

# ISHPSSB 2013, Montpellier, France

## Program

### Sunday, July 7, 2013

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|---------------|---|
| 1:00pm-5:00pm | Registration (Centre Saint-Charles, Entrance, University of Montpellier 3)  |
| 3:00pm-4:00pm | Introductory speeches (Room: Amphi Giraud): Paul Griffiths (president); Region Languedoc-Roussillon; University of Montpellier 3; Program committee; Organizing committee |
| 3:45pm-4:45pm | Plenary talk (Room: Amphi Giraud): Beginnings. Medicine and Natural Philosophy in Medieval Montpellier - <i>Maaïke van der Lugt</i>                                       |
| 5:00pm-7:00pm | Welcome cocktail (Location: Jardin des Plantes)   |

### Monday, July 8, 2013

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|------------------------|--|
| 9:00am-5:00pm          | Registration (Centre Saint-Charles, Entrance, University of Montpellier 3)   |
| <b>9:30am-11:00am.</b> | <b>Making Modern Developmental Biology (Room: Colloque 1)</b><br>- Chair: <i>Sabine Brauckmann</i>                                     |
| 9:30am-10:00am         | From Embryology to Developmental Biology: The Diversification of a Biological Field - <i>Michael Dietrich &amp; Nathan Crowe</i>       |
| 10:00 am-10:30am       | Molecularising mammalian development: gene transfer, recombinant networks and the making of transgenic mice - <i>Dmitriy Myelnikov</i> |
| 10:30 am-11:00am       | Communicating Reproductive Biology: Claims to Human In Vitro Fertilization - <i>Nick Hopwood</i>                                       |
| <b>9:30am-11:00am.</b> | <b>Eugenics Part I, eugenic traits (Room: Colloque 2) - Chair: Moyra Lang</b>  |
| 9:30am-10:00am         | Eugenic Lists - <i>Rob Wilson</i>  |
| 10:00am-10:30am        | Why did the Nazis sterilize the Blind? - <i>Amir Teicher</i>   |
| 10:30am-11:00am        | Combining permissible abortion with prenatal testing: Risking Eugenics? - <i>Lyster Caroline</i>                                       |
| <b>9:30am-11:00am.</b> | <b>Biological Theories and Theories in Medicine (Room: 004)</b><br>- Chair: <i>Jacob Stegenga</i>                                      |
| 9:30am-10:00am         | DSM-5 and the Removal of the Multiaxial System for Psychiatric Diagnosis: What Is at Stake? - <i>Steeves Demazeux</i>                  |
| 10:00am-10:30am        | Does pathophysiology contain a theory of disease? - <i>Maël Lemoine</i>  |
| 10:30am-11:00am        | Network medicine as a genetic theory of disease - <i>Marie Darrason</i>  |
| <b>9:30am-11:00am.</b> | <b>Can human sciences be applied to animal societies (Room: 005)</b>   |
| 9:30am-9:45am          | Japanese wisdom? Natural cultures and cultural natures - <i>Harry Wels</i>   |
| 9:45am-10:00am         | The Pragmatics of Nonhuman Friendships - <i>Irina Meketa</i>   |
| 10:00am-10:15am        | Culturally Constructed Concepts in Animals - <i>Grant Goodrich</i>   |
| 10:15am-10:30am        | Social networks and animal behavior - <i>Colin Allen</i>   |
| 10:30am-10:45am        | Social Constructionism and Theory of Mind - <i>Olivia Sultanescu</i>   |
| 10:45am-11:00am        | Can Human sciences be applied to animal societies? - <i>General discussion</i>   |
| <b>9:30am-11:00am.</b> | <b>Functions and Complex Systems (Room: 001) - Chair: Eric Desjardins</b>  |
| 9:30am-10:15am         | Functions and Ecological Resilience - <i>Gillian Barker</i>  |
| 10:15am-11:00am        | Functional Analogical Models in Biomedical Research - <i>Zachary Helwig</i>  |

- 9:30am-11:00am. New Directions in the Study of Inheritance (Room: 008)**  
- Chair: Pierrick Bourrat
- 9:30am-10:15am Pluralistic models of inheritance: toward the reform of a central concept in biology - *Gaëlle Pontarotti*
- 10:15am-11:00am Why culture evolves without being an inheritance system - *Olivier Morin*
- 9:30am-11:00am. Towards a motricity approach in cognitive sciences (Room: 214) - Chair: Bernardo Yanez**
- 9:30am-10:00am Differences between identity and self-consciousness from a motricity approach - *Melina Gastelum*
- 10:00am-10:30am Autonomous movement: the beginning of mental life from an embodied and ecological approach. - *Ximena González-Grandón & Jimena Vergara Ortega*
- 10:30am-11:00am The unification of the mind: a hypothesis - *Jose Padua-Gabriel*
- 9:30am-11:00am. Debates About the Level of Selection A (submitted papers) (Room: 006)**
- 9:30am-10:00am Variation Within and Between Hierarchical Levels - *Lauren McCall*
- 10:00am-10:30am On the Status of the Debate About Biological Individuality - *Austin Booth*
- 10:30am-11:00am Species Selection and the Individuality Thesis: A Lesson in Ontology from a Tasmanian Wolf - *Leonard Finkelman*
- 9:30am-11:00am. General Philosophy of Science A (submitted papers) (Room: 007)**
- 9:30am-10:00am Downward Determination as a Non-Causal Probability-Raising Relation - *Charbel El-Hani*
- 10:00am-10:30am Mechanisms and the puzzle of explanatory relevance - *Maria Serban*
- 10:30am-11:00am Ecosystem Research and Real-World Simulation - *Astrid Schwarz*
- 9:30am-11:00am. Genetics. From Mendel to Benzer and Beyond A (submitted papers) (Room: Actes)**
- 9:30am-9:50am What if Mendel had died in 1840? Retrodictions in early genetics - *Mike Buttolph*
- 9:50am-10:10am Against Theory-Biased Classical Genetics - *Yafeng Shan*
- 10:10am-10:30am The growth of Morgan's evolutionary thought: 1903-1932 - *Lilian Martins*
- 10:30am-10:50am Theorising and representational practices in genetics - *Marion Vorms*
- 9:30am-11:00am. More About Darwin and Wallace A (submitted papers) (Room: 125)**
- 9:30am-10:15am Evolution without Natural Selection: Darwin's Domain of the Useless - *Thomas Robert*
- 10:15am-11:00am Modus Darwin Reconsidered - *Casey Helgeson*
- 9:30am-11:00am. Public Health Issues A (submitted papers) (Room: 127)**
- 9:30am-10:00am Sorting out patients and diseases in early 19th century Paris. An historical account of how medicine met its subject. - *Antoine Ermakoff*
- 10:00am-10:30am Fetal Risk, Federal Response: Alcohol Warning Labels and Fetal Alcohol Syndrome - *Erica O'Neil*
- 10:30am-11:00am Bridging the Social-Biomedical Divide: Uncovering Explanatory Conflicts in the Public Health Literature - *Eniola Salami*
- 9:30am-11:00am. Public/scientist partnerships in the production of biomedical knowledge: the gamers, the advocates and the enablers (Room: 002) - Chair: Richard Creath**
- 9:30am-10:00am Public/scientist partnerships in the production of biomedical knowledge: the gamers - *David Magnus*
- 10:00am-10:30am Public/scientist partnerships in the production of biomedical knowledge: the enablers - *Lauren Milner*
- 10:30am-11:00am Public/scientist partnerships in the production of biomedical knowledge: the advocates - *Mildred Cho*

- 9:30am-11:00am.** **Round table: Responses to *Principles of Evolutionary Medicine* (Room: Amphi Physio)** - Participants: Peter Gluckman, Mark Hanson, John Matthewson, Pierre-Olivier Méthot, Dominic Murphy, Kenneth Schaffner. *Chair: Paul Griffiths.*
- 9:30am -11:00am.** **Is Race Real? (Interdisciplinary Session) (Room: 003)** - *Chairs: Quayshawn Spencer & Melinda Gormley*
- 9:30am-9:50am Race, Slavery, and Polygenism: Edward Long's History of Jamaica - *Suman Seth*
- 9:50am-10:10am When We Say "Race is a Social Construction," What Are We Saying? - *John Jackson*
- 10:10am-10:30am Concepts of Race among U.S. Biologists and Anthropologists - *Ann Morning*
- 10:30am-10:50am Why the Usefulness of Race Is Useless - *Matthew Kopec*
- 11:30am-1:00pm.** **Functions in Ecology (Room: 008)** - *Chair: Gillian Barker*
- 11:30am-12:00pm Defending Ecosystem Health: A Normative but Naturalized Notion of Ecological Function - *Antoine C. Dussault*
- 12:00pm-12:30pm On the vague and metaphorical definitions of "good ecosystem functioning" - *Catherine Dieleman*
- 12:30pm-1:00pm Climate change and ecological management: from historical structural to futuristic functional goals -*Eric Desjardins*
- 11:30am-1:00pm.** **Dialogue Garland Allen – Bruno Strasser (Room: Amphi Physio) - Theme: Biology in the 21st Century: Hybridization of Experimentalism and Natural History?**
- 11:30am-1:00pm.** **Hodgiana A (Room: Colloque 1)** - *Chair: Shane Glackin*
- 11:30am-12:00pm Buffon and Darwin after Hodge: the case for extremism - *Thierry Hoquet*
- 12:00pm-12:30pm Against "Evolution"? Non-Darwinian Theorizing and the Hodglean Historiography of Biology - *Peter Bowler*
- 12:30pm-1:00pm From germs and cells to species and trees of life... and beyond: Jon Hodge's articulation of Darwin's Generation Theorizing into its wider frames - *Carlos Lopez-Beltran*
- 11:30am-1:00pm.** **Eugenics Part II, politics and eugenics (Room: Colloque 2)** - *Chair: Moyra Lang*
- 11:30am-12:00pm Differentiating Eugenics and Social Darwinism - *Aida Roige Mas*
- 12:00pm-12:30pm Revisiting Eugenics and the Left: JBS Haldane, Diversity, and an Independent India. - *Gordon McQuat*
- 12:30pm-1:00pm Confronting the 'Eugenic Agitation': Herbert Spencer Jennings, the Biology of Democracy, and the American Social Welfare Community in the 1920s - *Judy Johns Schloegel*
- 11:30am-1:00pm.** **Immunology and Individuality (Room: 004)** - *Chair: Samuel Alizon*
- 11:30am-12:00pm Doing Biographical Work: The 'Self' of Immunological Theory and the 'Self' of Autoimmune Disease - *Warwick Anderson*
- 12:00pm-12:30pm Individuality and Immunology's Theories of Cognition - *Alfred Tauber*
- 12:30pm-1:00pm The Individual, the Organism, and the Immune System - *Thomas Pradeu*
- 11:30 am-1:00pm.** **New perspectives on the evolution of human cognition (Room: 001)** - *Chair: Kim Sterelny*
- 11:30am-12:15am Bonobos as model of the last common ancestor of humans and apes: the neglected discussion in the evolution of human cognition - *Ivan Gonzalez-Cabrera*
- 12:15am-1:00pm As far as I know. Social learning and the available information - *Chiara Ferrario*

