

Society for Philosophy of Science in Practice 10th Biennial Conference

Final Programme (13 May)

[This is the last programme version posted on the website. Updates are given in the Opening Session of the conference]



Philosophy

College of Arts and Sciences

UNIVERSITY OF SOUTH CAROLINA

DEPARTMENT OF
**PHILOSOPHY &
WORLD RELIGIONS**
ROWAN UNIVERSITY



MINNESOTA CENTER *for*
PHILOSOPHY OF SCIENCE

Conference location:

University Conference Center, [Close-Hipp Building](#) (8th Floor), University of South Carolina

WEDNESDAY 15 MAY

Preconference workshop on CITIZEN SCIENCE

University Conference Center, Close-Hipp Building (8th Floor)

Room: Eastview

- 9:30 – 10:00** **Arrival & registration** (at the entrance of the conference center).
- 10:00 – 11:30** **Session 1:** Citizen Science from Campus to the Capitol (Chair: [Ryan McCoy](#), USDA/Washington and Lee University)
[Matt Kisner](#), USC Philosophy, "Environmental Ethics and Community Engagement at USC: A Case Study"
[Grant Foster](#), USC Biology, "Citizen Science in a Changing World"
- 11:30 – 12:45** Lunch
- 12:45 – 14:15** **Session 2:** Natural History for the Modern World (Chair: [Dustin Sigsbee](#), USC Philosophy)
[Herrick Brown](#), USC Andrew Charles Moore Herbarium, "Tools of Citizen Science in Herbarium Curation"
[Arlene Marturano](#), South Carolina Garden-Based Learning Network *Data Dialogs: Citizen Science in Entomology, Meteorology, and Beyond*
- 14:30 – 15:00** **Session 3:** Closing Panel (Session Moderator: [Julia Bursten](#))
"The Interplay of Citizen Science and Philosophy of Science in Practice" All Speakers, Session Chairs, and Professor [Rachel Ankeny](#)
(Wageningen University and Research)
- 15:00 – 15:15** **Orientation** to iNaturalist
- 15:30** **Depart** for field trip to USC Arboretum
- 15:45-17:45** **Arboretum field trip** led by [Hilda Flamholtz](#)

THURSDAY 16 MAY

University Conference Center, Close-Hipp Building (8th Floor)
 We use 5 rooms: Lumpkin Auditorium, Eastview, Westview, Summit East & Summit West

8:30 – 9:00 **Registration** (at the entrance of the conference center)

9:00 – 9:15 **Opening session** (Lumpkin Auditorium)

9:15 – 10:30 **Plenary Lecture 1** (Lumpkin Auditorium)

Chiara Ambrosio (University College London): **The Art of Doing**
 Chair: Justin Biddle

10:30 – 11:00 **Coffee Break** (area around Lumpkin Auditorium)

11:00 – 12:30 **Concurrent Sessions 1**

Contributed talks 1A <i>Lumpkin Auditorium</i> Chair: Julia Bursten Symposium: Sowing a Philosophy of Agricultural Science (41) The Pursuit of Useful Knowledge in Agriculture, 1887–1920 <i>Joshua Tonkel</i> Implementing Sustainable Agricultural Practices: A Partial Overlaps Approach <i>Ryan E. McCoy</i>	Contributed talks 1B <i>Eastview</i> Chair: Chiara Ambrosio History & Philosophy of Science The Animal Leyden Jar: Analogy and Exploratory Experimentation in the History of Electrophysiology <i>Richard Vagnino (42)</i> Mound Builders and Mound Blunders: 19th Century Archaeology and the Image of Science	Contributed talks 1C <i>Westview</i> Chair: Erman Sozudogru Scientific Methodology I (progress & change) Distributive Creativity, Epistemic Environments and Scientific Progress <i>Ioan Muntean (102)</i> Epistemic Actions: A Scientonomic Framework <i>Joshua Allen (74)</i> How to Get Pregnant (Or: Pregnancy, Methodology, and Metaphilosophy)	Contributed talks 1D <i>Summit East</i> Chair: Manuela Fernandez Pinto Philosophy of Medicine I A Biological and Philosophical Comparison of Early Fetal Tissue and Tumors in the Post-Roe Era <i>Haley Cionfolo & Caleb Hazelwood (5)</i> The Epistemic Risks of Regulation, Side Effect	Contributed talks 1E
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Digging deep in the sociality of interaction: lessons from knowledge-making in potato science <i>Julia Bursten & Catherine Kendig</i>	<i>TJ Perkins (67)</i> How HPS can enhance scientific learning and inquiry today: the case of electrolysis <i>Hasok Chang (95)</i>	<i>Maja Sidzinska (29)</i>	Reporting and the Risk of Wishful Speaking <i>Ilvie Prince (44)</i> Experiments as the target of models: On the validation of computer simulation models in drug regulation <i>HyeJeong Han (78)</i>	
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12:30 – 14:00 Lunch

Suggested places for lunch

Restaurants within a mile of the conference center.

