

HISTORY OF SCIENCE SOCIETY MEETING PROGRAM

November 6 – 9, 2014

Chicago, Illinois

Please be sure to read the printed errata for any updates to this program. Further updates and information during the meeting will be announced on the Twitter feed (@hssonline), using hashtag #hsspsa14.

Sessions will be held on four floors of the hotel. The session listings below include the level with the room name. The rooms are named with a common theme for each floor:

2nd level – The Great Lakes

3rd Level – Parks in Chicago

5th Level – Streets bordering Wrigley Field

16th Level – Chicago Ballroom

Fret not if your session is in one of the Wrigley Field rooms. Wrigley Field has proven to be quite kind to visitors for more than 100 years.

A note on the use of social media: This year the HSS will again take full advantage of all that social media (blogging, Twitter, Facebook, etc.) has to offer. That means you may see audience members on their mobile devices during talks. We want to encourage this kind of digital engagement among our members, so please keep in mind that if you see someone on their mobile device, they may simply be sending out messages about the conference to a wider audience. For those using social media during conference events, please be aware of your surroundings and keep it positive!

Childcare/Nursing Mothers Room: Waveland, on the 5th level, has been designated as a childcare/nursing mothers room for the duration of the meeting. There will be a section of the room screened off for more privacy.

The hours for the book exhibit and registration desk are as follows:

Registration Desk

Thursday, 10:00 AM – 6:00 PM

Great Lakes Ballroom Foyer

Friday, 8:00 AM – 5:00 PM

Outside Superior East

Saturday, 8:00 AM – 5:00 PM

Outside Superior East

Sunday, 8:00 – 12:00 PM

Outside Superior East

Book Exhibit

Thursday, 6:30 PM – 8:45 PM

Great Lakes Ballroom A and Foyer

Friday, 8:00 AM – 5:00 PM

Great Lakes Ballroom A and Foyer

Saturday, 8:00 AM – 5:00 PM

Great Lakes Ballroom A and Foyer

Sunday, 8:00 AM – 11:00 AM

Great Lakes Ballroom and Foyer

THURSDAY NOVEMBER 6

12:00 PM – 3:30 PM

HSS Council Meeting

Lincoln Park (Level 3)

1:30 PM – 3:00 PM

Calibrating Self and Society in the Modern Human Sciences

Washington Park I (Level 3)

Chair: Mary S. Morgan (London School of Economics)

- “Tracking the Nineteenth-Century Self: Self-Monitoring and Phrenology in the U.S. and the Netherlands,” Fenneke Sysling (Utrecht University)
- “Mental Testing in Russian Child Science, 1901–1936,” Katya Mishuris (University of Michigan)
- “Making Flavor Objective: Tasting Panels, Sensory Science, and Flavor Research, 1945–1977,” Nadia Berenstein (University of Pennsylvania)
- “Intellectual Origins of the Quantification of American Sociology: The Case of Franklin H. Giddings,” Taku Iwatsuki (University of Pittsburgh)

Capturing Distance, Documenting Travel: Film, Photography, and Expeditionary Science

Michigan Ballroom I (Level 2)

Chair and Commentator: Daniela Bleichmar (University of Southern California)

Organizer: Lukas Rieppel (Brown University)

- “A Film Never Made: History, Science, and Memory in Liberia,” Gregg Mitman (University of Wisconsin)
- “Feeling Dear Old Egypt?: Affect and the Politics of Knowledge in the Archaeological Photographs of James Henry Breasted,” Elizabeth Wolfson (Brown University)
- “Locating the Central Asiatic Expedition: Science, Business, and Foreign Intelligence,” Lukas Rieppel (Brown University)

“The Center of Gravity of Mathematics Has Moved More Definitely Toward America”: The Mathematical Sciences in America, 1930–1950

Huron A (Level 2)

This session is sponsored by the Forum for the History of the Mathematical Sciences.

Chair: Albert Lewis (Educational Advancement Foundation)

Organizer: Karen Parshall (University of Virginia)

- “Celebrating the American Mathematical Endeavor: The Semicentennial of the American Mathematical Society, 1938,” Karen Parshall (University of Virginia)
- “Cultivating Mathematics: Emigré Mathematicians and New York University’s Graduate Department of Mathematics,” Brittany Shields (University of Pennsylvania)
- “From Vienna to New York: Abraham Wald’s Statistical Research and the American Mathematical Statistics Community,” Patti Hunter (Westmont College)
- “Creating a Life: Emil Artin in America,” Della Dumbaugh (University of Richmond)

Histories of Evolutionary Thought between Science and Philosophy

Great Lakes D (Level 2)

Chair: Sabetai Unguru (University of Tel-Aviv)

- “Charles Darwin’s Theory of Moral Sentiments: What Darwin Really Borrowed from Adam Smith,” Greg Priest (Stanford University)
- “William Whewell, Historical Scientist,” Aleta Quinn (University of Pittsburgh)
- “Weismannism Comes to America: Pragmatism and Evolution in the 1890s,” Trevor Pearce (University of North Carolina at Charlotte)
- “Bergsonian Science: Creative Evolution in the Twentieth Century,” Peter Collopy (University of Pennsylvania)

History of the History of Science in the U.S., 1940–1976—The Golden Age?

Millennium Park (Level 3)

Chair: Toby Appel (Yale University)

Organizer: Margaret Rossiter (Cornell University)

Chair: Joy Harvey (Independent Scholar)

- “George Sarton and Alexandre Koyré: Two Messengers of the History of Science,” Elise Aurières (University of Paris I, Pantheon-Sorbonne)
- “A Short History of the Yale Department of the History of Science and Medicine, 1960–77,” Margaret Rossiter (Cornell University)
- “Far from rejecting Tom?: Harvard and Thomas S. Kuhn, 1956–1976,” Joy Harvey (Independent Scholar)

Innovations in Animal Husbandry and Livestock Breeding and the Formation of New Forms of Expertise

Garfield Park (Level 3)

Chair: Bert Theunissen (Utrecht University)

Organizers: Jesper Oldenburger and Steven van der Laan (Utrecht University)

- “Fighting Salmonella: Struggles between Public Health and Agriculture in the Netherlands (1959–1978),” Floor Haalboom (University Medical Center Utrecht)
- “Artificial Fertilization in the Life Sciences of the 18th Century,” Barbara Orland (University of Basel)

- “Artificial Insemination in Dutch Pig Breeding: A Hard-Won Success,” Steven van der Laan (Utrecht University)
- “Sheep and Artificial Insemination: A Failure to Innovate,” Jesper Oldenburger (Utrecht University)

Paracelsus and His Readers: Alchemy, Gender Identity, and Imagination

Great Lakes E (Level 2)

Chair and Organizer: Jole Shackelford (University of Minnesota)

- “Paracelsus Was a Transmutational Alchemist,” Andrew Sparling (Independent Scholar)
- “Toxites as Paracelsian Advocate,” Chad Gunnoe (Aquinas College)
- “Syphilis and Imagination in Paracelsus’s Theory of Transplantation,” Hiro Hirai (Radboud University Nijmegen)
- “Sex Differentiation in the Later Works of Paracelsus as Precursors to Psychological Theories of Sexuality and Gender,” Amy Cislo (Washington University)

Scientific Objects and the Objects of Science

Marquette Park (Level 3)

Chair: Erica O’Neil (Arizona State University)

Organizers: Kate MacCord and Paige Madison (Arizona State University)

- “A Natural History of the Enamel Knot,” Kate MacCord (Arizona State University)
- “The Many Lives of Mosquito Nets: History of a Mundane Public Health Technology,” Kirsten Moore (Johns Hopkins Medical Institutions)
- “The Meandering Paths of the Feldhofer and the Gibraltar Neanderthals,” Paige Madison (Arizona State University)
- “From Browne to Andon: Building the Biography of the Jellyfish Aquarium,” Samantha Muka (University of Pennsylvania)

Trans-Atlantic Conduits: Circulating Scientific Knowledge in Early Modern Empires

Ontario (Level 2)

Chair and Commentator: Neil Safier (John Carter Brown Library)

Organizer: Marcelo Aranda (Stanford University)

- “Translating Empiricism: Spanish Books, Protestant English Translations, and the Invisible Early Modern Science of the Atlantic World,” Antonio Barrera-Osorio (Colgate University)
- “Fruit of the Ignatian Tree: Jesuits and their Students in the Circulation of Mathematical Knowledge in the late Seventeenth Century Spanish Empire,” Marcelo Aranda (Stanford University)
- “A Global Laboratory: Studies of Pandemic Diseases in the 1800s,” Julia Mansfield (Stanford University)

3:00 PM – 3:15 PM

Coffee Break

Great Lakes Ballroom Foyer (Level 2)

3:15 PM – 5:15 PM

Amerindian Knowledge and Science during the Long Enlightenment

Huron A (Level 2)

Chair and Commentator: William Eamon (New Mexico State University)

Organizer: Marcy Norton (George Washington University)

- “Mestisaje and The Royal Society,” Marcy Norton (George Washington University)
- “Beyond Erasure: Pehr Kalm and Indigenous Knowledge in Eighteenth-Century North America,” Christopher Parsons (Northeastern University)
- “Instructions in Independence: Amerindian Languages and National Science in the Early United States,” Cameron Strang (University of Nevada, Reno)

Contingency in Early Modern Science and Natural Philosophy

Millennium Park (Level 3)

Chair and Commentator: Jürgen Renn (Max Planck Institute for the History of Science)

Organizer: Pietro Daniel Omodeo (Max Planck Institute for the History of Science)

- “Secundum quid and Determined Necessity in Scholastic and Early Modern Mechanics,” Pietro Daniel Omodeo (Max Planck Institute for the History of Science)
- “Contingency and Laws of Nature in Descartes’s Physics,” Rodolfo Garau (Max Planck Institute for the History of Science)
- “Kepler on Contingency and Matter,” Jonathan Regier (Université Paris 7 – Diderot)
- “Contingency in the Universe of Precision,” Ofer Gal (University of Sydney)

Economies of Nature: Accounting for Silk, Coal, and Filth

Great Lakes E (Level 2)

Chair: Lissa Roberts (University of Twente)

Commentator: Anya Zilberstein (Concordia University)

Organizer: Fredrik Albritton Jonsson (University of Chicago)

- “Circulating Filth: Chemical Accountancy and Waste Management in the Eighteenth-Century Dutch Republic,” Joppe van Driel (University of Twente)
- “Coal Futures 1789–1884,” Fredrik Albritton Jonsson (University of Chicago)
- “Coining Foliage into Gold: Genres of Scientific Storytelling and Mulberry Bubble, 1838–1839,” Emily Pawley (Dickinson College)

Einstein and the Relation between Physics and Mathematics

Michigan Ballroom I (Level 2)

Chair: Diana Buchwald (Einstein Papers Project, California Institute of Technology)

Organizers: Michel Janssen (University of Minnesota) and Christoph Lehner (Max Planck Institute for the History of Science)

