



ALL TIMES US CENTRAL STANDARD TIME

THURSDAY, 18 NOVEMBER 2021

## Redistribution and Reparation in the History of Science: an Open Listening Session

11/18/2021

12:00 PM – 1:00 PM

HSS, Caucus / Forum / Interest Group Meeting

## Art, Literature, and Science

11/18/2021

3:30 PM – 4:30 PM

HSS, Contributed Paper Session

Chair Marc Rothenberg

Victor Monnin, University of Strasbourg: *Rethinking the History of Paleontology While Looking at a Painting*

Frank James, *Between Dichotomies: Thomas Richard Underwood (1772–1835)*

Josephine Musil-Gutsch, Ludwig-Maximilians-Universität München: *How Microchemistry entered Art History*

Ana María Gómez López: *Ivan Efremov (1902 – 1972) and the foundations of taphonomic research in astrobiology*

## Building national scientific research capacities

11/18/2021

3:30 PM – 4:30 PM

HSS, Contributed Paper Session

Chair Zuoyue Wang, California State Polytechnic University

Duim Huh, The University of Tokyo: *Deweyan Science Education in Japan: Cultivating Scientific 'Japanese Spirit' in Primary and Secondary Schools in Japan, 1931–1952*

Chihiro Yamanaka, Yokohama National University: *How Scientific Research Was Sponsored in Japan: Emergence of JSPS Focusing on Overseas Influence*

Magnus Altschäfl, LMU Munich: *The short and unhappy employment of the invisible technician – Conflict and design flaws in the Max-Planck-Institute for Biochemistry*

## Chemical Mobilities (Forum for the History of Chemical Sciences Sponsored Session)

11/18/2021

3:30 PM – 4:30 PM

HSS, Organized Session

Organizer Simon Werrett, University College London

Chair Megan Piorko, Science History Institute

Yuan Yi, Columbia University: *DuPont (China), Inc.: Synthetic Dyes, Chemical Knowledge, and the Business of Color in China, 1921–1951*

Mark Chen, Harvard University: *The Translation of Chemical Knowledge in Nineteenth-Century Japan*

Nushelle de Silva, Massachusetts Institute of Technology, Department of Architecture: *The Chemistry of Administration in the Modern Art Museum*

## Darwin, Evolution, and Beyond

11/18/2021

3:30 PM – 4:30 PM

HSS, Contributed Paper Session

Chair Maria Elice Brzezinski Prestes, University of São Paulo

Bartłomiej Swiatczak, University of Science and Technology of China: *Darwin within the body: Early theories of somatic evolution and their eclipse (1881–1910)*

Jan Baedke, Ruhr University Bochum: *Endosymbiosis and the Nazis: Adolf Meyer-Abich's work at the German-Dominican Tropical Research Institute*

Arya Mohan, The English and Foreign Languages University: *"To Be Esteemed by My Fellow Scientists": Examining the "Professional Man's" Rhetoric in the Origin of Species*

Liv Grjebine, Harvard University: *A Darwinian Murder: The Role of the Barré-Lebiez Affair in the Diffusion of Darwinism in 19th Century France*

## Earth Sciences/Earthquakes

11/18/2021

3:30 PM – 4:30 PM

HSS, Contributed Paper Session

Chair Katherine Buse, University of Chicago

Kathryn Renton, UCLA: *Earthquake Narratives: Uses of Archival Documents in Historical Seismology*

Debjani Dutta, USC: *Tremulous Media: Nature, Technology, and the Seismic Imagination*

## Expertise and Private Life in the 20th Century: Science, Communication, and Sexual Subjectivity

11/18/2021

3:30 PM – 4:30 PM

HSS, Organized Session

Organizer Teri Chettiar, University of Illinois Urbana-Champaign

Chair Isabel Gabel, University of Pennsylvania

Tinne Claes, Katholieke Universiteit Leuven: *When Expertise Precedes Science: Counseling for Donor Insemination in Belgian Fertility Clinics in the 1970s and 1980s*

Birgit Nemeč, University of Heidelberg: *Risk, Responsibility, and Transformations in the Parent-Child Relationship in Reproductive Counseling in West Germany*

Teri Chettiar, University of Illinois, Urbana-Champaign: *Intimacy Expertise and the Making of Queer Relationships During Britain's Sexual Revolution*

Saniya Ghanoui, University of Illinois at Urbana-Champaign: *You Know What I Mean: Sexual Health Organizations as Expert Advice Columnists*

## FHHS Distinguished Lecture and Business Meeting

11/18/2021

3:00 PM - 4:30 PM

HSS, Caucus / Forum / Interest Group Meeting

Organizer Dana Simmons

## Genres of Scientific Knowledge

11/18/2021

3:30 PM - 4:30 PM

HSS, Organized Session

Organizer Daniela Barberis, North Central College

Chair Emily Hutcheson, University of Wisconsin Madison

Julia Reed, *A Doctor's Note: Paolo Zacchia and the Development of Medico-legal Consilia*

Alyssa Peterson, *The Localization and Embodiment of the Environment in Early South Carolina Medicine*

Daniela Barberis, North Central College: *"It Is Only What Comes from Us That Is Of Value:" Creating Sociology Through Book Reviewing*

Sophia Graefe, : *Fictional Writing and Listening - The "Verein für Museen" of Biologist Günter Tembrock*

## New Perspectives on Soviet Science and Society

11/18/2021

3:30 PM - 4:30 PM

HSS, Organized Session

Organizer Michael Coates, University of California, Berkeley

Chair Pey-Yi Chu, Pomona College

Michael Coates, University of California, Berkeley: *Making Knowledge Soviet: On the History of the Great Soviet Encyclopedia*

Clarissa Ibarra, University of California, Berkeley: *The "Second" Encounter: Cuban-Soviet scientific collaboration in the National Atlases, 1960-1979*

Mirjam Voerkelius, University of Maryland, Baltimore County: *Darwinism, Revolution, and the Moscow Darwin Museum*

Pey-Yi Chu, Pomona College: *Commentary on "New Perspectives on Soviet Science and Society"*

## Remedy without a cause – towards a history of symptomatic treatment

11/18/2021

3:30 PM – 4:30 PM

HSS, Organized Session

Organizer Lisa Haushofer, University of Zurich

Chair Lisa Haushofer, University of Zurich

Annelie Drakman, Stockholm University: *Differentiating between preventive, symptomatic and curative goals of bloodletting to explore its skyrocketing popularity in early nineteenth century medicine*

Elin Björk, Independent researcher: *The double-edged sword – the Use of Catheters as Symptom Relief in late 19th century Anglo-American Prostate Medicine.*

Lisa Haushofer, University of Zurich: *Symptomatic treatment and the measurement of "steroid phobia"*

## Standardization and Measurement from the Ancient World to the Early 20th Century

11/18/2021

3:30 PM – 4:30 PM

HSS, Contributed Paper Session

Chair Henk Kubbinga, University of Groningen

Roland Boucher, Retired: *Ancient Measurement*

Biying Ling, University of Chicago: *Helmholtz on color space and the foundation of measurement*

E. Prasad Venugopal, University of Detroit Mercy: *More Dangerous Than Gunpowder: The Social History of Early Kerosene Standards in the US*

## Theology, Eugenics, and Constructions of Science and Medicine

11/18/2021

3:30 PM – 4:30 PM

HSS, Contributed Paper Session

Chair Matthew Stanley, New York University

Elisabeth Yang, Rutgers University: *Constructing Moral Babies: Science and Theology in American Medical Discourse, 1880s–1920s*

Branden McEuen, Wayne State University: *Eugenics as Preventive Public Medicine in Michigan*

Vincent Auffrey, IHPST, University of Toronto: *“Pour l’amélioration de la race humaine”: The Reception of Eugenics in the French–Canadian Press, 1912–1921*

Nathan Bossoh, UCL: *Christian “universalism” and the non–Western “other”: science, religion and racial boundaries*

## We, The (Spacefaring) People: Vernacular Participation in Space Science & Exploration

11/18/2021

3:30 PM – 4:30 PM

HSS, Organized Session

Organizer Peter Kleeman, Space Age Museum

Chair Michael Neufeld, Smithsonian National Air and Space Museum

Peter Kleeman, Space Age Museum: *SNAPSHOTS OF THE SPACE AGE: VERNACULAR IMAGES OF PUBLIC PARTICIPATION IN SPACE EXPLORATION*

Dr. Emily Margolis, Smithsonian National Air and Space Museum: *Houston Honors the Space Age: The National Space Hall of Fame, 1965–1969*

Jieun Shin, Samsung Institute of Advanced Technology: *Nostalgic Monument to Education Center. The History of Planetarium in Washington, D.C.*

Jennifer Levasseur, Smithsonian Institution: *Celebrating a Permanent Human Presence in Space*

## **PLENARY: Land Acknowledgement and Opening Plenary (Joint)**

11/18/2021

5:45 PM - 7:30 PM

Joint with SHOT, Plenary



# FRIDAY, 19 NOVEMBER 2021

## **Ancient Arabic and Chinese worlds**

11/19/2021

9:00 AM - 10:00 AM

HSS, Contributed Paper Session

Chair Elaine Leong, University College London

Iman Darwish, Harvard University: *The Illustrated Arabic Botanical tradition of Dioscorides de Materia Medica*

Sean Bradley, University of Washington: *Challenges to Identifying Ancient Substances in Chinese Materia Medica*

Bianca Grier, University of Toronto: *Healing in the Village: A Taxonomy of Medical Practitioners in the Workmen's Village of Deir el-Medina*

## **Building the Margins: Infrastructure and Nation at the Intersection of Sea, Sky, and Soil in China, Japan, and Korea**

11/19/2021

9:00 AM - 10:00 AM

Joint with SHOT

Chair Ian Miller, Harvard University

Organizer Subodhana Wijeyeratne, Tokyo Woman's Christian University

Commentator Zuoyue Wang, California State University - Pomona

John DiMoia, Seoul National University: *Cheju as Contested Model: Parasitology, Public Health, and Nation-Building in Post-Colonial South Korea, mid-1960s*

Christine Luk, Tsinghua University: *Constructing Coastal Biological Stations in 20th Century China: Tsingtao and Hong Kong*

Subodhana Wijeyeratner, Tokyo Woman's Christian University: *Between the Rocket and the Deep Blue Sea: Space Exploration and the "Fishing Problem" in Southern Japan, 1950-1980*

## Constructing/Deconstructing Race

11/19/2021

9:00 AM - 10:00 AM

HSS, Contributed Paper Session

Chair Clare Kim, University of Illinois at Chicago

Monica Libell, Lund University: *Time and Culture in Carl Linnaeus' Ethno-racial Classifications*

Erica Torrens, Universidad Nacional Autonoma de Mexico: *The natural system and its relation to the process of racialisation in nineteenth-century Mexico through visual representation*

Kelsey Henry, Yale University: *"This milestone in their development as property": Racially Stratified Child Development, 1820 - 1865 U.S.*

