

# HSS Preliminary Program

## Montréal, QC 2010

(Joint meeting with the Philosophy of Science Association)

(Please note that institutional affiliations will be added for the final program. TBD = To be determined)

**THURSDAY, November 4, 2010**

**HSS Council Meeting 1:00 – 5:00 PM**

**Plenary -- 5:30 --7:00 PM**

**The Challenges and Opportunities of Interdisciplinary Teaching** (Sponsored by the Committee on Education)

**Chair:** John Lynch, Arizona State University

**Organizer:** Kristin Johnson, University of Puget Sound

1. Making Better Scientists: HPS in the Science Curriculum, Hanne Andersen, University of Aarhus, Denmark
2. Applied History of Science, Melinda Gormley, University of Puget Sound
3. HPS in the Science Curriculum: History and Philosophy at the Lab Bench, Andrew Hamilton, Arizona State University
4. Why Do I Have to Take This STS Class?, Kristin Johnson, University of Puget Sound

**Opening Reception, 7:30–8:30 PM** (joint reception with PSA, cash bar)

**Newcomers' Welcoming Reception and Mentor-Mentee Gathering, 7:30-8:30 PM**

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**FRIDAY, November 5, 2010**

**HSS Women's Caucus Breakfast: 7:30 – 8:45 AM**

Friday, 09:00-11:45 AM

**Genes and Mechanisms in the Case of Cystic Fibrosis: Philosophical, Historical and Social Perspectives.**

**Chair and Commentator:** Miriam Solomon, Temple University

**Organizer:** Susan Lindee, University of Pennsylvania

1. A Disease About to Disappear, Susan Lindee, University of Pennsylvania
2. Mechanisms, Mutations, and Rational Drug Therapy in the Case of Cystic Fibrosis, Lindley Darden, University of Maryland
3. Examining Problems with Using 'Mechanistic' Evidence for Managing Cystic Fibrosis, Jeremy Howick, University College London

4. Is My Sick Child Healthy? Is My Healthy Child Sick?: Changing Parental Experiences of Cystic Fibrosis in the Age of Expanded Newborn Screening, Rachel Grob, Sarah Lawrence College (Child Development Institute)

Friday, 09:00-11:45 AM

### **Community and Isolation in the Ancient Sciences**

**Chair and Commentator:** Alexander Jones, Institute for the Study of the Ancient World

**Co-Organizers:** Daryn Lehoux, Queen's University; Serafina Cuomo, Birkbeck College

1. Accounts, Democracy, and Numeracy in Classical Athens, Serafina Cuomo, Birkbeck College
2. Authorial Immunity: Rethinking Disembodied Knowledge in Early Greek Medical Writing, Brooke Holmes, Princeton University
3. How is Praying to Statues like Talking to Houses?, Daryn Lehoux, Queen's University
4. Mapping Ancient Science, Reviewl Netz, Stanford University

Friday, 09:00-11:45 AM

### **Science and Popular Culture: Making and Communicating Natural Knowledge**

**Chair and Commentator:** Lynn Nyhart, University of Wisconsin, Madison

**Organizer:** Lukas Rieppel, Harvard University

1. Genres of Synthesis, and the Works of George Gamow, Nasser Zakariya, Harvard University
2. The Only Real Skeleton in Europe. Diplodocus, Andrew Carnegie, and German Rivalry, Ilja Nieuwland, Huygens Institute of the Royal Netherlands Academy of Sciences
3. Zen and the Art of Textbook Writing, David Kaiser, Massachusetts Institute of Technology
4. Collectors for Hire: Charles Sternberg and the Commercial Fossil Trade, 1870-1930, Lukas Rieppel, Harvard University

Friday, 09:00-11:45 AM

### **Scientific Institutions and Nazism**

**Chair and Organizer:** Mark Walker, Union College

1. The Research Program "The History of the German Research Foundation, 1920-1970," Karin Orth, University of Freiburg, Germany
2. The Meaning of Apology. Survivors of Nazi Medical Crimes and the Max Planck Society, Carola Sachse, Max Planck Institute for the History of Science
3. The German Physical Society During the Third Reich, Richard Beyler, Portland State University
4. The Deutsches Museum in National Socialism, Stefan Wolff, University of Birmingham, England
5. The Haber-Institute - No Place for Science During National Socialism?, Dieter Hoffmann, Max Planck Institute for the History of Science

Friday, 09:00-11:45 AM

### **Predicting the Unthinkable: Sciences of Natural and Social Crisis**

**Chair and Commentator:** Matthias Dorries, University of Strasbourg

**Organizer:** William Deringer, Princeton University

1. The Taming of the Volcano and the Conquering of Climate, Karen Holmberg, Brown University
2. Enumerating Mischiefs: The Mathematics and Politics of Financial Prediction During the 1720 South Sea Bubble, William Deringer, Princeton University
3. Typhoon Warning and Local Politics in Shanghai's Inter-Port Meteorological Scheme, 1869-1882, Marlon Zhu, The State University of New York, Binghamton
4. The Productivity of Weather and Climate Prediction, Samuel Randalls, University College London

Friday, 09:00-11:45 AM

### **Embedding the History of Mathematics in the History of Science**

**Chair and Commentator:** Karen Parshall, University of Virginia

**Organizer:** Peter Pesic, St. John's College, Santa Fe, NM

1. Mathematical Matter, Amir Alexander, University of California, Los Angeles
2. Algebraic Collisions: Challenging Descartes with Cartesian Methods, Scott J. Hyslop, Indiana University, Bloomington
3. Mathematical Models and the Mechanical Philosophy in 17<sup>th</sup>-Century Physiology: Comparing the Mathematical Theories of Muscle Contraction of Giovanni Alphonso Borelli and Johannes Bernoulli, Emil Sargyan, Indiana University, Bloomington
4. Calculating Possible Worlds: Calculus as Part of the History of Scientific Possible Worlds, Jacqueline Wernimont, Harvey Mudd College
5. Mathematics as Culture, or Getting Out of the Ghetto, Massimo Mazzotti, University of California, Berkeley

Friday, 09:00-11:45 AM

### **The War of Guns and Mathematics: Military-Scientific Collaborations and Methods in Ballistics from Euler to World War II**

**Chair and Commentator:** Matthew Jones, Columbia University

**Organizer:** David Aubin, Université Pierre et Marie Curie, Paris

1. Off the Target? Exact Solution to Approximate Differential Equations in 18<sup>th</sup> and 19<sup>th</sup>-Century Ballistics, Dominique Tournès, Université de la Réunion, France
2. Doctrine, Virtues and the Scientific Method in a Military Context: The French Gâvre Commission for Ballistics, 1829-1918, David Aubin, Université Paris 6
3. Mathematicians and Exterior Ballistics in America, 1880-1940, Alan Gluchoff, Villanova University
4. Trajectories After Aberdeen: Exploring Effects of the WWI Experience on American Mathematicians, Deborah A. Kent, Hillsdale College
5. From Canon Shell Trajectories to Atoms: Douglas Hartree and Ralph Fowler's WWI Ballistics and the Calculation of Atomic Properties, Edward Jurkowitz, Max Planck Institute for the History of Science

Friday, 09:00-11:45 AM

### **Entanglements of Instruments and Media in Investigating Organic Worlds**

**Chair and Commentator:** Jan Golinski, University of New Hampshire

**Organizer:** Joan Steigerwald, York University

1. 'Machina anthropometrica': Weighing Perspiration in the Long 18<sup>th</sup> Century, Lucia Dacome, Institute for the History and Philosophy of Science and Technology, University of Toronto