- “Einstein as the Greatest of the Nineteenth Century Physicists,” John Norton (University of Pittsburgh)
- “Einstein’s 1913 Vienna Lecture: Modeling Gravitational theory on Electrodynamics,” Michel Janssen (University of Minnesota) and Jürgen Renn (Max Planck Institute for the History of Science)
- “A Virtuous Theorist’s Theoretical Virtues: Einstein on Physics vs. Mathematics and Experience vs. Unification,” Jeroen van Dongen (Utrecht University)
- “Einstein’s Realism between Mathematics and Physics,” Christoph Lehner (Max Planck Institute for the History of Science)

Episodes in the History of Atmospheric Science

Marquette Park (Level 3)

Chair: Nancy Slack (The Sage Colleges)

- “Kites: The Rise and Fall of a Scientific Object,” David Teira and Juan M. Suay (Universidad Nacional de Educación a Distancia, Madrid)
- “A Ghost-Catching Weather Bureau: Psychical Research and Meteorology in Nineteenth-Century America,” Alicia Puglionesi (Johns Hopkins University)
- “Geographies and Policies of the Arctic Atmosphere: The Emergence of a Research Specialization in Canada,” Matthew Wallace (Université du Québec, Montréal)
- “Successfully Navigating Scientific Borderlands and Subcultures: Astronomer Walter Orr Roberts, The Sun-Earth Connection and the National Center of Atmospheric Research,” Joe Bassi (Embry-Riddle Aeronautical University)

Forum for the History of the Chemical Sciences Distinguished Lecture and Business Meeting

Ontario (Level 2)

- “If you can spray phlogiston, is it real?” Hasok Chang, University of Cambridge
- Award of the 2014 Partington Prize (4:45)
- Business Meeting for the Forum for the History of the Chemical Sciences

Methodology across the Life Sciences

Superior East (Level 2)

Sponsored by the Philosophy of Science Association

Chair: Richard Burian (Virginia Tech)

- “Atrazine Research and the Criteria of Characterized Adequacy,” Jack Powers (University of Minnesota)

- “Experiment and Animal Minds: Why Statistical Choices Matter,” Irina Meketa (Boston University)
- “You Can't Go Home Again - or Can You? 'Replication' Indeterminacy and 'Location' Incommensurability in Three Biological Re-Surveys,” Ayelet Shavit (Tel Hai College)

A Play of Scales? Modes of Generating Modern Biomedical Knowledge

Grant Park (Level 3)

Chair: Samantha Muka (University of Pennsylvania)

Organizers: Dmitriy Myelnikov and Kathryn Schoefert (University of Cambridge)

- “‘Small Scale Purifications Are No Longer Practical’: Scaling Up Retrovirus Research in the 1970s,” Robin Scheffler (Yale University)
- “‘A Boutique Operation’: Making Transgenic Mice in the 1980s,” Dmitriy Myelnikov (University of Cambridge)
- “‘Human Beings Aren’t Rabbits’ (Grünthal, 1966): Scales at Play in Non-Therapeutic Pharmaceutical Trials c.1940 – 1970,” Kathryn Schoefert (University of Cambridge)

Science and the Technocratic Making of Modern China

Great Lakes D (Level 2)

Chair and Commentator: Eugenia Lean (Columbia University)

Organizer: Shellen Wu (University of Tennessee, Knoxville)

- “The Social Network: Standardizing Scientific Terminology between Non-State and State Actors in Republican China,” David Luesink (University of Pittsburgh)
- “Electricity and China’s Military-Industrial Complex, 1937–1957,” Yingjia Tan (Yale University)
- “Mapping the Geography of Modern China,” Shellen Wu (University of Tennessee)

Women’s Resistance to and Appropriation of Eugenic Social Reforms

Washington Park I (Level 3)

Chair: Sally Gregory Kohlstedt (University of Minnesota)

Organizer: Katrina Jirik (University of Minnesota)

- “From Chicago to Shutesbury Mass: Isabelle Kendig’s Conflict with Charles Davenport,” Ben Harris (University of New Hampshire)
- “‘Doctor-less Birth Control’: Bringing Birth Control to California’s Migrant Workers, 1939–1942, Kelly O’Reilly (Vanderbilt University)
- “‘The Eugenics of the Present Has Too Little of the Feminine in It’: Gendered Debates about Eugenic Marriage in the Progressive Era U.S.,” Susan Rensing (University of Wisconsin-Oshkosh)
- “The Best Interest of the Child: Choosing Placement in an Institution for the Feeble-Minded in Early Twentieth Century America,” Katrina Jirik (University of Minnesota)

5:30 PM – 7:00 PM

Plenary Session: Bounded Rationality and the History of Science

Chicago Ballroom (Level 16)

Chair and Commentator: Lorraine Daston, (Max Planck Institute for the History of Science)

Organizer: Colin Webster (University of California, Davis)

- “Looking for Limits: Configuring Minds, Mathematics, and Machines in the Mid-Twentieth Century,” Stephanie Dick (Harvard University)
- “Hypothesis Bound: Trial and Error in the Nineteenth Century,” Henry Cowles (Yale University)
- “Financial Bubbles and the Boundaries of Economic Rationality in the Past,” William Deringer (Columbia University)
- “Heuristic Medicine: the Methodists and Galen,” Colin Webster (University of California, Davis)

7:00 PM – 8:30 PM

Opening Reception

Great Lakes Ballroom and Foyer (Level 2)

Cash bar and light hors d’oeuvres

Social Engagement Activities of the Joint Caucus for Socially Engaged Philosophers and Historians of Science (JCSEPHS)

Great Lakes Ballroom (Level 2)

Organized by the Joint Caucus for Socially Engaged Philosophers and Historians of Science

Conveners: Sandra Mitchell (University of Pittsburgh)
Jane Maienschein (Arizona State University)
Rachel Ankeny (University of Adelaide)
Dawn Digrius (The California State University)
Julia Bursten (University of Pittsburgh)

- “Podcasts,” Carla Nappi (University of British Columbia)
- “Science Museums and Exhibitions,” Kate MacCord and Erica O’Neil (Arizona State University)
- “Engaging Federal Agencies and Committees,” Lee Zwanziger (U.S. Food and Drug Administration)
- “Instant HPS: Short Videos for a General Audience,” Sandra Mitchell, Edouard Machery, John Norton, and Mazviita Chirimuuta (University of Pittsburgh)
- “Using Social Media like Facebook and Twitter to Get Out the Message,” Paige Madison and Steve Elliott (Arizona State University)

- “Talking with the Press,” Naomi Oreskes (Harvard University)
- “How I got Inside the Beltway,” Jim Fleming (Colby College)
- “Communicating Science on Socially Relevant Topics,” Kevin Elliott (Michigan State University) and Dan McKaughan (Boston College)
- “Protecting At-Risk People and Consulting for Federal Agencies,” Kristin Shrader-Frechette, Dustin Crummett, Emily Spencer, and Rebecca Thomas (University of Notre Dame), and Christopher Glueck (Indiana University)
- “Deliberative and Participatory Projects on Food Value,” Rachel Ankeny and Heather Bray (University of Adelaide)
- “Toolbox Project,” Michael O’Rourke and Sean Valles (Michigan State University) and Chad Gonnerman (University of Southern Indiana)
- “Library Talks for the Public,” Dan Hicks (University of Western Ontario)
- “(History of) Science Cafés,” Jessica Baron (History of Science Society/University of Notre Dame)

8:45 PM – 10:00 PM

HSS/PSA Graduate and Early Career Caucus Mixer

The Grill on the Alley Restaurant

Join the PSA and GECC for an early careerists mixer following the opening night reception. Appetizers will be provided.

FRIDAY NOVEMBER 7

7:30 AM – 8:45 AM

HSS Women’s Caucus Breakfast (all are welcome)

Chicago Ballroom (Level 16)

Committee on Honors and Prizes Meeting

The Grill on the Alley Restaurant

9:00 AM– 11:45 AM (Break from 10:00 to 10:15)

The coffee break will be in the Great Lakes Ballroom Foyer (Level 2)

Agnotology – Its Untapped Potential

Huron A (Level 2)

Sponsored by the Philosophy of Science Association

Chair: Manuela Fernández Pinto (University of Helsinki)

- “Hermeneutical Injustice and Agnotology: The Case of the Disappearance of Asperger’s Syndrome,” Miriam Solomon (Temple University)
- “Agnotological Challenges: Coping with Biases in Research Direction and Assessment,” Martin Carrier (Bielefeld University)
- “How Ignorance Makes Morality Possible: Kant on the Limits of Scientific Knowledge,” Michael Friedman (Stanford University)
- “Should Some Knowledge Be Forbidden? The Case of Cognitive Differences Research,” Janet Kourany (University of Notre Dame)

Assessment I: Appraising Assessment. Defining Excellence, Competence, and Normalcy in the Nineteenth and Twentieth Centuries

Great Lakes D (Level 2)

Chair and Commentator: Ted Porter (University of California, Los Angeles)

Organizer: Melinda Baldwin (Harvard University)

- “The Referee, or the Appearance and Disappearance of a Scientific Reader,” Alex Csiszar (Harvard University)
- “How to Cheat on a Victorian Chemistry Exam,” James Elwick (York University)
- “What A Young Husband Should Know: The Rhetoric of Science and Adult Sex Education at the Turn of the Twentieth Century,” Matthew Lavine (Mississippi State University)
- “Useful or Merely Excellent? Evaluating Proposals at the National Science Foundation, 1951–1976,” Melinda Baldwin (Harvard University)

Beyond the Laboratory: Animals and the Culture of Scientific Knowledge

Marquette Park (Level 3)

Chair and Commentator: Robert Mitchell (Eastern Kentucky University)

Organizer: Jeannette Vaught (University of Texas at Austin)

- “‘If Therefore We Would Obtain Such Property or Virtue, Let Us Seek for Such Animals’: Animals and the Magical Theology of Agrippa von Nettesheim,” Allison Kavey (John Jay College of Criminal Justice, CUNY)
- “Representing Animal Minds in Early Animal Autobiography: Charlotte Tucker’s *The Rambles of a Rat* (1857) and Nineteenth-Century Natural History,” Julie A. Smith (Independent Scholar)

- “Envisioning Living Tissue: Race, Animality, and Conflicts Over Vivisection in 1920s America,” Jeannette Vaught (University of Texas at Austin)
- “More than a Fox, Not Quite a Hound: Re-Thinking the Culture and Science of Domestication,” Amy Nelson (Virginia Tech)

Cultures of Work in the Human and Field Sciences

Erie (Level 2)

Chair and Commentator: Suman Seth (Cornell University)

Organizers: Wendy Doyon (University of Pennsylvania) and Marissa Petrou (University of California, Los Angeles)

- “Who Puts the Work in Fieldwork? Labor and Archaeological Discovery in Egypt,” Wendy Doyon (University of Pennsylvania)
- “Defining Work, Picturing Gender: German Visual Anthropology of Late Spanish Colonial Philippines,” Marissa Petrou, (University of California, Los Angeles)
- “Landscapes of Leisure or Labor? Making Places for U.S. Field Biology in the Caribbean,” Megan Raby (University of Texas)
- “Legalizing Psychiatric Expertise: Emotions as Scientific Fact and Legal Proof in Modern Italy,” Daphne Rozenblatt (Max Planck Institute for Human Development)