- 11:30am-1:00pm.** **The Problem of "Race" A (submitted papers) (Room: 002)**  
 11:30am-12:00pm Remeasuring Man - *Michael Weisberg*  
 12:00pm-12:30pm The use of the concept of race in biomedicine: the hypothesis of social causes undermines the utilitarian argument. - *Ludovica Lorusso*  
 12:30pm-1:00pm The Last Race Realisms - *Matthew Barker*
- 11:30am-1:00pm.** **Conceptual Difficulties Associated with Evo-Devo A (submitted papers) (Room: 003)**  
 11:30am-12:15am The inception of modularity in biology - *Silvia Caianiello, Silvia Caianiello*  
 12:15am-1:00pm Developmental explanation - *Veli-Pekka Parkkinen*
- 11:30am-1:00pm.** **Debates About the Level of Selection B (submitted papers) (Room: 006)**  
 11:30am-11:50am Conceptions of Multilevel Selection and their Implications for Empirical Results  
*Christopher Dimond*  
 11:50am-12:10pm MLS3: Expanding Multi-level Selection Theory to Capture Hierarchical Transition by Individuation - *David Crawford*  
 12:10pm-12:30pm A Defense of Superorganisms - *Karen Kovaka*  
 12:30pm-12:50pm Interactionist Group Selection - *Tomi Kokkonen*
- 11:30am-1:00pm.** **General Philosophy of Science B (submitted papers) (Room: 007)**  
 11:30am-12:00pm How Multiple Realization is Possible - *Kenneth Aizawa*  
 12:00pm-12:30pm Divergent Philosophies in Evolutionary Science - *Carmen Marcous*  
 12:30pm-1:00pm Regulation: Integrating Concept or Epistemological Red Herring? - *Kevin Amidon*
- 11:30am-1:00pm.** **Genetics. From Mendel to Benzer and Beyond B (submitted papers) (Room: Actes)**  
 11:30am-11:50am Economic models in the cell: division of labor in the German Empire and the transition from real- to finance economy in conception and heredity 1870-1900 - *Bettina Bock von Wülfingen*  
 11:50am-12:10pm Science During Wartime: Richard Goldschmidt's Internment during the First World War – *Marsha Richmond*  
 12:10pm-12:30pm Randomization? Fisher, "Student," and the Society for Psychical Research - *Nancy Hall*  
 12:30pm-12:50pm A Historical and Systematic Analysis of the Hardy-Weinberg Law - *Pablo Lorenzano*
- 11:30am-1:00pm.** **More About Darwin and Wallace B (submitted papers) (Room: 125)**  
 11:30am-12:00pm Hair-raising observations: Darwin and Crichton Browne on piloerection and insanity - *Pieter Adriaens*  
 12:00pm-12:30pm Darwin and the decline of Ancient Greece: a problem or a shining example for his theory? - *Ageliki Lefkadiou*  
 12:30pm-1:00pm Charles Darwin as Historical Methodologist; The Role of Scottish Conjectural History in the Origin of Species - *Cosima Herter*
- 11:30am-1:00pm.** **Physiology in the 20th Century (submitted papers) (Room: 214)**  
 11:30pm-12:15pm Forged Together: Anglo-American Physiologists and the Structure of War and Post-War Physiology 1935-1955 - *Stephen Casper*  
 12:15pm-1:00pm The erythrocyte "has a life span" – erythrocyte aging between experimental and mathematical approaches - *Maria Strecht Almeida*
- 11:30am-1:00pm.** **Public Health Issues B (submitted papers) (Room: 127)**  
 11:30am-12:00pm Nathan Shock and the "Biomedicalization of Aging" - *Hyung Wook Park*  
 12:00pm-12:30pm Bacteriophage and the American Pharmaceutical Industry - *Carolyn Farnsworth*  
 12:30pm-1:00pm Socially and morally responsible cognitive neuroimaging: Mental rotation case study - *Vanessa Bentley*

- 11:30am-1:00pm.** **Transnational Science During the Cold War A (Room: 005)** - Chair: *Edna Suarez-Diaz*
- 11:30am-12:00pm Practices of circulation: radioisotopes and cytology in the atomic age - *María Santasmases*
- 12:00pm-12:30pm A New Look at Radioisotopes: Eisenhower's Atoms for Peace and Its Consequences for Science and Medicine - *Angela Creager, John Krige*
- 12:30pm-1:00pm Cold War Collaboration and the 'American Challenge': The European Society for Nuclear Methods in Agriculture - *Karin Zachmann*
- 1:00pm-3:00pm.** **Council Meeting #1 - Open to Council's members**
- 3:00pm-4:30pm.** **Asking the Hidden Questions Raised by Stem Cells: History, Philosophy, and Biology (Room: Amphi Physio)** - Chair: *Jason Robert*
- 3:00pm-3:20pm What's Surprising about Stem Cell Research? - *Jane Maienschein*
- 3:20pm-3:40pm Leaping from Waddington's landscape: premature theorizing in stem cell biology - *Melinda Fagan*
- 3:40pm-4:00pm Stem cell ontology: why does it matter? - *Lucie Laplane*
- 4:00pm-4:20pm Stem cells in an evolutionary perspective - *Michel Vervoort*
- 3:00pm-4:30pm.** **Hodgiana B (Room : Colloque 1)** - Chair: *Shane Glackin*
- 3:00pm-3:30pm Hodge's Paradigm-Making Thinking about the Population Geneticists - *Michael Ruse*
- 3:30pm-4:00pm How Hodge's History of Biology and Philosophy of Biology Fit Together - *Gregory Radick*
- 4:00pm-4:30pm Responses and reflections - *Jon Hodge*
- 3:00pm-4:30pm.** **Eugenics Round table: Past and Present (Room: Colloque 2)** - Participants: Amir Teicher, Rob Wilson, Caroline Lyster, Judy Johns Schloegel, Gordon McOuat. Chair: *Matthew Smithdeal.*
- 3:00pm-4:30pm** **Individuality and the Division of Labor (Room: 004)** – Chair: *Mark Borrello*
- 3:00pm-3:30pm Modularity and division of labor: from theory to experimental evolution - *María Rebolleda Gómez*
- 3:30pm-4:00pm Individuality and the Division of Labor in the Nineteenth Century - *Lynn Nyhart*
- 4:00pm-4:30pm Debating Division of Labor in European Ethology. An Epistemological Analysis of the Pardi-Deleurance controversy about the Organization of Wasp Societies in 1950. - *Guido Caniglia*
- 3:00pm-4:30pm.** **What is a gene? The gene concept faced to recent advances in genetics, molecular and developmental biology (Room: 001)** - Chair: *Jean-Jacques Kupiec*
- 3:00pm-3:20pm "What is a gene? The gene concept faced to recent advances in genetics, molecular and developmental biology." - *Jean Deutsch*
- 3:20pm-3:40pm Hox genes' colinearity during Limb Development - *Charles Galperin*
- 3:40pm-4:00pm Chromosome structure as a component of gene definition - *Thomas Heams*
- 4:00pm-4:20pm The molecular gene concept in the post-genomic era - *Frédérique Théry*
- 3:00pm-4:30pm.** **The Problem of "Race" B (submitted papers) (Room: 002)**
- 3:00pm-3:30pm Racial Certificates and "Jewish Racial Traits": Otmar von Verschuer and Nazi Racial Policy Practice at the Institute for Human Heredity and Racial Hygiene, 1936-1942 - *Sheila Weiss*
- 3:30pm-4:00pm Survival of the Fittest during the First World War: Herbert Spencer, the French Army, and the Development of La force noire, 1890-1920 - *Joe Lunn*
- 4:00pm-4:30pm Do I look Mexican? The Reification of a National Face - *Abigail Nieves*

- 3:00pm-4:30pm. Understanding variation beyond the Modern Synthesis (Room: 008) - Chair: Fridolin Gross**  
 3:00pm-3:30pm Mutational Lamarckism and the Modern Synthesis view of mutational randomness as conditional independence - *Pablo Razeto-Barry & Davide Vecchi*  
 3:30pm-4:00pm Phenotypic variation in ecological setting: a challenge for evolutionary modeling beyond the Modern Synthesis - *Serrelli Emanuele*  
 4:00pm-4:30pm Variation in a world with multiple levels, mechanisms, and units of evolution: The Applied Evolutionary-Epistemology Approach - *Nathalie Gontier*
- 3:00pm-4:30pm. Conceptual Difficulties Associated with Evo-Devo B (submitted papers) (Room: 003)**  
 3:00pm-3:45pm Rethinking innateness as a primitive term within developmental scenarios - *Valentine Reynaud*  
 3:45pm-4:30pm Typological thinking and essentializing from a practical point of view - *Christopher DiTeresi*
- 3:00pm-4:30pm. General Philosophy of Science C (submitted papers) (Room: 007)**  
 3:00pm-3:30pm "If you can spray them, then they are real": Evidence Construction in Fragrance Chemistry – *Ann-Sophie Barwich*  
 3:30pm-4:00pm Open the doors: integrating epistemology into the lab - *Thomas Camus*  
 4:00pm-4:30pm Some examples of possibology applied to biology and its history - *Sylvie Allouche*
- 3:00pm-4:30pm. Genetics. From Mendel to Benzer and Beyond C (submitted papers) (Room: 209)**  
 3:00pm-3:30pm Patenting life: The life of a patent - *Ana Romero*  
 3:30pm-4:00pm The French Concept of the Gene, from Microbe to Transposon? - *Laurent Loison*  
 4:00pm-4:30pm Seymour Benzer, Genetic Maps, and the Junkman's Problem - *Yoichi Ishida*
- 3:00pm-4:30pm. More About Darwin and Wallace C (submitted papers) (Room: 125)**  
 3:00pm-3:30pm The Charles Darwin-Wyville Thomson Debate: deep sea crinoids, scientific evidence, and the adjudication of Darwinian natural selection - *Rodolfo Alaniz*  
 3:30pm-4:00pm From The Malay Archipelago: Alfred Russell Wallace's Scientific Contributions - *Emily Matykiewicz*  
 4:00pm-4:30pm Contribution to the methodology of reception studies: considerations regarding the study of Darwin in Portugal (1910-1974) - *Pedro Fonseca*
- 3:00pm-4:30pm. Macromolecules and Molecular Biology (submitted papers) (Room: 214)**  
 3:00pm-3:30pm Rosalind franklin and the dna double helix: historiographical accounts - *Marcos Silva*  
 3:30pm-4:00pm Molecules in Biology Before Molecular Biology - *Daniel Liu*  
 4:00pm-4:30pm Rendering the dynamic static: examining how x-ray crystallography constructs investigation into protein function - *Julie-Anne Gandier*
- 3:00pm-4:30pm. New Models and Approaches in Evolution (submitted papers) (Room: 127)**  
 3:00pm-3:45pm Modelling the Course of an HIV Infection: Insights from Ecology and Evolution - *Samuel Alizon*  
 3:45pm-4:30pm Modeling evolution using the probability of fixation - *David McCandlish*

- 3:00pm-4:30pm. Transnational Science During the Cold War B (Room: 005) - Chair: Edna Suarez-Diaz**
- 3:00pm-3:30pm Human population studies and the World Health Organization - *Soraya de Chadarevian*
- 3:30pm-4:00pm Alfonso León de Garay and the set up of the Genetics and Radiobiology Program in Mexico, 1960- 1970. - *Ana Barahona*
- 4:00pm-4:30pm General discussion with all the participants.
- 3:00pm-4:30pm. Outsourcing biomedicine (Room: 006) - Chair: Nick Hopwood**
- 3:00pm-3:20pm Outsourcing in anatomical visualization. Atlas production and the politics of visual cultures in early 20<sup>th</sup> century Vienna - *Birgit Nemec*
- 3:20pm-3:40pm The Vertical Integration of American Paleontology - *Lukas Rieppel*
- 3:40pm-4:00pm Open Source, Outsourced: Synthetic Biology in the Age of Biological Taylorism - *Sophia Roosth*
- 4:00pm-4:20pm Buy-ology: kits and knowledge in molecular biology - *Hallam Stevens*
- 4:30pm-7:00pm. Poster session, with cocktail (Hall)**
- Chang Shereen, Does Alex have a theory of mind?
  - Ronai Isobel, A Case Study for the Multifaceted Concept of the Gene: the Anarchistic honey bee Project
  - Garvia Cristian, The use and abuse of neurosciences in economics: the neuromarketing
  - Muro Elsa, An organizational account of the genome function
  - Haave Neil, Revolutionary, evolutionary or mangled science: Dietschy's development of the tritiated water technique for measuring cholesterologenesis as a case study
  - Tanghe Koen, The Non-Mendelian Revolution: A Conceptual Reinterpretation of the Genetic Revolution
  - Di Giusto Bruno, When species delineation challenges conservation policies: the case of a flagship carnivorous pitcher plant
  - Camus Thomas, When seeing incorporates the outcomes of doing: Epistemological background and issues of the concept of affordance
  - Lopez Paleta Miguel, Is domestic fowl a 'genetic tool'? Gallus gallus as a model organism
  - Yang Shijian, Levels of biological organization in the holobiont
  - Brando Fernanda, The Island as object of ecological studies: a proposal for biology teaching
  - Pereira Miler, History of science in the high school: Lazzaro Spallanzani's experiments in animal reproduction
  - Lacombe Rémi, Historical look at the evolution of the species concept from Antiquity to the 19th century
  - Franceschelli Sara, Designing generic dynamic landscapes
  - Munoz-Rubio Julio, Dialectics and neo-Lamarckism defended
  - Han Min-Kyu, Case Study - Importance of bioethics in determining whether or not to promote the governmental R&D programs in Korea
  - Laitinen Roosa, How does epigenetics influence our view on evolution?
  - Krsmanovic Pavle, Survival determinism in situ: an evolutionary perspective on disease etiologies

