Session Schedule SHOT Annual Meeting St. Louis (version June 27, 2018) (SIG events, plenary events, lunch sessions not included)

Friday, 12 October 2018 8:00 AM – 10:00 AM

1: Environmental Humanities and the History of TechnologyRound Table, sponsored by EnvirotechOrganizers:Etienne Benson (U Penn) and Jim Fleming (Colby College)Chair:Etienne Benson (U Penn): -Commentator:David Nye (University of Southern Denmark): -

Camille Cole (Yale University) Kent "Kip" Curtis (Ohio State University) Jim Fleming (Colby College) Spring Greeney (University of Wisconsin-Madison Finn Arne Jørgensen (University of Stavanger, Norway) Adam Lucas (University of Wollongong) Lisa Ruth Rand (University of Wisconsin-Madison) Kristoffer Whitney (Rochester Institute of Technology)

2: Nuclear Europeans: Transnational approaches to the history of a contested technology

Organizer: Arne Kaijser (KTH Royal Institute of Technology) Chair: Robert Bud (Science Museum, London) Commentator: Sonja Schmid (Virginia Tech)

Paul Josephson (Colby College): Society-Industry Relations in the Nuclear Industry, 1950spresent

Helmuth Trischler (Deutsches Museum): *Nuclear Energy: A Public Technology* Arne Kaijser (KTH Royal Institute of Technology): *Nuclear installations at borders* Karl-Erik Michelsen (Lappeenranta University of Technology): *Transnational governance of nuclear power in Eastern Europe after the collapse of the Iron Curtain*

3: Graduate Students' Flash Talks

Presidential Panel Organizers and chairs: **John Krige** (SHOT President) and **Janet Browne** (HSS President)

Dana Freiburger (University of Wisconsin-Madison): *What* Hath God Taught: Teaching Telegraphy at Notre Dame in the 1870s

Patrick John F. Mansujeto (University of the Philippines-Dilman): *Aerial Assimilation in the Philippines During the American Colonial Period*

Thomas Kelsey (King's College, London): *The Power of White Elephants: The Politics of Concorde and Nuclear Reactors in Post-War Britain*

Bo An (MIT): China and Cybernetics: The Case of Qian Xuesen

Mario Bianchini (Georgia Institute of Technology): East Germany and the Spirit of Technological Utopia

Tiffany Nichols (Harvard University): *Hidden Technicalities: Consideration of Former Cold War Sites by the Laser Interferometer Gravitational Wave Observatory for Placement of Large-Scale Interferometers* Harvard Brede Aven (Oslo Metropolitan University): A Particle of Angst and a Wave of Hope: The Two Cultures, Nuclear Physics, and Environmental Futures in the Technoscientific Public Sphere

Annie Handmer (University of Sydney): Gateways, Passages, Openings, and Enclosures in the History of Technology

4: Infrastructure in Africa: Local Knowledge and Technological Know-How Organizer: **Arwen P. Mohun** (University of Delaware) Chair: **Nina Lerman** (Whitman College) Commentator: **Jan-Bart Gewald** (University of Leiden)

Arwen P. Mohun (University of Delaware): The Infrastructure of Empire: Local Knowledge and Telegraph-Building in Central Africa, 1898-1901 Jethron Akallah (Maseno University) and Mikael Hård (Darmstadt University of Technology): Under the Radar: Local Water- supply Practices in Nairobi, 1940-1980 Laura Ann Twagira (Wesleyan University): Listening to Musokura: Lessons from Mali on Women, Technology, and Materiality

Benjamin Twagira (Emory University): We Are What We Know': Radio, Rumor and Identity in Militarized Kampala, ca. 1966-86"

5: Innovators, Disruptors, and Thought Leaders

Sponsored by SIGCIS

Organizer: **Bretton Fosbrook** (University of Toronto) Chair and Commentator: **Kira Lussier** (IHPST, University of Toronto)

Matt Wisnioski (Virginia Tech): *Lifelong Kindergarten: Play and the Making of Innovators* **Molly Sauter** (McGill University): *William J Casey and the Foundations of Modern Venture Capital*

Bretton Fosbrook (University of Toronto): *The Work of a Thought Leader: Why Business Management Publishing Matters to Historians of Innovation* **Di Jing** (Faculty of Philosophy and Education, University of the Basque Country

(UPV/EHU)): Responsibility in Chinese Innovation Contexts

6: Human-Machine Interfaces: industrial design, ergonomics, psychology and semiotics in the early history of computing

Organizer: **Elisabetta Mori** (Middlesex University, London) Chair: **Winifred R. Poster** (Washington University, St. Louis) Commentator: **Paul Thomas Rubery** (SUNY-Stony Brook)

Elisabetta Mori (Middlesex University, London): Early Olivetti Computer Design: Sottsass, Maldonado, and the Sign System for ELEA (Robinson Prize Candidate) Corinna Kirsch (Stony Brook University, New York): Computers as "Conversation Machines" at the Hochschule für Gestaltung Ulm, 1964-1965 (Robinson Prize Candidate) Luke Stark (Dartmouth College, Hanover, NH): After the Clinic: Jurgen Ruesch, Weldon Kees, and Cybernetic Non-Verbal Communication, 1950-1960 Evangelos Kotsioris (Princeton University): Designing Compatibility: The Soviet Unified System of Electronic Computers

7: Negotiating Infrastructure and Society in the Middle East

Organizer: **Alex Schweig** (University of Arizona) Chair and Commentator: **Begüm Adalet** (Cornell University) Session Schedule SHOT Annual Meeting St. Louis (version June 27, 2018) – page 2 **Pauline Lewis** (UCLA): Entangled: *The Role of Private Capital in Ottoman Submarine Telegraphy*

Xiaoyue Li (University of Michigan): *Multiplicity of Knowledge: Everyday Negotiations of Railway Technology in Colonial Egypt, 1882-1919*

Alex Schweig (University of Arizona): Fortunately, the Patient Died of Typhoid Fever: The Role of the Railroad in the Spread of the 1893 Anatolian Cholera Epidemic, and the Efforts to Contain It

Elham Bakhtary (George Washington University): *Strings of Imperialism: Afghanistan's Resistance to Telegraphy*