Decisive and Divisive Brains: Making Identity Intelligible

Ontario (Level 2)

Chair: John Tresch (University of Pennsylvania)

Organizer: Tabea Cornel (University of Pennsylvania)

- “Homo-Eudaimonicus: Wisdom and Happiness in Post-Fordist Capitalism,” Francis McKay (University of Chicago)
- “Mirror Neurons and the Human-Animal Divide,” Katja Guenther (Princeton University)
- “Cause and Cure: Psychotropic Drugs and Negotiations of Mental Pathology in Nineteenth-Century France,” Sara Black (Rutgers)
- “The Teleological Mind: Neural Networks and Identity in 20th Century Cybernetics,” Nicholas Hirsch (University of California, San Diego)
- “Human Adult Neurogendering: Brain Plasticity and Sex Difference Research,” Tabea Cornel (University of Pennsylvania)

Epistemologies of Experimentation and Observation before 1900

Washington Park II (Level 3)

Chair: Nancy Hall (University of Delaware)

- “Unveiling Error: Robert Fludd, Thomas Browne, and the Harrow of Truth,” Lawrence Lipking (Northwestern University)
- “Truth without Testimony in Enlightenment Germany,” Kasper Risbjerg Eskildsen (Roskilde University)

- “Information Starvation and Experiment in the Age of Revolutions,” Iain Watts (Princeton University)
- “‘Control(led) Experiments’ in Late Nineteenth-Century Biomedicine,” Jutta Schickore (Indiana University Bloomington)
- “Revisiting the Discovery of Argon,” Theodore Arabatzis and Kostas Gavroglu (University of Athens)

History of Interdisciplinarity: What We Do and Do Not Know—and Why It Matters

Grant Park (Level 3)

Chair and Organizer: Hanne Andersen (Aarhus University)

- “Disciplinary Studies and the ‘New Disciplinary’ in Nanoscale Scientific Research,” Hanne Andersen (Aarhus University); Anne Markovich (University of Paris IV); Terry Shinn (University of Paris IV/CNRS)
- “Mathematics and the Sciences: Two-Way Interdisciplinarity,” Henrik Kragh Sørensen (Aarhus University)
- “Interdisciplinarity in Mission-Oriented Military Research: The Case of US Military Research Activities in Greenland during the Cold War,” Kristian Hvidtfeldt Nielsen (Aarhus University)
- “Boundary Work: Nanoscience Meets Philosophy at Material Surfaces,” Julia Bursten (University of Pittsburgh)
- “What We Know (and Particularly Do Not Yet Know) About Twentieth Century Interdisciplinary Science,” Ronald E. Doel (Florida State University)

Innovation in Postwar Biology

Garfield Park (Level 3)

Chair: Erik L. Peterson (University of Alabama)

- “Adolf Meyer-Abich and the Foundation of Theoretical Biology,” Gregory Moynahan (Bard College)
- “Mathematization and the Development of Methodology in Systematic Biology, 1960–1990,” Beckett Sterner (The Field Museum)
- “From Norm of Reaction to Phenotypic Plasticity: The Importance of Anthony Bradshaw’s Work for Understanding the Evolution of Genotype and Environment Interaction,” Antonine Nicoglou (IHPST Paris)
- “From ‘Signal Transducers’ to ‘Molecular Machines’: Membranes and the Re-Making of Life’s Materiality c. 1970–1990,” Mathias Grote (Technische Universität Berlin)
- “Blueprints and Bricks: DNA and the Origins of the DNA Nanotechnology Community,” Brian Tyrrell (University of California, Santa Barbara)

Nature in Numbers: Histories of Data in the Geosciences

Washington Park I (Level 3)

Chair: Katharine Anderson (York University)

Commentator: Sabina Leonelli (University of Exeter)

Organizer: Elena Aronova (Max Planck Institute for the History of Science)

- “Data Products and Outputs: Climate Services and the U.S. National Climate Program,” Vladimir Janković (University of Manchester)
- “Winning a Battle, Losing the War? The Rise of Climatology and the Dilemma of Data Diversity, 1870–1910,” Philipp Lehmann (Harvard University)
- “Doing Things with Data: The Politics and Practices of the World Data Centers, 1950s–1970s,” Elena Aronova (Max Planck Institute for the History of Science)
- “Auditory Data Analysis: Epistemic Listening Practices and the Formation of Scientific Sonification, 1960s–1990s,” Axel Volmar (McGill University)

Newton, Mathematics, and Mechanism

Superior East (Level 2)

Sponsored by the Philosophy of Science Association

Chair: Katherine Brading (University of Notre Dame)

- “Mechanics in Geometry and in Natural Philosophy: Newton’s Programmatic Statement against Descartes,” Mary Domski (University of New Mexico)
- “Newton’s Surprising Struggle with Mechanistic Thinking,” Andrew Janiak (Duke University)
- “Newton’s Taxonomic Science,” Eric Schliesser (Ghent University)
- “Newton, the Galilean Tradition, and the Foundations of Mechanics,” Zvi Biener (University of Cincinnati):

Putting Pressure on Human Nature

Huron C (Level 2)

Sponsored by the Philosophy of Science Association

Chair: Matthew Kopec (Northwestern University)

- “Fertility Decline and Human Reproductive Decision-Making: Can the ‘Central Theoretical Problem of Human Sociobiology’ Tell us Anything about an Evolved Human Psychology?,” Heidi Colleran (University College, London)
- “Confronting Variation in the Social and Behavioral Sciences,” Stephen M. Downes (University of Utah)
- “Paradigmatic People,” Matt Haber (University of Utah)
- “What is Human Nature Good for?” Tim Lewens (University of Cambridge)

Under Threat: The Sciences of Extinction and Endangerment since 1850

Michigan Ballroom I (Level 2)

Chair and Commentator: Mark Barrow (Virginia Tech)

Organizers: Helen Anne Curry (University of Cambridge) and Alistair Sponsel (Vanderbilt University)

- “Doomed to Die: Endangered Races, Science and Modern Settler Colonialism,” Sadiyah Qureshi, (University of Birmingham)

- “Coral Reefs as Objects of Scientific Study, from Threatening to Threatened,” Alistair Sponsel (Vanderbilt University)
- “Endangered Maize: Agricultural Modernization and Genetic Conservation, 1935–1975,” Helen Anne Curry (University of Cambridge)
- “Extinction and the Value of Diversity,” David Sepkoski (Max Planck Institute for the History of Science)

What Chemistry Has Brought to Philosophy: Philosophical and Historical Perspectives

Great Lakes E (Level 2)

Co-Sponsored by the HSS Forum for the History of the Chemical Sciences and the Commission on the History of Modern Chemistry

Co-Chairs: Hasok Chang (University of Cambridge) and Yoshiyuki Kikuchi (The Graduate University for Advanced Studies, [SOKENDAI], Japan)

Commentator: Bernadette Bensaude-Vincent (Université Paris 1 – Panthéon Sorbonne, France)

Organizers: Brigitte Van Tiggelen (Mémosciences and Université de Louvain-la-neuve, Belgium) and Yoshiyuki Kikuchi (The Graduate University for Advanced Studies, [SOKENDAI], Japan)

- “Similarities – What Chemistry Brings to the Philosophy of Technoscience,” Alfred Nordmann (Technische Universität Darmstadt)
- “Know-how and Know-that as a Tool Kit,” Minwoo Seo (University of Cambridge)
- “Reconceptualizing Emergence from Chemistry: Connecting Continental and Analytic Philosophy,” Jean-Pierre Noël Llored (Ecole Polytechnique)
- “Chemical Analysis and the Analysis of Mind: Elements for a Prehistory of Psychology,” Ronan De Calan (Université Paris 1 Panthéon Sorbonne)

12:00 PM – 1:15 PM

Bringing the “Archival Turn” to the History of Science

Ontario (Level 2)

Chair and Respondent: Ann Blair (Harvard University)

- “Archives, Science, and the State,” Barbara Naddeo (City College of New York)
- “Digital Archives of Science,” Brian Ogilvie (University of Massachusetts Amherst)
- “Archives and the History of Collecting,” Nicholas Popper (College of William and Mary)
- “Finding ‘Science’ in the Archives of the Spanish Monarchy,” Maria Portuondo (Johns Hopkins University)
- “What’s Not in the Archives?” Elizabeth Yale (University of Iowa)

Committee on Meetings and Programs Meeting

The Grill on the Alley Restaurant

Early Science Forum Business Meeting

Washington Park I (Level 3)

Forum for the History of the Mathematical Sciences Luncheon

The Grill on the Alley Restaurant

Forum for the History of Science in America, Distinguished Lecture and Business Meeting

Michigan Ballroom I (Level 2)

- “Why I Am a Presentist,” Naomi Oreskes (Harvard University)

Open Access – What’s Next?

Huron A (Level 2)

Chair: Soraya de Chadarevian (University of California, Los Angeles)

- Mary Ellen Davis, Executive Director, Association of College and Research Libraries
- Michael Magoulias, Director, University of Chicago Press Journals Division
- H. Floris Cohen, Editor, History of Science Society
- Steven Wheatley, Vice President, American Council of Learned Societies

Physical Science Forum Distinguished Lecture and Business Meeting

Erie (Level 2)

- “More Interesting than Science? The Physical Discoveries of Stanford Ovshinsky,” Lillian Hoddeson (University of Illinois)

Q&A Session Concerning NSF’s Newly Published STS Program Solicitation

Superior East (Level 2)

- Fred Kronz (National Science Foundation)

The solicitation should be published by Nov 7th; if not, this will be a Q&A session about the funding opportunities for historians and philosophers of science at NSF including the STS program and other programs.