2. The Subject as Instrument: Galvanic Experiments, Organic Apparatus and Problems of Calibration, Joan Steigerwald, York University
3. A Brief History of Slime: Protoplasm, Ectoplasm and the Instruments of Infra-Visibility, Robert Brain, University of British Columbia
4. Surfing on the Sea of Brain Waves: Electroencephalography in Performance Art, Cornelius Borek, Institute for the History of Medicine and Science Studies, University of Lübeck, Germany

Friday, 09:00-11:45 AM

### **Rethinking Science and Race: Darwin, Boas, and Dobzhansky**

**Chair:** John Beatty, University of British Columbia

**Organizer:** Lisa Gannett, Saint Mary's University

1. Darwin's Explanation of Races by Means of Sexual Selection, Roberta Millstein, University of California, Davis
2. Racial Science and the Burden of Proof in the Work of Franz Boas, John P. Jackson, Jr., University of Colorado, Boulder
3. Franz Boas's Interest in Human Genetics, Evolutionary Biology and Physical Anthropology, Veronika Lipphardt, Humboldt University of Berlin
4. Races as Gene Pools: Reservoirs, Puddles, and Playing Cards, Lisa Gannett, Saint Mary's University

Friday, 09:00-11:45 AM

### **Creating and Crossing Disciplines**

**Chair:** TBD

1. "Balkanizing Physics": Division vs. Unity and the Establishment of American Solid State Physics in the 1940s, Joseph Martin, University of Minnesota
2. Measurement of X-Radiation: From Biology to Physics and Back, William C. Summers, Yale University
3. New Disciplinary Dynamics in Post World War II Brain Research: The Case of Francis O. Schmitt's Neurosciences Research Program at MIT, Tara H. Abraham, University of Guelph
4. Velvet Revolution at the Synchrotron: Shifting to Biology from Physics in Practice, Park Doing, Cornell University
5. Data-Gathering, Professionalization, and Specialization: Constructing a Paradigm in Astrophysics During the First Half of the 20<sup>th</sup> Century, Erik P. Norquest, University of Texas-Pan American

### **Forum for the History of Science in America, Business Meeting and Distinguished Lecture, 12:00 – 1:15 PM**

Professor Vassiliki Betty Smocovitis, University of Florida, "From 'The Good Earth' to 'Jungle Warfare': American Botanists and their Plants at War, 1942-1945"

### **Forum for the History of Science in Asia organizational meeting brown-bag lunch, 12:00 – 1:15 PM**

Friday, 01:30-03:10 PM

### **Museums and Popularization of Science**

**Chair:** TBD

1. "You say musaeum, I say museum..." Martin Weiss, Leiden University, the Netherlands
2. Science in Action: the New York Museum of Science and Industry and the Politics of Interactivity, Jaume Sastre Juan, CEHIC- Univeristat Autònoma de Barcelona

3. From Science to Propaganda: The Americanization of Otto Neurath's Pictorial Statistics (1929-1945), Loic Charles, University of Rheims and National Institute for Demographic Studies
4. On Display: Examining Contemporary Exhibits of the 19<sup>th</sup>-Century Asylum, Jennifer L. Bazar, York University

Friday, 01:30-03:10 PM

### **Studies in Early Modern Science**

**Chair: TBD**

1. Tracing the Industrial Revolutions to its Origins: Scientific Knowledges and Technological Innovations in Great Britain (1713-1800), Fabio Zanin, Liceo ginnasio "Brocci"
2. What History of Discoveries/Inventions? The Case of Leibniz's Calculating Machine, Florin Stefan Morar, Harvard University
3. Visualizing Refraction in the Papers of Thomas Harriot, Robert Goulding, University of Notre Dame
4. Fixed Colors in the Works of Francis Bacon: A Reappraisal, Tawrin Baker, Indiana University, Bloomington

Friday, 01:30-03:10 PM

### **Science in Modern Asia**

**Chair:** Yoshiyuki Kikuchi, Massachusetts Institute of Technology

1. Laboratory Studies in China: Mapping The History of Modern Science in Contemporary China, Christine Y. L. Luk, Arizona State University
2. Historical Trajectory of the Development of Nanoscience and Nanotechnology Research in the 'Other World': Case of India, Debasmita Patra, Cornell University
3. Seeing Like Statesmen and Scientists: The Role of Techno-Science in Making of Modern India, Madhumita Saha, Iowa State University
4. Two Controversies, One Narrative: A Strange Discursive Overlap of Scientific Fraud and Risk Politics in South Korea, Dae-Cheong Ha, Seoul National University

Friday, 01:30-03:10 PM

### **Climate Change in the 20<sup>th</sup> Century**

**Chair:** Jim Fleming, Colby College

1. Caught Between Absolutist Capitalism and Blind Environmentalism?, Nils Randlev Hundebøl, University of Aarhus, Denmark
2. Helmut E. Landsberg: "Foremost Climatologist" within Early Debates of Global Climate Change Science, 1950-1985, Gabriel Henderson, Michigan State University
3. Producing Arctic Climate Change: Hans Ahlmann's 'Polar Warming' Theory in the Field and in the Media, 1920 to 1960, Sverker Sörlin, Royal Institute of Technology, Sweden
4. Carbon, Oceans and the Future, ca 1900-1957, Maria Bohn, Royal Institute of Technology, Sweden

Friday, 01:30-03:10 PM

### **Science in a Canadian Context**

**Chair: TBD**

1. Drawing Canada Together: the Geological Survey of Canada and the Formation of the Canadian Visual Imagination, Peter Hodgins, Carleton University

2. The Hospital of the 20<sup>th</sup> Century: Folk Taxonomies and Contested Ideals, David Theodore, Harvard University
3. “Just a Theory”: The Atomic Theory Debate and Ontario's High School Chemistry Textbook, 1905-1909, Michelle D. Hoffman, University of Toronto
4. Negotiated Landscapes: Land Grants and Surveying in Upper Canada, 1826-1841, Sarah-Jane Patterson, University of Toronto

Friday, 01:30-03:10 PM

### **Conceptions of Humanity**

**Chair:** Benjamin Harris, University of New Hampshire

1. The Rise and Fall of British Craniometry, 1860-1900, Elise Juzda, University of Cambridge
2. Taking Fringe Science Seriously: Examining the Connection Between Phrenology and Evolutionary Theory, Sherrie Lyons, Empire State College
3. Frozen Bodies: Representations of Catalepsy in French 19<sup>th</sup>-Century Medical Texts, Alexandra Bacopoulos-Viau, University of Cambridge
4. When Apes Speak, Marta Halina, University of California, San Diego

Friday, 01:30-03:10 PM

### **Early Modern Mathematics**

**Chair:** TBD

1. Tutors and Textbooks: Vernacular Arithmetic Education in Early Modern England, Jessica Otis, University of Virginia
2. Descartes' Early Algebra, Kenneth Manders, University of Pittsburgh
3. Mathematical Concepts in the 16<sup>th</sup>-Century: The Case of Geometry and Ratio Conception in Theoretical Music, **Oscar Joao Abdonour**
4. Mathematics at Young Universities, Arjen Dijkstra, University of Twente, the Netherlands

