid potential problems with formatting or fonts.

Chairs— If you are the chair of a session, please arrive early to help make sure things run smoothly. You will be in charge of keeping everyone on time and handling the question and answer period. (If your session includes virtual talks, see information on those below.) Please do keep all talks to their scheduled period (even if, for example, there are only two speakers in a 90-minute session); people may have planned to enter or leave between talks.

Posters— Posters should be **A0 portrait size**, or 841 \times 1189 mm (33.1 \times 46.8 in). Presenters are responsible for hanging their own posters; tape for placing the posters on the structure/panel will be available.

Hybrid Sessions— Some sessions will have remote speakers, marked as "[Virtual]" in the program. Each of these sessions has a Zoom room already created, with a link in the online program. The chairs for each such session (as well as the session organizer, if it is an organized session) have been marked as hosts, so should be able to manage the Zoom room. Chairs should bring their own laptops, connect to Zoom, and share their screens. Please keep an eye on the chat, should moderation be necessary. We have attempted to keep these Zoom links private to conference participants, but it is possible that bad actors might need to be removed.

Remote presenters should already have the link and be able to connect; the chair may make them a cohost or enable their screen sharing, and they should be able to present. You may need to repeat questions coming in from participants online for those in the room in Porto to be able to hear them. Alternatively, if you would prefer to take only text questions in the Zoom chat, this would be fine as well.

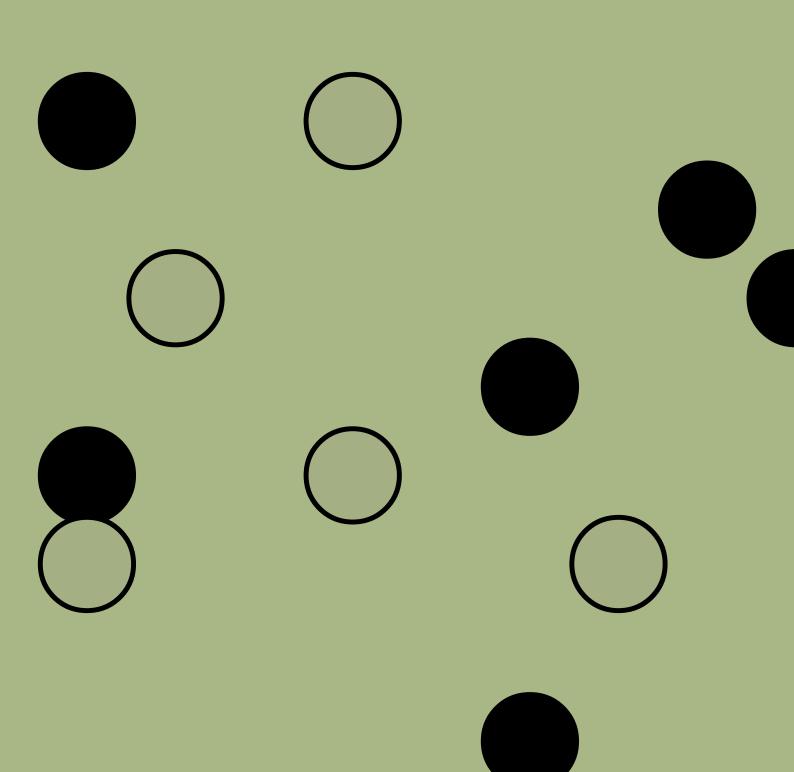
Troubleshooting— For worries about the technology available in the rooms – for instance, problems with projectors or cameras – each room will have a dedicated student assistant. Additionally, **Room BLB6** will be our conference support room, where you can also always find a student assistant, as well as members of the Program and Local Arrangements Committees, to help handle any last-minute emergencies. We will not be able to provide much help managing Zoom, unfortunately.

Policy on Respectful Behavior

ISHPSSB is committed to the ideals of diversity and inclusion and to creating an environment that facilitates an open intellectual exchange. ISHPSSB meetings are intended to foster the respectful exchange of ideas, provide participants the opportunity to present research findings and receive helpful feedback, establish and/or renew collaborations, and network with an international community of scholars interested in history, philosophy, and social studies of biology. The Society is dedicated to providing a safe, hospitable, and productive environment at its biennial meetings, off-year events, and in committee meetings that uphold these values. In compliance with Article XI of the Bylaws, ISHPSSB expects that members and meeting

participants be able to take part in Society activities without experiencing any form of harassment, bullying, discrimination, racism, incivility, or violence. The Society expects all members, meeting participants, and elected officers to treat others with respect and consideration. The same kind of respectful behavior is expected of members in all settings: formal and informal gatherings, such as banquets, restaurants, coffee shops, bars, outdoor spaces, or on public transportation, as well as during the course of the Society's committee work and business operations. For the full policy and procedures for reporting harassing behavior, see ishpssb.org/about/code-of-conduct, or contact the Ombuds Committee at ombuds@ishpssb.org.

SCHEDULE.



16:00-18:00

Registration Open [Galeria da Biodiversidade]

18:00-18:20

Welcome Speeches [Galeria da Biodiversidade]

18:20-19:00

Opening Panel: Censoring Knowledge and Ideas: Historical Echoes from Portugal [Galeria da Biodiversidade]

19:00-20:00

Reception: Porto de Honra [Galeria da Biodiversidade]

09:00-10:30

Anf. 1	Anf. 2		Anf. 6	Anf. 7	Anf. 8	Anf. 9
Organized: Abusing Deep Time: Scientific Responsibility in the Paleosciences	Organized: Neglected Topics in the Philoso- phy of Evolution: From Evolutionary Biology to Evolutionary Stud- ies — Session 1		Organized: The Construction of School Knowledge on History, Philosophy, and Social Studies of Biology — Session 1	Organized: Organicism: A Further Discussion of Themes from the 2025 History of Bi- ology Seminar at the Marine Biological Lab- oratory, Woods Hole	Individual: Building Scientific Organizations and Fields	Individual: Bias, Trauma, and Frailty
BLA1	BLA2	BLA3		BLB5	BLB7	
Organized: Early Twentieth-Century European Ecology: New Perspectives and Interpretations — Session 1	Organized: Ecologies of Life in Space [IDSP]	Organized: Rethinking Expertise for Data Sharing		Individual: Psychiatry and Mental Illness	Individual: Microbes and Macrobes	

10:30-11:00

Coffee Break [Cantina]

11:00-12:30

Anf. 2		Anf. 6	Anf. 7	Anf. 8	Anf. 9
Organized: Neglector Topics in the Philosophy of Evolution: Fro Evolutionary Biolog to Evolutionary Studies — Session 2	n- m /	Organized: The Construction of School Knowledge on History, Philosophy, and Social Studies of Biology — Session 2	Individual: Putting Human Genetics to Use	Individual: Agency	Organized: (Re)Integrating Uncertainty to Address the Complexity and Biosocial Dimension of the Interface Between Biology and the Environment

BLA1	BLA2	BLA3	BLA4	BLB5	BLB7
Organized: Early Twentieth-Century European Ecology: New Perspectives and Interpretations — Session 2	Individual: Evolution and Moral Realism	Individual: Fitness and Evolutionary Theory	Individual: Embryos, Development, and Explanation	Individual: Diagnosis and Intervention	Individual: Data, Replication, and Controversy

12:30-14:30

Lunch Break

BLA1

Outgoing ISHPSSB Council Meeting

14:30-16:00

Anf. 1	Anf. 2	Anf. 4	Anf. 6	Anf. 7	Anf. 8	Anf. 9
Organized: Local Constraints and Historical Coincidences Shaping Theory and Practice of Biological Anthropology Across the World — Session 1	Organized: Values, Bias and Controversies in Human Genomics — Session 1	Individual: Modeling and Explanation	Organized: Using Material Models to Investigate How Agency Can Arise and Evolve	Individual: Values and Democracy in Science	Organized: Conceptual Challenges in the Field of Human Evolution	Organized: Participation in Conservation in Postcolonial and Settler Colonial Contexts — Session 1
BLA1	BLA2	BLA3	BLA4	BLB5	BLB7	
Organized: Transform- ing Genetics Through Genetic Transforma- tion	Individual: History and Controversy in Medicine	Organized: Is "Non- human Language" an Oxymoron?	Organized: The Life of Protocols in the Life Sciences	Organized: Concepts and Principles for the New Biology: Develop- ment, Disruption and Normalization	Individual: Reproduction and Individuality	

16:00-16:30

Coffee Break [Cantina]

Cantina

Off-Year Workshop Committee: Workshop Proposals

16:30-18:00

Anf. 1	Anf. 2	Anf. 4	Anf. 6	Anf. 7	Anf. 8	Anf. 9
Organized: Local Constraints and Historical Coincidences Shaping Theory and Practice of Biological Anthropology Across the World — Session 2	Organized: Values, Bias and Controversies in Human Genomics — Session 2	Individual: Metaphors from Hibernation to Metamorphosis	Organized: Transfor- mative Transdisci- plinarity: An Introduc- tion to Community- Based Philosophy	Individual: Art, Aesthetics, and Science	Individual: Disease Past and Present	Organized: Participation in Conservation in Postcolonial and Settler Colonial Contexts — Session 2
BLA1	BLA2	BLA3	BLA4	BLB5	BLB7	
Individual: Division of Labor, Rationality, and Fitness	Individual: Oceans and Deserts	Organized: Quantitative Genetics in Comparison: Statistical and Genomic Practices Across Biomedicine, Behavioural Science and Agriculture	Organized: Should HPSSB Think About Philosophy of Physics?	Organized: Evolution at the Margins: Non- standard Applications of Evolutionary Theory	Individual: Evolution and Development	

18:15-19:15

Mini-Plenary: Discovering the Sea in the History, Philosophy and Social Studies of Science [Salão Nobre]

09:00-10:30

Anf. 1	Anf. 2	Anf. 4	Anf. 6	Anf. 7	Anf. 8	Anf. 9
Organized: Pluralism, Epistemic Injustice, and Transdisciplinarity in the Life Sciences — Session 1	Organized: Organi- cism: From Theoretical Developments to Eth- ical and Educational Implications	Organized: Tracking the Crisis Virus: Eq- uity in Global Health Research	Organized: Double-Roundtable on Evelyn Fox Keller's Legacy in History and Philosophy of Biology and Gender and Science Studies — Session 1	Organized: The Evolving Interface Between Biology and Psychology — Session 1	Individual: Organi- zation, Stability, and Matter	Organized: Gendered Agency in Horticul- tural and Agricultural Histories
BLA1		BLA3	BLA4	BLB5	BLB7	
Organized: What Future for Animal Experiments in Biological Psychiatry?		Individual: Biology in the Americas	Individual: Language and Behavior	Individual: Parasites, Pathogens, and Disor- ders	Organized: Concepts and Practices in Ecol- ogy and Conservation: When Context, Val- ues, and Positionality Matter	

10:30-11:00

Coffee Break [Cantina]

11:00-12:30

Anf. 1	Anf. 2	Anf. 6	Anf. 7	Anf. 8
Organized: Pluralism, Epistemic Injustice, and Transdisciplinarity in the Life Sciences — Session 2	Organized: Agency: The Twofold Concept About Niche Construc- tion in Cognition and Evolution	Organized: Double- Roundtable on Evelyn Fox Keller's Legacy in History and Philos- ophy of Biology and Gender and Science Studies — Session 2	Biology and Psychol-	Organized: Recently Recognized Properties, Powers and Puzzles of the Phenotype and Their Evolutionary Implications

BLA1	BLA2	BLA3	BLA4	BLB5	BLB7
Organized: The Pulse of Life: Materialism(s) of Vitality and Vibrancy [IDSP]	Individual: Race	Individual: Exploring Biological Possibility	Organized: Preparing the "Field" for AI and Data Intensive Agroe- cological Research	Individual: Classifica- tion	Individual: Plasticity and Evolvability
12:30-14:30					

Lunch Break

Lunch: Consortium for Socially Relevant Philosophy of/in Science and Engineering (SRPoiSE)

14:30-16:00

Anf. 1	Anf. 2	Anf. 4	Anf. 6	Anf. 7	Anf. 8	Anf. 9
Organized: Disability and "Defect": Tracing the Ableist Legacies of Eugenics in Research, Clinical Care, and Policy — Session 1	Individual: Cultural Evolution	Organized: Epistemic Pluralism for a Better Microbiome Research Practice? [IDSP]	Organized: Rebel Educator, Community Builder, Public Scientist: The Pedagogical and Media Strategies of Lynn Margulis	Organized: Conceptual Change in Biology: Historical and Philo- sophical Perspectives	Individual: Sex and Gender	Organized: From Seeds to Systems: Sociological Pathways in the Evolution of Agricultural Research Into Policy in Ghana
BLA1	BLA2	BLA3	BLA4	BLB5	BLB7	
Organized: What Is Evolvability and Why Does It Matter?	Individual: Evidence and Data	Individual: Biological Explanation	Organized: More than Pretty Pictures: The Roles of Visual Repre- sentations in the Life Sciences — Session 1	Organized: Is Life Meaning-Making? His- torical, Philosophical, Theoretical, and Soci- ological Approaches to Biosemiotics — Ses- sion 1	Organized: Microbes and Gender — Session 1	

16:00-16:30

Coffee Break [Cantina]

16:30-18:00

Anf. 1	Anf. 2	Anf. 4	Anf. 6	Anf. 7	Anf. 8	Anf. 9
Organized: Disability and "Defect": Tracing the Ableist Legacies of Eugenics in Research, Clinical Care, and Policy — Session 2	Organized: Reimagin- ing Gardens	Individual: Education and Experience	Organized: An Inter- disciplinary Discussion of Disputed Inheri- tance: The Battle over Mendel and the Future of Biology	Organized: What Role(s) for Theory in Contemporary Cel- lular and Molecular Biology?	Organized: Idealization and Values in Science	Organized: Dialectical Biology Today: Legacies of Richard Lewontin, the Triple Helix, and Marxist Science
BLA1	BLA2	BLA3	BLA4	BLB5	BLB7	
Individual: Influences and Theorizing Across Time and Place	Individual: Ethics, Envi- ronment, and Technol- ogy	Individual: Psychology and the Mind	Organized: More than Pretty Pictures: The Roles of Visual Repre- sentations in the Life Sciences — Session 2	Organized: Is Life Meaning-Making? His- torical, Philosophical, Theoretical, and Soci- ological Approaches to Biosemiotics — Ses- sion 2	Organized: Microbes and Gender — Session 2	

18:15-19:15

Mini-Plenary: Ecological Restoration: What Are We Restoring the World To? [Salão Nobre]

09:00-10:30

Anf. 1	Anf. 2	Anf. 4	Anf. 6	Anf. 7	Anf. 8	Anf. 9
Organized: Deconstructing Darwinism — Session 1	Organized: Cell Land- scapes — Session 1: Revisiting Waddington in the Light of Single- Cell Sequencing	Organized: Agents and Values in Conservation	Organized: Expeditions and Museum Collections	Organized: Deconstruction as a Signature of Precision Medicine? — Session 1 [IDSP]	Organized: Gaiapolitics: Historical and Philosophical Perspectives on Earth and Environmental Sciences and Management	Organized: Dialecti- cal Biologists Revis- ited: Gould, Levins, and Lewontin as Bio- Political Agents
BLA1	BLA2	BLA3	BLA4	BLB5	BLB7	
Individual: Concepts, Pluralism, and Emer- gence	Individual: Education, Creativity, and Drama	Individual: Medicine and (Non-)Animal Models	Individual: Meta- Studies of the Life Sciences	Individual: Sex and Feminism	Organized: New Histories of Eugenics & Euthenics in 20th Century Biology	

10:30-11:00

Coffee Break [Cantina]

Cantina

Off-Year Workshop Committee: Workshop Proposals

11:00-12:30

Anf. 1	Anf. 2	Anf. 4	Anf. 6	Anf. 7	Anf. 8	Anf. 9
Organized: Deconstructing Darwinism — Session 2	Organized: Cell Land- scapes — Session 2: Decanalization and Cancer Treatment: A Collaboration Between Philosophy, History and Biomedicine	Individual: Model Organisms	Organized: Species, Individuals, and Other Classificatory Matters: Reflections on Marc Ereshefsky's Contribu- tions to the Philosophy of Biology	Organized: Deconstruction as a Signature of Precision Medicine? — Session 2 [IDSP]	Individual: Values in Ecology and Conserva- tion	Organized: Cognate Session: Asian Phi- losophy of Science Association

BLA1		BLA3		BLB5	BLB7	
Individual: Pursuit and Planning in Science		Individual: Citizen Science, Zoos, and Primates		Individual: Pregnancy and Reproduction	Organized: "Population" Revisited: Histories of an Idea in Human Genetics	
12:30–14:30						
			Lunch Break			
1400 4000						
14:30–16:00						
Anf. 1	Anf. 2	Anf. 4	Anf. 6	Anf. 7	Anf. 8	Anf. 9
Organized: How Does Dirt Become Soil? Categorizations of Soil in the Agricultural Sciences — Session 1	Organized: Explana- tory Human Nature? — Session 1	Organized: Shifting Views: Racial Dis- cussions in Mexico from the Porfiriato (1876–1911) to the Turn of the Millennium	Organized: Biological Variation: Theory and Practice — Session 1	Organized: Introducing Neglected Perspectives on Agency: Microbes, Fungi and Niche Constructors — Session 1	Organized: Philoso- phy & Philosophers of Science in Crossdisci- plinary Science	Individual: Evolution Ethics, and Norms
BLA1	BLA2	BLA3	BLA4	BLB5	BLB7	
Organized: Imagery in Biology: Intersections Between Art, Science,	Individual: Human Enhancement and Improvement	Individual: Animal Models	Individual: Climate and Conservation	Organized: Time in Developmental Biology: Conceptualization and	Individual: Darwin	