8: Communication Technologies-in-Use

Chair and Commentator: TBA

Scott Kushner (University of Rhode Island): "Accurate ticket and dollar control": Ticketing, Computing, Tomorrows

Miaofeng Yao (University of Minnesota): *Different Typewriters for Different Modernities:* Society, Language, and Chinese Typewriters

Logan Blizzard (University of Pittsburgh): "Mimic Game': Spectacular Representation via Electric Baseball Bulletin Boards in the Early 20th Century (Robinson Prize Candidate) Jan Hadlaw (York University): "Dial M for Modernity"—Educating Urban Telephone Subscribers, 1928-29

Friday, 12 October 2018 10:30 AM – 12:00 AM

9: Government Control: Modernity, State Power, and Technological Innovation Organizer: Jonathan Shafer (National Park Service) Chair: Lisa Ruth Rand (University of Wisconsill'-Madison) Commentator: Sara B. Pritchard (Cornell University)

Jonah Bea-Taylor (Army Corps of Engineers): Coastal engineering, federal sponsorship, and the transformation of American coastlines

Brian Jirout (South Carolina State Museum): *Aerial Photography on the Farm: Remote Sensing and the transformation of American Agriculture*

Jonathan Shafer (National Park Service): *Practical, patriotic, and picturesque: Statecraft, recreation, and historie preservation on National Park Service parkways* (Robinson Prize Candidate)

Derek Nelson (University of New Hampshire): *"Is the Port of New York In Danger?":* Shipworms and the Professionalization of Marine Woodborer Research and Prevention, 1920-1950 (Robinson Prize Candidate)

10: Why some forms of very high speed transport have been adopted, not others Organizer: **Jim Cohen** (The City University of New York) Chair and Commentator: **Albert J. Churella** (Kennesaw State University)

Jim Cohen (The City University of New York): The development of very high speed, tracked air cushion vehicle technology in the United States, 1965-1975 Victor Marquez (Independent Scholar): Investments, risk, and the relativity of speed Steven Pieragastini (Boston College): The history and current status of magnetic levitation (Maglev) technology in Japan and East Asia Session Schedule SHOT Annual Meeting St. Louis (version June 27, 2018) – page 3 **Zhihui Zhang** (Institute for History of Natural Sciences, Chinese Academy of Sciences): Competition between Magnetic Levitation (Maglev) and Steel Wheel Technology for High Speed Ground Transportation Projects in China

11: Technological Advancement as the Generator of Scientific Progress?
Organizer: David Colaco (University of Pittsburgh)
Chair: Mark Povich (Washington University in St. Louis)
Commentator: Carl Craver (Washington University in St. Louis)

David Colaco (University of Pittsburgh): Technological Development, Data Integration, and "Unification": Is theory the cause of scientific progress, or the effect?
Rick Shang (Washington University in St. Louis): Competition and the Creation of Neuroimaging: The History of Positron Emission Tomography 1976-1985
Nina Atanasova (The University of Toledo): Virtual Morris Water Maze: The Independent Life of an Experimental System
John Bickle (Mississippi State University): Tool development drives progress in neurobiology, and engineering (not deep theory) drives tool development: The case of the patch clamp

12: Future of SHOT: Gateways to the Next 60 Years

Presidential Round Table sponsored by ECIG Organizer: Alice Clifton (Georgia Institute of Technology): -Chair: **Colin Garvey** (Rensselaer Polytechnic Institute): -

Panelists:

Katrin Boniface (University of California Irvine)
Alice Clifton (Georgia Institute of Technology)
Dolly Jørgensen (University of Stavanger)
Juyoung Lee (Johns Hopkins University)
Eden Medina (Indiana University Bloomington)
Xincheng Shin (Georgia Institute of Technology)
Honghong Tinn (Earlham College)

13: New Prospectives on Teaching the History of Technology

Unconventional Session

Organizers: **William Logan** (Pacific Union College), **Erinn McComb** (Mississippi State University), and **Kathleen Ochs** (Colorado School of Mines) Chair and Commentator **William Logan** (Pacific Union College)

Panelists:

William Logan (Pacific Union College) Erinn McComb (Mississippi State University) Kathleen Ochs (Colorado School of Mines)

14: Reconsidering Skills and Science in the Early Industrial Revolution Chair and Commentator: **Leslie Tomory** (McGill University)

Dustin Studelska (University of Minnesota): Forgetting the Hand: Neoclassical Ceramics and the Skill They Obscure (Robinson Prize Candidate) **Dazhi Yao** (Chinese Academy of Sciences): J. A. C. Chaptal's Conversion: the Interaction between the Chemical Revolution and Chemical Industry in the late 18th Century Session Schedule SHOT Annual Meeting St. Louis (version June 27, 2018) – page 4 **John Pannabecker** (Independent Scholar): *Technological Innovation and Social Networks in Paris during the Restoration*

15: Digital History and History of Technology: A Critical Dialogue Presidential Round Table Organizer: **Andreas Fickers** (University of Luxembourg / C2DH) Chair: **Pascal Griset** (Paris-Sorbonne University) Commentator: **Andrew Russell** (SUNY Polytechnic Institute)

Valérie Schafer (University of Luxembourg / C2DH): Does Born-Digital Heritage turn Historians into Digital Historians?
Anita Lucchesie (University of Luxembourg / C2DH): Technology's Stortellers Reloaded: A Text-Mining Experiment of "Technology & Culture"
Andreas Fickers (University of Luxembourg / C2DH): Technology's Stortellers Reloaded: A Text-Mining Experiment of "Technology & Culture"
Sean Takats (George Mason University): Digital History as Artifacts

16: Cyborg Politics in the Cold War

Chair and Commentator: TBA

Bo An (Yale University): *China and Cybernetics: The Case of Qian Xuesen* **Mario Bianchini** (Georgia Institute of Technology): *From Sports Field to Factory: Sport as Technological Consciousness in East Germany* **Layne Karafantis** (NASA): Designing with Purpose: *Human Factors Engineering at NASA*

Friday, 12 October 2018 1:30 PM - 3:00 PM

17: Labor, Stress, and Problem-Solving: Modeling the Human Mind in US Cybernetics & Al in the mid-20th Century