Friday, 01:30-03:10 PM

### **Cures and Drugs in the 17<sup>th</sup> Century**

**Chair:** Matthew Crawford, Kent State University

1. Explaining How Drugs Work in the Late 17<sup>th</sup> Century, Saskia Klerk, Institute for History of Science, University of Utrecht, the Netherlands
2. Astrology, Talismans and Medicine in Jacques Gaffarel's *Curiositez Inouyes* (1629), Hiro Hirai, Radboud University Nijmegen, the Netherlands
3. The New Chymical Medicine of Franciscus Sylvius: Chrysopoeia, Experiment, Sensation and Secrecy, Evan Ragland, Indiana University, Bloomington
4. Allegrifying the Spirits’: Scholarly Melancholy and Study as its Cure in Robert Burton’s *The Anatomy of Melancholy*, Stephanie Shirilan, Syracuse University

Friday, 01:30-03:10 PM

### **Black Holes and Quantum Mechanics**

**Chair:** Scott Walker, Nancy University

1. Projective Geometry and the Origins of the Dirac Equation, Thomas Pashby, University of Pittsburgh

2. A Giant's Singular Struggle: Einstein, de Sitter, Weyl, and Klein's Debate on an Alleged Singularity, Christian Wüthrich, University of California, San Diego
3. Whence the Banana Bond?, Julia Bursten, University of Pittsburgh
4. How Do You Draw a Black Hole? Penrose Diagrams in Theoretical Physics and Cosmology, 1963-1973, Aaron Sidney Wright, University of Toronto

Friday, 01:30-03:10 PM

### **Mathematics in the 20<sup>th</sup> Century**

**Chair: TBD**

1. The Rise of Non-Archimedean Mathematics and the Roots of a Misconception, Philip Ehrlich, Ohio University
2. Problems of Abstraction: Defining an American Standard for Collegiate Mathematics Education at the Turn of the 20<sup>th</sup> Century, Andy Fiss, Indiana University, Bloomington
3. Calculating Empire: How Mathematics Education Standards Define Nationalism in 20<sup>th</sup> Century U.S., Emily T. Hamilton, University of California, Berkeley
4. Place and Space in the History of Mathematics: A Comparative Study of the University of Göttingen and New York University's Mathematical Institutes under the Leadership of Richard Courant, Brittany Shields, University of Pennsylvania

Friday, 03:30-05:30 PM

### **“Science and Modernity Redux”**

**Chair and Commentator:** Robert Kohler, University of Pennsylvania

**Organizer:** Kathryn M. Olesko, Georgetown University

1. “The Semblance of Transparency: Expertise and the Ideology of the Public in the Enlightenment,” Thomas Broman, University of Wisconsin, Madison
2. “Modernizing Easter: Astronomy, Foreign Affairs, and Confessional Conflict,” Kathryn M. Olesko, Georgetown University
3. In “the Capital of all Geist”: Helmholtz and the Modernization of Science in Berlin,” David Cahan, University of Nebraska

Friday, 03:30-05:30 PM

### **Science, Politics, and Agriculture in Vietnam and China During the Long 20<sup>th</sup> Century**

**Chair:** Fa-ti Fan, The State University of New York, Binghamton

**Organizer:** Michitake Aso, University of Wisconsin, Madison

1. Veterinary Science and Cattle Breeding in Colonial Indochina, Annick Guénel, Centre national de la recherche scientifique, Paris
2. Business as Usual? Agricultural Research, the Rubber Industry, and Franco-Vietnamese Relations at the Beginning of Decolonization, 1945-1954, Michitake Aso, University of Wisconsin, Madison
3. Imperial Texts in Socialist China: Republishing Agricultural Treatises in the Early Maoist Era, Peter Lavelle, Cornell University
4. Insect Control in Socialist China and Corporate America: A Transnational Tale of Science and Politics through the Eyes of Three Entomologists, Sigrid Schmalzer, University of Massachusetts, Amherst

Friday, 03:30-05:30 PM

## **Clues from Genesis: the Mosaic Account and Early Modern Natural Philosophy**

**Chair and Organizer:** Maria Portuondo, The Johns Hopkins University

**Commentator:** Ann Blair, Harvard University

1. The Biblical Cosmology of Benito Arias Montano, Maria Portuondo, The Johns Hopkins University
2. Ulisse Aldrovandi and the Science of Scripture, Andrew Berns, University of Pennsylvania
3. Isaac Newton and the Genesis Creation, Stephen Snobelen, University of King's College, Halifax

Friday, 03:30-05:30 PM

## **Concepts of Generation**

**Organizer:** Shannon Withycombe, University of Wisconsin, Madison

**Commentator and Chair:** Shirley Roe, University of Connecticut

1. Generation from Putrefaction in Early Modern Causes of Disease, Frederick W. Gibbs, George Mason University
2. Growing Intelligence: Nicolas Hartsoeker's System (1656-1725) and the Legacy of Cambridge Platonism in Dutch-French Scientific Thought, Catherine Abou-Nemeh, Princeton University
3. Enveloped in Mystery: 19<sup>th</sup>-Century Embryology Through Miscarriage Materials, Shannon K. Withycombe, University of Wisconsin, Madison

Friday, 03:30-05:30 PM

## **Mutations**

**Chair and Commentator:** Angela Creager, Princeton University

**Organizer:** Jim Endersby, University of Sussex

1. Mutation and Utopia: America's (evening) Primrose Path to the Future, Jim Endersby, University of Sussex
2. The Promise of Mutation Under Japan's Sericultural Empire, Lisa Onaga, Cornell University
3. Dialectics Denied: Muller, Lysenko, and the Fate of Chromosomal Mutation, Luis Campos, Drew University

Friday, 03:30-05:30 PM

## **Environmental Histories of Science: Knowing Nature, Transforming Nature**

**Chair:** Christine Keiner, Rochester Institute of Technology

**Organizer:** Jeremy Vetter, Dickinson College

1. Adaptation, Divinity, and the Agricultural Landscape in New York, 1825-1850, Emily Pawley, University of Pennsylvania
2. Capitalist Nature: The Sciences of Development in the American West, 1860-1920, Jeremy Vetter, Dickinson College
3. Assuring Uncertainty: Metals, Biology, and Knowledge in the Deer Lodge Valley, Montana, 1880-1920, Kent Curtis, Eckerd College
4. What Is Habitat?, Peter Alagona, University of California, Santa Barbara

Friday, 03:30-05:30 PM

## **Discourse and Discovery: Colonial and Atlantic Encounters and Ideologies of Modern Science**

**Chair and Commentator:** Neil Safier, University of British Columbia

**Co-Organizers:** Christopher Parsons, University of Toronto; Matthew Crawford, University of California, San Diego

1. Botanical Discovery in a Not So New World: French North American Folk Taxonomies in the Seventeenth and 18<sup>th</sup> Century, Christopher M. Parsons, University of Toronto
2. Cataloging Discovery: Tobacco and Encounter in Sixteenth Century Virginia, Kelly Wisecup, University of North Texas
3. Transatlantic Hispanic Baconianism as a Tool for Understanding Spanish Contributions to Modern Science, Margaret Ewalt, Wake Forest University

Friday, 03:30-05:30 PM

## **Objects of Science, Objects of Culture: Models and Specimens in 19<sup>th</sup> Century Natural History**

**Chair:** Liba Taub, University of Cambridge

**Organizer:** Margaret Olszewski, University of Toronto

1. Fashioning Fruit Out of Wax and the Improvement of Italian Agriculture: The Case of the Whipple Museum's Pomological Models, Lavinia Maddaluno, University of Cambridge
2. Displays of Distinction and Decorum: Dr. Auzoux's Botanical Models In The Growing Educational Marketplace of Late 19<sup>th</sup>-Century America, Margaret Olszewski, University of Toronto
3. It's a Giant... It's an Elephant... It's a Mammoth!, Taika Dahlbom, University of Turku, Finland
4. Tusks at Tufts, Ruthanna Dyer, York University

