HSS PROGRAM
Montréal, QC 2010
(Joint meeting with the Philosophy of Science Association)
*session organizer(s)

Registration -- Grand Salon Foyer (Level 4)
Thursday, 12:00 PM – 7:00 PM
Friday, 8:00 AM – 5:00 PM
Saturday, 8:00 AM – 5:00 PM
Sunday, 8:00 AM – 12:00 PM

Book Exhibit -- Grand Salon A (Level 4)
Thursday, 7:30 PM – 8:30 PM
Friday, 8:00 AM – 5:00 PM
Saturday, 8:00 AM – 5:00 PM
Sunday, 8:00 AM – 12:00 PM

THURSDAY, November 4, 2010

HSS Council Meeting -- Salon des Arts (Level 6)
Thursday, 1:00 – 5:00 PM

Becoming Scientific: How Everyday Things Travel To Science and Back -- Auteuil A (Level 5)
(Joint session with PSA, 4:30 – 6:45)
2. Using 'Race' in Medicine: Founding a Ballung Concept, Sophia Efstathiou, Southampton University
3. Heredity’s Baggage, *Gregory Radick, University of Leeds
4. Values and the Science of Wellbeing: How Should They Mix?, Anna Alexandrova, University of Missouri, St. Louis

Plenary Session -- Grand Salon B (Level 4)
Thursday, 5:30 – 7:00 PM

The Challenges and Opportunities of Interdisciplinary Teaching
(Sponsored by the Committee on Education)
Chair: John Lynch, Arizona State University
Organizers: Kristin Johnson, University of Puget Sound; John Lynch, Arizona State University
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 -- Thursday, 7:30 – 8:30 PM
(joint reception with PSA, cash bar)
Grand Salon Foyer & A (Level 4)

Newcomers’ Welcoming Reception and Mentor-Mentee Gathering -- Grand Salon C (Level 4)

Earth and Environment Forum -- Thursday, 8:30 PM – 10:00 PM
Salon des Arts (Level 6)

FRIDAY, November 5, 2010

Friday, 7:30 – 8:45 AM
HSS Women’s Caucus Breakfast
Jeanne-Mance (Level 6)

Friday, 9:00 – 11:45 AM
(Coffee Break 10:00-10:15
Grand Salon Foyer)

Genes and Mechanisms in the Case of Cystic Fibrosis: Philosophical, Historical and Social Perspectives
Jeanne-Mance (Level 6)
Chair and Commentator: Miriam Solomon, Temple University
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 CEBM, UK

18
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)

**Community and Isolation in the Ancient Sciences**
Été des Indiens (Level 6)
Chair and Commentator: Jan Hogendijk, Utrecht University
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, Reviel Netz, Stanford University

**Science and Popular Culture: Making and Communicating Natural Knowledge**
Salon des Arts (Level 6)
Chair and Commentator: Lynn K. Nyhart, University of Wisconsin, Madison
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

**Scientific Institutions and Nazism**
Mont-Royal (Level 6)
Chair and Organizer: Mark Walker, Union College
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, Forschungsinstitut Deutsches Museum, München
5. The Haber-Institute – No Place for Science During National Socialism?, Dieter Hoffmann, Max Planck Institute for the History of Science

**Predicting the Unthinkable: Sciences of Natural and Social Crisis**
Hospitalité (Level 5)
Chair and Commentator: Matthias Dorries, University of Strasbourg
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

**Embedding the History of Mathematics in the History of Science**
(Sponsored by the Forum for the History of the Mathematical Sciences)
Alfred-Rouleau A (Level 4)
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 17th-Century Physiology: Comparing the Mathematical Theories of
Muscle Contraction of Giovanni Alphonso Borelli and Johannes Bernoulli, Emil Sargsyan, Indiana University, Bloomington
4. Mathematics as Culture, or Getting Out of the Ghetto, Massimo Mazzotti, University of California, Berkeley

The War of Guns and Mathematics: Military-Scientific Collaborations and Methods in Ballistics from Euler to World War II
Alfred-Rouleau B (Level 4)
Chair and Commentator: Matthew Jones, Columbia University
1. Off the Target? Exact Solution to Approximate Differential Equations in 18th- and 19th-Century Ballistics, Dominique Tournès, Université de la Réunion, France
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

Rethinking Science and Race: Darwin, Boas, and Dobzhansky
Grand Salon C (Level 4)
Chair: John Beatty, University of British Columbia
1. Darwin’s Explanation of Races by Means of Sexual Selection, Roberta Millstein, University of California, Davis
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

