



AWARDS AND FELLOWSHIPS 2020

SHOT 2020 VIRTUAL FORUM – 8-10 OCTOBER 2020

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2020 SHOT AWARDS AND FELLOWSHIPS

Leonardo da Vinci Medal

The highest recognition from the Society for the History of Technology is the Leonardo da Vinci Medal, presented to an individual who has made an outstanding contribution to the history of technology, through research, teaching, publication, and other activities. Andras Beck (formerly of the Hungarian Academy of Arts) designed the medal, the face of which shows Leonardo's head modeled after the artist's self-portrait. The reverse design shows (in the words of the sculptor) "the basic sources of energy: water, wind, and fire." A certificate accompanies the medal.

In 2020 two Da Vinci Medals are awarded (lectures to be given in 2021).

Recipients 2020

Maria Paula Diogo, New University of Lisbon, Portugal

Maria Paula Diogo is a scholar who has made outstanding contributions to the history of technology in every qualifying category for SHOT's Leonardo da Vinci medal, not only through research, teaching, publications and service to the society, but also through creating interdisciplinary bridges, astute networking, highly successful institution building, exceptional mentoring, and many other associated activities that have contributed to redefining the intellectual scope and geography of our field in Portugal.

Maria Paula pioneered the field of history of technology in Portugal, building it into one of the world's leading centers in the discipline. Throughout she been a key and loyal partner for SHOT, helping to establish its European presence and integrating southern European and postcolonial perspectives into our research agendas. She has consistently enlarged history of technology as an intellectual field by actively engaging scholarship in history of science, STS, and engineering studies while embracing historical objects from the early modern period to the late 20th century. More recently she has placed history of technology at the center of debates around the Anthropocene.

Diogo has taught at the faculty of science and technology in the New University of Lisbon since 1986, training a formidable number of excellent historians of technology, who are active contributors to SHOT, and initiating an important number of research projects and programs. These include directing CIUHCT, the Inter-University Centre of History of Science and Technology in Lisbon; establishing STEP, the Science and Technology in the European Periphery network; and sustaining the open access journal *HOST: History of Science and Technology*. CIUHCT has supported the growing history of technology community in Portugal, attracting and recruiting scholars from abroad above all from Spain and Brazil. Under her leadership it has become a major success story of how to sustain a community of scholars outside the traditional centers of the discipline, and under demanding financial constraints. Thanks to Diogo and her colleagues, Portugal regularly hosts history of technology related meetings including SHOT in Lisbon in 2007, ICOHTEC, STEP and ESHS, consolidating a vibrant and innovative international history of technology community

Diogo is the author of numerous well received books, edited volumes, articles and chapters in Portuguese and English focusing on the history of technology and engineering of science in Portugal and its colonies

from the 17th to the 20th centuries. She has also worked on the processes of globalisation of science and technology and taken a leading role in the expansive Tensions of Europe network including co-authoring the volume dedicated to globalisation and colonialism in the network's flagship book series, Making Europe. More broadly Diogo's collegiality and her skills in catalysing innovative and productive dialogue are eloquently expressed in the unusually large number of collective writing project she has engaged in, making her work exemplary of an alternative collective way of creating history of technology.

Maria Paula Diogo is awarded the 2020 Leonardo da Vinci medal of the Society for the History of Technology for her work as a pioneer in expanding the horizons of our field, an inspiring teacher and institution builder, and an outstanding scholar who has made enormous contributions to growing SHOT as an international society.

Arthur P. Molella, *Director Emeritus, Lemelson Center, National Museum of American History*

Dr. Arthur P. Molella is awarded the 2020 Leonardo da Vinci Medal in recognition of his sterling career achievements and long record of service to the profession. Art, as he is widely called by friends and colleagues, is the founding director (now director emeritus) of the Jerome and Dorothy Lemelson Center for the Study of Invention and Innovation at the Smithsonian's National Museum of American History and a senior lecturer in the Department of History of Science and Technology at Johns Hopkins University. Over the course of a 40-year career, he worked as an eminent public historian, curator, educator, and ambassador for the history of technology. He has an enviable scholarly record, with numerous books, edited volumes, and articles to his credit. However, Art's museum work—building collections,

supporting fellowship programs, curating exhibitions, and leading educational and public programs—also had a tremendously important impact on his colleagues and the general public.