## Tuesday, July 9, 2013

- 9:00am-10:30am.**      **Selection at the level of the community and ecosystem (Interdisciplinary Session) (Room: Amphi Physio) - Chairs: Antoine Dussault & Josiane Seghieri**
- 9:00am-9:30am      Artificial selection of ecological interactions in microbial communities - *Manuel Blouin*
- 9:30am-10:00am      How to define the selective environments in which symbiotic communities evolve? - *Karine Prévot & Frédéric Bouchard*
- 10:00am-10:30am      Evolution in metacommunities: The role of population structure - *Charles Goodnight*
- 9:00am-10:30am.**      **Parental Effects I: Historical, Sociological, and Medical perspectives (Interdisciplinary Session) (Room: Amphi 8) - Chair: Mark Hanson**
- 9:00am-9:30am      Maternal Effects and the Twentieth Century Sciences of Heredity - *Richardson Sarah*
- 9:30am-10:00am      The Origin and Operationalization of Fetal Programming Science - *Miranda Waggoner*
- 10:00am-10:30am      A biomedical perspective on parental effects - *Peter Gluckman*
- 9:00am-10:30am.**      **From Neurons to Knowledge A (Interdisciplinary Session) (Room: Amphi Jean Rey) - Chairs: Robert C. Richardson & Christopher A. Shaw**
- 9:00am-9:30am      A Place for Levels-Thinking in Science and Philosophy - *Daniel Brooks*
- 9:30am-10:00am      Making Sense of Brain and Behavioural Lateralization - *Elisa Frasnelli*
- 10:00am-10:30am      Cognitive task and brain activity: an uncertain correlation - *Paola Hernandez Chavez*
- 9:00am-10:30am.**      **Dialogue Sonia Kéfi – Annick Lesne (Room: Colloque 2) - Theme: Complex systems, tipping points and early warnings**
- 9:00am-10:30am.**      **Abstracting from the Living: Characters and Classifications in the Life Sciences (Room: 004) - Chair: Pierre-Luc Germain**
- 9:00am-9:30am      Enriching and observing: Microbial species as practices - *Mathias Grote*
- 9:30am-10:00am      Identifying Medically Relevant Variation to Re-Classify Disease: Linkage Analysis of Neurodegenerative Disorders in the 1980's - *Lara Keuck*
- 10:00am-10:30am      From Merkmal to Marker. The taxonomic origin of the genetic character concept - *Robert Meunier*
- 9:00am-10:30am.**      **Teaching Biology A (submitted papers) (Room: 001)**
- 9:00am-9:30am      The Ghost in the Classroom. Evolution, Ernst Haeckel and German biology didactics (1859-1933) - *Constance Sommerey*
- 9:30am-10:00am      H.G. Wells: Biology Crammer - *James Elwick*
- 10:00am-10:30am      Concepts of dominance in 20th century genetics pedagogy - *Annie Jamieson*
- 9:00am-10:30am.**      **Psychological Altruism from a Biological Point of View A (Room: 005) - Chair: Christine Sachse**
- 9:00am-9:30am      Why there might not be an evolutionary explanation for psychological altruism - *Stephen Stich*
- 9:30am-10:00am      Altruism, Egoism, or Neither? The Evolution of Psychological Capacities for Helping Behaviour – *Armin Schulz*
- 10:00am-10:30am      Two Types of Psychological Hedonism - *Justin Garson*
- 9:00am-10:30am.**      **Philosophical perspectives on and from systems biology (Room: 002) - Chair: Veli-Pekka Parkkinen**
- 9:00am-9:30am      Articulating Mechanisms in Molecular Systems Biology - *Robert Richardson*
- 9:30am-10:00am      Systems biology and the quest for organizing principles - *Sara Green*
- 10:00am-10:30am      A standard for dividing labor in systems medicine - *Rogier De Langhe*



- 9:00am-10:30am.** **The Formation of Language (submitted papers) (Room: 008)**  
 9:00am-9:45am Language Acquisition, Rule-following, and the Individual Species Concept - *Shane Glackin*  
 9:45-10:30am Is syntax equals to language? A debate on a trait of human uniqueness - *Mercedes Tapia*
- 9:00am-10:30am.** **Conceptual Tools for Neurobiology A (submitted papers) (Room: 003)**  
 9:00am-9:45am Early nervous systems and the origins of the animal sensorimotor organization - *Fred Keijzer*  
 9:45am-10:30am The Explanatory Role of Mechanisms in Neuroscience - *Tobias Huber*
- 9:00am-10:30am.** **The Problem of Species A (submitted papers) (Room: 125)**  
 9:00am-9:20am Cohesion and the Individuality Thesis - *Celso Antônio Neto*  
 9:20am-9:40am The Perdurantist Implications of the Species-as-Individuals Thesis - *August Martin*  
 9:40am-10:00am The Idea of Neo-Biological Species Concept—A new approach to responding the old debates - *Bo-Chi G. Lai*  
 10:00am-10:20am A Process-Focused Approach to the Species Problem - *Derek Skillings*
- 9:00am-10:30am.** **Simulation vs. Experiment in Evolutionary Biology (Room: 006) - Chair: Brett Calcott**  
 9:00am-9:30am Why aren't all cells in neoplasms cancer stem cells? An evolutionary explanation for cancer non-stem cells - *Kathleen Sprouffske*  
 9:30am-10:00am What's the Difference Between Experiment and Simulation? - *Emily Parke*  
 10:00am-10:30am Comments by Paul Sniegowski & Kyle Stanford
- 9:00am-10:30am.** **Models & Mechanisms: Extending the Framework (Room: 007) - Chair: William Bechtel**  
 9:00am-9:20am How mechanisms work, how they change, and how the way they work affects the way they change - *Brett Calcott*  
 9:20am-9:40am How-kind-of actually Models - *Stuart Glennan, Butler University*  
 9:40am-10:00am Causal Order & Two Kinds of Robustness - *Arnon Levy*  
 10:00am-10:20am Mechanisms, Models, and Explanatory Autonomy - *Thomas Polger*
- 9:00am-10:30am.** **The Status and Prospect of Genetic Explanations of Behavior (Room: Colloque 1) - Chair: Dominic Murphy**  
 9:00am-9:20am Explanatory Virtues and Genetic Causation - *Maria Kronfeldner*  
 9:20am-9:40am The gene of - *Pierre Roubertoux*  
 9:40-10:00am Can Genes Explain Human Personality? Doubtful! - *Kenneth Schaffner*  
 10:00am-10:20am Gene-Environment Interaction in the 21st Century: Its Rise, Its Fall, Its Rise? - *James Tabery*
- 11:00am-12:30pm.** **Dialogue Samir Okasha – François Rousset (Room: Amphi Physio) - Theme: Adaptation and Optimality**
- 11:00am-12:30pm.** **Parental Effects II: Philosophical and Scientific perspectives (Interdisciplinary Session) (Room: Amphi 8) - Chair: Mark Hanson**  
 11:00am-11:30am Different interpretations of parental effects and their implications on our understanding of development, heredity and evolution - *Karola Stotz*  
 11:30am-12:00pm Parental Effects: Development, Heredity, and Evolution - *Tobias Uller*  
 12:00pm-12:30pm General discussion, with all the participants of sessions I and II

- 11:00am-12:30pm. From Neurons to Knowledge B (Interdisciplinary Session) (Room: Amphi Jean Rey) – Chairs: Robert C. Richardson & Christopher A. Shaw**
- 11:00am-11:45am The neuroplasticity – neuropathology continuum: an alternative view on learning and memory formation - *Isabella Sarto-Jackson*
- 11:45am-12:30pm Neuro-Science vs. Folk Psychology: From Deadlock to Well-moderated Controversy – *Katherina Zakravsky*
- 11:00am-12:30pm. Clustering Humans (Room: Colloque 1) - Chair: Hallam Stevens**
- 11:00am-11:20am Human Genetic Clustering and Ontological Inference - *Quayshawn Spencer*
- 11:20am-11:40am Human Genetic Diversity: Fact and Fallacy - *Lisa Gannett*
- 11:40am-12:00pm Genetic Clustering and the Definition of ‘Race’ - *Adam Hochman*
- 12:00pm-12:20pm The Israeli population-geneticists’ conceptualisation of “Jewish Difference” - 1945-2012 - *Snait Gissis*
- 11:00am-12:30pm. Round table: Doing Science Without Natural Kinds (Room: Colloque 2) – Participants: Tekin Serife, Machery Edouard, Rice Collin. Chair: TBA.**
- 11:00am-12:30pm. Generic and Genetic Explanations of Evolvability and Evolutionary Novelty (Room: 004) - Chair: William Wimsatt**
- 11:00am-11:30am Generic and Genetic Explanations: Comparing Experimental and Historical Biology - *Alan Love*
- 11:30am-12:00pm Generic vs genetic approaches to early animal evolution - *Douglas Erwin*
- 12:00pm-12:30pm Genetic and Generic Explanations: A Pluralistic Perspective - *Karl Niklas*
- 11:00am-12:30pm. Psychological Altruism from a Biological Point of View B (Room: 005) - Chair: Christine Sachse**
- 11:00am-11:30am Psychological Altruism from a Biological Point of View - Some Recent Perspectives - *Chandra Sripada*
- 11:30am-12:00pm Preference altruism: a conceptual link between economics and evolutionary biology - *Christine Clavien*
- 12:00am-12:30pm Final comments – *Elliott Sober*
- 11:00am-12:30pm. Teaching Biology B (submitted papers) (Room: 001)**
- 11:00am-11:30am Research Integrity and Everyday Practice of Science - *Frederick Grinnell*
- 11:30am-12:00pm Object Lessons in the Life Sciences - *Ruthann Dyer*
- 12:00pm-12:30pm A qualitative and quantitative analysis of contents concerning of pluralism of processes and evo-devo in higher education textbooks of evolution and vertebrate zoology - *Wellington Santos*
- 11:00am-12:30pm. Historical and Philosophical Perspectives on Disease Biology (Room: 002) - Chair: Anya Plutynski**
- 11:00am-11:45am “Natural” and “Artificial” Infection: Host-Specificity in Mid-20th-Century Parasitology and its Implications for Evolutionary and Disease Biology - *Rachel Mason Dentinger*
- 11:45am-12:30pm Confronting the Complex Causality of Cancer - *Katherine Liu*
- 11:00am-12:30pm. Playing by their own rules: marginality and heterodoxy in modern science (Room: 008) - Chair: Lynn K. Nyhart**
- 11:00am-11:30am ‘My sole intention in that country is to obtain a giraffe’ – Science, patronage, and the local merits of an African expedition in Restoration Frankfurt am Main - *Ayako Sakurai*
- 11:30am-12:00pm Science for gentlemanly breeders? British acclimatisation revisited - *Takashi Ito*
- 12:00pm-12:30pm Defining Wild: Japanese Primatology and Monkey Parks - *Akihisa Setoguchi*