Friday, 03:30-05:30 PM

## **In the Mind's Eye: Technical Drawing in France and England, 1800-1850**

**Chair and Commentator:** Hamilton Cravens, Iowa State University

**Organizer:** Andrew J. Butrica, unaffiliated

1. Technical Drawing and the Société d'Encouragement pour l'Industrie Nationale, 1815-1848, Andrew J. Butrica, unaffiliated
2. British Technical Draughtsmen in the First Half of the 19<sup>th</sup> Century, Frances Robertson, Glasgow School of Art
3. Arguing in Pictures: The Visual Rhetoric of Mechanical Reliability in Restoration France, Jennifer K. Alexander, University of Minnesota

Friday, 03:30-05:30 PM

## **Physiology and Morphology in the 19th Century**

**Chair:** TBD

1. Helmholtz's Curves. Imagery and Precision in His Early Measurements of Physiological Time, Henning Schmidgen, Max Planck Institute for the History of Science
2. Respiratory Physiology and the climbing of Mount Everest, both in and out of the laboratory, Vanessa Heggie, University of Cambridge
3. The Emergence of Concepts of Inner and Outer Milieus in anatomy, pathology and physiology (Cuvier, Blainville, Broussais, Bernard) 1800-1860, Tobias Cheung, Humboldt University of Berlin

4. Evolutionary Morphology: A German success in the Netherlands, L. de Rooy, University of Amsterdam

**HSS Awards Ceremony, 6:00-6:45 PM**

**Reception: TBD 7:00-8:00 PM (tentative)**

Friday, 07:30-09:00 PM

**WORKSHOP: The Legacy of Antiquity: Books and Practice**

**Organizer:** Alain Touwaide, Smithsonian Institution, Institute for the Preservation of Medical Traditions

Friday, 07:30-09:00 PM

**Psychology in the 20<sup>th</sup> Century**

**Chair: TBD**

1. The Birth of Information in the Brain: Edgar Adrian and the Vacuum Tube, Justin Garson, University of Texas, Austin
2. Narratives of the Unconscious: Henry Murray, Literary Interpretation, and the Thematic Apperception Test, Jason Richard Miller, University of California, Los Angeles
3. Hugo Münsterberg, Psychotechnics, and the Psychologizing of Cinema, Jeremy Blatter, Harvard University
4. "Murder of the Mind?" The Psychosurgery Controversy of the 1970s, Brian Casey, National Institute of Health

Friday, 07:30-09:00 PM

**Making the Sciences Humaines Scientific**

**Chair: TBD**

1. The Language of Objects: Christian Jürgensen Thomsen's Science of the Past, Kasper Risbjerg Eskildsen, Roskilde University, Denmark
2. Lamarckism and the Constitution of Sociology, Snait B. Gissis, Tel Aviv University (Canceled)
3. An Informant's Guide to Observing Man: Ethnographic Questionnaires, and the Development of Early Observational Practices in 'the Field', Efram Sera-Shriar, University of Leeds
4. 'The Missing Link Expeditions', 1921-28: □or, How Peking Man Wasn't Found, Peter C. Kjaergaard, University of Aarhus, Denmark

Friday, 07:30-09:00 PM

**Techniques and Instruments for Science**

**Chair:** Dana Freiburger, University of Wisconsin, Madison

1. Mastering "the Play of Light and Shadow": Retinoscopy and the Quest of Optometry in Early 20<sup>th</sup>-Century America, He Bian, Harvard University
2. Scientific Creativity in Peripheral Science: C.V Raman and the Construction of a Mechanical Violin-Player, Deepanwita Dasgupta, University of Minnesota
3. Mechanical Objectivity or Instrumentalizing Theory? Introducing Automatic Recorders in Radio Ionospheric Sounding, 1930-39, Chen-Pang Yeang, University of Toronto
4. Playing with Colour: Variants of Newtonianism in London's Optical Instrument Making Community, Karen M. Buckle, University College London

Friday, 07:30-09:00 PM

### **Travelling and Collecting in the 18<sup>th</sup> and 19<sup>th</sup> Centuries**

**Chair: TBD**

1. The Growth of Collaborative Collecting: Spencer F. Baird, Robert Kennicott, and the Hudson Bay Company, Matthew Laubacher, Arizona State University
2. Botany: Its Key Role in Imperial Expansion, Elisabeth de Cambiaire, University of New South Wales
3. Itinerant Savants: Dutch Humboldtians and the Multiple Purposes of Travel, Azadeh Achbari, Free University Amsterdam
4. Tradition and Innovation in the Production of Natural Knowledge in Central America, c.1780-1800, Sophie Brockmann, University of Cambridge

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### **SATURDAY, November 6, 2010**

Saturday, 09:00-11:45 AM

#### **Artifacts of Science**

**Chair:** Benjamin Wilson, Massachusetts Institute of Technology

**Organizer:** Teasel Muir-Harmony, Massachusetts Institute of Technology

**Commentator:** Roger Launius, Smithsonian National Air and Space Museum

1. IYA 2009 – 400 Years of Objects and the Construction of their Messages, Marv Bolt, Adler Planetarium and Museum
2. Re-examining Icons on Display, David Pantalony, Canada Science and Technology Museum
3. The Moon on Display: The Exhibition of a Moon Rock at the 1970 Osaka World's Fair, Teasel Muir-Harmony, Massachusetts Institute of Technology

Saturday, 09:00-11:45 AM

#### **Spatial Knowledge: Writing and Drawing as Epistemic Practices**

**Chair and Commentator:** Seymour Mauskopf, Duke University

**Organizer:** Matthew Eddy, Durham University, England

1. The Space of Drawing, the Time of Modeling: Representing Comets in the Later 17<sup>th</sup>-Century, Matthew C. Hunter, California Institute of Technology
2. Tools for Reordering: Commonplacing and the Space of Words in Linnaeus' *Philosophia Botanica*, Matthew D. Eddy, Durham University
3. John Herschel's 'Working Skeletons': A Look at the Procedures of Drawing Nebulae, Omar W. Nasim, Swiss Federal Institute of Technology
4. The Portrait of a Species: A Case Study on Biological Drawing, Barbara Wittmann, Max Planck Institute for the History of Science

Saturday, 09:00-11:45 AM

#### **Thinking with Specimens: Collections-Based Research in the Museum of Vertebrate Zoology**

**Chair and Commentator:** Cathryn Carson, University of California, Berkeley

**Organizer:** Mary Sunderland, University of California, Berkeley

1. Collections-based Research at the Museum of Vertebrate Zoology, Mary Sunderland, University of California, Berkeley
2. Taxon-Focused Research in Collections-Based Biology, James R. Griesemer University of California, Davis
3. Collections and Analyses in Lab and Field: Some Problems with a Distinction, Elihu R. Gerson, Tremont Research Institute

