

HSS 2004 Program Schedule

Thursday, 18 November

(* denotes session organizers)

1:00 p.m. – 5:00 p.m.

HSS Council Meeting

(Big Bend B & C)

5:00 p.m. - 7:00 p.m.

**Man, Mind, and Machine: Ideas of the Self in the Context of
Nineteenth-Century Science in Western Europe**

(Texas Ballroom V)

Minsoo Kang,* *University of Missouri, St. Louis*, “The Living Machines: The Automaton as a Modernist Symbol, 1886 - 1909”

Courtenay Raia, *University of California, Los Angeles*, “Frederic Myers, Depth Psychology and the Spiritual Anatomy of Mind: Searching for the Psychical Soul in Late 19th Century England”

Kevin Lambert, *University of California, Los Angeles*, “George Boole in Ireland: The Reasoning Self and The Claims of Science”

Chair and Commentator: Bruce Clarke, *Texas Tech University*

Aliens in Science and Science Fiction from the 17th Century to Today

(Texas Ballroom VI)

Laura J. Snyder, *St. John's University*, “‘Lord Only of the Ruffians and Fiends?’: William Whewell and the Plurality of Worlds Debate”

Thomas P. Weber, *Lund University, Dept. of Animal Ecology*, “Spiritualism, Evolution and the Plurality of Worlds: A Comparison of Alfred Russel Wallace, Camille Flammarion and Carl du Prel”

Manfred D. Laubichler, *Arizona State University*, “Universal Biology - Dream or Reality?”

Samuel Gerald Collins, *Towson State University*, “Exotic Futures: Evolution, Emergence and the Ingrained Alien in Anthropology”

Chair: Laura Snyder,* *St. John's University*

Rethinking National Security and American Physics 50 Years after the Oppenheimer Hearing

(*Texas Ballroom III*)

Rebecca Press Schwartz, *Princeton University*, “Scientists Under Scrutiny in World War and Cold War”

Shawn Mullet, *Harvard University*, “Documenting Atomic Espionage: Historians’ Uses of Government Files”

David Kaiser,* *Massachusetts Institute of Technology*, “The Atomic Secret in Red Hands?: Cold War Fears of Theoretical Physicists”

Chair and Commentator: Mary Jo Nye, *Oregon State University*

A Volatile Relationship? Theory and Practice in Early Modern Chemistry

(*Texas Ballroom VII*)

Dane Thor Daniel,* *Dibner Institute, MIT*, “The Wandering Magus: Paracelsus’ Medical Practice”

Lawrence Principe, *Johns Hopkins University*, “Wilhelm Homberg and the Chymistry of Light”

M. D. Eddy,* *Dibner Institute, MIT*, “Principles and Practice: Agricultural Chemistry in Scotland, 1770-1800”

Chair and Commentator: William R. Newman,* *Indiana University*

Representing Life and Mind: New Methods for Analyzing Structures, Functions, and Sequences in Mid-20th Century Biology and Psychology

(*Texas Ballroom II*)

David Steffes, *University of Oklahoma*, “Causal Connections, Nature’s Game and Organismal Perspective: the Role of Chance in Sewall Wright’s “Balanced” Evolutionary Theory”

Joel Hagen, *Radford University*, “Fossil Proteins, Chemical Paleogenetics, and the Early Development of Molecular Systematics”

Hunter Crowther-Heyck,* *University of Oklahoma*, “The Program ‘Is’ the Theory: The Search for a New Language for the Behavioral Sciences in Postwar America”

Chair and Commentator: Vassiliki B. Smocovitis, *University of Florida*

Thursday, 18 November (continued)

7:00 p.m. – 8:30 p.m.

Opening Reception: HSS & PSA

(Texas Foyer)

8:30 p.m. - late

Special Interest Group in Chemical
History

Dinner at Truluck's, 400 Colorado Street

Friday, 19 November

7:30 a.m. 8:45 a.m.

Women's Caucus

(Hill Country D)

HSS Committee on Meetings and Programs

(Big Thicket)

9:00 a.m. – 11:45 a.m.

(Coffee Break 10:00 a.m. – 10:15 a.m. in Exhibit Hall)

Science and Art Go East

(Hill Country A)

Simon Werrett,* *University of Washington, Seattle*, “Russian Science Illuminated: Physics, Fireworks, and Court Spectacle at the St. Petersburg Academy of Sciences”

Michael D. Gordin, *Princeton University*, “The Weekday Chemist: Music, Science, Training, and Aleksandr Borodin”

Margarete Voehringer, *Max-Planck-Institute for the History of Science Berlin*, “How to Experiment with Instruments, Stones and

People – Nikolai Ladovski’s Psychotechnical Laboratory for Architecture, Moscow 1926”

Margareta Tillberg, *Vaxjo University, School of Industrial Engineering*, “New Eyes. Department for Organic Culture, Leningrad 1920s.”

Commentator: Ute Holl, *Weimar University*

Chair: John Tresch, *University of Chicago*

Across the Pacific: American-East Asian Scientific Interactions during the Cold War

(Hill Country B)

Zuoyue Wang, *California State Polytechnic University, Pomona*, “Technical Aliens: Chinese Scientists in the United States and the Politics of the Early Cold War”

Benjamin Zulueta, *California State University, Channel Islands*, “People of Science: American-Educated Chinese and the “Cold War of the Classrooms””

Jacob Darwin Hamblin, *California State University, Long Beach*, “Scientific Opportunity or Political Opportunism? American Oceanographers, UNESCO, and Cooperation in Asia, 1950-1970”

John Paul DiMoia,* *Princeton University*, “Teaching the Atom: AERI and the Origins of the South Korean Nuclear Program, 1955-1959”

Chair and Commentator: John Krige, *Georgia Institute of Technology*

Dimensions of the Naturalist Tradition in America

(Texas Ballroom VII)

Kristin Renee Johnson, *Arizona State University*, “Defending Systematics: The Plague Flea and the Role of Species Identification”

Mary Anne Andrei,* *University of Minnesota*, “Smithsonian Taxidermy and the Birth of Wildlife Conservation”

Chris Young, *Alverno College*, “Status and Agenda in Wildlife Preservation: William T. Hornaday as Zoologist and Activist”

Frederick R. Davis,* *Florida State University*, “The Naturalist Tradition and the Evolution of Conservation Biology”

Chair and Commentator: Paul L. Farber, *Oregon State University*

Friday, 19 November (continued)

9:00 a.m. – 11:45 a.m.