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| <b>11:00am-12:30pm.</b>       | <b>Conceptual Tools for Neurobiology B (submitted papers) (Room: 003)</b>   |
| 11:00am-11:20am               | Re-Thinking Neuroconstructivism through Dynamic (neuro)-Enskilment: a critique of Neo-Nativism - <i>Mirko Farina</i>  |
| 11:20am-11:40am               | Embodied Cognition: The Very Idea - <i>Fred Adams</i>   |
| 11:40am-12:00pm               | Embodied Cognition and Neuroethology: A Defense of Information Processing Models – <i>Jonathan Martin</i>   |
| 12:00pm-12:20pm               | Corporization as the substrate of mental development - <i>Melina Gastelum Vargas</i>  |
| <b>11:00am-12:30pm.</b>       | <b>Towards Epistemologies of Biological Practice (Room: 006) - Chair: Hans-Joerg Rheinberger</b>  |
| 11:00am-11:20am               | From Conceptual Analysis to the Analysis of Conceptual Practice - <i>C. Kenneth Waters</i>  |
| 11:20am-11:40am               | Why and How Biological Practice Matters to a Philosophical Analysis of Epistemic Reduction - <i>Marie I. Kaiser</i>   |
| 11:40am-12:00pm               | The Ethos of Organism-Based Communities - <i>Sabina Leonelli &amp; Rachel Ankeny</i>  |
| 12:00pm-12:20pm               | The interplay of model building and science policy: the case of lock-and-key in 20th century biochemistry - <i>Rebecca Mertens</i>                              |
| <b>11:00am-12:30pm.</b>       | <b>Some Problematic Concepts in Evolutionary Biology (submitted papers) (Room: 007)</b>   |
| 11:00am-11:20am               | Hannibal (The Cannibal) Lecter and (Un)natural Selection - <i>Michael White</i>   |
| 11:20am-11:40am               | Plasticity cannot explain itself - <i>Antonine Nicoglou</i>   |
| 11:40am-12:00pm               | Gradualism: Complications and Implications. - <i>Roger Sansom</i>   |
| 12:00pm-12:20pm               | The Plant and the Pollinator Tale: how to take Teleology seriously in Biology and yet avoid being a Lamarkian? - <i>Iñigo Ongay de Felipe</i>                   |
| <b>11:00am-12:30pm.</b>       | <b>Animal Models in Neurobiology (submitted papers) (Room: Actes)</b>   |
| 11:00am-11:30am               | History of biological researches on memory - <i>Quentin Lade</i>  |
| 11:30am-12:00pm               | Animal Models as Experimental Model Systems - <i>Nina Atanasova</i>   |
| 12:00pm-12:30pm               | Humanizing Animals: The Selection and Justification of the Prairie Vole as an Animal Model for Autism Spectrum Disorders - <i>Nicholas Zautra</i>               |
| <b>11:00am-12:30pm.</b>       | <b>The Problem of Species B (submitted papers) (Room: 125)</b>  |
| 11:00am-11:30am               | Is the Ontology of Homologous Traits a Matter of Pragmatics? - <i>Christopher Pearson</i>   |
| 11:30am-12:00pm               | Models of species metaphysics - <i>Rafael Ventura</i>   |
| 12:00pm-12:30pm               | Informationally-Connected Property Clusters and Polymorphism - <i>Manolo Martinez</i>   |
| <b><u>12:30pm-2:30pm.</u></b> | <b>Student Advisory Workshop (Room: Colloque 1):</b> Navigating Intellectual and Professional Transitions in an Interdisciplinary World                         |
| <b><u>2:30pm-4:30pm.</u></b>  | <b>Two plenary talks (Room: Amphi Giraud):</b>  |
|                               | ➤ <b>Michel Loreau</b> (Station d'Ecologie Expérimentale du CNRS, Moulis, France) – <b>From Populations to Ecosystems: Towards a Unifying Ecological Theory</b> |
|                               | ➤ <b>Isabelle Olivieri</b> (University of Montpellier 2, France) – <b>Experimental Evolution: What's For?</b>   |
| <b><u>5:00pm-6:30pm.</u></b>  | <b>Charles Darwin and the Scientific Revolution (Room: Colloque 1) - Chair: Stéphane Tirard</b>   |
| 5:00pm-5:30pm                 | Darwin and the Mechanical Philosophy: Likening Nature to Artifice - <i>Andrew Inkpen</i>  |
| 5:30pm-6:00pm                 | Darwin's Experimentalism - <i>Richard Richards</i>  |
| 6:00pm-6:30pm                 | Charles Darwin's Particular Theory of Evolution - <i>Richard G. Delisle</i>   |

- 5:00pm-6:30pm. Round table: From Groups to Individuals: Evolution and Emerging Individuality (Room: Colloque 2)** – Participants: Frédéric Bouchard, Ellen Clarke, Charles J. Goodnight, Matt Haber, Philippe Huneman, Thomas Pradeu, Minus van Baalen, Scott Turner. *Chair: Silvia de Monte.*
- 5:00pm-6:30pm. Topics in the Philosophy of Behavioural Biology (Room: 004)** - *Chair: Ivan Dario Gonzalez Cabrera*
- 5:00pm-5:30pm Simple learning systems and evolvability: Why culture isn't all that matters - *Rachael Brown*
- 5:30pm-6:00pm The role of psychological vs. behavioral approaches to studying the evolution of cognition – *Catherine Driscoll*
- 6:00pm-6:30pm Can Altruism be Unified? - *Grant Ramsey*
- 5:00pm-6:30pm. Teaching Biology C (submitted papers) (Room: 001)**
- 5:00pm-5:20pm The teaching of evolution in Mexico - *Erica Torrens*
- 5:20pm-5:40pm Advisability of training course “The history of bacterial phytopathology” in higher education institutions - *Vira Gamaliia & Oksana Zabuga*
- 5:40pm-6:00pm Retrospective survey of ethical conceptions' development in the system “man – environment” - *Yurij Duplenko & Svitlana Ruda*
- 6:00pm-6:20pm Creative Nonfiction, Excerpt and Methodology - *Melinda Gormley*
- 5:00pm-6:30pm. Biomobilities – travel, movement and relationality in the emergence of contemporary biological materials and knowledges (Room: 005)** - *Chair: Rachel Ankeny*
- 5:00pm-5:30pm Cutting off the circulation: ordering and managing excessive evidence - *Megan Clinch*
- 5:30pm-6:00pm The biomobile brain – on the pragmatics and politics of travelling between the neural and social sciences - *Des Fitzgerald*
- 6:00pm-6:30pm Before and After the Return: Repatriating Indigenous DNA - *Amy Hinterberger*
- 5:00pm-6:30pm. Predictive ecology in a changing world: from data to practices (Room: 002)** - *Chair: Virginie Maris*
- 5:00pm-5:30pm When the bio-sphere becomes a data-sphere: quantifying nature for big ecology - *Vincent Devictor*
- 5:30pm-6:00pm The two meanings of “prediction” and their consequences in ecological science - *Sarah Calba*
- 6:00pm-6:30pm The methodological individualism of individual-based modeling in ecology - *James Justus*
- 5:00pm -6:30pm. Working in biology: how laboratory and field practices shape biological knowledge (Room: 008)** - *Chair: Raf de Bont*
- 5:00pm-5:20pm The mouse multiple: Intersections of welfare practices and experimental practices in the animal neuroscience laboratory - *Nicole Nelson*
- 5:20pm-5:40pm Pregnancy testing with toads: Sourcing strategies of competing laboratories in postwar Britain – *Jesse Olszynko-Gryn*
- 5:40pm-6:00pm A Feel for the Numbers: the Data and Discourse of Mark/Recapture Studies - *Kristoffer Whitney*
- 6:00pm-6:20pm Creativity in the paleobiology laboratory: why fossil preparators compare themselves to Michelangelo - *Caitlin Wylie*

- 5:00pm-6:30pm.** **Anthropological Ecology (submitted papers) (Room: 003)**  
5:00pm-5:20pm Cultivated plants and culture: Hypotheses of the origin of bread wheat - *Kaori Iida*  
5:20pm-5:40pm Crop diversity patterns as a mirror of communities' social organization: an illustration from the Tharaka people of Mount-Kenya region - *Vanesse Labeyrie*  
5:40pm-6:00pm Models of plant-human interaction and the characterization of the indigenous knower in ethnobiology - *Diego Méndez*  
6:00pm-6:20pm Optimal Foraging Models and The Impact of Culture on Behavioral Variation - *Kenneth Vernon*
- 5:00pm-6:30pm.** **Antimetabolites, Magic Bullets & New Ways to Diagnosis (submitted papers) (Room: Actes)**  
5:00pm-5:20pm Using integrated history and philosophy to inform diagnostic medicine: The case of heart failure - *Nicholas Binney*  
5:20pm-5:40pm The right drugs for the job : the use of antimetabolites in biological research (1940-1960) – *Thibaut Serviant-Fine*  
5:40pm-6:00pm Theoretical Assumptions and Instrumental Strategies in Early Detection of Cancer - *Ronan Le Roux*  
6:00pm-6:20pm Magic Bullets - *Jacob Stegenga*
- 5:00pm-6:30pm.** **Cancer and Viruses (submitted papers) (Room: 125)**  
5:00pm-5:30pm Cancers, viruses, and the contrastive model of disease - *Alex Broadbent*  
5:30pm-6:00pm Political Viruses: RNA Tumor Viruses and the War on Cancer - *Robin Scheffler*  
6:00pm-6:30pm The virus, the prisoners, and the past: Historical ontology and the craft of history through the case of cancer virus - *Laura Stark*
- 5:00pm-6:30pm.** **Challenges for Molecular Biology (submitted papers) (Room: 127)**  
5:00pm-5:20pm Prevalence-knowledge and the changing store of molecular biology - *Pierre-Luc Germain*  
5:20pm-5:40pm The central dogma and its implications for gene-centrism revisited: from DNA-centrism to NA-centrism - *Alexis De Tiège*  
5:40pm-6:00pm The gene after encode: a Wittgensteinian approach - *Emanuele Ratti*  
6:00pm-6:20pm Can Ecology Inform Molecular Biology? - *Marco Nathan*
- 5:00pm-6:30pm.** **The Resistance of the Modern Synthesis (submitted papers) (Room: 214)**  
5:00pm-5:30pm The adaptive landscape as a unificatory tool - *Stefan Petkov*  
5:30pm-6:00pm Niche Construction and the Insides and Outsides of the Modern Synthesis - *Lynn Chiu*  
6:00pm-6:30pm At the boundary of sexual selection: examining the evolutionary explanations for the absence of the human baculum - *Edwin Siu*
- 5:00 pm 6:30pm.** **An Example of "Citizen Science" (submitted papers) (Room: 006)**  
5:00pm-5:45pm Citizen Science in a Democracy - *Pamela Henson*  
5:45pm-6:30pm Technology and Access: Naturalists in the Backyard - *Gabrielle Graham*
- 8:00pm-10:00pm.** **Public lecture (open to everyone, in French): Le déluge informationnel: Une opportunité pour des sciences expérimentales participatives? - Bruno Strasser (Room: Jacques 1er d'Aragon, 117, rue des Etats Généraux, 34000 Montpellier)**

## Wednesday, July 10, 2013

- 9:00am -10:30am.**      **Ecology and Evolution: How Ecology Matters (Interdisciplinary Session) (Room: Amphi Anatomie) - Chair: Stephan Linquist**  
9:00am-9:20am      Life history evolution in metapopulations - *Ophelie Ronce*  
9:20am-9:40am      Ecological Experiments that Inform Evolution: A Typology - *Roberta Millstein*  
9:40am-10:00am      Chaos and Unpredictability in Evolution - *Michael Doebeli*  
10:00am-10:20am      When Does Ecology Matter? The Stories of Fisher and Wright - *Alirio Rosales*
- 9:00am-10:30am.**      **Reconceptions: Life at the Frontiers of Health and Disease (Interdisciplinary Session) (Room: Amphi Hygiene) - Chairs: Alex Broadbent & Scott Podolsky**  
9:00am-9:30am      Pathogens as Evolving Entities: Taking the 'Microbe's View of Infection' Seriously – *Pierre-Olivier Methot*  
9:30am-10:00am      Reconceptualizing viruses against the shifting sands of opposing thought styles in cancer etiology and bacteriology - *Neeraja Sankaran*  
10:00am-10:30am      Life in harmony: The balancing role of the immune system - *Bartlomiej Swiatczak*
- 9:00am -10:30am.**      **On the Expansion of the Modern Synthesis ca. 1960-1979, Session I (Room: Salle bleue) - Chair: Michael Dietrich**  
9:00am-9:30am      The Creativity of Natural Selection? Darwin, the Synthesis, and Since - *John Beatty*  
9:30am-10:00am      A bibliometric enquiry about the Modern Synthesis (1947-2010): results and questions - *Jean Gayon*  
10:00am-10:30am      Going Molecular in Evolutionary Biology: techniques, objects, concepts and theories between 1960 and 1970. - *Edna Suarez-Díaz*
- 9:00am-10:30am.**      **Anger: new insights on a very old notion (Interdisciplinary Session) (Room: 001) – Chair: TBA**  
9:00am-9:30am      Anger and personality test : A psychological investigation - *Nathalie Blanc*  
9:30am-10:00am      Anger in vitalist thought: Jacques Lordat and the question of passions - *Thierry Lavabre-Bertrand,*  
10:00am-10:30am      Anger and genes : a philosophical inquiry - *Pascal Nouvel*
- 9:00am-10:30am.**      **Degeneration: Rethinking Teleological Conceptions of Living Organisms (Room: Colloque 2) - Chair: Gordon McQuat**  
9:00am-9:30am      Heredity and Deviation in the Life Sciences around 1800 - *Staffan Mueller-Wille*  
9:30am-10:00am      Treviranus' Biology: Degeneration and the Boundaries of *Life* - *Joan Steigerwald*  
10:00am-10:30am      Early 19th century Animal and Plant Breeders' views on Variation, Degeneration and Teleology - *Tarquin Holmes*
- 9:00am-10:30am.**      **General Issues in Philosophy of Biology A (submitted papers) (Room: 004)**  
9:00am-9:20am      Multilevel Causation and the Extended Synthesis - *Maximiliano Martinez*  
9:20am-9:40am      Toward a Propensity Interpretation of Stochastic Mechanism: Lessons from Fitness and Drift – *Lane DesAutels*  
9:40am-10:00am      Idealized Models, Explanatory Roles, and Realism - *Collin Rice*  
10:00am-10:20am      Causal Selection versus Causal Parity: Relevant Counterfactuals and Biologically Normal Interventions - *Marcel Weber*
- 9:00am-10:30am.**      **Emergence and Downward Determination in Biological Systems? (Room: 005) - Chair: Akihisa Setoguchi**  
9:00am-9:30am      Dynamic notions of emergence: interplay of entropic driving principle and environmental/genetic constraints over the hierarchy of life - *Naoki Sato*  
9:30am-10:00am      Ecosystem downwardly affects adaptive evolution - *Toshiyuki Nakajima*  
10:00am-10:30am      Emergence and Downward Determination from a Philosophical Point of View - *Shunkichi Matsumoto*