16:00-16:30

and Philosophy

Coffee Break [Cantina]

Representation

16:30-18:00

Anf. 1	Anf. 2	Anf. 4	Anf. 6	Anf. 7	Anf. 8	Anf. 9
Organized: How Does Dirt Become Soil? Categorizations of Soil in the Agricultural Sciences — Session 2	Organized: Explana- tory Human Nature? — Session 2	Organized: Historiciz- ing Prenatal Testing: Prognostic Uncertainty, Decision Making, and (Dis)Ability in Context	Organized: Biological Variation: Theory and Practice — Session 2	Organized: Introducing Neglected Perspectives on Agency: Microbes, Fungi and Niche Constructors — Session 2	Individual: Darwin, Before and After	Organized: The Beginnings of Modern Philosophy of Biology: Hull, Ruse, Wimsatt

BLA1	BLA2	BLA3	BLA4	BLB5	BLB7
Individual: Humans and Anthropology	Individual: Metabolism	Individual: Microbes and Microbiomes	Organized: Controlling Pests and Pathogens: "Basic" and "Applied" Science in Cold War Debates over Insecti- cide Resistance, Dis- ease Eradication, and Antibody Production	Organized: Evolution- ary Reconstruction and Explanation	Organized: The Measured Body: Exploring the Implications of Wellness Technologies and Self-Diagnosis Through Objects and Images [IDSP]

09:00-10:30

Anf. 1	Anf. 2	Anf. 4	Anf. 6	Anf. 7	Anf. 8	Anf. 9
Organized: Imagina- tion Beyond Humans	Individual: Disease from Pregnancy to Aging	Individual: Genes, Individuals, and Popu- lations	Organized: Reading Ruse: A Celebra- tion of Michael Ruse (1940–2024)	Organized: The Ontological Status of Ecosystems: New Perspectives	Individual: European Biology in the Early 20th Century	Individual: Organisms and Teleology
BLA2	BLA3	BLA4	BLB5	BLB7	Super Bock Arena,	Super Bock Arena,
Individual: Organisms	Individual: Mechanism	Individual: Biologi-	Individual: Neuro-	Individual: Medicine	Meeting Room A	Meeting Room B
at the Extremes	and Selection	cal Determinism vs. Plasticity	science and Mind	and Bioethics	Graduate and Early Career Committee Meeting	Education Committee Meeting
Super Bock Arena, Meeting Room C	Super Bock Arena, Meeting Room D					
Membership Devel- opment Committee Meeting	Off-Year Workshop Committee Meeting					

10:30-11:00

Coffee Break [Super Bock Arena, Foyer]

11:00-12:30

Members' Meeting [Super Bock Arena, Auditorium]

12:30-14:00

Lunch Break

Super Bock Arena, Meeting Room C

Incoming ISHPSSB Council Meeting

14:00–15:30	
	Plenary [Super Bock Arena, Auditorium]
15:30–16:00	
	Coffee Break [Super Bock Arena, Foyer]
16:00–17:30	
	Recognition and Awards [Super Bock Arena, Auditorium]
17:30–18:30	
	Poster Session [Super Bock Arena, Foyer]
19:00–22:00	
	Celebration Dinner [Palácio da Bolsa]

09:00-10:30

Anf. 1	Anf. 2	Anf. 6	Anf. 7	Anf. 8	Anf. 9
Organized: Biology and Sexes — Session 1	Organized: Pushing the Frontiers of Im- munology — Session 1	Organized: Health and Function Within and Across Organisms	Individual: Plants: Agency and Cognition	Individual: 19th- Century Biological Practice	Organized: Lessons from the Purpose Project
	BLA2	BLA4	BLB5	BLB7	
	Organized: Biological Modality	Organized: Cognitive Ontology for Non- neural Creatures	Organized: Perspectives on Ecosystem Regeneration/Restoration	Individual: Evolution- ary Dynamics and Game Theory	

10:30-11:00

Coffee Break [Cantina]

11:00-12:30

Anf. 1	Anf. 2	Anf. 4	Anf. 6	Anf. 7	Anf. 8	Anf. 9
Organized: Biology and Sexes — Session 2	Organized: Pushing the Frontiers of Im- munology — Session 2	Individual: Explain- ing with Niches and Gametes	Organized: Can You Be In-Formed by What You Don't Expect?	Individual: Science, Special and General	Individual: Biomedicine, Sex, and Eugenics	Individual: Ecology, Change, and Degrada- tion

Organized: Exploring Anthropogenic Evolution Individual: Modeling Genetic (In)Determinism Individual: Organisms from Aristotle to Transcendental Biology Organized: Scientific, Social, and Ethical Facets of Complex Biological Systems Organized: Evolution- ary Mismatch: Clarifying Core Concepts, Consolidating Ideas, and Taking the Steps Towards Theory Building and Hypothesis Testing

12:30-14:30

Lunch Break

14:30-16:00

Anf. 1	Anf. 2	Anf. 4	Anf. 6	Anf. 7		Anf. 9
Organized: Eugenics and Eugenic Thinking: Now and Then — Session 1	Organized: Cognate Session: Shesvie@ISH #2 — Experimental Encounters: Philoso- phers and Scientists Working Together	Organized: Organizational Perspectives in Ecology: Functioning, Health, Regulation, and Evolution	Organized: Making Educational Sense of "New Biology's" Philo- sophical Significance — Session 1	Individual: Circulating the Body		Individual: Drift and Neutral Evolution
BLA1			BLA4		BLB7	
Organized: From Science Fiction to Moral Mandates: Interrogating the Recent History of Human Gene Editing			Organized: Indigenous Data Sovereignty: From Metaethical Theorizing to Biobank Management		Organized: 21st Century Taxonomy: Classification, Systematics, and Nomenclature	

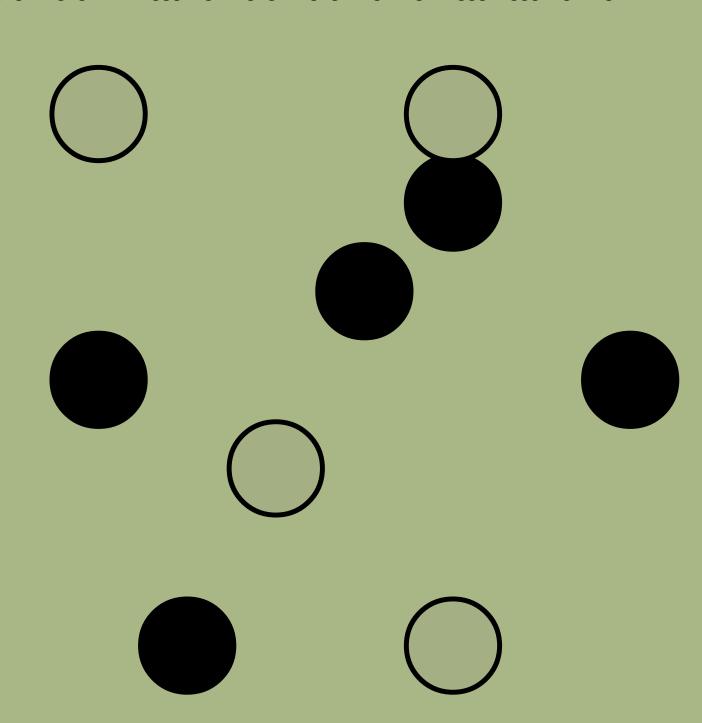
16:00-16:30

Coffee Break [Cantina]

16:30-18:00

Anf. 1	Anf. 2	Anf. 4	Anf. 6	Anf. 7	Anf. 8	Anf. 9
Organized: Eugenics and Eugenic Thinking: Now and Then — Session 2	Individual: Aesthetics and the Environment	Individual: Explanation, Understanding, and Testing	Organized: Making Educational Sense of "New Biology's" Philo- sophical Significance — Session 2	Organized: Process Perspectives in Evo- Devo: From Meta- physics to Practice	Organized: Evolution and Agency	Organized: Feminist Biologies Roundtable
BLA1					BLB7	
Organized: Contem- porary Evolutionary Theories of Aging					Individual: Mechanism	

DETAILED SESSION THEORNATION





If a talk has multiple authors, the presenting author is marked with a \$\displaystyle \text{symbol}.

Sunday, July 20, 16:00-18:00

From Invisible to Warrior: Prehistoric Women in Contemporary Society

Enza Elena Spinapolice

Registration Open

July 20, 16:00–18:00 · Galeria da Biodiversidade

Sunday, July 20, 18:00-18:20

Organized: Neglected Topics in the Philosophy of Evolution: From Evolutionary Biology to Evolutionary Studies — Session 1

July 21, 09:00–10:30 · Anf. 2 Chair: Elis Jones

Energy-Based Approaches to Evolution: Fitness Without Body Counts and System Partitioning as Driving Principles

François Papale

Welcome Speeches

July 20, 18:00–18:20 · Galeria da Biodiversidade

Sunday, July 20, 18:20–19:00

How Probable are Gaias?

Arwen Nicholson[♦]: Rudy Arthur

Opening Panel: Censoring Knowledge and Ideas: Historical Echoes from Portugal

July 20, 18:20–19:00 · Galeria da Biodiversidade

18:20–19:00 **Discussion**

Alexandre Quintanilha

18:20-19:00 **Discussion**

Richard Zimler

18:20-19:00 **Discussion**

Isabel Menezes

Integrating Ecological Context and Protein Sequence-Structure Relationships to Track the Evolution of Antimicrobial Resistance

Lachlan Bartrop[†]; Emy Beauchemin-Lauzon; Frédéric Grenier; Sébastien Rodrigue; Louis-Patrick Haraoui

The Multiple Epistemic Roles of Natural Selection Shapes Models of Clonal Evolution of Cancer

Anaïs Lamoureux

Philosophical Implications of Biological Studies on Domestication

Sandra Ranchon

Sunday, July 20, 19:00-20:00

Open-Ended Technological Evolution and Cognitive Technologies

Mathieu Charbonneau

Reception: Porto de Honra

July 20, 19:00–20:00 · Galeria da Biodiversidade

Monday, July 21, 09:00-10:30

Organized: The Construction of School Knowledge on History, Philosophy, and Social Studies of Biology — Session 1

July 21, 09:00–10:30 · Anf. 6 Chair: Carlos Sonnenschein

Organized: Abusing Deep Time: Scientific Responsibility in the Paleosciences

July 21, 09:00–10:30 · Anf. 1 Chair: Andra Meneganzin Nature of Science (NOS) and Nature of Biology (NOB) as Curriculum Goals Under the Lens of the Didactic Transposition Theory

Charbel N. El-Hani

Homo naledi, Controversial Burials & Responsibility Failures

Matteo Bedetti[♦]; Andra Meneganzin

Should the Historical Contingency of Scientific Knowledge Be Rated X? The Case of Mendelian Genetics

Gregory Radick

Inductive Risk & Speculation in the Paleosciences

Adrian Currie

From Decontextualized to Deconstructed Science:



Shifting from 'Nature of Science' to "Whole Science" in Science Education

DOUGLAS ALLCHIN

History of Science and Science Education: A Proposal for a Two-Way Methodological Dialogue

Nelio Bizzo

Organized: Organicism: A Further Discussion of Themes from the 2025 History of Biology Seminar at the Marine Biological Laboratory, Woods Hole

July 21, 09:00–10:30 · Anf. 7 Chair: Karl Matlin

Discussion

Karl Matlin

Discussion

Kate MacCord

Individual: Building Scientific Organizations and Fields

July 21, 09:00–10:30 · Anf. 8 Chair: Ana Soto

09:00–09:30 A Table of One's Own. The Naples Table Association for Promoting Scientific Research by Women as a Political and Epistemic Community (1890s-1930s)

Fabio De Sio[♦]; Heiner Fangerau

09:30–10:00 A Provisional Framework for Evaluating the Epistemic Value of Translational Research Initiatives [Virtual]

Jacqueline Sullivan

10:00-10:30 Corino de Andrade and the Beginning of a Biomedical Research Field

Maria Rosário Almeida: Maria Strecht Almeida

Individual: Bias, Trauma, and Frailty

July 21, 09:00–10:30 · Anf. 9 Chair: Charles Pence

09:00–09:30 Biases in Qualitative Social Science: Understanding the Role of Bias in Disaster Commemoration, Collective Memory of Traumatic Events, and Reinterpretation Across Generations

Sarah Roe[♦]; Elyse Zavar

09:30-10:00 Lesions and Persons

Carl Craver

10:00–10:30 Materialities of Human Frailty in the Past:

Interconnecting Archaeological Contexts, Human Remains and Archival Data

Francisca Alves Cardoso[♦]; Nicholas Marquez-Grant; Alexandra Esteves; Paula Mota Santos; Steffi Vassallo; Anne Malcherek; Zélia Rodrigues; Rui Maia

Organized: Early Twentieth-Century European Ecology: New Perspectives and Interpretations — Session 1

July 21, 09:00–10:30 · BLA1 Chair: Antoine C. Dussault

Revisiting the Modern Synthesis through Limnology: The Role of Freshwater Ecosystems in Evolutionary Theory from Edgardo Baldi and Livia Pirocchi's (1938) Analysis

Pier Luigi Pireddu

Ecology, Holism and National Socialist Ideology

Gonçalo Martins

The emergence of "phytosociological styles" in earlytwentieth century vegetation science (1910-1930)

Fabrice ROUX

A Mediterranean Ecology? a Brief Genealogy of the Idea of the Mediterranean Region in Scientific Ecology

Marine Fauché

Ecology and Ideology in Interwar Germany: August Thienemann and Karl Friederichs

Gene Cittadino

Purposes of Nature and the Unity of Ecological Systems: Cornelis Jacob Van Der Klaauw's Reading of Kant's Critique of Teleological Judgment

Ghyslain Bolduc

Organized: Ecologies of Life in Space [IDSP]

July 21, 09:00–10:30 · BLA2 Chair: Paola Castaño

Beyond Astronauts' Plates: A Proposal for Reconceptualizing Space Food

Monica Truninger

From Microgravity to a More Complex 'Environment': Plant Space Biology in Transition from Low Earth Orbit to the Moon

Paola Castaño

Hybrid Assemblages and Multispecies Life Beyond Earth: Investigating Tensions and Challenges in Research on Bioregenerative Life Support Systems [Virtual]



Ilenia Picardi: Marco Serino

Discussion

Kärin Nickelsen

Caleb Hazelwood[†]; Carlos Santana

Monday, July 21, 10:30-11:00

Organized: Rethinking Expertise for Data Sharing

July 21, 09:00–10:30 · BLA3 Chair: Kim Hajek

"As Open as Possible, as Closed as Necessary": How Research Security Creates Uncertainty in Science [Virtual]

Anna-Lena Rueland

States of Uncertainty in Automating Face Recognition for Rare Disease Detection [Virtual]

Paul Trauttmansdorff

The Problem of Risk Variability

Rena Alcalay

Narrating (Un)Certainty in Psychotherapy: Textual 'Data', Reproducibility, and Case-based Reasoning

Kim Hajek

Knowing the Knowers with Open Science

Richard Williams

Individual: Psychiatry and Mental Illness

July 21, 09:00–10:30 · BLB5 Chair: Miguel Segundo Ortin

09:00-09:30 An Uncertainty Model of Suicidality [Virtual]

Sidney Carls-Diamante

09:30–10:00 The Neglect of Harm in Evidence-Based Psychiatry

Megan Delehanty

10:00–10:30 Madness-as-Strategy From an Enactivist Approach to Extreme Mental Suffering

Mayo Pinto

Individual: Microbes and Macrobes

July 21, 09:00–10:30 · BLB7 Chair: Dominika Wloch-Salamon

09:00–09:30 Interactions at Sea: On the Spatiotemporal Connections of Microbiome Life-Cycle and Biogeochemical Processes

Tamar Schneider

10:00–10:30 Macrobe Bias: Bad Metaphysics but Good Policy

Coffee Break

July 21, 10:30-11:00 · Cantina

Monday, July 21, 11:00-12:30

Organized: Neglected Topics in the Philosophy of Evolution: From Evolutionary Biology to Evolutionary Studies — Session 2

July 21, 11:00–12:30 · Anf. 2 Chair: Flis Jones

Energy-Based Approaches to Evolution: Fitness Without Body Counts and System Partitioning as Driving Principles

François Papale

How Probable are Gaias?