Molella earned his Ph.D. in the History of Science at Cornell University under the direction of L. Pearce Williams. His dissertation was entitled “Philosophy and 19th c. German Electrodynamics: The Problem of Atomic Action at a Distance.” In 1971, just prior to receiving his doctorate, Art accepted an offer to work at the Smithsonian Institution in Washington, DC, where he has been a valued colleague for nearly fifty years. In his first position, Art worked with Nathan Reingold as an associate editor of the multi-volume *Papers of Joseph Henry* (Smithsonian Institution Press, 1972-1981), which documented the career of the 19th century physicist and founding Secretary of the Smithsonian.

In 1981, Art accepted a full-time curatorial position at the National Museum of American History (NMAH), and began a career of research, exhibition, and publication projects. For example, in 1982, Art curated an exhibition and published a companion volume titled *Franklin Delano Roosevelt: The Intimate Presidency* (Smithsonian Institution Press, 1982), which marked the centenary of FDR’s birth. He focused on FDR’s mastery of radio during the Fireside Chats, and even exhibited FDR’s automobile, which had been modified with hand controls to accommodate his polio.

Over the next several years, Art Molella advanced through a series of leadership positions at NMAH, including chairing the museum’s History of Science and Technology department, before serving as chief of the entire History Division. With Robert Post, Art was part of the team that brought Technology and Culture’s editorial offices to NMAH in 1982. Art served as T&C’s book review editor from 1983 through 1987, and remained an advisory editor through 1993.

In the late 1980s, Art signed on as the project director and chief curator for an ambitious exhibition titled *Science in American Life*. It broke new ground by exploring the impact and meaning of science and technology as integral to American history and culture. It also challenged visitors to critically examine the military-industrial complex, nuclear weapons, the birth control pill, Rachel Carson's *Silent Spring*, and concerns over depletion of atmospheric ozone.

Shortly before the exhibition opened in 1994, Art and other curators found themselves embroiled in the then-raging science / culture wars. Two major underwriters of the exhibition, the American Physical Society and the American Chemical Society, accused the exhibition team of politically correct interpretations and anti-scientific bias and called for content revisions. Art found himself embroiled in both the visible public controversy and difficult behind-the-scenes negotiations between the donors and Smithsonian's top leadership. Not widely known outside of the Smithsonian, Art's defense helped underscore the importance of internal curatorial control over exhibition content and the value of a scholarly voice in the museum setting.

In the midst of the *Science in American Life* controversy, Art published a series of articles, book chapters, and an edited volume on the history and contemporary concerns of science and technology museums. He also began to explore the historiographical legacy of the earliest philosophers of technology, including Lewis Mumford, Sigfried Giedeon, and Abbott Payson Usher. Along these lines, Art, Bob Post, and others facilitated the transfer of the Mel Kranzberg Papers and SHOT's institutional records to the NMAH Archives Center in 1988. Art's career trajectory shifted considerably after he met the inventor Jerome Lemelson. Lemelson and his wife Dorothy established the Lemelson Center for the Study of Invention and Innovation in 1995, with Art as its founding director. Art set a broad mission for the

Lemelson Center aligned to public history goals for the history of technology field; recruited a team of like-minded historians, archivists, and educators; and then spent the next twenty years developing new collections, publications, multimedia products, exhibitions, public programs, and educational initiatives.

Under Art's direction, the Center established the Modern Inventors Documentation (MIND) program to proactively identify, collect, and preserve inventors' artifacts, papers, and oral histories. For example, pioneering home-playable video game system. Art and the Lemelson Center team also have prioritized collecting from women and minority inventors, such as ophthalmologist-inventor Patricia Bath, who developed surgical instruments to correct cataracts. Overall, since 1995, the Lemelson Center has accessioned approximately 85 inventors' collections and oral histories.

From its founding under Art's guidance, the Lemelson Center also supported research by scholars, public historians, and film-makers through a competitive grants process. To honor Art's retirement in 2015, the Lemelson Foundation expanded the Center's fellowship offerings through the endowed Arthur Molella Distinguished Fellowship. To date, the Center has named four Molella Distinguished Fellows: Rayvon Fouché, Stephen Mihm, Patrick McCray, and Amy Sue Bix.