- 9:00am-10:30am. Criticisms Addressed to Evolutionary Psychology (submitted papers) (Room: 001)**
- 9:00am-9:30am The Difference Between Ice Cream and Nazis: Evolution and the ‘Hard Problem’ of Human Moral Psychology - *P. Kyle Stanford*
- 9:30am-10:00am Why psychiatrists shouldn’t care about evolutionary psychiatry - *Andreas De Block*
- 10:00am-10:30am Deep homology in mirror neurons? Epistemic problems with the extrapolation of evo-devo schemes in cognitive science - *Bernardo Yañez*
- 9:00am-10:30am. A Longue Durée History of the Cell (Room: 002) - Chair: François Duchesneau**
- 9:00am-9:20am Restricted individuality. Individuals and supra-individual order in German Naturphilosophie – *Susanne Lettow*
- 9:20am-9:40am Latent Life of Organisms and the Cell Scale During the XIXth Century - *Stéphane Tirard*
- 9:40am-10:00am Exploring the History of the Cell from a Transnational and Local Perspective - *Marion Thomas & Florence Vienne*
- 10:00am-10:20pm Stem Cell Research and the Embryo. Conceptual and Practical Shifts in the 1970s - *Christina Brandt*
- 9:00am-10:30am. Ethics and Its Difficulties (submitted papers) (Room: 008)**
- 9:00am-9:30am Backtracking and the Ethics of Framing: Lessons from Voles and Vasopressin - *Daniel McKaughan*
- 9:30am-10:00am Aristotle on the Material and Efficient Causes of Character - *Julie Ponesse*
- 10:00am-10:30am The Menace of Magisteria - *Richard Creath*
- 9:00am-10:30am. Epigenetics and Its Challenges A (submitted papers) (Room: 003)**
- 9:00am-9:45am Epigenetics: a view from social theory - *Maurizio Meloni*
- 9:45am-10:30am Heredity without parents and offspring - *Mathieu Charbonneau*
- 9:00am-10:30am. Cultural Evolution (Room: 006) - Chair: Adrian Boutel**
- 9:00am-9:30am The Kinetic Theory of Culture - *Tim Lewens*
- 9:30am-10:00am Expertise, Extension, Evolution - *Andrew Buskell*
- 10:00am-10:30am Methodological Individualism and Group Selection - *Christopher Clarke*
- 11:00am-12:30pm. Recomposing Biological Mechanisms Through Diagrams and Computational Models (around William Bechtel) (Room: Amphi Anatomie). Participants: William Bechtel, Lindley Darden, Alan Love, Paul Griffiths.**
- 11:00am-12:30pm. Round table: Evolution’s narratives (Room: Amphi Hygiene) – Participants: Jan Sapp, Michael Bradie, Charbel Niño El-Hani. Chair: Nathalie Gontier**
- 11:00am-12:30pm. On the Expansion of the Modern Synthesis ca. 1960-1979, Session II (Room: Salle bleue) - Chair: Roberta Millstein**
- 11:00am-11:30am To what extent – and why – did the Modern Synthesis give Developmental Biology short shrift, 1960-1980? - *Richard Burian*
- 11:30am-12:00pm Best-behaved ethology? Behavioural ecology and the modern synthesis - *Frank Cezilly*
- 12:00pm-12:30pm The Changing Ideological Context of the Modern Synthesis - *David Depew*
- 11:00am-12:30pm. HPS Informatics Demonstrations (Room: Colloque 1) - Organized by Jane Maienschein**
- 11:00am-12:30pm. Microbes as model systems (Room: Colloque 2) - Chair: Arnon Levy**
- 11:00am-11:20am What microbes can model - *Jessica Bolker*
- 11:20am-11:40am How general is social evolution? - *Gregory Velicer*
- 11:40am-12:00pm Experimental Evolution of Multicellularity - *Michael Travisano*
- 12:00pm-12:20pm Beyond Tractability: Microbes as Model Systems - *Maureen O'Malley*

- 11:00am-12:30pm. Testing the ZFEL in a Macro-evolutionary Context (Room: 004) - Chair: Matthew Haber**  
 11:00am-11:45am Quantifying the Zero Force Evolutionary Law - *Leonore Fleming*  
 11:45am-12:30pm Testing the ZFEL in a Macro-evolutionary Context - *Robert Brandon*
- 11:00am-12:30pm. The Organism Problem between Life Sciences and Philosophy of Nature around 1800 (Room: 005) - Chair: Charles Wolfe**  
 11:00am-11:30am Blumenbach: Teleology and the Laws of Vital Organization - *François Duchesneau*  
 11:30am-12:00pm Schelling, Oken and the Problem of Animal Classification - *Andrea Gambarotto*  
 12:00pm-12:30pm Hegel's Theory of Organism - *Luca Illetterati*
- 11:00am-12:30pm. Issues in Biological Modeling--Mechanisms, Simulations and Target Systems (Room: 008) - Chair: Michael Hunter**  
 11:00am-12:15pm What is the Target of a Generalized Model? - *Alkistis Elliott-Graves*  
 12:15pm-13:00pm Trading Fiction for Performance: How to Understand Computer Simulations of Ecological Systems - *Shawn Miller*
- 11:00am-12:30pm. Epigenetics and Its Challenges B (submitted papers) (Room: 003)**  
 11:00am-11:30am Dissecting the explanatory power of epigenetics - *Jan Baedke*  
 11:30am-12:00pm Conductor's baton: The meaning of the cell cycle for development, inheritance and evolution - *Sebastian Gaub*  
 12:00pm-12:30pm Towards an extended epigenetics perspective - *Xochitl Arteaga-Villamil*
- 11:00am-12:30pm. General Issues in Philosophy of Biology B (submitted papers) (Room: 006)**  
 11:00am-11:20am Morgan's Munificent Canon - *Devin Sanchez Curry*  
 11:20am-11:40am Biological Kinds, Physico-chemical Kinds - *Jordan Bartol*  
 11:40am-12:00pm Astrobiology and the Evolutionary Contingency Thesis - *Cory Lewis*  
 12:00pm-12:20pm Biological essentialism, evolutionary theory and the roles of different sorts of essences - *Edit Talpsepp*
- 11:00am-12:30pm. Metaphors and Models in Evolutionary Biology (Room: 007)**  
 - Chair: *Snait Gissis*  
 11:00am-11:30am Why is Metaphor like a Model? Epistemic and Cognitive Uses of Scientific Metaphors - *Ehud Lamm*  
 11:30am-12:00pm Metaphor and the Evolved Mind: The Case of Darwin's "Tree of Life" - *Greg Priest*  
 12:00pm-12:30pm How the Mouse Lost its Tail: A Brief History of Lamarckophobia - *Jessica Riskin*
- 11:00am-12:30pm. History and Philosophy of Medical Practice (the 19th century - today) (submitted papers) (Room: Actes)**  
 11:00am-11:30am Disease Avatars: the epistemology of cell reprogramming-based disease models - *Giuseppe Testa*  
 11:30am-12:00pm Why so long to abandon bloodletting, and why the relative lack of influence of the work of P.C.A. Louis on its use? Reflections on whiggish queries in the history of medicine and biology. - *Ernest B. Hook*  
 12:00pm-12:30pm Cancer as a complex disease and a transdisciplinary challenge: ontological, epistemological and sociological implications - *Edgar Valadez Blanco*
- 11:00am-12:30pm. The Nature of Living Systems (submitted papers) (Room: 125)**  
 11:00am-11:30am On minimal regulation in biological systems - *Leonardo Bich*  
 11:30am-12:00pm The ontophylogenetics of J.-J. Kupiec. In between historicism and determinism of the surroundings. - *José Carlos Gutierrez Privat*  
 12:00pm-12:30pm The problem of time in theories of organic self-organization and self-maintenance - *Francisco Güell*



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| <b><u>12:30pm-2:30pm.</u></b> | <b>Graduate Student Meeting – (Room: Colloque 1)</b>   |
| <b><u>2:30pm-4:00pm.</u></b>  | <b>Round table on Elliott Sober’s book <i>Did Darwin write the Origin Backwards</i> (Room: Amphi Hygiene).</b> Participants: Jean Gayon, Tim Lewens, Samir Okasha; Reply: Elliot Sober. <i>Chair: TBA.</i> |
| <b>2:30pm-4:00pm.</b>         | <b>Exploring the evolution of culture and social behavior A (Room: Colloque 1) -</b><br><i>Chair: Sarah Richardson</i>   |
| 2:30pm-3:00pm                 | Explanatory Appeals to Hormones in Evolutionary Anthropology - <i>Stephen Downes</i>   |
| 3:00pm-3:30pm                 | Fitness measures and the evolution of social behavior - <i>Patrick Forber</i>  |
| 3:30pm-4:00pm                 | Learning to Spite and the Evolution of Envy - <i>Rory Smead</i>  |
| <b>2:30pm-4:00pm.</b>         | <b>Complex Diseases: Evolutionary Models, Systems, and Explanations (Room: Colloque 2) -</b> <i>Chair: Sandra D. Mitchell</i>  |
| 2:30pm-2:50pm                 | Explaining Obesity: Implications for Treatment and Prevention - <i>Robert Skipper</i>  |
| 2:50pm-3:10pm                 | The Ecology and Evolution of Cancer - <i>Anya Plutynski</i>  |
| 3:10pm-3:30pm                 | Recent reemergence of an evolutionary model of cancer growth - <i>Michel Morange</i>   |
| 3:30pm-3:50pm                 | The impact of biological uncertainty on our understanding of complex biological systems. Cancer as a paradigmatic case. - <i>Marta Bertolaso</i>   |
| <b>2:30pm-4:00pm.</b>         | <b>Explaining adaptation: Organism/environment interactions accross time and spatial scales (Room: 005) -</b> <i>Chair: Francesca Merlin</i>   |
| 2:30pm-3:00pm                 | Explaining the emergence of a global order out of biosphere-environment interactions: a critical appraisal of the Gaïa hypothesis theoretical foundations - <i>Sebastien Dutreuil</i>                      |
| 3:00pm-3:30pm                 | Niche construction theory and the concept of adaptation without selection - <i>Arnaud Pocheville</i>   |
| 3:30pm-4:00pm                 | The extended organism. Scale, adaptation, and the nature of the individual - <i>Scott Turner</i>   |
| <b>2:30pm-4:00pm.</b>         | <b>Reasoning with Diagrams in Biology (Room: 001)</b>  |
| 2:30pm-3:00pm                 | Novice and Expert Understandings of Space in Scientific Diagrams - <i>Ben Sheredos</i>   |
| 3:00pm-3:30pm                 | Between Phenomenon and Mechanism: Diagrams as Vehicles of Intermediate Explanatory Reasoning - <i>Daniel Burnston</i>  |
| 3:30pm-4:00pm                 | Diagrams and the production of visual evidence - <i>Perini Laura</i>   |
| <b>2:30pm-4:00pm.</b>         | <b>Origins of Life (Room: 002) -</b> <i>Chair: TBA</i>   |
| 2:30pm-2:50pm                 | Going Live: The Origin of (Artificial) Life - <i>Robert Pennock</i>  |
| 2:50pm-3:10pm                 | What is the driving force for life’s emergence? - <i>Robert Pascal</i>   |
| 3:10pm-3:30pm                 | On the origins of autonomy: protocells as the first forms of functional integration - <i>Sara Murillo Sánchez</i>  |
| 3:30pm-3:50pm                 | Flying Mother Nature’s Seed Into a New Home Near the Sun - <i>Christian Orlic</i>  |
| <b>2:30pm-4:00pm.</b>         | <b>Issues with causation in Biology (Room: 008) -</b> <i>Chair: Benjamin Jantzen</i>   |
| 2:30pm-3:00pm                 | Prospects of recommending management interventions on the basis of formal population viability analysis with scarce data. - <i>Wes Anderson</i>  |
| 3:00pm-3:30pm                 | Population Size, Type Number, and Evolutionary Outcomes - <i>Bruce Glymour</i>   |
| 3:30pm-4:00pm                 | Integrating proximate/ultimate causation - <i>Jun Otsuka</i>   |
| <b>2:30pm-4:00pm.</b>         | <b>General Issues in Philosophy of Biology C (submitted papers) (Room: 006)</b>  |
| 2:30pm-3:00pm                 | Narrative Why-Explanations - <i>Gary Fuller</i>  |
| 3:00pm-3:30pm                 | Robustness Redux - <i>Jay Odenbaugh</i>  |
| 3:30pm-4:00pm                 | What’s in a (natural) valuation? - <i>David Suárez Pascal</i>  |