[Mr. Friendly's](#)
 [Publico](#)
 [Gourmet Shop](#)
 [Immaculate Consumption](#)
 [Cool Beans](#)
 [Pho Viet Restaurant](#)
 [Backstreets Grill](#)
 [Il Giorgione](#)
[Ban Sawan](#)
[Ruby Sunshine](#)
[Green Olive](#)
[Market on Main](#)
[Cantina 76](#)
[MOA](#)

Brewing companies near campus

[Columbia Craft Brewing Company](#) (very walkable)
[Craft and Draft](#)
[Bierkeller](#)
[Hunter Gatherer](#)

14:00 – 16:00 Concurrent Sessions 2

<p>Contributed talks 2A <i>Lumpkin Auditorium</i> Chair: Katherine Furman Philosophy of Medicine II The Value of "Research" in Osteopathic vs Allopathic Medical Education: A conceptual analysis in context <i>Devora Shapiro (40)</i> Data Integrity Through Validation Method Revelation in Real-World Evidence <i>Yun-Ying Kuo & Karen Yan (26)</i> Using the interventionist theory to unify exploratory and hypothesis-driven activities in biomedical research <i>Yin Chung Au (48)</i> Values in Psychosocial Measurement <i>Sebastian Rodriguez Duque (99)</i></p>	<p>Contributed talks 2B <i>Eastview</i> Chair: Sepehr Ehsani Philosophy of Biology I (evolution) Larger-Scale Databases and Research on Human Evolution <i>Matilde Carrera (110)</i> Individualized niche construction in population-environment systems <i>Marshall Abrams (103)</i> Disentangling Domestication: Are Humans Domesticated? <i>Jason Zinser (62)</i> Rethinking Time in Heterochrony <i>Cassandra Zie Yang (72)</i></p>	<p>Contributed talks 2C <i>Westview</i> Chair: Julie Mennes Scientific Methodology II (pluralism & disagreement) Multiverse analysis as a plausible solution to the replication crisis <i>Mariusz Maziarz (17)</i> The Evidential Significance of Model Disagreement <i>Matthew Maxwell (69)</i> Dissent as an Internal Self-Control Mechanism <i>Ann-Christin Fischer (9)</i> Pragmatic Pluralism <i>Erman Sozudogru (47)</i></p>	<p>Contributed talks 2D <i>Summit East</i> Chair: Manuela Fernandez Pinto Ethics & Scientific Integrity Academic Discussions on Human Enhancement Meet Science: A Quantitative Analysis <i>Tomasz Żuradzki, Piotr Bystranowski & Vilius Dranseika (86)</i> Epistemic self-servingness – The corrupting effects of seeking knowledge <i>Alexander Christian (92)</i>, How Can We Know if You're Serious? Ethics Washing, Trustworthy AI, and Science Governance in Practice <i>Justin Biddle (117)</i> [This session ends at 15:30]</p>	<p>Contributed talks 2E <i>Summit West</i> Chair: Hasok Chang Philosophy of Physics & Astronomy Back to the Problem of Space <i>Joshua Eisenthal (25)</i> Signatures: A core concept from particle physics practice and its philosophical significance <i>Michael Stoeltzner & Peter Maettig (38)</i> 'Instruments of Our Own Species': How Observational Elitism in Astronomy Delayed the Discovery of Personal Observational Differences <i>Matthew D. Lund & Janna Katharina Müller (98)</i> Deux clefs de la Physique : Calculation and Experiment in Du Chatelet's Physics of Fire <i>Michael Veldman (109)</i></p>
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16:00 – 16:30 Coffee Break (area around Lumpkin Auditorium)