Roundtable: The Ontological Turn: Ian Hacking and the History of Science

Grant Park (Level 3)

Commentator: John Zammito (Rice University)

Organizers: Henry Cowles (Yale University) and Laura Stark (Vanderbilt University)

- “Human Kinds,” Henry Cowles (Yale University)
- “Translated Kinds,” Carla Nappi (University of British Columbia)
- “Natural Kinds,” Lukas Rieppel (Brown University)
- “Moral Kinds,” Laura Stark (Vanderbilt University)

12:00 PM – 2:00 PM

Nominating Committee Meeting

Addison (Level 5)

1:30 PM – 3:30 PM

The Biologist as Public Intellectual in the 20th Century

Great Lakes E (Level 2)

Chair and Commentator: Cathryn Carson (University of California, Berkeley)

Organizer: Judy Johns Schloegel (Independent Scholar)

- “The Biological Philosophers: William Emerson Ritter and Herbert Spencer Jennings as Public Intellectuals,” Judy Johns Schloegel (Independent Scholar)
- “Women as Public Intellectuals: Rachel Carson, Charlotte Auerbach, Genetics, and Post-World War II Scientific Activism,” Marsha L. Richmond (Wayne State University)
- “The Power of Metaphor: Evolution and Economics in *The Selfish Gene*,” David K. Hecht (Bowdoin College)

The Body as Machine

Michigan Ballroom I (Level 2)

Chair: Andreas Killen (The City College of New York)

Organizer: Alexandra Bacopoulos-Viau (New York University)

- “Dispatches from the Beyond: The Medium as Telegraph in Early French Spiritism (1857-1869),” Alexandra Bacopoulos-Viau (New York University)
- “Wired Bodies and Sensitive Machines: Neurotic Identities of Italian Telegraph and Telephone Operators at the Turn of the Twentieth Century,” Paola Villa (University of Wisconsin)
- “The Machine as Body: Nikola Tesla’s Telautomaton,” Kendall Milar (University of California, Los Angeles)
- “Becoming ‘Le moteur humain’: ‘The Art of Work’ and ‘The Tailored Body,’” Fae Brauer (University of New South Wales)

Early Modern Atlantic Scientific Discourses

Erie (Level 2)

Chair and Organizer: Jaime Marroquin (George Washington University)

Commentator: Alejandra Fernandez (George Washington University)

- “Imperial Conquest and 17th c. Medical Contest in Abraham Cowley’s *Plantarum*,” Stephanie Shirilan (Syracuse University)

- “Circulating Images and the Production of Natural Knowledge,” Kay Etheridge (Gettysburg College)
- “Ethnography and Experience in Francisco Hernández’s Mexican Natural History,” Jaime Marroquin (George Washington University)

Euler: Mathematical Genius in the Enlightenment

Grant Park (Level 3)

Chair: Andre Wakefield (Pitzer College)

Commentator: Judy Grabiner (Pitzer College)

Organizer: Ronald Calinger (Catholic University of America)

- “Euler’s Berlin Period and the Foundations of Differential Calculus,” Robert Bradley (Adelphi University)
- “The Reception of Euler’s *Letters to a German Princess*: Science and Religion at the End of the Enlightenment,” Dominic Klyve (Central Washington University)
- “Euler: Return to St. Petersburg,” Ronald Calinger (Catholic University of America)

Fish, Fathoms, and Fair Winds: Contextualizing Marine Science within Changing Scientific Institutions, Cultures, and Communities, 1840–1940

Washington Park II (Level 3)

Chair: Christine Keiner (Rochester Institute of Technology)

Commentator: Michael Reidy (Montana State University)

Organizer: Jason Smith (U.S. Naval Academy)

- “The Common Highway: Matthew Fontaine Maury, Naval Science, and the American Maritime World,” Jason Smith (U.S. Naval Academy)
- “The Biotic Debate and the Disruption of Transatlantic Marine Naturalist Networks,” Rodolfo Alaniz (University of California, San Diego)
- “Regional Culture, Scientific Culture, and New England’s Rejection of Russell’s ‘Theory of Fishing,’ 1920–1934,” Matthew McKenzie (University of Connecticut)

Measuring People: Anthropometry as Practice, 1850–1950

Garfield Park (Level 3)

Chair: Saskia Bultman (Radboud University Nijmegen, The Netherlands)

Organizers: Saskia Bultman and Geertje Mak (Radboud University Nijmegen, The Netherlands)

- “Measuring Bodies and Intelligence: Physicians, Psychiatrists, and Prisoners in Puerto Rico’s Oso Blanco, 1930s–1950s,” Alberto Ortiz (University of Wisconsin)
- “From Body to Data: The Practicalities of Anthropometric Examination in the Dutch State Reformatory for Girls, 1905–1952,” Saskia Bultman (Radboud University Nijmegen)
- “Different Forms: Touching Details of Measured Humans’ Files around 1900 in The Netherlands,” Geertje Mak (Radboud University Nijmegen)

- “Anthropometry by Any Other Name: Beautiful Children, Homely Parents, and a Blueprint for ‘Marriage from the Standpoint of Art,’” Ry Marcattilio-McCracken (Oklahoma State University)

Race, Eugenics, and Bodily Identity

Washington Park I (Level 3)

Chair: Debbie Weinstein (Brown University)

- “‘Hue-man’ Nature: Migration, Genetics, and Alternate Evolutionary Frameworks in Post-WWII America,” J. Cecilia Cárdenas-Navía (Yale University)
- “‘A Change of Heart:’ Racial Politics, Scientific Metaphor, and Coverage of the First Interracial Heart Transplant in the African American Press,” Mara Koretzky (National Institutes of Health)
- “Joshua Lederberg’s ‘Euphenics’: the Construction of Human Cloning Narratives in the 1960s,” Nathan Crowe (University of North Carolina Wilmington)
- “Facial Transplants: Decoding the Debates,” Sharrona Pearl (University of Pennsylvania)

Replicating Early Modern Materials, Observations, and Experiments

Ontario (Level 2)

Chair: James Voelkel (Chemical Heritage Foundation)

Organizer: Tawrin Baker (Indiana University)

- “Verdigris Emeralds, Red Lake Rubies and Ultramarine Sapphires: Recipes, Reconstructions and the Historiography of Gemstone Imitations in Art and Nature, 1400–1500,” Marjolijn Bol (University of Amsterdam)
- “Performing Early-Modern Dissections and Experiments on the Eye,” Tawrin Baker (Indiana University)
- “Laboratory Replication of Newton’s Chymistry,” William Newman (Indiana University)
- “Assessing Reproductions of Past Experiments,” Jed Buchwald (California Institute of Technology)

Scientific Exploration and Cross-Cultural Encounters

Marquette Park (Level 3)

Chair: John Gascoigne (University of New South Wales)

- “Observers on Other Worlds: Johannes Kepler and his Extraterrestrial Life,” Sarah Reynolds (Indiana University)
- “Finding Voices on Pitcairn and Norfolk Islands: The Practice of Linguistic Fieldwork on Two ‘Natural Laboratories’ in the Pacific,” Adrian Young (Princeton University)
- “A Shared Sense of Curiosity: Sven Hedin and the Public Yearning for Geography in the Early Twentieth Century,” Staffan Bergwik (Stockholm University)
- “The Discovery of the Other in Postwar Italian Science and Culture: De Martino’s Fieldwork in Salento and Biocca’s Expedition to Amazonia,” Daniele Cozzoli (Universitat Pompeu Fabra, Barcelona)

Who's in Charge? Alternative Actors in Late Nineteenth-Century Nutrition Science

Great Lakes D (Level 2)

Chair and Commentator: Richard Kremer (Dartmouth College)

Organizer: Elizabeth Neswald (Brock University)

- “When Experimental Subjects Kick Back: Resistance, Cooperation and Collaboration in Nutrition Experimentation,” Elizabeth Neswald (Max Planck Institute for the History of Science)
- “Life Reformers and Laboratories: On Nutrition Science in Modern Germany,” Corinna Treitel (Washington University)
- “Starving in a Science Pavilion. Giovanni Succi Challenges Doctors’ Authority at the 1888 Barcelona International Exhibition,” Agusti Nieto-Galan (Universitat Autònoma de Barcelona)

Workshop: Digital and Computational History of Science: Tools, Platforms, Networks, and Corpora, Part I

Chicago Ballroom (Level 16)

Chair: Alex Wellerstein (Stevens Institute of Technology)

Organizers: Sabine Brauckmann (Estonian Institute of Humanities), Frederick Gibbs (University of New Mexico), Manfred Laubichler (Arizona State University)

Each presentation is 15 minutes with 45 minutes of roundtable discussion concluding each part of the workshop.

- “Analyzing and Interpreting Born Digital Primary Sources,” Trevor Owens (Library of Congress)
- “Conceptual Change in Collaborative Network,” Erick Peirson (Arizona State University)
- “From Tagging to Mapping Historical Chinese Data,” Shih-Pei Chen, Martina Siebert, and Dagmar Schäfer (Max Planck Institute for the History of Science)
- “Deryc Painter and Nadya Bliss: Detecting Scientific Innovation,” Manfred Laubichler (Arizona State University)
- Roundtable Discussion

3:30 PM – 4:00 PM

Coffee Break

Great Lakes Ballroom Foyer (Level 2)

4:00 PM – 6:00 PM

Anthropological Engagement in the Postwar World

Washington Park II (Level 3)

Chair: Regna Darnell (University of Western Ontario)

Organizer: Adrianna Link (Johns Hopkins University)

- “The Post-War Expansion of American Anthropology and its Discontents,” Regna Darnell (University of Western Ontario)
- “A Living Journal: Current Anthropology as Action Anthropology,” Joshua Smith (University of Western Ontario)
- “Antropologia Engajada: Trajectories of Anthropological Activism in Post-War Brazil,” Rosanna Dent (University of Pennsylvania)
- “Anthropology for a World in Crisis: Sol Tax and the Center for the Study of Man, 1965–1976,” Adrianna Link (Johns Hopkins University)

Assessment II: Assessing Assessments

Ontario (Level 2)

Chair: Matthew Shindell (Harvard University)

Organizer: Jessica O'Reilly (College of Saint Benedict/Saint John's University)

- “Institutional Settings, Institutional Actors: Expertise, Policy, and the U.S. National Academy of Sciences,” Matthew Shindell (Harvard University)
- “Assessing Acid Rain during the Reagan Years: The U.S. National Acid Precipitation Assessment Program,” Milena Wazec (University of East Anglia)
- “New Knowledge in Climate Assessments,” Jessica O'Reilly (College of Saint Benedict/Saint John's University)
- “Constructing, Honoring, and Breaching the Science/Policy Boundary in Scientific Assessments,” Naomi Oreskes (Harvard University)

Between the Local and Global: National Pharmacopoeias in the Eighteenth and Nineteenth Centuries

Marquette Park (Level 3)

Chair: Seymour Mauskopf (Duke University)

Commentator: Abena Osseo-Asare (University of Texas, Austin)

Organizer: Joseph Gabriel (Florida State University)

- “Imperial Pharmacy? Felix Palacios' Palestra Pharmaceutica and the Circulation of Materia Medica in the Spanish Atlantic World,” Matthew Crawford (Kent State University)
- “The Translocate in the Making of Chemistry in British India,” John Mathew and Seymour Mauskopf (Duke University)
- “The United States Pharmacopoeia and Problem of Intellectual Property,” Joseph Gabriel (Florida State University)

The Greater and Lesser Circulation of Scientific Concepts in Early Modern East Asia: Aristotle, Newton, and the New Lives of the Notion of Qi (Ch'i)

Great Lakes E (Level 2)

Chair and Commentator: Grace Shen (Fordham University)

Organizer: Qiong Zhang (Wake Forest University)

- “New Discourses on Qi as a Material Medium in Seventeenth Century China: The Case of the Fang School,” Qiong Zhang (Wake Forest University)
- “Sliding under the Signifier, Insisted Meaning: The Concept of Air and Qi in the Literatures of China Jesuits and Joseon Literati from 17th to 19th Centuries,” Kwon Soo Park (Chungbuk National University)
- “Confrontation and Conciliation of the Chi (Energy) Tradition with Newtonian Particle Theory in Late 18th-Century Japan,” Tomoko Onabe (University of Osaka)