Saturday, 09:00-11:45 AM

### **History of Mathematics: New Perspectives from the Far East: China, Japan, and Vietnam**

**Chair and Organizer:** Joseph Dauben, National Chiao-Tung University, Taiwan, and The City University of New York

1. Mathematical Content of Newly-Published Bamboo Strips of the Qin Dynasty, Yibao Xu, Borough of Manhattan Community College (The City University of New York)
2. Chinese Roots of Linear Algebra, Roger Hart, University of Texas, Austin
3. Samurai Culture and the Fashioning of Mathematics in Japan, Tomoko Kitagawa, Harvard University
4. Proof, 算理 Suanli, and Mathematical Thinking in 17<sup>th</sup>-Century China, Jiang-Ping Jeff Chen, St. Cloud State University
5. Chinese Mathematics in Vietnam: Transmission and Adaptation, Alexei Volkov, National Tsing Hua University

Saturday, 09:00-11:45 AM

### **The Science, Politics, and Publics of Climate Change**

**Chair and Organizer:** Jessica O'Reilly, University of California, San Diego and Princeton University

**Commentator:** Keynyn Brysse, Princeton University

1. Climate Science, Truth, and Democracy, Evelyn Fox-Keller, Massachusetts Institute of Technology
2. Neo-liberalism, Resistance to Climate Science, and the Legacy of the Cold War, Naomi Oreskes, University of California, San Diego
3. The Public Role of Climate Scientists, Michael Oppenheimer, Princeton University
4. The History of a Typo: Himalayan Glacier Predictions and the Intergovernmental Panel on Climate Change, Jessica O'Reilly, University Of California, San Diego and Princeton University

Saturday, 09:00-11:45 AM

### **Science and American Empire**

**Chair and Commentator:** Paul Sutter, University of Colorado, Boulder

**Organizer:** Christine Manganaro, University of Minnesota

1. Sixty-one Years of Soledad: University and Corporate Science at Harvard's Research Station in Soledad, Cuba, 1898-1959, Megan Raby, University of Wisconsin, Madison

2. Baseline Archipelago: U.S. Insular Science and the Re-mapping of the Philippines, Scott Kirsch, University of North Carolina, Chapel Hill
3. America's Rubber Empire: Ecology, Disease, and Commerce in the Making of Firestone Plantations Company, Gregg Mitman, University of Wisconsin, Madison
4. The Social Science of Assimilation in the Settler Colony of Hawai'i, Christine L. Manganaro, University of Minnesota

Saturday, 09:00-11:45 AM

### **Rethinking the Emergence of Islamic Science**

**Chair:** Sally Ragep, McGill University

**Organizer and Commentator:** F. Jamil Ragep, McGill University

1. Early Islam's Reactions to Astrology, Robert Morrison, Whitman College
2. Narratives of Science, Keren Abbou Hershkovits, McGill University
3. Dead Texts Versus Living Teachers: Remarks on the Transmission of Greek Mathematics into Arabic, Jan P. Hogendijk, University of Utrecht, the Netherlands
4. Why Greek Rational Sciences Were Needed in the Abbāsīd Court, Taro Mimura, University of Tokyo

Saturday, 09:00-11:45 AM

### **There is Something in the Air: Chemistry, Medicine, and Enlightenment Reform**

**Chair and Commentator:** Trevor Levere, University of Toronto

**Organizer:** Victor Boantza, McGill University

1. The Origins of William Brownrigg's Theory of Airs: Links between Medicine and Pneumatic Chemistry, **Leslie Tomory**, University of Toronto
2. Modernizing Medicine in the Enlightenment: John Pringle and the Medical Place of Chemical Knowledge, Erich Weidenhammer, University of Toronto
3. Making Chemistry Matter: D'Arconville and the Problem of Putrefaction in Enlightenment France, Margaret Carlyle, McGill University
4. Measuring Airs and Virtues: Debating Eudiometry between the Medical Environment and the Experimental Sphere, Victor Boantza, McGill University

Saturday, 09:00-11:45 AM

### **Controlling Life in 20<sup>th</sup>-Century Biology: A Session Inspired by the Work of Philip J. Pauly**

**Chair:** Nathan Crowe, University of Minnesota

**Organizers:** Rachel Mason Dentinger, unaffiliated; Nathan Crowe, University of Minnesota

**Commentator:** Jane Maienschein, Arizona State University

1. Recasting "Chemical Warfare" in the 1960s: Coevolutionary Studies and the Evolution of "Natural Insecticides," Rachel Mason Dentinger, unaffiliated
2. A Science of Control?: A History of Nuclear Transfer Experiments, 1940s-1970s, Nathan Crowe, University of Minnesota
3. "A Modified Kind of Man and a Modified Kind of Nature": Charles Elton's Vision of Millennial Conservation, Matthew Chew, Arizona State University

4. “Live Animals in Museums: Reframing the Science of Life, From ‘The Watchful Grasshopper’ to ‘The Insect Zoo’, Karen Rader, Virginia Commonwealth University

Saturday, 09:00-11:45 AM

### **Women as Subjects of Science**

**Chair:** Sheila Faith Weiss, Clarkson University

1. A Feminist Reproductive Health Coalition: Feminist Health Activists and Emergency Contraception in the United States, 1970-2000, Heather Munro Prescott, Central Connecticut State University
2. Regenerative Medicine in Context: Co-evolving Conceptions of the Fetus and its Worth, Andrew J. Hogan, University of Pennsylvania
3. Between Healers and Jurists: Abortion in Tridentine Italy, John Christopoulos, University of Toronto
4. The Moons of Pregnancy: Measuring Legitimacy in Early Modern France, Cathy McClive, Durham University
5. ‘Femmes fatales’. Examining Criminal Women in 19<sup>th</sup>-Century France, Aude Fauvel, Max Planck Institute for the History of Science

Saturday, 12:00-1:15 PM

Forum for the History of Human Science Business Meeting and Distinguished Lecture: Mary S. Morgan, Professor of History and Philosophy of Economics, London School of Economics and University of Amsterdam, “Recognising Glass Ceilings and Sticky Floors.”

Graduate and Early Career Caucus (GECC) Business Meeting (drinks and light snacks will be served)

“Investigating the History of Science on the Web: History of Science in Latin America and the Caribbean, World History of Science Online, and Rational Sciences in Islam”

Saturday, 01:30-03:10 PM

### **Research at the Frontier: Scientific Practices and the Dynamics of Expansion**

**Chair:** Bruce Hevly, University of Washington

**Organizer:** Tiago Saraiva, University of Lisbon

1. Terrestrial Physics as Investment in Frontier Building, Bruce Hevly, University of Washington
2. Malaria, Railroads and the Inner Exploration of Brazil, Jaime Larry Benchimol
3. Frontier Organisms: Genetics, the Circulation of Karakul Sheep and the Imperial Landscapes of Fascism, Tiago Saraiva, University of Lisbon
4. The Scientific Landscape of the Portuguese Far-East: Port Wine, Phylloxera and Railways, Marta Macedo, University of Lisbon

Saturday, 01:30-03:10 PM

### **Rethinking the History of Organicism: New Perspectives on Vital Science**

**Chair and Organizer:** Phillip Sloan, University of Notre Dame

1. “From Substantial to Functional Vitalism and Beyond: Animal Economies, Organisms and Existential Attitudes,” Charles T. Wolfe, University of Sydney
2. “The Organicism Moment at Cambridge and Why It Was Nearly Lost,” Erik Peterson, University of Notre Dame

3. Biophysics and Holism at the University of Chicago, 1928-1945: Resistance to Molecularization, Phillip R. Sloan, University of Notre Dame
4. The Organismic Critique of the Modern Synthesis: its Roots and Varieties, Philippe Hunemann, Institute of History and Philosophy of Sciences and Technologies