Kelsey Henry Yale University

Aparna Nair, University of Oklahoma-Norman: *"Swadeshi" Spectacles, Eye Preservers and Dark Glasses: Race, Disability and Vision Aids in British India*

## When History of Science and Technology is Difficult History

11/19/2021

9:00 AM - 10:00 AM

Joint with SHOT, Roundtable

Organizer Aimee Slaughter, Los Alamos Historical Society

Chair Aimee Slaughter, Los Alamos Historical Society

## Animals in/as Technologies

11/19/2021

9:00 AM - 10:00 AM

Joint with SHOT, Organized Session

Organizer Brad Bolman, Stevanovich Institute on the Formation of Knowledge, University of Chicago

Chair Miguel Garcia Sanco Sanchez, University of Edinburgh

Anin Luo, Princeton University: *Animal Anxieties: The Dual Emergence of Experimental Biology and Animal Protection in Republican China*

Gina Surita, Princeton University: *The "Muscle Machine" in the Work of German Biochemist Otto Meyerhof, 1919–1930*

Claire Webb, Berggruen Institute: *Animals as Technologies in Outer Space*

Bradley Bolman, Stevanovich Institute on the Formation of Knowledge, University of Chicago: *The Dog in the Machine: Beagles, Computers, and Drugs*

## Dueling with Data: Fairness by Calculation in the Law

11/19/2021

9:00 AM - 10:00 AM

Joint with SHOT, Organized Session

Organizer Michael McGovern, Princeton University

Chair William Deringer, Massachusetts Institute of Technology

Pariroo Rattan, Harvard University: *Dueling Economists and Discriminating Models: Law and Statistics in 21st Century America*

Michael McGovern, Department of History, Princeton University: *The Strange Career of Jim Crow Statistics: Jury Selection in New Deal America*

Cleo Chassonnery-Zaïgouche, University of Cambridge: *"Contested Rationalities: Economic Expertise in the Comparable Worth Controversy, 1979–1989"*

Ciara Kenefick, University of Oxford: *Mathematics and Fairness in French Contract Law, 1700 to 1850*

## Geographies of disease

11/19/2021

9:00 AM - 10:00 AM

HSS, Contributed Paper Session

Chair Margaret Schotte, York University

Lauren Killingsworth, Yale University: *"With Maps Illustrative of the Disease": Medical Cartography in Late Nineteenth-Century Colonial India*

Jennifer Derr, UCSC: *Building a Science of the Post-Colonial Body in Egypt*

Sarah Naramore, Northwest Missouri State University: *Iodine and Endemic Goiter. A Specific Therapy in a Changing Medical World*

Emma Broder, Harvard University: *"The Anatomy of the Epidemic": Neuromyasthenia and Epidemiological Rationality, 1956-1965*

## Molecular Biology/Genetics

11/19/2021

9:00 AM - 10:00 AM

HSS, Contributed Paper Session

Chair John Emrich, The American Association of Immunologists

Neeraja Sankaran, Utrecht University: *Maclyn Mccarty, the Transforming Principle & Dnase: Clinching Evidence For DNA as the Material Basis of Genes*

William Summers, Yale University: *Death by Radiation: The Debates on the "Critical Radiosensitive Target"*

Pnina Abir-Am, Brandeis University: *Strategies for securing priority in the discovery of RNA splicing and their ramifications.*

Kyrie Greenberg, University of Minnesota Twin Cities: *Dance of the Genome*

## Natural History Collections and Empire (1)

11/19/2021

9:00 AM - 10:00 AM

HSS, Organized Session

Organizer Andreas Weber, University of Twente

Chair Andreas Weber, University of Twente

Lauren Williams, McGill University: *The American Black Parrot. Exploring an 18th-century Paper Museum*

Whitney Barlow Robles, Dartmouth College: *The Kitchen in the Cabinet: Histories of Food and Natural Science*

Dr. Charmantier, The Linnean Society of London: *Empire and the Linnean Society Botany collections*

Luciana Martins, Birkbeck, University of London: *Resources of hope: reactivating Indigenous biocultural knowledge*

## The Boundaries of Human Bodies in the Early Modern World

11/19/2021

9:00 AM - 10:00 AM

HSS, Organized Session

Organizer Tawrin Baker, University of Notre Dame

Chair María Portuondo, The Johns Hopkins University

Tawrin Baker, University of Notre Dame: *Early Modern Images of the Eye and the Borders Between the Artificial, the Natural, and the Mathematical*

Pablo Gomez, University of Wisconsin: *Accounting for Bodies: Slave Trading and Medical Arithmetic in the Early Seventeenth-Century Iberian Atlantic*

Anita Guerrini, Oregon State University: *Monster Theory and the Problem of Giants*

Daniel Margocsy, University of Cambridge: *Worms*

## The Science of Violence in 20th-Century North America: Experts and their Public

11/19/2021

9:00 AM - 10:00 AM

HSS, Organized Session

Organizer Stephanie Pache, UQAM

Chair Elizabeth Lunbeck, Harvard University

Debbie Weinstein, Brown University: *"Wars begin in the minds of men": UNESCO and the scientific study of violence, war, and peace*

Nadine Weidman, Harvard University: *The Killer Instinct: an idea and its reception in 1960s America*

Stephanie Pache, UQAM: *Politics of Sexual Violence: The Psychology of Consent in Contemporary North America*

## Underground Labor: Earth Workers, Evidence, and Erasure

11/19/2021

9:00 AM - 10:00 AM

HSS, Organized Session

Organizer Patrick Anthony, Vanderbilt University

Chair Lukas Rieppel, Brown University

Patrick Anthony, Vanderbilt University: *Prussian Miners, Creole Surveyors & Siberian Convicts: A Labor History of Humboldtian Science*

Jeremy Vetter, University of Arizona: *The Field Man: Skill and Identity in Underground Scientific Research at Dinosaur National Monument and Agate Fossil Beds*

Paige Madison, Natural History Museum Denmark: *The Unknown Discoverers: Scientific Practice and Knowledge Production in Postcolonial Indonesia*

## Working Theories: The Human Sciences and Motivation to Labor in the Twentieth Century

11/19/2021

9:00 AM - 10:00 AM

HSS, Organized Session

Organizer Simon Torracinta, Yale University

Chair Dana Simmons, University of California, Riverside

Nima Bassiri, Duke University: *Simulation, Industrial Labor, and Economic Pathologies circa 1900*

Danielle Judith Carr, Columbia University: *It made human life seem like the worst kind of wage labor": Imagining the Motivation to Produce From Behaviorism's Stimulus-Wage to Cognitivism's Innate Creativity*

Simon Torracinta, Yale University: *Time, Labor, and Motivation in Midcentury Economics*

Charles Petersen, Cornell University: *The 100x Road to Neoliberalism: Engineers, Meritocracy, and Economic Inequality, 1950–2000*

## Breakdown of the Productive Self: Work Sciences and Industrial Affect in the Twentieth Century

11/19/2021

11:00 AM – 12:00 PM

Joint with SHOT, Organized Session

Organizer Sam Schirvar, University of Pennsylvania

Chair Jennifer Alexander, University of Minnesota

Jiemina Tina Wei, Harvard University: *Ameliorating Worker Fatigue through the Body's Motions and Pauses: Frank and Lillian Gilbreth's 'Motion Studies'*

Victor Seow, Harvard University: *"To Advance Innovation and Invention, to Agitate for a Technological Revolution": Labor Psychology in the Early People's Republic of China*

Sam Schirvar, University of Pennsylvania: *The Politics of Stress: Human Factors Engineering, Occupational Health, and Air Traffic Control, 1968–1981*

## Building Race into the Machine: The Ongoing Challenges of "Big Data"

11/19/2021

11:00 AM – 12:00 PM

Joint with SHOT, Organized Session

Organizer Erik Peterson, University of Alabama

Chair Iris Clever, University of Chicago

Abigail Nieves Delgado, Utrecht University: *Making Race (Ir)relevant: Historical Biases in Facial Recognition Technologies*

Erik Peterson, University of Alabama: *Afraid of the Dark: Making the First 'Index of Nigrescence' (1850s–1900)*

Catherine Stinson, Queen's University, Kingston: *The artifice of AI mindreading*

Iris Clever, University of Chicago: *Tracing race in forensic anthropological data practices: the case of Fordisc*

## Chemical Past and Chemical Futures

11/19/2021

11:00 AM - 12:00 PM

HSS, Organized Session

Organizer Alison McManus, Princeton University

Chair Evan Hepler-Smith, Duke University

Vaibhav Pathak, Indian Institute of Science Education and Research, Mohali: *The Issues of Authority and Discovery in Roald Hoffmann and Carl Djerassi's play Oxygen (2001)*

Jessica Varner, USC Society of Fellows: *But Only from Ethylene: Extending Uncertain Culpabilities of Oil and Gas By-Products to Architecture*

Colleen Lanier-Christensen, Harvard University: *Making Toxicology Good: Regulating Laboratory Practice and Chemical Knowledge*

Kwame Edwin Otu, E-Waste as Archive: *Unsettling Technological Humanitarianism in Neoliberal Ghana: E-Waste as Archive: Unsettling Technological Humanitarianism in Neoliberal Ghana*

## Clinical Research

11/19/2021

11:00 AM - 12:00 PM

HSS, Contributed Paper Session

Chair Carolyn Shapiro-Shapin, Grand Valley State University

Pavel Vasilyev, HSE University: *Balancing Knowledge Reliability and Ethical Acceptability at the Moscow Institute for New Antibiotics, 1950s-1970s*

Michelle LaBonte, Harvard University: *Missing Mutations: Diagnostic Uncertainty in Carrier Screening for Cystic Fibrosis*

Hein Brookhuis, KU Leuven: *"Big Science coming in Small Pieces" - the Belgian Nuclear Research Center and the growth of nuclear medicine in Belgium (1990 - 2020)*



Fedir Razumenko, University of Calgary: *Three Dimensions in the Interpretation of Oncologic Clinical Trials: physician–investigators, biomedical evidence, and patient–participants*

## Death in the Time of Cholera: Bureaucracy, the State and Contested Communications in Nineteenth-Century Spain and the Ottoman Empire

11/19/2021

11:00 AM – 12:00 PM

Joint with SHOT, Organized Session

Organizer Alex Schweig, University of Arizona

Chair Alex Schweig, University of Arizona

Isacar A. Bolaños, California State University, Long Beach: *Disease and the State in Late Ottoman Iraq, 1821–1899*

Ruth A. Oropeza, University of Arizona: *Sanitation in the time of Cholera: Spain, Epidemics and the Dirección General de Beneficencia y Sanidad, 1830–1860*

Alex Schweig, University of Arizona: *Contested Quarantines and Interruptions: The Effects of Cholera on Late Ottoman Mobilities*