Self-Training: The Moral and Practical Stakes of Perception and Decision-Making

(*Big Bend A, B, & C*)

Matthew Stanley, *Iowa State University*, “The Pointsman: Maxwell’s Demon and Victorian Freewill”

Debbie Weinstein, *Brandeis University*, “Through the Looking Glass: Technologies of Perception in Twentieth-Century American Psychotherapy”

Sharrona Pearl,* *Harvard University*, “Natural-Born Beggars: Physiognomy and Determinism in Victorian Britain”

Chair and Commentator: Rebecca Herzig, *Bates College*

Exploration and Alienation in the History of Science

(*Texas Ballroom III*)

Elizabeth H. Lee, *Harvard University*, “Genealogies of Piracy: Alienation and Early-Modern French Geographical Knowledge”

Maria Lane, *University of Texas, Austin*, “Wonderful, Terrible Martians: Geographic Representations of the Red Planet, 1894-1916”

Hannah Landecker, *Rice University*, “What Cells Might Be: Cell Fusion and the History of Biotechnology”

Colin Milburn,* *Harvard University*, “Nano Worlds: Vision Beyond the Limits of Fabrication”

Chair and Commentator: Timothy Lenoir, *Stanford University*

A Just Story of Learning: Histories of Science in Early Modern Europe

(*Texas Ballroom VI*)

James Steven Byrne,* *Princeton University*, “Regiomontanus’s Padua Oration in the University Context”

Robert Goulding, *University of Notre Dame*, “‘How can Alexandria be Brought to Oxford?’ Henry Savile’s History of Mathematics and Institutional Reform”

Nicholas Popper, *Princeton University*, “Abraham, Planter of Mathematics”: Making Mathematics Orthodox in Early Modern England”

H. Darrel Rutkin, *Stanford University*, “Francis Bacon’s Reform of Astrology: De augmentis scientiarum III, 4”

Lauren Kassell, *Pembroke College*, “All Was This Land Full Fill’d of Faerie’, or Magic and the Past in Early Modern England”

Chair: Nicholas Popper, *Princeton University*

**All in the Family: Science and the Domestic Sphere
(Sponsored by the Women’s Caucus)**

(Texas Ballroom V)

Alix Cooper, *SUNY–Stony Brook*, “The Nature of Home: Work, Gender, and Power in Early Modern Natural History”

Joan L. Richards,* *Brown University*, “Parallel Universes: Visions of Reason in the De Morgan Household”

Catherine Nisbett, *Princeton University*, “Marriage and Widowhood in Amateur Astronomy”

Donald Opitz, *University of Minnesota*, “Schoolrooms, Cabinets, and Laboratories: Creating Spaces for Science in Victorian Country Houses”

Deborah Rachel Coen,* *Harvard University*, “Beyond Public and Private: Science and Liberalism in Imperial Austria”

Chair: Sally Gregory Kohlstedt, *University of Minnesota*

**Between Science and Politics:
Historical Constructions of Expertise**

(Hill Country C)

Mary Carmel Finley,* *University of California, San Diego*, “All the Fish in the Sea: Science and the Development of Maximum Sustained Yield (MSY)”

Steve Luis, *University of California, San Diego*, “Lochner v. New York: Expert and Common Knowledge in the Supreme Court Decision”

Peter A. Shulman, *Massachusetts Institute of Technology*, “Why Let a Petroleum Geologist File Your Taxes?”

Rebecca Slayton, *Stanford University*, “Between Science and Activism: Boycotting Star Wars”

Chair and Commentator: Tal Golon, *University of California, San Diego*

Friday, 19 November (continued)

9:00 a.m. - 11:45 a.m.

Intellectuals and the Political Meanings of Science in the Twentieth-Century

North Atlantic World

(Texas Ballroom II)

Jessica Wang, *University of California, Los Angeles*, “Knowledge and Policy: Pragmatism, Law, and Social Science in New Deal America”

Andrew Jewett, *Yale University*, “American Scientists and the International Reconstruction Debate”

Charles Thorpe, *University College London*, “Scientific Freedom, Cold War Liberalism, and the Oppenheimer Case”

Cathryn Carson,* *University of California, Berkeley*, “Science, Politics, and Instrumental Reason: Heidegger, Habermas, Heisenberg”

Chair: David Hollinger, *University of California, Berkeley*

Commentator: Thomas Broman, *University of Wisconsin, Madison*

Late-Twentieth Century Biosciences and Their Publics: Controversy and Pedagogy

(Big Bend D & E)

Hanne Andersen, *University of Copenhagen*, “Misrepresentation or Ignorance: The Case of ‘The Sceptical Environmentalist’”

Christina Brandt, *Max Planck Institute for the History of Science*, “Between Fact and Fiction: Bioscientific Research and Early Debates About Cloning and Genetic Engineering in Germany”

Xaq Frohlich, *Massachusetts Institute of Technology*, “Origins of the US ‘Sound Science’ Rationale and its Confrontation with Europe’s ‘Precautionary Principle’ Over GM Foods”

Amber Vogel, *University of North Carolina at Chapel Hill*, “From Frankenstein to Frankenfoods: An Interdisciplinary Approach to Secondary Education in the Biosciences”

Chair: Diane Paul, *University of Massachusetts, Boston*

12:00 p.m. - 12:30 p.m.

