SUNDAY JULY 16

13:00-17:00 – Registration
13:00-15:00 – Visiting Butantan Museums and Park
15:00-16:00 – Brazilian Music
17:00-18:00 – President’s welcome
18:00-19:00 – Open air cinema: “Science in movement”
19:00-21:00 – Welcome to São Paulo cocktail

MONDAY JULY 17

08:00-09:00 – Registration/Secretariat – LabLic (MINAS)

09:00-10:30 – Parallel sessions 1

ORGANIZED SESSION STANDARD TALKS – AG-ZOO
Heredity and Evolution in an Ibero-American Context
Orgs. Marsha Richmond and Ana Barahona
Chair of the session: Ana Barahona
Papers:
Lilian Al-Chueyr Pereira Martins & José Franco Monte Sião – (002) The introduction of population genetics studies in Brazil (1943-1960): a bibliometric study
Marsha Richmond – (003) Central-American species/North-American knowledge: The cytogenetic research program of Sally Hughes-Schrader and Franz Schrader

ORGANIZED SESSION STANDARD TALKS – CD-A1
The Enduring Relevance of Organicism for Philosophy of Biology
Orgs.: Jan Baedke and Daniel J. Nicholson
Chair of the session: Jan Baedke
Papers:
Daniel J. Nicholson – (004) Organicist Philosophy of Biology: Then and now
Jan Baedke – (005) Locating the organism in the environment: Old and new challenges

Daniel Brooks – (006) Joseph Needham’s contributions to the development of the levels concept in Biology (1929-1945)

ORGANIZED SESSION STANDARD TALKS – CD-A2
The Resitution of Scientific Knowledge
Org. and chair of the session: James Griesemer
Papers:
Carlos Andrés Barragán – (007) Substantiating genetic and cultural continuity: Partial connections between genomic, archaeological and linguistic datasets

L. Scott Cole – (008) Resituating scientific knowledge using commercial platforms

James Griesemer – (009) Situating the resituation of knowledge

INDIVIDUAL PAPERS SESSION – CD-A3
History of Medicine
Chair of the session: Michel Morange
Papers:
Ruy Jose Henriquez Garrido – (015) Optics and analogy in Fracastoro’s definition of "seeds of contagion at a distance"

Kelly Regina Silva Campos, Luiz Felipe Reversi, Ana Maria de Andrade Caldeira & João José Caluzi – (016) The sociality network of Albert Calmette’s studies about the development process of the bacillus BCG

Michel Morange – (017) Bacteriophage in the Pasteurian tradition

INDIVIDUAL PAPERS SESSION – MINAS1
Neurosciences: Philosophical Perspectives
Papers:
Chair of the session: Osvaldo Frota Pessoa Jr.
Matthew Smithdeal – (138) Situating the individual: An expanded account of psychological mechanisms

Osvaldo Frota Pessoa Jr. – (020) On the coming revolution in Brain Science

INDIVIDUAL PAPERS SESSION – MINAS2
Life and organisms: Philosophical Perspectives
Papers:
Chair of the session: Susie Fisher
Susie Fisher – (021) "Life created” – for the love of science?
Thomas Heams – (022) Why life cannot be engineered but can be defined
Flavio D'Abramo – (023) Epigenetics and the molecularization of the social

10:30-11:30 – Coffee Break

11:00-12:30 – Parallel sessions 2

ORGANIZED SESSION STANDARD TALKS – AG-ZOO
Heredity and Evolution in an Ibero-American Context
Orgs. Marsha Richmond and Ana Barahona
Chair of the session: Marsha Richmond
Papers:
Marta Velasco Martín – (024) Women geneticists, families and Drosophila populations
Ana Barahona – (025) Women and the workplace: The work of Leonor Buentello at the first Unit of Human Genetics in Mexico
Panel discussion

ORGANIZED SESSION STANDARD TALKS – CD-A1
Teleology and Organization in Biological Systems
Orgs.: Matteo Mossio and Andrea Gambarotto
Chair of the session:
Kepa Ruiz-Mirazo
Papers:
Matteo Mossio – (027) What makes biological organization teleological?
Andrea Gambarotto – (028) Kant and beyond: natural purposiveness from an organizational perspective
Cristian Saborido – (029) Organizational teleology and functional normativity

ORGANIZED SESSION STANDARD TALKS – CD-A2
The Resituation of Scientific Knowledge
Org. and chair of the session: James Griesemer
Papers:
Jason Oakes – (030) Versioning as a means to track resituation
Alok Srivastava – (031) The work of metabolism of anomalies at sites of scientific communities drives recruitment and re-situation of knowledge from other communities
Panel discussion

INDIVIDUAL PAPERS SESSION – CD-A3
Biological Education I
Papers:
Chair of the session: Sarah M. Roe
Martin Joseph Bremer – (032) Why science education needs Philosophy
Sarah M. Roe – (033) The Citizen Science Movement according to Feyerabend: Taking advice from a madman
Eduardo Cortez – (034) Applying technology and history of science to develop an innovative teaching-learning sequence about natural selection and nature of science

INDIVIDUAL PAPERS SESSION – MINAS1
Phylogenetics: Philosophical Perspectives
Papers:
Chair of the session: Celso Neto
Celso Neto – (035) Species cohesion in the age of discordance
Yuichi Amitani & Tetsuji Iseda – (036) What can species theorists learn from Parfit?
Nina Kranke – (160) The molecularization of phylogenetics – preconditions and consequences

INDIVIDUAL PAPERS SESSION – MINAS2
Systems Biology and Big Data: Philosophical Perspectives
Papers:
Chair of the session: Constantinos Mekios
David Montminy – (038) Is biology once again setting a new agenda for philosophy of science?
Constantinos Mekios – (040) Can organizing principles continue to transform the research program of systems biology in a productive manner?

INDIVIDUAL PAPERS SESSION – MINAS3
Scientific Explorations
Papers:
Chair of the session: Eleonore Zulnara Freire Setz

Denise de Alemar Gaspar, Marcos Almir Polettini, Eleonore Zulnara Freire Setz & Suzana Barretto Ribeiro – (042) Fauna in Campinas, São Paulo, in the era of sugarcane and coffee cultivation: From 19th century naturalists to 20th century popular and scientific chronicles

Alexandre Kannebley de Oliveira & Julio Cesar Garavello – (043) Systematics, history and biodiversity conservation relationships from the assembly of a freshwater fish species topotypes collection

INDIVIDUAL PAPERS SESSION – AG-BOT

Philosophy of Ecology I

Papers:

Chair of the session: Michael Goldsby

Michael Goldsby – (044) Conflicting baselines: A crisis in Ecology

Georgia Rae Rainer – (045) Law & Order: Ecology

Bruno Travassos-de-Britto, Renata Pardini & Paulo Inácio de Knegt López de Prado – (046) From models to theories: A bottom-up approach to organize propositions into constitutive theories in Ecology

12:30-13:00 – Lunch Break

13:00-15:00 – ISHPSSB Council Meeting – ROOM4

15:30-17:00 – Parallel sessions 3

ORGANIZED SESSIONS DIVERSE FORMAT – AG-ZOO

Mini-workshop

(047) Historical, Philosophical, and Interdisciplinary Writing and Publishing

Org.: ISHPSSB Education Committee

Chair of the session: Isabella Sarto-Jackson

Discussants:

Gregory Radick

Michael Dietrich

Staffan Müller-Wille

ORGANIZED SESSION STANDARD TALKS – CD-A1
The Multiple Guises of Value in Biological Science
Orgs. and Chair of the session: Adrian Currie
Papers:
Joyce Havstad – (049) Taxonomic discovery, epistemic standards, and ecological aims in Ornithology
Adrian Currie – (050) Extrinsic values, the paradox of material evidence, and crocodiles
Panel discussion

ORGANIZED SESSION STANDARD TALKS – CD-A2
Teleology and Organization in Biological Systems
Orgs.: Matteo Mossio and Andrea Gambarotto
Chair of the session: Andrea Gambarotto
Papers:
Gaëlle Pontarotti – (051) Connecting biological inheritance with purposiveness: A new insight into evolutionary theory
Kept Ruiz-Mirazo – (052) The teleological debate at the interface between chemistry and biology
Nei Nunes-Neto – (053) The organizational approach of ecological functions and ecocentrism

ORGANIZED SESSION STANDARD TALKS – CD-A3
Models and Theories in Biology
Org. and chair of the session: Pablo Lorenzano
Papers:
Karina Alleva, José Díez & Lucía Federico – (054) Models, theory structure and mechanism in Biochemistry: The case of allostereism
Pablo Lorenzano & Martín Díaz – (055) Models, laws and theories in population dynamics
Federico Nahuel Bernabé & Leandro Ariel Giri – (056) Neither one-sex nor two-sex Models: Rethinking the general conceptualization of sexual differences and differentiation in Biology

ORGANIZED SESSION DIVERSE FORMAT – MINAS1
Panel
Between Plants and Snakes: 100 Years of Botanical Studies at Instituto Butantan
Org.: Luiza Teixeira-Costa and Erika Hingst-Zaher
Chair of the session: Luiza Teixeira-Costa

Papers:

**Paulo Henrique Nico Monteiro** – (057) Horto Oswaldo Cruz, medicinal plants and health in the XIX Century São Paulo

**Adriano Dias de Oliveira** – (058) Horto Oswaldo Cruz and the birth of botany in São Paulo

**Luiza Teixeira-Costa** – (059) Social and medicinal use of the botanical collections at the Horto Oswaldo Cruz

**Yasmin Vidal Hirao** – (060) Hoehne’s collection of orchids

**Erika Hingst-Zaher** – (061) Public participation and the research at the Horto Oswaldo Cruz

---

**INDIVIDUAL PAPERS SESSION – MINAS2**

**Evolution Education**

Papers:

Chair of the session: Nelio Bizzo

**Gonzalo Peñaloza** – (062) The relation between science and religion in the circulation of Darwinism in the school biology in Colombia

**Jing Zhu, Mingjun Zhang & Michael Weisberg** – (063) Why does the Chinese public accept evolution?

**Nelio Bizzo** – (285) Understanding evidence of biological evolution in a Darwinian perspective: The power of philosophy

---

**17:00-17:30 – Coffee break**

**17:30-18:00** – Transfer to CDI (Plenary conference)

**18:00-19:30** – **Plenary conference**

**Naomi Oreskes** – (067) Can Science Be Viewed as *ex ante* Authoritative in a Post-Factual World?

---

**19:30-21:00** – **Poster session and refreshments**

**Posters on Biological Education**

**Ana Carolina Biscalquini Talamoni** – (068) Mondino de Luzzi, Alfonso Bovero and the birth of a tradition for the Anatomy teaching
Antônio Fernando Gouvêa Silva, Paulo Newton Tonolli & Fernando Faria Franco – (070) The historical construction of enzymes concept and its use in the Biology teaching

Gregory Alves Dionor, Liziane Martins & Neima Alice Menezes Evangelista – (071) Approach to History and Philosophy of Science in Brazilian Science Textbooks of Middle and High School

Ítalo Nascimento de Carvalho – (072) Structuring concepts in biology: contributions from the philosophy of biology to the high school curriculum


Luis Felipe Delsin, Giselle Alves Martins & Fernanda da Rocha Brando – (075) Teleology and pollination: A proposal for a didactic intervention

Matheus Luciano Duarte Cardoso & Thaís Cyrino de Mello Forato – (076) Contributions of the History of Biology in the teaching of Photosynthesis: A perspective for classroom

Nathalia Helena Azevedo & Daniela Lopes Scarpa – (077) “What are legume root nodules?” An example of history of science use for designing and evaluating inquiry-based-learning activities

Neima Alice Menezes Evangelista & Vanessa Carvalho dos Santos – (078) The gene concept in Cellular and Molecular Biology Higher Education textbooks

Rafael Luccas & Fernando Santiago dos Santos – (079) Teaching and learning Botany with a democratic and collaborative teaching approach: A report with undergraduate students

Renata de Paula Orofino & Daniela Lopes Scarpa – (080) Contributions from logic to research on science education

Posters on History of Biology

Christine Janczur – (083) Commented translation from an original source in the history of science: Claude Bernard’s Introduction à l’Étude de la Médecine Expérimental (1865)

Leonardo Augusto Luvison Araújo – (085) The cleavage between heredity and development in the early XX century: The importance of scientific practices


Pedrita Fernanda Donda & Lilian Al-Chueyr Pereira Martins – (087) Louis Agassiz’s conceptions on the origin of species and his criticisms on Charles Darwin’s proposal (1859-1874)

Posters on Philosophy of Biology
Andrea Soledad Olmos – (088) The functional language of Neuroethology

Breno Pascal de Lacerda Brito – (089) The role of non-epistemic values in accepting ecological theories

Claudio Ricardo Martins dos Reis & Leonardo Augusto Luvison Araújo – (090) The Nature of Change in Evolutionary Biology: Extended Evolutionary Synthesis?

Felipe Rebelo Gomes Lima & Nei Nunes-Neto – (092) A critique of Norton’s anthropocentric approach to sustainability: Linking intrinsic value to an organizational approach to functional ascriptions


Lucia Carvalho Neco, Nicolas Chaline & Hilton Ferreira Japyassu – (094) An integrative and quantitative concept of complexity as a measure of sociality

Luiz Felipe Reversi, Kelly Regina Silva & João José Caluzi – (095) An organicist perspective to the Philosophy of Science

Marcelo Silva de Carvalho Delfino & Breno Pascal Lacerda Brito – (096) Photomicrography as a method of visual representation in science: A discussion about objectivity in photomicrography from the standpoint of Robert Koch’s contribution

Simon Lohse & Thomas Reydon – (097) Why ELSI research would benefit from (more) philosophy of science

Vanessa Carvalho dos Santos & Jonei Cerqueira Barbosa – (098) What Biology is all about: Expanding the commognitive approach by examining Biology as a discourse

Victor Hugo Oliveira – (099) Occupational therapy and alternative treatment in relation to disorders of the psyche

TUESDAY JULY 18

8:00-09:00 – Registration/Secretariat – LabLic (MINAS)

09:00-10:30 – Parallel sessions 4

ORGANIZED SESSION STANDARD TALKS – AG-ZOO
Weldon’s Legacy Revisited: From an Integrated Historical and Philosophical Perspective
Org. and chair of the session: Yafeng Shan
Papers:

Charles H. Pence – (100) Syntheses that weren’t: W.F.R. Weldon’s abandoned ‘synthesis’ of Biometry and Mendelism

Gregory Radick – (101) Biometry without Positivism: The means and ends of Weldon’s mathematized Biology
**Yafeng Shan** – (102) Choice in the Mendelian-Biometrician controversy: Why Weldon was not a Mendelian