## Explaining Everything: Models, Machines, and Black Boxes in Histories of Science and Technology

11/19/2021

11:00 AM – 12:00 PM

Joint with SHOT, Organized Session

Organizer Lan Li,

Chair Elizabeth Patrick,

Rodolfo Alaniz, University of Texas at Austin: *Body Boxes: Sexual Inversion and the Embodiment of Sexual Selection*

Jan Mueggenburg, Leuphana University Lüneburg: *Functional Boxes: UNIFACE, the Personal Computer, and Accessibility in 1990s Germany*

Lan Li, Rice University: *Battery Boxes: Cyborg Connections and Cesarean Sections in Colombo (1962–1985)*

Els Woudstra, Rice University: *The Boxed Gut: Human Waste Production and Digestive Anxiety in the United States (1951–1979)*

## Flashtalks

11/19/2021

11:00 AM – 12:00 PM

Joint with SHOT, Flashtalks

Chair Jan Golinski, University of New Hampshire, Arwen Mohun, University of Delaware

Eva Molina, Princeton University: *"These Interesting Remains": The Collinson Adze and the Limits of Imperial Science in the Age of Polar Exploration*

Taylor Copen, Harvard University: *Soft Skills and Soft Power: American and Japanese Education Efforts in China (1895–1911)*

Jacob Green, Jacob Green: *William James' Network and Mind-altering Drug Research*

Madison Renner, Harvard University: *Carbon Credit: How a Change in Citation Practices Linked Charles Keeling's Name to CO2 Data*

## Histories of Evolutionary Thinking about Social Things

11/19/2021

11:00 AM – 12:00 PM

HSS, Organized Session

Organizer Cameron Brinitzer, University of Pennsylvania

Chair Erika Milam, Princeton University

Michael Pettit, York University: *How Faces Became Special (When Maybe They are Not)*

Tara Suri, Princeton: *Security, Territory, Primate: Rhesus Monkeys and the Politics of Development in Postcolonial India*

Cameron Brinitzer, University of Pennsylvania: *Social Learning Mechanisms: The Evolution of Culture and Its Sciences*

## Histories of Science and Capitalism in Latin America and the Caribbean

11/19/2021

11:00 AM - 12:00 PM

HSS, Roundtable

Organizer Jordan Howell, Harvard University

Chair Stuart McCook, University of Guelph

## Laser Focus: Planning, Modeling, and Implementing Interferometry to Illuminate the Science-Technology-Policy Interface

11/19/2021

11:00 AM - 12:00 PM

Joint with SHOT, Organized Session

Organizer Connemara Doran, Harvard University

Chair Theresa Levitt, University of Mississippi

Connemara Doran, Harvard University: *Precision Interferometry from Fizeau and Michelson to the Cosmic First Light*

Tiffany Nichols, *More Than Models: Prototypes as Historical Records of the Evolving Epistemic Understandings of the Future Object of Study*

Daniel Kennefick, Univ. of Arkansas: *Lasers in Space: A Preliminary Focus on the History of LISA, the Proposed Space-Based Gravitational Wave Detector*

## Natural History Collections and Empire (2)

11/19/2021

11:00 AM - 12:00 PM

HSS, Organized Session

Organizer Andreas Weber, University of Twente

Chair Fenneke Sysling, Leiden University

Sofia Boanova Viegas, CIUHCT- FCUL, University of Lisbon; Museum of Natural History and Science, University of Porto: *African Herbarium Collections: A Trigger to Uncover 'Colonial Botany' at University of Porto.*

Melanie Boehi, Wits Institute for Social and Economic Research: *Revisiting empire in a Southern African plant collections*

Chanelle Adams, University of Lausanne: *Empirical Aims, Empire Gains: Knowledge regimes in the Madagascar herbarium collection at Marseille's Colonial Institute*

Martha Fleming, Natural History Museum of Denmark: *Colonialities of the storeroom: provenance matters in natural history collections*

## Reassessing Earth History, Deep Past, and Questions of Origins in the Long Eighteenth Century

11/19/2021

11:00 AM - 12:00 PM

HSS, Roundtable

Organizer Ivano Dal Prete, Yale University

Chair Lydia Barnett, Northwestern University

## Roundtable: IsisCB Pandemics Issue

11/19/2021

11:00 AM - 12:00 PM

HSS, Roundtable

Organizer Stephen Weldon, University of Oklahoma

Chair Stephen Weldon, University of Oklahoma

## Science in the U.S. South

11/19/2021

11:00 AM - 12:00 PM

HSS, Organized Session

Organizer Jeremy Montgomery, Mississippi State University

Chair Matthew Lavine, Mississippi State University

Michael Gunther, Georgia Gwinnett College: *"Southern Nationalists and the Early Smithsonian"*

Paul Lucier, Independent: *A Failure of Northern Science in Southern Reconstruction*

Jeremy Montgomery, Mississippi State University: *The Science of Southern Medicine: Disease Theory and the U.S. South*

Ronald Mickens, Clark Atlanta University: *Evolution of Physics Research and Graduate Education in the South: A Case Study - Fisk University*

## The Digital and the Encyclopedic: New Tools for Open-Access History of Science

11/19/2021

11:00 AM - 12:00 PM

HSS, Roundtable

Organizer Christopher Phillips

Chair Christopher Phillips

## FUTURES: Making and Doing History: On Non-Traditional Modes of Critical Engagement

11/19/2021

12:45 PM - 1:45 PM

Joint with SHOT, Roundtable

Organizer Crystal Lee, MIT

Chair Crystal Lee, MIT

## Ancient Greek and Roman sciences and their transformations in the Medieval and Early Modern periods

11/19/2021

2:30 PM – 3:30 PM

HSS, Contributed Paper Session

Chair Anne-Laurence Caudano, University of Winnipeg

Carl Philipp Nothaft, Trinity College Dublin: *The Practice of Latin Astronomy in the High Middle Ages*

Verity Walsh, Stanford University: *Scientific and 'Common-Sense' Geographies on Eratosthenes's World Map: A Hybrid Approach*

James Brannon, Independent Scholar: *The Sphere of Anthony Ascham: Sources for the Earliest Known English-Language Cosmography Based on Sacrobosco's De Sphaera*

## FUTURES: The Future of Open Access in the History of Science, Technology, and Medicine

11/19/2021

2:30 PM – 3:30 PM

HSS, Roundtable

Organizer Jeremy Green, Johns Hopkins University

## Gender and Work in the Mathematical Sciences

11/19/2021

2:30 PM – 3:30 PM

HSS, Organized Session

Organizer Andrew Fiss, Michigan Technological University

Chair Ellen Abrams, Cornell University

David Dunning, University of Oxford: *"Real Working Men": Performing Gender in Nineteenth-Century Mathematical Logic*

Laura Fiss, Michigan Technological University: *"The Paper for Practical Men": Transnational Constructions of Engineering Identities through Periodicals*

Andrew Fiss Michigan Technological University

Milena Kremakov, Martin-Luther University of Halle-Wittenberg: *Men play, women care? The different experiences of "becoming a mathematician" among contemporary male and female early career mathematicians*

Tori Reeder, Michigan Technological University: *Subjectivity, Epistemology, and Quantum Theory: Making Way for Intersubjectivity*

## Health and Computation Before the Internet

11/19/2021

2:30 PM – 3:30 PM

Joint with SHOT, Organized Session

Organizer David Theodore, McGill University, Theodora Vardouli, McGill University

Chair Hannah Zeavin, University of California–Berkeley

Julie Zook, Texas Tech University: *Hospital Architecture and the Geometry of Nurse Paths*

David Theodore, McGill University, Theodora Vardouli, McGill University: *Simulating Surgery ca. 1970*

Jeff Nagy, Stanford University: *Hardening Feeling: Computing Psychiatric Data at Rockland State, 1960–1972*

Rachel Plotnick, Indiana University: *Care and Feeding for the Computer: Imagining Machines' "Preventive Medicine"*

## Histories of the Less-than-known: Questions of Risk and Uncertainty in Global 20th Century Science

11/19/2021

2:30 PM – 3:30 PM

HSS, Organized Session

Organizer Aaron Van Neste, Harvard University

Chair Aaron Van Neste

Rachel Bunker, Rutgers University: *"Many Anomalies Which I Cannot Explain:" Early Twentieth-Century Actuarial Science and the Making of the Semi-Tropics*

Miriam Rich, Yale University: *"The Power to Become a Monster": Pregnancy as a Site of Risk in Early Twentieth-Century Biology and Medicine*

Aaron Van Neste, Harvard University: *"They Rarely Remain Steady for Long": Fluctuations of Marine Species and the Question of Sustainable Fisheries*

## Intellectual Property, National Security, and the Anglo-American Hegemonic Transition, 1914–1945

11/19/2021

2:30 PM – 3:30 PM

Joint with SHOT, Organized Session

Organizer Katherine Epstein, Rutgers University–Camden

Chair Margaret Graham, McGill University, emerita

Kathryn Steen, Drexel University: *Radio, U.S. Patent Law, and World War I*

Kate Epstein Michael Falcone Margaret Graham (the one who might need to be remote)

Michael Falcone, Yale University: *The Politics of Erasure: Memory, Technology, and Institutions in Second World War-era Anglo-American Diplomacy*

Katherine Epstein, Rutgers University–Camden: *Yesterday's China: US Patent Law and Anglo-American Technology Transfer*

## Is Psychoanalysis All There Is? A History of Psychotherapy in Britain and the USA

11/19/2021

2:30 PM – 3:30 PM

HSS, Organized Session

Organizer Hannah Blythe, University of Cambridge

Chair Hannah Blythe, University of Cambridge

Hannah Blythe, University of Cambridge: *Lay and Professional Expertise in Developing Psychotherapy in British Charities*



Riana Betzler, Washington University in St. Louis: *The Evidential Basis of Psychotherapy: Expansive and Tacit*

Sarah Marks, CBT, *Evidence-Based Medicine and Policy-Making in Britain, 1948-2010*

## **Making Sense of the World: A Roundtable on Science, Technology & the Senses**

11/19/2021

2:30 PM – 3:30 PM

Joint with SHOT, Roundtable

Organizer Gabriella Petrick, University of Stavanger

Chair Gerard Fitzgerald, George Mason University

## **Psychology and theories of the mind**

11/19/2021

2:30 PM – 3:30 PM

HSS, Contributed Paper Session

Chair Jeremy Blatter, Drew University

Mason Tattersall, Oregon State University: *T. Meynert's Diseases of the Forebrain: Art, Science, & Speculation in Systems of Understanding Neuropathology*

Francesca Brittan, Case Western Reserve University: *Orchestras of the Mind*

Grace Huckins, Stanford University: *The Other Neuron Doctrine: Changing Modes of Explanation in Psychology in the 20th Century*

## **Racialized Knowledges: Epistemology, Difference, and Sciences Beyond the Western Teleologies**

11/19/2021

2:30 PM – 3:30 PM

HSS, Organized Session

Organizer Patrícia Martins Marcos, UC San Diego / Universidade Nova de Lisboa

Chair Patricia Marcos, Surekha Davies

Sarah Qidwai, University of Toronto: *De-centering the History of evolutionary thought and theories of origin in the nineteenth century*