**Forum for the History of Science
in America Business Meeting**

(Texas Ballroom V)

**All scholars interested in the history of science in America are
invited and encouraged to attend.**

12:00 p.m. - 1:15 p.m.

HSS Committee on Honors and Prizes

(Big Thicket)

12:30 p.m. 1:15 p.m.

(Texas Ballroom II & III)

**Forum for the History of Science in
America Distinguished Scientist Lecture**

Steven Weinberg, *University of Texas*

Introduction by **Bruce Hunt**

1:30 p.m. - 3:10 p.m.

**Evolution, Old and New: Contested Interpretations of
Darwinism from Haeckel to the Present. Part I: The Evolution
and Development of German Darwinism**

(Texas Ballroom III)

Sander Gliboff, *Indiana University*, “Ernst Haeckel and the Mechanical Causes of Ontogeny”

Robert J. Richards, *University of Chicago*, “Haeckel’s and Miklucho-Maclay’s Polymorphous Demonstration of Darwin’s Theory, or How to Deep-Six Your Graduate Student.”

Frederick B. Churchill, *Indiana University*, “The Biogenetic Law and its Paradoxes”

Patricia Princehouse, *Case Western Reserve University*, “Haeckel, Goldschmidt, Gould: 100 Years of Contrarian Darwinians”

Chair: Sander Gliboff,* *Indiana University*

Friday, 19 November (continued)

1:30 p.m. – 3:10 p.m.

Heavenly and Earthly Bodies: Problems of “Pre-modernity” in Chinese and Ottoman Science

(Hill Country A)

Hilary A. Smith, *University of Pennsylvania*, “Does the ‘Early Modern’ Shoe Fit? Foot qi and Chinese Nutritional Science”

Carla Suzan Nappi, *Princeton University*, “Dragon’s Blood and Cardamom: The Foreign and the Distant in Early Modern Chinese Natural History”

Jane H. Murphy,* *Princeton University*, “The Ubiquity of the ‘Uncommon Sciences’: Scientific Practices in 18th-Century Cairo”

Commentator: Avner Ben-Zaken, *Harvard Society of Fellows*, “The Decade When the Sky Fell and A New Astronomy Arose”

Chair: Christopher Minkowski, *Cornell University*

Mind and Modernity

(Texas Ballroom V)

Mioara Deac, *University of Notre Dame*, “Psychology, Vision, and the Late Nineteenth-Century Modernist Project”

Philipp Felsch, *Max-Planck-Institute for the History of Science*, “Laboratory Landscapes. Angelo Mosso and the Mountains of Fatigue, 1875 - 1900”

Henning Schmidgen, *Max Planck Institute for the History of Science*, “The Early History of Reaction Time Experiments, 1850-1865”

Chair: Lenny Moss, *University of Notre Dame*

Visualizing the Body

(Texas Ballroom VII)

Cynthia Klestinec, *Georgia Institute of Technology*, “Fabricius and the Dramatic Rhetoric of Anatomical Inquiry”

Eva Ahrén Snickare, *Nobel Museum*, “Medicine and the Media: The Human Body on Display around 1900”

Lucia Dacome, *Wellcome Trust Centre for the History of Medicine at UCL*, “Seeing Enlightenments: Anatomical Models and the Visual Regimes of the Body in Eighteenth-Century Italy”

Chair: Pamela Smith, *Pomona College*

From Collections to Populations in Life Science

(Hill Country C)

Charissa S. Varma, *IHPST, University of Toronto*, “Early 19th Century Taxonomy and Essentialism: William Kirby’s Place in the History of Systematics”

Jean-Francois Auger, *Universite Louis-Pasteur, Strasbourg*, “The Cultural Meaning of Leon Provancher’s Entomological Collections, 1877-1980”

Christine Keiner, *Rochester Institute of Technology*, “Rats, Humans, and Urban Ecology: The Johns Hopkins Rodent Ecology Project, 1944-1952”

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

Re-examining Aristotle

(Big Bend A, B, & C)

Jeremy Kirby, *Florida State University*, “Aristotle’s Rejection of Resurrection”

Tiberiu Marcel Popa, *University of Pittsburgh*, “Metaphysical Implications of Aristotle’s Chemistry”

Bill Sterner, *University of Chicago*, “The Definitory Dialectic of Aristotle’s Four Causes in the Poetics”

Chair: R.J. Hankinson, *University of Texas, Austin*

Cells and Viruses in the History of Biology

(Texas Ballroom VI)

Sabine Brauckmann, *KLI*, “Cells Migrate and Shape: A Historical Sketch of Developmental Fate Maps”

Neeraja Sankaran, *Yale University*, “What Was a Virus? – The Status of Bacteriophage in this Debate in the Early 20th Century.”

Rena Selya, *Harvard University*, “Viruses, Cancer and the Institutionalization of Molecular Biology”

Chair and Commentator: Angela N.H. Creager, *Princeton University*

Friday, 19 November (continued)

1:30 p.m. – 3:10 p.m.