Arwen Nicholson[♦]; Rudy Arthur

Integrating Ecological Context and Protein Sequence-Structure Relationships to Track the Evolution of Antimicrobial Resistance

Lachlan Bartrop[♦]; Emy Beauchemin-Lauzon; Frédéric Grenier; Sébastien Rodrigue; Louis-Patrick Haraoui

The Multiple Epistemic Roles of Natural Selection Shapes Models of Clonal Evolution of Cancer

Anaïs Lamoureux

Philosophical Implications of Biological Studies on Domestication

Sandra Ranchon

Open-Ended Technological Evolution and Cognitive Technologies

Mathieu Charbonneau

Organized: The Construction of School Knowledge on History, Philosophy, and Social Studies of Biology — Session 2

July 21, 11:00–12:30 · Anf. 6 Chair: Vassilis Koulountzos

Teaching Biology in a New STEAM Context With NOS Elaborated Contemporary Matters of Public Interest

Fanny Seroglou; Vassilis Koulountzos



Revolutionizing Education: A 21st Century Didactic Model Merging Biopedagogism, Didactic Transposition Theory and AI [Virtual]

Venetia Nikita

Visual Analysis of Human Evolution in Secondary Textbooks in Brazil, Mexico, and Colombia: A New History of Homo in Biological Education

Jairo Robles-Piñeros[♦]; Julio Alejandro Castro-Moreno; Gonzalo Peñaloza

Let's Also Talk About What We Don't Know: On the Importance of Uncertainty and Not-Knowing in Biology Education

Britta Lübke

Individual: Putting Human Genetics to Use

July 21, 11:00–12:30 · Anf. 7 Chair: Jan Baedke

11:00-11:30 From 'The' Human Genome to the Study of Human Genome Variation: People, Patents, and Infrastructures

Matthew Tontonoz

11:30–12:00 Navigating Ethical Dilemmas in (Non)disclosure of Genetic Information to Family Members

Ana Rita Soares ; Filipa Lopes; Ana Sofia Carvalho

Individual: Agency

July 21, 11:00-12:30 · Anf. 8

Chair: Ross Pain

11:00-11:30 Weak Specificity and Agency

Ivan Kuzin

11:30–12:00 Organismic Agency as the Principle of Individual Selection

Hugh Desmond

12:00–12:30 Agency: Between Mechanism and Philosophy of Mind

Louis Virenque

Organized: (Re)Integrating Uncertainty to Address the Complexity and Biosocial Dimension of the Interface Between Biology and the Environment

July 21, 11:00–12:30 · Anf. 9 Chair: Stephanie Lloyd

Biological Insights and Relational Care in Therapeutic Gardens of Psychiatric Hospitals

Cassandre Ville

Storytelling, Facts, and Uncertainties in Epigenetics Research

Stephanie Lloyd

The Evolution of ACEs: From Coping Behaviors to Epigenetics as Explanatory Frameworks for the Biology of Adverse Childhood Experiences

Ruth Müller[♦]; Martha Kenney

Organized: Early Twentieth-Century European Ecology: New Perspectives and Interpretations — Session 2

July 21, 11:00–12:30 · BLA1 Chair: Antoine C. Dussault

Revisiting the Modern Synthesis through Limnology: The Role of Freshwater Ecosystems in Evolutionary Theory from Edgardo Baldi and Livia Pirocchi's (1938) Analysis

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Gene Cittadino

Purposes of Nature and the Unity of Ecological Systems: Cornelis Jacob Van Der Klaauw's Reading of Kant's Critique of Teleological Judgment

Ghyslain Bolduc

Individual: Evolution and Moral Realism

July 21, 11:00–12:30 · BLA2 Chair: Margarida Hermida

11:00–11:30 Evolutionary Debunking and Human Value

Michael Dale

11:30–12:00 Morality evolves in frequency-dependent selection with selfishness. The threat of subversion from within.

Alejandro Rosas

12:00–12:30 Have We Run Out of Empirical Premises for the Evolutionary Debunking of Value Realism?



João Pinheiro

Juan Gefaell

Individual: Fitness and Evolutionary Theory

July 21. 11:00-12:30 · BLA3 Chair: Matthew J. Maxwell

11:00-11:30 Prebiological Fitness

Jules Macome

11:30–12:00 Minimal Evolutionary Theory and the Origins of Life

Ludo Schoenmakers

12:00–12:30 Why Biologists Don't Perform Replication **Studies**

Stephan Guttinger

Monday, July 21, 12:30-14:30

Monday, July 21, 14:30-16:00

Lunch Break

July 21, 12:30-14:30 ·

July 21, 12:30-14:30 · BLA1

Chair: Vassiliki Betty Smocovitis

Outgoing ISHPSSB Council Meeting

Individual: Embryos, Development, and Explanation

July 21, 11:00-12:30 · BLA4 Chair: Carlos Mariscal

11:00–11:30 Cracking the Morphogenetic Code: Michael Levin's Top-Down Approach to Morphogenetic Engineering

Silvia Caianiello

12:00–12:30 Cybernetics in Evo-Devo Biology

Flavia Fabris

Organized: Local Constraints and Historical Coincidences Shaping Theory and Practice of Biological Anthropology Across the World — Session 1

Chair: Lumila Menendez

Individual: Diagnosis and Intervention

tific Medicine's Demarcation Problem

July 21. 11:00-12:30 · BLB5 Chair: Gregor Greslehner

11:00-11:30 Diagnosis as Value-Laden Classification: Examining Patient-Practitioner Interactions in the Clinic [Virtual]

Aaron Chavez 11:30-12:00 The New Modern Medicine: Modern Scien-

Jonathan Fuller

12:00-12:30 Disambiguating 'Intervention' in Biomedical Practice: Comments on a Limitation of Mechanistic Interventionism [Virtual]

Yin Chung Au

July 21, 14:30-16:00 · Anf. 1 Nicolás León and Ales Hrdlicka and the Beginnings

of Mexican Physical Anthropology: Hopes and Disappointments in Turbulent Times

David Robichaux

Physical Anthropology on Both Sides of the Border: Mexico-U.S. Scientific and Anthropological Exchanges BERNARDO YÁÑEZ

The Development of Biological Anthropology in Uruguay (And Some Notes for the Future)

Gonzalo Figueiro

Transatlantic Circulation of Indigenous Bodies: Coloniality, Academic Prestige and Repatriation Policies at the Museo de La Plata

Diego Ballestero

Re-evaluating the Evolutionary Origins of Music: Beyond Eurocentric Adaptationism

Luis Alejandro Villanueva

Building Narratives About the Human Past in the Americas: A Bibliometric and Conceptual Analysis on the "Peopling of the Americas"

Lumila Menéndez

Theory, Method, Money & Geopolitics: Tracking Power,

Individual: Data, Replication, and Controversy

July 21. 11:00-12:30 · BLB7 Chair: Sélène Domino

11:00–11:30 Control Regimes on Data (Re)use: From Citations Requests to Authorship Impositions

Inma Aleixos-Borrás ; José Julián López

11:30–12:00 Moving Scientific Controversies Forward: Adversarial Collaboration in Evolutionary Biology



Traditions, and Transitions in Biological Anthropology [Virtual]

Agustín Fuentes

Organized: Values, Bias and Controversies in Human Genomics — Session 1

July 21, 14:30–16:00 · Anf. 2 Chair: Abigail Nieves Delgado

Values Beyond (Mis)uses: Updating the Discussion on Values in Behavioural Genetics and Genomics

Olesya Bondarenko

Deconstructing Whiteness in Research on Racism and Health Inequities [Virtual]

Joanna Karolina Malinowska

Is Human Genomics moving away from Racial Thinking?

Celso Neto

Does Behavioral Genetics Offer Solutions to Our Social Justice Problems?

Lauren Wilson

Status Quo Bias

Yasmin Haddad

Causal Reasoning in Human Genetics

Kate Lynch[♦]; Ritsaart Reimann

Individual: Modeling and Explanation

July 21, 14:30–16:00 · Anf. 4 Chair: Bennett McNulty

14:30–15:00 Optimality Studies as an Example of Explanation as Ampliative Specialized Embedding

José Díez[♦]; Santiago Ginnobili; Ariel Roffé

15:00–15:30 Scientific Representation and Evolutionary Biology: A Perspectival Reading of Population Models

Cristián Novelli[†]; Tiago Rama

15:30–16:00 Must Teleological Explanations Be Causal?

Auguste Nahas

Organized: Using Material Models to Investigate How Agency Can Arise and Evolve

July 21, 14:30–16:00 · Anf. 6 Chair: C. Kenneth Waters A Jamesian Approach to Investigating Agency and Innovation

C. Kenneth Waters

Evolutionary Innovation via Eco-Evolutionary Feedbacks

Michael Travisano[♦]; Maria Rebolleda-Gomez; Valeria Souza

Exploring Rules for Community Assembly

Maria Rebolleda-Gomez[♦]; Michael Travisano; Valeria Souza

Individual: Values and Democracy in Science

July 21, 14:30–16:00 · Anf. 7 Chair: Kate MacCord

14:30–15:00 Warranted Trust and Value Transparency in Science [Virtual]

Stephanie Hoffmann

15:00–15:30 Metaphors, Misinformation and Democratised Science: The Challenges Posed by Misinformation to the Democratisation of Science: The Case of De-Extinction

Mikel Asteinza[♦]; Jon Umerez

15:30-16:00 Whose scientific mandates should we nourish? On representational pluralism in the history of ecology and environmentalism

Max Bautista-Perpinyà

Organized: Conceptual Challenges in the Field of Human Evolution

July 21, 14:30–16:00 · Anf. 8 Chair: Adrian Currie

When Does a Concept Create More Problems Than It Solves? the Case of "Anatomically Modern Humans"

Mathilde Lequin

Normativity and the Archaeological Record

Anton Killin

Defining Ancestry: Conceptual Clarity to Minimize Harms [Virtual]

Matilde Carrera

Organized: Participation in Conservation in Postcolonial and Settler Colonial Contexts — Session 1

July 21, 14:30–16:00 · Anf. 9 Chair: Rachel Ankeny, Federica Bocchi



The Political Epistemology of Public Participation in Ecological Research

Rose Trappes[♦]; Nathanael Sheehan

What Future for Protected Areas? Analysing the Mismatch Between South Africa's Pre-Existing Protected Areas System and the Declared "New Conservation" Vision in Contemporary Conservation Policy [Virtual]

Reece Alberts ; François Retief

'We don't believe they are dead, they are just resting': Indigenous Knowledges as Epistemological Reclamation in Planning [Virtual]

Joaquin (Am'aj Q'in) Lopez-Huertas

Relationship-Building and the Limits of Participatory Science

Federica Bocchi; Emily Parke

Co-Designing Conservation Interventions Through Participatory Action Research in the Indian Trans-Himalaya

Munib Khanyari

Aesthetic Features in Knowledge Co-production for Environmental Conservation and Eco-Resistance Movements

Luana Poliseli

Organized: Transforming Genetics Through Genetic Transformation

July 21, 14:30–16:00 · BLA1 Chair: Laurent Loison

Genetics as a Dyadic Science: A Trans Studies Approach to the History of Genetics

Yingchen Kwok

Epigenetic Attitude: Conrad Hal Waddington and the Humanistic Development of Epigenetics

Haesoo Park

Gender-bending Chemicals: Epigenetics and Endocrine Disruption

Marsha Richmond

Individual: History and Controversy in Medicine

July 21, 14:30–16:00 · BLA2 Chair: Marion Thomas

14:30-15:00 On Classifying Scientific Controversies: The Reasons and Layers of Dissent in the Pain-Specificity Debate.

Alberto Monterde-Fuertes

15:00–15:30 Evolutionary Epidemiology: Understanding Human Non-Communicable Diseases Through a Niche Construction Approach

Sofia Belardinelli[†]; Luigi Garaffa; Telmo Pievani; Paolo Vineis

Organized: Is "Non-human Language" an Oxymoron?

July 21, 14:30–16:00 · BLA3 Chair: Carrie Figdor

On Uniqueness Claims and the Nature of Language

Sergio Balari

Language and Standards for Cross-species Comparison

Carrie Figdor

Are Machine Languages, Languages? [Virtual]

Ryan Nefdt

Organized: The Life of Protocols in the Life Sciences

July 21, 14:30–16:00 · BLA4 Chair: Hans-Jörg Rheinberger, Fotis Tsiroukis

Non-Standard Non-Operating Procedures: How Scientific Protocols Change (And How They Change Science)

Fotis Tsiroukis

Cultivating Standardization: The Role of Protocols in Agricultural Research and Practice

Thiresia Teresa Tzatzani[†]; Georgios Psarras; Fotis Tsiroukis

Should Agricultural Data Be Cultivated Like Crops or Harvested for Compliance? [Virtual]

Denisa Kera

Organized: Concepts and Principles for the New Biology: Development, Disruption and Normalization

July 21, 14:30–16:00 · BLB5 Chair: Carlos Sonnenschein

An Epistemological History of the concept of Morphogenetic Field within cancer research

Claudia Gadaleta

Disruptions: A Specific Kind of Disorganization

Maël Montévil

"Normalization": regaining function lost by disruption

Ana Soto[♦]; Carlos Sonnenschein



Individual: Reproduction and Individuality

July 21, 14:30–16:00 · BLB7 Chair: Jair Moisés de Sousa

14:30–15:00 Egalitarian Transitions in Individuality Beyond History

Afra Salazar

15:00–15:30 Reproducees, Reproducers, and Darwinian Individuals

Pierrick Bourrat

15:30–16:00 Rethinking Reproduction: An Organismal and Relational Perspective

David Cortés García

Monday, July 21, 16:00-16:30

Coffee Break

July 21, 16:00-16:30 · Cantina

Off-Year Workshop Committee: Workshop Proposals

July 21, 16:00–16:30 · Cantina

Monday, July 21, 16:30-18:00

Organized: Local Constraints and Historical Coincidences Shaping Theory and Practice of Biological Anthropology Across the World — Session 2

July 21, 16:30–18:00 · Anf. 1 Chair: Lumila Menendez

Nicolás León and Ales Hrdlicka and the Beginnings of Mexican Physical Anthropology: Hopes and Disappointments in Turbulent Times

David Robichaux

Physical Anthropology on Both Sides of the Border: Mexico-U.S. Scientific and Anthropological Exchanges

BERNARDO YÁÑEZ

The Development of Biological Anthropology in Uruguay (And Some Notes for the Future)

Gonzalo Figueiro

Transatlantic Circulation of Indigenous Bodies: Coloniality, Academic Prestige and Repatriation Policies at the Museo de La Plata

Diego Ballestero

Re-evaluating the Evolutionary Origins of Music: Beyond Eurocentric Adaptationism

Luis Alejandro Villanueva

Building Narratives About the Human Past in the Americas: A Bibliometric and Conceptual Analysis on the "Peopling of the Americas"

Lumila Menéndez

Theory, Method, Money & Geopolitics: Tracking Power, Traditions, and Transitions in Biological Anthropology [Virtual]

Agustín Fuentes

Organized: Values, Bias and Controversies in Human Genomics — Session 2

July 21, 16:30–18:00 · Anf. 2 Chair: Tayyaba Jiwani

Values Beyond (Mis)uses: Updating the Discussion on Values in Behavioural Genetics and Genomics

Olesya Bondarenko

Deconstructing Whiteness in Research on Racism and Health Inequities [Virtual]

Joanna Karolina Malinowska

Is Human Genomics moving away from Racial Thinking?

Celso Neto

Does Behavioral Genetics Offer Solutions to Our Social Justice Problems?