**ORGANIZED SESSION STANDARD TALKS – CD-A1**
From Biological Practice to Scientific Metaphysics: Prospects and Challenges
Org. and chair of the session: Alan C. Love
Papers:
**Janella Baxter** – (103) Changing the degree of fine-grained influence with biological technologies
**Katherine Liu** – (104) Uncovering the complex “real” world through simple models?
**Max Dresow** – (105) Communities and ecosystems: The view from scientific practice

**ORGANIZED SESSION STANDARD TALKS – CD-A2**
On the Evolutionary Debunking of Reasons and Morality
Org. and chair of the session: Alejandro Rosas
Papers:
**Jorge Oseguera Gamba** – (106) Can metaethical constructivism overcome the evolutionary debunking?
**Maximiliano Martínez** – (107) Evolutionary explanations and the Darwinian dilemma
**Alejandro Rosas** & **Juan P. Bermúdez** – (108) Shared intentionality co-evolves with a sense of fairness

**ORGANIZED SESSION STANDARD TALKS – CD-A3**
Contraceptive Controversies: Perspectives on Birth Control
Org.: Kate Grauvogel
Chair of the session: Sophia Efstathiou
Papers:
**Christopher ChoGlueck** – (109) Why ‘how It works’ has mattered: The values of knowing the morning-after pill’s mechanism
**Kate Grauvogel** – (110) Controversial contraceptives: Uncoupling the pill and social progress to assess risk
Panel discussion

**ORGANIZED SESSION STANDARD TALKS – MINAS1**
The Power of One: The Individual in Neuropsychology, Psychology, and Psychiatry
Org. and chair of the session: Rob Wilson

Papers:

Carl F. Craver – (111) Mr. B as science in amber: Some historical perplexities of Neuropsychiatry
Şerife Tekin – (112) First person perspectives in Psychiatry
Natalia Washington – (113) Diagnostic kinds as human kinds

INDIVIDUAL PAPERS SESSION – MINAS2
Visual Representation and Science

Papers:

Chair of the session: Erica Torrens

Erica Torrens – (114) Pictures in Biology: Representing human evolution in Mexican visual culture
Gemma Anderson and John Dupré – (115) Representing biology as process
Laura Perini – Beyond depiction: Aesthetics & images in the Life Sciences

INDIVIDUAL PAPERS SESSION – AG-BOT
Social, Historical and Philosophical Studies of Ecology

Papers:

Chair of the session: Thomas Michael Lewinsohn

Thomas Michael Lewinsohn – (116) The onset of Brazilian ecological science in the 20th century
Diana Bertuol Garcia, Carla Morsello & Renata Pardini – (117) A conceptual framework for understanding the causes of the science-practice gap in Ecology
Guilherme Sanches de Oliveira – (118) Ecological Psychology and the environmentalist promise of “affordances”

10:30-11:00 – Coffee Break

11:00-12:30 – Parallel sessions 5

ORGANIZED SESSION DIVERSE FORMAT – AG-ZOO
Innovative Proposals to Introduce History and Philosophy of Biology in Biology Education
Org.: Maria Elice Brzezinski Prestes and Paulo T. Sano
Chair of the Session: Paulo T. Sano

Papers:

**Thaís Cyrino de Mello Forato** & Maria Elice Brzezinski Prestes – (121) Students’ perceptions about relevant elements to prepare teachers to deal with history and nature of science

**Filipe Faria Berçot** & Maria Elice Brzezinski Prestes – (122) Where do they come from? The 18th century puzzle of aphids in a virtual historical narrative

Panel discussion

**ORGANIZED SESSION STANDARD TALKS – CD-A1**

Thinking the Organic in German Idealism: Life, Time, and History

Org. and chair of the session: Juan Felipe Guevara-Aristizabal

Papers:

**Juan Felipe Guevara-Aristizabal** – (123) Epigenesis and the rupture of Kantian time

**Violeta Aréchiga-Córdova** – (124) Schelling: Epigenesis and Philosophy

**Joan Steigerwald** – (125) Schelling’s Natural History of the World Soul

**ORGANIZED SESSION STANDARD TALKS – CD-A2**

Modeling Individuality: Organisms, Stem Cells, and Cancer

Org. and chair of the session: Melinda Bonnie Fagan

Papers:

**Melinda Bonnie Fagan** – (126) Stem cells and lineage models of development

**Anne Siebels Peterson** – (128) Individuality, generality, and change in Metaphysics and Philosophy of Biology

Panel discussion

**ORGANIZED SESSION STANDARD TALKS – CD-A3**

Science and Ethics on the Application of Biogenetic and Chemical Technologies to Large-scale Agriculture in Argentina and Brazil

Orgs.: Luciana Zaterka, Pablo Rubén Mariconda and Guillermo Folguera

Chair of the session: Pablo Rubén Mariconda

Papers:

**Pablo Rubén Mariconda** – (129) Epistemology and Ethics in large-scale biotechnological applications

**Luciana Zaterka** – (130) Genetically modified organisms: The scientific inadequacy of the principle of substantial equivalence
Guillermo Folguera & Christian Francese – (131) Biotechnology, technoscience and theoretical simplification. The case of genetically modified organisms (GMOs)

ORGANIZED SESSION STANDARD TALKS – MINAS1
Population Genetics and Mechanics
Orgs.: Jean Gayon and Maël Montévil
Chair of the session: Matteo Mossio
Papers:
Jean Gayon – (132) Invariance and reversibility in theoretical Population Genetics
Maël Montévil – (133) What counterpart to the principle of inertia in Population Genetics?
Panel discussion

INDIVIDUAL PAPERS SESSION – MINAS2
Scientific Practices: Philosophical Perspectives I
Papers:
Chair of the session: Bettina Bock von Wülffingen
Dominic Berry – (135) The history of DNA synthesis: Ways of knowing and making in biology
Rick Shang – (136) Evaluating scientific detection instruments: The case of Positron Emission Tomography
Bettina Bock von Wülffingen – (137) Annotating, retrieving and reactivating: the epistemic role of labels on micro-preparations within bioscience recovery systems (using the example of Alzheimer’s disease preparations)

INDIVIDUAL PAPERS SESSION – MINAS3
Biology, Philosophy and Anthropology
Papers:
Chair of the session: Elliot Hollingsworth
Pedro Henrique Pereira, Victor Ximenes Marques & Amanda Soares de Melo – (140) Towards a naturalist philosophical Anthropology
Elliot Hollingsworth – (141) Helmhut Plessner’s excentric positionality and schizophrenia

12:30-13:00 – Lunch Break
13:00-15:00 – Early Career Scholar Mentoring Lunch

15:30-17:00 – Parallel sessions 6

ORGANIZED SESSION STANDARD TALKS – AG-ZOO
Dreamers, Visionaries, and Revolutionaries in the Life Sciences
Org. Michael Dietrich
Chair: Oren Harman
Papers:
Oren Harman – (146) Perchance to dream: Fostering novelty in the Life Sciences
Mark Borrello – (171) David Sloan Wilson: Visionary, idealist, ideologue
Luis Campos – (148) Neanderthals in space: George Church’s modest steps toward possible futures

ORGANIZED SESSION STANDARD TALKS – CD-A1
Teaching Brazilian Biology: Historical Case Studies for Nature of Science Education
Orgs.: Nathália Helena Azevedo and Thiago Marinho Del Corso
Chair of the session: Nathália Helena Azevedo
Papers:
Nathália Helena Azevedo & Thiago Marinho Del Corso – (149) Carlos Chagas (1879 – 1934) and the triple discovery: A teaching-learning sequence with historical inquiry case and nature of science
Rodrigo Ponce & Ursula Simonetti Lovaglio – (150) Case study: Johanna Döbereiner and the nitrogen biological fixation
Adriano Dias Oliveira & Fernanda Pardini Ricci – (151) Case study: Different aspects of the nature of science present in a historical case study about Vital Brazil