Science Between Nations

(Hill Country B)

Jahnvi Phalkey, *Georgia Institute of Technology*, “Meghnad Saha and the Calcutta Cyclotron”

Kenji Ito, *The University of Tokyo*, “Gender and Physics in Japan around WWII: Toshiko Yuasa and Her Emigration to France”

Sara Tjossem, *Columbia University*, “Competing Visions for Marine Science in the North Pacific”

Boumsoung Kim, *The University of Tokyo*, “Representing Earthquakes: A Historical Interpretation of Seismograms in Meiji Japan”

Chair: Abha Sur, *Massachusetts Institute of Technology*

Science and Religion in Public Life

(Texas Ballroom II)

Adam R. Shapiro, *University of Chicago*, “The Evolution of the “New Civic Biology”

Stephen P. Weldon, *University of Oklahoma*, “Humanistic Psychology and Liberal Religion in America, 1950-1980”

Greg Whitesides, *University of California, Santa Barbara*, “Manufacturing Faith: The Industry at the Intersection of American Science and Spirituality”

Chair: Ronald L. Numbers, *University of Wisconsin, Madison*

The Scientist in Memory

(Hill Country D)

Laura Otis, *Hofstra University*, “Haeckel’s Deferred Action”

Jeris Stueland Yruma, *Princeton University*, “How Experiments are Remembered: Discovery, Discipline, and the Birth of Fission”

Michael Cory Halliburton, *Independent Scholar*, “Paul Kammerer, Immortal Suicide”

Chair: Rima D. Apple, *University of Wisconsin, Madison*

**Fellowship and Research Support in History of Science,
Technology, and Medicine: A Panel Discussion
(Session Sponsored by the HSS Committee on Research and
the Profession)**

(Big Bend D & E)

Spencer Weart, *American Institute of Physics*

Mary Ellen Bowden, *Chemical Heritage Foundation*,

George Smith, *Dibner Institute*

John Servos, *Amherst College*

Victoria Harden, *National Institutes of Health*

Ron Rainger, *National Science Foundation*

(Coffee Break 3:10 p.m. – 3:30 p.m. in Exhibit Hall)

3:30 p.m. – 5:30 p.m.

**State-Sponsored Surveys in America: Providence,
Politics and Capitalist Expansion Sponsored by the
Earth and Environment Forum**

(Texas Ballroom VI)

Daniel Goldstein,* *University of California, Davis*, “Great Expectations: The Intellectual Context for State Geological and Natural History Surveys in Antebellum America”

Jeremy Vetter, *University of Pennsylvania*, “Knowledge, Capitalism, and the States: The Role of State Surveys in the Economic Development of the U.S. Central West, 1890-1920”

Brian Frehner, *University of Oklahoma*, “Mapping Nature: The Role of Field Work in the Oklahoma Geological Survey”

Commentator: Julie Newell, *Southern Polytechnic State University*

Chair: Daniel Goldstein, *University of California, Davis*

Friday, 19 November (continued)

3:30 p.m. - 5:30 p.m.

Tracing the Development of Mathematics in Early Twentieth-Century America: Three Case Studies Drawn from the Archives of American Mathematics, Austin

(Hill Country D)

Albert C. Lewis, *Indiana University -Purdue Univ. Indianapolis*, “G.B. Halsted and Mathematics on the American Frontier”

Della D. Fenster, *University of Richmond*, “Leonard Dickson: You Can Take the Man Out of Texas But not the Texas Out of the Man”

David E. Zitarelli, *Temple University*, “The Moore-Kline Correspondence: A Portrait of Two Mathematicians”

Commentator: Karen Parshall, **University of Virginia*

Chair: Joseph Dauben, *The Graduate Center, CUNY*

Evolution, Old and New: Contested Interpretations of Darwinism from Haeckel to the Present: Part II: “Challenges to Gradualism: Saltationism, Punctuated Equilibrium, and Neo-Catastrophist Mass Extinction Theory”

(Texas Ballroom III)

Marsha L. Richmond,* *Wayne State University*, “Views of Evolution at the Darwin 1909 Celebration: The Challenges of Mendelism, Mutation, Meiosis, and Saltation”

Sherrie Lynne Lyons, *SUNY Empire State College*, “From Huxley to Gould: Thomas Henry Huxley’s Relevance For Modern Evolutionary Theory”

Michael R. Dietrich, *Dartmouth College*, “Reviving the Hopeful Monster: Richard Goldschmidt and Saltational Evolution”

David Sepkoski, *Oberlin College*, “Paleobiology in the 1970s: Punctuation, Mass Extinction, and Quantification”

Chair: Sander Gliboff, *Indiana University*

Computers in the Midst: Computational Science Enters the Laboratory

(Hill Country C)

Charles N. Yood, *Lyman Briggs School of Science, Michigan State*

University, “Building Big Iron: Applied Mathematics, ‘Hybrid Areas’ and the Social Organization of Computational Science at Argonne National Laboratory, 1949-1970”

Joe November, *Princeton University*, “DENDRAL: Automating Hypothesis Formation”

Ann Johnson,* *University of South Carolina*, “Molecules or Very, Very Tiny Beams? Writing Algorithms to Model Carbon Nanotubes at NASA”

Chair and Commentator: Robert W. Seidel, *University of Minnesota*

Behavior on Film – The Uses of Motion Picture in Studies of Human and Animal Behavior

(Texas Ballroom VII)

Scott Curtis, *Northwestern University*, “As Tangible as Tissue: Arnold Gesell, Infant Behavior, and Film Analysis”

Ute Holl, *Bauhaus-University Weimar*, “Science and Avantgarde. Dziga Vertovs Filmwork and the Techniques of Observing in Russian Reflexology”

Tania Munz,* *Princeton University*, “Birds, Bees, Lights, Camera, Action - Karl von Frisch, Konrad Lorenz and the Behavior of Animals on Film”

Chair and Commentator: Alison Winter, *University of Chicago*

Astronomy and Representation in the Nineteenth Century

(Hill Country B)

Anna Henchman, *Society of Fellows, Harvard University*, “To See What I See: Thomas De Quincey and the Orion Nebula”

Pamela Gossin, *University of Texas, Dallas*, “Literary History of Astronomy: Thomas Hardy’s Personal Construct Cosmology”

Jimena Canales, *Massachusetts Institute of Technology*, “AUTO, NOMOS, and MATIC: Boundaries between “Impersonal” and “Personal” Representations”

Commentator: Allen MacDuffie, *Harvard University*

Chair: Anna Henchman,* *Harvard University*

Friday, 19 November (continued)

3:30 p.m. - 5:30 p.m.