In the late 1990s and early 2000s, Art led the Lemelson Center in producing a series of educational videos for distribution to schools; topics included Thomas Edison, women inventors, African-American inventor Lewis Latimer, and the inventions of bicycles and of the electric guitar. Along with other public programs that brought school classes to the museum to meet invited inventors, Art established an educational approach that highlighted creativity and invention among

a diverse variety of people and in fun and unexpected domains, thereby reinforcing the notion that everyone can be inventive. Under Art's leadership, the Lemelson Center established and maintained an active and award-winning exhibition program. In 2001, Art cooperated with the Deutsches Museum and the Smithsonian's National Portrait Gallery to curate Nobel Voices. In 2002, Art and the Lemelson Center team broke new museological ground through the Invention at Play exhibition. With interactives and hands-on invention challenges at the front of the exhibition, visitors could explore how playful habits of mind—including curiosity, imagination, visual thinking, model building, and problem solving—are shared by successful inventors. Invention at Play was the first hands-on exhibition of its kind at the Smithsonian and set a new bar for interactivity. In 2003, the American Association of Museums awarded the travelling exhibition its Excellence in Exhibitions Award.

Under Art's direction the Lemelson Center established and pursued an active publication program. In the early 2000s, Art and Joyce Bedi approached MIT Press and established a new book series, the Lemelson Center Studies in Invention and Innovation. Art and Joyce published the first title in the series, *Inventing for the Environment* (MIT Press, 2003), an edited volume that emerged from a Lemelson Center symposium. Art also founded the International Eco-Cities Initiative.

In recognition of his work on the eco-cities initiative and his numerous career achievements, Westminster University presented Art with a doctorate of science, *honoris causa*, in 2005.

In 2014, Art curated *Making a Modern Museum*, which celebrated the fiftieth anniversary of NMAH (founded in 1964 as the National Museum of History and Technology).. The exhibition explored the NMHT's opening in the midst of the Cold War; the building's modernist architecture, and the museum's 1980 name change reflecting its

inclusion of social and cultural history alongside the history of technology.

The eco-cities work Art initiated in the early 2000s evolved into a broader exploration of the role of spaces, places, and communities in fostering invention, leading to his final exhibition with the Center. Places of Invention examines why certain places, at certain times in American history, became hot spots of invention and innovation. The exhibition explores six high-tech communities—precision manufacturing in Hartford (1850s-1860s); Technicolor and movies in Hollywood (1930s); the medical device industry in central Minnesota (1940s-1950s); the computing industry in Silicon Valley (1970s-80s); the invention of hip-hop in the Bronx (1970s-80s); and green energy initiatives in Fort Collins, Colorado at present. The exhibition received SHOT's Dibner Award for Excellence in Museum Exhibitions in 2016 and the Smithsonian's inaugural Excellence in Exhibitions Award in 2017.

Molella retired to emeritus status immediately after Places of Invention opened in July 2015, but has remained active at the Smithsonian and in the field as a scholar, mentor, educator, and museum consultant. Over his nearly fifty-year career, he has published dozens of book reviews, served as a reader for hundreds of manuscripts, and mentored many students, interns, and junior scholars. Besides his long association with SHOT, Art has served on the boards of the National Academy of Inventors, the National Inventors Hall of Fame, and the MIT Museum. His outstanding achievements and service to the profession make Arthur Molella a worthy recipient of SHOT's Leonardo da Vinci Medal.

Melvin Kranzberg Dissertation Fellowship

This award is in memory of the co-founder of the Society, and honors Melvin Kranzberg's many contributions to developing the history of technology as a field of scholarly endeavor and SHOT as a professional organization. The \$4000 award is given to a doctoral student engaged in the preparation of a dissertation on the history of technology, broadly defined, and may be used in any way chosen by the winner to advance the research and writing of that dissertation.