ORGANIZED SESSION DIVERSE FORMAT – CD-A2
Dialogue and informal roundtable
Toward a Theory of Organisms: Two Proposals and Three Aims: Using the Theory to Construct Objectivity, Provide Intelligibility and Frame Observations and Experiments
Org.: Carlos Sonnenschein
Chair: Charbel El-Hani
Papers:
Ana M. Soto – (152) Principles for a theory of organisms
Samuel M. Scheiner – (153) A general theory of organisms
Dialogue and extended roundtable

ORGANIZED SESSION STANDARD TALKS – CD-A3
Collaboration in Contemporary Bioscience: Sociological and Philosophical Approaches
Org.: Phillip Honenberger
Chair of the session: Sabina Leonelli
Papers:
Niccolò Tempini – (154) Collaborative science and the epistemic consequences of project management (or its lack thereof): Insights from an interdisciplinary research collaboration and data infrastructure development project
Phillip Honenberger – (156) On the dynamics of collaborations in contemporary Biosciences, with lessons drawn from Nature
Panel discussion

INDIVIDUAL PAPERS SESSION – MINAS1
Reductionism: Philosophical Perspectives
Papers:
Chair of the session: Daniel C. Burnston
Daniel C. Burnston – (066) Getting over atomism
Nahuel Pallitto – (158) Human behaviour, reduction and the lack of lower-level warrants
Nicolás José Lavagnino, Marta Bertolaso & Guillermo Folguera – (159) Omics in cancer research: Winds of change or same old story?

INDIVIDUAL PAPERS SESSION – MINAS2
Primate Evolution: Theoretical and Philosophical Perspectives
Papers:
Chair of the session: Oren Bader
Michael Dale – (162) The sexual selection of Hominin bipedalism
Alba Leticia Pérez-Ruiz – (207) Cognitive complexity in primates: The social mind
Oren Bader – (164) 'Being in a group' – The emotional scaffolding of the evolution of collective intentionality

INDIVIDUAL PAPERS SESSION – MINAS3
Gender and Race: Historical and Philosophical Studies

Papers:

Chair of the session: Donald Luke Opitz

Donald Luke Opitz – (165) Victoria domesticates Amazonia: Gender and Botany in nineteenth century British surveys of Guiana

Benjamin Rylie Palmer – (166) A fruitful field for women: Oral histories of 20th century women biochemists

Leyla Mariane Joaquim – (167) Race, racism and science: Contemporary perspectives

INDIVIDUAL PAPERS SESSION – AG-BOT

Biological Education II

Papers:

Chair of the session: Agustín Adúriz-Bravo

Agustín Adúriz-Bravo & Andrea Revel Chion – (168) On the construction of “biology stories”: The value of historical narratives for biology education

Ítalo Nascimento de Carvalho & Dália Melissa Conrado – (169) Modeling socioscientific issues with laws for high school biology teaching

Frederik Moreira-dos-Santos – (170) Evolutionary explanation and religious beliefs: Where the conflict really lies

17:00-17:30 – Coffee Break

17:30-19:00 – Parallel sessions 7

ORGANIZED SESSION DIVERSE FORMAT – AG-ZOO

Dreamers, Visionaries, and Revolutionaries in the Life Sciences

Org. Michael Dietrich

Chair: Oren Harman

Panel discussion:

Oren Harman

Mark Borrello

Luis Campos

ORGANIZED SESSION STANDARD TALKS – CD-A1
Toward a Theory of Organisms: Two Proposals and Three Aims: Using the Theory to Construct Objectivity, Provide Intelligibility and Frame Observations and Experiments

Orgs.: Ana M. Soto and Matteo Mossio

Chair: Samuel M. Scheiner

Papers:

Maël Montévil – (173) Modeling mammary organogenesis from biological first principles

Carlos Sonnenschein – (174) Carcinogenesis explained within the context of a theory of organisms

Samuel M. Scheiner – (175) A theory of ecoimmunology and its relationship to a general theory of organisms

INDIVIDUAL PAPERS SESSION – CD-A2

Cultural Evolution

Chair of the session: Lorenzo Baravalle

Papers:

Lorenzo Baravalle – (176) Invariance and unification in the theory of cultural evolution

Carlos Gray Santana – (177) Cultural evolution: Is language a special case?

INDIVIDUAL PAPERS SESSION – CD-A3

General Epistemology and Biology I

Chair of the session: Octavio Valadez-Blanco

Papers:

Daniel C. Baiardi – (178) The concept of semantic fitness inside a semiotic account of natural kind terms

Octavio Valadez-Blanco – (234) Cancer in the civilizing process: An epistemological and educational approach to historical and socio-environmental roots

INDIVIDUAL PAPERS SESSION – MINAS1

Identity and Individuality

Papers:

Chair of the session: Anne Sophie Meincke

Denise Regina Percequillo Hosson – (181) From personhood to neighborhood: Biotic communities and personal identity

Anne Sophie Meincke – (182) Processual animalism: Towards a scientifically informed account of biological identity through time
INDIVIDUAL PAPERS SESSION – MINAS2
Scientific Practices: Philosophical Perspectives II
Papers:
Chair of the session: Maria Strecht Almeida

Robert Meunier – (183) Perspective and practice: A comparative view on Walther Vogt’s and Alfred Sturtevant’s approaches to development

Luciana Sarmento Garbayo – (184) Coordinating measurement and world in Medicine: A model-based approach to the introduction of the metric system standardization in the XIXth and XXth centuries

Maria Strecht Almeida – (185) Beyond multiplicity: Exploring narratives around the life span of the mammalian erythrocyte

INDIVIDUAL PAPERS SESSION – MINAS3
Philosophy of Evolution I
Papers:
Chair of the session: Makmiller Pedroso

Brandon Allen Conley – (186) Disentangling and integrating Mayr and Tinbergen

Mingjun Zhang – (187) Is methodological adaptationism really so dangerous?

Makmiller Pedroso – (188) Coping with stress: How microbes respond to bottleneck events

INDIVIDUAL PAPERS SESSION – AG-BOT
Race and Ethnicity: Historical Perspectives
Chair of the session: Michael Osborne
Papers:

Anita Guerrini – (189) Joseph Banks, John Hunter, and the skull trade

Joe Lunn – (190) Martial Race Theory in Africa: Herbert Spencer’s institutional influence on European colonial armies during the First World War

WEDNESDAY JULY 19
8:30-09:00 – Registration – LabLic (MINAS)

09:00-10:30 – Parallel sessions 8

ORGANIZED SESSION STANDARD TALKS – AG-ZOO
Conceptual and Political Challenges in Postgenomics: Organisms, Niches, and Plasticity
Org.: Maurizio Meloni
Chair of the session: Maurizio Meloni
Papers:
Eva Jablonka – (191) The challenges of the Extended Evolution Synthesis (EES) research framework
Jan Baedke – (192) No return of the organism? Postgenomic trends in biological theory and society
Tatjana Buklijas – (193) Uses of epigenetics

ORGANIZED SESSION STANDARD TALKS – CD-A1
Philosophy of Neuroscience: Broader Implications for Philosophy of Science
Org.: Marshall Abrams
Chair of the session: Carl Craver
Papers:
Marshall Abrams – (194) Evolutionarily distributed prediction error minimization: R-strategies and selection for misperception
Lena Kästner & Henrik Walter – (195) Predictive processing: A theory of everything?
Matteo Colombo – (196) The free-energy principle as a first principle of neuroscience?