The “Inner Life” in French Psycho-Physiology from the Late Enlightenment to the Late Nineteenth Century

Garfield Park (Level 3)

Chair and Organizer: Elizabeth Williams (Oklahoma State University)

- “The Animal Within: ‘Internal’ Sense, Instinct, and Psycho-Physiology in France, 1765–1832,” Anne Vila (University of Wisconsin)
- “Liberating the Inner Self: Heightened Sensibility, Intuition, and Imaginative Expression in the Philosophy of Maine de Biran,” Sean Quinlan (University of Idaho)
- “Silent Need, Clamorous Appetite: Civilization and the Degradation of Needs in Early Nineteenth-Century French Physiology,” Elizabeth Williams (Oklahoma State University)
- “Deafness, Language, and Human Evolution: Accessing Inner Life and Competing for One’s Discipline in Late Nineteenth-Century France,” Sabine Arnaud (Max Planck Institute for History of Science)

Mathematics and Mechanics

Washington Park I (Level 3)

Chair: Peter Machamer (University of Pittsburgh)

Organizer: Jean De Groot (Catholic University of America)

- “Mechanics and Mathematics in Peurbach’s *Theoricae Novae Planetarum*,” Edith Sylla (North Carolina State University)
- “Mathematics, Mechanics, and the Calculus Controversy,” Paul Wolfson (West Chester University of Pennsylvania)
- “The Kinematics of Leverage in Aristotle’s Scientific Milieu,” Jean De Groot (Catholic University of America)
- “Ontologizing Activity: Operational Representation and Problem-Solving in Analytic Mechanics,” Brian Hepburn (Wichita State University)

Modern Analytics Applied to the Past: New Perspectives on Pre-Modern Science and Medicine

Grant Park (Level 3)

Chair and Commentator: Lawrence M. Principe (Johns Hopkins University)

Organizer: Monica Green (Arizona State University) and Jennifer Rampling (Princeton University)

- “When History Becomes Science: Medieval Diseases in the Twenty-First Century,” Monica Green (Arizona State University)
- “Alternatives to Galenic Physiology in the Islamic World: The Evidence from the Commentary Tradition, 1200–1500 C.E.,” Nahyan Fancy (DePauw University)
- “Digitisation and the Vernacular: New Approaches to Medieval Scientific Instruments,” Seb Falk (University of Cambridge)

Questions of Causation in the History of Medicine

Addison (Level 5)

Chair: Bradford Harris (Stanford University)

- “The Long Prehistory of Electronic Cigarettes: ‘Project Ariel’ 1962 – 1966,” Stephan Risi (Stanford University)
- “Medical Nihilism: A Brief History,” Jacob Stegenga (University of Utah)
- “Koch’s Criteria of Disease Causation,” Lauren Ross (University of Pittsburgh)
- “Confronting the Parasite of Puerto Rico: Power, Politics, and Hookworm Disease, 1898–1917,” Linda Magana (University of Oxford)

Rot: Scientific, Social and Cultural Engagements with Putrefaction

Great Lakes D (Level 2)

Chair and Commentator: Carin Berkowitz (Chemical Heritage Foundation)

Organizer: Projit Mukharji (University of Pennsylvania)

- “What is Putrid about ‘Putrid’ Fever?,” Christopher Hamlin (University of Notre Dame)
- “Fermenting Vernaculars: Pasteur, Putrefaction and Colonial Agro-Industries, Bengal, 1900–1914,” Projit Mukharji (University of Pennsylvania)
- “All Aboard the Poo-Poo Choo-Choo: The Exportation of Human Waste and Environmental Justice in Post-War America,” Graham Mooney (Johns Hopkins University)

Technicians Visible and Invisible: Implications for Scientific Knowledge

Erie (Level 2)

Chair and Organizer: Park Doing (Cornell University)

Commentator: Peter Dear (Cornell University)

- “(In)visible Technicians, Scientists, and Fossils,” Caitlin Wylie (New Jersey Institute of Technology)

- “Techniques of Care, Techniques of Science: Interactions between Scientists and Welfare Technicians in Animal Behavior Genetics,” Nicole Nelson (University of Wisconsin)
- “Technicians as Scientific Authors at a Synchrotron Radiation Laboratory from 1993–1999: An Alternative Expertise?,” Park Doing (Cornell University)

Workshop: Digital and Computational History of Science: Tools, Platforms, Networks, and Corpora, Part II

Chicago Ballroom (Level 16)

Chair: Frederick Gibbs (University of New Mexico)

Organizers: Sabine Brauckmann (Estonian Institute of Humanities), Frederick Gibbs (University of New Mexico), Manfred Laubichler (Arizona State University)

Each presentation is 15 minutes with 45 minutes roundtable discussion concluding each part of the workshop.

- “From Deep Maps to Deep Networks,” Charles van den Heuvel (Royal Netherlands Academy of Arts and Sciences)
- “Extracting Semantic Networks,” Mark Schiefsky (Harvard University)
- “[Re]Constructing ‘Inedited’ Knowledge,” Cornelis J. Schilt (University of Sussex)
- “Mapping Interdisciplinarity and Expansion of Scientific Institutions,” Dirk Wintergrün (Max Planck Institute for the History of Science)
- Roundtable Discussion

6:15 PM – 7:15 PM

HSS Distinguished Lecture

Michigan Ballroom (Level 2)

“Science and the Political History of Pain”

Keith Wailoo (Princeton University)

Introduction by Angela Creager (Princeton University), HSS President



7:15 PM – 8:45 PM

Cambridge University Press Reception

Lincoln Park (Level 3)

Hosted reception for new publishing program.

7:30 PM – 8:30 PM

HSS at Work/GECC Networking Event

Great Lakes Ballroom Foyer (Level 2)

Sponsored by HSS at Work, HSS Graduate and Early Career Caucus, and the Chemical Heritage Foundation

Meet PhDs who have developed successful careers in a variety of fields, including business, museum work, consulting, and publishing. This event will allow attendees to ask questions and exchange ideas in an informal setting, and the evening will be punctuated by short comments from experts on various aspects of non-academic job searches.

Refreshments will be provided.

8:00 PM – 9:30 PM

Everything You Wanted to Know About Negotiating a Job Offer, but Were Afraid to Ask

Huron A (Level 2)

Sponsored by the HSS Graduate and Early Career Caucus

Presenter: Erin Thomas (Yale University)

Chair and Organizer: Bridget Collins (University of Wisconsin-Madison)

Physical Sciences and the Great War

Erie (Level 2)

Chair and Organizer: Suman Seth (Cornell University)

Presenters:

- David Aubin (Université Pierre-et-Marie-Curie)
- Jeffrey Johnson (Villanova University)
- Suman Seth (Cornell University)
- Chen-Pang Yeang (University of Toronto)
- Gregory Good (American Institute of Physics)

SATURDAY NOVEMBER 8

7:30 AM – 8:45 AM

Committee on Education Meeting

The Grill on the Alley Restaurant

Committee on Research and the Profession Meeting

The Grill on the Alley Restaurant

***Osiris* Editorial Board Meeting**

The Grill on the Alley Restaurant

HSS President's International Breakfast

The Grill on the Alley Restaurant

8:00 AM – 8:45 AM

Earth and Environment Forum Business Meeting

Huron A (Level 2)

HSS at Work Business Meeting

Erie (Level 2)

9:00 AM – 11:45 AM (Break from 10:00 to 10:15)

The coffee break will be in the Great Lakes Ballroom Foyer (Level 2)

Experimental Decisions: Radiation and Genetics in Japan

Huron A (Level 2)

Chair and Commentator: Luis Campos, University of New Mexico

Organizer: Lisa Onaga, Nanyang Technological University

- “Radiation and Spiritualism in the Empire of Japan,” Maika Nakao (Keio University)
- “Instruments of Modernity: Rentogen in Pre-War Japan,” Shi-Lin Loh (Harvard University)

- “Tracing the Low-Dose Question in Japan,” Lisa Onaga (Nanyang Technological University)
- “Genetics and the U.S.-Japan Relationship in the 1950s,” Kaori Iida (The Graduate University for Advanced Studies [SOKENDAI], Japan)

Historical Tracers and the Historiography of Science

Great Lakes E (Level 2)

Chair and Commentator: Angela Creager, Princeton University

Organizer: Evan Hepler-Smith, Princeton University

- “Between Regulation and Information: Tracing Chemical Novelty,” Evan Hepler-Smith (Princeton University)
- “Semaphores, Signals, and the History of Humankind: Alan Lomax’s Choreometrics Project (1965–1985),” Whitney Laemmler (University of Pennsylvania)
- “Beat Policing and Forensic DNA Databases in Twenty-First Century Crime Control,” Hilary Robinson (Massachusetts Institute of Technology)
- “Latent Analyses: Mining Networks, Traffic Analysis and Government Surveillance,” Matthew Jones (Columbia University)

The Institution as Laboratory: Captive Bodies and the Production of Scientific Knowledge

Michigan Ballroom I (Level 2)

Chair: Carla Bittel (Loyola Marymount University)

Organizer: Courtney Thompson (Yale University)

- “Madman or Heretic? The Inquisition and the Uses of a Madhouse in Colonial Mexico,” Christina Ramos (Harvard University)
- “Directly at War with the Gallows’: Phrenology in the Prison, 1830–1860,” Courtney Thompson (Yale University)
- “Lying-In: Obstetrical Space and Authority in Nineteenth-Century Philadelphia,” K.A. Woytonik (University of New Hampshire)
- “‘The Library as Laboratory’: Bibliotherapy and the Clinical Study of Literature as Medicine, 1940–1960,” Monique Dufour (Virginia Tech)
- “Discerning Patterns of Abnormality: Institutionalized Patients and the Postwar Delineation of Genetic Disease,” Andrew Hogan (Creighton University)

Mathematical Laboratory/Paper Physics: Concepts, Pedagogy, and Methods of Mathematical Physics

Erie (Level 2)

Chair: Tilman Sauer (University of Bern)

Organizer: Massimiliano Badino (Universitat Autònoma de Barcelona/Massachusetts Institute of Technology)

- “On Mathematical Practices and Cultures of Mechanics: The Secular Equation in the 19th Century,” Frédéric Brechenmacher (École Polytechnique)

- “The ‘Physicization’ of Mathematics and Early Twentieth Century Reforms in General Education,” Ion Mihailescu (Harvard University)
- “Boltzmann in Oxford: How Mathematics Molds Physical Concepts,” Massimiliano Badino (Universitat Autònoma de Barcelona / Massachusetts Institute of Technology)
- “Was Václav Hlavatý (1894–1969) ‘Einstein’s Elementary Mathematician?’” Helena Durnova (Masaryk University)
- “Density Functional Theory: How Mathematical Physics Launched a Revolution in Materials Physics and Quantum Chemistry,” Andrew Zangwill (Georgia Tech)