Patricia Marcos, University of California San Diego: *Racialized Knowledges: Manipulating Nature, Blackness, and Epistemic Disciplining in the Portuguese Inquisition.*

Taylor Moore, University of California, Santa Barbara: *Of Seashells and Sand: Racing and Erasing Superstition in Khedival Egypt*

## Regeneration as a Boundary Concept: Dialogues between Basic and Applied Biology in the Long Twentieth Century

11/19/2021

2:30 PM – 3:30 PM

HSS, Organized Session

Organizer Kathryn Maxson Jones,

Chair Jane Maienschein, Arizona State University

Kathryn Maxson Jones, Princeton University/Baylor College of Medicine: *Neuron Regeneration, Experimental Organisms, and the Curious Case of the Lamprey in 20th-Century Neurobiology*

Kate MacCord, Arizona State University: *The Historical Roots of a Flawed Assumption: How the History of Germline Research Reifies and Undermines the Human Genome Editing Debate*

Frederick R Davis, Purdue University: *A Bird's Eye View: Regeneration at the Ecosystem Level*

## Science in the Public Space

11/19/2021

2:30 PM – 3:30 PM

HSS, Contributed Paper Session

Chair Axel Jansen, German Historical Institute Washington

Moynahan Gregory, Bard College: *James Joyce, Giordano Bruno, and the Scale of the Universe: Popular Science and Historical Epochs*

Leslie Digdon, Saint Mary's University: *"He Didn't Want to Know": Scientific Literacy and Scientific Authority in Remote and Rural Communities in the 1980s*

Taner Edis, Truman State University: *Tides of Irrationality*

## Sound and Color as Infrastructure: Electrifying the Built Environment in the Long 20th Century

11/19/2021

2:30 PM – 3:30 PM

Joint with SHOT, Organized Session

Organizer Linda Zeitlin Wu, University of California Berkeley

Chair Lida Zeitlin Wu, University of California Berkeley

Lida Zeitlin Wu, UC Berkeley: *"Choose Your Color": Mood Conditioning the Postwar Domestic Interior*

Carolyn Kane, Ryerson University: *The Neon Surround: History, Theory, and Technique*

Harry Burson, University of California, Berkeley: *"Producing Sonic Space: Telephony and the Emergence of Stereophonic Sound"*

## Systems Thinking and Its Politics in Cold-War East Asia and Beyond

11/19/2021

2:30 PM – 3:30 PM

Joint with SHOT, Roundtable

Organizer Yize Hu, Johns Hopkins University

Chair Sigrid Schmalzer, University of Massachusetts Amherst

Sigrid Schmalzer, University of Massachusetts Amherst: *Connecting the Dots: Systems Thinking in PRC Agricultural Science and Technology, 1950s to Present*

Bo An, Yale University: *Growing Apple Trees: A History of Systems Engineering in the People's Republic of China According to Qian Xuesen (1950s-1990s)*

Yize Hu, Johns Hopkins University: *An Optimized Order: Systems Engineers' Idea of Social Governance in Postwar Japan*

Angela Xiao Wu, New York University: *Journalism via Systems Cybernetics: Reforming the Socialist Press for Modernization in 1980s China*

## The Septic Fringe: Developing a History of Marginalized Species

11/19/2021

2:30 PM – 3:30 PM

HSS, Organized Session

Organizer Matthew Holmes, University of Cambridge

Chair Joan Steigerwald, York University

Carmen Schmechel, Freie Universität: *'Putrid Feavers, Morbid Ferments': Fermentation and Putrefaction in Early Modern Iatrochemistry*

Aro Velmet, University of Southern California: *Spectacular Experiments and Yeasts of Harm: Modernizing Fermentation in French Indochina*

Brenda Kellar, Oregon State University: *Unwanted: Before the Honey Bee Became Desirable*

Matthew Holmes, University of Cambridge: *Commentary: The Septic Fringe: Developing a History of Marginalized Species*

## Contagion, Viruses, and Vaccines

11/19/2021

4:30 PM – 5:30 PM

HSS, Contributed Paper Session

Chair Thomas Kepler, Boston University School of Medicine

Paul Sampson, University of Scranton: *Quarantining the Empire: The Political Economy of Airborne Contagion in Britain, 1770–1820*

Kirsten Moore-Sheeley, Cedars-Sinai; UCLA: *Chasing the Magic Bullet: The Promises and Consequences of Vaccine Research*

Adam Lawrence, SciArc: *The Unliving Invasions: A Contradiction at the Heart of Modern Virology*

Hyung Wook Park, Nanyang Technological University: *Revisiting Frank Macfarlane Burnet during the Pandemic*

## Contested Collaboration in Modern and Contemporary East Asia

11/19/2021

4:30 PM – 5:30 PM

Joint with SHOT, Organized Session

Organizer Jaehwan Hyun, Pusan National University

Chair Aya Homei, University of Manchester

Jaehwan Hyun, Pusan National University: *“There Were Always Conflicts”: Writing about Collaboration with Japanese Scientists in Anti-Japanese South Korea*

Yi-Tang Lin, University of Geneva: *How to Modify Research in Regime Change? Chinese Rockefeller Fellows in Biology and Chemistry from 1949 to 1966*

Meng Zhang, Peking University: *Between Cooperation and Assimilation: Educating Chinese Medical Students in Japan’s Occupied Beijing*

Kaori Iida, SOKENDAI: *Studying Biological Effects of Radiation: Contested Collaborations of Japanese and American Scientists in the Bombed City Hiroshima*

## Enlightenment Sciences and Rational Assertions of Otherness

11/19/2021

4:30 PM – 5:30 PM

HSS, Organized Session

Organizer David Spanagel, Worcester Polytechnic Institute

Chair Emily Pawley, Dickinson College

Tamara Plakins Thornton, SUNY, Buffalo, Department of History: *How to Think about Human Difference: Mathematical Geography, the “Use of the Globes,” and the Antipodes in the Early North American Spatial Imagination*

Joe Torre, *Physiology is Theology: Benjamin Vaughan and Mr. Merrick’s Freemartin*

David Spanagel, Worcester Polytechnic Institute: *Technical Collaboration After the War: Applied Sciences and the Quest to Invent a Peaceful Mexico/U.S. Boundary in the 1850s*

## Faithful Representations: Observation, Mediation, and the Visual Reproduction of Nature

11/19/2021

4:30 PM - 5:30 PM

Joint with SHOT, Organized Session

Organizer Samantha Thompson, National Air and Space Museum

Chair Elizabeth Kessler, Stanford University

Katie Boyce-Jacino, Arizona State University: *"So True to Nature": Illusion and Immersion in the Early Planetarium*

Lois Rosson, University of California, Berkeley: *Transcribing the Lunar Environment: Art, Draughtsmanship, and the USGS Moon Maps of the 1960s*

Samantha Thompson, National Air and Space Museum: *Capturing the Northern Lights: The Use of Television Cameras to Measure and Study Aurora*

Talia Shabtay Filip, Northwestern University: *Seeing the World with Super-sight: The Science Photography of Berenice Abbott*

## Global Water Constructions

11/19/2021

4:30 PM - 5:30 PM

Joint with SHOT, Organized Session

Organizer Carlie Cervantes De Blois, University of Minnesota

Chair Hannah Conway, Harvard University

Hannah Conway, Harvard University: *How Infrastructures Age: Public Power, the TVA, and Environmental Justice in Memphis, TN since 1933*

Carlie Cervantes De Blois, University of Minnesota--Twin Cities: *Tsuguo Nozaki's Fieldwork and the "Collaborative" Nature of Dam-Building in the Third World*

Luna Sarti, University of Pennsylvania: *From God's Waters to Unworthy Matter. Profit, the Textile Industry and the Secularization of the Arno River in Medieval Florence*

John Doyle-Raso, Michigan State University: *"Mr. Crane, the Faithful Husband": Making an "Indicator" and "Flagship" Species for Ugandan Wetland Conservation, 1986 to Present*

## Histories of Biology

11/19/2021

4:30 PM - 5:30 PM

HSS, Contributed Paper Session

Chair David Munns, John Jay College

Daniel Brooks, Ruhr-University Bochum: *The Organicist Roots of the Levels Concept, 1910-1937*

Alejandro Fábregas-Tejeda, Ruhr University Bochum: *Organismal agents for biology, intervenable populations for fisheries: the theories and practices of E.S. Russell*

Cora Stuhmann, LMU Munich: *Recognizable Fields in a Competitive World: Animal Behavior Studies from the 1960s to the 1980s*

Ian Varga, Florida State University: *Searching for Life and a Political Identity. Exobiology and the Struggle to Fund the Hunt for Extraterrestrial Life during NASA's Doldrums, 1970-1990*

## History of Interpretations of Quantum Physics

11/19/2021

4:30 PM - 5:30 PM

HSS, Organized Session

Organizer Olival Freire Junior, Universidade Federal da Bahia

Chair Olival Freire Junior,

Olival Freire Junior, Universidade Federal da Bahia: *David Bohm (1917-1992) - Biography of a Major Quantum Dissident*

Flavio Del Santo, University of Vienna: *The Foundations of Quantum Mechanics in Post-War Italy's Cultural Context*

José Perillán, Vassar College: *Early Solvay Councils: Rhetorical Lenses in the Development of Quantum Theory*

Indianara Silva, *Rewriting the History of Quantum Foundations: The Madame Wu Case*

## Indigenous Peoples, Settler Science, and Social Justice

11/19/2021

4:30 PM - 5:30 PM

HSS, Contributed Paper Session

Chair Richard Sorrenson, University of Auckland

Kelly McDonough, University of Texas at Austin: *Indigenous Scientific Knowledges and the Archive: Health, Illness, and Healing in the 1577 Relaciones geográficas*

Charlotte Williams, University of Pennsylvania: *The Many Roads to El Dorado: transportation infrastructures in archaeological extraction*

Alexi Baker, Yale Peabody Museum: *Instruments of Science and Social Justice: Uses for Historical Scientific Artifacts in Higher Education*

Adam Johnson, SMU: *Structure, Constraint, and Revelation in the Paper Tools of 19th Century American Ethnology*

## Integrated Courses: Benefits, Challenges, and Successes

11/19/2021

4:30 PM - 5:30 PM

Joint with SHOT, Roundtable

Organizer Greg Macklem, University of Notre Dame

Chair Erik Peterson, University of Alabama



## Medical Algorithms: Computing, Diagnosis, and Health in the United States

11/19/2021

4:30 PM - 5:30 PM

Joint with SHOT, Organized Session

Organizer Gerardo Con Diaz, University of California Davis

Chair Gerardo Con Diaz, University of California Davis

Andrew Lea, Johns Hopkins University School of Medicine: *Computerizing Diagnosis: Minds, Medicine, and Machines in Twentieth-Century America*