Lauren Wilson

Status Quo Bias

Yasmin Haddad

Causal Reasoning in Human Genetics

Kate Lynch[♦]; Ritsaart Reimann

Individual: Metaphors from Hibernation to Metamorphosis

July 21, 16:30–18:00 · Anf. 4 Chair: Ariane Hanemaayer

16:30–17:00 **Hibernation and Life's Uncertain Return** Angela Yu

17:00–17:30 Metamorphosis: A Natural and Human History

Oren Harman



Organized: Transformative Transdisciplinarity: An Introduction to Community-Based Philosophy

July 21, 16:30–18:00 · Anf. 6 Chair: Abigail Nieves Delgado

Discussion

Sabina Leonelli

Discussion

Jairo Robles-Piñeros

Discussion

Catherine Kendia

Discussion

Charbel N. El-Hani

Discussion

Lucia C. Neco

Discussion

David Ludwig

Individual: Art, Aesthetics, and Science

July 21, 16:30–18:00 · Anf. 7 Chair: Alex Aylward

16:30–17:00 The Rules That Aren't There: Common Sense in Art and Science

Shani Inbar[♦]; Eva Jablonka; Simona Ginsburg; Anna Zeligowski

17:00–17:30 The Romantic Empiricism of Massimi's Perspectival Realism

Gregory Rupik

17:30–18:00 Locating the Aesthetic in the Life Sciences: Entangled Values

Laura Perini

Individual: Disease Past and Present

July 21, 16:30–18:00 · Anf. 8 Chair: Derek Skillings

16:30–17:00 Hereditary Diseases in Enlightenment France

Carlos López Beltrán

17:00-17:30 Hereditary Disease at the Era of Extended Heredity: Explanation, Classification, Social Perception [Virtual]

Gaëlle Pontarotti

17:30–18:00 Malfunction as Dysregulation: An Analysis of Functional Loss

Rebecca Cuciniello

Organized: Participation in Conservation in Postcolonial and Settler Colonial Contexts — Session 2

July 21, 16:30–18:00 · Anf. 9 Chair: Rachel Ankeny, Federica Bocchi

The Political Epistemology of Public Participation in Ecological Research

Rose Trappes[♦]; Nathanael Sheehan

What Future for Protected Areas? Analysing the Mismatch Between South Africa's Pre-Existing Protected Areas System and the Declared "New Conservation" Vision in Contemporary Conservation Policy [Virtual]

Reece Alberts[♦]; Francois Retief

'We don't believe they are dead, they are just resting': Indigenous Knowledges as Epistemological Reclamation in Planning [Virtual]

Joaquin (Am'aj Q'in) Lopez-Huertas

Relationship-Building and the Limits of Participatory Science

Federica Bocchi; Emily Parke

Co-Designing Conservation Interventions Through Participatory Action Research in the Indian Trans-Himalaya

Munib Khanyari

Aesthetic Features in Knowledge Co-production for Environmental Conservation and Eco-Resistance Movements

Luana Poliseli

Individual: Division of Labor, Rationality, and Fitness

July 21, 16:30–18:00 · BLA1 Chair: Zvi Hasnes Beninson

16:30–17:00 Prosocial Beehavior: Honey Bees in 20th Century Social Insect Studies

Leah Malamut

17:00–17:30 Normative Alternatives to Adaptation for an Embodied Rationality

Enrico Petracca

 $17{:}30{-}18{:}00$ Dialectical Biology and the Propensity Interpretation of Fitness

Marshall Abrams

Individual: Oceans and Deserts



July 21, 16:30–18:00 · BLA2 Chair: Paulo Inácio Prado

16:30–17:00 Tiny Lives That Float in Water: Historical Ontologies of Animalcule, Infusoria, and Plankton

Zi Yun Huang

17:00–17:30 The Myth of Sisyphus and Why Dolphins Cannot Flourish in Captivity

Katariina Hynninen

17:30–18:00 Desert Exploration by the Hebrew University's Scientists, 1927-1967

Nurit Kirsh

Organized: Quantitative Genetics in Comparison: Statistical and Genomic Practices Across Biomedicine, Behavioural Science and Agriculture

July 21, 16:30–18:00 · BLA3 Chair: Hugh Williamson

Quantitative Genetics in Comparison: A View from the Agricultural Biosciences

Hugh Williamson

What Is So Special, if Anything, About Genetic Prediction of Human Complex Diseases?

Davide Serpico

Organized: Should HPSSB Think About Philosophy of Physics?

July 21, 16:30–18:00 · BLA4 Chair: Collin Rice

Symmetries and Reformulation in Evolutionary Dynamics

Hannah Rubin

A mesoscale interpretation of the infinite-population limit in population genetics

Mike Schneider[♦]; André Ariew

Pragmatic Constraints, Experiments, and Tradeoffs in Model Building

Collin Rice

Organized: Evolution at the Margins: Non-standard Applications of Evolutionary Theory

July 21, 16:30–18:00 · BLB5 Chair: Samir Okasha

Cancer as an Evolutionary Phenomenon

Samir Okasha

The Evolution of Commitment

Saira Khan[♦]; Rory Smead

Structural Representation, Teleosemantics and the Proximate/Ultimate Distinction

Ross Pain[♦]; Johan Heemskerk

Individual: Evolution and Development

July 21, 16:30–18:00 · BLB7 Chair: Aline Potiron

16:30–17:00 Evolution/Development: And, Or, Of in Either Direction, Is in Either Direction or Something Else Perhaps?

Marion Blute

17:00–17:30 A Framework for the Integration of Development and Evolution: The Forgotten Legacy of James Meadows Rendel

María Alejandra Petino Zappala

17:30–18:00 What Does Mendel Mean by "Entwicklung" of Hybrids and by "Entwicklungs-Geschichte"?

Pablo Lorenzano

Monday, July 21, 18:15-19:15

Mini-Plenary: Discovering the Sea in the History, Philosophy and Social Studies of Science

July 21, 18:15–19:15 · Salão Nobre Chair: Vassiliki Betty Smocovitis

Tuesday, July 22, 09:00-10:30

Organized: Pluralism, Epistemic Injustice, and Transdisciplinarity in the Life Sciences — Session 1

July 22, 09:00–10:30 · Anf. 1 Chair: David Ludwig

Alleviating Epistemic Injustice in Environmental Health Research: Strategies from Science and Values

Kevin Elliott

Rethinking Quality Control: Epistemic Injustice in Medical Research and the Case of Endometriosis

Ann-Christin Fischer

Indigenizing Research Governance in Aotearoa New Zealand [Virtual]

Tatjana Buklijas



Herbaria and Epistemic Injustice: The Legacies of Local Plant Collectors in the History of Botany

Jan Baedke

From othering knowledge systems to transdisciplinarity: The meaning of the prefix "ethno" in Ethnobiology

Abigail Nieves Delgado[♦]; Juliana Gutierrez Valderrama

Transdisciplinarity: Tales From the Trenches of its Praxis [Virtual]

Esther Milberg Muñiz

Organized: Organicism: From Theoretical Developments to Ethical and Educational Implications

July 22, 09:00–10:30 · Anf. 2 Chair: Charbel El-Hani

Organicism Varieties and Some of Their Past and Present Influences in Biology

Ruãn Batista

Design Principles for an Organicist Biology Teaching: The Cell

Ítalo Nascimento de Carvalho

Organized: Tracking the Crisis Virus: Equity in Global Health Research

July 22, 09:00–10:30 · Anf. 4 Chair: Lukas Engelmann

Discussion

Nathaniel Sheehan

Data Production and Sharing During Public Health Emergencies Using the Zika Virus Epidemic as a Case Study

Mariana Pitta Lima

Discussion

Julia Pescarini

Organized: Double-Roundtable on Evelyn Fox Keller's Legacy in History and Philosophy of Biology and Gender and Science Studies — Session 1

July 22, 09:00–10:30 · Anf. 6 Chair: Francesca Merlin

Introduction

Francesca Merlin

Refiguring the History of Biology: Evelyn Fox Keller's Legacy

Angela N. H. Creager

The Gene at Mid-Century: How Dependent Was Molecular Genetics on Mendelian Genetics?

Gregory Radick

Evelyn Fox Keller and the "Linguistic Habits of Biologists"

Snait B. Gissis

Introduction & Keller on Gender and Science: Her Contributions and Open Questions

Francesca Merlin

Implications of Keller's Philosophy of Nature

Helen Longino

The Subject of Feminism and Science

Thierry Hoquet

Evelyn Fox Keller's Ethics of Attention: An Homage

Maria Kronfeldner

Organized: The Evolving Interface Between Biology and Psychology — Session 1

July 22, 09:00–10:30 · Anf. 7 Chair: Edward Baggs, Amanda Corris

The Material Basis of Groups in Psychology and Biology

Edward Baggs

Functionalism(s), Structuralism(s) and Evolutionary Thinking at the Interface of Psychology and Biology

Gui Sanches de Oliveira , Anthony Chemero

Creating Novel Affordances

Amanda Corris

Going Ecological in Plant Cognition: Between Biology and Psychology

Anna Finke[♦]; Vicente Raja

Teleological Explanations in Biology and Psychology

Martyna Meyer

Towards an Ecological Comparative Psychology

Miguel Segundo Ortin

Individual: Organization, Stability, and Matter

July 22, 09:00–10:30 · Anf. 8 Chair: Rebecca C. Mann

09:00–09:30 How to Manufacture Life: A History of Self-Assembly

Sebastian Sander Oest



09:30-10:00 How Life Is Stable: A Comparison of Allostasis, Homeostasis and Robustness in the Life Sciences [Virtual]

Jan Pieter Konsman

10:00–10:30 Dissipative structures gone rogue: the political economy of life and/or the biology of capital

Clair Quentin

Organized: Gendered Agency in Horticultural and Agricultural Histories

July 22, 09:00–10:30 · Anf. 9 Chair: Judy Johns Schloegel

Planting the Seeds of a New Future: Transforming the Fate of Women and Cucumbers

Erela Teharlev Ben Shachar

"The Giving Tree": Arboreal Agency in Gendered Environmental Histories

Donald Opitz

Teaching Horticulture to Girls in the 19th-century Portugal

Ana Rodrigues

"Skirt Askew and No Braid": Female Agronomy Students in the 20th Century Russia

Olga Elina

Organized: What Future for Animal Experiments in Biological Psychiatry?

July 22, 09:00–10:30 · BLA1 Chair: Antonine Nicoglou

The Origins and Uses of Animal Experimentation in Biological Psychiatry: Issues and Perspectives

Antonine Nicoglou[†]; Caroline Angleraux

Evolutionary Psychology and Animal Experimentation

Steeves Demazeux

From Validity to Values in Critical Engagement With Animal Modelling

Nicole Nelson

Individual: Biology in the Americas

July 22, 09:00–10:30 · BLA3 Chair: Matthew Tontonoz

09:00-09:30 Humans and Animals in the Travel Reports of Vespucci, De Orellana and Fritz

Harald Gropp

09:30–10:00 A Star Is Born? The Dawn of Mexican Evolutionary Biology (19th and Early 20th Centuries) in Late 20th and Early 21st Century Writings. A Historiographical Critique of the Darwinian Perspective [Virtual]

Demián Missael Muñoz Jiménez

Individual: Language and Behavior

July 22, 09:00–10:30 · BLA4 Chair: Emma Cavazzoni

09:00–09:30 What Is 'Communication' in Biology and Cognitive Science? Studying Scientific Concepts With Digital Methods

Wiktor Rorot

09:30-10:00 Ecology Within the Octopus Genome Potentially Explains the Evolution of Their Flexible Behaviour

Stefan Linguist

Individual: Parasites, Pathogens, and Disorders

July 22, 09:00–10:30 · BLB5 Chair: Stefano Canali

 $09{:}30{-}10{:}00$ Pathogen Mysteries: When Simple Explanations Fall Short

Vlasta Sikimic

10:00–10:30 Ontological Perspectives on Eating Disorders: Crossover, Symptom Shifting, and Recovery

Valentina Petrolini[†]; Davide Serpico; Silvia Camporesi

Organized: Concepts and Practices in Ecology and Conservation: When Context, Values, and Positionality Matter

July 22, 09:00–10:30 · BLB7 Chair: Ely/iott Mermans

The Value/dness of the Keystone Species Concept: A Historical and Philosophical Situated Account [Virtual]

Ely/iott Mermans

Ecosystem health: between nihilism and absolutism

Elis Jones

The Imprint of Scientists' Non-Epistemic Values on Conservation Outcomes: A View From Conservation Biology in India

Hari Sridhar



Tuesday, July 22, 10:30-11:00

Coffee Break

July 22, 10:30-11:00 · Cantina

Tuesday, July 22, 11:00-12:30

Organized: Pluralism, Epistemic Injustice, and Transdisciplinarity in the Life Sciences — Session 2

July 22, 11:00–12:30 · Anf. 1 Chair: David Ludwig

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Abigail Nieves Delgado[†]; Juliana Gutierrez Valderrama

Transdisciplinarity: Tales From the Trenches of its Praxis [Virtual]

Esther Milberg Muñiz

Organized: Agency: The Twofold Concept About Niche Construction in Cognition and Evolution

July 22, 11:00–12:30 · Anf. 2 Chair: Melina Gastelum-Vargas

Discussion

Juan Manuel Argüelles San Millán

Discussion

Melina Gastelum Vargas

Organized: Double-Roundtable on Evelyn Fox Keller's Legacy in History and Philosophy of Biology and Gender and Science Studies — Session 2

July 22, 11:00–12:30 · Anf. 6 Chair: Francesca Merlin

Introduction

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The Gene at Mid-Century: How Dependent Was Molecular Genetics on Mendelian Genetics?

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Teleological Explanations in Biology and Psychology

Martyna Meyer

Towards an Ecological Comparative Psychology

Miguel Segundo Ortin



Organized: Recently Recognized Properties, Powers and Puzzles of the Phenotype and Their Evolutionary Implications

July 22, 11:00–12:30 · Anf. 8 Chair: Philip Ball, Lenny Moss

Discussion

Philip Ball

Discussion

Richard Watson

Discussion [Virtual]

Lenny Moss

Organized: The Pulse of Life: Materialism(s) of Vitality and Vibrancy [IDSP]

July 22, 11:00–12:30 · BLA1 Chair: Mustafa Yavuz

Life or Vitality: Which One to Define?

Mustafa Yavuz

Vibrancy in New Materialisms: Bridging Differences

Başak Ağın[♦]; Z. Gizem Yılmaz

Bridging the Ontological Divide: Lessons from Vitalism, Emergentism, and Organicism in Biology

Caglar Karaca

Individual: Race

July 22, 11:00–12:30 · BLA2 Chair: Cornelius Borck

11:00–11:30 Racialization: Causal and Metaphysical

Kal Kalewold

11:30–12:00 Classifying (the Philosophy of) Race

Itsue Nakaya Perez

Individual: Exploring Biological Possibility

July 22, 11:00–12:30 · BLA3 Chair: Michael Goldsby

11:00–11:30 Simulating Evolution: How-Possibly Explanations and How They Explain

Tianqin Ren

12:00–12:30 Biological Possibility: Can Chance Show Us the Way?

Marco Casali

Organized: Preparing the "Field" for AI and Data Intensive Agroecological Research

July 22, 11:00–12:30 · BLA4 Chair: Paola Castaño

Dimensions of Object Preparation for Data Intensive Agroecological Research

Emma Cavazzoni

New Tools and AI Technology in Insect Monitoring

Daniele Giannetti[†]; Lorenzo Palazzetti; Francesco Betti Sorbelli; Niccolò Patelli; Emma Cavazzoni; Sabina Leonelli; Maria Cristina Pinotti; Lara Maistrello; Donato Antonio Grasso

Organisms as Technologies Between Field and Lab: Representing and Intervening in Toxicology

Rachel A. Ankeny; Sabina Leonelli

Individual: Classification

July 22, 11:00–12:30 · BLB5 Chair: Michael Dietrich

11:00–11:30 The Classification of Cell Types since 1970: Between Methods and Definitions

George Alexandrou

11:30–12:00 The Rationality of Norm-Driven Scientific Classification

Matthew Slater[♦]; Matt Barker

12:00–12:30 Classification, Uniqueness, and Analogical Reasoning: Lessons from Biology and Geology [Virtual]

Matthew Brewer

Individual: Plasticity and Evolvability

July 22, 11:00–12:30 · BLB7 Chair: Rob Wilson

11:00–11:30 Exploring Plasticity-Led Evolution: The Case of Maladaptive Plasticity

Luigi Garaffa

11:30–12:00 In What Sense is Evolvability Adaptive?
An Zhu

Tuesday, July 22, 12:30–14:30

Lunch Break

July 22, 12:30-14:30 ·



Lunch: Consortium for Socially Relevant Philosophy of/in Science and Engineering (SRPoiSE)

July 22, 12:30–14:30 · Chair: Katie Plaisance, Aja Watkins

Tuesday, July 22, 14:30-16:00

Organized: Disability and "Defect": Tracing the Ableist Legacies of Eugenics in Research, Clinical Care, and Policy — Session 1

July 22, 14:30–16:00 · Anf. 1 Chair: James Tabery

Unfit to Reproduce, Unfit to Parent, Unfit to Decide: The Evolving Rationale for Sterilizing People with Disabilities without Their Consent

James Tabery

Rewiring History: Alexander Graham Bell, Eugenics, and the American Deaf Community [Virtual]

Brian Greenwald

Informed Consensus? Kennedy-Brownback and the Disability Politics of Getting Along

Elizabeth Dietz

"Fortunately, Cerebral Palsy Syndromes Only Infrequently Appear in More Than One Member of a Family": The Long Quest to Find Genetic Causes of Cerebral Palsy

Christopher Donohue

Deaf Flourishing: Lessons for Gene Editing from Pediatric Cochlear Implant Surgery

Teresa Blankmeyer Burke

Why Should Deaf People Exist? The Human Rights Case [Virtual]

Joseph Murray

Individual: Cultural Evolution

July 22, 14:30–16:00 · Anf. 2 Chair: Katie Morrow

14:30–15:00 Knowledge Synthesis in the Cultural Evolution Literature

Kevin Kaiser; Charles Pence[◆]

15:00–15:30 Cultural Evolution, Biological Evolution, and the Concept of Lineage Fitness

Ryan Nichols

 $15:30-16:00 \ \mbox{Human Collective Knowledge and the} \\ \mbox{High-Fidelity Paradigm in Cultural Evolution} - \mbox{Conceptual Challenges} \\$

Ehud Lamm

Organized: Epistemic Pluralism for a Better Microbiome Research Practice? [IDSP]

July 22, 14:30–16:00 · Anf. 4 Chair: Abigail Nieves Delgado

Discussion

Elian Schure

Discussion

Nicolae Morar

Discussion

Aline Potiron

Discussion

Charlie Pauvert

Discussion

Daan Kenis

Organized: Rebel Educator, Community Builder, Public Scientist: The Pedagogical and Media Strategies of Lynn Margulis

July 22, 14:30–16:00 · Anf. 6 Chair: Mathias Grote

Lateral Genre Transfer: Tracing Microbial Research Communities Through the Margulis Lab

Caitlin Kossmann

Lynn Margulis as Public Intellectual in the 1970s and 1980s

Nicolas Rasmussen

Lynn Margulis as a Holobiont, Or: Doing and Living Planetary Biology in the 1980s

Mathias Grote

Peas and Particles: Lynn Margulis and the U.S. Peace Corps Colombia Project

Ana Maria Gómez López

Organized: Conceptual Change in Biology: Historical and Philosophical Perspectives

July 22, 14:30–16:00 · Anf. 7 Chair: Sloane Wesloh

Carving the Concept of Disease from Clinical Epidemiology to Precision Medicine

Sloane Wesloh

Changing Sex: Frank Lillie and the Free-Martin

Kyra Solomon



Leveling Up: The Open Texture of Biological Organization

Caitlin Mace[♦]; Dejan Makovec

Individual: Sex and Gender

July 22, 14:30–16:00 · Anf. 8

Chair: Karen Kovaka

14:30–15:00 Studying Gender From an Evolutionary Perspective: The Diversity of Generalizations of Darwinism

Agathe Du Crest

15:00–15:30 Where are female hierarchies? Questioning female social structure and status in the convention of sociobiology

Rose Gatfield-Jeffries

15:30–16:00 **Sex Eliminativism: Its Promises, Its Limits** Siobhan Mc Manus

Organized: From Seeds to Systems: Sociological Pathways in the Evolution of Agricultural Research Into Policy in Ghana

July 22, 14:30–16:00 · Anf. 9 Chair: Sabina Leonelli

Intersection of Open Science and Participatory Research: The case of Indigenous Leafy Vegetables' Dissemination in Ghana

Patricia Pinamang Acheampong[♦]; Isaac Newton Boakye-Mensah; Augustine Boakye-Boateng; Richard Adu-Amoah; Lawrence Misa Aboagye; Daniel Kortey; Prince Maxwell Etwire

Negotiating Knowledge and Policy Through Actor-Network Theory and Institutional Dynamics

Joyce Koranteng-Acquah

Endogenous Development: Linking Political Economy and Political Epistemology Through Ghanaian Agriculture

David Ludwig

Organized: What Is Evolvability and Why Does It Matter?