- 2:30pm-4:00pm. Figures in the History of Cell and Molecular Biology A (submitted papers) (Room: 003)**
- 2:30pm-3:00pm Edmund Beecher Wilson: Room: Amphioxus, the comparative and the exemplary - *James Lowe*
- 3:00pm-3:30pm Wilhelm Roux's "The Struggle of the Parts in the Organism": a physiological synthesis of Darwinism - *Ghyslaine Bolduc*
- 3:30pm-4:00pm Biometrics: the controversy on telomere length as biomarker of aging - *Tiago Moreira*
- 2:30pm-4:00pm. General Philosophical Issues Raised By the Theory of Evolution A (submitted papers) (Room: 007)**
- 2:30pm-3:00pm A New Criticism of the Paradigm of Science as Requiring Paradigms - *Sheldon Richmond*
- 3:00pm-3:30pm Three Kinds of Constructionism: The Role of Analogies and Metaphor in the Debate over Niche Constructionism - *Emanuele Archetti*
- 3:30pm-4:00pm The Moral of the Story: What Does the Evolutionary Contingency Thesis Teach Us About Biological Laws? - *Jake Wright*
- 2:30pm-4:00pm. Organisms, Individuality, and Personality A (submitted papers) (Room: 209)**
- 2:30pm-3:00pm Immune tolerance as a developmental process – innate immune system and gut bacteria interactions - *Tami Schneider*
- 3:00pm-3:30pm Ecosystems Unto Ourselves: the concept "organism" in the age of individualized medicine, targeted therapies, and the microbiome - *Julio Tuma*
- 3:30pm-4:00pm From cohesion to collaboration: how to define biological individuality - *Thiago Hutter*
- 2:30pm-4:00pm. Biodiversity, Conservation, and Sustainable Development (submitted papers) (Room: 125)**
- 2:30pm-3:00pm Save the planet: eliminate biodiversity - *Carlos Santana*
- 3:00pm-3:30pm From 'Anthropological Natural Monuments' to 'Ecosystem People': Hunter Gatherers and the Discourse of International Nature Conservation - *Raf De Bont*
- 3:30pm-4:00pm The Scientific and Technological Knowledge as a Common Good: Towards a "Sustainable Socially Justifiable Development" - *Carlo Marcello Almeyra*
- 2:30pm-4:00pm. Issues Raised by Synthetic Biology (submitted papers) (Room: 127)**
- 2:30pm-2:50pm Synthetic biology and the almighty fixers - *Susie Fisher*
- 2:50pm-3:10pm Is the Creation of Artificial Life Morally Significant? - *Thomas Douglas*
- 3:10pm-3:30pm Functions in Biological Artifacts - *Sune Holm*
- 3:30pm-3:50pm From rational to random re-composition: two design principles in synthetic biology - *Tero Ijäs*
- 2:30pm-4:00pm. Taxonomy and Phylogeny (submitted papers) (Room: 004)**
- 2:30pm-2:50pm Phylogeny and the Straight Rule of Induction - *John Wilkins*
- 2:50pm-3:10pm How Should Phylogeny Guide Biodiversity Conservation? - *James Maclaurin*
- 3:10pm-3:30pm Phylogenetic ancestors - *René Zaragüeta Bagils*
- 3:30pm-3:50pm Hierarchies and orders in systematics and phylogenetics - *Stéphane Prin*
- 4:30pm-6:00pm. Round table: Evolutionary transitions as social contracts? (Room: Colloque 2) -**  
 Participants: Marion Blute, Daniel Brooks, Alejandro Rosas, Eörs Szathmáry, Richard A. Watson. *Chair: Peter Godfrey-Smith.*

- 4:30pm-6:00pm.** **Exploring the evolution of culture and social behavior B (Room: Colloque 1) -**  
*Chair: Sarah Richardson*
- 4:30pm-5:00pm *Patterns of Discordance - Matt Haber*
- 5:00pm-5:30pm *Cultural phylogenetics: bringing anthropology, linguistics and biology together to understand cultural evolution - Fiona Jordan*
- 5:30pm-6:00pm *The Logic of Research Questions: Adaptationism, the Null Hypothesis, and the Lack of a Stopping Rule - Elisabeth Lloyd*
- 4:30pm-6:00pm.** **Conceptual Challenges for Human Microbiome Research (Room: 004)**  
*- Chair: Lindley Darden; Comments: Chris Diteresi*
- 4:30pm-5:00pm *Changing views on individuality and organismality: A role for the human microbiome - Mark Borrello*
- 5:00pm-5:30pm *Methodology and Ontology in the Human Microbiome Project - John Huss*
- 5:30pm-6:00pm *Ecological Metaphors in Microbiome Research - Mark Sagoff*
- 4:30pm-6:00pm.** **The explanatory role of mathematical and dynamical models in molecular and cell biology (Room: 005) – Chair: Stuart Glennan**
- 4:30pm-4:50pm *The Mathematics of Molecular Mechanisms - Tudor Baetu*
- 4:50pm-5:10pm *Explaining with mathematical models: the contribution of systems engineering to biology – Pierre-Alain Braillard*
- 5:10pm-5:30pm *The Relevance of Irrelevance: Explanation in Systems Biology - Fridolin Gross*
- 5:30pm-5:50pm *Mechanisms, models and explanatory force - Tarik Issad & Christophe Malaterre*
- 4:30pm-6:00pm.** **Round table: Information, how meaningful it is? (Room: 001).** Participants: Minus Van Baalen, Livio Riboli-Sasco. *Chair: Arnaud Pocheville.*
- 4:30pm-6:00pm.** **Perspectives on Extinction (Room: 008) - Chair: Oren Harman**
- 4:30pm-4:50pm *Extinction and the Value of Diversity - David Sepkoski*
- 4:50pm-5:10pm *Ecosystem functioning and species extinctions - Julien Delord*
- 5:10pm-5:30pm *Once upon a Time: Construction and Realism of K-T Mass Extinction Data - Marco Tamborini*
- 5:30pm-5:50pm *The unextinct: Living fossils and their place in evolutionary theory - Derek Turner*
- 4:30pm-6:00pm.** **Figures in the History of Cell and Molecular Biology B (submitted papers) (Room: 003)**
- 4:30pm-5:15pm *Understanding Life: It's Not All Genes; An Examination of the Work and Thought of Daniel Mazia - Sherrie Lyons*
- 5:15pm-6:00pm *August Weismann's First Embryological Investigations 1861-1866 - Charlotte Weissman*
- 4:30pm-6:00pm.** **General issues in philosophy of Biology D (submitted papers) (Room: 006)**
- 4:30pm-5:00pm *Are Celibate Priests Fit? The Expanded Gene Hypothesis - Elias Khalil*
- 5:00pm-5:30pm *Non-reductive physicalism and its discontents - Paul Ryan*
- 5:30pm-6:00pm *Functions for Representation - Nicholas Shea*
- 4:30pm-6:00pm.** **General Philosophical Issues Raised By the Theory of Evolution B (submitted papers) (Room: 007)**
- 4:30pm-5:00pm *Metaphors and operative definitions. The case of adaptive radiation - Alfonso Arroyo-Santos*
- 5:00pm-5:30pm *Evolutionary Biology and the Axiomatic Method Revisited - Andreea Esanu*
- 5:30pm-6:00pm *Natural Selection as Rational Inference - Ryota Morimoto*
- 4:30pm-6:00pm.** **Darwinian Ethics and Its Challenges (submitted papers) (Room: 125)**
- 4:30pm-5:00pm *The Moral Lives of Animals - Michael Bradie*
- 5:00pm-5:30pm *Evolution and the diversity of moral norms - Justin Bruner*
- 5:30pm-6:00pm *Descriptive and Prescriptive Darwinian Ethics - Jorge Oseguera Gamba*

- 4:30pm-6:00pm.**      **Reductionism, Emergence, and Complexity (submitted papers) (Room: 127)**  
4:30pm-4:50pm      Complex systems: A causal approach to biological species - *Elizabeth Martinez-Bautista*  
4:50pm-5:10pm      Approaches based on complexity darken rather than solve the mind-body problem - *Carlos Blanco*  
5:10pm-5:30pm      The Bilaterian Body Plan and the Evolution of Intrinsic Intentionality - *Alex Levine*  
5:30pm-5:50pm      Reductionism, eliminativism, and the concept of life in Descartes' biology - *Barnaby Hutchins*
- 4:30pm-6:00pm.**      **Three Historical Studies on the Place of Microscopic Images (submitted papers) (Room: 214)**  
4:30pm-5:00pm      The soft entrance of photography into the serious world of science at the Naples Station – *Christiane Groeben*  
5:00pm-5:30pm      Usage of photography by the biologist Wilhelm Giesbrecht – scientific instrument or documentation device? - *Katharina Steiner*  
5:30pm-6:00pm      Disposition and Morphology: Imagen and classification in 18th century - *Nuria Valverde Pérez*
- 4:30pm-6:00pm.**      **Round table: Conceptual transfers and parallelism in Evolutionary biology and economics (Room: 002).** Participants: Jean-Baptiste André, Mikael Cozic, Johannes Martens, Silvia De Monte, Bernard Walliser. *Chair: Werner Callebaut*
- 4:30pm-6:00pm.**      **Organisms, Individuality, and Personality B (submitted papers) (Room: 209)**  
4:30pm-5:00pm      Does plant genetic diversity shed light on plant individuality? - *Sophie Gerber*  
5:00pm-5:30pm      Autonomy and Multicellular Organisms - *Argyris Arnellos*  
5:30pm-6:00pm      Bacteria Cognition and Natural Agency - *Fermin Fulda*

## Thursday, July 11, 2013

- 9:00am-10:30am.**      **Ecological explanation at different levels and scales (Interdisciplinary Session) (Room: Amphi Physio) - Chair: Patrick Forber & Ryan Gregory**  
9:00am-9:30am      Distinguishing ecological from evolutionary approaches to transposable elements - *Stefan Linquist*  
9:30am-10:00am      Generality in community ecology - *Karl Cottenie*  
10:00am-10:30am      The problem of pattern and scale in ecology: what have we learned in 20 years? - *Jérôme Chave*
- 9:00am-10:30am.**      **Round table: Philosophy of Biology and Biology Education (Room: Amphi Jean Rey) - Participants: Ingo Brigandt, Richard Burian, David Depew, Annie Jamieson, Alan Love, Anya Plutynski, Michael Ruse, Tobias Uller, Kostas Kampourakis. Chair: Thomas Reydon.**
- 9:00am-10:30am.**      **The Nature of Cellular Complexity (Interdisciplinary Session) (Room: Amphi 8) - Chair: Giovanni Boniolo & Ana Soto**  
9:00am-9:20am      Mechanicism vs. Organicism: Two Views of the Cell - *Daniel Nicholson*  
9:20am-9:40am      The cell: between constraints and stochasticity - *Jean-Jacques Kupiec*  
9:40am-10:00am      Demonstrated, predictable, information-rich: why biologists should not be afraid of stochasticity in gene expression - *Olivier Gandrillon*  
10:00am-10:20am      The role of cell environment in controlling stochastic gene expression through the metabolism. - *Andras Paldi*