ORGANIZED SESSION DIVERSE FORMAT – CD-A2
Type of session: Graduate student workshop
(197) Decoding science papers (tools for non-scientists)
Org. and chair of the session: Jessica A. Bolker
Discussants:
Ana M. Soto
Laura Perini
Dan Burnston

ORGANIZED SESSION STANDARD TALKS – CD-A3
Multidisciplinary Perspectives on Evolutionary Biology, Religion and Society
Org.: James Riley
Chair of the session: Fern Elsdon-Baker
Papers:
Fern Elsdon-Baker – (198) Creating creationists: Conceptual and methodological issues in social studies of the perceived relationship between evolutionary science and religious belief
Carissa Sharp, Carola Leicht, Karisha George & Fern Elsdon-Baker – (199) The projection of belief in the conflict between science and religion

Stephen Jones, Rebecca Catto & Tom Kaden – (200) Doubt, uncertainty and salience in public perceptions of biological evolution: Results from a qualitative study of the UK and Canada

INDIVIDUAL PAPERS SESSION – MINAS1

Social Studies of Genetics

Papers:

Chair of the session: Antonello La Vergata

Antonello La Vergata – (201) From biology to utopia: Charles Richet’s mankind in the future

Evan Arnet – (202) Our mutational load and the politics of the human breeding population

Tito Brige Carvalho – (203) Modeling nature, modeling society: Drosophila Genetics in post World War Two Brazil

INDIVIDUAL PAPERS SESSION – MINAS2

Philosophy of Ecology II

Papers:

Chair of the session: Victor Lefèvre

Victor Lefèvre – (204) Explaining the dynamics of ecosystems: A plea for organicism

Leila C. Cruz & John Collier – (205) Hierarchy Theory as epistemological framework in conservation biology research

Guilherme Sanches de Oliveira – (206) Go big AND go home? The Biome problem and its metaphysical and epistemological roots

INDIVIDUAL PAPERS SESSION – MINAS3

Modeling and Mechanisms: Historical and Philosophical Perspectives

Papers:

Chair of the session: Jens Harbecke

Jens Harbecke – (210) Two challenges for a Boolean approach to constitutive inference

Luana Poliseli & Jeferson Gabriel da Encarnação Coutinho – (211) Explaining ecological phenomena by means of mechanistic models: Is it possible?

Tobias Cheung – (212) Processual orders of organized living systems: The agent models of Cuvier, Hufeland and Cabanis
10:30-11:00 – Coffee Break

11:00-12:30 – Parallel sessions 9

ORGANIZED SESSION DIVERSE FORMAT – AG-ZOO
Panel with four speakers
(213) Reflections on the Past 50 Years of the History of Biology
Org. and chair of the session: Michael Dietrich
Discussants:
Garland Allen
Ana Barahona
Karen Rader
Marsha Richmond

ORGANIZED SESSION STANDARD TALKS – CD-A1
Conceptual and Political Challenges in Postgenomics: Organisms, Niches, and Plasticity
Org.: Maurizio Meloni
Chair of the session: Tatjana Buklijas
Papers:
Maurizio Meloni – (214) The politics of nature-nurture: What it was, how it is changing in postgenomic times
Stephen Engelmann – (215) From the evolution of cooperation to the political physiology laboratory: The adventures of biopolitical science
Benjamin Gregg – (216) Epigenetics as a political theory of genetically influenced social inequalities

ORGANIZED SESSION STANDARD TALKS – CD-A2
Philosophy of Neuroscience: Broader Implications for Philosophy of Science
Org.: Marshall Abrams
Chair of the session: Marshall Abrams
Papers:
Nina Atanasova – (218) Virtual Morris water maze: The independent life of an experimental system

Philipp Haueis – (219) Mesoscale concepts and cortical function

ORGANIZED SESSION STANDARD TALKS – CD-A3
Biodiversity Patterns and their Ecological and Evolutionary Origin
Org. and chair of the session: Davide Vecchi
Papers:
Silvia Di Marco – (220) Eco-evolutionary feedback theory: Bridging the gap between ecological and evolutionary processes
Elena Casetta & Jorge Marques da Silva – (221) Are species the main units of biodiversity? A lesson from multispecies biofilms
Davide Vecchi – (223) The instability of the homogeneous and the stability of the heterogeneous as causes of biodiversity

ORGANIZED SESSION STANDARD TALKS – MINAS1
Multidisciplinary Perspectives on Evolutionary Biology, Religion and Society
Org.: James Riley
Chair of the session: Bernard Lightman
Papers:
Bernard Lightman – (224) Oliver Lodge, evolution, and religion
James Riley – (225) Popes and evolution in the press: A media content analysis of UK newspapers
Glen Moran – (226) British Muslim perceptions of biological evolution

ORGANIZED SESSION STANDARD TALKS – MINAS2
The Cell Theory Reconsidered: From Cell to Organism
Organizer and chair of the session: Sherrie L. Lyons
Papers:
Maurizio Esposito – (227) Within and beyond the cell: William Emerson Ritter between cytology and politics
Sherrie L. Lyons – (228) “Something is missing”: Daniel Mazia and the concept of the cell body
Gabriel Vallejos – (229) Cell biology and the choice of a fundamental unit of analysis

INDIVIDUAL PAPERS SESSION – MINAS3
Gender and Sexual Orientation: Philosophical Perspectives

Papers:

Chair of the session: Ingo Brigandt

**Ingo Brigandt** & **Esther Rosario** – (230) Three concepts of gender for different social aims

**Fabrizio Mc Manus** – (231) Queering explanations of human sexual diversity

**Jaroslava Varella Valentova** & **Marco Antonio Correa Varella** – (232) Adaptiveness of the sexual orientation spectrum: Resolving the seeming evolutionary puzzle of homosexuality

INDIVIDUAL PAPERS SESSION – AG-BOT

Philosophy of Evolution II

Papers:

Chair of the session: Giorgio Airoldi

**Giorgio Airoldi** – (235) A proposal of Design Space to classify and explain evolutionary changes

**Alejandro Fábregas-Tejeda** – (236) The emerging structure of the Extended Evolutionary Synthesis: Epistemic turmoil and alternative interpretations

**Wellington Bittencourt-dos-Santos** – (237) Conceptual networks analysis of the integration between internalist and externalist views in Evo-devo

**12:30-13:00 – Lunch Break**

13:00-15:00 – Graduate Student General Meeting/Membership Diversity Meeting – ROOM4

15:30-17:00 – Parallel sessions 10

ORGANIZED SESSION DIVERSE FORMAT – CD-A1

Panel

Organisms, Membranes and Boundaries: A Process Perspective

Org. and chair of the session: John Dupré

Papers:

**Daniel Nicholson** – (238) Mechanisms and the fluidity of life

**Stephan Guttinger** – (239) Vagueness and the processual nature of membranes

**Anne Sophie Meincke** – (240) On the metaphysics of living boundaries
ORGANIZED SESSION DIVERSE FORMAT – AG-ZOO

Panel
Agriculture and the Biological Sciences: Heredity, Productivity, Organisms, and the Farmer
Orgs.: Gregory Radick, Berris Charnley and Dominic Berry
Chair of session: Gregory Radick
Papers:

Barbara Kimmelman – (241) Making Mendelians: Agricultural breeding programs and the early careers of Edward Murray East and Rollins Adams Emerson

Garland Allen – (242) Genetics and the penetration of capital into United States agriculture, 1890-1940: A Marxist analysis

Tiago Saraiva – (243) California cloning: Oranges in circulation and the writing of transnational history

Berris Charnley – (244) “Dedicated to all Miss Ormerod’s correspondents in economic entomology”: The Injurious Insects Movement and the social purpose of science, 1870-1901

ORGANIZED SESSION STANDARD TALKS – CD-A2

Rethinking the Explanatory Role of Neuroscience in Psychopathology Research
Org.: Isabella Sarto-Jackson
Chair of the session: Nina Atanasova
Papers:

Isabella Sarto-Jackson – (245) Revisiting conceptual frameworks of psychopathologies: The ‘drug-centered’ versus the ‘disease-centered’ model

Paola Hernández Chávez – (246) The logic of dysfunctions in Cognitive Neuroscience: Five methodological principles

Nina Atanasova – (247) ADHD across cultures: A case study in the biopsychosocial model of mental illness

INDIVIDUAL PAPERS SESSION – CD-A3

Experiments and Models: Philosophical Perspectives
Papers:
Chair of the session: Lena Kästner

Lena Kästner – (248) Experiments in a 2 x 2 table

Jessica A. Bolker – (249) Animal models in translational research: Rosetta Stone or stumbling block?
Sophia Efstathiou – (250) Personalising RCTs: What is the right target?

INDIVIDUAL PAPERS SESSION – MINAS1
Continental Philosophical Perspectives on Biology and Medicine
Papers:
Chair of the session: Sandra Caponi
Sandra Caponi – (251) Psychiatry and the construction of subjectivity in modern society
Olivier Perru – (252) Canguilhem: A philosophy of life and a philosophical history of life sciences

INDIVIDUAL PAPERS SESSION – MINAS2
Function and teleology
Papers:
Chair of the session: Amanda Thorell
Amanda Thorell – (256) Physiological function, health and medical theory
Marcela D’Ambrosio, Nelio Bizzo, Marco Solinas & Fernando Santiago dos Santos – (258) The influence of Teleology on the comprehension of evolution and its consequences to education: An analysis from Aristotle to Mayr’s teleological categories

INDIVIDUAL PAPERS SESSION – MINAS3
Philosophy of Evolution III
Papers:
Chair of the session: Gustavo Caponi
Gustavo Caponi – (259) The physiological and ecological correlate of the phylogenetic exemplar
Matheus Henrique da Mota Ferreira – (261) There in evolution and back again: Evolutionary dialectics of ontogeny and phylogeny through Developmental Psychology and Biology of Cognition

INDIVIDUAL PAPERS SESSION – AG-BOT
History of Evolution I
Papers:
Chair of the session: Gonzalo Peñaloza
Jairo Robles-Piñeros & Gonzalo Peñaloza – (262) The reception of Darwinism in Colombia in the late 19th century

Douglas Rogério Anfra – (263) Evolution theory and the German social democracy

Luis Felipe Eguiarte Souza – (264) Haldane between scientific facts and a hard place: The Lysenko affair and his conviction to the public understanding of science

17:00-17:30 – Coffee break

17:30-18:00 – Transfer to CDI (Plenary conference)

18:00-19:30 – Plenary conference

Kevin N. Laland – (265) What use is an extended evolutionary synthesis?

THURSDAY JULY 20

8:30-09:00 – Registration – LabLic (MINAS)

09:00-10:30 – Parallel sessions 11

ORGANIZED SESSION DIVERSE FORMAT – AG-ZOO

Multiple speakers session

Philosophical Issues in Astrobiology

Orgs. Kelly C. Smith and Carlos Mariscal

Chair of the session: Kelly C. Smith

Papers:

Erik Persson – (266) Some philosophical thoughts about planetary protection

Leonore Fleming – (267) To serve Man: Eating meat, eating people, and eating aliens

Carlos Mariscal – (268) When astrobiologists write humanities & when humanists write astrobiology

Kelly C. Smith – (269) Pinning down "Life"

ORGANIZED SESSION STANDARD TALKS – CD-A1

Generic and Genetic Perspectives on Evolvability

Org.: Alan C. Love

Chair of the session: Thomas A. Stewart

Papers:
**Thomas A. Stewart** – (270) RNA sequencing as a predictive tool for analyzing evolvability

**Alan C. Love** – (272) Temporal scale and extrinsic contributions to evolvability

**ORGANIZED SESSION DIVERSE FORMAT – CD-A2**

How is the Human Possible? The Hybrid Hominin, the Hybrid Mind, and Unique Relation of Embodiment to Sociality

Type of session: Roundtable

Orgs.: Lenny Moss and Victor Ximenes Marques

Chair of the session: Victor Ximenes Marques

**Lenny Moss** – (273) The hybrid Hominin and its evolved hybrid mind: Groundwork for a renewed Philosophical Anthropology?

Discussants:

**Victor Ximenes Marques** (274)

**Elliot Hollingsworth** (275)

**Phillip Honenberger** (276)

**ORGANIZED SESSION STANDARD TALKS – CD-A3**

The History and Philosophy of Taxonomy as an Information Science

Orgs.: Joeri Witteveen and Staffan Müller-Wille

Chair of the session: Staffan Müller-Wille

Papers:

**Bettina Dietz** – (277) Co-authoring taxonomy in eighteenth-century botany

**Joeri Witteveen** – (278) Anchoring taxonomic names in a deluge of data

**Staffan Müller-Wille** – (279) “Good and bad species” – Anton Kerner von Marilaun, Charles Darwin, and Gregor Mendel on the ranking of species

**ORGANIZED SESSION STANDARD TALKS – MINAS1**

Ethnobiology: Historical, Philosophical, and Sociological Issues

Orgs.: David Ludwig and Charbel El-Hani

Chair of the session: David Ludwig

Papers:

**David Ludwig** – (280) Revamping the metaphysics of ethnobiological classification

**Natalia Hanazaki** – (281) Contributions and pitfalls of current Ethnobiology
**Fabio Pedro S. F. Bandeira** – (282) Integrating communities values of biodiversity and traditional knowledge with scientific knowledge to environmental management: Epistemological limits and challenges

**ORGANIZED SESSION STANDARD TALKS – MINAS2**

Global Perspectives on Human Genetics: Past and Present
Orgs.: Edna Suárez-Díaz, Rosanna Dent and Vivette García-Deister
Chair of the session: Vivette García-Deister

Papers:

**Soraya De Chadarevian** – (286) Human chromosomes in the atomic age

**Rosanna Dent** – (287) “Men of exuberant health”: Indigenous subjects and the gendered study of human microevolution in midcentury Brazil


**INDIVIDUAL PAPERS SESSION – AG-BOT**

Philosophy of Evolution IV

Papers:

Chair of the session: Ciprian Jeler

**Ciprian Jeler** – (289) Group selection and how not to define a group's fitness

**François Papale** – (290) The distinction between populations and individuals in the context of Darwinian explanations: A matter of integration

**Tamar Schneider** – (120) Ecological Interactions within the Holobiont: On the Holobiont’s interactions of its microorganisms

10:30-11:00 – Coffee Break

11:00-12:30 – Parallel sessions 12

**ORGANIZED SESSION DIVERSE FORMAT – AG-ZOO**

Roundtable
Manipulation and Causation in Biology: Genetics, Evolution and Experimental Intervention
Orgs.: Maurizio Esposito, Davide Vecchi, Gabriel Vallejos and Lorenzo Baravalle
Chair of session: Maurizio Esposito

Papers:
Maurizio Esposito – (291) Handling life: Intervention and causation in Biology
Davide Vecchi – (292) Prokaryotic transcription as a test case for manipulationist accounts of developmental causation
Gabriel Vallejos – (293) Extrapolating reliable knowledge through different experimental systems
Lorenzo Baravalle – (294) Is genetic drift a force of evolution?