16:30 – 18:00 Concurrent Sessions 3

<p>Contributed talks 3A <i>Lumpkin Auditorium</i> Chair: Maja Sidzińska Philosophy & Scientific Practice Scientific Practice & the Metaphysics of History <i>Adrian Currie (8)</i> Scientific Practice and a Fourth Dogma of Empiricism <i>Joseph Rouse (30)</i> Searching for the Big Picture in Philosophy of Scientific Practice <i>Beckett Sterner (111)</i></p>	<p>Contributed talks 3B <i>Eastview</i> Chair: Devora Shapiro Philosophy of Neuroscience On Generalizing Stipulated Functions <i>Caitlin Mace (84)</i> Mapping the Brain - the tyranny of Hubel and Wiesel <i>Stuart Firestein (10)</i> Beyond One-Size-Fits-All: Reframing Cognitive Variations and Individual Differences in Cognitive Science and Neuroscience Research <i>Yi-Hsuan Kao (53)</i></p>	<p>Contributed talks 3C <i>Westview</i> Chair: Erik Weber Scientific Methodology III (causation & explanation) No Cause for Concern: Why even indefinitely many potential confounders do not undermine randomized experiments <i>Raphael Scholl & Fabio Molo (88)</i> From metaphysics to epistemology of causal production: using variation to trace transmission of information <i>Phyllis Illari & Federica Russo (46)</i> Computational Explanations as a Guide to What is Worth Explaining <i>Annabelle Tao (123)</i></p>	<p>Contributed talks 3D <i>Summit East</i> Chair: Matthew Lund Science & Society I The President and the Hurricane <i>Brandon Boesch (13)</i> Science and societal problems <i>Julie Mennes (91)</i> Standpoint Theory & Science Policy: Indigenous Peoples and Wildfire Management <i>Adam Smith (104)</i></p>	<p>Contributed talks 3E</p>
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18:30 – 20:30 Welcome event (cocktail hour with food) at [701 Whaley](#).

FRIDAY 17 MAY

9:15 – 10:45

Concurrent Sessions 4

<p>Contributed talks 4A <i>Lumpkin Auditorium</i> Chair: Elliott Hauser Research across Disciplines & Cultures Organized Entanglement: A Case Report of Casual Interdisciplinary Organization in a Biological Research Project <i>James Griesemer & Elihu Gerson (83)</i> Interdisciplinary Research & Integration in Social Robotics <i>Erik Weber & Julie Mennes (57)</i> “Yes No Other”: Error, Uncertainty, and Ontic Risk in Cross-Cultural Databases <i>Andrew Buskell (15)</i></p>	<p>Contributed talks 4B <i>Eastview</i> Chair: Michael Stoeltzner Philosophy of Biology II Dynamic Monism for Biological Function <i>Milan Ney (68)</i> Models of Information in Structural Biology <i>Agnes Bolinska (107)</i> A Framework for Evaluating Behavioral Traits <i>Lauren Wilson (63)</i></p>	<p>Contributed talks 4C <i>Westview</i> Chair: Ingo Brigandt Scientific Methodology IV Crafting Scientific Narratives <i>Devin Gouvêa (75)</i> Evaluative Categories and their Blinding Effect <i>Simon Brausch & Sam Ducourant (28)</i> Error Repertoires <i>Douglas Allchin (21)</i></p>	<p>Contributed talks 4D <i>Summit East</i> Chair: Monika Piotrowska Philosophy of Artificial Intelligence I (explainability & opacity) Why is it (still) Difficult to Understand Black-Box Models? Explainable Artificial Intelligence and the Experimenters’ Regress <i>Siyu Yao (32)</i> Explainability with Large Language Models: The Meta-Explainability Problem <i>Alberto Termine, Andrea Ferrario & Alessandro Facchini (49)</i> [This session ends at 10:15]</p>	<p>Contributed talks 4E</p>
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10:45 – 11:15

Coffee Break & Poster session (area around Lumpkin Auditorium)

11:15 – 12:30 Plenary Lecture 2 (Lumpkin Auditorium)