Creating and Crossing Disciplines
Grand Salon B (Level 4)
Chair: Jutta Schickore, Indiana University
1. Data-Gathering, Professionalization, and Specialization: Constructing a Paradigm in Astrophysics During the First Half of the 20th Century, Erik P. Norquest, University of Texas-Pan American
2. 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
3. Balkanizing Physics: Division vs. Unity and the Establishment of American Solid State Physics in the 1940s, Joseph Martin, University of Minnesota
4. Velvet Revolution at the Synchrotron: Shifting to Biology from Physics in Practice, Park Doing, Cornell University

Entanglements of Instruments and Media in Investigating Organic Worlds
Alfred-Rouleau C (Level 4)
Chair and Commentator: Jan Golinski, University of New Hampshire
1. ‘Machina anthropometrica’: Weighing Perspiration in the Long 18th Century, Lucia Dacone, Institute for the History and Philosophy of Science and Technology, University of Toronto
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 Borck, Institute for the History of Medicine and Science Studies, University of Lübeck, Germany
Friday, 12:00 – 1:15 PM
Forum for the History of Science in America, Business Meeting and Distinguished Lecture
Grand Salon B (Level 4)
Vassiliki (Betty) Smocovitis, Professor of Zoology and History, University of Florida, “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 and Brown-bag Lunch
Été des Indiens (Level 6)

Forum for the History of the Mathematical Sciences Luncheon, 12:00 – 1:15 PM
Café Fleuri

Friday, 1:30 – 3:10 PM
Museums and Popularization of Science
Mont-Royal (Level 6)
Chair: Hanna Rose Shell, Massachusetts Institute of Technology
1. Science in Action: the New York Museum of Science and Industry and the Politics of Interactivity, Jaume Sastre Juan, CEHIC-Universitat Autònoma de Barcelona
2. On Display: Examining Contemporary Exhibits of the 19th-Century Asylum, Jennifer L. Bazar, York University
3. “You say museum, I say museum…,” Martin Weiss, Leiden University, the Netherlands
4. From Science to Propaganda: The Americanization of Otto Neurath’s Pictorial Statistics (1929-1945), Loïc Charles, EconomiX, INED and University of Reims, France; and Yann Giraud, THEMA, University of Cergy, France

Studies in Early Modern Science
Salon des Arts (Level 6)
Chair: Renee Raphael, University of Alabama
1. Fixed Colors in the Works of Francis Bacon: A Reappraisal, Tawrin Baker, Indiana University, Bloomington
2. What History of Discoveries/Inventions? The Case of Leibniz’s Calculating Machine, Florin-Stefan Morar, Harvard University
3. Tracing the Industrial Revolutions to its Origins: Scientific Knowledges and Technological Innovations in Great Britain (1713-1800), Fabio Zanin, Liceo ginnasio “Brocci”

Science in Modern Asia
Été des Indiens (Level 6)
Chair: Yoshiyuki Kikuchi, Massachusetts Institute of Technology
1. Seeing Like Statesmen and Scientists: The Role of Techno-Science in the Making of Modern India, Madhumita Saha, Iowa State University
2. Historical Trajectory of the Development of Nanoscience and Nanotechnology Research in the ‘Other World’: The Case of India, Debasmita Patra, Cornell University
3. Two Controversies, One Narrative: A Strange Discursive Overlap of Scientific Fraud and Risk Politics in South Korea, Dae-Chong Ha, Seoul National University
4. Laboratory Studies in China: Mapping The History of Modern Science in Contemporary China, Christine Y. L. Luk, Arizona State University

Climate Change in the 20th Century
Alfred-Rouleau C (Level 4)
Chair: Jim Fleming, Colby College
1. Carbon, Oceans and the Future, ca 1900-1957, Maria Bohn, Royal Institute of Technology, Sweden
2. 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
3. Caught between Absolutist Capitalism and Blind Environmentalism?, Nils Randlev Hundeboel, Aarhus University, Denmark

Science in a Canadian Context
Hospitalité (Level 5)
Chair: Peter Hodgins, Carleton University
1. Negotiated Landscapes: Land Grants and Surveying in Upper Canada, 1826-1841, Sarah-Jane Patterson, University of Toronto
2. Just a Theory’: The Atomic Theory Debate and Ontario’s High School Chemistry Textbook, 1905-1909, Michelle D. Hoffman, University of Toronto