ORGANIZED SESSION STANDARD TALKS – CD-A1
Doing and Undoing Race
Org.: Ageliki Lefkaditou
Chair of the session: Dominic Berry
Papers:
Tracy Teslow – (295) Two takes on race: Exhibitions in mid-20th century United States museums
Abigail Nieves Delgado – (296) Ways of seeing faces: Race as visible difference in facial reconstruction
Ageliki Lefkaditou – (297) Blood, bone, and DNA: Undoing race at the museum

ORGANIZED SESSION STANDARD TALKS – CD-A2
The History and Philosophy of Taxonomy as an Information Science
Orgs.: Joeri Witteveen and Staffan Müller-Wille
Chair of the session: Joeri Witteveen
Papers:
Gordon McOuat – (298) The threat of sub-species: The intrusion of a taxonomic category and what it might say about meanings in taxonomic practice
Catherine Kendig – (299) Individuation, identity, and sortals in biological taxonomy
Thomas Reydon – (300) Taxa and systems as holders of information about organisms

ORGANIZED SESSION STANDARD TALKS – CD-A3
Ethnobiology: Historical, Philosophical, and Sociological Issues
Orgs.: David Ludwig and Charbel El-Hani
Chair of the session: David Ludwig
Papers:
Charbel El-Hani – (301) Ethnobiological and ethnoecological research as key contributors to culturally responsive science education: Epistemological grounds and educational studies
Diego F. Valderrama-Pérez – (302) Integrating different accounts for interpreting traditional communities’ knowledge in the science classroom: Contributions for dialogue, increase of students’ self-esteem and sense of community belonging

Panel discussion on the relevance of ethnobiology for ISHPSSB

ORGANIZED SESSION STANDARD TALKS – MINAS1
Nuclear Environments: Geography and Locality in Atomic Age Ecology and Environmental Research
Org. and chair of the session: Judy Johns Schloegel
Papers:
Joshua McGuffie – (303) Hidden atomic loci: Cooperation in radioecology at the UCLA Atomic Energy Project and the University of Washington Applied Fisheries Laboratory in the 1940s and 1950s
Alistair Sponsel – (304) The symbiosis between studies of nuclear weapons and studies of coral reefs, 1946-1977
Toshihiro Higuchi – (305) Cold War, hot spots: Global fallout, regional variations, and the question of scale in the U.S. Worldwide Radiostrontium Sampling Program

ORGANIZED SESSION STANDARD TALKS – MINAS2
Global Perspectives on Human Genetics: Past and Present
Orgs.: Edna Suárez-Díaz, Rosanna Dent and Vivette García-Deister
Chair of the session: Rosanna Dent
Papers:
Elise Burton – (306) The politics of scientific collaboration and the International Biological Program in the Middle East
Vivette García-Deister & Lindsay Smith – (307) "Los migrantes desaparecidos" as a population of cognition: Crisis, unknowability, and the making of the missing
Vitor Richter – (308) Accessing prisoners’ bodies: Ethical and administrative challenges in making Brazil’s national DNA database

INDIVIDUAL PAPERS SESSION – MINAS3
Medicine and Health Sciences: Philosophical Perspectives
Papers:
Chair of the session: Megan Delehanty
Sara Kolmes – (309) They tried to make me go to rehab
Shane N. Glackin – (310) Supervenient disease: The biological and the social in Medicine
Megan Delehanty – (311) Illness or identity?

INDIVIDUAL PAPERS SESSION – AG-BOT
Philosophy of Evolution V
Papers:
Chair of the session: Ariel Jonathan Roffé
Marshall Abrams – (312) Imprecise probability in evolution and mechanism
Ariel Jonathan Roffé & Santiago Ginnobili – (314) Optimality models and the propensity interpretation of fitness

12:30-13:00 – Lunch Break

13:00-15:00 – ISHPSSB Council Meeting – ROOM4

15:30-17:00 – Parallel sessions 13

ORGANIZED SESSION DIVERSE FORMAT – AG-ZOO
Roundtable
History, Philosophy and Sociology of Ethnobiology: A Latin American Perspective
Orgs.: Francisco Vergara-Silva, Radamés Villagómez-Reséndiz and Tania González-Rivadeneyra
Chair of the session: Francisco Vergara-Silva
Papers:
Radamés Villagómez-Reséndiz – (315) Mapping styles of ethnobiological thinking in Latin America: Two kinds of integration between biology and anthropology
Tania González-Rivadeneyra & Arturo Argueta-Villamar – (316) The meaning and use of ‘biocultural’ in Latin American ethnobiology
Alfredo Sáynes-Vásquez – (317) Centers, peripheries, and the historiography of ethnobiology: Eugene Hunn’s periodization as a case study
Panel discussion

ORGANIZED SESSION STANDARD TALKS – CD-A1
Nuclear Environments: Geography and Locality in Atomic Age Ecology and Environmental Research
Org.: Judy Johns Schloegel
Chair of the session: Toshihiro Higuchi

Papers:

**E. Jerry Jessee** – (318) The nuclear sacrifice zone: Fallout, science information, and the American West

**Judy Johns Schloegel** – (319) A classical AEC boundary dispute: Thermal studies and the Great Lakes Research Program at Argonne National Laboratory in the 1970s

Final panel discussion

**ORGANIZED SESSION DIVERSE FORMAT – CD-A2**

Multiple speakers session (four talks and one brief commentary)

Challenges and Opportunities of Data Integration

Org.: Sabina Leonelli

Chair of the session: James R Griesemer

Papers:

**Sabina Leonelli** – (320) Studying plant traits across cultures: Data integration strategies in plant phenomics

**David J. Colaço** – (321) The interaction of technique and data: Insights from neural microscopy

**Stefano Canali** – (322) Integrating data in Molecular Epidemiology: The case of exposome research

**Niccolò Tempini** – (323) Where health and environment meet: Geolocation as invariance mechanism for integrating diverse data sources

**INDIVIDUAL PAPERS SESSION – CD-A3**

Philosophy of Evolution VI

Chair of the session: Roger Sansom

Papers:

**Rick Morris** – (324) Stranger in a strange land: A forecasting account of evolutionary mismatch

**Roger Sansom** – (326) Why LaPlaceanism is no threat to evolutionary theory

**INDIVIDUAL PAPERS SESSION – MINAS1**

Cell and Molecular Biology: Philosophical Issues

Papers:

Chair of the session: Stephan Guttinger
Ravi Gomatam – (328) The Central Dogma, Quantum Theory and objective semantic information

Stephan Guttinger – (012) When size matters: Lithium and what it means to be part of a cell

INDIVIDUAL PAPERS SESSION – MINAS2
Teleology, Autonomy and Agency
Papers:
Chair of the session: Bernard Feltz
Bernard Feltz – (330) From self-organization to autonomy
Sérgio Izidoro de Souza – (331) Reproduction and auto-production: Kant’s idea of organism
Daniel Sander Hoffmann – (332) Non-mental agency and life

INDIVIDUAL PAPERS SESSION – MINAS3
History of Biology I
Papers:
Chair of the session: Olivier Perru
Marion Constance Thomas – (333) Biological and social new orders: Charles Robin (1821-1885) and Comteanism in the Third Republic
Johannes Mattes – (334) Travelling olms: Local and global perspectives on the research on Proteus anguinus (1700-1930)
Olivier Perru – (335) The Brothers of the Christian Schools and the botanical research at the beginning of the 20th century: Some examples of their works

INDIVIDUAL PAPERS SESSION – AG-BOT
Evolutionary Psychology and Ethics
Papers:
Chair of the session: Douglas Allchin
Douglas Allchin – (013) The naturalizing error
Jonatan Garcia-Campos & Saul Sarabia-Lopez – (336) What is a context in the cognitive psychology of reasoning?