Saturday, 01:30-03:10 PM

### **Progressive Science? Embodiment and Reform in Progressive America**

**Chair:** Jane Maienschein, Arizona State University

**Organizer:** Robin Wolfe Scheffler, Yale University

1. The Metaphysical Club, Pragmatism, and the Search for New Methods in American Biology, 1880-1910, Keith R. Benson, University of British Columbia
2. The Fate of a Progressive Science: The Harvard Fatigue Laboratory, Athletes, and the Science of Work, Robin Wolfe Scheffler, Yale University
3. Biological Analogies in History: Theodore Roosevelt, Nature, and National Character, Henry Cowles, Princeton University
4. Female and Fowl: Eugenic and Euthenic Conflicts about the Body and Reproduction in Early 20<sup>th</sup>-Century America, Kathy Cooke, Quinnipiac University

Saturday, 01:30-03:10 PM

### **Practical Knowledge in the Early Modern Period**

**Chair:** TBD

1. Privileged Knowledge. Patents, Privileges, and the Legitimization of Knowledge in the Dutch Republic (1584-1621), Marius Buning, European University Institute
2. Diagramming the Sea: Depicting Charts and Currents in 17<sup>th</sup>-Century Navigation Textbooks, Margaret Schotte, Princeton University
3. Natural Histories of State and Industry: Proto-Industrial Artisan Production and State Sciences in Eighteenth Century Europe, Adelheid Voskuhl, Harvard University
4. Ars and Scientia in Venetian Shipbuilding Practice During the Late Middle Ages and the Renaissance, Lilia Campana, Nautical Archaeology Program

Saturday, 01:30-03:10 PM

### **Animating the Heavens and the Earth**

**Chair:** Faith Wallis, McGill University

1. God, Intellect and Angels in the Cosmology of Julius Caesar Scaliger, Kuni Sakamoto, University of Tokyo
2. The Animation of the Heavens in Albert the Great's *De caelo et mundo*, Adam Takahashi, Radbound University Nijmegen
3. Ptolemy: Altering Data to Fit the Model, Jacqueline Feke, Stanford University
4. A Tale of Two Astronomies: Late Renaissance Astrology and Biological Rhythms, Jole Shackelford, University of Minnesota

Saturday, 01:30-03:10 PM

### **Pre-modern Medicine**

**Chair:** TBD

1. Superstitious Doctors and Benevolent Remedies: Healers and the Inquisition in Late-Colonial Yucatan, R.A. Kashanipour, University of Arizona
2. Healing by Incantation in Medieval China, Yan Liu, Harvard University
3. The Medieval Hippocrates: a Late Middle Ages Transformation of the Greek Medical Tradition, Marco Viniegra, Harvard University
4. Herophilus' Pulsating Medicine, Deirdre Moore, University of King's College

Saturday, 01:30-03:10 PM

### **Industry, Patronage and Science**

#### **Chair: TBD**

1. Managing the Transition in Research Patronage in the Early 20th Century, Tom Scheiding, Elizabethtown College
2. Regulation and Evolution of the Biopharmaceutical Sector: A 'Begriffsgeschichte' of Non-inferiority as a Testing Standard for Antibiotics, Arthur Daemmrich, Harvard University
3. Negotiating Scientific and Industrial Management: The Micromotion Films of Frank and Lillian Gilbreth, 1912-1924, Arlie R. Belliveau, York University
4. "Selling the Research Idea": The National Research Council's Promotion of Industrial Research, 1916-1945, Eric S. Hintz, University of Pennsylvania

Saturday, 01:30-03:10 PM

### **Biology and Ideology**

#### **Chair: Marsha Richmond, Wayne State University**

1. From Organic Morphogenesis to Liberal Socialism: Eugenio Rignano and the "Centro-Epigenetic" Hypothesis of Heredity and Development, Maurizio Esposito, Leeds University, England
2. 'Falling in Love Intelligently': Eugenic Love in the Progressive Era, Susan Rensing, University of Wisconsin, Oshkosh
3. Mendelism and Eugenics in Vienna: Mendel's Rediscoverer Erich Tschermak-Seysenegg and his Active Involvement with Eugenics, Veronika Hofer, University of Vienna
4. From 'Passive Confidence' to 'Neo-Romanticism'? The American Socialist Left and Popular Evolutionary Theory in The International Socialist Review, 1900-1918, James Fiorentino, University of Massachusetts, Amherst

Saturday, 01:30-03:10 PM

### **Science in America before 1900**

#### **Chair: TBD**

1. Electrical Debate: William Watson, Benjamin Franklin, Nature and God, 1745-1763, Christopher Baxfield, University of Leeds
2. "What is the consensus of opinion as to...?": The Age of the Earth Debates and the Meaning of Scientific Consensus at the End of the 19th Century in America, Sylwester Ratowt, American Philosophical Society
3. Lester Frank Ward v. Othniel C. Marsh: Defining the Mesozoic, Debra Lindsay, University of New Brunswick
4. Knowing Nature, Knowing Gender, and Eating Turkey: Agriculture and Natural History in 19<sup>th</sup>-Century America, Neil Prendergast, University of Arizona

#### **Poster Session, Saturday, 01:30-5:00 PM**

1. An Analysis of Sturm's Theorem: A Rare Example of Simplicity and Elegance Emerging from a Network of Scientific Inquiry and Informing Further Innovation in Algebra, Frederick W. Sakon, Florida State University
2. From J. Winthrop, Jr. to E.E. Barnard: The Arduous Path to the First Sighting of the Fifth Satellite of Jupiter, François Wesemael, Université de Montréal
3. Organizing Knowledge: The Periodic Table in Popular Culture, Ann E. Robinson, University of Massachusetts, Amherst
4. Development and Senescence: Growing Up and Old and the Making of Biogerontology, 1900-1950, Hyung Wook Park, University of Durham
5. Space Madness: The Dreaded Disease That Never Was, Matthew H. Hersch, University of Pennsylvania
6. "Why does a human, a mammal, have to drink milk of cow, another mammal?"—Milk Myth, A Study on Milk Phenomena in Contemporary China Since 1980s, Song Tian
7. The Role of Interferometry in the Aether Debate throughout the 19<sup>th</sup> Century, Roberto A. Pimentel and Carlos B. G. Koehler, Universidade Federal do Rio de Janeiro

Saturday, 03:30-05:30 PM

### **The Development of Biology in a Model Technocracy: Science and the Soviet Union**

**Chair:** Bruno Strasser, Yale University

**Organizer:** William deJong-Lambert, The City University of New York and Columbia University

**Commentator:** Miklos Muller, Rockefeller University

1. The Cache Economy: Science, Capital and Socialism, Jenny Leigh Smith, Georgia Institute of Technology
2. Differing Scientific Visions Approach Climate Change: The Development of the Stalin Plan for the Transformation of Nature, Stephen Brain, Mississippi State University
3. Youthful Perceptions, Foreign Illusions: L.C. Dunn, J.B.S. Haldane, Julian Huxley and the Soviet Union, William deJong-Lambert, The City University of New York and Columbia University