Organizer: **Jonnie Penn** (University of Cambridge) Chair: **Margaret Minsky** () Commentator: **Tarra Abraham** (University of Guelph): -

Angelica Clayton (Yale University): *Psychological Stress and the Language of the Mind in Early Cybernetic Models*

Colin Garvey (Rensselaer Polytechnic Institute): *The "General Problem Solver" Doesn't Exist: Mortimer Taube & The Art of AI Criticism*

Jonnie Penn (University of Cambridge): *The Logic Behind the Logic Theory Machine, 1955-*56

18: Constructing Social Landscapes

Chair and Commentator: TBA

Kathryn Carpenter (University of Missouri-Kansas City): "Cesspools," Springs, and Snaking Pipes: The use of technology to reroute the water and the social landscape of Hot Springs National Park (Robinson Prize Candidate)

Eric Hardy (Loyola University New Orleans): *Going Against the Flow: The Evolution of Constructed Wetlands as Storm Water Mitigation in New Orleans and Atlanta*

Justin Shapiro (University of Maryland, College Park): *Decent, Safe, and Sanitary?* Kenilworth Courts and the Environmental Obstacles of Washington, D.C.'s Public Housing Program

19: "Enclosures" in the History of Technology: Public Historians of Technology and Engineers Discuss their Silos (and Try to Break them Down)

You Write, I Present Session

Organizer and Moderator: **Michael Geselowitz** (IEEE History Center at Stevens Institute of Technology)

Author 1: **Mary Ann Hellrigel** (IEEE History Committee): Conducting oral histories in the history of technology

Reader/Commentator 1: Robert Dent (IEEE History Committee)

Author 2: **Allison Marsh** (USC and IEEE History Committee): *Recognizing landmarks in the history of technology*

Reader/Commentator 2: Jason Hui (IEEE History Committee)

Author 3: **Corinna Schlombs** (RIT and IEEE History Committee): *Awarding/Supporting historical research and publication*

Reader/Commentator 3: Janina Mazierska (IEEE History Committee)

20: Assimilating the Gun: Military Technology in the Long Sixteenth Century Sponsored by SMiTnG

Organizer: Kang Hyeok Hweon (Harvard University)

Chair: Steve Walton (Michigan Technological University): -

Commentators: **Victor Seow** (Harvard University) and **Yulia Frumer** (Johns Hopkins University): -

Roger Lee de Jesus (University of Coimbra): Gun and Gunpowder Production in Portuguese Asia (16th century)

Barend Noordam (Freie Universität Berlin and Hebrew University of Jerusalem): Debating the Gun: The Reception of Guns in Ming Military Manuals

Hyeok Hweon Kang (Harvard University): Divine Machine': Korea's Reception of the Gun

21: Sustaining Technologies in Times of Crisis

Chair and Commentator: TBA

Yovanna Pineda (University of Central Florida): *Harvesting Technology Use and Development in Argentina During the Interwar Period, 1930-1945*

Éverton Luís de Oliveira (University of Campinas): *History of social technologies in the Brazilian semi-arid: a solution for the water scarcity*

Beatrice Choi (Northwestern University): *Innovation on Standby: Political Pitfalls, Economic Uncertainty, and Scientific Frustrations in Local Computer Innovation at Rio de Janeiro's National Computer Science Laboratory (LNCC)*

22: Redifining Spaces

Chair and Commentator: TBA

Jeffrey Nesbit (Harvard University): *Blockhouse: From Military Fortification to Cybernetic Ports of Control*

Annie Handmer (University of Sydney): Wilderness or Open Space? Contextualising Environmental Concern in the Second Space-Age (Robinson Prize Candidate) **Tiffany Nichols** (Harvard University): *Hidden Technicalities: Consideration of Former Cold War Sites by the Laser Interferometer Gravitational-Wave Observatory for Placement of Large-Scale Interferometers*

23: Deskilling, Labor, and Gender: Gardening, Sewing, and Laundry in 20th-Century America

Organizer: Linda Przybyszewski (University of Notre Dame) Chair: Rachel Maines (Columbia University Seminar in the History and Philosophy of Science) Commentator: Ruth Schwarz Cowan (University of Pennsylvania)

Anastasia Day (University of Delaware): How the Home-Grown Tomato Became So Expensive: Exploring Technologies of Home Food Production in the 1940s Linda Przybyszewski (University of Notre Dame): Deskilling and the Loss of Moral Certainty: The Evolution of Garment Pattern Drafting and Sewing Education in the 20th Century United States

Spring Greeney (University of Wisconsin-Madison): *Why We Stopped Boiling Clothes: Race, Steam Laundries, and the Transformation of Cleanliness, 1898-1936*

24: Engineering Studies and the History of Technology

Roundtable Discussion –Sponsored by the Prometheans Organizer: **Amy Bix** (Iowa State University): -Chair: **Amy Bix** (Iowa State University): -

Panelists:

Cyrus Mody (Maastricht University) Atsushi Akera (Rensselaer Polytechnic Institute) Amy Slaton (Drexel University) Brent K. Jesiek (Purdue University) Matt Wisnioski (Virginia Tech)

Friday, 12 October 2018 3:30 PM - 5:30 PM

25: To Electrify or Not to Electrify: Examining Electrification Options and Trajectories You Write, I Present Session Organizer: Anto Mohsin (Northwestern University in Qatar) Chair: Begüm Adalet (Cornell University) Mutual commenting

Esra Bakkalbasioglu (University of Washington): Social Life of the Electric Grid: Electrification in Ottoman and Turkish Anatolia
Leo Coleman (Hunter College): Technology's Constitution: Electricity Grids and State Boundaries in India and Scotland after 1947
Fredrik Meiton (University of New Hampshire): The Non-Electrification of Nablus
Anto Mohsin (Northwestern University in Qatar): The Indonesian Electric Cooperatives

26: Totalitarian Technology

Organizer: **Matthew Hersch** (Harvard University) Chair: **Maria Gonzalez Pendas** (Society of Fellows in the Humanities / Columbia University) Commentator: **Asif A. Siddiqi** (Fordham University) *Session Schedule SHOT Annual Meeting St. Louis (version June 27, 2018) – page 7* Daniel Asen (Rutgers University-Newark): Fingerprinting and Photography: A History of 'Fascist' Identification Technologies in Japanese-Occupied Beijing, 1937–1945 Matthew Hersch (Harvard University): Do Rockets Have Styles? Space Exploration and Technological Choice, 1945–1950