The Formation of Scientific Practice and Knowledge in Cross-Cultural Perspectives

(*Hill Country A*)

Minghui Hu, *University of Chicago*, “Measuring the Cosmos: Tension between Confucian Cosmology and Jesuit Cosmography”

Fa-ti Fan,* *State University of New York at Binghamton*, “Natural History in Chinese-Western Encounter”

Grace Yen Shen, *Harvard University*, “Scientific Worldviews: Chinese Geology and International Science, 1911-1949”

Chair and Commentator: Roger Hart, *University of Texas, Austin*

Scientific Persona(e)

(*Texas Ballroom V*)

Matthew L. Jones, *Columbia University*, “Leibniz and the Persona of the Decorous Natural Philosopher”

Theodore M. Porter, *University of California, Los Angeles*, “The Cultivated Scientist: Fashioning a Self for a New Age of Science”

Jamie Cohen-Cole,* *University of Chicago*, “Experimental Psychology and the Professional Politics of Thinking About Thinking”

Chair and Commentator: Alison Wylie, *Barnard College*

Detection Devices and Experimental Agents

(*Texas Ballroom II*)

Keith A. Nier, *Independent Scholar/Chemical Heritage Foundation*, “Development of Mass Spectrometry: Weighing Ions and the Nature of Science”

Catherine Lee Westfall, *Argonne National Laboratory*, “When Little Plays Big: Fifty Years of Mössbauer Spectroscopy at Argonne”

Chen-Pang Yeang, *Massachusetts Institute of Technology*, “Toward a Science of Noise”

Chair: Christophe Lecuyer, *Chemical Heritage Foundation*

Mathematics and Practice in Early Modern Europe

(Big Bend A, B, & C)

Alexander J. Hahn, *University of Notre Dame*, “Discorsi and Experiment in Conflict: Galileo’s Folio 116v and his Resolution of the Mirandum Paradox”

Sigurd Tønnessen, *Center for the Study of the Sciences and the Humanities, University of Bergen*, “Creating Physics: Kepler’s Analysis and Synthesis of Geometry, Kinematics and Dynamics”

Saul Fisher, *The Andrew W. Mellon Foundation*, “Gassendi and Puy-de-Dôme: Abandoning the ‘Regressus’ for a Method of Hypothesis”

Albrecht Heeffner, *Ghent University*, “‘Récration Mathématiques (1624): A Study on the Authorship, Sources and Influence.”

Chair: Jole R. Shackelford, *University of Minnesota*

6:15 p.m. - 8:00 p.m.

Joint Reception at the Harry Ransom Humanities Research Center, University of Texas, Austin (Ticket required)

Buses will pick up from hotel entrance at 5:45 p.m. and then run on a circuit, with stops at the Hyatt, the Radisson, the Warehouse District, and the Ransom Center until 10:15 p.m. Or ride the free Gold Dillo. See packet insert.

8:00 p.m. – 9:30 p.m.

Committee on Education Workshop: Bringing the History of Science to Science and Mathematics Teachers

(Harry Ransom Center, Prothro Theater)

Elizabeth Cavicchi, *Dibner Institute/MIT*

Peter Heering, *University of Oldenburg/Deutsches Museum*

Bruce Hunt, *University of Texas, Austin*

Mark Largent, *University of Puget Sound*

Michael Marder, *University of Texas, Austin*

Saturday, 20 November

7:30 a.m. – 8:45 a.m.

Osiris Editorial Board Meeting

(Board Room)

Saturday, 20 November (continued)

7:30 a.m. - 8:45 a.m.

Forum for the History of Science in America Steering Committee
(*Big Thicket*)

9:00 a.m. - 11:45 a.m.

(Coffee Break 10:00 a.m. - 10:15 a.m. in Exhibit Hall)

Racial Biology before and during the Third Reich:

New Research Initiatives

(*Texas Ballroom II*)

Volker Roelcke, *University of Giessen*, “Preventing Disease, Improving the Race: Genetic Research at the Kaiser Wilhelm Institute for Psychiatry in Munich, 1917-1945”

Bernd Gausemeier, *MPG-Forschungsprogramm*, “Science or Politics?: Nazi Racial Biology, ‘Pure Genetics’ and the Rockefeller Foundation Connection”

Sheila Faith Weiss,* *Clarkson University*, “The Political Function of Human Genetics at International Conferences Under the Swastika”

Hans-Walter Schmuhl, *University of Bielefeld/Fakultät für Geschichtswissenschaft, Philosophie und Theologie*, “Racial Science, Eugenics, and Developmental Genetics: The Politics of the Paradigm Shift at the Kaiser Wilhelm Institute for Anthropology, Human Heredity and Eugenics, 1938-1945”

Commentator: Garland Allen, *Washington University*

Chair: Susanne Heim, *Presidential Commission, Max Planck Society*

The Other Final Frontier: A Session on Post-War Ocean Science, in Honor of David K. van Keuren

(*Texas Ballroom III*)

Ronald Rainger, *National Science Foundation*, “Beyond Being Blue: The Expanding Domain of American Oceanography”

Helen M. Rozwadowski, *University of Connecticut, Avery Point*, “Turning Heads: FLIP and the Technological Imagination in Postwar Oceanography”

D. Graham Burnett,* *Princeton University*, “Whales and the Cold War:

The First International Symposium on Cetacean Research”

Naomi Oreskes, *University of California, San Diego*, “Secrecy and Sea-floor Spreading”

Commentator: Eric L. Mills, *Dalhousie University*

Chair: D. Graham Burnett, *Princeton University*

State of Nature: Presenting and Representing Animals in 20th Century Japan and the United States

(Texas Ballroom VII)

Victoria Cain,* *Columbia University*, “‘Selling’ Animals: Consumption and Conservation in American Natural History Museums, 1900-1930”

Brett L. Walker, *Montana State University*, “Global Science and National Distinctiveness: Animal Representations and the Birth of Ecology in Japan”

Hanna Rose Shell, *Harvard University*, “Hide: Reframing Wartime Natural History and the AMNH Alaska Brown Bear Group 1937-1945”

Chair and Commentator: Gregg Mitman, *University of Wisconsin, Madison*

Who Knows Best - Judges, Fakers, Scientists, or Historians?