17:00-17:30 – Coffee break
17:30-18:00 – Transfer to CDI (Awards ceremony)
18:00-19:30 – Awards ceremony and ISHPSSB general meeting
19:30-20:00 – Transfer to Paineiras Club (Conference dinner)

20:00-23:00 – Conference dinner

FRIDAY JULY 21

8:30-09:00 – Registration – LabLic (MINAS)

09:00-10:30 – Parallel sessions 14

ORGANIZED SESSION DIVERSE FORMAT – AG-ZOO
Author Meets Critics
The Eugenic Mind Project
Organizer and chair of the session: Rob Wilson
Discussants
Katie Kendig (338)
Alan Love (339)
Judy Johns Schloegel (340)

Respondent
Rob Wilson

ORGANIZED SESSION DIVERSE FORMAT – CD-A1
Four-papers session – Talks and discussion (two interrelated sessions)
Organisms and Us: Part I: Conceptual, Institutional, and Social Forces Shaping Organism Choice and Use
Org. and chair of the session: Rachel A. Ankeny
Papers:
Lijing Jiang – (341) From Michurin fish to transgenic carp: Material legacies of socialist science in Chinese biotech
Dook Shepherd – (342) Of windows and worlds: Foundational concepts and their roles in the study of honeybee (A.M.) cognition
Michael Dietrich – (343) Why study sex by the sea? Marine organisms and the problem of fertilization and cell cleavage

**ORGANIZED SESSION STANDARD TALKS – CD-A2**
Species in the Age of Discordance
Org. and chair of the session: Matt Haber
Papers:
- **Jerzy Brzozowski** – (345) An anti-realist theory of reference for species names
- **Aleta Quinn** – (346) Model reductions and competing paradigms in phylogenetic inference
- **Dan Molter** – (347) Individual essence and species form: a lesson from polymorphic rust fungi

**ORGANIZED SESSION STANDARD TALKS – CD-A3**
Methodology in Non-primate Cognition
Org.: Shereen Chang
Chair of the session: Joyce Havstad
Papers:
- **Shereen Chang** – (348) Reasoning by analogy from the cognition of humans to parrots
- **Sidney Diamante** – (349) The octopus and Cognitive Science
Panel discussion

**INDIVIDUAL PAPERS SESSION – MINAS1**
History of Biology II
Papers:
Chair of the session: João Felipe Ginefra Toni
- **Gustavo Barreto Vilhena de Paiva** – (351) Henry of Ghent and the two-headed monster: A casuistry of the extremes of life
- **João Felipe Ginefra Toni** & Ruth Richter – (352) Evolving morphology: 200 years of Goethe's *Zur Morphologie*
- **Pablo Lorenzano** – (353) A structuralist analysis of Mendel’s two hybridist theories and of their intertheoretical relationships

**INDIVIDUAL PAPERS SESSION – MINAS2**
General Epistemology and Biology II
Papers:
Chair of the session: Gustavo Caponi
Yoshinari Yoshida – (354) Characterizing and evaluating a rationalist approach to biology
Rafael Ventura – (355) The logic of simulation
Paulo Jeferson Pilar Araújo – (356) The Biolinguistic enterprise: A case in epistemological anarchism?

INDIVIDUAL PAPERS SESSION – MINAS3
Genetic Drift: Theoretical and Philosophical Perspectives
Papers:
Chair of the session: Cristian Saborido
Pierrick Bourrat – (357) Interpreting drift physically
Ariel Jonathan Roffé – (358) On genetic drift as an evolutionary force
Cristian Saborido, Victor Luque & Giorgio Airoldi – (359) What is the place of genetic drift in Price equation?

INDIVIDUAL PAPERS SESSION – AG-BOT
Genetics: Philosophical Perspectives
Papers:
Chair of the session: Brandon Allen Conley
Qiaoying Lu – (360) Revisiting the notion of interaction in the nature-nurture debate
Brandon Allen Conley – (362) Taking genetic representation seriously

10:30-11:00 – Coffee Break

11:00-12:30 – Parallel sessions 15

ORGANIZED SESSION DIVERSE FORMAT – AG-ZOO
Four-papers session – Talks and discussion (two interrelated sessions)
Organisms and Us: Part II: Using Typical and Atypical Organisms to Represent
Org. and chair of the session: Rachel A. Ankeny
Papers:
Laura Bottrill – (363) Plant blindness and model organism selection in the Cognitive Sciences
Karina Burns – (364) How much can a Koala ‘bear’? A history of the development of Australian marsupial models in psychological research

Sara Green – (365) Choosing the right organism: On the role and reliability of the August Krogh Principle

Rachel A. Ankeny and Sabina Leonelli – (366) Using organisms as representations

ORGANIZED SESSION STANDARD TALKS – CD-A1

The Evolutionary and Psychological Bases of Mindreading, Metacognition, and Folk Epistemology

Orgs.: Ximena Gonzalez-Grandon and Edouard Machery

Chair of the session: Ximena Gonzalez-Grandon

Papers:

Edouard Machery – (367) The evolution of epistemology

Ximena Gonzalez-Grandon – (368) Practical metacognition and feeling of knowledge

Panel discussion

INDIVIDUAL PAPERS SESSION – CD-A2

Genes and Information

Papers:

Chair of the session: María Cerezo

Charbel N. El-Hani – (373) Recent developments in the debates about the gene concept: The dynamic, systemic gene

María José Ferreira Ruiz & Jon Umerez – (374) Conflations in the parity thesis: Causation and information

María Cerezo – (375) Pros and cons of a causal dispositionalist theory of genes: Parity, complexity and simultaneity

INDIVIDUAL PAPERS SESSION – CD-A3

History of Biology III

Papers:

Chair of the session: Gregory J. Morgan

Koen B. Tanghe & Mike Kestemont – (371) The birth of Evolutionary Biology in Great-Britain: A stylometric peek behind a 19th century veil of anonymity

Jennifer Bernard – (376) Lynn Margulis, architect of the endosymbiotic theory

INDIVIDUAL PAPERS SESSION – MINAS1
History/Philosophy of Biology and Anthropology
Papers:
Chair of the session: Susanne Lettow

Susana Gisela Lamas, Marta Crivos & Vicente Dressino – (379) Niche construction as a tool to understand parasitism: The case of a Mbyá Guaraní community

Susanne Lettow – (380) Life, Earth, human diversity. Henrik Steffen's *Anthropology* and the invention of race

12:30-13:00 – Lunch Break

13:00-15:00 – ISHPSSB Council Meeting – ROOM4

15:30-19:00 – Excursions in São Paulo