4. The Hospital of the 20th Century: Folk Taxonomies and Contested Ideals, David Theodore, Harvard University

**Conceptions of Humanity**
Alfred-Rouleau A (Level 4)
Chair: Benjamin Harris, University of New Hampshire
1. The Rise and Fall of British Craniometry, 1860-1900, Elise Juzda, University of Cambridge
2. When Apes Speak, Marta Halina, University of California, San Diego
3. Taking Fringe Science Seriously: Examining the Connection between Phrenology and Evolutionary Theory, Sherrie Lyons, Empire State College
4. Frozen Bodies: Representations of Catalepsy in French 19th-Century Medical Texts, Alexandra Bacopoulos-Viau, University of Cambridge

**Early Modern Mathematics**
Alfred-Rouleau B (Level 4)
Chair: Florence Hsia, University of Wisconsin, Madison
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 16th-Century: The Case of Geometry and Ratio Conception in Theoretical Music, Oscar Joao Abdounur, Instituto de Matemática e Estatística da Universidade de São Paulo; Carla Bromberg, CESIMA (Simao Mathias Center for the History of Science) Pontifical Catholic University of São Paulo (Brazil)
4. Mathematics at Young Universities, Arjen Dijkstra, University of Twente, the Netherlands

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

**Black Holes and Quantum Mechanics**
Grand Salon B (Level 4)
Chair: Scott Walter, Nancy Université
1. Projective Geometry and the Origins of the Dirac Equation, Thomas Pashby, University of Pittsburgh
4. Whence the Banana Bond?, Julia Bursten, University of Pittsburgh

**Mathematics in the 20th Century**
Jeanne-Mance (Level 6)
Chair: Nancy S. Hall, University of Delaware
1. The Rise of Non-Archimedean Mathematics and the Roots of a Misconception, Philip Ehrlich, Ohio University
2. Calculating Empire: How Mathematics Education Standards Define Nationalism in 20th Century U.S., Emily T. H. Redman, University of California, Berkeley
3. 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
4. Problems of Abstraction: Defining an American Standard for Collegiate Mathematics Education at the Turn of the 20th Century, Andy Fiss, Indiana University, Bloomington

**Coffee Break** (Grand Salon Foyer) 3:10 – 3:30 PM
Friday, 3:30 – 5:30 PM

“Science and Modernity Redux”
Jeanne-Mance (Level 6)
Chair and Commentator: Robert Kohler,
University of Pennsylvania
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

Science, Politics, and Agriculture in Vietnam
and China During the Long 20th Century
Été des Indiens (Level 6)
Chair: Fa-ti Fan, The State University of New
York, Binghamton
1. Veterinary Science and Cattle Breeding
   in Colonial Indochina, Annick Guénel,
   Centre National de la Recherché
   Scientifique, Paris and Sylvia Klingberg,
   Université Paris
2. Business as Usual?: Agricultural Research,
   the Rubber Industry, and Franco-Vietnamese
   Relations at the Beginning of
   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

Mutations
Hospitalité (Level 5)
Chair and Commentator: Angela Creager,
Princeton University
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

Concepts of Generation
Alfred-Rouleau A (Level 4)
Chair and Commentator: Erika Milam,
University of Maryland, College Park
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: Nineteenth-Century
   Embryology Through Miscarriage Materials,
   *Shannon K. Withycombe, University of
   Wisconsin, Madison

Environmetal Histories of Science: Knowing
Nature, Transforming Nature
Alfred-Rouleau C (Level 4)
Chair: Christine Keiner, Rochester Institute of
Technology
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

Clues from Genesis: The Mosaic Account and
Early Modern Natural Philosophy
Salon des Arts (Level 6)
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
Discourse and Discovery: Colonial and Atlantic Encounters and Ideologies of Modern Science
Alfred-Rouleau B (Level 4)
Chair and Commentator: Neil Safer, University of British Columbia
1. Botanical Discovery in a Not So New World: French North American Folk Taxonomies in the 17th and 18th 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 Spanish Baconianism as a Tool for Understanding Spanish Contributions to Modern Science, Margaret Ewalt, Wake Forest University

Objects of Science, Objects of Culture: Models and Specimens in 19th Century Natural History
Grand Salon B (Level 4)
Chair: Soraya de Chadarevian, University of Cambridge
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 19th-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

In the Mind's Eye: Technical Drawing in France and England, 1800-1850
Grand Salon C (Level 4)
Chair and Commentator: Hamilton Cravens, Iowa State University
2. British Technical Draughtsmen in the First Half of the 19th 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

Physiology and Morphology in the 19th Century
Mont-Royal (Level 6)
Chair: Bert Theunissen, Utrecht University
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

Friday, 6:00 – 6:45 PM
HSS Awards Ceremony (Please see the program and citations beginning on page 36)
Grand Salon B (Level 4)

Friday, 7:00 – 9:00 PM
Reception: Canadian Centre for Architecture (buses will pick up at the hotel’s Jeanne-Mance entrance and circulate between the hotel and the CCA -- tickets required). Sponsorship for this reception provided by the Social Sciences and Humanities Research Council of Canada Strategic Knowledge Cluster.