A Festsession for J. L. Heilbron

(Texas Ballroom VI)

Mario Biagioli, *Harvard University*, “Intellectual Property in Early Modern Instruments: Galilei vs. Capra”

Jessica Riskin, *Stanford University*, “Dissimulations”

Larry Lagerstrom, *University of California, Davis*, “Applied History of Science: The Case of Creation and Evolution”

Timothy Moy, *University of New Mexico*, “Recent Applications of History of Science and Technology in National Security Policy”

Matthias Dorries,* *Université Louis Pasteur/University of Texas, Austin*

Commentator: J. L. Heilbron, *University of California, Berkeley*

Chair: Abigail Lustig, *University of Texas, Austin*

Saturday, 20 November (continued)

9:00 a.m. – 11:45 a.m.

Citizens as Subjects: Behavioral Science Research and Its Critics in Postwar America

(Hill Country C)

Lynn Gorchov, *Oberlin College*, “Dismissing the Experts: The 1950 Senate Sex Perversion Hearings”

Jill Morawski, *Wesleyan University*, “Socialized/Civilized: The Promise of Socialization Theory and the Protean Human in Postwar America”

Laura Stark, *Princeton University*, “Practicing Morality: Psychological Research Practices and the Rise of Human Subjects Regulations in Postwar America”

Commentator: Elizabeth Lunbeck, *Princeton University*

Chair: John Carson,* *University of Michigan*

Russian Intelligentsia and Science,

1860-1960

(Hill Country A)

Olga A. Valkova, *S. I. Vavilov Institute for History of Science and Technology, Moscow*, “Women Taking on the Role of Scientist in Nineteenth-century Russia”

Kirill Rossiianov, *S. I. Vavilov Institute for History of Science and Technology, Moscow*, “Taming the Primitive: Elie Metchnikov and His Discovery of Immune Cells”

Konstantin Ivanov, *Tula State Pedagogic University*, “The First Steps of Astrophysics in the USSR: Revolutionary Policies in Science and Disciplinary Boundaries”

Commentator: Alexei Kojevnikov,* *University of Georgia, Athens*

Chair: Jonathan Coopersmith, *Texas A&M University*

The Politics of Cosmology in

Early Modern Europe

(Texas Ballroom V)

John P. Friesen, *University of Leeds*, “Newtonian Natural Philosophy and the Ancients-Moderns Controversy at Christ Church Oxford”

David Marshall Miller, *University of Pittsburgh*, “The Thirty Years War and the Galileo Affair: A Plea for Political Contextualization”

Derek Jensen, *Brigham Young University*, “The Idea of a Plurality of Worlds in Seventeenth-Danzig: Abraham von Franckenberg’s *Oculus Sidereus*”

Steven R. Vanden Broecke, *The Johns Hopkins University*, “Disciplining Astrology: Notes on the Publication of Tycho Brahe’s *World System* (1588)”

Chair and Commentator: Adrian Johns, *University of Chicago*

Displays and Audiences

(Hill Country B)

Anna Maerker, *Cornell University*, “How (not) to be a Museum Visitor in Late-Eighteenth-Century Florence: Micro-Histories and Retrospective Accounts from the Royal Museum of Physics and Natural History”

Elizabeth R. Neswald, *National University of Ireland, Galway*, “Itinerants and Institutions: Popularizing Science in 19th-century Provincial Ireland”

Julia R. Saari, *University of Massachusetts, Amherst*, “A Space of Their Own: Making Room for the Public at NASA’s Kennedy Space Center”

Chair and Commentator: Karen Rader, *Sarah Lawrence College*

12:00 p.m. - 1:15 p.m.

The Expanding Scope of History of Science: Doctoral Dissertations – Jonathon Erlen, *University of Pittsburgh*

(Texas Ballroom VII)

Earth and Environment Forum, Business Meeting

(Texas Ballroom V)

Forum for the History of Human Sciences Business Meeting

(Texas Ballroom VI)

HSS Committee on Research and the Profession

(Big Thicket)

12:00 p.m. - 1:15 p.m.

The International Society for the History of Philosophy of Science, Open House Meeting

(Texas Ballroom II)

Saturday, 20 November (continued)

12:00 p.m. - 1:15 p.m.

HSS Committee on Education

(Foot Hills I)

12:00 p.m. - 3:00 p.m.

HSS Committee on Publications

(Board Room)

1:30 p.m. - 3:10 p.m.

Disease Etiology and Prevention

(Texas Ballroom VII)

Andrea Rusnock, *University of Rhode Island*, “Making Sense of Vaccination circa 1800”

Elise S. Lipkowitz, *Northwestern University*, “Matters of Family, Matters of State: The Debate over Inoculation in France 1754-1774”

Sofie Lachapelle, *Max Planck Institute for the History of Science*, “The Prophylaxis and Treatment of Endemic Cretinism by Nineteenth-Century Alienists”

Chair: Victoria Harden, *National Institutes of Health*

Science and Education

(Hill Country A)

Donald Cotter, *Mount Holyoke College*, “A Converted Organic Chemist and the Invention of American General Chemistry”

Deeapanwita Dasgupta, *University of Minnesota*, “The Story of Engineering Education in India: Science Education within the Framework of a Colonial Requirement”

Hanna Östholm, *Dept. for History of Science and Ideas, Uppsala University*, “The ‘Idea of the University’: The Impact of the Berlin University on Scandinavia and Sweden in Early 19th Century”

Holly C. VanScoy, *Academic Research Associates*, “The Role of The Psychological Sciences in The Supreme Court’s Decision in *Brown v. Board of Education*”