Leah McClimans (University of South Carolina): **Patient-Centered Measurement**

Chair: Alan Love

12:30 – 14:00 Lunch

14:00 – 16:00 Concurrent Sessions 5

<p>Contributed talks 5A <i>Lumpkin Auditorium</i> Chair: Dana Matthiessen Symposium: Measurement Across the Life Sciences: Conceptual Issues (35) Measurement in High-Throughput Biology: Moving Beyond the “Objective” and “Data-Driven” Ideals <i>Dana Matthiessen</i> Measuring and Extending Biological Sex <i>Marina DiMarco & Aja Watkins</i> Measuring Biological Function in Biomechanics <i>Alan Love</i> Measurement of Fitness and Estimation of its Properties <i>Ruth Shaw</i></p>	<p>Contributed talks 5B <i>Eastview</i> Chair: Chiara Ambrosio Miscellaneous Reversing Gene Drives: Insights from the Art of Restoration <i>Monika Piotrowska (37)</i> Decoding Sustainability: A comparison between Life Cycle Assessment and the Institutional Compass <i>Maria del Rosario Martinez Ordaz, Michèle Friend & Ahmad Yaman Abdin (97)</i> Colonialism in the Geosciences: A Closer Look at Extractive Practices <i>Leticia Castillo Brache (114)</i> Normative Work for Concept Functions: From</p>	<p>Contributed talks 5C <i>Westview</i> Chair: Justin Biddle Science Communication A pink lie: How France fell in love with a placebo <i>Juliette Ferry-Danini (19)</i> When is it rational to distrust scientists? <i>Sally Geislar & Bennett Holman (70)</i> Sensational cognitive claims <i>David Colaço (82)</i> What Is Epistemic Intimidation, and What Should We Do About It? <i>Manuela Fernández Pinto & Anna Leuschner (89)</i></p>	<p>Contributed talks 5D <i>Summit East</i> Chairs: Federica Bocchi & Stefano Canali Symposium: Demanding Evidence and Addressing Justice at the Intersection of Health and Environmental Sciences (31) Two senses of ‘evidence’ in Evidence-Based Conservation <i>Federica Bocchi</i> Discursive entrenchment: genetic epidemiology in precision medicine <i>Ariane Hanemaayer</i> Can Wearables Fix Validity in Evidence-Based Medicine? <i>Stefano Canali</i> Are Protected and Conserved areas effective for biodiversity</p>	<p>Contributed talks 5E <i>Summit West</i> Chair: Julia Bursten Metaphysics of Science Natural Selection, Scientific Practice, and the Boundaries of a Biological Individual <i>Caleb Hazelwood (33)</i> Pragmatic Idealism <i>Christopher Spano (54)</i> Mathematics and the meshing of plans: Doctrine, Drill, and Shared Agency <i>Elliott Hauser (116)</i> Reconciling Process and Structure: Towards a Process-based Ontic Structural Realism <i>Yihan Jiang (22)</i></p>
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	Scientific Concepts to Conceptual Engineering <i>Ingo Brigandt (16)</i>		conservation? A reflection on Methods and tools for decision-making <i>Helena Alves Pinto</i>	
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16:00 – 16:30 **Coffee Break & Poster Session** (area around Lumpkin Auditorium)

16:30 – 18:00 **Concurrent Sessions 6**

<p>Contributed talks 6A <i>Lumpkin Auditorium</i> Chair: Aja Watkins Symposium: Philosophy on Fire. Evidence, Ethics, and Explanations in Fire Science and Fire Policy (39) Regime change, new tinder, and fire ecology in a novel pyrocene <i>Derek Halm</i> Evidence in Fire Science <i>Aja Watkins</i> Climate Change, Wildfires, and Causation <i>Jay Odenbaugh</i></p>	<p>Contributed talks 6B <i>Eastview</i> Chair: Yin Chun Au Science & Society II (evidence-based policy) Evidence in Evidence-Based Management: Challenging Weber et al. (2023) <i>Paride del Grosso & Kato Van Roey (51)</i> Counteractive Mechanisms and Effect Indeterminacy in Evidence-based Policy <i>Qianru Wang (36)</i> Using Scientific Knowledge to Democratize Authoritarian Societies <i>Viorel Pâslaru (115)</i></p>	<p>Contributed talks 6C <i>Westview</i> Chair: Agnieszka Bolinska Philosophy of Artificial Intelligence II Artificial Intelligence Benchmarks and Degenerating Research <i>Catherine Stinson (77)</i> Promises and perils of big data: Philosophical constraints on chemical ontologies <i>Rebekah Duke, Ryan McCoy, Chad Risko & Julia Bursten (80)</i> The rise of the robots: automation, AI, and the future of research <i>Stephan Guttinger (96)</i></p>	<p>Contributed talks 6D <i>Summit East</i> Chair: Alan Love Philosophy of Biology III The Future of the Model Organism Repertoire <i>Rachel Ankeny & Sabina Leonelli (14)</i> Model Systems Across the Lab and the Field: Organismal Samples <i>Emma Cavazzoni & Sabina Leonelli (23)</i> Specialisation of stem cell biology and its downside: Three case studies <i>Yoshinari Yoshida & Sabina Leonelli (113)</i></p>	<p>Contributed talks 6E</p>
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19:00 **Conference diner** (BBQ) in the garden of the [Anne Frank Center](#) on campus