Tom Kelsey (King's College, London): *The Mechanical Road to Serfdom: State-Backed Machines, Economic Nationalism and Untruths in Post-War Britain*

Ramesh Subramanian (Quinnipiac University): *Dark Days: The Indian 'National Emergency'* and the Technologies that Enabled It (1975–1977)

27: Technologies-in-Use

Round Table Organizer: **Lee Vinsel** (Virginia Tech) Chair: **Lissa Roberts** (University of Twente) Commentator: **Francesca Bray** (University of Edinburgh)

Aleksandra Kobiljski (French National Research Center (CNRS)): *Beyond Eureka: Designing Coals for the Japanese Steel Industry 1895-1911"*

Darina Marykanova (Universidad Autónoma de Madrid): *Engineering Progress: public works in political debate of the Mediterranean countries in the First Era of Globalisation (1880-1918)*

Andrew Russell (SUNY Polytechnic Institute): *Maintenance and Operations in the Bell System, 1917-1939*

Sonja Schmid (Virginia Tech): Preparing for the Unprecendented: Nuclear Emergency Response Technologies and the Politics of Anticipated (non-)Use **Lee Vinsel** (Virginia Tech): Getting Maintenance Organized: Technologies-in-Use, Learning, and Occupational Identity in the American Railroad Industry

28: Technology, Modernity, and Human-Animal Relations

Organizers: **Peter Soppelsa** (University of Oklahoma) and **Etienne Benson** (University of Pennsylvania):

Chair and Commentator: Rebecca Woods (University of Toronto)

Cassie Adcock (Washington University St. Louis): *Hidebound Industry in an 'Agricultural Country': Protecting Cattle in India, 1907–1927*

Etienne Benson (University of Pennsylvania): Engineering the Pain-Free City: Electrocution as Animal Rescue in the United States, 1900–1920

Peter Soppelsa (University of Oklahoma): *Technologies of the War on Rats during the Third Plague Pandemic, 1894–1959*

Kathleen Sullivan (Mississippi State University): *The Nature of the Beast: Vaccines and Zoonotic Disease in Mid-Twentieth-Century America*

29: Pre-Modern Technological and Economic Innovation

Chair and Commentator: TBA

Moritz Nagel (Northwestern University): *Waterborne Parrots: Duala Talking Drummers and Their Craft, 1650-1914* (Robinson Prize Candidate)

Anne McCants (Massachusetts Institute of Technology): Competition and Innovation in Gothic Cathedral Construction

Phillip Reid (Independent scholar): Stasis and Change in a Key Artisanal Technology: The Merchant Ship in the British Atlantic, 1600—1800 (Robinson Prize Candidate) Session Schedule SHOT Annual Meeting St. Louis (version June 27, 2018) – page 8 Adam Lucas (University of Wollongong): The role of milling in the commercialization of the feudal economy

30: Hydraulic Landscapes

Organizer and Chair: **Stuart Leslie** (Johns Hopkins University) Commentator: **Rina Falcetti** (University of California)

Xincheng Shen (Georgia Institute of Technology): *Meandering Shortcut: Transplanting Water System in Colonial Shanghai and the Dual Reality of Technological Globalism* **Daniel Macfarlane** (Western Michigan University): *Nature Empowered: Hydraulic Models, Engineers, and the Hydraulic Landscape of Niagara Falls*

Owain Lawson (Columbia University): 'Sisters in Misery': Rural and Urban Effects of the Litani Project, 1955-65

Ramya Swayamprakash (Michigan State University): Borderlandia: Amusement Parks, Public Lands, and the story of emptiness in the Detroit River

31: Narrative Technology - new approaches to the science-technology gateway Organizer: **Dominic Berry** (London School of Economics and Political Science) Chair and Commentator: **Karen Rader** (Virginia Commonwealth University): -

Dominic Berry (London School of Economics and Political Science): *Narrative starting points: where to place your fingertips on the history of DNA synthesis*

Robert Bud (Science Museum, London): *The Industrial Revolution as story, Technology as a key word and Industrial Strategy as policy in 1960s Britain*

Lijing Jiang (Science History Institute, Philadelphia): Stories of the "Living Fossil" across the Pacific: Narratives of Evolutionary History and Resource Management in Metasequoia Research

Tiago Saraiva (Drexel University): *White Writing: Cloning Citrus and Racial Degeneration in South Africa*

32: Legal Histories of Technology II

Organizer: **Meg Jones** (Georgetown University) Chair and Commentator: **Gerardo Con Diaz** (University of California, Davis)

Kathryn Steen (Drexel University): *Inventing Policy: The Challenge of U.S. Patent Governance in the Interwar Years*

Sarah Bell (Michigan Technological University): *The Congressional Act as a Funding Stream for Computing Technologies A Case Study of the Kurzweil Reading Machine*

Jillian Foley (University of Chicago): *Regulating Technological Secrecy* (Robinson Prize Candidate)

Andrew McGee (Library of Congress): *The Courts Consider the Computer: Electronic Computers as Objects of Litigative and Administrative Fascination in the U.S. Federal Courts, 1950-1985*

Saturday, 13 October 2018 8:00 AM - 10:00 AM

33: Cold War Diplomacy and Technology Transfer Chair and Commentator: TBA **Kenzo Okuda** (Independent scholar): *UK-US cooperation on atomic energy development during World War II and UK political warfare toward Japan in the Cold War period* **Miroslaw Sikora** (Institute of National Remembrance Poland): *To share or not to share? Expectations, (mis)trust, deception and nativity in the US policy toward Polish People's Republic in the area of science and technology during the 50s – 70s.* **Ling-Ming Huang** (Georgia Institute of Technology): *Creating Hybridity*

34: Legal Histories of Technology I

Organizer: **Meg Jones** (Georgetown University) Chair: **Kara Swanson** (Northeastern University School of Law) Commentator: TBA