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| <b>9:00am-10:30am.</b>  | <b>Cultural learning and cultural evolution (Room: Colloque 1)</b><br>- Chair: <i>Beth Hannon</i>   |
| 9:00am-9:30am           | Social Learning and Human Cooperation - <i>Kim Sterelny</i>   |
| 9:30am-10:00am          | Morality, evolution and culture - <i>Matteo Mameli</i>  |
| 10:00am-10:30am         | Cultural inheritance of mentalizing - <i>Cecilia Heyes</i>  |
| <b>9:00am -10:30am.</b> | <b>The Extension of Evolutionary Theory and Its Difficulties A (submitted papers) (Room: 004)</b>   |
| 9:00am-9:30am           | "Memetics is Dead! Long Live Memetics!": The importance of conceptual framing in replication-based approaches to evolution - <i>Colin Garvey</i>  |
| 9:30am-10:00am          | The role of analogy in cultural transmission and human dispersal - <i>Marshall Abrams</i>   |
| 10:00am-10:30am         | Reciprocal causation or hermeneutic spiral? Anthropological reflections on the theoretical integration of organismic development and niche construction with culture history - <i>Emily Schultz</i> |
| <b>9:00am-10:30am.</b>  | <b>Conceptual Issues in Ecology A (submitted papers) (Room: 005)</b>  |
| 9:00am- 9:20am          | Dynamical kinds and ecological theory - <i>Benjamin Jantzen</i>   |
| 9:20am-9:40am           | But isn't the neutral theory of ecology a null model? - <i>William Bausman</i>  |
| 9:40am-10:00am          | An organizational account of ecosystem functions - <i>Victor Lefèvre</i>  |
| 10:00am-10:20am         | Is the neutral theory of community ecology really neutral? - <i>François Munoz</i>  |
| <b>9:00am-10:30am.</b>  | <b>Systems Biology A (submitted papers) (Room: 001)</b>   |
| 9:00am-9:30am           | Hierarchical approach at the core of organicist and systemic views in biology - <i>Jon Umerez</i>   |
| 9:30am-10:00am          | Institutional and Epistemic Practices in Systems Biology - <i>Ramya Rajagopalan</i>   |
| 10:00am-10:30am         | Mechanisms in Systems Biology: do they explain enough? - <i>Constantinos Mekios</i>   |
| <b>9:00am-10:30am.</b>  | <b>A comparative history of evolutionary theories in the mid 20th century (Room: 008) - Chair: <i>Miquel Carandell</i></b>  |
| 9:00am-9:20am           | Falls and rises of evolutionary theories during Franco's regime (1939-1975) - <i>Clara Florensa</i>   |
| 9:20am-9:40am           | Evolutionary theories in Portugal during the dictatorial regime (1933-1974) I – Portuguese botanists' differentiated stances towards evolution - <i>Pedro Fonseca</i>                               |
| 9:40am-10:00am          | Evolutionary theories in Portugal during the dictatorial regime (1933-1974) II – Portuguese zoologists' differentiated stances towards evolution - <i>Pedro Fonseca</i>                             |
| 10:00am-10:20am         | Microevolution on microscales: shifting views of the temporal and spatial scales of evolution in British genecology - <i>Erick Peirson</i>  |
| <b>9:00am-10:30am.</b>  | <b>Different Facets of Evolutionary Psychology A (submitted papers) (Room: 003)</b>   |
| 9:00am-9:30am           | Phylogenetic Footprints in Organizational Behavior - <i>Ulrich Witt</i>   |
| 9:30am-10:00am          | Birds Trust Their Wings, Sharks Their Teeth, and Humans Their Minds: The Critical Intelligence Argument Against Naturalism - <i>John Mizzoni</i>  |
| 10:00am-10:30am         | Conflict resolution in primates from an evolutionary approach - <i>Alba Perez-Ruiz</i>  |
| <b>9:00am-10:30am.</b>  | <b>Mechanistic Explanations A (submitted papers) (Room: 006)</b>  |
| 9:00am-9:20am           | A Salmonian Approach to Mechanistic Explanations - <i>Sarah Roe</i>   |
| 9:20am-9:40am           | Abstract Models, Generic Mechanisms - <i>Catherine Stinson</i>  |
| 9:40am-10:00am          | Understanding the "machine metaphor": organizational similarities and differences between machines and living beings - <i>Victor Marques</i>  |
| 10:00am-10:20am         | Conflicting Results for Natural Selection and the New Philosophy of Mechanism - <i>Lucas Matthews</i>   |

- 9:00am-10:30am. Frameworks and Representation of Cells and Genes I. Lineages (Room: Colloque 2) - Chair: Denis Thieffry**  
 9:00am-9:30am Stem trees, stem lines, stem cells - Ernst Haeckel's and August Weismann's legacy to stem cell research - *Ariane Dröscher*  
 9:30am-10:00am Between Molecular Ecology and Cytophysics - *Sabine Brauckmann*  
 10:00am-10:30am Justifying molecular imagery in cell biology: Goodsell vs Roberts - *Norberto Serpente*
- 9:00am-10:30am. Round table: Plant Science: Its Role In Biology (Room: 002) - Participants: Jean-Francois Briat, Berris Charnley, Bertrand Muller, Staffan Müller-Wille, Francisco Vergara-Silva, Vassiliki Betty Smocovitis. Chair: Sabina Leonelli.**
- 11:00am-12:30pm. Developing Scaffolds in Evolution, Cognition, and Culture (Room: Amphi Physio) - Chair: Colin Allen**  
 11:00am-11:30am Scaffolded Development – A Reproducer Perspective - *James Griesemer*  
 11:30am-12:00pm At the Juncture of Generations: Materiality and Scaffolding - *Linda Caporael*  
 12:00pm-12:30pm Crafting Interchangeability: A Generative Structure for the Industrial Revolution and for Evolution - *William Wimsatt*
- 11:00am-12:30pm. Social microbes (Room: Amphi Jean Rey) - Chair: Christopher Clarke**  
 11:00am-11:20am A genotypic view of social interactions in multispecies microbial communities - *Sara Mitri*  
 11:20am-11:40am Multispecies individuals as units of selection - *John Dupre*  
 11:40am-12:00pm Bacterial individuality - *Ellen Clarke*  
 12:00pm-12:20pm Gene mobility and the concept of relatedness - *Jonathan Birch*
- 11:00am-12:30pm. Round table: Patenting Life: genes and generations (Room: Colloque 1) - Participants: Robert Cook-Deegan, Graham Duffield, Jean-Paul Gaudillière, Amanda Odell-West, Bronwyn Parry, Robin Scheffler, Ravi Srinivas, Kara Swanson, Antony Taubman. Chair: Berris Charnley.**
- 11:00am-12:30pm. The Extension of Evolutionary Theory and Its Difficulties B (submitted papers) (Room: 004)**  
 11:00am-11:30am The evolution of technology is Darwinian - *Mark Bedau*  
 11:30am-12:00am Beyond Generalized Darwinism: Considering Alternative Ways to Articulate Evolutionary Economics - *Werner Callebaut*  
 12:00pm-12:30pm The Relevance of Human Evolutionary History to Evolutionary Game Theory - *Rebecca MacIntosh*
- 11:00am-12:30pm. Conceptual Issues in Ecology B (submitted papers) (Room: 005)**  
 11:00am-11:30am Function in ecology: description of the scientific uses and an epistemological framework - *Nei Nunes-Neto*  
 11:30am-12:00pm What may be General Ecology? - *Michel Godron*  
 12:00pm-12:30pm Functionality in Open Dynamical Systems: The Case of Ecology - *John Collier*
- 11:00am-12:30pm. Systems Biology B (submitted papers) (Room: 001)**  
 11:00am-11:20am Metabolic data and mathematical models - *Josephine Donaghy*  
 11:20am-11:40am Systems biology and the limits of philosophical accounts of mechanistic explanation - *Ingo Brigandt*  
 11:40am-12:00pm Bridging the gap between system and molecular biology. The case of melanoma - *Giovanni Boniolo*  
 12:00pm-12:20pm What is a 'hypothesis' in contemporary biology? - *Eve Roberts*

- 11:00am-12:30pm. Transhumanism (submitted papers) (Room: 008)**  
 11:00am-11:45am Reimagining the Guiding Forces of Synthetic Biology: The Ethical Preoccupation of Transhumanism - *Laura Adams*  
 11:45am-12:30pm Bioethical issues on genetic enhancement : between conservatism and transhumanism – *Laurence Perbal*
- 11:00am-12:30pm. Different Facets of Evolutionary Psychology B (submitted papers) (Room: 003)**  
 11:00am-11:30am Towards a new evolutionary psychology - *O'Neal Buchanan*  
 11:30am-12:00pm The Cambrian Explosion and the Origins of Embodied Cognition - *Michael Trestman*
- 11:00am-12:30pm. Mechanistic Explanations B (submitted papers) (Room: 006)**  
 11:00am-11:20am Mechanistic Explanation & Evo-Devo - *Fabrizzio Mc Manus*  
 11:20am-11:40am Explanatory frameworks in molecular oncology: the case of the gene p53 - *Paolo Maugeri - Alessandro Blasimme - Pierre-Luc Germain*  
 11:40am-12:00pm From Cyborg to Replicant: The Historical Transition from Mechanical Transplants to Digital Genetic Intervention. The Heart Case - *Carlos Guevara-Casas*  
 12:00pm-12:20pm Statistical Learning as a Mechanism - *Riana Betzler*
- 11:00am-12:30pm. Genetics: Ethical Issues (submitted papers) (Room: 007)**  
 11:00am-11:45am The “Devil’s Heritage”: Masuo Kodani, Genetics, and Social Stratification at the Atomic Bomb Casualty Commission (1946-1954) - *Vassiliki Smocovitis*  
 11:45am-12:30pm “Genetic load”, How the architects of the Synthesis got trapped in a scientific ideology – *Alexandra Soulier*
- 11:00am-12:30pm. History and Philosophy of Life sciences, 19th-20th century (submitted papers) (Room: Actes)**  
 11:00am-11:45am Progress, Adaptation, and Organism-Environment Interaction: Spencer's Criticism of Lamarck - *Federico Morganti*  
 11:45am-12:30pm Elan Vital Revisited: Bergson and the Thermodynamic Paradigm - *James DiFrisco*
- 11:00am-12:30pm. Frameworks and Representation of Cell and Genes II. Networks (Room: Colloque 2) - Chair: Ariane Dröscher**  
 11:00am-11:30am Paradoxes of “Live-Cell Imaging” - *Lina Maria Stahl*  
 11:30am-12:00am From Pathways to Networks: Developments in the Science of Intracellular Signaling - *Andrew Reynolds*  
 12:00pm-12:30pm Graphing cellular regulatory networks - *Denis Thieffry*
- 12:30pm-2:30pm. Council Meeting #2 - Open to newly elected Council's members**
- 2:30pm-4:30pm. General Meeting of the ISHPSSB (including Hull and Greene Prizes) (Room: Amphi. Giraud)**
- 5:00pm-6:30pm. Information and Plasticity (Room: Colloque 1) - Chair: C. Kenneth Waters**  
 5:00pm-5:30pm Genetic, Epigenetic, and Neural Memory Systems - *Peter Godfrey-Smith*  
 5:30pm-6:00pm Plasticity and selection in synaptic populations - *Rosa Cao*  
 6:00pm-6:30pm Evolving to Generalize - *Cailin O'Connor*
- 5:00pm-6:30pm. Round table: Will the distinction between medicine and enhancement be soon obsolete? (Room: 002).** Participants: Pascal Nouvel, Darian Meacham. *Chair: Sylvie Allouche*