July 22, 14:30–16:00 · BLA1 Chair: Cristina Villegas

Chance, Necessity, and the Evolution of Evolvability

Cristina Villegas

Prospects for a Unified Account of Evolvability

Katie Deaven

Individual: Evidence and Data

July 22, 14:30–16:00 · BLA2 Chair: To Be Determined

14:30–15:00 When is Science Self-Correcting?

Douglas Allchin

15:00–15:30 Role of Identifiers in Data-Centric Scientific Practice and Reasoning

Srijan Butola

Individual: Biological Explanation

July 22, 14:30–16:00 · BLA3 Chair: Fridolin Gross

14:30–15:00 Mathematical Explanations and Epistemic (Mis)regulation in Biology

José Antonio Pérez Escobar

15:00–15:30 Evolutionary Explanations in Non-Biological Fields – Evolutionary, or Just Historical? [Virtual]

Thiago Zahn

15:30–16:00 Likeness in the Living World

Gordon Nichols

Organized: More than Pretty Pictures: The Roles of Visual Representations in the Life Sciences — Session 1

July 22, 14:30–16:00 · BLA4 Chair: Guido I. Prieto

Visualizing Levels: Conceptual Flexibility in Action

Daniel Brooks

Tools for Thought: Diagrams as Visual Devices in Evolutionary Ecology Research

Guido I. Prieto

The Many Meanings of a Large, Jurassic Fossil

Judyth Sassoon

Lost in Distortion: Misleading Visualizations of Complexity [Virtual]

Giuseppe D'Agostino

Theragnostic Imaging in Nuclear Medicine: Diagnosis and Intervention Through Visual Representations

Elisabetta Lalumera



Shifting Frames in Neuroimaging Research on Hysteria/Functional Neurological Disorder from the 1990s to Today

Paula Muhr

Organized: Is Life Meaning-Making? Historical, Philosophical, Theoretical, and Sociological Approaches to Biosemiotics — Session 1

July 22, 14:30–16:00 · BLB5 Chair: David Suárez Pascal

Information is Primary and Central to Meaning-Making

Jaime Cárdenas-García

A critical analysis of meaning related notions in the enactivist framework

Eléa Pertusati

Biosemiotics: From Homeorhesis to Semiosis

Kalevi Kull[♦]; Donald Favareau

Organized: Microbes and Gender — Session 1

July 22, 14:30–16:00 · BLB7 Chair: Andrea Núñez Casal

Multispecies intellectual History of Cellular Metaphysics: Minakata Kumagusu's Slime Moulds, Buddhist Science and the First Principles, 1893-1894

Eiko Honda

Rubella Virus, and Women: Gendered Vulnerabilities and Relationships [Virtual]

Marta Velasco-Martín

Plasmids and Gender: A Genealogy From Antimicrobial Resistances to Molecular Genetics, 1960s-1990s

María J Santesmases[†]; Isabel Gómez Rodríguez

Tuesday, July 22, 16:00-16:30

Coffee Break

July 22, 16:00-16:30 · Cantina

Tuesday, July 22, 16:30-18:00

Organized: Disability and "Defect": Tracing the Ableist Legacies of Eugenics in Research, Clinical Care, and Policy — Session 2

July 22, 16:30–18:00 · Anf. 1 Chair: James Tabery Unfit to Reproduce, Unfit to Parent, Unfit to Decide: The Evolving Rationale for Sterilizing People with Disabilities without Their Consent

James Tabery

Rewiring History: Alexander Graham Bell, Eugenics, and the American Deaf Community [Virtual]

Brian Greenwald

Informed Consensus? Kennedy-Brownback and the Disability Politics of Getting Along

Elizabeth Dietz

"Fortunately, Cerebral Palsy Syndromes Only Infrequently Appear in More Than One Member of a Family": The Long Quest to Find Genetic Causes of Cerebral Palsy

Christopher Donohue

Deaf Flourishing: Lessons for Gene Editing from Pediatric Cochlear Implant Surgery

Teresa Blankmeyer Burke

Why Should Deaf People Exist? The Human Rights Case [Virtual]

Joseph Murray

Organized: Reimagining Gardens

July 22, 16:30–18:00 · Anf. 2 Chair: John Dupré

Pollinator Pathmaker

Alexandra Daisy Ginsberg

Philosophy of the Garden

John Dupré

Reimagining Gardens as Networks

Jane Calvert[♦]; Molly Bond

Individual: Education and Experience

July 22, 16:30–18:00 · Anf. 4 Chair: Mariana Pitta Lima

16:30–17:00 Embodying Biology in Mexican Class-rooms: Integrating Gender Perspectives in High School Education

Jordan William Cruz Castillo

17:30–18:00 Between Object and Subject of Research: Autoethnographic Reflections of a Transmasculine Scientist in the Biological Sciences

Murillo Carvalho[♦]; Jaqueline de Jesus; Charbel El-Hani



Organized: An Interdisciplinary Discussion of Disputed Inheritance: The Battle over Mendel and the Future of Biology

July 22, 16:30–18:00 · Anf. 6 Chair: Marsha Richmond

Discussion

Gregory Radick

Discussion

Lilian Al-Chueyr Pereira

Discussion

Douglas Erwin

Discussion

Nelio Bizzo

Organized: What Role(s) for Theory in Contemporary Cellular and Molecular Biology?

July 22, 16:30–18:00 · Anf. 7 Chair: Jorge Carneiro

Discussion

Denis Thieffry

Discussion

Jorge Carneiro

Organized: Idealization and Values in Science

July 22, 16:30–18:00 · Anf. 8 Chair: Aidan Ryall

History-Making Histories

Aidan Ryall

DAGnabbit—Graphical Models of Causation in Ecology

Junhyung Han

How a Humble Role for Values Shapes All Scientific Knowledge

Angela Potochnik

Organized: Dialectical Biology Today: Legacies of Richard Lewontin, the Triple Helix, and Marxist Science

July 22, 16:30–18:00 · Anf. 9 Chair: Jonathan Basile

Dialectical Biology and Niche Construction Theory: Theoretical and Political Divergences

Jonathan Basile

Science as a Radical Practice: The Case of Richard Lewontin [Virtual]

Stuart A. Newman

Intertidal Ontology: Taking the Organism/Environment Dialectic Seriously.

Denis Walsh

Individual: Influences and Theorizing Across Time and Place

July 22, 16:30–18:00 · BLA1 Chair: Alison McConwell

16:30–17:00 Insights into Spencer's Autobiography: The Central Role of Lamarckian Ideas in His Evolutionary Theory [Virtual]

Marcelo Monetti Pavani

17:00-17:30 Punctuated Equilibrium and the Hopeful Monster: The Influence of Continental Evolutionary Thought on Stephen Jay Gould's Challenge to the Modern Synthesis

Thea Applebaum Licht

17:30–18:00 Navigating the Tension: Exploring Evolutionary Synthesis and the Extended Evolutionary Synthesis Through Lakatos' Research Programs

Larisa Gogianu[♦]; Andreea Eṣanu

Individual: Ethics, Environment, and Technology

July 22, 16:30–18:00 · BLA2 Chair: Sarah Roe

16:30–17:00 The Problem with the Problem with Predation

Jason Zinser

17:00-17:30 Surrealing MEAT – Making Meat Realer (And Better?) Through Technoscience

Sophia Efstathiou

17:30–18:00 Building Trust in Recruiting Indigenous Patients Into Biomedical Research: What Is Missing? [Virtual]

Lida Sarafrazarpatapeh

Individual: Psychology and the Mind

July 22, 16:30–18:00 · BLA3 Chair: Carl Craver

16:30–17:00 Rethinking Psychological Needs: Toward an Ontological Consistency in Social Psychology

Rotem Yahel

17:00–17:30 How far can evolutionary/adaptationist perspective apply to psychiatry beyond somatic



medicine?

Shunkichi Matsumoto

17:30–18:00 Evolutionary Theories of Emotions in Italian Psychophysiology: Reception, Criticism, and Influence

David Ceccarelli

Organized: More than Pretty Pictures: The Roles of Visual Representations in the Life Sciences — Session 2

July 22, 16:30–18:00 · BLA4 Chair: Guido I. Prieto

Visualizing Levels: Conceptual Flexibility in Action

Daniel Brooks

Tools for Thought: Diagrams as Visual Devices in Evolutionary Ecology Research

Guido I. Prieto

The Many Meanings of a Large, Jurassic Fossil

Judyth Sassoon

Lost in Distortion: Misleading Visualizations of Complexity [Virtual]

Giuseppe D'Agostino

Theragnostic Imaging in Nuclear Medicine: Diagnosis and Intervention Through Visual Representations

Elisabetta Lalumera

Shifting Frames in Neuroimaging Research on Hysteria/Functional Neurological Disorder from the 1990s to Today

Paula Muhr

Organized: Is Life Meaning-Making? Historical, Philosophical, Theoretical, and Sociological Approaches to Biosemiotics — Session 2

July 22, 16:30–18:00 · BLB5 Chair: Jaime F. Cárdenas-García

Biosemiotic Descaffolding: Meaning, Its Role and Destruction in Organic Systems

Claudio J. Rodríguez Higuera

Uexküll's and Darwin's Differing Views of Ecology and Evolution

C. David Suárez Pascal

Radical Creativity: Understanding Adaptive Behavior Beyond Modes of Chance and Fixed Law [Virtual]

J. Augustus Bacigalupi

Organized: Microbes and Gender — Session 2

July 22, 16:30–18:00 · BLB7 Chair: Angela N. Creager

The Characterization of Beta-Lactamases: Gendered Practices in the Study of the Mechanisms of Antimicrobial Resistance During the 1980s

Cristina Moreno Lozano

Queering Vulnerability: Intersectionality and Social Justice in Ethics of AMR

Salla Sariola[♦]; Tiia Sudenkaarne

Re-Embodying Resistance: Feminist Para-Ethnographies as More-Than-Biomedical Approach of Biome Justice and Restoration

Andrea Nuñez Casal

Tuesday, July 22, 18:15-19:15

Mini-Plenary: Ecological Restoration: What Are We Restoring the World To?

July 22, 18:15–19:15 · Salão Nobre Chair: Challie Facemire

Wednesday, July 23, 09:00-10:30

Organized: Deconstructing Darwinism — Session 1

July 23, 09:00–10:30 · Anf. 1 Chair: Richard Delisle

The Darwinian Fallacy

Jeffrey Schwartz

Before Darwin: Tracing the "Common Ancestor" of Evolutionary Thinking

Maurizio Esposito

Year 1990: When Ernst Mayr Moved Out of Darwinism

Richard Delisle

Deconstructing and Constructing the Structure of Evolutionary Theory: Modern Synthesis, Extended Evolutionary Synthesis, Unmodern Synthesis, and H-Evo-Devo Theory

Carlos Ochoa

Organized: Cell Landscapes — Session 1: Revisiting Waddington in the Light of Single-Cell Sequencing

July 23, 09:00–10:30 · Anf. 2 Chair: Kate MacCord



Updating Waddington: The Attractiveness of the Epigenetic Landscape as a Guiding Metaphor for Contemporary Biology

Meike Wiegand

A Lack of Distinct Cell Identities in Single-Cell Measurements: Revisiting Waddington's Landscape

Breanne Sparta[†]; Timothy Hamilton; Eric Deeds

The unstable epistemic status of the attractor perspective

Fridolin Gross

Organized: Agents and Values in Conservation

July 23, 09:00–10:30 · Anf. 4 Chair: Ellen Clarke

What Does The Value-ladeness of Conservation Aims Mean for Objectivity in Conservation Science? [Virtual]

Daniel Davis

Would Revived Species Have Intrinsic Value?

Katie Prosser

The Role of Intrinsic Value in the Conservation of Parasite Biodiversity

Timothy Brown

Organized: Expeditions and Museum Collections

July 23, 09:00–10:30 · Anf. 6 Chair: Matthew James

Now Is the Time to Collect: Salvage Zoology & Museum Expeditions at the Turn of the Twentieth Century

Paul Brinkman

'Lost' in the Archives? The Case of the Corpse Flower in Nationalist Museum Collections

Elaine Ayers

USS Monitor Discovery Expedition, E-12-73: Rapid Evolution of Deep-Marine Research Technologies and Founding of the First US National Marine Sanctuary

Cathryn Newton

The History of Darwin's Finches in the Galapagos Islands

Matthew James

Organized: Deconstruction as a Signature of Precision Medicine? — Session 1 [IDSP]

July 23, 09:00–10:30 · Anf. 7 Chair: Cornelius Borck, Simon Lohse Introduction

Cornelius Borck

Complexity, Pluralistic Evidence and Uncertainty in Precision Medicine

Simon Lohse[♦]; Cornelius Borck

Deconstruction in Precision Medicine as Essential Epistemic Opacity

Christian Herzog[♦]; Deniz Sarikaya

Precision Medicine: Deconstructing Device and Evidence Standards with Wearable Technology

Alessandro Demichelis[♦]; Stefano Canali

The Deconstruction of Doctor-Patient Relations Through Precision Medicine Technologies

Yael Friedman

Reflections

Sara Green

Organized: Gaiapolitics: Historical and Philosophical Perspectives on Earth and Environmental Sciences and Management

July 23, 09:00–10:30 · Anf. 8 Chair: Rose Trappes

Geopolitics and Climate Injustice in Environmental Sciences: A Democratic Science in an Unequal World?