Chair: Nancy Hall, *University of Maryland*

Communication, Community, and Knowledge

(*Hill Country B*)

Peter Schimkat, *Independent Scholar*, “A Truly German Science: Attempts to Redefine Geology in Interwar Germany”

Anne Katrine Gjerløff, *Department of History, University of Copenhagen*, “Adventures of the Ape: Popularizations of Paleoanthropology in Denmark in the 20th Century”

Jesse Richmond, *University of California, San Diego*, “The Art of Ancestral Identity: Pictorial Representation and the Marginalization of ‘Australopithecus’”

Chair: Hamilton Cravens, *Iowa State University*

Postwar Science and Politics

(*Texas Ballroom II*)

Thomas Lassman, *Center for History of Physics, American Institute of Physics*, “The Path Not Taken: Henry A. Wallace and the Reconstruction of American Science after World War II”

Anja Skaar Jacobsen, *Department of Mathematics and Physics, Roskilde University, Denmark*, “The Role of Marxist Ideology in Léon Rosenfeld’s Defence of Complementarity in the 1950s”

David C. Cassidy, *Hofstra University*, “Militarized Science: J. Robert Oppenheimer as Federal Science Advisor”

Commentator and Chair: Susan M. Lindee, *University of Pennsylvania*

The Historiographical Roots of History and Philosophy of Science

(*Hill Country D*)

Peter McLaughlin, *University of Heidelberg*, “Rethinking Internalism in the Scientific Revolution”

Nahum Kipnis, *Independent scholar*, “Are Old Scientific Theories ‘Rejected’ or ‘Abandoned’?”

Anna Mayer, *University of Florida*, “When Things Don’t Talk: Knowledge and Belief in the Historic Didactics of Charles Singer”

Chair: Joseph T. Rouse, *Wesleyan University*

Saturday, 20 November (continued)

1:30 p.m. – 3:10 p.m.

Travels and Expeditions of Nineteenth-Century Scientists

(*Texas Ballroom III*)

David Cahan, *University of Nebraska*, “The Scientific Tourist: Helmholtz in Gilded Age America”

Christopher R. Carter, *Duke University*, “Herschel, Humboldt, and Imperial Science”

Alistair Sponsel, *Princeton University*, “Fathoming the Depth of Charles Darwin’s Theory of Coral Reef Formation”

Chair and Commentator: James Secord, *University of Cambridge*

Epistemology and Audience

(*Hill Country C*)

Edward Jurkowitz, *University of Illinois at Chicago*, “Liberal Unities of Mind and Knowledge: Hermann Von Helmholtz’s and Ernst Mach’s Images of Intellect and Epistemology”

Katherine Arens, *University of Texas, Austin*, “Mach, Haeckel, and the Rejection of the “Two Cultures”: Popular Science as Epistemology in German-Language Science of the (Last) Fin de siècle”

Joel Isaac, *Trinity College, University of Cambridge*, “The Education of a ‘Scientific Philosopher’: W. V. Quine and the Analytic Turn in American Philosophy, 1926-1940”

Chair: John Zammito, *Rice University*

Theory Confronts the World

(*Texas Ballroom V*)

Cibelle Celestino Silva, *Universidade de Campinas, Brazil*, “Dimensional Analysis and the Search for the True Nature of Electromagnetic Quantities: The Contribution of Reginald A. Fessenden”

Slobodan Perovic, *York University*, “Recent Revival of Schrödinger’s Ideas on Interpreting Quantum Mechanics and Relevance of Their Early

Experimental Critique”

William Shields, *Virginia Tech*, “The Strange Tale of Centrifugal Force”

Chair: Matthias Dorries, *Université Louis Pasteur/UT, Austin*

18th-Century Naturalism

(Texas Ballroom VI)

William Max Nelson, *University of California, Los Angeles*, “Healing Time’s Eunuch: Buffon and the Generation of the Future in Enlightenment France”

Mary Terrall, *University of California, Los Angeles*, “Réaumur’s Networks of Knowledge and Practice”

Jed Foland, *University of Massachusetts, Amherst*, “Crossing Species: Buffon and the Science of Experimentation.”

Monika Gisler, *University of Basel/University of California, Los Angeles*, “Interpreting Earthquakes in 18th Century Protestant Switzerland: Between Science and Theology”

Chair: Anita Guerrini, *University of California, Santa Barbara*

(Coffee Break 3:10 p.m. -3:30 p.m. in Exhibit Hall)

3:30 p.m. – 5:30 p.m.

**Going Wrong: Errors, Failures, and Other Pitfalls
in Scientific Practice**

(Texas Ballroom III)

Theodore Arabatzis, *University of Athens*, “Misinterpreting (correct) Experimental Results: Kaufmann’s Rejection of the Particulate Interpretation of Cathode Rays”

Davis Baird, *University of South Carolina*, “Atomic Precision: Rowland’s Dictum and Nanotechnology”

Giora Hon, *University of Haifa*, “Living Extremely Flat: The Status of Errors in Experimental Studies of Biological Systems”

Jutta Schickore,* *Indiana University*, “The Infamous Globule Hypothesis”

Chair: Friedrich Steinle, *University Lyon 1*

Saturday, 20 November (continued)

3:30 p.m. – 5:30 p.m.