SATURDAY 18 MAY

9:15 – 10:45 Concurrent Sessions 7

<p>Contributed talks 7A <i>Lumpkin Auditorium</i> Chair: Celso Neto Symposium: Individuality and Genealogy Across Living Systems (61) Phylogenetic Complexity and its Consequences <i>Maureen Kearney</i> Applying the Recursive Account of Individuality <i>Matt Haber</i> Individuating Human Lineages <i>Celso Neto</i></p>	<p>Contributed talks 7B <i>Eastview</i> Chair: Matthew Lund Science & Values A Virtue Epistemological Rejection of the Value-Free Ideal <i>Sindhuja Bhakthavatsalam</i> (76) Science and Value: An Empirical Analysis <i>Myron Penner, Amanda Nichols & Matthew Billet</i> (56) Revitalizing the Value-Free Ideal of Science: The Temporal Role of Values <i>Hanyu Ma</i> (20)</p>	<p>Contributed talks 7C <i>Westview</i> Chair: Rachel Ankeny Philosophy of Medicine III Loving Ignorance, Expert Trustworthiness, and Patient Integration in Psychiatric Research <i>Manasa Gopakumar</i> (24) Toward an Affective Account of Distrust in Medical Science <i>Katherine Furman</i> (45) A cross-cultural study on the ethics and moral psychology of HPV vaccination <i>Andrea Quint, Phuc Nguyen, María Alejandra Petino Zappala & *Nora Heinzelmann</i> (50)</p>	<p>Contributed talks 7D [The talk of <i>Annabelle Tao</i> is moved to Session 3C]</p>	<p>Contributed talks 4E</p>
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10:45 – 11:15 **Coffee Break** (area around Lumpkin Auditorium)

11:15 – 12:30 **Plenary Lecture 3** (Lumpkin Auditorium)

Sean Valles (Michigan State University): Being A Philosopher of Science In Practice, in an Inequitable World Chair: Catherine Kendig
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12:30 – 14:00 **Lunch**

14:00 – 15:00 **Closing session** (Lumpkin Auditorium)

14:00 -- 14:15 Closing remarks
14:15 -- 15:00 SPSP business meeting (all participants welcome)

POSTER PRESENTATIONS AT SPSP 2024

- Matthew Brewr (Boston University): *When Can Absence of Evidence Be Evidence of Absence?: A Case Study of Geological Practice.*
- Francisco Calderón (University of Michigan): *The (beta) decay of effective realism.*
- Mathilde Carrera (Boston University): *To the girl who cried pain they asked "How much"? On pain measurements in gynecological contexts.*
- Leticia Castillo Brache (Boston University): *The Many Faces of Parachute Science: Exploring Epistemic and Ethical Harms as Distributive Injustices.*
- Emma Cavazzoni (University of Exeter): *Why Open Science Needs Philosophy.*
- Sepehr Ehsani (University College London): *Examining Part–Part Interactions toward Improving Explanations in Cell Biology.*
- Patrick Ferree (University of Copenhagen): *Technical and epistemic objects in cell-type classification: A study of single-cell sequencing platforms.*
- Manasa Gopakamar (Temple University): *The Epistemic Precautionary Principle for Research in Controversial Domains.*
- Kayoung Kim (University of Notre Dame): *Dealing with Reproducibility Crisis in Biochemistry: Constructing Guidelines for a More Trustworthy Experimental Report on Enzyme Data.*
- Julieta Macome (Cambridge University): *Philosophy for Science: The Case of Origins of Life Research.*
- Amir Metasherei (University of South Carolina): *Science and Tradition: Towards a Pluralistic Approach.*
- Isaac Record (Michigan State University): *Critical Making to Solve Wicked Problems: Changes in Student Knowledge and Attitudes about Problem Solving in a Philosophy of Science Classroom.*
- Jim Stewart (University of South Carolina): *Evidential Weight: Towards Resolving IBE's Failure to Match Scientific Practice.*
- Marlene van den Bos (Bielefeld University): *Individual Based Research - A New Scientific Practice?*
- Yoshinari Yoshida (University of Exeter): *Great ape iPS cells as a model system for human Evo-Devo.*