Re-Appropriation and Memory in Early Science

Garfield Park (Level 3)

Chair: Courtney Roby (Cornell University)

Commentator and Organizer: Jacqueline Feke (University of Chicago)

- “Appropriating Eratosthenes: Is Rehabilitation Still Possible?,” James Evans (University of Puget Sound)
- “Re-Appropriating Pliny in Late Antiquity and A Forgotten Pliny Epitome in the Vergilian commentator Servius,” Paul Keyser (Independent Scholar)
- “From Petosiris to Ptolemy: Authorities for Celestial Knowledge in Late Antique Omen Interpretation,” Zoë Misiewicz (New York University)
- “Re-Appropriating Visual Knowledge: Image Reuse in Printed Works on Medicine in the Fifteenth and Sixteenth Centuries,” Allen Shotwell (Ivy Tech)

Scientific Agriculture and the State

Washington Park I (Level 3)

Chair: Diane Paul (University of Massachusetts Boston)

- “Chemistry and the British Board of Agriculture,” Frank James (The Royal Institution)
- “The Lie of Philippine Mahogany: Transnational Definitions of Species for Science, Power, and Trade,” Emily K. Brock (Max Planck Institute for the History of Science)
- “Whose Trees? Disputes Over the Origin of the Yoshino Cherry and Cherry Blossom Festivals in Korea,” Manyong Moon (Korea Advanced Institute of Science and Technology)
- “The Beginning of an ‘Exceptional Era’ in Australia? Early Genetic Modification Research Regulation and its Implications for Public Understanding of Science,” Rachel Ankeny and Heather Bray (University of Adelaide)
- “Loving the Country, But Not Necessarily the State: American-Trained Chinese Agricultural Scientists, 1920s–30s,” Xuan Geng (University of Minnesota)

Shapes and Contours of Early Modern Knowledge

Grant Park (Level 3)

Chair: JB Shank (University of Minnesota)

Organizer: Surekha Davies (Western Connecticut State University)

- “Collecting Faces: Physiognomic Data in the Early Modern Print,” Stephanie Leitch (Florida State University)
- “Cartography, Ethnology and Epistemology: World Maps as Visual Encyclopedias,” Surekha Davies (Western Connecticut State University)
- “On the Same Page: Early Modern Collection and Inscription,” Claudia Swan (Northwestern University)
- “Collecting Adepts: Joachim Morsius, the Alchemical Republic, and Early Modern Social Media,” Vera Keller (University of Oregon)
- “‘But Nonetheless Man Imagines Them To Be So’: Athanasius Kircher and *Lapides figuratae* in Text and Image,” Rebecca Zorach (University of Chicago)

Technoscience as Practice: Creating Communities/Constructing the Self

Great Lakes D (Level 2)

Chair and Organizer: Thomas Stapleford (University of Notre Dame)

Commentator: Andrea Woody (University of Washington)

- “The Historiography of Practice,” Thomas Stapleford (University of Notre Dame)
- “Practices as a Framework for History and Social Science,” Daniel Hicks (University of Western Ontario)
- “The ‘Methodical Production of Genius’: Collective Practice and Chemical Theory in Emil Fischer’s Laboratory,” Catherine Jackson (University of Wisconsin)
- “Drawing Trust: Circuit Diagrams and the Lost Practices of Cold-War Electronics,” Edward Jones-Imhotep (York University)

Testing Drugs and Trying Cures in the Early Modern World

Marquette Park (Level 3)

Chair and Commentator: Claudia Stein (University of Warwick)

Organizer: Alisha Rankin (Tufts University) and Elaine Leong (Max Planck Institute for the History of Science)

- “Trying Medicine in the Historiography of Early Modern Experiment,” Evan R. Ragland (University of Alabama, Huntsville)
- “The Live Chicken Cure for Plague Buboes: Medical Experimentation in Late Medieval and Early Modern Europe,” Erik Heinrichs (Winona State University)
- “Medical Experimentalism in the Ottoman Empire: An Introduction for Beginners,” B. Harun Küçük (Max Planck Institute for the History of Science)
- “Homemade Trials: Recipes and ‘Experimentation’ in the Early Modern Household,” Elaine Leong (Max Planck Institute for the History of Science)

The “Three-Man Paper” and its Ramifications

Ontario (Level 2)

Chair: Pnina Abir-Am (Brandeis University)

Organizers: Pnina Abir-Am (Brandeis University) and Phillip Sloan (University of Notre Dame)

- “The Three-Man Paper, the Bohr-Debates, and Schrödinger’s *What is Life?*,” Phillip Sloan (University of Notre Dame)
- “Light and Life: The Emergence of the Photosynthetic Unit from the Delbrück Seminars,” Kärin Nickelsen (Ludwig Maximilian University of Munich)
- “Biophysics without Molecular Biology,” Richard Beyler (Portland State University)
- “The Early Years of the American Phage Group: Replication of the Delbrück Seminar in Berlin?,” William Summers (Yale University)
- “The ‘Theoretical Biology Club’ in London, the ‘Delbrück Seminar’ in Berlin, and the ‘Club de Physiologie Cellulaire’ in Paris: Social Origins of Collective Creativity in Early Molecular Biology,” Pnina Abir-Am (Brandeis University)

9:00 AM – 12:00 PM

Committee on Publications Meeting

Parks Boardroom (Level 3)

12:00 PM – 1:15 PM

Forum for History of Human Science Distinguished Lecture and Business Meeting

Michigan Ballroom I (Level 2)

- “Everyone’s Autobiography of Gertrude Stein,” Ken Alder (Northwestern University)

Forum for the History of Science in Asia Business Meeting

Huron A (Level 2)

Historians of Science Watching COSMOS: Interpretive Challenges and Teaching Opportunities

Erie (Level 2)

Organized by the HSS Committee on Education

Chair: James Evans (University of Puget Sound)

Organizers: Kristin Johnson (University of Puget Sound) and Joseph D. Martin (Michigan State University)

Participants:

- Lloyd Ackert (Drexel University)
- Benjamin Gross (Chemical Heritage Foundation)
- Darin Hayton (Haverford College)
- David Kirby (University of Manchester)
- Bruce Lewenstein (Cornell University)
- Joseph D. Martin (Michigan State University)

- W. Patrick McCray (University of California, Santa Barbara)
- Catherine Westfall (Michigan State University)

Joint Caucus for Socially Engaged Philosophers and Historians of Science Business Meeting

Ontario (Level 2)

Roundtable: HSS and the Permeable Academy

Washington Park I (Level 3)

Sponsored by HSS at Work

Chair: Angela Creager (Princeton University)

Commentator: Carin Berkowitz (Chemical Heritage Foundation)

Organizer: Tania Munz (Northwestern University)

- “Maintaining a Scholarly Identity without a University to Back You Up,” Carin Berkowitz (Chemical Heritage Foundation)
- “History at Large – A Perspective from the AHA,” James Grossman (American Historical Association)
- “Finding Your Way Outside Academe,” Lesley Lundeen (University of Chicago)
- “Fashioning A Life as an Independent Historian,” Audra Wolfe (The Outside Reader)

Roundtable: Science and Supranationalism: Exploring the History of Science in Intergovernmental Organizations

Washington Park II (Level 3)

Chair, Commentator, and Organizer: Rachel Rothschild (Yale University)

Presenters:

- John Krige (Georgia Tech)
- Helen Rozwadowski (University of Connecticut)
- Jacob Darwin Hamblin (Oregon State University)
- Amy Sayward (Middle Tennessee State University)
- Ronald Doel (Florida State University)
- Arthur Daemmrich (University of Kansas)

12:00 PM – 2:00 PM

Finance Committee Meeting

Burnham Park (Level 3)

1:30 PM – 3:30 PM

Assessment III: Publication and Peer Review

Michigan Ballroom I (Level 2)

Chair: Bruce Lewenstein (Cornell University)

- “Refereeing in Action at the *Philosophical Transactions*, 1850–1890,” Aileen Fyfe (University of St. Andrews)
- “Publishing Britain’s Scientific Sphere: Macmillan and Co. as Publishers of Science, 1860–1890,” Sylvia Nickerson (IHPST, University of Toronto)
- “Tracing the Paper Trail of the *Philosophical Transactions*: Correspondence, Referees’ Reports and Proofs, 1850-1885,” Julie McDougall-Waters (University of St. Andrews)
- “History of Editorial Peer-Review in Scientific Journals: Factors Influencing Publication in French and English Scientific Society, 1665–1830,” Stacy Wykle (University of Illinois, Urbana-Champaign)

The History of the Humanities—A Challenge to the History of Science?

Great Lakes D (Level 2)

Commentator: Ingrid Rowland (University of Notre Dame School of Architecture)

Chair: Dagmar Schäfer (Max Planck Institute for the History of Science)

Organizers: Rens Bod and Julia Kursell (University of Amsterdam)

- “Patterns in Humanities and Sciences: Aller-Retour,” Rens Bod (University of Amsterdam) and Johanna Sprondel (Stanford University)
- “Precisely. Differentiating Accuracy, Precision, and Exactitude in the Sciences and Humanities,” Jimena Canales (University of Illinois at Urbana-Champaign) and Markus Krajewski (Bauhaus University Weimar)
- “Methods and Concepts in the Loop of Exchange: Historians Investigating Life and Life Scientists Testing History,” Soraya de Chadarevian (University of California, Los Angeles) and Julia Kursell (University of Amsterdam)

The Politics of Discovery: The Physical Sciences in the 20th and 21st Centuries

Erie (Level 2)

Chair and Organizer: Amy Fisher (University of Puget Sound)

- “Jefferson Laboratory Sets Intent into \$500 million of Concrete: Desire, Bureaucracy, and Innovation in the New Big Science,” Catherine Westfall (Michigan State University)
- “What Constitutes Discovery?: Chemists, Physicists, and the Synthesis of Heavy Elements,” Ann Robinson (University of Massachusetts, Amherst)
- “Teller vs. Pauling: The Debate over Disarmament and the Peacetime Uses of Nuclear Weapons,” Amy Fisher (University of Puget Sound)
- “Engineering as the Driver of Technoscience: Or, Tilting at Windmills in Mars Exploration,” Erik Conway (Jet Propulsion Laboratory)

Post-Colonial Life and Politics of Colonial Science

Huron B (Level 2)

Chair and Commentator: Susan Burns (University of Chicago)

Organizer: Hiromi Mizuno (University of Minnesota)

- “Evolutionary Ecology and the Transwar: Japanese Expeditions from Mongolia to Mahale, 1938–1958,” Sakura Christmas (Harvard University)
- “Empowering Hungnam: The Transwar Legacy of Japanese Scientific, Technological, and Industrial Development of a Korean City,” Walter Grunden (Bowling Green State University)
- “Visualizing the Network of Fertilizer under and after the Japanese Empire,” Hiromi Mizuno (University of Minnesota)

The Scientific Animal

Marquette Park (Level 3)

Chair: Paul White (University of Cambridge)