The CCA (Centre canadien d’architecture / Canadian Centre for Architecture http://www.cca.qc.ca/en ) was founded in 1979 to promote public understanding and appreciation of architecture and urbanism, and also to foster research and public debate on the history, theory and practice of architecture and urban design in today’s society. It is currently occupies a unique place in Montréal's cultural and educational landscape, running exhibitions through the year and bringing visiting scholars to use its extensive special collections. As the venue for some of Montréal's most exciting exhibitions, and as the home of one of the city's most interesting bookstores, the CCA was a natural choice as a venue for our Friday night reception. Guests will be able to circulate through the exhibition space, and the bookstore will be open, so come ready to shop.
Getting to the CCA:
1920, rue Baile, Montréal, Québec, H3H 2S6

The CCA is easy to reach by the city’s public transport system (with a short walk at the end of the bus or metro journey), and we would encourage those who wish to get a feel for Montréal to take public transport (details below). The bus and metro are part of the same system and both use the same tickets (which you can buy in the metro station or on the bus, with correct change.)

For those less adventurous, less mobile, or just tired after a long day’s conferencing, we have arranged for buses to shuttle on a loop between the Hyatt and the CCA between 7pm and 10:00.

By shuttle bus: orange school buses will pick up guests from the hotel and loop back and forth. Depending on traffic, each journey should be between 8 and 20 minutes.

By metro: from the Place des Arts station (across Ste Catherine St from the hotel and adjoining the mall below), take the Green Line west (direction: “Angrignon”) for three stops, and get off at station “Guy-Concordia”. It’s best to leave the metro station by the “Saint Mathieu” exit, and then walk three blocks south and one block west. Each way: $2.75; $1.75 for those over 65 (tickets available in the metro station).

By city bus: fare each way: $2.75; $1.75 for those over 65 (tickets available in the metro station, or pay on entering the bus, with exact change).
Option 1 (the 15 bus): from the hotel, walk up to the corner of Blvd de Maisonneuve and rue St-Urbain. From there, take the number 15 bus (which leaves twice an hour), heading west along Blvd de Maisonneuve, and get off at St-Mathieu. (This is less than 10 minutes). You could walk the rest of the way (three blocks south and one block west), but you might be lucky and find the 165 bus heading south down St-Mathieu, in which case you could transfer and use it to take the three blocks south (getting off at Baile). You could get the same bus (no. 15) back to the Hyatt by catching it on Ste-Catherine St.
Option 2 (the 535 bus): from the hotel, walk one block west to Ste-Catherine and Bleury (OR Rene-Levesque and Bleury); take the no. 535 bus (they pass every 8 minutes or so at this time) -- this will take you as far as the corner of Rene-Levesque and Guy; then walk the remaining 500 metres along Rene-Levesque to the corner of Rue du Fort, turn right and enter the CCA from the corner of rue du Fort and Baile.

Friday, 7:30 – 9:00 PM

WORKSHOP: The Legacy of Antiquity: Books and Practice
Argenteuil (Level 4)
Organizer: Alain Touwaide, Smithsonian Institution, Institute for the Preservation of Medical Traditions
Introduction -- Alain Touwaide

On the Authorship and Use of Pharmacological Books in Ancient Mesopotamia: Learned Scholars or Expert Practitioners?, Barbara Böck, Instituto de Lenguas y Culturas del Mediterráneo y Oriente Próximo, CCHS – CSIC, Madrid, Spain

Medical Book Learning and Medical Practice in 12th Century Byzantium: Anna and the Physicians, Glen Cooper, Brigham Young University

The Medieval Transmission and Reception of Hippocrates’ Aphorisms, Faith Wallis, McGill University

Discussion

Conclusions and perspectives

Psychology in the 20th Century
Picardie A (Level 5)
Chair: Stephen T. Casper, Clarkson University
1. Hugo Münsterberg, Psychotechnics, and the Psychologizing of Cinema, Jeremy Blatter, Harvard University
2. “Murder of the Mind?” The Psychosurgery Controversy of the 1970s, Brian Casey, National Institute of Health
3. Narratives of the Unconscious: Henry Murray, Literary Interpretation, and the Thematic Apperception Test, Jason Richard Miller, University of California, Los Angeles
4. The Birth of Information in the Brain: Edgar Adrian and the Vacuum Tube, Justin Garson, University of Texas, Austin
Making the Sciences Humaines Scientific
Picardie B (Level 5)
Chair: David Robinson, Truman State University
1. The Language of Objects: Christian Jürgensen Thomsen’s Science of the Past, Kasper Risbjerg Eskildsen, Roskilde University, Denmark
2. ‘The Missing Link Expeditions’, 1921-28: or, How Peking Man Wasn’t Found, Peter C. Kjaergaard, University of Aarhus, Denmark