Imagined Worlds: Constructions of Nature in Early Modern Europe

(Hill Country C)

Jonathan Seitz, *University of Wisconsin, Madison*, “Science in the Holy Office: The Inquisition and Views of Nature in Early Modern Venice”

Maria M. Portuondo, *The Johns Hopkins University*, “Mapmakers at Work: Constructing a Map of the New World”

Mark A. Waddell, *The Johns Hopkins University*, “Magic, Magnets, and Machines: Jesuit Depictions of Artifice and the End of Nature’s Wondrous Power”

Allison B. Kavey, *Gonzaga University*, “Structuring Nature: Scripting the Natural in “The Secrets of Albertus Magnus” and “Cornucopiae, or Divers Secrets””

Chair: Allison B. Kavey,* *Gonzaga University*

Caltech at War and Peace

(Texas Ballroom II)

Patrick McCray,* *University of California, Santa Barbara*, “Caltech, Project Vista, and the Dilemmas of Lee DuBridge”

Peter Neushul, *University of California, Santa Barbara*, “World War II War Production at Caltech: The Rocket Program”

Peter J. Westwick, *Caltech*, “Remobilizing for Defense in the 1980s: The Case of the Jet Propulsion Lab”

Chair and Commentator: Daniel Kevles, *Yale University*

Practicing Natural History

(Texas Ballroom VI)

Lynn K. Nyhart, *University of Wisconsin, Madison*, “Bringing Natural History to Life: “Practical” Natural History, Museums, and Zoos in Mid-Nineteenth-Century Germany”

Anne Secord, *University of Cambridge*, “Social Class and the Boundaries of the Field in Nineteenth-Century British Botany”

Richard Burkhardt, *University of Illinois, Urbana-Champaign*, “Ordering and Coordinating Naturalists’ Practices in Restoration France”

Robert E. Kohler,* *University of Pennsylvania*, “American Museums and Natural History Collecting”

Chair: Mark V. Barrow, *Virginia Tech*

Scientists as Educators: Teaching the Exact Sciences in the U.S. from 1910 to 1970

(*Hill Country A*)

John L. Rudolph, *University of Wisconsin, Madison*, “Millikan, Mann, and the Debate Over General Science in the High School Course of Study”

Patti Wilger Hunter, *Westmont College*, “Foundations of Statistics in American Textbooks: Probability and Pedagogy in Historical Context”

David Lindsay Roberts,* *Independent Scholar*, “Mathematicians in the Schools: The “New Math” as an Arena of Professional Struggle, 1950-1970”

Commentator: John Servos, *Amherst College*

Chair: Peggy Kidwell, *Smithsonian Institution*

The German Physical Society under National Socialism

(*Hill Country B*)

Richard Beyler, *Portland State University*, “Boundaries and Authority in the Physics Community in the Third Reich”

Dieter Hoffmann,* *Max Planck Institute for History of Science*, “The “Ramsauer Era” and the Self-Mobilization of the DPG”

Michael Eckert, *Deutsches Museum (Munich)*, “The DPG and “Aryan Physics””

Chair and Commentator: Mark Walker, *Union College*

Saturday, 20 November (continued)

3:30 p.m. - 5:30 p.m.

The Autonomy of the Automaton: Paradoxes of Subjectivity and Technology in the Scientific and Literary Culture of Modern Europe

(Texas Ballroom VII)

Adelheid Voskuhl, *Cornell University*, “Bourgeois Automata: Mechanical Bodies and Autonomous Subjects in the Nascent Civil Society of Late 18th-Century Germany”

John Tresch,* *Northwestern University*, “The Automaton and its Uncanny Kin in French Fantastic Literature, c.1848”

Matt Price, *University of Toronto*, “The Hand, Human Nature, and the Art of Prosthesis in World War I”

Commentator: Robert Brain, *University of British Columbia*

Chair: Tracie Matysik, *University of Texas, Austin*

Varieties of Darwinism

(Texas Ballroom IV)

Stephen G. Alter,* *Gordon College*, “The Textual Sources of Darwin’s ‘Unconscious Selection’ Concept”

Joy Harvey, *Independent Scholar*, “Rethinking French Darwinism”

Paul White, *University of Cambridge*, “Darwin’s Correspondence and the Imperial Archive”

Chair and Commentator: Phillip R. Sloan, *University of Notre Dame*

Recent Work in the History of Biological Science in Japan

(Hill Country D)

Eriko Kakuzaki, *Rissho University*, “History of Human-Animal Interaction in Japan”

Yoshiko Iizuka, *Rissho University*, “Birth Technology and Gender Problems in Recent Japan”

Hazime Mizoguchi*/**Noriko Sato**, *Rissho University*, “Japanese Biologists at the Marine Biological Laboratory, Woods Hole”

Chair and Commentator: Keith Benson, *Green College, University of British Columbia*

Saturday, 20 November

6:00 p.m. - 7:00 p.m.

(Texas Ballroom II & III)

HSS Distinguished Lecture

Peter Dear, *Cornell University*

Introduction by Tom Broman, *University of Wisconsin, Madison*

What is the History of Science the History of? Identifying the
Subject-Matter of a Discipline



Photo courtesy Peter Dear

Saturday, 20 November (continued)

8:00 p.m. – 10:00 p.m.

Awards Banquet – Ticketed event

(Texas Ballroom V, VI, & VII)

10:30 p.m. - 12:00 a.m.

HSS and PSA Graduate Student Party

Hill Country C & D

Sunday, 21 November

8:00 a.m. – 9:00 a.m.

HSS Business Meeting

(Texas Ballroom V)

9:00 a.m. – 10:00 a.m.

HSS Committee on Finance

(Texas Ballroom V)

9:00 a.m. – 11:45 a.m.

(Coffee Break 10:00 a.m. - 10:15 a.m. in Exhibit Hall)

Plenary Session -To Market, To Market

(Texas Ballroom II & III)

Daniel Kevles, *Yale University*, “The Engineering and Ownership of Life: The Establishment of Intellectual Property in Living Organisms”

Philip Mirowski, *University of Notre Dame*, “Caveat Emptor: On the History of Perceptions of the Supposed Independence of Scientific Research from the Forms of Economic Support”

Mary S. Morgan, *London School of Economics/University of Amsterdam*, “The Prisoner’s Dilemma and ‘Modern’ economics”

Donald MacKenzie, *University of Edinburgh*, “Markets, Bodies, and Theorems”

Chair: Emily Thompson, *Massachusetts Institute of Technology*