Recipient 2020

Salem Elzway, University of Michigan

For "Arms of the State: A History of the Industrial Robot in Postwar America"

The committee is pleased to award the 2020 Melvin Kranzberg Dissertation Fellowship to Salem Elzway for his PhD project "Arms of the State: A History of the Industrial Robot in Postwar America." Salem Elzway is a PhD candidate in the Department of History at the University of Michigan, Ann Arbor. His dissertation project addresses the history of industrial robotics and automation in the US since the 1950s by examining the development of computer-controlled mechanical arms designed to perform and to replace human labor.

The dissertation investigates the wider repercussions of industrial robotics on production, labor, technology, and national security. Elzway locates the consequences of industrial robotics both in the sociotechnical and socioeconomic realities and in the imaginaries created by the new robotic limbs. Following the entanglements of academic institutions and industrial corporations as well as the funding streams of digitalization, computerization, and artificial intelligence research, Elzway aims to

expose the heavy involvement of US military agents and defense contractors in the development of industrial robotics. The mechanical arms were, as the title of his dissertation suggests, literally intended to become the “arms of the state” in the twofold meaning of governmental and military prosthesis.

Elzway draws on theory and method from political economy, history of technology, and history of science. His study is informed by a material-semiotic approach to human-machine interaction that takes both the science fiction and the technological embodiment of the industrial robot seriously by exploring its cultural imaginary, innovation policy, and technical assembly on the factory floor. Elzway plans to use the award to complete his empirical research by performing a number of oral interviews and by consulting relevant archival collections, university collections, and libraries in the US.

Brooke Hindle Post-doctoral Fellowship

The Brooke Hindle Postdoctoral Fellowship in the History of Technology honors the contribution of Brooke Hindle to the work of the Society for the History of Technology. The Fellowship, made possible thanks to the great generosity of his family, is for \$10,000 and may be used for any purpose connected with research or writing in the history of technology for a period of not less than four months during the calendar year following the award.

Recipient 2020

Sangwoon Yoo, *Seoul National University*

For “Crafting Innovation: The Technical Achievements of Operators and Maintainers in South Korea’s Semiconductor Assembly Lines”

Sangwoon Yoo’s research examines how operators and maintainers of manufacturing equipment on Samsung Electronics’ semiconductor production lines contributed to the company’s rise to global success. His goal is to modify common innovation narratives and to place South Korean factory work in the context of East Asia’s cultural history of learning as well as its specific material network. Yoo contributes to recent discussions in the history of technology about the significance of ‘maintainers’ by asking us to acknowledge their role as innovators.

Using workers’ technical notes, training materials, and personal diaries created between the 1980s and 2000s, Yoo analyzes the influence of South Korean cultural practices and material contexts on how workers solved technical problems they encountered. His sources offer him unique insights into the ways that workers in the high-tech sector acquire and transfer knowledge, specifically how they use recorded knowledge in creating tacit knowledge. In addition, Yoo extends our understanding of the international division of labor between developed and developing countries. He shows that South Korean operators and maintainers helped improve the Japanese-made equipment by sharing their knowledge with Japanese suppliers. In short, Yoo’s work will provide an empirical foundation for topics that had remained somewhat elusive in the historiography of semiconductor technology.

Yoo will use the Hindle Fellowship to write two articles, one focused on the operators’ practices in the context of Korea’s culture of learning and solidarity, the other on the larger impact of workers’ recommendations for Japanese-made manufacturing equipment. This

work will no doubt widen our understanding of the nature of innovation by incorporating the role of shop floor workers' everyday practices.

AHA NASA Fellowship in the History of Space Technology

Three Fellowships in Aerospace History are offered annually by the National Aeronautics and Space Administration (NASA) to support significant scholarly research projects in aerospace history. These fellowships grant the opportunity to engage in significant and sustained advanced research in all aspects of the history of aerospace from the earliest human interest in flight to the present, including cultural and intellectual history, economic history, history of law and public policy, and the history of science, engineering, and management. NASA provides funds to the American Historical Association and to the History of Science Society to allow both associations to award fellowships. Representatives from the AHA, HSS, and SHOT comprise the review committee.

Recipient 2020

Jeffrey Mathias, Cornell University

For “‘Pathologies of Boredom’: Isolation and the Cold War Human Sciences”

Bernard S. Finn IEEE History Prize

The Bernard S. Finn IEEE History Prize is supported by the IEEE Life Members' Fund and administered by the Society for the History of Technology. The prize is awarded annually to the best paper in the history of electrotechnology—power, electronics, telecommunications, and computer science—published during the preceding year. The prize consists of \$500 and a certificate.