Techniques and Instruments for Science
Auteuil A (Level 5)
Chair: Dana Freiburger, University of Wisconsin, Madison
1. Mastering the Play of Light and Shadow”: Doctors, Opticians and the Shadow Test in Late 19th-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
4. Mechanical Objectivity or Instrumentalizing Theory? Introducing Automatic Recorders in Radio Ionospheric Sounding, 1930-39, Chen-Pang Yeang, University of Toronto

Travelling and Collecting in the 18th and 19th Centuries
Anjou A/B (Level 5)
Chair: Richard Bellon, Michigan 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

Saturday, November 6, 2010

Saturday, 7:30 – 8:45 AM
Committee on Honors and Prizes Breakfast
Café Fleuri
Osiris Editorial Board Breakfast
Touraine (Level 5)
Committee on Education
Café Fleuri
Saturday, 9:00 – 11:45 AM
(Coffee Break 10:00-10:15
Grand Salon Foyer)

Artifacts of Science
Salon des Arts (Level 6)
Chair: Benjamin Wilson, 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. Recontextualizing the V-2, David DeVorkin, Smithsonian National Air and Space Museum
3. Re-examining Icons on Display, David Pantalony, Canada Science and Technology Museum

Spatial Knowledge: Writing and Drawing as Epistemic Practices
Grand Salon B (Level 4)
Chair and Commentator: Seymour Mauskopf, Duke University
1. The Space of Drawing, the Time of Modeling: Representing Comets in the Later 17th Century, Matthew C. Hunter, California 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
Thinking with Specimens: Collections-Based Research in the Museum of Vertebrate Zoology

Été des Indiens (Level 6)
Chair and Commentator: Cathryn Carson, 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

History of Mathematics: New Perspectives from the Far East: China, Japan, and Vietnam
Mont-Royal (Level 6)
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. Trigonometric Tables in China, Jiang-Ping Jeff Chen, St. Cloud State University
5. Chinese Mathematics in Vietnam: Transmission and Adaptation, Alexei Volkov, National Tsing Hua University

Science and American Empire
Alfred-Rouleau B (Level 4)
Chair and Commentator: Paul Sutter, University of Colorado-Boulder
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
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

Rethinking the Emergence of Islamic Science
Hospitalité (Level 5)
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 Abb sid Court, Taro Mimura, University of Tokyo

The Science, Politics, and Publics of Climate Change
Alfred-Rouleau A (Level 4)
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

There is Something in the Air: Chemistry, Medicine, and Enlightenment Reform
Alfred-Rouleau C (Level 4)
Chair and Commentator: Trevor Levere, University of Toronto
2. Modernizing Medicine in the Enlightenment: John Pringle and the Medical Place of Chemical Knowledge, Erich Weidenhammer, University of Toronto


4. Measuring Airs and Virtues: Debating Eudiometry between the Medical Environment and the Experimental Sphere, *Victor Boantza, McGill University

Controlling Life in 20th-Century Biology: A Session Inspired by the Work of Philip J. Pauly
Grand Salon C (Level 4)

Chair: 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


Women as Subjects of Science (Sponsored by the HSS Women’s Caucus)
Jeanne-Mance (Level 6)

Chair: Sheila Faith Weiss, Clarkson University

1. ‘Femmes fatales’. Examining Criminal Women in 19th-Century France, Aude Fauvel, Max Planck Institute for the History of Science


3. Regenerative Medicine in Context: Co-evolving Conceptions of the Fetus and its Worth, Andrew J. Hogan, University of Pennsylvania

4. Between Healers and Jurists: Abortion in Tridentine Italy, John Christopoulos, University of Toronto

Saturday, 9:30-11:30 AM
Nominating Committee – Touraine (Level 5)

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.” - Grand Salon C (Level 4)

Graduate and Early Career Caucus (GECC) Business Meeting (drinks and light snacks will be served) - Alfred-Rouleau A (Level 4)

Committee on Meetings and Programs Meeting - Café Fleuri

Global Histories of Science: Exploring New Resources on the Web - Été des Indiens (Level 6)
Chair: Jan Golinski, University of New Hampshire