Jeremy Greene, Johns Hopkins University: *The Automated Clinic: Computerized Health Testing and the Architecture of Prevention, 1960-1980.*

Gerardo Con Diaz, University of California, Davis: *Prometheus's Patents: Owning Medical Algorithms in the 21st Century*

Hannah Zeavin, UC Berkeley: *"Auto-Intimacy: Algorithmic Therapies"*

## Natural Histories

11/19/2021

4:30 PM - 5:30 PM

HSS, Contributed Paper Session

Chair Mariam Sabri, University of California, Berkeley

Celia Abele, Princeton Univ.: *Fossils as Dead Debris: Interlayering the Human and Natural Sciences*

Yotam Tsal, University of California, Berkeley: *Stilling Nature: Collecting Birds in Eighteenth-Century France*

Leore Joanne Green, University of Cambridge: *'We the tormentors, the destroyers': Death, emotions, and gender in entomology*

Matthew Laubacher, University of Arizona, Global Campus: *Scientific Reputation as Currency - the Career of the Notorious Edmund Heller*

## Refusing Erasure: Historical Struggles for Liberation in the "Peripheries"

11/19/2021

4:30 PM - 5:30 PM

HSS, Organized Session

Organizer Salina Suri, Harvard University

Chair Salina Suri, Harvard University

Hina Walajahi, MIT: *Contested Memoryscapes: Mapping Histories and Landscapes of Occupation in Kashmir*

Nikhil Dharmaraj, Harvard College: *Sixteen Sutras, One Agenda: Vedic Mathematics & Its Discontents*

Osase Omoruyi, Harvard University: *The Extractive Gaze: American Astronomical Southern Stations in South Africa*

Salina Suri, Harvard University: *Capitalist-Casteist-Colonialist Crucibles: Farms in Punjab*

## Technical Expertise and Doing History

11/19/2021

4:30 PM - 5:30 PM

HSS, Roundtable

Organizer Phillip Reid, Independent scholar

Chair Phillip Reid, Independent scholar

## Ways of Knowing the Universe

11/19/2021

4:30 PM - 5:30 PM

HSS, Organized Session

Organizer Jaco de Swart, University of Amsterdam

Chair Jordan Bimm, University of Chicago

Jaco de Swart, University of Amsterdam: *How the Universe Went Missing: Dark Matter and the Rise of Physical Cosmology*

Luis Campos, University of New Mexico: *Blue Vegetation on the Red Planet: Soviet Astrobotany and Early Earth Analogues*

Emilie Skulberg, University of Cambridge: *The Event Horizon as a Vanishing Point: Visual Representations in Black Hole Research and Communication, 1973–2019*

## **Working on the Problems of Freedom and Control in American Political Culture: How the Social Sciences Became Relevant in New Ways from the 1940s to the 1970s**

11/19/2021

4:30 PM – 5:30 PM

HSS, Organized Session

Organizer Mark Solovey, University of Toronto

Chair Mark Solovey, University of Toronto

Joy Rohde, University of Michigan: *Games Experts Play: Computation, Control, and Freedom in the Cold War United States*

Mark Solovey, University of Toronto: *Social Science Inquiry for What? Marcus Raskin and the Institute for Policy Studies in Post-1960s America*

Ibanca Anand, Johns Hopkins University: *'Secondhand Dealing' in Economic Ideas: A Study on The Foundation for Economic Education, 1946–1960*

## **Prize Ceremony**

11/19/2021

6:00 PM – 7:00 PM

HSS, Plenary

Chair Jan Golinski, University of New Hampshire

# Trivia Night Presented by The Linda Hall Library

11/20/2021

7:00 PM - 10:00 PM

Joint with SHOT, Social Event

Organizer Benjamin Gross, Linda Hall Library

Chair Benjamin Gross, Linda Hall Library

# SATURDAY, 20 NOVEMBER 2021

## **Bodies, Anatomy, and Forensic Expertise**

11/20/2021

9:00 AM - 10:00 AM

HSS, Organized Session

Organizer Claire Cage, University of South Alabama

Chair Cathy McClive, Florida State University

Meghan Roberts, Bowdoin College: *Jean-Barthélemy Dazille and the Social Uses of Anatomy in the Eighteenth-Century French Empire*

Claire Cage, University of South Alabama: *Forensic Medicine on Trial in Nineteenth-Century France*

Christopher Hamlin, University of Notre Dame: *Paul Kirk Rewrites the History of (Forensic?) Science, 1964*

Cathy McClive, Florida State University: *Bodies, Anatomy and Medico-Legal Expertise-Comment*

## **Books, Botany and the Specimens of Nature, c. 1600-1825**

11/20/2021

9:00 AM - 10:00 AM

HSS, Organized Session

Organizer Anna Svensson, Independent Scholar (Uppsala University after September 2021)

Chair Janet Browne, Harvard University

Anatole Tchikine, Dumbarton Oaks: *Between horti sicci and herbaria viva: the individual and the type in early modern botanical representations*

Edwin Rose, University of Cambridge: *Plants, Paper and the Classification of Nature in the Cambridge Botanic Garden, 1760-1825*

Anna Svensson, Uppsala University (from 1 September 2021): *The Botany of a Bibliophile: Pressed Plants in Johan Svalberg's Flora Svecica (1755)*

## Collections and Community Engagement

11/20/2021

9:00 AM - 10:00 AM

HSS, Roundtable

Organizer Benjamin Gross, Linda Hall Library

Chair Benjamin Gross, Linda Hall Library

## Forgotten Genealogies: Medical Genetics and the Emergence of Human Genomics

11/20/2021

9:00 AM - 10:00 AM

HSS, Organized Session

Organizer Miguel Garcia-Sancho, University of Edinburgh

Chair Soraya de Chadarevian, University of California Los Angeles

Miguel Garcia-Sancho, University of Edinburgh: *Sequencing, Bibliometrics and History: A 'From Below' Perspective on the Emergence of Human Genomics*

Andrew Hogan, Creighton University: *Conflicting Priorities: Genetic Counseling, Disability Advocacy, and Genomic Research*

Rebecca Mueller, University of Pennsylvania: *Prognostic Imaginaries of Cystic Fibrosis: From the trope of a cure to the reality of precision medicine*

## Global Taiwan as Method: Rethinking Global Science, Technology, and Medicine

11/20/2021

9:00 AM - 10:00 AM

Joint with SHOT, Organized Session

Organizer Wayne Soon, Vassar College

Chair J. Megan Greene, The University of Kansas

Wayne Soon, Vassar College: *Making Actuarial Science Precarious: International Labor Organization and the Taiwan Health Insurance Program, 1960–1970*

Hsinyi Hsieh, UCSF: *Indigenous Species for Imperial Projects: The Taiwan Monkey as a Research Subject from Japanese Colonial Sciences to Postwar US Naval Medical Research*

Ying Jia Tan, Wesleyan University: *Taiwan as Trailblazer for Tropical Hydropower, 1919–1935*

John Hayashi, Harvard University: *History's Rhythm: Taiwanese Timber and Japanese Climate Science in the Twentieth Century*

## Imagining the Darwinian Revolution from Darwin to Dawkins

11/20/2021

9:00 AM – 10:00 AM

HSS, Organized Session

Organizer Ian Hesketh, University of Queensland

Chair Emily Kern, University of Chicago

Bernard Lightman, York University: *Early Historians of the Darwinian Revolution: Herbert Spencer and Charles Darwin*

Ian Hesketh, University of Queensland: *The Making of John Tyndall's Darwinian Revolution*

Vassiliki Betty Smocovitis, University of Florida: *Rewriting the Past, Rewriting the Theory: The Extended Evolutionary Synthesis and its Discontents*

Jamie Freestone, University of Queensland: *How the History of Science is Used in Recent Popular Explanations of Darwinism*

## Interrogating Histories of Science in Westworld

11/20/2021

9:00 AM – 10:00 AM

HSS, Organized Session

Organizer Eli Nelson, Williams College

## Microbes and the Order of Nature in the Anthropocene

11/20/2021

9:00 AM - 10:00 AM

HSS, Organized Session

Organizer Charles Kollner, California Institute of Technology

Charles Kollner, California Institute of Technology: *Petri-Dish Parsimony: Growth Factors, Nutritional Types, and the Molecular Microbe*

Alison Renna, Yale University: *Intestinal Gardening and Progressive-Era Bacterial Cosmology in the Life of the Reverend Doctor James Empringham*

Nicole Welk-Joerger, North Carolina State University (until June 2021): *"Greening" U.S. Cattle through Microbial "Bovine Alchemy" in the Twentieth Century*

## Navigating the Profession with Chronic Illness or Invisible Disabilities

11/20/2021

9:00 AM - 10:00 AM

Joint with SHOT, Roundtable

Organizer Allison Marsh, University of South Carolina

Chair Allison Marsh, University of South Carolina

## Practicing and Formalizing: Engineering Creativity in the Twentieth Century

11/20/2021

9:00 AM - 10:00 AM

Joint with SHOT, Organized Session

Organizer Ekaterina Babintseva, Harvey Mudd College

Chair Patrick McCray, University of California, Santa Barbara, Department of History



Ekaterina Babintseva, Harvey Mudd College: *Producing Rule-Based Creativity: Automation and Thinking in Late Socialism and Capitalism*

Honghong Tinn, University of Minnesota: *City of Displacement: Electronics, Creativity, and Urban Space in Taiwan*

Evan Hepler-Smith, Duke University: *Making it explicit: Formalization and creativity in chemistry*

Aaron Mendon-Plasek, Columbia University: *Creativity as efficacy criteria: how machine learning became artificial intelligence in the 1980s and reformed descriptions of the social and political world*

## Raw Materials, Supply Chains, and the Politics of Scientific Technologies

11/20/2021

9:00 AM - 10:00 AM

Joint with SHOT, Roundtable

Organizer Christine von Oertzen, Max Planck Institute for the History of Science

Chair Christine von Oertzen, Max Planck Institute for the History of Science

## Science and Artisanal Knowledge: Towards a Global History

11/20/2021

9:00 AM - 10:00 AM

HSS, Organized Session

Organizer Hyeok Hweon Kang, Washington University in St. Louis

Chair Pamela H. Smith, Columbia University

Yin Cai, University of Chicago: *"Scholars Arrange Threads in the Right Order": Writing about the (State)craft*

Hyeok Hweon Kang, Washington University in St. Louis: *"Artisans Do Not Illuminate the Principles": A Physician's Experiments with Craft Knowledge in Eighteenth-Century Korea*

Rajarshi Sengupta, University of Hyderabad: *Craft Revival at the Time of Technological Growth: Kamaladevi Chattopadhyay's Hands-on Interventions*