- 5:00pm-6:30pm.**  
5:00pm-5:30pm  
5:30pm-6:00pm  
6:00pm-6:30pm
- Theory of Organisms (Room: 004) - Chair: Matteo Mossio**  
Propagative and Repulsive constraints in molecular and cellular biology  
*Paul-Antoine Miguel*  
The Darwinian input into development and carcinogenesis. On the default state of cells. - *Carlos Sonnenschein*  
Towards a theory of organisms - *Ana Soto*
- 5:00pm-6:30pm.**  
5:00pm-5:20pm  
5:20pm-5:40pm  
5:40pm-6:00pm  
6:00pm-6:20pm
- Ethical Issues Behind Human Practices (submitted papers) (Room: 008)**  
Natural in the context of reproductive technologies - *Maya Fisher*  
Un/Cut: The Ethics of Routine Infant Male Circumcision - *Gal Kober*  
Body and Ren: Historical and Ethical Perspective on Organ Donation in China  
*Zhuran Li*  
Ethical foundations of biodiversity communication - *Uta Eser*
- 5:00pm-6:30pm.**  
5:00pm-5:20pm  
5:20pm-5:40pm  
5:40pm-6:00pm  
6:00pm-6:20pm
- Different Facets of Evolutionary Psychology C (submitted papers) (Room: 003)**  
Biological causes and the epistemic status of moral beliefs - *Elizabeth O'Neill*  
Perception-action mechanisms as precursors to empathy - *Alejandro Rosas*  
Beyond Positive Illusions: Free Will as an Adaptive Misbelief - *Matthew Smithdeal*  
Evolutionary Psychology and Multimodularity: Rebutting Samuels' Challenge - *Malte Dahlgrün*
- 5:00pm-6:30pm.**  
5:00pm-5:30pm  
5:30pm-6:00pm  
6:00pm-6:30pm
- Functions (submitted papers) (Room: Actes)**  
Counterfactuals and the Generality Requirement - *Sören Häggqvist*  
The Modal Theory of Function: Lessons from Molecular Biology - *Maximilian Huber*  
Context-based functional synthesis - *Marc Daëron*
- 5:00pm-6:30pm.**  
5:00pm-5:20pm  
5:20pm-5:40pm  
5:40pm-6:00pm  
6:00pm-6:20pm
- History of Science in Science Education (submitted papers) (Room: 125)**  
The History of Science as a tool for teaching metascience: an assessment of changes in pre-service biology teachers' conceptions - *Maria Elice Prestes*  
The origin of electric organs: can that Darwin's special difficulty contribute to the teaching of Evolutionary Biology? - *Gerda Jensen*  
Darwin in the classroom: replication of historical experiments to assist in the understanding of the evolution theory - *Tatiana Silva*  
History and Philosophy of Science and how they relate to Science Education: Teaching for Conceptual Change in Evolutionary Theory - *Kostas Kampourakis*
- 5:00pm-6:30pm.**  
5:00pm-5:20pm  
5:20pm-5:40pm  
5:40pm-6:00pm  
6:00pm-6:20pm
- Philosophical issues raised by Evo-Devo (submitted papers) (Room: 127)**  
Evolutionary Developmental Biology's Relative Significance Controversy - *Lindsay Craig*  
The genetic and the morphogenetic approach in evo-devo: rethinking evolutionary causality - *Laura Nuño de la Rosa*  
Theoretical and Methodological Diversity in the 1980s: Early Development of Evo-devo - *Yoshinari Yoshida*  
Gene Networks in Developmental Evolution: What do Common Developmental Mechanisms mean for Evolutionary Explanations? - *Valerie Racine*
- 5:00pm-6:30pm.**  
5:00pm-5:30pm  
5:30pm-6:00pm  
6:00pm-6:30pm
- Understanding Disease (submitted papers) (Room: 214)**  
Clarifying Health and Disease in Darwinian Medicine via Phenotypic Flexibility and Robustness - *Jonathan Sholl*  
Biology, Health and Medical Practice - *James Krueger*  
Biological normativity, clinical normalcy and the theoretical definitions of health and disease - *Cristian Saborido*



**5:00pm-6:30pm.**            **Evolutionary Theory and Causation (submitted papers) (Room: 005)**  
5:00pm-5:45pm            Are there a priori causal relations in evolutionary theory? - *Guillaume Schlaepfer*  
5:45pm-6:30pm            Selection and drift: why “caused by” rather than “constitutes”? - *Björn Brunnander*

**7:00pm-10:30pm.**            **Gala dinner (Location: Parc Grammont)**

## Friday, July 12, 2013

**9:00am-10:30am.**            **Round table: Back to Darwin’s tangled bank (Room: Amphi Physio) -**  
Participants: Greg Cooper, Nei de Freitas Nunes-Neto, Julien Delord. *Chair:*  
*Emanuele Serrelli*

**9:00am-10:30am.**            **The space of explanations in evolutionary biology A (Room: Colloque 2) -**  
*Chair: Denis Walsh*  
9:00am-9:30am            Statistically autonomous explanations - *Andre Ariew*  
9:30am-10:00am            Multilevel Mechanisms of Evolutionary Change - *Lindley Darden*  
10:00am-10:30am            Articulating mechanisms and topologies as mutually required in explanatory  
strategies. - *Philippe Huneman*

**9:00am-10:30am.**            **The Question of Levels (submitted papers) (Room: 001)**  
9:00am-9:30am            What is reductionism? - *Megan Delehanty*  
9:30am-10:00am            The problem of ontic levels in mechanistic explanation - *Ramon Alvarado*  
10:00am-10:30            Levels, Hierarchy, and Scale - *Alex von Stein*

**9:00am-10:30am.**            **New light on species essentialisms in biology (Room: 005)**  
- *Chair: Sébastien Dutreuil*  
9:00am-9:20am            Essentialism, evolutionary theory, and the species concept - *Anouk Barberousse*  
9:20am-9:40am            “Biological species”: a hybrid notion referring to a bundle of essences? -  
*Françoise Longy*  
9:40am -10:00am            How feasible is intrinsic taxon essentialism? - *Thomas Reydon*  
10:00am-10:20am            A meta-analysis of species concepts as units of generalizations in biology -  
*Francesca Merlin*

**9:00am-10:30am.**            **Philosophical Anthropology I: The Bio-Philosophy of Helmuth Plessner in**  
**Context (Room: 002) - Chair: Kevin Amidon**  
9:00am-9:30am            The substantive and methodological integration of biology, anthropology, and  
philosophy in Plessner's *Die Stufen des Organischen und der Mensch* – *Phillip*  
*Honenberger*  
9:30am-10:00am            Keywords in the Conceptualization of Life: Plessner's “Boundary” and Hegel's  
“Deficiency” - *Francesca Michellini*  
10:00am-10:30am            Plessner’s Conceptual Investigation of ‘Life’: Structural Narratology - *Lawrence*  
*Davis*

**9:00am-10:30am.**            **Classification and Taxonomy (submitted papers) (Room: 008)**  
9:00am-9:45am            Complex Objects and Integrative Pluralism - *Joyce Havstad*  
9:45am-10:30am            Type-specimens and the (historical) metaphysics of taxonomic practice - *Joeri*  
*Witteveen*

**9:00am-10:30am.**            **Comparative Psychology (submitted papers) (Room: 003)**  
9:00am-9:45am            Anthropomorphism and anti-anthropomorphism: A plea for synthesis - *Hisashi*  
*Nakao*  
9:45am-10:30am            Basic Emotions, Flexible Aggression, and Angry Motivation - *Isaac Wiegman*

- 9:00am-10:30am. Cooperation (submitted papers) (Room: 006)**  
 9:00am-9:20am Revisiting Petr Kropotkin: Is competition necessary for natural selection? - *Anne Marie Gagné Julien*  
 9:20am-9:40am Randomization and the alignment of biological interests: why fairness doesn't matter – *Johannes Martens*  
 9:40am-10:00am Spatial Reciprocity and the Evolution of Cooperation - *Marie Barnett*  
 10:00am-10:20am The evolution of empathy through parental care - *Irene Audisio*
- 9:00am-10:30am. Ecology and Society A (submitted papers) (Room: 007)**  
 9:00am-9:20am Where Science Meets Society: A Sociological Case for Ecology - *Amanda Richard*  
 9:20am-9:40am Between place and cosmos: biodiversity knowledge, expertise and the IPBES - *Maud Borie*  
 9:40am-10:00am Environmental Crises and the Evolved Mind - *Jason Zinser*  
 10:00am-10:20am People save the day: the influence of public activism on the history of conservation biology and why it remains important today - *Hannah Koslowsky*
- 9:00am-10:30am. History and Philosophy of Life Sciences, 17th-18th century A (submitted papers) (Room: Actes)**  
 9:00am-9:30am Joseph Lelarge de Lignac (1697-1762), a friend of Réaumur against the thought of Buffon – *Olivier Perru*  
 9:30am-10:00am Husbandry, alchemy, and technologies of ameliorating nature in the works of Gabriel Plattes – *Oana Matei*  
 10:00am-10:30am The Watchmen of the Body: How Early Moderns Gained an Education in the Physiology of the Eye - *Karen Buckle*
- 9:00am-10:30am. Fitness and Fitness Wars A (submitted papers) (Room: 125)**  
 9:00am-9:30am Process and Product Concepts of Natural Selection and Genetic Drift - *Charles Pence*  
 9:30am-10:00am Measures of fitness: opening the Pandora's box - *Thomas Lenormand*  
 10:00am-10:30am Will Simpson's Paradox and the Sure Thing Principle Resolve the Fitness Wars? - *Peter Takacs*
- 9:00am-10:30am. What Is Genetic Information? (submitted papers) (Room: 127)**  
 9:00am-9:20am The genome and the stored program concept - *Ronald Planer*  
 9:20am-9:40am Defending a mathematical sense of biological information - *Oliver Lean*  
 9:40am-10:00am Is Shannon's Information Theory Applicable to Genetic Data? - *Omri Tal*  
 10:00am-10:20am Genetic information as a conceptual metaphor - *Tomoko Ishida*
- 11:00am-12:30pm. Roles of viruses in Ecology, Evolution and Origins of life (Room: Colloque 1) - Chair: Karine Prévot**  
 11:00am-11:30am What roles for viruses in origin of life scenarios? - *Gladys Kostyrka*  
 11:30am-12:00pm Viruses: Essential Agents of Life - *Luis Villarreal*  
 12:00pm-12:30pm Comments - *John Dupre*
- 11:00am-12:30pm. The space of explanations in evolutionary biology B (Room: Colloque 2) - Chair: Lindley Darden**  
 11:00am-11:30am Maximum Entropy Explanations in Biology - *Lyon Aidan*  
 11:30am-12:00pm Asymptotic Idealization in Evolutionary Explanation - *Michael Strevens*  
 12:00pm-12:30pm Varieties of Invariance - *Denis Walsh*

- 11:00am-12:30pm. Philosophical Anthropology II: Applications in Genomics, Human Evolution, and Addiction (Room: 002) – Chair: Sara Franceschelli**
- 11:00am-11:30am We-Intentionality, Being-in-the-World and Multi-Level Selection: Re-synthesizing an evolutionary account of anthropogenesis by way of the hominid ‘super-organism’ - *Lenny Moss*
- 11:30am-12:00pm Roles for technology in feeding an evolutionary feed-forward loop in the human lineage - *Sylvia Blad*
- 12:00pm-12:30pm Advancing Insights from Philosophical Anthropology: Addiction as a Detachment-Compensatory Occupation - *Sally Wasmuth*
- 11:00am-12:30pm. Ecology and Society B (submitted papers) (Room: 007)**
- 11:00am-11:30am A Conflict between Biology and Geology: The “Thirty Years' War” in Coral Reef Studies, 1910-1939 - *Alistair Sponser*
- 11:30am-12:00pm From local newspaper notes to DNA profiles – The science and politics of wolf population estimates in Norway from the 1960s until today - *Håkon B. Stokland*
- 12:00pm-12:30pm Ecosystem Function and Environmental Values - *Gregory Cooper*
- 11:00am-12:30pm. Fitness and Fitness Wars B (submitted papers) (Room: 125)**
- 11:00am-11:45am Revisiting fitness: Trait-based Fitness - *Pierrick Bourrat*
- 11:45am-12:30pm Assessing Methodological Adaptationism: an Historical Approach - *Alessandro Allegra*
- 11:00am-12:30pm. Holism and organicism: conceptual consensus or historical typologies? (Room: 004) - Chair: Michel Morange**
- 11:00am-11:20am Cabanis’s Living Systems - *Tobias Cheung*
- 11:20am-11:40am Coming to Terms with Holism: Minimalistic Conceptual Tools for Describing and Explaining Holistic Systems in Biology - *Georg Toepfer*
- 11:40am-12:00pm Holism in biology: a restatement and defence - *Matteo Mossio*
- 12:00pm-12:20pm Holism, organicism and the risk of biochauvinism - *Charles Wolfe*
- 11:00am-12:30pm. History and Philosophy of Life Sciences, 17th-18th century B (submitted papers) (Room: Actes)**
- 11:00am-11:45am Charles Georges Leroy and Enlightened Ethology - *Jorge Martínez-Contreras*
- 11:45am-12:30pm Charles-Georges Leroy and Auguste Comte on cooperation in animals and altruism – *Michel Bourdeau*
- 2:00pm-5:00pm. Excursions in and around Montpellier.**  
See <http://www.ishpssb2013.org/guided-tours/>