1. History of Science in Latin America and the Caribbean, Julia Rodriguez and Jan Golinski, University of New Hampshire

2. World History of Science Online, Stephen Weldon, HSS Bibliographer/University of Oklahoma

3. Rational Sciences in Islam, Sally Ragep, McGill University

Saturday, 12:00 – 3:00 PM
Committee on Publications Meeting
Touraine (Level 5)

Saturday, 1:30 – 3:10 PM

Research at the Frontier: Scientific Practices and the Dynamics of Expansion
Alfred-Rouleau C (Level 4)

Chair: Bruce Hevly, University of Washington

1. Terrestrial Physics as Investment in Frontier Building, Bruce Hevly, University of Washington

2. Malaria, Railroads and the Inner Exploration of Brazil, Jaime Larry Bechimol, Casa de Oswaldo Cruz
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

Rethinking the History of Organicism: New Perspectives on Vital Science
Alfred-Rouleau A (Level 4)
Chair and Commentator: Daniel McKaughan, Boston College
1. Blumenbach's Theory of Vital Forces: A Research Program?”, François Duchesneau, Université de Montréal
2. From Substantival to Functional Vitalism and Beyond: Animal Economies, Organisms and Existential Attitudes, Charles T. Wolfe, University of Sydney
4. The Organistic Moment at Cambridge and Why It Was Nearly Lost, Erik Peterson, University of Notre Dame

Progressive Science? Embodiment and Reform in Progressive America
Alfred-Rouleau B (Level 4)
Chair: Garland Allen, Washington University
1. The Metaphysical Club, Pragmatism, and the Search for New Methods in American Biology, 1880-1910, Keith R. Benson, University of Washington (Paper will be read by Michael Reidy.)
4. Female and Fowl: Eugenic and Euthenic Conflicts about the Body and Reproduction in Early Twentieth Century America, Kathy Cooke, Quinnipiac University

Practical Knowledge in the Early Modern Period
Salon des Arts (Level 6)
Chair: Larry Stewart, University of Saskatchewan
1. Natural Histories of State and Industry: Proto-Industrial Artisan Production and State Sciences in 18th-Century Europe, Adelheid Voskuhl, Harvard University
2. Ars and Scientia in Venetian Shipbuilding Practice During the Late Middle Ages and the Renaissance, Lilia Campana, Nautical Archaeology Program
3. Diagramming the Sea: Depicting Charts and Currents in 17th-Century Navigation Textbooks, Margaret Schotte, Princeton University

Animating the Heavens and the Earth
Hospitalité (Level 5)
Chair: Faith Wallis, McGill University
1. The Animation of the Heavens in Albert the Great's *De caelo et mundo*, Adam Takahashi, Radboud University Nijmegen
2. God, Intellect and Angels in the Cosmology of Julius Caesar Scaliger, Kuni Sakamoto, University of Tokyo
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

Pre-modern Medicine
Mont-Royal (Level 6)
Chair: Valentina Pugliano, Oxford University
1. Healing by Incantation in Medieval China, Yan Liu, Harvard University
2. The Medieval Hippocrates: A Late Middle Ages Transformation of the Greek Medical Tradition, Marco Viniegra, Harvard University
3. Herophilus' Pulsating Medicine, Deirdre Moore, University of King's College

Industry, Patronage and Science
Été des Indiens (Level 6)
Chair: Margot Iverson, Institute of Medicine
1. The Chemical Foundation as Academic/Industry Interface, 1919-1941, Tom Scheiding, Elizabethtown College; and Phil Mirowski, University of Notre Dame
2. Selling the Research Idea: The National Research Council's Promotion of Industrial Research, 1916-1945, Eric S. Hintz, University of Pennsylvania (paper will be read by Margot Iverson, Institute of Medicine)


**Biology and Ideology**

Jeanne-Mance (Level 6)
Chair: Marsha Richmond, Wayne State University

1. Mendelism and Eugenics in Vienna: Mendel’s Rediscoverer Erich Tschermak-Seysenegg and His Active Involvement with Eugenics, Veronika Hofer, University of Vienna

2. ‘Falling in Love Intelligently’: Eugenic Love in the Progressive Era, Susan Rensing, University of Wisconsin, Oshkosh

3. From Organic Morphogenesis to Liberal Socialism: Eugenio Rignano and the “Centro-Epigenetic” Hypothesis of Heredity and Development, Maurizio Esposito, Leeds University, England

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

**Science in America before 1900**

Grand Salon C (Level 4)
Chair: David Sepkoski, University of North Carolina, Wilmington