- “Dogs, Science, and the State: Inventing the Canine Hero in the Fight for the Health of the American Nation, 1948–1966,” Robert Kirk (University of Manchester) and Edmund Ramsden (Queen Mary, University of London)
- “‘What the boys in the laboratory have been up to’: Space Dogs, Cold War Vivisection, and the ‘Muttnick Affair,’” Ryan Shapiro (Massachusetts Institute of Technology)
- “Kant’s Denial that Animals Have Consciousness,” Curtis Sommerlatte (Indiana University, Bloomington)
- “Making Natural History Anatomical: Edward Tyson and Comparative Anatomy in Seventeenth-Century England,” Emelin Miller (University of Minnesota)

The Transformation of Psychiatry in Twentieth-Century Italy, Denmark, and the United States

Superior West (Level 2)

Chair: David Robinson (Truman State University)

- “From ‘Lifetime Psychosis’ to ‘Wartime Neurosis’: How Italian Mind and Brain Sciences Escaped From the Asylum during the Great War,” Sultana Banulescu (CUNY Graduate Center)
- “Exploring Predispositions and Predictors: High-Risk Schizophrenia Research and Visions of Prevention at Psykologisk Institut, Copenhagen, 1960–1990,” Marie Reinholdt (CERMES 3, site CNRS)
- “The Biological Revolution in Psychiatry: A Purely Logical Choice?,” Brian Casey (Northwestern University)
- “A ‘Model Schizophrenia’: Amphetamine Psychosis and the Transformation of American Psychiatry,” Justin Garson (Hunter College/CUNY)

Transmission and Exchange of Scientific Knowledge Before 1600

Garfield Park (Level 3)

Chair: Cassandra Hatton (Bonhams)

- “How Social Boundaries Limit Access to Indigenous Knowledge: Case Studies from Sixteenth-Century India,” Matthew Sargent (California Institute of Technology)
- “Scholarly and Scientific Exchange in the Eastern Mediterranean in the 15th and 16th Centuries,” Robert Morrison (Bowdoin College)
- “Fathallah al-Shirwani and the Transmission of Science from Samarqand to Istanbul,” Scott Trigg (University of Wisconsin-Madison)
- “The Problems of Aristotle’s Mechanics,” Peter McLaughlin (University of Heidelberg)

Transnational Technology Networks and Knowledge-Diffusion during the Cold War

Ontario (Level 2)

Chair: Daniel Kevles (Yale University)

Commentator: Jacob Hamblin (Oregon State University)

Organizer: Jay Sarkar (Harvard University)

- “Helping and Hindering Allies: The Transnational Circulation of Nuclear Information between the U.S. and Europe from the Late 50s to the Early 70s,” John Krige (Georgia Tech)
- “Transnational Networks of Nuclear Scientists and North-South Technological Cooperation during the Cold War: The Case of India, 1950–1974,” Jay Sarkar (Harvard University)
- “Dreams of Transnational Uranium Enrichment: International Ambitions of the Dutch Ultracentrifuge Program, 1955–1962,” Abel Streefland (Leiden University)
- “Know-how and International Transmission of Industrial Science in the Cold War,” Douglas O’Reagan (University of California, Berkeley)

Women’s Bodies and Sexuality in the History of Science and Medicine

Grant Park (Level 3)

Chair: Sherrie Lyons (Empire State College)

- “The Hazards of Lying-in: Rudolf Virchow’s Experimental Research on Deep Vein Blood Clotting,” Kate Grauvogel (Indiana University Bloomington)
- “The ‘Smooth Flow’ of Birth: Streamlining the Obstetrical Oeuvre of Joseph B. Delee, 1930–1940,” Caitjan Gainty (King’s College London)
- “Mesmerism, Sexuality, and Medicine: ‘Karezza’ and the Sexual Reform Movement,” Heinz Schott (Universität Bonn)
- “The Blinding Lights of the Blazing World: Margaret Cavendish’s Utopias as Gendered Discourses on Proper Sensory Perception,” Andrew Kettler (University of South Carolina)

1:30 PM – 4:00 PM

Narrating Order

Lincoln Park (Level 3)

Sponsored by the Philosophy of Science Association

Chair: Rachel Ankeny (University of Adelaide)

- “Theories as Narratives: The Fisher-Wright Controversy,” Alirio Rosales (University of British Columbia)
- “Does Form Trump Content in Clinical Case Reports?,” Brian Hurwitz (King’s College London):
- “Making Credible Narratives of Society,” Mary S. Morgan (London School of Economics):
- “Narrative Order and the Problem of Chance,” John Beatty (University of British Columbia):

Philosophy of Interdisciplinarity

Huron A (Level 2)

Sponsored by the Philosophy of Science Association

Chair: Evelyn Brister (Rochester Institute of Technology)

- “Philosophy of Interdisciplinarity: Mapping The Issues,” Hanne Andersen (Aarhus University)
- “Problems, Problem Spaces and Interdisciplinarity,” Brian Hepburn (Wichita State University)
- “Interventionist Omissions: A Critical Study of Mechanistic Explanation in Biology,” Melinda Fagan (University of Utah)
- “Social and Biological Mechanisms of Disease,” Federica Russo (University of Amsterdam) and Michael Kelly (National Institute for Health and Care Excellence)
- “Mathematics in Interdisciplinary Modelling: the Case of Quasi-Crystals,” Henrik Kragh Sørensen (Aarhus University)

1:30 PM – 5:00 PM

Poster session

Great Lakes Ballroom E and Foyer (Level 2)

Poster Prize sponsored by Elsevier

- “From Private to Public: The Acquisition, Preservation, and Availability of Archival Materials from the Norman Collection of Molecular Biology,” Chrystal Carpenter (J. Craig Venter Institute)
- “The Styles of Early Experimental Evolution,” Kele Cable (University of Minnesota)

- “Protective Pictures: The Role of the Image in Plant Patents,” Xan Chacko (University of California, Davis)
- “Deciphering Mathematical Problems of the ‘Shoebox Collection’ of the Paul A.M. Dirac Papers at Florida State University,” Kathleen Clark (Florida State University)
- “*Darlingtonia californica*: The History of an Iconic American Plant,” Maura Flannery (St. John’s University)
- “Galileo Galilei: *De motu antiquiora scripta mea*,” Raymond Fredette (Independent Scholar)
- “Engineering: Applied Science or Not?,” Eunjeong Ma (Pohang University of Science and Technology)
- “Remaking the Past: 3D Methods in HPS and STS,” Isaac Record (University of Toronto)
- “Looking at Rocks like Abraham Gottlob Werner,” Peter Schimkat (Independent Scholar)
- “Changing Facets of Digital Pre-face of Science Museums: Three Case Studies,” Anwasha Chakraborty and Federico Nanni (University of Bologna)
- “Early Psychosis Intervention in Post-War France and Germany: Historical Representations of Prevention and the Mapping of Scientific Communities,” Emmanuel Delille (Humboldt University of Berlin)
- “The Medieval Counting Table,” Cheryl Periton (University of Notre Dame)
- “Taxidermy and Science Education: From Carl Akeley to Emily Graslie,” Christy Tidwell (South Dakota School of Mines & Technology)

3:30 PM – 4:00 PM

Coffee Break

Great Lakes Ballroom Foyer (Level 2)

4:15 PM – 6:15 PM

Biology, Ecology, and Society after World War Two

Ontario (Level 2)

Chair: Frederick R. Davis (Florida State University)

- “W.D. Hamilton and the Theory of Inclusive Fitness: Constructing a Science of Society in the Post-War Decades,” Sarah Swenson (University of Oxford)
- “Virtual Water: Natural Resources in the Wake of Neoliberalism,” Kaitlin Stack Whitney (University of Wisconsin-Madison)
- “Paul Sears and Barry Commoner on Project Chariot: Struggle for the Soul of Ecology,” Gene Cittadino (New York University)

The Corpse as Scientific Object

Huron B (Level 2)

Chair: Carol Pal (Bennington College)

- “Investigating the Holy Bodies of Men: Medical Disagreements about Physical Manifestations of Holiness in the Body at Rome, 1550–1620,” Nicholas Overgaard (University of Toronto)
- “Robert Boyle on Ferments and Fermentation,” Ashley Inglehart (Indiana University)
- “‘It Lives!’ Frankenstein and the Formation of Public Scientific Discourse,” John Robbins (Tufts University)
- “A Mortuary with a View: The Crumbles Bungalow Murder and the Spectacle of Interwar English Homicide Investigation,” Neil Pemberton (CHSTM, University of Manchester)

Documenting and Defining Human Subjects: Historical Reflections on the Questionnaire

Great Lakes C (Level 2)

Chair: Andrew Ruis (University of Wisconsin-Madison)

Commentator: John Carson (University of Michigan)

Organizer: Judith Kaplan (Max Planck Institute for the History of Science)

- “Questionnaires and the Epistemological Space of German Anthropology,” Daniel Midena (University of Copenhagen)
- “‘Basic’ Word Lists and the Universal Linguistic Subject,” Judith Kaplan (Max Planck Institute for the History of Science)
- “Questionnaire and Interview in the Social Research of Paul F. Lazarsfeld,” Eric Hounshell (University of California, Los Angeles)

Early Modern Scientific Networks

Great Lakes D (Level 2)

Chair: Daniel Margocsy (Hunter College – CUNY)

Organizers: Daniel Margocsy (Hunter College – CUNY) and Paola Bertucci (Yale University)

- “Material Networks: Artisans, Savants and Metals in Early Eighteenth-Century France,” Paola Bertucci (Yale University)
- “Poison Trials and the (Mis?) Communication of Experiments in Sixteenth-Century Europe,” Alisha Rankin (Tufts University)
- “The Republican Army of Letters,” Daniel Margocsy (Hunter College - CUNY)
- “Indigo in the Laboratory: Michel Adanson in Senegal,” Mary Terrall (University of California, Los Angeles)

Evidence in Mathematical Understanding

Marquette Park (Level 3)

Chair and Commentator: Emily Grosholz (Pennsylvania State University)

Organizer: Abram Kaplan (Columbia University)

- “The Sense and Sensibility of Distributions,” Michael Barany (Princeton University)
- “The Figure and Other Forms of Geometric Evidence,” Jemma Lorenat (Jussieu/University of Paris, Simon Fraser University)
- “Natural Mathematics and the Account of Error,” Abram Kaplan (Columbia University)

Making Data and Making Sense of Data: Histories of Information in Public Health Science and Practice

Lincoln Park (Level 3)

Chair and Organizer: Aaron Mauck (Harvard University)

- “Data under Development,” Emily Harrison (Harvard University)
- “Integrating Genomics into State Public Health Programs,” Laura Senier (Northeastern University)
- “Searching the Microbial Sea for Epidemiologic Relevance: From Molecular to Genomic Epidemiology in Public Health, 1990s – Present,” Angie Boyce (Cornell University)
- “Mapping Biocultural Pathways: Telomere Length and the Transformation of Social Epidemiology,” Aaron Mauck (Harvard University)

Military Science, Industry, and the Public in the Cold War

Erie (Level 2)