Mary Mitchell (Purdue University): Moving Targets: Analogy and Bricolage in the Regulation of Technological Change

Meg Jones (Georgetown University): The Development of Consent to Computing David Zvi Kalman (University of Pennsylvania): Rabbinic Legal Responses to Technology in the 19th Century: Lagging or Leading? (Robinson Prize Candidate) Hugo Silveira Pereira (University NOVA of Lisbon): The Portuguese railway legislation (1845-1892)

35: Protective and belligerent technologies in twentieth century warfare

Organizer: *Mark Crowley* (Wuhan University, China / Harvard Center for European Studies) Chair and Commentator: *Christopher Sellers* (State University of New York at Stony Brook)

Mark Crowley (Wuhan University, China / Harvard Center for European Studies): "Health is Wealth": The drive to improve occupational health in British coalmines during the Second World War

Peter Thorsheim (University of North Carolina, Charlotte): Secrecy at the Expense of Safety: Protective Technologies in Britain's Chemical Weapons Factories

Amy Hay (University of Texas Rio Grande Valley): *"The Weed Killers": Chemical Warfare in Vietnam*

William Vogel (University of Minnesota): Constructing Biosafety: The American Biological Weapons Program and the Military Transformation of Microbiological Laboratory Practice

36: Other Spaces: Displacement, Disruption, and Violence in the Space Age Organizer: **Asif Siddiqi** (Fordham University) Chair and Commentator: **Edward Jones-Imhotep** (York University)

Lisa Ruth Rand (University of Wisconsin-Madison): *Decay and Disruption: The Globalizing By/Products of the Cold War Space Industry*

Ellen Power (University of Toronto): *Narratives of radiation, risk and uncertainty in the cleanup of satellite Cosmos 954*

Anna Reser (University of Oklahoma): *Making Way for 'America's Spaceport': Displacement and Disruption on Florida's Space Coast*

Asif Siddiqi (Fordham University): *Sites of Exclusion: The Disturbing Legacy of Cold War Space Research in Kenya*

37: Technological Rituals

Organizer: **Whitney Laemmli** (Columbia University) Chair and Commentator: **Yulia Frumer** (Johns Hopkins University) **Matthew Henderson** (University of Virginia): *The Hock of the Old: American Collectors of American Antiques, 1919 - 1979*

Whitney Laemmli (Columbia University): *Taylorism Transfigured: Movement, Spirit, and Technology in the WWII British Factory*

Maria González Pendás (Columbia University): Building Redemption: Concrete Technologies, Brick Geometries, and Catholicism in Mid-century Latin America Jennifer Karns Alexander (University of Minnesota): Technology, ritual, and protest: The 20th Anniversary Mass of the United Farm Workers of America

38: User Communities in the History of Computing: New Methods and Directions Sponsored by SIGCIS

Organizer: **Gerardo Con Diaz** (University of California, Davis) Chair and Commentator: **Janet Abbate** (Virginia Tech)

Stephanie Dick (University of Pennsylvania): *MACSYMA: Making a Mathematical Community*

Marie Hicks (National Humanities Center (from UW-Madison)): Bootstrapping Digital Governance: Trading Programming for a New Computer at the Administrative Staff College of India in the 1970s

Gerardo Con Diaz (University of California, Davis): Copyright Law and the Angry Programmers: The League for Programming Freedom, 1985-1995

Matthew Jones (Columbia University): *Through the List-Serve, Darkly: User Groups and the Emergence of Data Mining in the 1990s*

39: Moving crops and the scales of history: a round-table

Round Table

Organizers: **Francesca Bray** (University of Edinburgh), **Barbara Hahn** (Texas Tech), **John Lourdusamy** (Indian Institute of Technology Madras), and **Tiago Saraiva** (Duke University): Chair: **Francesca Bray** (University of Edinburgh): -

Dominic Berry (Narrative Science Project, Economic History, LSE): *Agricultural modernity and seed science.*

Courtney Fullilove (Wesleyan University): *Global roots of US agricultural system* **Aleksandra Kobiljski** (CNRS - EHESS): *Technology in Japanese modernity* **Pamela O. Long** (Independent Scholar): *Technology in context and in the longue durée* **Harro Maat** (WURL): *Thinking globally about agrarian change*

Marta Macedo (Institute of Social Sciences, University of Lisbon): *Global technoscientific regimes considered from the "periphery"*

Gabriela Soto Laveaga (Harvard University): *Science, technology and empire: the case of Mexico*

40: Energy gateways: an international history of interconnection

Organizer: **George Wilkenfeld** (George Wilkenfeld and Associates) Chair: **Julie Cohn** (Center for Public History University of Houston) Commentator: TBA

Richard Hirsh (Virginia Tech): *Filling in the Gaps on Interconnection: A Cross-national Study of Rural Electrification in the 1920s and 1930s*

Adewumi Damilola Adebayo (St. John's College Cambridge): From the PWD to the ECN: Indigenous Agency, Development Planning, and Regulation of Electricity Production in Nigeria, 1923 - 1950

Nicole Hesse (University of Stuttgart): *Grid of Knowledge: Wind Energy Usage in Southern France 1880-1940* George Wilkenfeld (George Wilkenfeld and Associates): A Confluence of Water and Power the Snews Under Scheme, grid interconnection and the gradient of the Australian National

– the Snowy Hydro Scheme, grid interconnection and the creation of the Australian National Electricity Market

41: Graduate Student Workshop I

Organizer and Chair: **Colin Garvey** (Rensselaer Polytechnic Institute) Commentators: **Patrick McCray** (UCSB), **Sabine Höhler** (KTH Royal Institute of Technology), **Nina Lerman** (Whitman College), **Lee Vinsel** (Virginia Tech)

Ashley Sweetman Tasha Schoenstein Patrick John F. Mansujeto Ranjodh Singh Dhaliwal Daniel Wiley Jieshu Wang Betsy Frederick-Rothwell Fabian Prieto-Nanez

Saturday, 13 October 2018 10:30 AM – 12:00 AM

42: Educational Technology in the Information Society

Organizer: **Todd Dresser** (University of Wisconsin-Green Bay) Chair: TBA Commentator: **Joy Rankin** (Michigan State University)

Brandon Jackson (Independent Scholar): *Early Radios as Educational Technologies* **Ekaterina Babintseva** (University of Pennsylvania): *Technologies of Creativity: Minds, Algorithms, and Education in the Mid-Century Soviet Union.*

Todd Dresser (University of Wisconsin-Green Bay): "Addressing Societies Unmet Needs as Profitable Business Opportunities": PLATO at the University of Illinois and the Control Data Corporation.