Pamela Long, independent historian: *Commentary*

## The Senses in the Archive: Attention, Experience, Form

11/20/2021

9:00 AM - 10:00 AM

HSS, Organized Session

Organizer D. Graham Burnett, Princeton University

Chair D. Graham Burnett, Princeton University

Alexandra Hui, Mississippi State University: *Finding Attention in the Archives: listening for control and listening for manipulation in the Irving Teibel Papers*

Anya Yermakova, Harvard University: *Across archival categories: Attention to methods in pre-Revolutionary Russian-speaking Eurasia*

D. Graham Burnett, Princeton University: *The Perky Experiments: Imagination in the Archive*

Shireen Hamza, Harvard: *Look Hard at the Edges*

## Vast Canvases: Science, Technology, and the Rendering of Marine Environments

11/20/2021

9:00 AM - 10:00 AM

Joint with SHOT, Organized Session

Organizer Samantha Muka, Stevens Institute of Technology

Chair Samantha Muka, Stevens Institute of Technology

Penelope Hardy, University of Wisconsin-La Crosse: *Drafting the Deep: Knowing the Ocean through Images in the Mid-Nineteenth Century*

Hayley Brazier, University of Oregon: *Out of Sight, Out of Mind: Public Perception and the Visibility of Seafloor Technologies*

Samm Newton, UW-Madison: *Pteropods Realized: Organismal Technology and the Co-production of Environmental Value*

Samantha Muka, Stevens Institute of Technology: *Creating Responsible Pollution?: C-WARP, Conservation, and the Ocean as Landfill*

## Working (with) Matter

11/20/2021

9:00 AM - 10:00 AM

HSS, Organized Session

Organizer Robin Wolfe Scheffler, Program in STS, Massachusetts Institute of Technology

Chair Robin Wolfe Scheffler, Program in STS, Massachusetts Institute of Technology

Sara Meloni, University of Pennsylvania: *Zero Risk: Chemical Workers' Struggles for Health in Italy (1966-1977)*

Joel Tannenbaum, Community College of Philadelphia: *"The Subjects Found That the Steak Was Blue": Science, Marketing and the Making of a Culinary Myth*

Robin Wolfe Scheffler, Program in STS, Massachusetts Institute of Technology: *Locating Laboratory Lives: The Urban Workscapes of Biotechnology*

Carolyn Cobbold, Cambridge University: *Chemists become food creators and connoisseurs: Food Transformation 1856-1906*

## Another Vast Machine I: Data, Models, and Simulations in the Human Sciences

11/20/2021

11:00 AM - 12:00 PM

Joint with SHOT, Organized Session

Organizer Tabea Cornel, New College of Florida

Chair Emily Merchant, University of California, Davis

Rebecca Lemov, Harvard University: *From Mass to Micro Persuasion in an Age of Big Data*

Christopher Phillips, Carnegie Mellon University: *Anatomy of a Biomedical Controversy: Cancer Screening, Statistics, and Simulation Modeling*

Tabea Cornel, New College of Florida: *Fluorescent Sensors in Bayesian Brains: Transgenic Mice as Statistical Technologies in Neurogenomics*

Hallam Stevens, Nanyang Technological University: *Hadooping the Genome: The impact of text search tools in biomedicine*

## Capturing Motion: New Approaches to Power / Knowledge in the History of Science and Technology

11/20/2021

11:00 AM - 12:00 PM

Joint with SHOT, Organized Session

Organizer Hiromi Mizuno, University of Minnesota

Chair Hiromi Mizuno, University of Minnesota

Victor Petrov, University of Tennessee: *A Song for Fujitsu: Socialist Bulgarian Accelerationism and the Japanese Model in the Late Cold War*

James Lin, University of Washington: *Feeding "the World's Costliest Military Machines:" Rice, Fertilizer, and State Power in Authoritarian Taiwan, 1949-1960*

Kate McDonald, University of California, Santa Barbara: *The Housewife Cart Force and Other Transport Innovations: Histories of Human Power in Contemporaneous Frame*

Hiromi Mizuno, University of Minnesota: *Nitrogen in Motion: Fertilizer Flow between the East and West in the Cold War*

## Digitizing Materiality of Scientific Collections

11/20/2021

11:00 AM - 12:00 PM

HSS, Roundtable

Organizer Isabelle Held, Science History Institute

Chair Isabelle Held, Science History Institute

## Early Modern Natural Philosophy

11/20/2021

11:00 AM - 12:00 PM

HSS, Contributed Paper Session

Chair Catherine Abou-Nemeh, Victoria University of Wellington

Filip Geaman, Johns Hopkins University: *Nature, Authority, and History in 16th-Century Treatises of Astrology and Divination*

Stefano Gattei, University of Trento: *Campanella, Galileo, and the Clash for the New Science at the Court of Urban VIII*

Peeter Mürsepp, Tallinn University of Technology: *Early Teaching of Newton at Tartu University*

Areins Pelayo, Department of Philosophy, University of Illinois-Chicago: *The Metaphysical and Empirical Criteria of Newton's Hypotheses*

## Expertise and Exercise

11/20/2021

11:00 AM - 12:00 PM

Joint with SHOT, Organized Session

Organizer Katherine Contess, Brown University

Chair Scott Kushner, University of Rhode Island

Hongwei Thorn Chen, Tulane University: *Performing Expertise, Reforming Customs: Cinema, Industrial Technique, and Embodied Knowledge in Semi-Colonial China*

Katherine Contess, Brown University: *From the Harvard Fatigue Lab to Peloton: Towards a History of the Exercise Treadmill*

Adam Hebert, *Faster, Higher, Stronger?: Olympic Bodies in Motion and the Loss of the "Open" Machine*

## FUTURES: Past, Present, and Future of the Scientific Conference

11/20/2021

11:00 AM - 12:00 PM

HSS, Roundtable

Organizer Geert Somsen, Maastricht University / Vrije Universiteit

Chair Geert Somsen, Maastricht University / Vrije Universiteit

## Hidden Labor in the Practices of Early Modern Science

11/20/2021

11:00 AM - 12:00 PM

HSS, Organized Session

Organizer Alix Cooper, SUNY-Stony Brook

Chair Michelle DiMeo, Science History Institute

Vera Keller, University of Oregon: *Charlatans, Hidden and Shown in Experimental Practice*

Alix Cooper, SUNY-Stony Brook: *The Work of Family Connections: In-Laws and Other Kin in the Early Modern Sciences*

Elizabeth Yale, University of Iowa: *Hidden from Whom? Visibility and Historical Practice in the Study of Early Modern Knowledge-Craft*

## Legacies of Silent Spring, Session #1: Ecology, Pollution, Industry, Environmental Activism

11/20/2021

11:00 AM - 12:00 PM

Joint with SHOT, Organized Session

Organizer Marsha Richmond, Wayne State University

Chair Frederick R. Davis, Purdue University

Gene Cittadino, New York University: *Ecology and the Bomb: A Retrospective Assessment*

Ryan Hearty, Johns Hopkins University: *Ruth Patrick, DuPont, and the Biological Monitoring of Pollution in the US, 1950-1970*

David Hecht, Bowdoin College: *Stressful Environments: Nuclear Power and the Politics of Public Health*

Jole Shackelford, University of Minnesota: *Chronobiology and Environmental Impact in Projects Sanguine and Seafarer*

## Narrative as Practice in the Life Sciences

11/20/2021

11:00 AM - 12:00 PM

HSS, Roundtable

Organizer Rachel Mason Dentinger, University of Utah

Chair Rachel Mason Dentinger, University of Utah

## Nationalism and the Decolonization of Asian Histories of Science

11/20/2021

11:00 AM - 12:00 PM

HSS, Roundtable

Organizer Elise Burton, University of Toronto

Chair Lan Li, Rice University

## Psychology, Research, and Pedagogy

11/20/2021

11:00 AM - 12:00 PM

HSS, Contributed Paper Session

Chair Felix Rietmann, University of Fribourg

Ulrich Koch, George Washington University: *From the Consulting Room to the Classroom? Institutions, Social Technologies, and the Creation of Safe Spaces*

Marga Vicedo, University of Toronto: *Clara Park's intelligent love: Reclaiming the role of parents in studying child development and autism*

Evan Arnet, Indiana University Bloomington: *Hierarchy and Experimentalism in Early Comparative Psychology*

## Thinking with Poison: A Cross-Cultural Conversation

11/20/2021

11:00 AM - 12:00 PM

HSS, Organized Session

Organizer Yan Liu, State University of New York, Buffalo

Chair Jeremy Greene, Johns Hopkins University

Alain Touwaide, Institute for the Preservation of Medical Traditions: *Toxicology in Antiquity: From the Forensic to the Epistemological*

Yan Liu, SUNY Buffalo: *The Paradox of Du: Poisons and Medicines in Early China*

Alisha Rankin, Tufts University: *Poison, Witchcraft, and Pharmakeia in Early Modern Europe*

Barbara Gerke, independent scholar: *Ecologies of Patronage and Potency: The Transformation of Poisons in Tibet*

## Visioning Past and Future in Science Museums and Educational Technologies

11/20/2021

11:00 AM - 12:00 PM

Joint with SHOT, Organized Session

Organizer Elizabeth Petrick, Rice University

Chair Patrick McCray, University of California, Santa Barbara

Morgan Ames, UC Berkeley: *Throwback Culture: The Role of Nostalgia in American Educational Technology*

Elizabeth Petrick, Rice University: *Replacing Visions: The Notetaker Prototype and the Loss of Education*

Petrina Foti, Loughborough University: *Science Museums and the Intangible: Curatorial Visions of the Future*

Elena Aronova, UCSB: *The Revolutionary Avant-Garde: Scientific Modernity at the Moscow Museum of Biology in the 1920s*



## What Now? Broadening Your Career Horizons While a Grad Student

11/20/2021

11:00 AM - 12:00 PM

HSS, Roundtable

Organizer Sara Ray

## Sarton Medalist Interview: Bernadette Bensaude Vincent

11/20/2021

12:45 PM - 1:45 PM

HSS, Plenary

Organizer Mary Jo Dye, Oregon State University, Alan Rocke, Case Western Reserve University

Chair Jan Golinski,

Participants:

Ana Simoes, University of Lisbon

Evan Helper-Smith, Duke University

Brigitte Van Tiggelsen, Science History Institute

Carsten Reinhardt, University of Bielefeld

William Newman, Indiana University

Robert Fox, Oxford University

## Animal Studies, Biodiversity, and Conservation

11/20/2021

2:30 PM - 3:30 PM

HSS, Contributed Paper Session

Chair Tamara Caulkins, Central Washington University

Jeremy Schneider, Princeton University: *Hunted to extinction: "lost species" in the commercial world of Bernard Palissy (1510-89)*

Jacob Gautreaux, Louisiana State University/University of Louisiana at Lafayette: *John Lynch "Father of the Flyway Biologists": A Professional Naturalist and Dedicated Conservationist*

Katherine McLeod, New York University: *How to Display a Hoatzin: Evolution and Conservation at the Bronx Zoo*