Chair: Thomas Lassman (Smithsonian Institution)

- “The Dispute over the Establishment of the Institute for Nuclear Study and Socio-Cultural Meanings of Nuclear Physics in Cold War Japan,” Kenji Ito (The University of Tokyo)
- “A Chokepoint of Oceanography: Cold War Surveillance and the Contested Sovereignty of Gibraltar,” Lino Camprubi (Max Planck Institute for the History of Science) and Samuel Robinson (The University of Manchester).
- “From Handmaiden to ‘Proper Intellectual Discipline’: Computer Science, the NSF, and the Status of Applied Science in 1960s America,” Janet Abbate (Virginia Tech)
- “Explaining the Atom: Science Education for Survival in the Atomic Age, 1945–1957,” Bonnie Gidzak (University of Minnesota)

Representing Scientific Knowledge in 19th-Century Philadelphia

Garfield Park (Level 3)

Chair: Mark Barrow (Virginia Tech)

Commentator: Gregory Nobles (Georgia Tech)

Organizer: Jonathan Grunert (Virginia Tech)

- “An Inimitable Picture: Dynamic Perception in William Bartram’s Natural History,” Elizabeth Athens (Yale University)

- “The Lithographer as Agent of Change: J.T. Bowen and Natural History Illustration,” Jonathan Grunert (Virginia Tech)
- “Cutting and Casting: Thomas Eakins & Anatomical Study in Gilded Age Philadelphia,” Naomi Slipp (Boston University)

Science and the Making of Post-Colonial National Identities

Grant Park (Level 3)

Chair: Jim Secord (University of Cambridge)

- “Natural History and Leading the Good Life in Nineteenth-Century Chile,” Patience Schell (University of Aberdeen)
- “Building Identities as Geologists in Liberated Korea by Dissociating Themselves from Japan,” Jung H. Won (Seoul National University)
- “New Wine in New Bottles: Technical Education and the Marketing of Electricity in India, 1900–1915,” Animesh Chatterjee (Independent Scholar)
- “The High Horizon: Science and Art in Argentina,” Lewis Pyenson (Western Michigan University)

Thought Experiments as an Epistemic Practice in the Natural and Social Sciences, 1830–1930

Washington Park I (Level 3)

Chair: Bernhard Kleeberg (University of Konstanz)

Commentator: Charles Camic (Northwestern University)

Organizer: Julian Bauer (University of Konstanz)

- “A Day in the Life: Charles Lyell’s Geological Daydreams,” Adelene Buckland (King’s College London)
- “Experimenting with Thoughts, Experimenting with Scripture: Ernst Mach On and In Thought Experiments,” Julian Bauer (University of Konstanz)
- “Max Weber’s ‘Ideal Types’: A Theory and its Practice,” Florian Ernst (University of Konstanz)

Transnational Biomedical Expertise in Modern China

Huron A (Level 2)

Chair: Fa-ti Fan (Binghamton University – SUNY)

Organizer: Lijing Jiang (Princeton University)

- “The Vital Link between Laboratory and Home: Scientific Nursing in Wartime China,” Shenglan Li (Binghamton University)
- “Going to Taiwan: Chinese American Biomedical Scientists and U.S.-Taiwan Scientific Exchanges,” Zuoyue Wang (California State University, Pomona)
- “Comparative Study on the Developments of the Contraceptive Pills in China and in the U.S.,” Haiyan Yang (Peking University)
- “The Troubled Escape from Chinese Lysenko: Questioning Pseudoscience in Postwar U.S.-China Contacts of Biology,” Lijing Jiang (Princeton University)

6:30 – 7:15 PM

HSS Prize Ceremony

Chicago Ballroom (Level 16)

7:15 – 8:15 PM

Joint Reception: HSS/PSA

Great Lakes Ballroom and Foyer (Level 2)

Cash bar and light hors d'oeuvres.

This is a ticketed event.

SUNDAY, NOVEMBER 9, 2014

8:30 AM – 9:30 AM

HSS Business Meeting

Great Lakes E (Level 2)

9:30 – 11:30 AM

The Alchemy of the Unexpected: Interpreting Alchemical Sources from Antiquity to the Seventeenth Century

Washington Park I (Level 3)

Sponsored by the HSS Forum for the History of the Chemical Sciences

Chair and Organizer: Jennifer Rampling (Princeton University)

- “Technical Knowledge and Epistemic Values in Ancient Assyrian Procedure Texts,” Eduardo Escobar (University of California, Berkeley)
- “Alchemy between City and Cloister: Poetry, Blackmail, and Expertise in English Religious Houses,” Jennifer Rampling (Princeton University)
- “A Gift to the Sons of Rum: Turkish Alchemical Poems of the Seventeenth Century,” Tuna Artun (Rutgers University)
- “The Alchemical Emblem Book and Early Modern Game Theory: *Atalanta fugiens* (1618),” Donna Bilak (Chemical Heritage Foundation)

The Latter-Day Lyceum: Pushing the Boundaries of Catholic Aristotelianism, 1500–1750

Ontario (Level 2)

Chair and Commentator: Mordechai Feingold (California Institute of Technology)

Organizer: Jean-Olivier Richard (Johns Hopkins University)

- “Exegetical Exercises and Judaic Legends: Fortunio Liceti against Francisco Suarez,” Eva Del Soldato (University of Pennsylvania)
- “Divination in Dreams and the Alleged Impiety of Aristotle,” Craig Martin (Oakland University)
- “Between the Miraculous and the Mundane: The Jesuit War on the Occult,” Mark Waddell (Michigan State University)
- “Men in the Machine: Père Castel and the Art of Avoiding Catastrophes,” Jean-Olivier Richard (Johns Hopkins University)

Music, Acoustics, and Rhythm in the Sciences

Grant Park (Level 3)

Chair: David L. Seim (University of Wisconsin-Stout)

- “Turning Music into Sound: Vincenzo Galilei’s Contributions to Acoustics,” Marina Baldissera Pacchetti (University of Pittsburgh)
- “Sound and Vision: Visuality and the Role of Acoustics in the Birth of Modern Ophthalmology in Seventeenth-Century Europe,” Richard Spiegel (Princeton University)
- “‘The Harmonium within Us’: Ether, Ethereality, and Early Romantic Ideas about Music and the Nerves,” Carmel Raz (Yale University)
- “Folding into Being: Early Embryology and the Epistemology of Rhythm, 1760–1830,” Janina Wellmann (Leuphana University Lüneburg)
- “Music and the Arsenal: Artillery, Sound, and Science in Woolwich, 1800–1850,” Simon Werrett (University of Washington, Seattle)

Number and Narratives: New Approaches to the History of the Mathematical Sciences

Marquette Park (Level 3)

Chair and Organizer: Emily Redman (University of Massachusetts, Amherst)

Commentator: Massimo Mazzotti (University of California, Berkeley)

- “Geometries of Power,” Amir Alexander (University of California, Los Angeles)
- “The Housewife Problem: Applied Mathematics and Efficient Economics in the National Security State,” Theodora Dryer (University of California, San Diego)
- “Cause by Number: Jerome Cornfield and Statistical Narratives,” Christopher Phillips (NYU Gallatin)
- “Measuring Worth: Constructing Narrative of Value for Precollege Mathematics Education in the United States,” Emily Redman (University of Massachusetts, Amherst)

Scientific Expertise in the Peripheral and the Emerging Contexts of Science

Huron A (Level 2)

Chair and Commentator: Alexander Levine (University of South Florida)

Organizer: Deepanwita Dasgupta (East Tennessee State University)

- “Periphery on the Centre: C.V. Raman, Colonial Physics and Indian Modernity,” Somaditya Banerjee (University of Idaho)
- “The Surface of a Star, a Peripheral Scientist, and an Equation on Ionization,” Deepanwita Dasgupta (East Tennessee State University)
- “Human Origins at the End of the World: Francisco Moreno, Florentino Ameghino, and the Invention of Prehistoric South America,” Ashley Kerr (University of Idaho)
- “Japanese Malacology 1790–1925: Zoology in the Non-Alphabetic Realm,” Paul Callomon (Academy of Natural Sciences of Drexel University)

SciViroTech, or Science that Materially Changed the World

Erie (Level 2)

Chair, Commentator, and Organizer: Roger Turner (Dickinson College)

- “Bringing California to the Table: Myer E. Jaffa and the Pure Food Movement,” Kimberly Killion (University of California, Berkeley)
- “Mendeleev’s Maps, Measures and the Magnetic Mountain,” Lydia Xynogala (Cooper Union)
- “The Year of Balloons and Fireflies: Operation FuGo and the Militarization of Fire Suppression,” Jameson Karns (University of California, Berkeley)
- “The Century 21 Exposition: Building Confidence in a Space Age Fair in Seattle 1955-1962,” James D. Skee (University of California, Berkeley)

Theoretical Change in the History of Physics

Garfield Park (Level 3)

Chair: Bruce J. Hunt (University of Texas at Austin)

- “Euler’s Mechanics as Opposition to Leibnizian Dynamics,” Nobumichi Ariga (National Museum of Nature and Science, Japan)
- “Dimensional Analysis in the Nineteenth Century,” Sybil de Clark (University of Arizona)
- “The Conservation of Energy in the Netherlands,” Frans van Lunteren (VU University of Amsterdam)
- “The Origins of Schwinger’s Euclidean Green’s Functions,” Michael Miller (University of Pittsburgh)
- “Quantum Mechanisms and the Microscopic-Macroscopic Divide,” Daniela Monaldi (York University)

Where are the Go-Betweens Going?

Millennium Park (Level 3)

Chair: Janet Browne (Harvard University)

Commentator: Kapil Raj (Ecole des Hautes Etudes)

Organizer: Jordan Goodman (University College London)

- “Knowledge of the ‘Non-Expert’: Chemistry, Botany, and Peasants in 1960s Mexico,” Gabriela Soto Laveaga (University of California, Santa Barbara)
- “Pharmacological Go-Betweens in the Atlantic World,” Ben Breen (University of Texas)
- “Confident Men and Confidence Men: Taxonomy and Local Agents in Joseph Pitton de Tournefort’s Eastern Mediterranean Voyage, 1700–1702,” Jordan Kellman (University of Louisiana at Lafayette)
- “Spot the Go-Between(s): Joseph Banks, Knowledge, and Interpreters for the Macartney Embassy to China, 1792,” Jordan Goodman (University College London)

2:00 – 3:00 PM

Elizabeth Paris Memorial Lecture for Socially Engaged History and Philosophy of Science: “From Einstein’s Clocks to the Refusal of Time,” Peter Galison, Harvard University

The Fourth Presbyterian Church of Chicago – Buchanan Chapel at the Gratz Center (1 block from meeting hotel)

This talk is part of the Chicago Humanities Festival and is a ticketed event (tickets for this event are sold out). You can find more information at <http://chicagohumanities.org/events/2014/journeys/peter-galison-from-einsteins-clocks-to-the-refusal-of-time>.



Image by Rich Niewiowski Jr