Recipient 2020

Xiaochang Li (Stanford University) and Mara Mills (New York University)

For “Vocal Features: From Voice Identification to Speech Recognition by Machine,” *Technology and Culture*, 60:2, Supplement (April 2019): S129–S160

This article examines machine methods for investigating the essential characteristics of human voices for purposes of individual identification for legal and commercial purposes and the subsequent transition of this research into machine speech recognition.

The authors begin with early efforts to transform acoustic recordings made by early sound-recording technologies of the late 19th and early 20th centuries into voiceprints that could be used to identify criminals in a fashion similar to that of fingerprints. This effort soon intersected with the work of electrical engineers developing technology to record speech as waveforms of electrical oscillations in order to diagnose errors in telephone transmission. Having set the stage for these parallel but intertwined efforts to improve telephone technology and to produce individual voiceprints for criminal forensics, the authors focus on the development of the sound spectrograph, a device

developed at Bell Labs in the 1940s that is central to the history that follows. Designed to automatically convert speech waves into their frequency components, the sound spectrograph initially was conceived as a way to enable visual telephony or to serve as a visual speech translator for the deaf. It also emerged as a new tool for use by communications engineers and linguists seeking to identify speech universals. Not surprisingly, during World War II, the spectrograph was applied to research on voiceprint identification and decryption for intercepted radio messages.

The effort to produce individual voiceprint identification, which the authors describe as “a forensic fantasy,” continued at Bell Labs after the war and reached its zenith in the 1960s with the controversial efforts of a former Bell Labs researcher to commercialize voiceprint identification. This attempt to turn voiceprints into forensic evidence was challenged by a growing community of engineers and scientists studying the physical nature of speech and ultimately led to its rejection for this purpose.

Instead, spectrographic research increasingly focused on discerning patterns of speech that could be expressed statistically so as to enable it to be recognized by machines through computational pattern recognition. In their last section, the authors explore the vital role played by Bell Labs researchers in this research, which led to the development of speech recognition. For so ably drawing connections between electrical engineering practice, research on speech and criminal forensics, and the emergence of machine speech recognition, the authors are awarded the Bernard S. Finn IEEE History Prize.

Dibner Award for Excellence in Museum Exhibits

The Dibner Award for Excellence in Museum Exhibits was established in 1985, through the generosity of Bern Dibner, to recognize excellence in museums and museum exhibits that interpret the history of technology, industry, and engineering to the general public. The award consists of a plaque and up to \$1,000 to cover expenses for a member of the design team to accept the award at the SHOT awards banquet.

2020

Severe travel restrictions made it impossible to judge museum exhibits in person this spring. Consequently, SHOT has decided to postpone the normal cycle of the Dibner Award for 2020. We will extend the 2021 eligibility to ensure that all museum exhibits are fairly considered for the award.

Joan Cahalin Robinson Prize (2019)

Established in 1980 by Dr. Eric Robinson in memory of his wife, the prize is awarded annually for the best-delivered paper by an individual who is making his or her first appearance at the Society's annual meeting. Candidates for the award are judged not only on the quality of the historical research and scholarship of their paper, but also on the effectiveness of the oral presentation. The Robinson Prize consists of a check and a certificate.

Recipient 2019

Jan Henning, *Institute for the History and Philosophy of Science and Technology*

For *“Opening the Red Box: The Fire Alarm Telegraph and Technologies of Emergency Response”*

The Robinson Prize Committee is pleased to award the 2019 Joan Cahalin Robinson Prize for the best first-time presentation at SHOT’s annual meeting to Jan Henning for “Electricity Has Kept Watch: The Frankfurt Fire Alarm Telegraph 1873-1900.” Jan Henning delivered an excellent and engaging presentation analyzing the design and use of information technology.

Henning maps out the location and use of alarm boxes in late nineteenth century Frankfurt Germany. We discover that, as opposed to other municipal infrastructures providing water and gas, the distribution of the fire alarm “red boxes” was quite even across the city—seemingly democratic in nature. However, through rigorous analysis and artful presentation skills, Henning’s research revealed that the same communications network used to muster and deliver city resources to extinguish fires was also used to route police forces to sites of riots and other social unrest. Thus, constructed shortly after Frankfurt’s annexation into the Prussian Empire, this system helped sustain an anti-democratic and anti-socialist order in the city, undermining Frankfurt’s historically politically liberal society.