Carolina Cuadrado

Earth System-Thinking and Gaian Ontologies in the History of Mediterranean Oceanography (1970-2000)

Pablo Lima

Organized: Dialectical Biologists Revisited: Gould, Levins, and Lewontin as Bio-Political Agents

July 23, 09:00–10:30 · Anf. 9 Chair: Jay Odenbaugh

Stephen Jay Gould: In the Shadow of Methodology, Not in Evolution's Historical Nature

Alison McConwell

Epistemic Commitments Have No 'Off' Button: On the Embodiment of Commitments by Way of Model Formulation

Zvi Hasnes Beninson

Richard Lewontin and Dialectics as Warning Sign

Michael Dietrich

Individual: Concepts, Pluralism, and Emergence



July 23, 09:00-10:30 · BLA1

Chair: Caitlin Mace

09:00-09:30 Empirical inquiry on ontological pluralism in biology

Sélène Domino

09:30–10:00 Emergence and the Plurality of Metaphysical Concepts

Turad Miguel Turad Lorenzo

Individual: Education, Creativity, and Drama

July 23, 09:00–10:30 · BLA2

Chair: Yiru Wang

09:00–09:30 The Meaning of Creativity in Science

Gabriel Zimbler

09:30–10:00 Examining Preschool Children's Perceptions of Science and Scientists Using Drama Method

Simge UÇAR[†]; Çiçek Dilek BAKANAY

10:00–10:30 Darwin, Dewey, Ruse - The Entanglement of the History and Philosophy of Biology, and Education

Martin Bremer

Individual: Medicine and (Non-)Animal Models

July 23, 09:00–10:30 · BLA3

Chair: Anna Olsson

09:00–09:30 Making Flies, Organoids, Simulations, and Mice Play Nice: Evaluating Experimental Ensembles in Translational Biomedical Research

Jacqueline Wallis

09:30–10:00 Supplementing Vulnerability Account of Evolutionary Medicine; Disease as a Secondary Property

Ozan Altan Altinok

Individual: Meta-Studies of the Life Sciences

July 23, 09:00–10:30 · BLA4 Chair: William (Bill) McComas

09:00–09:30 The Plurality of Scientific Knowledge: A Text-Mining Study of Epistemic Framings in Astrobiology

Christophe Malaterre[♦]; Iana Atanassova; Francis Lareau; Ningrum Panggih Kusuma

09:30–10:00 Market Share in the Academic Commons: Trends in Philosophy of Biology since the 1980s

Makmiller Pedroso

10:00–10:30 A concerning estrangement? The case of philosophy of biology

Jacob Hamel-Mottiez

Individual: Sex and Feminism

July 23, 09:00-10:30 · BLB5

Chair: Aja Watkins

09:00–09:30 Requirements for Scientific Debate: Sexual Diversity in Biology

Eduardo Ferreriz Duarte

 $09: 30-10: 00 \ \textbf{Duck Genitals and Feminist Science Stud-}$

ie

Matthew Brown

Organized: New Histories of Eugenics & Euthenics in 20th Century Biology

July 23, 09:00–10:30 · BLB7 Chair: Gregory Radick

Fighting the Tyranny of Heredity

david munns

Biological Relativity: A History of Julian Huxley's Developmental Eugenics, 1906-1936

Stefan Bernhardt-Radu

A Eugenicist's History of Eugenics

Michael Ortiz-Castro

Wednesday, July 23, 10:30-11:00

Coffee Break

July 23, 10:30-11:00 · Cantina

Off-Year Workshop Committee: Workshop Proposals

July 23, 10:30-11:00 · Cantina

Wednesday, July 23, 11:00-12:30

Organized: Deconstructing Darwinism — Session 2

July 23, 11:00–12:30 · Anf. 1 Chair: Richard Delisle

The Darwinian Fallacy

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Before Darwin: Tracing the "Common Ancestor" of Evolutionary Thinking



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Year 1990: When Ernst Mayr Moved Out of Darwinism

Richard Delisle

Deconstructing and Constructing the Structure of Evolutionary Theory: Modern Synthesis, Extended Evolutionary Synthesis, Unmodern Synthesis, and H-Evo-Devo Theory

Carlos Ochoa

Organized: Cell Landscapes — Session 2: Decanalization and Cancer Treatment: A Collaboration Between Philosophy, History and Biomedicine

July 23, 11:00–12:30 · Anf. 2 Chair: Kate MacCord

The Clonal Evolution Model: A Philosophical Evaluation

Lucie Laplane

The Concept of Decanalization: A View From History

Laurent Loison

Cancer Treatments and Decanalization: Proposed Experimental Approaches

Aline RENNEVILLE

Individual: Model Organisms

July 23, 11:00-12:30 · Anf. 4

Chair: Nicole Nelson

11:00–11:30 Nobody Knows What Attention Is (Neither Do Mice)

Angelica Breviario

 $11{:}30{-}12{:}00 \ \textbf{Interpretative "Keys" in Model Organisms}$

lorenzo sartori

12:00–12:30 Translational Deficiency of Animal Models in Neuroscience Research

Lilly Liu

Organized: Species, Individuals, and Other Classificatory Matters: Reflections on Marc Ereshefsky's Contributions to the Philosophy of Biology

July 23, 11:00-12:30 · Anf. 6

Chair: Celso Neto

Discussion

Matt Haber

Discussion

Thomas Reydon

Discussion

Megan Delehanty

Discussion [Virtual]

Roberta Millstein

Discussion

Jay Odenbaugh

Discussion

celso neto

Discussion

Alison McConwell

Discussion

Derek Turner

Discussion

Adrian Currie

Discussion

Makmiller Pedroso

Organized: Deconstruction as a Signature of Precision Medicine? — Session 2 [IDSP]

July 23, 11:00–12:30 · Anf. 7 Chair: Cornelius Borck, Simon Lohse

Introduction

Cornelius Borck

Complexity, Pluralistic Evidence and Uncertainty in Precision Medicine

Simon Lohse[♦]: Cornelius Borck

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Christian Herzog[♦]; Deniz Sarikaya

Precision Medicine: Deconstructing Device and Evidence Standards with Wearable Technology

Alessandro Demichelis[♦]; Stefano Canali

The Deconstruction of Doctor-Patient Relations
Through Precision Medicine Technologies

Yael Friedman

Reflections

Sara Green

Individual: Values in Ecology and Conservation

July 23, 11:00–12:30 · Anf. 8 Chair: Thomas Bonnin



11:00–11:30 Eco-Evo-Devo Perspectives on Restoration Ecology: Shaping Sustainable Ecosystems Through Relational Values

Sean Pears

11:30–12:00 Fostering Interspecific Social Relationships for Environmental Care Across Knowledge Systems

Lucia C. Neco

12:00–12:30 Can Climate Science Be Value-Free? Grounding the Inherent Normativity of the Earth System Through Biological Autonomy

Alejandro Merlo[♦]; Xabier E. Barandiaran

Organized: Cognate Session: Asian Philosophy of Science Association

July 23, 11:00–12:30 · Anf. 9 Chair: Qiaoying Lu, Yafeng Shan

Problems of Pence and Ramsey's Model of Fitness

Keith Jin Deng Chan

Kant and Evolution

Bohang Chen

Individual: Pursuit and Planning in Science

July 23, 11:00–12:30 · BLA1 Chair: Jose Díez

11:00–11:30 The Research Pursuits of Shinya Inoué and Jacques Loeb: Cases of Pursuitworthiness and Science in Practice

Shane Jinson

11:30–12:00 Biologists' perceptions and conceptualizations of the development of omics in biological research.

Emmanuelle MACIEL

Individual: Citizen Science, Zoos, and Primates

July 23, 11:00–12:30 · BLA3 Chair: James Elwick

11:00–11:30 The Monkey House in the Zoo Around 1900 – A Global Site?

Oliver Hochadel

11:30–12:00 Polio, Primates and the Pasteur Institute During the Colonial Period (1910s-1950s)

Marion THOMAS

Individual: Pregnancy and Reproduction

July 23, 11:00–12:30 · BLB5 Chair: Maël Lemoine

11:00–11:30 Pregnancy Is a Survival Pathology: A Biostatistical Approach

Jolie Zhou

11:30–12:00 The Pervasive Legacy of Hysteria and Premenstrual Syndrome

Vanessa Lovato

12:00–12:30 Expanded immune individuality in pregnancy and maternal–fetal integration

Bartlomiej Swiatczak

Organized: "Population" Revisited: Histories of an Idea in Human Genetics

July 23, 11:00–12:30 · BLB7 Chair: Abigail Nieves Delgado

The Long Now of Neuroticism: Infrastructural Fixation and the Temporality of Biobank Ecologies

Kathryne Metcalf

Undoing Population: Towards a Critical Genealogy of an Impossible Idea

Carolina Mayes[♦]; Lukas Engelmann; John Nott

Seeing Like a Meta-Analysis: A Data-Driven History of GWAS Consortia

Bennett McIntosh

Wednesday, July 23, 12:30-14:30

Lunch Break

July 23, 12:30-14:30 ·

Wednesday, July 23, 14:30-16:00

Organized: How Does Dirt Become Soil? Categorizations of Soil in the Agricultural Sciences — Session

July 23, 14:30–16:00 · Anf. 1 Chair: Catherine Kendig

Social Ontologies of Soil: What Is Soil?, What's It For?, and What Should We Do With It?

Catherine Kendig

Controlling Soil: Lab vs Field Experiments and the Heterogeneity of Soil [Virtual]



Özlem Yilmaz Silverman

Soil Fertility as a Cause of Land Health in Ecological and Agricultural Contexts: Solving Puzzles Concerning the Origins of Aldo Leopold's Views on Soil [Virtual]

Roberta L Millstein

Finding Common Ground in Soil: Leopoldian Land Health as a framework to address free-roaming horse management policy conflicts in the US and Australia

Denise Hossom

Soil Quality Indicators as Hybrid Facts: Integrating the Epistemology and Axiology of Usable Knowledge

Robert Meunier

Criteria for Soil Classification

Aja Watkins

Organized: Explanatory Human Nature? — Session 1

July 23, 14:30–16:00 · Anf. 2 Chair: Paul Griffiths

The Contingency of Human Nature

edouard Machery

A Critical View of 'Human Nature' From a Gene–Culture Coevolutionary Perspective

Gillian Brown[♦]; Kevin Lala

Beyond Reductionism: Scientific Practices and Integration in Evolutionary Psychology

Aleksandra Knežević

Organized: Shifting Views: Racial Discussions in Mexico from the Porfiriato (1876–1911) to the Turn of the Millennium

July 23, 14:30–16:00 · Anf. 4 Chair: Marco Ornelas-Cruces

Evolutionary Ideas and Racial Discourses in Mexico: Two Perspectives in Late 19th and Early 20th Centuries

Brian Becerra Bressant

Eugenics and Social Control in México

Ma-Alicia Villela

Old Ideas and New Languages: The Tacit Idea of Race in the Discourse of Genomic Medicine in Mexico at the Beginning of the 21st Century

Marco Ornelas-Cruces[♦]; Ana Barahona

Visualizing Hierarchies: Racial Taxonomies and Ideological Frameworks in Porfirian Mexico's Visual Economy

Erica Torrens-Rojas[†]; Juan Manuel Rodríguez-Caso

Organized: Biological Variation: Theory and Practice — Session 1

July 23, 14:30–16:00 · Anf. 6 Chair: James Lowe

Biological Variation as an Object of Inquiry

James Lowe

Population Thinking, Variation, and Uniqueness

Daniel Nicholson

Individual-based Research in Ecology, Behavioral, and Evolutionary Biology

Marlene van den Bos

Genetics and Variation in Developmental Biology

Alan Love

Understanding the Linnaean Hierarchy

Staffan Mueller-Wille

Discussion

Gregory Radick

Organized: Introducing Neglected Perspectives on Agency: Microbes, Fungi and Niche Constructors — Session 1

July 23, 14:30–16:00 · Anf. 7 Chair: Javier Suárez

Fungal Agency

César Marín

Biological Individuality, Biological Agency, and the Exclusion Principle

Javier Suárez

Microbes, Genes, and Evolution: Rethinking Biological Determinism in a Symbiotic World

Dominika Wloch-Salamon

Is Organismal Agency Possible Without Internal Representation?

Jan Czarnecki

Necessity and Contingency: Two kinds of Common Interest

Adrian Stencel



Agency in Niche Construction: Different Levels and Definitions

Alba G. Padrós

Organized: Philosophy & Philosophers of Science in Crossdisciplinary Science

July 23, 14:30–16:00 · Anf. 8 Chair: Kelli Barr

Philosophical Differences Between Scientific Disciplines and Their Implications for Cross-Disciplinary Science

Gina Pizzo[♦]; Gina Pizzo; Brian Robinson; Aaron Mc-Cright; Chad Gonnerman; Troy Hall

Facilitating Crossdisciplinary Science: What's Special About Philosophy?

Stephen Crowley[†]; Marisa Rinkus; Chet McLeskey

Biologists' Attitudes Towards, Interest In, and Experiences With Philosopher-Scientist Collaborations

Kathryn Plaisance[♦]; Sara Doody

Individual: Evolution, Ethics, and Norms

July 23, 14:30–16:00 · Anf. 9 Chair: Joan Camarena Bononad

14:30–15:00 Darwinian Dilemmas and LaPlacian Challenges for Moral Realism

P. Kyle Stanford

15:00–15:30 Reconciling Moral Progress With Evolutionary Theory: Consequentialism, Human Nature and Science

Tomislav Bracanović

15:30–16:00 The Value-Free Ideal: A Pragmatist Approach to Scientific Norms

Sandra Mitchell

Organized: Imagery in Biology: Intersections Between Art, Science, and Philosophy

July 23, 14:30–16:00 · BLA1 Chair: Olga Pombo

The Role of Different Visual Representations in Zoology: The Importance of Naturalist Illustration in Species Description

Ana Paula Suarez

Tracing Movement: Thinking Movement Through Its Form

Liz Vahia

Nine Decades of Plant Physiology: Assessing Scientific Progress From Illustrations of Early 20th-Century and Contemporary College Textbooks

Jorge Marques da Silva

Individual: Human Enhancement and Improvement

July 23, 14:30–16:00 · BLA2 Chair: Ryan Nichols

14:30-15:00 From Self-Improvement to Superhuman: Exploring the Roots of Transhumanism in Modern Enhancement Culture

João Fonseca

15:00–15:30 The 11th Hour Fix: The Implications of the Human Enhancement Project on Autonomy and Free Will Amidst a Climate Emergency

Kawthar Fediki

15:30–16:00 The Myth of the Alpha Male [Virtual] Jorge Lizarzaburu

Individual: Animal Models

July 23, 14:30–16:00 · BLA3 Chair: Héloïse Athéa

14:30–15:00 Clarifying Open Communication and Collaboration in Mice Research Communities

Yağmur Metin

15:00–15:30 "Do I Have to Kill This Mouse?" Meeting Early Career Researchers Moral Concerns in Laboratory Animal Science Training

Anna Olsson[♦]; Andreia Costa; Julio Borlido

 $15{:}30{-}16{:}00$ Empathy at the Edge: Examining Compassion Fatigue and Mental Health Among Veterinary Professionals in Portugal

Daniel Costa[†]; Duarte Rolo; Nuno H. Franco; Manuel Magalhães-Sant'Ana; Anna Olsson

Individual: Climate and Conservation

July 23, 14:30–16:00 · BLA4 Chair: Federica Bocchi

14:30–15:00 Reflections on Crisis Science

Bennett McNulty

15:00–15:30 Rethinking and Reframing Climate Change Adaptation for Systematic Interdisciplinarity and Knowledge Integration [Virtual]

Corey Bunce[♦]; Laura Menatti



15:30–16:00 Collaborative Conservation: Leveraging Partnership Networks to Overcome Challenges in Ecosystem Management and Restoration

Challie Facemire

Organized: Time in Developmental Biology: Conceptualization and Representation

July 23, 14:30–16:00 · BLB5 Chair: Yoshinari Yoshida

A Causal-Mechanistic Framework for the Comparative Study of Developmental Time

Cassandra Zie Yang

Representing Developmental Time With in Vitro Models: Epistemic Challenges

Yoshinari Yoshida

From Clocks to Hourglasses: Making Time an Epistemic Object in Developmental Biology

Patrick Ferree

Individual: Darwin

July 23, 14:30–16:00 · BLB7 Chair: Mathias Grote

14:30–15:00 Reconsidering the Structure of Darwin's 'Long Argument'

Stavros Ioannidis

15:00-15:30 Charles Darwin's Conversion: Do We Really Know How It Happened? A Historiographical Illusion Exposed

Koen B. Tanghe

15:30–16:00 Darwin in Patagonia: Unmasking the Galapagos Myth

Stuart Blake

Wednesday, July 23, 16:00-16:30

Coffee Break

July 23, 16:00-16:30 · Cantina

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Controlling Soil: Lab vs Field Experiments and the Heterogeneity of Soil [Virtual]

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Soil Fertility as a Cause of Land Health in Ecological and Agricultural Contexts: Solving Puzzles Concerning the Origins of Aldo Leopold's Views on Soil [Virtual]

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Finding Common Ground in Soil: Leopoldian Land Health as a framework to address free-roaming horse management policy conflicts in the US and Australia

Denise Hossom

Soil Quality Indicators as Hybrid Facts: Integrating the Epistemology and Axiology of Usable Knowledge

Robert Meunier

Criteria for Soil Classification

Aja Watkins

Organized: Explanatory Human Nature? — Session 2

July 23, 16:30–18:00 · Anf. 2 Chair: Grant Ramsey

Nature and Nurture: Interactions, Asymmetries and Independencies

Maria Kronfeldner

Human Nature, Praxis, and Ideology [Virtual]

Matteo Mameli

Nature-less Human Nature [Virtual]

Subrena Smith

Organized: Historicizing Prenatal Testing: Prognostic Uncertainty, Decision Making, and (Dis)Ability in Context

July 23, 16:30–18:00 · Anf. 4 Chair: María Jesús Santesmases

Discursive and Regulatory Entrenchment: Genetic Epidemiology, Guidelines, and Clinical Practice

Ariane Hanemaayer

Contextualizing Debates About Whole-Genome Sequencing With 1970s U.S. Debates About Screening During Pregnancy

Heather Dron



Decision Making During Prenatal Screening for Toxoplasmosis: Who Bears the Epistemic Risks and Practical Consequences?

Hanna Lucia Worliczek

Agency in Niche Construction: Different Levels and Definitions

Alba G. Padrós

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Microbes, Genes, and Evolution: Rethinking Biological Determinism in a Symbiotic World

Dominika Wloch-Salamon

Is Organismal Agency Possible Without Internal Representation?