Saturday, 03:30-05:30 PM

### **Reexamining the Uneasy Partnership: Economics, the Nation State, and the Public Welfare, 1920s-1980s**

Sponsored by Forum for History of Human Science

**Chair and Commentator:** Sarah Igo, Vanderbilt University

**Organizer:** Mark Solovey, University of Toronto

1. Re-Imagining Markets: The U.S. Consumer Movement and Federal Economists, 1920-1970, Thomas A. Stapleford, University of Notre Dame
2. What Doesn't Kill You Makes You Stronger: Patrons, Public Image, and Research in Economics, 1970-1985, Tiago Mata, University of Amsterdam
3. To Measure, Monitor, and Manage the Nation's Social Progress: U.S. Senator Walter Mondale's Initiative to Create a Council of Social Advisers, 1967-1974, Mark Solovey, University of Toronto

Saturday, 03:30-05:30 PM

### **Seeds of Change: Agricultural Production, Commercial Interests, and the Science of Breeding, 1850-1940**

**Chair and Commentator:** Daniel Kevles, Yale University

**Organizer:** Helen Anne Curry, Yale University

1. “Prolific”: Valuing Proprietary Staple Varieties in 19<sup>th</sup>-Century America, Courtney Fullilove, Columbia University
2. From Farm to Can: The Canning Industry and Agricultural Production in the Early 20<sup>th</sup> Century, Anna Zeide, University of Wisconsin, Madison
3. Breeding the Roentgen Regal Lily: Agricultural and Horticultural Research at the General Electric Laboratory, 1930-1940, Helen Anne Curry, Yale University

Saturday, 03:30-05:30 PM

### **17<sup>th</sup>-Century Amsterdam as a Site of Knowledge**

**Chair and Commentator:** Harold Cooke, Brown University

**Organizer:** Fokko Jan Dijksterhuis, University of Twente

1. Cultures of Collecting and Communities of Discourse in 17<sup>th</sup>-Century Amsterdam, Eric Jorink, Huygens Institute (Royal Dutch Academy of Arts and Sciences)
2. Maths and the City. Positioning the Teaching of Elementary Mathematics in 17<sup>th</sup>-Century Amsterdam, Tim Nicolaije, University of Twente, the Netherlands
3. Mobilizing Learning for Urban Affairs in Golden Age Amsterdam, Fokko Jan Dijksterhuis, University of Twente, the Netherlands

Saturday, 03:30-05:30 PM

### **From Wartime Experience to “Big Science” in Asia (1931- )**

**Chair:** Tae-ho Kim, Asia Research Institute

**Organizer:** John DiMoia, National University of Singapore

1. Patriots’ Pancake: War and Nutrition Science in Wartime China, 1931–1945, Seung-Joon Lee, National University of Singapore
2. Dependent on the Enemy’s Path: Japanese Fertilizer Factories and Synthetic Fiber Industry in North Korea, Tae-ho Kim, The Johns Hopkins University
3. “Going Nuclear?”: From AERI to KAERI, 1955-1978, the South Korean Case of Nuclear Energy, John DiMoia, National University of Singapore
4. A Space Science Virtuoso in Japan: The Historical Evolution of the Institute of Space and Astronautical Science, Yasushi Sato, National Graduate Institute for Policy Studies, Japan

Saturday, 03:30-05:30 PM

### **Taming the Information Beast**

**Chair:** Staffan Müller-Wille, University of Exeter

**Organizers:** Isabelle Charmantier, University of Exeter, and Bruno Strasser, Yale University

1. Natural History and Information Overload: the Case of Linnaeus, Isabelle Charmantier, University of Exeter
2. The Search for Order and the Order of Search: Archiving Species in Print circa 1900, Alex Csiszar, Harvard University
3. Staying Afloat in the ‘Flood of New Information:’ Computers in America’s Cold War Scientific Data Crisis, Joseph November, University of South Carolina
4. “The Fourth Paradigm?” Natural History in Silico, Bruno Strasser, Yale University

Saturday, 03:30-05:30 PM

### **Losing Arguments in Early Modern Science**

**Chair:** James Byrne, Princeton University

**Organizer:** Craig Martin, Oakland University

1. Cure-All or Helpful Herb? Debates about the Panacea in Early Modern Europe, Alisha Rankin, Tufts University
2. The Sudden Death of the Burning Salamander, Nicholas Popper, College of William and Mary
3. 'Trials about the Art of Flying in the Air': The Possibility of Flight in the 17<sup>th</sup> Century, Natalie Kaoukji, University of Cambridge
4. Too Metaphysical or Too Naturalistic? Critiques of 17th-c. Aristotelianism, Craig Martin, Oakland University

Saturday, 03:30-05:30 PM

### **Industrial Food and the Biopolitics of Nutrition Science**

**Chair and Organizer:** Helen Veit, Michigan State University

**Commentator:** John Waller, Michigan State University

1. Electric Dairyland: Science, Technology and Milk Production in Britain, 1850-1940, Christopher Otter, Ohio State University
2. The Cultural Algebra of Nutrition: Rational Eating & Dietary Substitution in the Progressive Era, Helen Veit, Michigan State University
3. Killer Carbs? The Biopolitics of Amylophobia from Graham to Gluten-Free, Aaron Bobrow-Strain, Whitman College

Saturday, 03:30-05:30 PM

### **Episodes in Early Science**

**Chair:** TBD

1. Science and Instruments: Levi ben Gerson's (1288–1344) Pinhole Camera, Yaakov Zik, University of Haifa
2. "You Asked Me, Princess, how Thunder and Lightning Happen": Byzantine Science and Learning in the 11<sup>th</sup> and 12<sup>th</sup> Centuries, Anne-Laurence Caudano, University of Winnipeg
3. Determinism in Abu Ma'shar's Defense of Astrology, Teri Gee, University of Toronto
4. Foundations of an Ancient Optical Textbook, Al-Basā'ir Fī 'Ilm Al-Manāzir, Comparing with Today's Textbooks and Major Books of Optics before It, Maryam Farahmand, University of Tehran
5. Mechanics in the Aristotelian Physical Problems, Jean De Groot, Catholic University of America

Saturday, 03:30-05:30 PM

### **Darwin on Reason and Method**

**Chair:** TBD

1. Darwinian Evolution: An Implication Regarding the Scientific Method Itself, G. Arthur Mihram, University of Southern California
2. The Rhetoric of Probability: How Darwin Overcame the Argument from Design, Daniel A. Newman, University of Toronto

3. The Evolution of Methodological Naturalism in the Origin of Species, Stephen C. Dilley, St. Edward's University
4. Charles Darwin and the Natural History of Reason, Kathryn Tabb, University of Pittsburgh
5. Darwin and Wallace on Morals and Ethics: Two Different Views from Natural Selection, Rosaura Ruiz Gutierrez, University of Leeds, England

Saturday, 03:30-05:30 PM

### **Revisiting the Beginning of Modern Science**

**Chair:** Robert Westman, University of California, San Diego

1. Thomas Hobbes on Simple Conceptions & the Nature of Science, Marcus P. Adams, University of Pittsburgh
2. The Scientific Revolution: The Master Narrative Replaced, H. Floris Cohen, University of Utrecht, the Netherlands
3. Kepler's Notion of Empirical Value, Jonathan Regier, Université Paris 7
4. The Reception of Descartes' Machine Psychology in Medical Writers and Natural Philosophy, Gary Hatfield, University of Pennsylvania