Josep Simon (Universidad del Rosario, Bogota (Colombia)): Technologies in the Classroom: Appropriating the Material Culture of Education in Latin America (19th-21st centuries) for the History of Technology

43: Gendered Technologies and Seperate Spheres

Chair and Commentator: TBA

Cari Casteel (Georgia State University): "Gender in the Bath": Technologies and Space in the American Household

Elizabeth Semler (University of Minnesota): "'I Finally Felt Valued': The Construction of an Environment of Equality at Cray Research, 1972-1996" (Robinson Prize Candidate) Anna Turza (War Studies University in Warsaw): War is a woman. How women's paramilitary training influenced the situation of women in the interwar Poland

44: Imagining Spaceship Earth

Chair and Commentator: TBA

Rebecca Perry (University of Virginia): *Imaging Space: Planetary Voyages and Computer Graphics at NASA/JPL*

Hari Durrani (Columbia Law School): "Our Window on the World": Life in the Orbital Heterotopia of the International Space Station (Robinson Prize Candidate)
David Munns (John Jay College, CUNY): The Alga-tron and the Aqua-Hamster: Engineering Models of Closed Ecosystems to Live In Space.

45: Controlling Information on and with Paper

Chair and Commentator: TBA

Kyle Bickoff (University of Maryland): *Infrastructures of Knowledge: The Hollinger Box and the Containerization of Memory*

Paul Ceruzzi (Smithsonian Institution): Calvin Mooers, Zatocoding, and Early Research on Information Retrieval

Paul Miranti (Rutgers Business School): Information Innovation and Diffusion: Walter A. Shewhart and the Development of the Control Chart, 1918-1954
Phillip Bradford (University of Connecticut): Information Innovation and Diffusion: Walter A. Shewhart and the Development of the Control Chart, 1918-1954

46: Soil, Dirt, and Sediment: New Perspectives on Technoscience and the Environment

Sponsored by Envirotech Organizer: **Theodora Dryer** (University of California, San Diego) Chair: **Layne Karafantis** (NASA) Commentator: **Courtney Fullilove** (Wesleyan University)

Pen Hardy (Xavier University): Sampling the Sea Bottom: The Collection and Use of Sediment on the Challenger Expedition
Christine Keiner (Rochester Institute of Technology): From Fallout to Sea Snakes: The Panatomic Canal Debate and Pre-NEPA Environmental Impact Assessment
Theodora Dryer (University of California, San Diego): Computing Sugar Beets, 1920-1940

47: Technologies of Self-Determination and Collective Action in African American Expert Communities

Sponsored by EDITH Organizer: Lisa Ruth Rand (University of Wisconsin-Madison) Chair: Fallon Samuels Aidoo (University of New Orleans) Commentator: E. Prasad Venugopal (University of Detroit Mercy)

Selika Ducksworth-Lawton (University of Wisconsin - Eau Claire): Broadcasting a Movement: Communications Technology for Armed Self-Defense in Louisiana, 1965-1967 Charnell Chasten Long (University of Wisconsin - Madison): Technologies of Counter-Publics: The Social Origins of the African American Scientist (Robinson Prize Candidate) Chanda Prescod-Weinstein (University of Washington): When Is She a Mathematician, Technologist, Biologist, Physicist? The Challenges of Boundary Work Among African American Women in STEM

48: Digital Economies of Labor, Transnational Mobilities
Organizer: Winifred Poster (Washington University, St. Louis)
Chair: Elisabetta Mori (Middlesex University)
Commentator: Srirupa Prasad (University of Missouri, Columbia)
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Andrea Alarcon (USC): Digital Nomads: Spatial Freedom and The Culture of Remote Work Michael Palm (University of North Carolina, Chapel Hill): Carry That Weight: Online Record Sales and International Traffic in the Digital Economy

Winifred Poster (Washington University, St. Louis): *From Knowledge Work to Maintenance Work on the Global Information Highway: Histories of ICT Outsourcing in India*

49: Public Memory, Technology, Strategy, and Cultural Values in the Pacific WW2 Round Table Organizer: **Pnina Abir-Am** (Brandeis University)

Chair and Commentator: **Roger Launius** (Launius Historical Services)

Pnina Abir-Am (Brandeis University): Historiographic surplus of the 50th and 60th commemorations of the end of WW2 in the US and Japan Alex Roland (Duke University): Asymmetrical Naval War in the Pacific, 1941-1945 Takashi Nishiyama (SUNY at Brockport): Making Better Sense of Wartime Technology: The Japanese Zero Fighter as a Case Study

50: Graduate Student Workshop II (ends 12:30)

Organizer and Chair: **Colin Garvey** (Rensselaer Polytechnic Institute) Commentators: **Patrick McCray** (UCSB), *Sabine Höhler* (KTH Royal Institute of Technology), **Nina Lerman** (Whitman College), **Lee Vinsel** (Virginia Tech)

Chamee Yang Nathaniel "Bucky" Stanton Rosalind Donald Zachary Loeb Ericka Leonor Herazo Berdugo Anna Lehr Mueser Amitkumar Singh Akoijam

Saturday, 13 October 2018 1:30 PM – 3:00 PM

51: The Ecology of Technology Organizer: **Cole Stratton** (Indiana University) Chair: **James Schwoch** (Northwestern University) Commentator: TBA

James Schwoch (Northwestern University): Trees, Telegraphy and Telecommunications Networks

Hannah Conway (Harvard University): *Designing for Resilience: The Industrialization of Microbial Labor and Development of Self-Healing Concrete* **Cole Stratton** (Indiana University): *Towards a Political Ecology of the iPhone 5C*

52: Standards and Calculations as Technologies of Trust: Institutions, Markets, Publics