Jan Czarnecki

Necessity and Contingency: Two kinds of Common Interest

Adrian Stencel

Individual: Darwin, Before and After

July 23, 16:30–18:00 · Anf. 8

Chair: Stuart Blake

16:30–17:00 Darwin's invasion thinking: naturalization, chance, and the principle of divergence

Fric Anderson

17:00–17:30 The Non-Darwinian Tree of Life: Evolution of the Tree-Practice. 1860-1960

Elizabeth Schulz

Organized: The Beginnings of Modern Philosophy of Biology: Hull, Ruse, Wimsatt

July 23, 16:30–18:00 · Anf. 9 Chair: Vassiliki Betty Smocovitis

David Hull and the Rise of the Philosophy of Biology

Pierre-Olivier Méthot

Piecewise Approximations to a Wimsattian Philosophy of Re-Engineering

James Griesemer

Understanding Ruse's Early Career: Challenges, Successes and Contributions

Paul Thompson

Individual: Humans and Anthropology

July 23, 16:30–18:00 · BLA1 Chair: James Tabery

16:30–17:00 The Ape Zone of Latent Solutions: An Anthropocentrically Biased Theory [Virtual]

Mateo Arias-Velez

17:30–18:00 The Origin of Body Awareness: From Autopoiesis to Cooperative Ecologies

Ximena González-Grandón

Individual: Metabolism

July 23, 16:30–18:00 · BLA2 Chair: Hugh Desmond

16:30–17:00 Metabolic Wholes: The Organism as Having a Centred Metabolic Network

Rebecca C. Mann

17:00–17:30 Active Matter and Purposive Agency: Continuities and Discontinuities [Virtual]



Fermin Fulda

Individual: Microbes and Microbiomes

July 23, 16:30–18:00 · BLA3 Chair: Tamar Schneider

16:30–17:00 More Than A Menagerie of Microbes: the National Collection of Type Cultures and the Management of Microorganisms in the Early Twentieth Century

James Stark

17:00-17:30 Hype and Distortion in Microbiome Research

Federico Boem

Organized: Controlling Pests and Pathogens: "Basic" and "Applied" Science in Cold War Debates over Insecticide Resistance, Disease Eradication, and Antibody Production

July 23, 16:30–18:00 · BLA4 Chair: Robert Bud

"I wouldn't put anything past the flies anymore":
"Basic" and "Applied" Ideals in the American Battle
Against Insecticide Resistance

Rachel Mason Dentinger

Smallpox and an Environment for Basic and Applied Science

T.Y. Branch

Immunology, Applied: Liberal and Socialist Lives in Practice

Anin Luo

Organized: Evolutionary Reconstruction and Explanation

July 23, 16:30–18:00 · BLB5 Chair: Alejandro Gordillo-Garcia

The Modal Structure of Evolutionary Explanation

ALEJANDRO GORDILLO GARCIA

The Logical Structure of Narrative Explanations

Luca Corti

Reconstructing Extinct Life: Analogues, Homologues, & Biomechanical Models

Alisa Bokulich

Organized: The Measured Body: Exploring the Implications of Wellness Technologies and Self-Diagnosis Through Objects and Images [IDSP]

July 23, 16:30–18:00 · BLB7 Chair: Sara Green

Group Discussion

Karin Tybjerg

Group Discussion

Sara Green

Group Discussion

Lukas Deviletti Skov

Group Discussion

Olivia Spalletta

Thursday, July 24, 09:00-10:30

Organized: Imagination Beyond Humans

July 24, 09:00–10:30 · Anf. 1 Chair: Oryan Zacks

The Emergence of Imagination in Vertebrate Evolution

Oryan Zacks

The Evolution of Animal Imaginative Cognition: Origins and Elaborations

Eva Jablonka

Imagination Beyond Humans

Henry Shevlin

Individual: Disease from Pregnancy to Aging

July 24, 09:00–10:30 · Anf. 2 Chair: Filip Adolf Buyse

09:00–09:30 Is Pregnancy a Disease? An Ontological Exploration of Thinking Pregnancy as a Disease

Francesca Bellazzi

09:30–10:00 The Problem of Pseudoscience in Aging Research

Gregor Greslehner

10:00–10:30 Can the Aging of an Organism Be Reduced to the Aging of Its Cells?

Mael Lemoine

Individual: Genes, Individuals, and Populations

July 24, 09:00–10:30 · Anf. 4 Chair: Maria Kronfeldner



09:00-09:30 Bell Curves: Reconciling the Dichotomy Between Typological and Population Thinking

Shichao Wen

09:30–10:00 Rethinking Interaction in the Interaction Debate: Meanings, Models, and Explanations

Xingyi Li

10:00–10:30 Can Genes Cause Trait Variation Without Causing Traits of Individuals?

Riin Kõiv

Organized: Reading Ruse: A Celebration of Michael Ruse (1940-2024)

July 24, 09:00-10:30 · Anf. 6 Chair: Vassiliki Betty Smocovitis

Discussion

Paul Thompson

Discussion

Jane Maienschein

Discussion

Frederick R. Davis

Discussion

Samantha Muka

Discussion

Chris Zarpentine

Discussion

Charles Pence

Organized: The Ontological Status of Ecosystems: New **Perspectives**

July 24, 09:00-10:30 · Anf. 7 Chair: Ghyslain Bolduc

Ecosystem Songs: Might Natural Selection Be Conducting the Singers?

Antoine C. Dussault

The Ontology of Ecosystems and Biogeographical Areas

Philippe Huneman; Artemis Korniliou

Natural Selection of Ecosystems: Beyond the Replicator/Interactor Dichotomy

Sébastien Ibanez

Individual: European Biology in the Early 20th Century

July 24, 09:00-10:30 · Anf. 8 Chair: Rachel Mason Dentinger

09:00–09:30 Translating the Concept of Organism: Organicist Theoretical Biology between Vienna and Great Britain, 1926-1945 [Virtual]

Libby O'Neil

09:30-10:00 Max Delbrück's Evolutionary Epistemology: Debating with Wheeler, Reading Rilke, and Going Beyond Bohr's Complementarity

Stefano Furlan

10:00-10:30 Linking Rationalist Politics and Molecular Biology: Paris's "Institut de biologie physico-chimique" During the 1930s?

Robert Bud

Individual: Organisms and Teleology

July 24, 09:00-10:30 · Anf. 9 Chair: Rena Alcalay

09:00-09:30 Teleology and Evo-Devo?

Ingo Brigandt

09:30-10:00 Addressing Hypotheses of Within-Individual Phenotypic Variation in Plants: An Argument to Consider Plants as Biological Individuals

Darian Bolen

10:00–10:30 The Return of the Organism? [Virtual]

Sandy Boucher

Individual: Organisms at the Extremes

July 24, 09:00-10:30 · BLA2

Chair: Nurit Kirsh

09:00-09:30 An Argument From Stress Against the Machine Conceptions of Organisms

Davis Kuykendall

09:30-10:00 Beyond the Biological Norm: The Epistemological Value of Teratologies

Leyre Celada

Individual: Mechanism and Selection

July 24, 09:00-10:30 · BLA3

Chair: Stuart Glennan

09:00–09:30 On the Modification to the Explanatory Model of the New Mechanical Philosophy and its Theoretical Relevance

Adonay Otero Garcia



09:30–10:00 Mechanisms vs. Pathways: Ontological and Conceptual Differences

Vito Balorda

10:00–10:30 Defining Natural Selection: Why Trait-Centered Definitions Are Superior to Fitness-Centered Ones

Ciprian Jeler

Individual: Biological Determinism vs. Plasticity

July 24, 09:00–10:30 · BLA4 Chair: Marco Casali

09:00–09:30 From Critique to Concept: The Development of "Biological Determinism", 1970-1999

Cora Stuhrmann

09:30–10:00 Plasticity as Ontopolitical Rationality. Biology, Biomedicine, and Biopower in the 20th and 21st Centuries

Leah Muñoz Contreras

10:00–10:30 What is Dialectical Biology?

Christopher Shambaugh

Individual: Neuroscience and Mind

July 24, 09:00–10:30 · BLB5 Chair: Shunkichi Matsumoto

09:00–09:30 The Biological Grounding for Decoupled Representations

Anastasia Garbayo

09:30-10:00 Hierarchies and Analogies in Neurobiology of Memory

Jonathan Najenson

Individual: Medicine and Bioethics

July 24, 09:00–10:30 · BLB7 Chair: Nicolas Brault

09:00–09:30 The Instrumentalization of Medicine Between Constraint and Resistance of the Body

Sonia Harzallah Debbabi

09:30–10:00 The Future of Bioethics: Confronting Emerging Issues

Filipa Lopes , Ana Rita Soares; Ana Sofia Carvalho

10:00–10:30 Bridging Innovation and Equity: A Critical Analysis of AI in Healthcare Through Social Justice and Technical Limitations

Gregory Rogel

Graduate and Early Career Committee Meeting

July 24, 09:00–10:30 · Super Bock Arena, Meeting Room A Chair: Jarrett Joubert

Education Committee Meeting

July 24, 09:00–10:30 · Super Bock Arena, Meeting Room B

Chair: Ramsey Affifi, Charbel El-Hani

Membership Development Committee Meeting

July 24, 09:00–10:30 · Super Bock Arena, Meeting Room C

Chair: Vivette García Deister, Abigail Nieves Delgado

Off-Year Workshop Committee Meeting

July 24, 09:00–10:30 · Super Bock Arena, Meeting Room D

Chair: Matt Haber

Thursday, July 24, 10:30-11:00

Coffee Break

July 24, 10:30–11:00 · Super Bock Arena, Foyer

Thursday, July 24, 11:00-12:30

Members' Meeting

July 24, 11:00–12:30 · Super Bock Arena, Auditorium

Thursday, July 24, 12:30-14:00

Lunch Break

July 24, 12:30-14:00 ·

Incoming ISHPSSB Council Meeting

July 24, 12:30–14:00 · Super Bock Arena, Meeting Room C

Chair: Sabina Leonelli

Thursday, July 24, 14:00-15:30

Plenary

July 24, 14:00–15:30 · Super Bock Arena, Auditorium Chair: Ramsey Affifi, Charbel El-Hani, Vassiliki Betty Smocovitis

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Thursday, July 24, 15:30-16:00

Coffee Break

July 24, 15:30–16:00 · Super Bock Arena, Foyer

Thursday, July 24, 16:00-17:30

Recognition and Awards

July 24, 16:00–17:30 · Super Bock Arena, Auditorium

Thursday, July 24, 17:30-18:30

Poster Session

July 24, 17:30-18:30 · Super Bock Arena, Foyer

17:30–18:30 Elucidating the internal coherence of Hennigian ontology for phylogenetic systematics

Ruãn Batista

17:30–18:30 A Subjective Perspective vs. an Objective Perspective on Social Cooperation Helps Explain Social Polarization

Ehud Lamm

17:30-18:30 What if We Replay the Developmental Tape of Life?

Marco Casali[♦]; Francesca Merlin

17:30–18:30 You Are How You Live: Categorisation in Gut Microbiome Research Based on Lifestyle/Subsistence Strategy in South Africa

Elian Schure

17:30–18:30 Answering Origin Questions in Origins of Life Research

Ludo Schoenmakers

17:30–18:30 Analysis of the Concept and Role of Valence in the Evolution of Consciousness

Jidong Wang

17:30–18:30 An Evolutionary Debunking Argument to the Problem of Pragmatic Encroachment

Zixun Jiang

17:30–18:30 Grounding Normativity in Earth System Science Through Autonomy: The Quaternary Period Is (Was?) Cool in More Than One Sense

Alejandro Merlo

17:30–18:30 Studying the Purpose Project: Qualitative and Quantitative Data

Carol Bromer[♦]; Edward Wilson; Elihu Gerson; James Griesemer

17:30–18:30 Measuring Aging and Ontology of Disease

Amirreza Liaghat[♦]; Adrien Barton

17:30–18:30 Studying the Purpose Project: A Multiple Methods Approach

James Griesemer[♦]; Edward Wilson; Carol Bromer; Shane Jinson; Elihu Gerson

17:30–18:30 Biomedical Platforms in Basic Research: The Case of Single-Cell Omics

Patrick Ferree

17:30–18:30 Beyond the Preclinical Research: Rethinking Validity Criteria for Animal Models in Biology

Héloïse Athéa[†]; Nicolas Heck

17:30–18:30 Moving Beyond Mayr's Model: Broadening Interpretations of Students' Reasoning in Natural Selection Education

Yiru Wang[♦]; Sugat Dabholkar; Scott Benjamin; Julia Gouvea

17:30–18:30 Advancing the Empirical Turn in Philosophy of Science: The Affordances of Mixed Methods Approaches

Kathryn Plaisance[♦]; Sara Doody

17:30–18:30 Egalitarian Transitions in Individuality Beyond History

Afra Salazar

17:30–18:30 Opening the Heart-Shaped Locket: Rethinking Extinction and Biodiversity Through the Lost-and-Found Case of Silphium

Emma Cole

17:30–18:30 HPV Opinions, Attitudes, and Knowledge in College Students

Eboni Andersun[♦]; Rachel Gur-Arie

17:30–18:30 What Does the Reconceptualization of the Environment as Co-Constituted by Organisms Entail for the Concept of Population?

Raphaël Marquis-Pelletier

17:30-18:30 A Metahistory of Cancer Genetics

Alistair Sponsel; Ludmila Pollock[†]; Stephanie Satalino

17:30–18:30 Cultural Coevolution: Exploring Interspecies Culture Dynamics



CHIARA PERTILE Ale

17:30–18:30 Three Types of in vitro Modeling and Different Aims of Idealization

Yoshinari Yoshida

17:30–18:30 Saving the Devil: Ethics of Intervention in Wildlife Crisis

Marie-Pier Ladouceur

Thursday, July 24, 19:00-22:00

Celebration Dinner

July 24, 19:00-22:00 · Palácio da Bolsa

Friday, July 25, 09:00-10:30

Organized: Biology and Sexes — Session 1

July 25, 09:00–10:30 · Anf. 1 Chair: Aja Watkins

Discussion

Aya Evron

Discussion

Paul Griffiths

Discussion

Jussi Lehtonen

Discussion

Miriam Miyagi

Remarks About Sex

Joan Roughgarden

Discussion

lu Ciccia

Discussion

Marina DiMarco

Discussion [Virtual]

Letitia Meynell

Discussion

Richard Prum

Sex Pluralism

Maximiliana Rifkin

Discussion

Alex Thinius

Organized: Pushing the Frontiers of Immunology — Session 1

July 25, 09:00–10:30 · Anf. 2 Chair: Thomas Pradeu

Why the Unity of Immunology Must Be Maintained

Thomas Pradeu

What Do Endocrine-Immunological Interactions Tell Us About Gender?

Sophie Veigl

Neuroimmune Ecosystems

Henrique Veiga-Fernandes

Advancing Our Understanding of Tuberculosis: Learning From the Pathogen

margarida saraiva

Do We Understand the Progression of Infectious Diseases, From Mild to Severe and Lethal?

Miguel Soares

Organized: Health and Function Within and Across Organisms

July 25, 09:00–10:30 · Anf. 6 Chair: Derek Skillings

How Should We Think About Microbiome Health and Function?

Derek Skillings[♦]; Emily Parke

Dynamic Biological Norms: Adding a Temporal Dimension to Homeostasis

William Bechtel

Questioning the Relationship Between Homeostasis and Health: From Stability to Change

Leonardo Bich[♦]; Laura Menatti

Individual: Plants: Agency and Cognition

July 25, 09:00–10:30 · Anf. 7 Chair: Alejandro Fábregas-Tejeda

09:00–09:30 The Historical Roots of Plant Agency: Lessons from Early 20th-Century Biology

Vera Straetmanns

09:30-10:00 Testing Cognitive Abilities in Plants

Gianmaria Dani



Individual: 19th-Century Biological Practice

July 25, 09:00–10:30 · Anf. 8 Chair: Max Bautista-Perpinyà

09:00–09:30 Colonial Darwinian Microbiology: Johannes Meiring Beck's Evolutionary Germ Theories in late 19th Century South Africa

Tarquin Holmes

09:30–10:00 What's in an Insect Name? The Many Lives of the Cockchafer Beetle in the British Empire [Virtual]

Matthew Holmes

10:00–10:30 Henry Sorby (1826-1908), the Spectrum Microscope, and Spectra of Various Biological Materials [Virtual]

Ian Davis

Organized: Lessons from the Purpose Project

July 25, 09:00–10:30 · Anf. 9 Chair: James Griesemer

The ADF as an Organizational Context for Specialized Research [Virtual]

Elihu Gerson

Reasons and Passions: Sentiment in the Social Epistemology of Interdisciplinary Biology

Kelli Barr

Understanding Contingency in Scientific Practice

Andrew Bollhagen

Organized: Biological Modality

July 25, 09:00–10:30 · BLA2 Chair: Margarida Hermida

The Evolution of Biological Possibility Spaces

Margarida Hermida

Assembly Possible and the Role of Historical Contingency in Biological Modality

Rami Koskinen

Biological Modality and Physical Modality

James Ladyman

Organized: Cognitive Ontology for Non-neural Creatures

July 25, 09:00–10:30 · BLA4 Chair: Patrick McGivern

Molecules and Codes and Intentions

Mazviita Chirimuuta

Decision-Making on the Small Scale

Patrick McGivern

Slime Mould: A Jumping Off Point for Exploring Different Notions of Biological Memory

Matthew Sims

Organized: Perspectives on Ecosystem Regeneration/Restoration

July 25, 09:00–10:30 · BLB5 Chair: Frederick R. Davis

Ecosystem Regeneration in a Time of Climate Change

Frederick R. Davis[†]; James P. Collins

Who Knows the Coast? Expertise and Value Creation in Coastal Engineering

Samantha Muka

Individual: Evolutionary Dynamics and Game Theory

July 25, 09:00–10:30 · BLB7 Chair: Stephan Guttinger

09:00–09:30 Evolutionary Game Theory as an Interdisciplinary Hub

Mingjun Zhang

09:30-10:00 Finding the Fundamental Equation of Evolutionary Dynamics: Problems and Prospects

Zachary Mayne

10:00–10:30 Darwin's Dream: Unifying Ecological and Evolutionary Change

A. Bradley Duthie[†]; Víctor J. Luque

Friday, July 25, 10:30-11:00

Coffee Break

July 25, 10:30-11:00 · Cantina

Friday, July 25, 11:00-12:30

Organized: Biology and Sexes — Session 2

July 25, 11:00–12:30 · Anf. 1 Chair: Rose Trappes

Discussion

Aya Evron



Discussion

Paul Griffiths

Discussion

Jussi Lehtonen

Discussion

Miriam Miyagi

Remarks About Sex

Joan Roughgarden

Discussion

lu Ciccia

Discussion

Marina DiMarco

Discussion [Virtual]

Letitia Meynell

Discussion

Richard Prum

Sex Pluralism

Maximiliana Rifkin

Discussion

Alex Thinius

Organized: Pushing the Frontiers of Immunology — Session 2

July 25, 11:00–12:30 · Anf. 2 Chair: Thomas Pradeu

Why the Unity of Immunology Must Be Maintained

Thomas Pradeu

What Do Endocrine-Immunological Interactions Tell Us About Gender?