Saturday, 03:30-05:30 PM

### **Natural History, Bugs and Plants**

**Chair:** TBD

1. Pansophy Revisited: Comenius's "Irenic" Approach to Natural Philosophy, Brent Ranalli, The Cadmus Group, Inc.
2. Newtonian Vegetables and Perceptive Plants, Susannah Gibson, University of Cambridge
3. "A Treatise of Buggs": The Use and Re-Use of Natural History in 18<sup>th</sup>-Century England, Jennifer Steenshorne, Columbia University
4. Between Love and Science: Apicultural Research and Ethical Beekeeping in the British Isles, c. 1750-1850, Adam Ebert, Mount Mercy College

Saturday, 6:00-7:00 PM

**HSS Distinguished Lecture: Nancy Siraisi, What is the Place of Early Modern Medicine in the History of Science?** Introduction by Michael R. McVaugh

**HSS/PSA Joint Dinner, 7:30-9:30 PM**

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**SUNDAY, November 7, 2010**

**HSS Business Meeting, 9:00-10:00 AM**

Sunday, 10:00-12:00 PM

**Opportunities and Challenges: Plants and Evolution (1920-1950)**

**Chair and Commentator:** Vassiliki (Betty) Smocovitis, University of Florida

**Organizer:** Dawn Digrius, Stevens Institute of Technology

1. Where Are the Plants? Simpson's 'Tempo and Mode,' Evolutionary Studies and Paleobotany, Dawn M. Digrius, Stevens Institute of Technology
2. Systematics and the Origin of Species from Edgar Anderson's Viewpoint, Kim Kleinman, Webster University
3. The Sociology of Plants and Neo-Darwinism in the 20<sup>th</sup> Century, Adam Lawrence, University of California, Los Angeles

Sunday, 10:00-12:00 PM

### **Medicine, Science, and the Stomach, 1540-1840**

**Chair and Organizer:** Elizabeth Williams, Oklahoma State University

1. Fat, Dumb, Slow, and Prone to Sudden Death: Obesity in Early Modern Medicine, Michael Stolberg, Institut für Geschichte der Medizin, Würzburg
2. The Ghastly Kitchen, Anita Guerrini, Oregon State University
3. Martyrs to the Stomach: Self-Experiment in the Science of Digestion of the Late Eighteenth Century, Elizabeth Williams, Oklahoma State University
4. The Burning Pleasures of Gastro-Chic: Modern Stimulants, Health, and the 'Nervous Temperament' from Lorry to Balzac, Anne C. Vila, University of Wisconsin, Madison

Sunday, 10:00-12:00 PM

### **Gendering the Human Brain: Science, Language, and Sex Difference in the 19th and 20th Centuries**

**Chair:** Carla Bittel, Loyola Marymount University

**Organizer:** Kimberly Hamlin, Miami University of Ohio

1. Woman, Know Thyself: Gender, Phrenology, and the Female Brain, Carla J. Bittel, Loyola Marymount University
2. Helen Hamilton Gardener's Brain: Contested Understandings of Brain Science and Feminist Applications of the Scientific Method, Kimberly A. Hamlin, Miami University of Ohio
3. Silas Weir Mitchell's Nervous Malady and its Influence on the Rest Cure, Anne M. Stiles, Washington State University
4. Transgendered Cells: A History of Metaphors about Astrocytes, Meg Upchurch, Transylvania University

Sunday, 10:00-12:00 PM

### **Once Bitten, Twice Shy? Early Modern Naturalists, Insects, and Animals**

**Chair and Commentator:** Paula Findlen, Stanford University

**Organizer:** Lisa Sarasohn, Oregon State University

1. The Body of the Animal: 'Hunting Epistemology' and the Study of Animals in Early Modern Europe, Massimo Petrozzi, The Johns Hopkins University
2. John Donne's Flea and Robert Hooke's Louse: What Vermin Meant in 17<sup>th</sup>-Century England, Lisa T. Sarasohn, Oregon State University
3. Insect Theology: Friedrich Christian Lesser, Pierre Lyonet, and the Intersection of Enlightenment Natural History and Natural Theology, Brian Ogilvie, University of Massachusetts, Amherst

Sunday, 10:00-12:00 PM

## **Computers as Scientific Instruments: Technologies, Scientific Practices, and Social Structures**

**Chair:** Adelheid Voskuhl, Harvard

**Organizer:** Ann Johnson, University of South Carolina

**Commentator:** Andrew Russell, Stevens Institute of Technology

1. Recipes For Any Occasion. Computational Chemistry and the Desktop Computer, Johannes Lenhard, Bielefeld University, Germany
2. Splitting and Optimizing in Mathematics and Politics: the History of “Lions-Marchuk” Cooperation in Numerical Methods (1966-1993), Ksenia Tatarchenko, Princeton University
3. A Not-so-Short History of Computational Science: Building a Scientific Discipline in the Digital Age, Ann Johnson, University of South Carolina

Sunday, 10:00-12:00 PM

## **Scientific Organizations and Research Practices in Nationalist Times**

**Chair and Commentator:** Jeffrey Johnson, Villanova University

**Organizer:** Jeremiah James, Fritz Haber Institute

1. Research Divisions in Imperial Germany, an Organizational Scheme for War and Peace, Jeremiah James, Fritz Haber Institute
2. Survey as Resource: The Geological Survey of China and Scientific Nationalism, 1928-1949, Grace Shen, Princeton University
3. Materials, Methods, and Management: the Kaiser-Wilhelm-Institute for Physical Chemistry Under the National Socialists, Thomas Steinhauser, Fritz Haber Institute

Sunday, 10:00-12:00 PM

## **Science, Identity and Race**

**Chair: TBD**

1. "We can't relocate the world": Activism and the Bravo Medical Program, Laura Harkewicz, University of California, San Diego
2. Gender Conservatism and Racial Liberalism in US Psychiatry: Dr. Viola W. Bernard and the Community Service Society of Harlem, 1943-1945, Dennis A. Doyle, Mississippi State University
3. Personalized Medicine or Scientific Racism? The Persistence of the Genetic Theory of Race and its Modern Day Tuskegee, Andrea Patterson, California State University, Fullerton
4. A Brazilian Dilemma: UNESCO Studies in Brazil and the Retreat from Race in the 1950s, Sebastián Gil-Riaño, University of Toronto

Sunday, 10:00-12:00 PM

## **Expeditions, Imperialism and Science**

**Chair: TBD**

1. Intersecting Worldviews: Ricci World Maps in China, Ying Jia Tan, Yale University
2. Imperialism and Mathematics, Kevin Lambert, California State University, Fullerton

3. A School for Naturalist Voyagers in the Jardin des Plantes: Field Science During the “Golden Age” of French Natural History (1796 – 1850), Antony Adler, University of Washington
4. “Botanical Monroe Doctrine” in Puerto Rico: Contours of American Imperial Scientific Expeditions and Research Stations, 1898-1933, Darryl E. Brock, Fordham University

Sunday, 10:00-12:00 PM

**Knowledge and Politics of Climate in the Eighteenth and Nineteenth Centuries**

**Chair:** Miruna Achim, Universidad Autonoma de Mexico

**Organizer:** Jean-Baptiste Fressoz, Harvard University

**Commentator:** Jean-François Gauvin, McGill University

1. Climate, Biopolitics and the Environmental Reflexivity of Modernity (18th and 19th Centuries France), Jean-Baptiste Fressoz, Harvard University
2. Hippocratism and Urban Reform: Mexico City and Lima, Late 18<sup>th</sup> Century, Miruna Achim, Universidad Autónoma Metropolitana
3. Deforestation, Climate Changes and the Environmental Heritage of the French Revolution, Fabien Locher, Centre national de la recherche scientifique, Paris