Deftly weaving together primary and secondary sources, Henning explained how risk management of property and political power dovetailed in a technopolitical system in which firefighters, police, and city administrators became stakeholders in the management and surveillance of Frankfurt.

Henning's thorough local case study of Frankfurt's first fire alarm telegraph system is framed in such a way to provide SHOT colleagues with more generalizable lessons and observations. Central to Henning's narrative is the often inverted relationship between "security" and "liberty" in public spaces. Or more precisely, (and regrettably timeless) the security of property vice the uncertain liberty of individuals in public spaces. Henning concluded that the fire alarm telegraph was not simply the logical consequence of technological know-how and benevolent civic concerns. It also reflected historically-situated politics and class interests of property owners, industrialists, liberals, and the bourgeoisie. Moreover, its use over time demonstrates a distrust against the common population and privileged use by city administration and police. From a systems perspective the fire telegraph safeguarded the orderly function of the industrialized, modern city. Thus, although the system was developed and installed for firefighting, over time, the adaptive—and socially biased— use of the fire telegraph became a very different public asset. Throughout the talk, Henning maintained a fruitful balance between granular substance and big picture synthesis, making his topic interesting to a diverse SHOT audience. Robinson Committee judges were most impressed with Henning's verve wielding quantitative and qualitative observations gleaned from municipal primary sources. At various points in the talk, his creative ability to communicate the relevance of technical components as well as employ a broader perspective was evident in the number of phones rising above the audiences' shoulders and heads to snap photos of his PowerPoint slides. Judges reported a confident passion about his subject, engaging the audience in a flow of questions through which Henning continued to demonstrate a tranquil mastery of his topic and a capacity to extemporize

Given this lively, engaging, substantive, and convincing presentation we heartily nominate Jan Henning for the 2019 Joan Cahalin Robinson Prize.

2020

The Robinson Prize will not be awarded in 2020. Candidates who wanted to be considered for the Robinson Prize 2020 will still be eligible for the 2021 Robinson Prize, even if they presented in one of the sessions of the SHOT 2020 Virtual Forum.

Samuel Eleazar and Rose Tartakow Levinson Prize

The Samuel Eleazar and Rose Tartakow Levinson Prize is awarded each year for a single-authored, unpublished essay in the history of technology that explicitly examines, in some detail, a technology or technological device or process within the framework of social or intellectual history. It is intended for younger scholars and new entrants into the profession. The award consists of a check and a certificate.

2020

The Prize Committee decided not to award the 2020 Levinson Prize.

Sally Hacker Prize

The Sally Hacker Prize was established in 1999 to recognize the best popular book written in the history of technology in the three years preceding the award. The prize, consisting of a check and a certificate, recognizes books in the history of technology that are directed to a broad audience of readers, including students and the interested public. Books worthy of this prize assume that the reader has no prior knowledge of the subject or its method of treatment, and provide an elucidating explanation of technological change in history, with a minimum of technical or academic prose.

2020

The physicality of book shipments this spring, with many university offices closed down, made it impossible to conduct the judging for this prize “as normal.” Consequently, SHOT has decided to postpone the normal cycle of the Hacker Prize for 2020. We will extend the 2021 eligibility to ensure that all books are fairly considered for this award.

Sidney M. Edelstein Prize

Established in 1968 through the generosity of the late Dr. Sidney Edelstein, a noted expert on the history of dyes, founder of a successful specialty chemical manufacturing firm, and 1988 recipient of SHOT’s Leonardo da Vinci Award, the Edelstein Prize is awarded by SHOT to the author of an outstanding scholarly book in the history of technology published during any of the three years preceding the award. The prize, donated by Ruth Edelstein Barish and her family in memory of Sidney Edelstein and his commitment to excellence in

scholarship in the history of technology, consists of \$3500 and a plaque.