Elizabeth McNeill, University of Michigan: *Maurice Maeterlinck's Popular-Spiritualist Animal Psychology (1914)*

## Animating Technoscience: Imagination, Production, and Representation

11/20/2021

2:30 PM – 3:30 PM

Joint with SHOT, Organized Session

Organizer Michael Meindl, Radford University/Virginia Tech

Chair Hanna Rose Shell, University of Colorado Boulder

Colin Williamson, Rutgers University – New Brunswick: *Animating Biology and the Biology of Animation: The Technoscience of Disney's FANTASIA*

Alana Staiti, Smithsonian Institution: *Motion, Emotion, and the Human in the Computer: Motion Models and Computerized Bodily Form, 1971-1981*

Michael Meindl, Radford University: *"Take Chances! Make Mistakes! Get Messy!": The Magic School Bus and the Reanimation of Science Education in the 1990s*

Matthew Wisnioski Virginia Tech

Reb Perry, Independent: *Virtual Film Production: Surfing the Database, Democratizing Technology?*

## Another Vast Machine II: Data, Models, and Simulations in the Human Sciences

11/20/2021

2:30 PM – 3:30 PM

Joint with SHOT, Organized Session

Organizer Emily Merchant, University of California, Davis

Chair Tabea Cornel, New College of Florida

Michael Neuss, Vanderbilt University Medical Center: *"Physicians of the Future":  
Reconfiguring the Patient's Chart for the Production of Usable Data*

Emily Merchant, University of California, Davis: *Excavating the Origins of Sociogenomics*

Emanuele Ratti, Johannes Kepler University Linz: *Algorithmic Bias and Norms about the Past:  
The Thin Line between Predicting and Creating the Future*

Elodie Grossi, Universite Toulouse Jean Jaures: *The new face of race in the epigenetic age:  
towards a survey of past trauma, the creation of predictive technologies and their limits*

## **Bible-Based Science in Paracelsus and his Followers**

11/20/2021

2:30 PM – 3:30 PM

HSS, Organized Session

Organizer William Newman, IU Bloomington

Chair James Voelkel, SHI

Didier Kahn, CNRS: *A Paracelsian Medicina Mosaica: the "Monarchia Triadis in Unitate" by  
Gerhard Dorn (1577)*

Andrew Sparling, independent scholar: *Paracelsus on Signa and Scientia: How the Signs  
That God Stamped upon Natural Things Made the "Knowledge" That the Things Contained  
Discoverable*

Dane Daniel, Wright State University, Lake Campus: *Radical Spiritualism Meets Spagyric  
Cosmology: Paracelsus on the Scriptural Foundations of Natural, Divine, and Demonic Magic*

William Newman, IUB: *A Chymist among Beasts: Paracelsus and Animal-lore*

## **Censoring Science in the Early Modern Mediterranean**

11/20/2021

2:30 PM – 3:30 PM

HSS, Organized Session

Organizer Jonathan Regier, Ca' Foscari University of Venice

Chair Hannah Marcus, Harvard University

Duygu Yildirim, *In the Time of Melancholy: Medical Translation, Religious Conversion, and  
Resilience in the Early Modern Ottoman World*

Neil Tarrant, University of York: *Making a Censor: Learned Magic in Robert Bellarmine's Lectiones Iovanienses*

Jonathan Regier, Ca' Foscari University of Venice: *Cardano's Philosophy of Threat and the Roman Inquisition*

## Earthly Knowledge: Digging the Deep Past

11/20/2021

2:30 PM – 3:30 PM

HSS, Organized Session

Organizer Meira Gold, York University

Chair Megan Raby, University of Texas at Austin

Fredrik Albritton Jonsson, University of Chicago: *Carbonic Climates: Coal Mining and the Making of the Carboniferous 1820–1840*

Lukas Rieppel, Brown: *Temporal Dispossession & Epistemic Imperialism During the Long Gilded Age*

Meira Gold, York University: *Territorial Soils: Between British Archaeology and Local Agriculture in Colonial Egypt*

Rebecca Woods, University of Toronto: *Mining for Mammoths: The Political Economy of Frozen Pleistocene Remains in the North American Arctic*

## Envirotech at 20: Roots and Branches

11/20/2021

2:30 PM – 3:30 PM

Joint with SHOT, Roundtable

Organizer Blair Stein, Clarkson University

Chair Tom Zeller, University of Maryland

## FUTURES: Digital Futures in the History of Science and Technology

11/20/2021

2:30 PM – 3:30 PM

Joint with SHOT, Roundtable

Organizer Abraham Gibson, University of Texas at San Antonio

Chair Abraham Gibson, University of Texas at San Antonio

## Legacies of Silent Spring, Session #2: From Scientist to Nation

11/20/2021

2:30 PM – 3:30 PM

HSS, Organized Session

Organizer Sabine Clarke, University of York, UK

Chair Frederick R. Davis, Purdue University

Marsha Richmond, Wayne State University: *Theo Colborn, the Great Lakes, and the Discovery of Endocrine Disruption*

Mark Barrow, Virginia Tech: *The Construction of a Sentinel Species: Louis Guillette and Lake Apopka's Alligators*

Sabine Clarke, *Slow, Mediated and Uneven: A New History of Insecticides in British Farming*

Lloyd Ackert, Drexel University: *Applied Ecology at the Academy of Natural Sciences of Philadelphia, 1970–1990*

## Maritime Cultures and the Translation of Scientific Knowledge

11/20/2021

2:30 PM – 3:30 PM

HSS, Organized Session

Organizer Judy Johns Schloegel, Independent Scholar

Chair Penelope Hardy, University of Wisconsin–LaCrosse

Katharina Steiner, University of Wisconsin–Madison: *The Use of Images in the Debate between Haeckel and Hensen over the Role of Plankton*

Emily Hutcheson, University of Wisconsin–Madison: *Local Labor, Transnational Science: Producing Scientific Objects and Inscriptions in the Dutch East Indies, circa 1900*

Judy Johns Schloegel, Independent Scholar: *Instituting Biology in the Great Lakes: Scientific Survey Work and Inland Seas Maritime Culture, 1893–1903*

## Public Health and the Body

11/20/2021

2:30 PM – 3:30 PM

HSS, Contributed Paper Session

Chair Danielle Picard, Vanderbilt University

Ambika Natarajan, UM–DAE CEBS: *The Uses of Quarantine: Diseased Bodies as a Hygiene Crisis in the Work of Sigmund Ritter von Illanor*

Kathryn Holihan, The College of Wooster: *Enrolling Women in Hygiene: “Maternal Anatomy” and the 1918 Exhibition for Infant Welfare*

Courtney Mrazek, University of New Brunswick: *The Nova Scotia Sanatorium: Patient Demographics*

Che Yeun, Harvard University: *Technologies of Personal Care and the Rise of Synthetic Musk in 20th Century America*

## Scientists and Engineers on the Move (Around the World): Multidisciplinary Reflections on National and Transnational History

11/20/2021

2:30 PM – 3:30 PM

Joint with SHOT, Organized Session

Organizer Monique Laney, Auburn University

Chair Ross Bassett, North Carolina State University

Monique Laney, Auburn University: *Writing the History of STEM Migration to the United States*

Takashi Nishiyama, State University of New York, Brockport: *International Outflow of Technological Expertise: A Case from Japan, 1868–1952*

Roland Wittje, IIT Madras: *German scientists and engineers in post-independence India*

Irina Antoshchuk, University of Amsterdam: *Foreign-born academics as highly skilled migrants: how migration studies can help sociology of science*

## Sovereigns and Savants: State Power and Intellectual Authority in French Scientific-Cultural Networks

11/20/2021

2:30 PM - 3:30 PM

HSS, Organized Session

Organizer Abigail Fields, Yale University

Chair J. B. Shank, University of Minnesota

Travis Wilds, University of Minnesota Twin Cities: *The Empire of Exactitude: Mathematical Physics and the Autonomization of Science under Napoleon*

Katherine Reinhart, University of Wisconsin - Madison: *The Iconography of Science & Power in Early Modern France*

Rossella Baldi, University of Neuchâtel: *Taste or method on display. Debating scientific legitimacy through natural history collections in the second half of the 18th century*

Abigail Fields, Yale University: *'Modern' Science: Situating the Royal Academy of Sciences within the Quarrel of the Ancients and the Moderns*

## Agriculture in Colonial and Post-Colonial Contexts

11/20/2021

4:30 PM - 5:30 PM

Joint with SHOT, Organized Session

Organizer Marlis Hinckley, Johns Hopkins University

Chair Nathan Kapoor, Grand Valley State University

Marlis Hinckley, Johns Hopkins University: *Asceticism and Food Crops in 16th-Century Mexico*

Marianna Fenzi, EPFL: *Interconnected Croscapes, Agronomists and Varieties in the Global South*

Sandipan Baksi, Foundation for Agrarian Studies: *Indian Engagements with Scientific Agriculture under British Colonial Rule: The Case of the United Provinces*

## Climate Science/Environment

11/20/2021

4:30 PM – 5:30 PM

HSS, Contributed Paper Session

Chair Joyce Chaplin, Harvard University

Oliver Lucier, Yale University: *Caribbean Commodities and the Construction of a Normative Climate, 1940–1967*

Jiho Moon, Seoul National University: *The “struggle against nature” of agricultural-meteorologists in the 1950s–60s China: Rubber trees and the cold-weather damage*

Emil Flatø, University of Oslo: *Climate Futures and the Problem in the U.S. Post-War Science–Policy Nexus*

## Fairness by Calculation: Four Centuries of Algorithmic Aspirations

11/20/2021

4:30 PM – 5:30 PM

Joint with SHOT, Organized Session

Organizer William Deringer, M.I.T.