Organizer: **Ashton Merck** (Duke University) Chair and Commentator: **Stephen Mihm** (University of Georgia) **Aashish Velkar** (The University of Manchester): *Standards as Technologies of Trust* **Ann Daly** (Brown University): *"Men of Honor and Intrinsic Value": Personal and Institutional Authority at the New Orleans Mint, 1839-1848*

Ashton Merck (Duke University): *The Internationalization and Privatization of Food Safety Standards*

Kohta Juraku (Tokyo Denki University): Calculation Automates the Decision: Historical Perspectives of Strong Belief in Simulation Technology for Nuclear Emergency in Japan **Shin-etsu Sugawara** (Central Research Institute of Electric Power Industry, Japan): Calculation Automates the Decision: Historical Perspectives of Strong Belief in Simulation Technology for Nuclear Emergency in Japan

53: Intellectual and Institutional Challenges to Internationalizing SHOT

Presidential Round Table Organizer and Chair: **John Krige** (Georgia Institute of Technology) Moderator: **Francesca Bray** (University of Edinburgh):-

Panelists:

Joseph Simon Castel (Universidad del Rosario, Bogota (Colombia)) Dazhi Yao (Chinese Academy of Sciences) Anna Guagnini (University of Bologna) Aleksandra Kobiljski (French National Research Center (CNRS)) Marta Macedo (Institute of Social Sciences of Lisbon) Édison Renato Pereira da Silva (Federal University of Rio de Janeiro) Darwin Stapleton (Rockefeller Archive Center)

54: From Abstract and Keywords to Film-making: Creating Historical Videos In and Out of an Academic Context

Workshop-style session Organizer: **Sam Smiley** (AstroDime Transit Authority) Chair: **Patrick McCray** (UCSB) Commentator: The Audience

Sam Smiley (AstroDime Transit Authority): Ornamentalism: The Migrations and Translations of Japanese Knotweed

Yovanna Pineda (University of Central Florida): *Filming Memories and Artifacts of Industrialization from Argentina's Past*

David C. Brock (Center for Software History, Computer History Museum): *Video Ethnography and the Dynamic Artifacts of Computing*

Hansen Hsu (Center for Software History, Computer History Museum): Video Ethnography and the Dynamic Artifacts of Computing

55: Materializing Sight: Psychology and Technologies of Vision in the Twentieth Century

Organizer: **Cameron Brinitzer** (University of Pennsylvania, History and Sociology of Science)

Chair: **Erica Robles-Anderson** (New York University, Media Culture and Communication) Commentator: TBA

Cameron Brinitzer (University of Pennsylvania, History and Sociology of Science): Materializing Nonverbal Minds: The Technical Measurement of Looking-Time in Experimental Psychology (Robinson Prize Candidate)

Alex Campolo (New York University, Media Culture and Communication): Computing and Human Behavior: Allen Newell and Applied Information Processing at Xerox PARC **Erica Robles-Anderson** (New York University, Media Culture and Communication): Personal Computing through Portrait Display: The Xerox Alto as Object Lesson in Upright Views

Benjamin Lindquist (Princeton University): "Synthesis by Art": Synthetic Speech and the Conversion of Tacit Knowledge into Algorithms (Robinson Prize Candidate)

56: Man, Superman, and Machine

Chair and Commentator: TBA

Michael Hankins (United States Air Force Academy): *From Snoopy to Starbuck: The Evolution of Fighter Pilots in Popular Culture and the Embrace of Science Fiction* **Lisa Nocks** (IEEE History Center): *Industry and Imagination in the Nineteenth Century: The Steam Man Phenomenon*

Alexander Magoun (IEEE History Center at Stevens Institute of Technology): *Fear and the Electrical Sublime: Why Frankenstein became Electric*

57: An Offering of Tools and Advice for a Post-Grad Work/Life; Or, 'Get a Job!'

Presidential Round Table sponsored by ECIG Organizer and Chair: **Colin Garvey** (Rensselaer Polytechnic Institute)

Theodora Dryer (University of California, San Diego) Emily Gibson (National Science Foundation) Layne Karafantis (NASA) Pamela Long (Independent Scholar) Suzanne Moon (University of Oklahoma) Erik Rau (Hagley Library) Andy Russell (SUNY Polytechnic Institute)

58: The Cold War Expo: A Gateway to the World, and Beyond A Round-table on comparative history, collaborative publishing, and contemporary practices Round Table Organizer: Ellan Spero (École polytechnique fédérale de Lausanne (EPFL)):-Chair and Commentator: TBA

Ellan Spero (École polytechnique fédérale de Lausanne (EPFL)): A Garden City for "Progress and Harmony," Singapore at the Osaka '70 Expo

Matthew Assada (Office of the Under Secretary for Public Diplomacy and Public Affairs, Washington D.C.): *Expo 2020*

Michelle Demeter (Florida State University): Advancing an Optimistic Technological Narrative in an Age of Skepticism: General Electric and Walt Disney's Progressland at the 1964-1965 New York World's Fair.

Robert Kargon (Johns Hopkins University): *How the Cold War Changed the Future: Science and Technology at the 1964 New York Fair*

Stuart W. Leslie (Johns Hopkins University): *Who We Are, Not What We Make: Techno-Humanism and Expo '58*

Arthur Molella (Smithsonian Institution): The Human Spirit in an Age of Machines: The Pietà and the Computer at the 1964-65 New York World's Fair

Katie Uva (CUNY Graduate Center): 1964 and the State of the City

Saturday, 13 October 2018 3:30 PM - 5:30 PM

59: Power and Silence: (Non-)Engagements in the History of Technology You Write, I Present Session sponsored by EDITH Organizers: **Kara Swanson** (Northeastern University) and **Amy Slaton** (Drexel University):-Chair and Provocateur: **Tiago Saraiva** (Drexel University)

Author 1: **Pablo Gomez** (University of Wisconsin): *Enslaved Histories: African Diasporic Technologies and the Limits of Historicism*

Presenter 1: Kara Swanson (Northeastern University)

Author 2: Kara Swanson (Northeastern University): The Black Inventor in the History of Race, Politics, and Technology

Presenter 2: Pablo Gomez (University of Wisconsin)

Author 3: **Amy Slaton** (Drexel University): *History, Technology, and the Strategic Cruelties of Merit*