1. “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

2. Lester Frank Ward v. Othniel C. Marsh: Defining the Mesozoic, Debra Lindsay, University of New Brunswick

3. Knowing Nature, Knowing Gender, and Eating Turkey: Agriculture and Natural History in 19th-Century America, Neil Prendergast, University of Arizona

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

Grand Salon B (Level 4)
Chair: William C. Summers, Yale University
Commentator: Miklos Muller, Rockefeller University

1. The Cache Economy: Science, Capital and Socialism, Jenny Leigh Smith, Georgia Institute of Technology


**Saturday, 3:10 – 3:30**

Coffee Break (Grand Salon Foyer)

**Saturday, 1:30 – 5:00 PM**

**Poster Session** - Grand Salon Foyer (Level 4)

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


5. SPACE MADNESS: The Dreaded Disease That Never Was, Matthew H. Hersch, HSS-NASA Fellow in the History of Space Science

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, Beijing Normal University
7. The Role of Interferometry in the Aether Debate Throughout the 19th Century, Roberto A. Pimentel and Carlos B. G. Koehler, Universidade Federal do Rio de Janeiro

Saturday, 3:30 – 5:30 PM

Reexamining the Uneasy Partnership: Economics, the Nation State, and the Public Welfare, 1920s-1980s
(Sponsored by the Forum for the History of Human Science) - Grand Salon C (Level 4)
Chair and Commentator: Sarah Igo, Vanderbilt University

Seeds of Change: Agricultural Production, Commercial Interests, and the Science of Breeding, 1850-1940
Alfred-Rouleau A (Level 4)
Chair and Commentator: Daniel Kevles, Yale University
1. Prolific: Valuing Proprietary Staple Varieties in 19th-Century America, Courtney Fullilove, Columbia University
2. From Farm to Can: The Canning Industry and Agricultural Production in the Early 20th 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

Losing Arguments in Early Modern Science
Mont-Royal (Level 6)
Chair: James Byrne, Princeton 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 17th Century, Natalie Kaoukji, University of Cambridge
Episodes in Early Science

Chair: Pamela Long, Independent Scholar
1. Foundations of an Ancient Optical Textbook, Al-Bas‘ir F ‘Ilm Al-Man zir, Comparing with Today’s Textbooks and Major Books of Optics Before it, Maryam Farahmand, University of Tehran
2. Mechanics in the Aristotelian Physical Problems, Jean De Groot, Catholic University of America
3. Science and Instruments: Levi ben Gerson’s (1288–1344) Pinhole Camera, Yaakov Zik, University of Haifa
4. “You Asked Me, Princess, how Thunder and Lightning Happen”: Byzantine Science and Learning in the 11th and 12th Centuries, Anne-Laurence Caudano, University of Winnipeg
5. Determinism in Abu Ma’shar’s Defense of Astrology, Teri Gee, University of Toronto

Darwin on Reason and Method

Chair: Robert Richards, University of Chicago
1. Charles Darwin and the Natural History of Reason, Kathryn Tabb, University of Pittsburgh
2. Darwinian Evolution: An Implication Regarding the Scientific Method Itself, G. Arthur Mihrum, Princeton, NJ; Danielle Mihrum, University of Southern California
3. Darwin and Wallace on Morals and Ethics: Two Different Views from Natural Selection, Rosaura Ruiz Gutierrez, School of Sciences, National Autonomous University of Mexico
4. Darwin’s Rhetorical Use of Methodological Naturalism in The Origin of Species, Stephen C. Dilley, St. Edward’s University
5. The Rhetoric of Probability: How Darwin Overcame the Argument from Design, Daniel A. Newman, University of Toronto

Natural History, Bugs and Plants

Chair: Nicholas Dew, McGill University
1. Between Love and Science: Apicultural Research and Ethical Beekeeping in the British Isles, c. 1750-1850, Adam Ebert, Mount Mercy College
2. “A Treatise of Buggs”: The Use and Re-Use of Natural History in 18th-Century England, Jennifer Steenshorne, Columbia University
3. Newtonian Vegetables and Perceptive Plants, Susannah Gibson, University of Cambridge

Saturday, 4:00 – 6:00 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

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

**Saturday, 5:00 – 6:00 PM**

Committee on Research and Profession Meeting
Touraine (Level 5)

**Saturday, 6:00 – 7:00 PM**

HSS Distinguished Lecture
Jeanne-Mance (Level 6)

Nancy Siraisi,
(Distinguished Professor Emerita in History at Hunter College and at the Graduate Center, City University of New York)