Sophie Veigl

Neuroimmune Ecosystems

Henrique Veiga-Fernandes

Advancing Our Understanding of Tuberculosis: Learning From the Pathogen

margarida saraiva

Do We Understand the Progression of Infectious Diseases, From Mild to Severe and Lethal?

Miguel Soares

Individual: Explaining with Niches and Gametes

July 25, 11:00–12:30 · Anf. 4 Chair: Ozan Altan Altinok

11:00–11:30 On Holes in Hypervolumes: Addressing the Paradox of Vacant Niches

Katie Morrow

11:30–12:00 The Matrix Account of Niche Construction

Grant Ramsey[†]; Alejandro Fábregas-Tejeda

12:00-12:30 The Explanatory Value of Anisogamy

Karen Kovaka

Organized: Can You Be In-Formed by What You Don't Expect?

July 25, 11:00–12:30 · Anf. 6

Chair: Maël Montévil

The Historicity of Expectations From an Epistemological Perspective

Anton Robert[†]; Adrien Goulletquer; Teodoro Ariel Cohen

Historicity, Memory and Prediction. the Dynamic and Evolving Organisms' Space of Possibilities

Teodoro Ariel Cohen[♦]; Anton Robert; Adrien Goulletquer

Is There Such a Thing as a New Information?

Adrien Goulletquer[†]; Teodoro Ariel Cohen; Anton Robert

Individual: Science, Special and General

July 25, 11:00–12:30 · Anf. 7 Chair: Oryan Zacks

11:00–11:30 General Systems Theory and the Problem of the Unity of Life Science: Revising a History of Relative Neglect

Benjamin Smart

11:30–12:00 Which Generality for the Life Sciences? [Virtual]

João Cortese

12:00-12:30 Special Science Kinds From a Mechanistic Standpoint

Aida Roige

Individual: Biomedicine, Sex, and Eugenics

July 25, 11:00-12:30 · Anf. 8

Chair: Clair Quentin

11:00–11:30 Is Philosophy of Biomedicine a Subfield of Philosophy of Biology? [Virtual]



John Huss

11:30–12:00 Royal Society Fellows in the Eugenics Society Council, 1909-1950

Kiera Evans

12:00–12:30 Sex in the Medical Machine: How Algorithms Entrench Bioessentialism in Precision Medicine

Marion Boulicault[♦]; Kelsey Ichikawa; Sarah Richardson

Mariano Martín-Villuendas

11:30–12:00 Synergetic Information and Oyama's Dictum: Overcoming Extended Predeterminism

Tiago Rama[♦]; Cristián Novelli

12:00–12:30 Hereditary Systems: A Discussion Based on the Notion of Self-Eco-Organization and the Hologrammatic Principle

Jair Sousa

Individual: Ecology, Change, and Degradation

July 25, 11:00–12:30 · Anf. 9 Chair: Lucia Neco

11:00–11:30 Norms of Causal Selection and the Explanation of Environmental Degradation

Stuart Glennan

11:30–12:00 Anyplace, Anywhere, Anytime? Epistemological Problems of Spatiotemporal Variability of Ecological Systems

Robert Frühstückl

12:00–12:30 Against Place-Based Essentialism: Rethinking Ecosystems and Communities in a Changing Climate

Michael Goldsby[♦]; Rebecca LaRue

Individual: Organisms from Aristotle to Transcendental Biology

July 25, 11:00–12:30 · BLA4 Chair: Marshall Abrams

 $11:\!00-\!11:\!30$ The Concept of the Organism, the Cognizing Mind and the Four Aristotelian Causes – Illuminating Life's Cognitive Blind Spot

Christoph Hueck

11:30–12:00 Organicism in Schelling's Naturphilosophie: Schelling as the first process philosopher of biology

Campbell Rider

12:00–12:30 Transcendental Biology: The Organic Becoming of the Subject in the Work of Jacob von Uexküll

Andrea Gentili

Organized: Exploring Anthropogenic Evolution

July 25, 11:00–12:30 · BLA1 Chair: Elena Casetta

The Relationality of Reproduction in Anthropogenic Evolution

Arantza Etxeberria

An Example of Anthropogenic Selection: The Aesthetic Bias in Biological Conservation Strategies

Mariagrazia Portera

Is Ecological Engineering Turning Ecosystems Into Units of Selection?

Elena Casetta

The Paradox of Thinking Together the Human and the Biological in a Darwinian Context [Virtual]

Philippe Huneman

Organized: Scientific, Social, and Ethical Facets of Complex Biological Systems

July 25, 11:00–12:30 · BLB5 Chair: Emily Parke

Weak Emergence Drives Social and Ethical Implications of Synthetic Cells

Mark Bedau

Conserving Ecological Function

Jay Odenbaugh

Natural Authenticity as Evolutionary Entanglement

Christopher Lean

Individual: Modeling Genetic (In)Determinism

July 25, 11:00–12:30 · BLA3 Chair: Alan Love

11:00–11:30 The Artifactual Role of Model Organisms: The Case of External Intergenerational Epigenetic Inheritance

Organized: Evolutionary Mismatch: Clarifying Core Concepts, Consolidating Ideas, and Taking the Steps Towards Theory Building and Hypothesis Testing

July 25, 11:00–12:30 · BLB7 Chair: Sudhindra Rao

What Is the Difference Between the Developmental and the Evolutionary Mismatch Hypothesis?

Annemie Ploeger



Mismatch Resistance and the Problem of Evolutionary Novelty [Virtual]

Jonathan Egeland

How to Evaluate Evolutionary Mismatch [Virtual]

David Sloan Wilson ; Sudhindra Rao

Friday, July 25, 12:30-14:30

Lunch Break

July 25, 12:30-14:30 ·

Friday, July 25, 14:30-16:00

Organized: Eugenics and Eugenic Thinking: Now and Then — Session 1

July 25, 14:30–16:00 · Anf. 1 Chair: Rob Wilson

Eugenics, Scientific Racism and the Role of Academia in Promoting Political Ideology

Rebecca Sear

The Bone Collector: Socialist Constructions of Race and Sex in Interwar Romania

Kate Mower

What's in a Name Change? The Many Lives of the British Eugenics Society

Alex Aylward

Organized: Cognate Session: Shesvie@ISH #2 — Experimental Encounters: Philosophers and Scientists Working Together

July 25, 14:30–16:00 · Anf. 2 Chair: Héloïse Athéa

Discussion

Thomas Bonnin

Discussion

Nicolas BRAULT

Discussion

Guglielmo Militello

Discussion

Armance Neveu

Organized: Organizational Perspectives in Ecology: Functioning, Health, Regulation, and Evolution

July 25, 14:30–16:00 · Anf. 4 Chair: Gillian Barker

A Short Timeline of the Debate on "Ecosystem Health" (1979-2023) [Virtual]

Emiliano Sfara

Modeling Ecosystem Health Based on Regulation in Ecological Systems: An Organizational Approach

Clarissa Leite

Modeling Closure of Constraints in Ecosystems

Paulo Inácio K. L. Prado

Co-Opting Regulation: Function, Organization, and Ecosystem Evolution

Gillian Barker

Organized: Making Educational Sense of "New Biology's" Philosophical Significance — Session 1

July 25, 14:30-16:00 · Anf. 6

Chair: Ramsey Affifi, Kostas Kampourakis, Thomas Reydon

The "New Biology" and the Timeliness of Teaching New Ideas

Thomas Reydon

Should We Give Peas a Chance? Teaching Mendel and Punnett Squares in the Light of the New Biology

Kostas Kampourakis

Darwin's Teleological Explanations and the Contextual Teaching of Evolution in the Light of New Biology

Maria Elice Prestes[♦]; Luiz Gustavo Ferreira

Developing Consensus on the Elements of Philosophy of Biology to Inform Science Instruction

William McComas

Integrating Agency in Evolution Education: A Dangerous Idea or a Path to Deeper Learning?

Susan Hanisch

Agencies and Ecologies: Implications of the "New Biology" for Sustainability Education

Ramsey Affifi

Beyond Static Systems: Adaptation as the Core Theme of Biology Curricula

Christian Moore-Anderson

Contextualizing the Contextual: Exploring Ecoevodevo Principles With Art-Science Activities [Virtual]

Lynn Chiu



Individual: Circulating the Body

July 25, 14:30–16:00 · Anf. 7

Chair: Sophie Veigl

14:30–15:00 B. Spinoza and J. Müller: Uncovering the Philosophical Roots of Modern Sensory Physiology

Filip Buyse

15:00–15:30 The Circulation of Blood as Described in a 14th Century Persian Manuscript

Ben Kavoussi

15:30–16:00 Creative Abduction in the Lab: Lessons From Early Electrophysiology

Maria Serban

Individual: Drift and Neutral Evolution

July 25, 14:30–16:00 · Anf. 9 Chair: David Cortés-García

14:30–15:00 When Does Drift Dominate Selection? A Zeroing-Out Account [Virtual]

Matthew J. Maxwell; Elliott Sober[♦]

15:00–15:30 What Kind of Law Is the Zero-Force Evolutionary Law? Lessons From the Genetic Load Research Project

Matthew J. Maxwell

15:30–16:00 Evolution of "Unnecessary" Complexity: Constructive Neutral Evolution or Selection for Genetic Robustness?

Azat Garaev

Organized: From Science Fiction to Moral Mandates: Interrogating the Recent History of Human Gene Editing

July 25, 14:30–16:00 · BLA1 Chair: Kirstin Matthews

Interrogating the Recent History of Human Gene Editing: Science and Governance

Kirstin Matthews

From Science Fiction to Moral Mandates: Interrogating the Recent History of Human Gene Editing

Ana Iltis

[Title not submitted]

Jason Robert

[Title not submitted]

Shannon Conley

Organized: Indigenous Data Sovereignty: From Metaethical Theorizing to Biobank Management

July 25, 14:30–16:00 · BLA4 Chair: Kelle Dhein

How the Pragmatic View of Data Connects AmerIndigenous Philosophies with the Indigenous Data Sovereignty Movement

Kelle Dhein

The Pragmatics of Indigenous Metaethics

Joseph Miller

The Application of Indigenous-led Biobank Management

Kali Dale

Organized: 21st Century Taxonomy: Classification, Systematics, and Nomenclature

July 25, 14:30–16:00 · BLB7

Chair: Matt Haber

When Systematics Matters: Species Classification at the Edge of Extinction

Joeri Witteveen

Taxonomic Decision Making, Rogue Taxonomy, and The Principle of Taxonomic Freedom

Matt Haber

Friday, July 25, 16:00-16:30

Coffee Break

July 25, 16:00–16:30 · Cantina

Friday, July 25, 16:30-18:00

Organized: Eugenics and Eugenic Thinking: Now and Then — Session 2

July 25, 16:30–18:00 · Anf. 1 Chair: Rebecca Sear

Eugenics+

Rob Wilson

Sterilisation Legislation and Eugenic Narratives: A North American Case Study

Luke Kersten

Individual: Aesthetics and the Environment



July 25, 16:30–18:00 · Anf. 2 Chair: Andra Meneganzin

16:30–17:00 Loving the Forest: Ethical, Aesthetic, Poetic, and Affective Dimensions of Environmental Research in Argentina's Northern Patagonia [Virtual]

Gabriela Klier[†]; Laura Borsellino; Sofía Crescio; Carla

17:00–17:30 Rethinking the Aesthetics of Species
Derek Turner

17:30–18:00 Who Founded a University Botanical Garden in Mexico During the 1950's, and What For? Critical Reflections on Current Historiographies of 'Situated Botany' [Virtual]

Francisco Vergara-Silva

Individual: Explanation, Understanding, and Testing

July 25, 16:30–18:00 · Anf. 4 Chair: Ludo L.J. Schoenmakers

16:30–17:00 **Understanding Biological Phenomena** Yafeng Shan

17:00–17:30 de Laubenfels Untested: Testability and the End-Cretaceous Mass Extinction [Virtual]

T.J. Perkins

Organized: Making Educational Sense of "New Biology's" Philosophical Significance — Session 2

July 25, 16:30-18:00 · Anf. 6

Chair: Ramsey Affifi, Kostas Kampourakis, Thomas Reydon

The "New Biology" and the Timeliness of Teaching New Ideas

Thomas Reydon

Should We Give Peas a Chance? Teaching Mendel and Punnett Squares in the Light of the New Biology

Kostas Kampourakis

Darwin's Teleological Explanations and the Contextual Teaching of Evolution in the Light of New Biology

Maria Elice Prestes[♦]; Luiz Gustavo Ferreira

Developing Consensus on the Elements of Philosophy of Biology to Inform Science Instruction

William McComas

Integrating Agency in Evolution Education: A Dangerous Idea or a Path to Deeper Learning?

Susan Hanisch

Agencies and Ecologies: Implications of the "New Biology" for Sustainability Education

Ramsey Affifi

Beyond Static Systems: Adaptation as the Core Theme of Biology Curricula

Christian Moore-Anderson

Contextualizing the Contextual: Exploring Ecoevodevo Principles With Art-Science Activities [Virtual]

Lynn Chiu

Organized: Process Perspectives in Evo-Devo: From Metaphysics to Practice

July 25, 16:30–18:00 · Anf. 7 Chair: Anne Sophie Meincke

The Metaphysics of Development and Evolution: From Thing Ontology to Process Ontology

Anne Sophie Meincke

What's in a Trait? How Process Philosophy Can Inform Evolutionary Neurodevelopmental (NeuroEvoDevo) Research

Isabella Sarto-Jackson

Studying Model Organisms to Elucidate the Dynamics of Developmental Processes

Markus Kunze

Organized: Evolution and Agency

July 25, 16:30–18:00 · Anf. 8 Chair: Samir Okasha

Divided Agency

Patrick Forber[♦]; Rory Smead

Reafference and Major Transitions in Cognitive Evolution

Martyna Stachaczyk[♦]; Marta Halina

Joint Agency and the Evolution of Cooperation

Joshua Shepherd[†]; Stephen Downes

Organized: Feminist Biologies Roundtable

July 25, 16:30-18:00 · Anf. 9

Chair: Sam Fernández-Garrido, Andrea Núñez Casal

Re-imagining Reproduction: The Queer Possibilities of Plants [Virtual]

Madelaine Bartlett[♦]; Banu Subramaniam

Organized: Contemporary Evolutionary Theories of Aging

July 25, 16:30-18:00 · BLA1



Chair: Maël Lemoine

The Danaid Theory of Aging: An Evolutionary-Mechanistic Theory Based on Constraints

Alan Cohen

Biological Constraint in the Evolutionary Physiology of Ageing

David Gems

Biological Constraints in the Evolution of Human Diseases of Aging

Amirreza Liaghat[♦]; Simon Okholm

Individual: Mechanism

July 25, 16:30–18:00 · BLB7 Chair: Aida Roige

16:30–17:00 Revisiting the Causal-Constitutive Divide in Mechanistic Explanations

Jietong Xu

17:00–17:30 Closure of Constraints and Emergence

Prakhar Manas

 $17{:}30{-}18{:}00 \ \textbf{Ecological Populations are Mechanistic} \\ \textbf{Populations}$

Viorel Pâslaru

The ISHPSSB 2025 Program booklet is published in Porto, July 2025. The book cover and divider pages are designed by Jorge Moreira and explore the idea of circles as a common pattern between (some) mesosomes and the windows of the dome of an emblematic building in Porto, the "Super Bock Arena – Pavilhão Rosa Mota".

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