Presenter 3: Debjani Bhattacharyya (Drexel University)

Author 4: **Debjani Bhattacharyya** (Drexel University): *The Right against Mobility: A History* of Caste and the Built Environment

Presenter 4: Amy Slaton (Drexel University)

60: The Cost of Engineering to Society: Risk and Failure in Ground Transport Organizer: Julie Mark Cohen (Independent Scholar) Chair: TBA

Commentator: Matthew Winsnioski (Virginia Tech)

David Schley (Hong Kong Baptist University): *The Urban Locomotive in Nineteenth-Century America*

David A. Banks (Social Science Research Council): *Cultivating a New Engineer: Using Transportation History to Reconsider*

Julie Mark Cohen (Independent Scholar): U.S. Bridge Failures: The Cost of Extrapolation in Design Decision-Making

Katie Valliere Streit (University of Houston): Dirt Cheap: Assessing the Failures of Road Engineering in Tanzania

61: To Boldly Preserve: Archiving the History of the Next Half-Century of Spaceflight Round Table

Organizer: **Jonathan Coopersmith** (Texas A&M University) Chair and Commentator: **Angelina Callahan** (Naval Research Laboratory) Angelina Callahan (Naval Research Laboratory): Preserving the Invisible

Discussants:

Jonathan Coopersmith (Texas A&M University): Failure Is an Option: Why We Need to Act Roger Launius (Launius Historical Services): Whither Space Archives for the Future? Valerie Neal (Smithsonian - National Air and Space Museum): Writing Space History in the 21st Century

Erik Rau (Hagley Library): *To Boldly Collect: Building Space Archives and Beyond* Asif A. Siddiqi (Fordham University): *Comments*

62: The Historical Reach of American Engineering Education

Sponsored by Prometheans Organizer: **Atsushi Akera** (Rensselaer Polytechnic Institute) Chair and Commentator: **Bruce Seely** (Michigan Tech)

Larry Gragg (Missouri University of S&T): Seeking a Separate Path: The Efforts of the Missouri School of Mines and Metallurgy to Establish an Autonomous Engineering Campus Atsushi Akera (Rensselaer Polytechnic Institute): Who's at the Helm of U.S. Engineering Education? The Historical Origins of ABET's EC 2000 and Its Subsequent Implementation Timothy Stoneman (Georgia Tech Lorraine): The Blast Furnace in the Classroom: Site Learning in International Engineering Education

Ellen Foster (Purdue University): 'Everyone Makes': A critical history of 'diversity' and 'equity' discourse in STEM pedagogy practices

63: Symbolisms of technology

Organizer: Dolly Jørgensen (University of Stavanger) Chair: **Peter Soppelsa** (University of Oklahoma)

Jacques Vest (University of Michigan): Ready-Made: Victor Talking Machine Company and the Technological Aesthetic of Centralization (Robinson Prize Candidate) Joshua Nygren (University of Central Missouri): From Cause to Solution: Representations of Farm Machinery's Relationship to Soil Erosion in the Mid-Twentieth Century United States Dolly Jørgensen (University of Stavanger): Symbols of Modernity in Your Wallet: Technological Infrastructures on Developing Nations' Banknotes Blair Stein (University of Oklahoma): The Language of Technology and the Trans Canada Air Lines/Air Canada Transition, 1961-1965

64: Navigating Technological Color Lines: Networks and Mobility in African American History

Organizer: **Christopher Blakley** (Rutgers University–New Brunswick) Chair: **Rayvon Fouché** (Purdue University) Commentator: **Erinn McComb** (Mississippi State University)

Christopher Blakley (Rutgers University–New Brunswick): "She Took With Her A Small Black Horse": Fugitive Mobility, Equine Mastery, and the Envirotechnical Boundaries of Slavery in British America (Robinson Prize Candidate)

Xavier Macy (Rutgers University–New Brunswick): *Pooling and Police: Automobiles, Black Organization in the Montgomery Bus Boycott, and Carpool Criminalization* (Robinson Prize Candidate)

Alan Meyer (Auburn University): "Are You the Pilot?" African Americans in the Not-So Friendly Skies of Commercial Aviation.

Anke Ortlepp (University of Cologne): *Jim Crow Terminals: The Desegregation of American Airports*

65: State of the Art - Program Committee's Choice

Chair and Commentator: TBA

Howard Segal (University of Maine): Alvin Weinberg's Promotion of Tech no-Fixes in Cold War America

Patricia Bass (Duke University): *Photography as Evidence in Criminal Cases in 19th century France*

Sonia Robles (Universidad Panamericana, Mexico City): Cross-Border Dreams: Mexican Radio Entrepreneurs and their International Audience Waqar Zaidi (Lahore University of Management Sciences): Maintaining Pakistani Civil Aviation, Maintaining the State

66: Innovation Out of the Blue: Managing Serendipity in Energy Conversion Systems Organizers: Lillian Hoddeson (University of Illinois), Julie Cohn (University of Houston), Abby Spinak (Harvard University), Matthew Eisler (University of Strathclyde) Chair: Matthew Eisler (University of Strathclyde) Commentator: TBA

Lillian Hoddeson (University of Illinois): Chance and Design in Stanford Ovshinsky's Invention of the Nickel-Metal Hydride Battery

Julie Cohn (University of Houston): Becoming a Test-Bed: The Texas Case in American Electrification

Abby Spinak (Harvard University): In Search of an Inventor: The Birth of the Cooperative Business Model in Electricity History

Matthew Eisler (University of Strathclyde): Bounding Battery Risk: Managing Convergence in the Electric Auto Age

67: Gateways: Passages, Openings, and Enclosures in the History of Technology. Roundtable Discussion: "Teaching the History of Technology with a Focus on Diversity"

Round Table sponsored by EDITH Organizer: *Monique Laney* (Auburn University) Moderator: **Ruth Schwarz Cowan** (University of Pennsylvania)

Discussants: Michael Hankins (United States Air Force Academy) Monique Laney (Auburn University) Nina Lerman (Whitman College) Pamela Mack (Clemson University) Urooj Raja (University of Colorado at Boulder) E. Prasad Venugopal (University of Detroit Mercy)