What Was Medicine 1450-1620 and What Did It Have To Do with Science? Introduction by Ann Blair, Harvard University, Henry Charles Lea Professor of History

**Saturday, 7:30 – 9:30 PM**

HSS/PSA Joint Dinner – Complexe Desjardins
(central fountain area off of level 4)

Wine for this dinner is provided by an anonymous donor in honor of Allan Rex Sandage, maven of the Hubble constant

The Complexe Desjardins in downtown Montréal houses the offices of several companies, including the Desjardins bank (the largest association of credit unions in North America, founded in 1900) and some branches of the Québec government. It also houses the Hyatt Regency Hotel, this year’s HSS/PSA meeting location. Especially useful in winter, the Complexe is an important node in Montréal’s underground city (RÉSO), the largest indoor “city” in the world. The large atrium built at the center of the Complexe, where the HSS/PSA dinner will be held, is used year round to host a variety of spectacles and exhibitions, record television shows, and launch music records from Québécois artists. Spacious, multifunctional, and well sunlit, this atrium has become over time a carrefour of Montréal’s cultural and community life. We have chosen the Atrium because it is the only venue close to the hotel that could fulfill the capacity requirements of the HSS-PSA for the Saturday-night event.

**SUNDAY, November 7, 2010**

**Sunday, 9:00 – 10:00 AM**

HSS Business Meeting (Please see agenda on page 43 ) - Picardie B (Level 5)

**Sunday, 10:00 – 12:00 PM**

Opportunities and Challenges: Plants and Evolution (1920-1950)
Hospitalité (Level 5)
Chair and Commentator: Vassiliki (Betty) Smocovitis, University of Florida
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 Twentieth Century, Adam Lawrence, University of California, Los Angeles

Medicine, Science, and the Stomach, 1540-1840
Salon des Arts (Level 6)
Chair and Organizer: Elizabeth Williams, Oklahoma State University
1. Fat, Dumb, Slow, and Prone to Sudden Death: Obesity in Early Modern Medicine, Michael Stolberg, University of 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 18th Century, *Elizabeth Williams, Oklahoma State University*
Gendering the Human Brain: Science, Language, and Sex Difference in the 19th and 20th Centuries - Été des Indiens (Level 6)
Chair and Commentator: Sarah S. Richardson, Harvard University
1. Woman, Know Thyself: Gender, Phrenology, and the Female Brain, Carla J. Bittel, Loyola Marymount University
4. Transgendered Cells: A History of Metaphors about Astrocytes, Meg Upchurch, Transylvania University

Once Bitten, Twice Shy? Early Modern Naturalists, Insects, and Animals
Jeanne-Mance (Level 6)
Chair and Commentator: Paula Findlen, Stanford 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

Computers as Scientific Instruments: Technologies, Scientific Practices, and Social Structures - Picardie A (Level 5)
Chair: Adelheid Voskuhl, Harvard University
Commentator: Andrew Russell, Stevens Institute of Technology
1. Recipes for Any Occasion. Computational Chemistry and the Desktop Computer, Johannes Lenhard, Bielefeld University, Germany
3. A Not-so-Short History of Computational Science: Building a Scientific Discipline in the Digital Age, *Ann Johnson, University of South Carolina

Scientific Organizations and Research Practices in Nationalist Times - Argenteuil (Level 5)
Chair and Commentator: Jeffrey Johnson, Villanova University
1. Research Divisions in Imperial Germany, an Organizational Scheme for War and Peace, *Jeremiah James, Fritz Haber Institute
2. Materials, Methods, and Management: The Kaiser-Wilhelm-Institute for Physical Chemistry Under the National Socialists, Thomas Steinhauser, Fritz Haber Institute

Science, Identity and Race
Anjou A/B (Level 5)
Chair: John Carson, University of Michigan
1. 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
2. Personalized Medicine or Scientific Racism? The Persistence of the Genetic Theory of Race and its Modern Day Tuskegee, Andrea Patterson, California State University, Fullerton
3. We can’t relocate the world: Activism and the Bravo Medical Program, Laura Harkewicz, University of California, San Diego

Expeditions, Imperialism and Science
Alfred-Rouleau A (Level 4)
Chair: Pnina G. Abir-Am, Brandeis 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. Intersecting Worldviews: Ricci World Maps in China, Ying Jia Tan, Yale University

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

Auteuil A/B (Level 5)

Chair: Miruna Achim, Universidad Autonoma de Mexico

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 18th Century, Miruna Achim, Universidad Autónoma Metropolitana

3. Deforestation, Climate Changes and the Environmental Heritage of the French Revolution, Fabien Locher, Centre national de la recherché scientifique, Paris