Chair Theodora Dryer, New York University / AI Now Institute

William Deringer, Massachusetts Institute of Technology: *Just Fines: Mathematical Tables, Church Landlords, and Fair Algorithms, c. 1628*

Rodrigo Ochigame, Massachusetts Institute of Technology: *Algorithmic Fairness and Actuarial Politics*

Alma Steingart, Columbia University: *Voting by Algorithm: The 1930s Fight over Proportional Representation in Cambridge, MA*



## Islamicate Sciences and Small Technologies in Modern South Asia

11/20/2021

4:30 PM – 5:30 PM

Joint with SHOT, Organized Session

Organizer Andrew Amstutz, University of Arkansas–Little Rock

Chair Projit Mukharji, University of Pennsylvania

S Dattoo, Reed College: *Advertising Medical Technologies in Urdu Print c. 1930: Prosthesis and Possibility*

Amanda Lanzillo, Princeton University: *Electroplating as alchemy: Labor and technology among Muslim metalsmiths*

Andrew Amstutz, University of Arkansas–Little Rock: *Technology against Revolution: Compiling an Urdu History of Science through Small Technologies*

Charlotte Giles, University of Texas at Austin: *Crafting artisanal body parts: technology and embroidery in the zardozi industry of Lucknow*

## Libraries and Mathematics: Rethinking “the mathematician’s laboratory”

11/20/2021

4:30 PM – 5:30 PM

HSS, Organized Session

Organizer Michael Barany, University of Edinburgh

Chair Joan Richards, Brown University

Kevin Lambert, California State University Fullerton: *The Malthus Library: The Library as Cognitive Instrument in the Making of the Malthusian Population Principle*

Jenne OBrien, Princeton University: *Shaping a Model Library in Göttingen: Felix Klein and the Spaces of Professional Mathematics*

Bruce Hunt, University of Texas: *“Having No Books to Speak Of”: The Mathematical Self-Education of Oliver Heaviside.*

Ellen Abrams, Cornell University: *The Scripta Mathematica Library and the “Survival” of Mathematics in America*

## Making and Knowing: Working with How-To Texts in the History of Science and Technology

11/20/2021

4:30 PM – 5:30 PM

HSS, Organized Session

Organizer Tillmann Taape, The Warburg Institute

Chair Pamela Smith, Columbia University

Tillmann Taape, The Warburg Institute: *From erfahrung to expérience: vernacular traditions of experiential knowledge in French and German technical literature.*

Monique O'Connell and Paul Jones, Wake Forest University: *From Watching to Working: Incorporating "Making and Knowing" activities into a History of Science course*

Paul Jones Wake Forest University

Clément Godborge, The Warburg Institute/Villa I Tatti: *Semi-distant Reading: A Data-rich Approach to Early Modern Technical Literature.*

## Medieval and Early Modern Reading Practices

11/20/2021

4:30 PM – 5:30 PM

HSS, Organized Session

Organizer Nuno Castel-Branco, Max Planck Institute for the History of Science

Chair Vera Keller, University of Oregon

Nuno Castel-Branco, Johns Hopkins University: *Reading the Philosophical Transactions: The English Manuscript Notes of Nicolaus Steno (1638–1686)*

Yijie Huang, University of Cambridge: *Taking the Pulse in the Marketplace of Print in Seventeenth-Century England*

Raz Chen-Morris, Hebrew University of Jerusalem: *Acts of non-reading and the production of knowledge in early Modern Europe*

Carol Pal, Bennington College: *Seriously? Humor as an Invisible Genre in Medieval Medical Manuscripts*

## Nutrition Science in the Cold War

11/20/2021

4:30 PM – 5:30 PM

HSS, Contributed Paper Session

Chair Matt Shindell, Smithsonian National Air and Space Museum

Hannah LeBlanc, California Institute of Technology: *The Global Protein Gap and the Post-Eugenic Politics of Nutrition*

Travis Weisse, Marist College: *The Atomic Balm: Nuclear War, Cancer, and the Macrobiotic Diet in America, 1960–1990*

William Gurstelle, University of Minnesota: *Bea's Diner: Beatrice Finkelstein and the early U.S human space program*

## Research Methods in the Social Sciences

11/20/2021

4:30 PM – 5:30 PM

HSS, Contributed Paper Session

Chair Jonny Bunning, University of Chicago

Tom Kayzel, Universiteit van Amsterdam: *Early Economic Planning and the Double Experience of Modernity*

Ohad Reiss Sorokin, Princeton University: *The Production of Knowledge: A Path Not Taken*

Christopher Rudeen, Harvard University: *"Anthropology at Home": The Domestic Methods of Mass-Observation*

Matthew Hoffarth, Consortium for History of Science, Technology & Medicine: *Interactions with the Rorschach: Anthony F.C. Wallace and Mel Spiro's Criticisms of the Culture Concept*

## Science & Gender

11/20/2021

4:30 PM – 5:30 PM

HSS, Contributed Paper Session

Chair Evelyn Hammonds, Harvard University

Leah Malamut, University of Minnesota: *Prosperity through "Beeconomy": American Women in Beekeeping, 1870-1900*

Randi Spray, University of Wyoming: *Knowledge without a University: Authority building by women botanists in pre-WWII America*

Ana Barahona, Evolutionary Biology: *Collaborative networks and hybrid objects: women geneticists in Mexico in the 1960s and early 1970s*

Rhianna Elliott, University of Cambridge: *Motherhood, menstrual blood, and the moon: life and death in the early modern womb*

## Science in East Asia between Global, Regional, and Local Perspectives: Power, Colonialism and Knowledge Production, 19th - 21st century

11/20/2021

4:30 PM - 5:30 PM

HSS, Organized Session

Organizer Noa Nahmias, York University

Chair Grace Shen, Fordham University

Noa Nahmias, York University: *The universe of science at your doorstep: popular science between national and global in China, 1933-1937*

Rachel Wallner, Northwestern University: *Making Hydrography Modern: Late-Qing Empire and Reforming Knowledge of the Southern Chinese Coast, 1886-1902*

Haesoo Park, Singapore Management University: *Postcolonial Science in Korea: Gendered Stem Cells and Technoscientific Sovereignty*

Midori Kawaue, Princeton University: *Japanese Anthropology and its Colonial Enterprise: A Case Study of the 1903 Human Pavilion*

## Science, Colonization, and Decolonization

11/20/2021

4:30 PM - 5:30 PM

HSS, Contributed Paper Session

Chair Vivek Neelakantan

Miguel Chavez, Vanderbilt University: *Professionalizing Science: British Geography, Africa, and the Exploration of the Nile*

Jonathan Victor Baldoza, Princeton: *Science for the Future Republic: Postcolonial Anticipation and "Scientific Planning" in the Philippines, 1935-1941*

Robrecht Declercq, Ghent University: *Infrastructures of Modernity? Processing Metals on the Central African Copperbelt, c.1907-1975*

Duncan Money Leiden University

Jack Klempay, Princeton University: *Archaeology, Atoms, and African Decolonization: Pasts and Futures Collide in a Senegalese Radiocarbon Laboratory*

## UFOs and Ufology as Transnational Phenomena

11/20/2021

4:30 PM - 5:30 PM

Joint with SHOT, Organized Session

Organizer Greg Eghigian, Penn State University

Chair Pey-Yi Chu, Pomona College

Andy Bruno, Northern Illinois University: *The Tunguska Event in Soviet UFOlogy*

Kate Dorsch, University of Pennsylvania: *Countercultural Religion in Extraterrestrial Space: UFO Theologies as Cold War Logics*

Noah Morrill, Memorial University of Newfoundland: *"UFO New Supercraft Under Test": Science, Conspiracy Theory, and the Public Response to the 1967 Shag Harbour UFO Incident*

Greg Eghigian, Penn State University: *How UFOs Went Global: The Internationalization of Ufology, 1947-1980*

# SUNDAY, 21 NOVEMBER 2021

## **HSS Business Meeting**

11/21/2021

7:30 AM - 8:45 AM

HSS, Caucus / Forum / Interest Group Meeting

Organizer Jan Golinski, University of New Hampshire

## **A Higher Form of Cannibalism?**

11/21/2021

9:00 AM - 10:00 AM

HSS, Roundtable

Organizer John Galbraith Simmons

## **Collections, Archives, Libraries, and Museums (CALM) Caucus Meeting**

11/21/2021

9:00 AM - 10:00 AM

HSS, Caucus / Forum / Interest Group Meeting

Organizer Pedro Raposo

## **Ephemeral Phenomena: Science and Technology in Experimental and Observational Research**

11/21/2021

9:00 AM - 10:00 AM

HSS, Organized Session

Organizer Amy Fisher, University of Puget Sound

Chair Gregory Good, Center for History of Physics, American Institute of Physics

Amy Fisher, University of Puget Sound: *The Animal Furnace: Technological Analogs of Natural Systems in Nineteenth-Century Chemistry*

Daniel Liu, Max Planck Institute for the History of Science: *Teaching Microscopy at the Limits of Optical Interpretation: The Zeiss Vacation Courses, 1907–1924*

Kathryn Carpenter, Princeton University: *Storm Snapshots: The Use of Amateur Photography in Tornado Science*

Jacob Hamblin, Oregon State University: *Rivers of the Bomb: Modeling historical doses of radiation after the Cold War in the United States and Russia*

## **FoHoMS Meeting**

11/21/2021

9:00 AM - 10:00 AM

HSS, Caucus / Forum / Interest Group Meeting

Organizer Karen Parshall, University of Virginia

## **FoHCS Meeting**

11/21/2021

9:00 AM - 10:00 AM

HSS, Caucus / Forum / Interest Group Meeting

Organizer Evan Hepler-Smith, Duke University

## **GECC Business Meeting**

11/21/2021

9:00 AM - 10:00 AM

HSS, Caucus / Forum / Interest Group Meeting

Organizer Sarah Pickman, Yale University, Mikey McGovern, Princeton University

## Heads in the Clouds: Fantasies and Communities in Early Meteorology

11/21/2021

9:00 AM - 10:00 AM

HSS, Organized Session

Organizer Mark Frank, Fulbright University Vietnam

Chair Mark Frank, Fulbright University Vietnam

Josh Levy, Library of Congress, Manuscript Division: *Every Farm a Laboratory: Civilization, Empire, and Early Visions for a United States Weather Bureau*

Fiona Williamson, Singapore Management University: *Local Problems, Global Solutions?: Making it Rain in Hong Kong c. 1890-1930*

Mark Frank, Yale University: *National Climate: Zhu Kezhen and the Politics of the Atmosphere in Modern China*

## Naturalness as an Epistemic Virtue: Case Studies from the History of Mathematics

11/21/2021

9:00 AM - 10:00 AM

HSS, Organized Session

Organizer Nicolas Michel, Utrecht University

Chair Jemma Lorenat, Pitzer College, Claremont

Julia Tomasson, Columbia University: *"Nature" in Mathematics after Newton: The Epistemic Priority of Mathematics in The Analyst Controversy*

David Waszek, McGill University: *Clever Artifice or Signpost to the Hidden Nature of Things? The Circulation of Leibniz's Analogy of Powers and Differences*

Nicolas Michel, Utrecht University: *Sweet is the lore which Nature brings: Clarity, Simplicity, and Naturalness in Chasles's and Poincaré's Geometrical Mechanics*

Michael Barany, University of Edinburgh: *Commentator: [Naturalness as an Epistemic Virtue: Case Studies from the History of Mathematics]*



# Physical Intermediaries between Mind and Brain from the 18th to 20th Centuries

11/21/2021

9:00 AM - 10:00 AM

HSS, Organized Session

Organizer Edward Barnet, Hamilton College

Chair Nima Bassiri, Duke University

Edward Barnet, Stanford University: *David Hartley's Mental Acoustics: The Doctrine of Vibrations and the Beginnings of Associationist Psychology*

Zachary Levine, Columbia University: *Experimenting Between Brains, Nerves and Selves: Alfred Binet, Charles Féré, and the Form of the Case Study in the Brain and Mind Sciences*

Katja Guenther, Princeton University: *Mirrors, Twins, and the Developing Child: Capturing the Self through Glass and Film*