2020

The physicality of book shipments this spring, with many university offices closed down, made it impossible to conduct the judging for this prize “as normal.” Consequently, SHOT has decided to postpone the normal cycle of the Edelstein Prize for 2020. We will extend the 2021 eligibility to ensure that all books are fairly considered for this award.

Abbott Payson Usher Prize

The Abbott Payson Usher Prize was established in 1961 to honor the scholarly contributions of the late Dr. Usher and to encourage the publication of original research of the highest standard. It is awarded annually to the author of the best scholarly work published during the preceding three years under the auspices of the Society for the History of Technology. The prize consists of a check and a certificate.

Recipient 2020

Daniel Williford, Indiana University Bloomington

For “Seismic Politics: Risk and Reconstruction after the 1960 Earthquake in Agadir, Morocco,” *Technology and Culture* 58:4 October 2017, 982-1016

The Usher Prize Committee unanimously chose Daniel Williford’s article, “Seismic Politics: Risk and Reconstruction after the 1960 Earthquake in Agadir, Morocco,” as the recipient of the 2020 Abbot Payson Usher Prize. We found this well-written article impressive in its scholarly ambitions and execution. It deftly brings together wide-

ranging concepts and literatures in a fascinating examination of technology, natural disaster, and Moroccan history. The committee found that the article's central argument – that international experts' redefinition of Agadir as seismically vulnerable shaped the subsequent material and moral trajectories of post-earthquake reconstruction – was compelling and valuable for our understanding of Morocco's early independence. We further appreciated how Williford tracked the interactions between seismologists, who rendered the area around Agadir as spatialized nature, and engineers, who rendered the space a laboratory that transformed material inequalities into normative categories of difference. Imaginative in its use of sources and deft in its critical methods, this article holds important insights for the intertwined histories of disaster, seismicity, and technology, while providing a fascinating contribution to our knowledge of technology and infrastructure in Morocco's postcolonial history.

Eugene S. Ferguson Prize

The Eugene S. Ferguson Prize is awarded biennially by SHOT for an outstanding and original reference work that will support future scholarship in the history of technology. The Ferguson Prize recognizes work that is in the tradition of scholarly excellence established by Eugene S. Ferguson (1916–2004), SHOT's pioneering bibliographer, a founding member of the Society (President, 1977–1978; da Vinci Medalist, 1977), museum curator and exhibit catalog author, editor, annotator, university professor, and scholar of the history of engineering and technology. The prize consists of a plaque and a cash award.

2020

The Ferguson Prize is a biennial award, the next prize will be awarded in 2021.

Martha Trescott Prize

The Martha Trescott Prize will be given annually for the best published essay in one of two areas. In even-numbered years, the prize will be awarded to an outstanding published historical essay in the area of women in technology. In odd-numbered years, the prize will be awarded to an outstanding published essay in the area of social responsibility of engineers in history. Martha Trescott was one of the pioneering spirits behind Women in Technological History (WITH). She wished to honor Frances McConnell Moore, Carroll Pursell, and Edwin T. Layton, Jr., with this prize.

The inaugural award will consist of a \$500 check and a certificate. The winner will be honored at the Society's awards banquet.

Recipient 2020

Laura Ettinger, Nicole Conroy & William Barr II

The 2020 winner of the inaugural Martha Trescott Prize, for an outstanding published historical essay in the area of women in technology, is: Laura Ettinger, Nicole Conroy and William Barr, "What Late-Career and Retired Women Engineers Tell Us: Gender Challenges in Historical Context," *Engineering Studies*, 11,3 (2019) 217–242; <https://doi.org/10.1080/19378629.2019.1663201>.

The committee chose this article because of its clarity and its subtlety, with regard to both substance and method.

The question it addresses—why engineering, unlike all the other professions (including the clergy)—has not seen a sustained improvement in women’s workforce participation since 1980—has interested a small army of researchers.

The answer this article provides is based on “open-ended written survey responses,” which were completed by 251 North American women engineers who went to engineering school between 1970 and 1980: the so-called affirmative action generation of women engineers. Their often-lengthy responses were analyzed by the three authors using the qualitative research method, applied thematic analysis, commonly used these days by social psychologists, sociologists and anthropologists.

Their conclusion, broadly stated, is that affirmative action programs are not sufficient to wipe out the subtle discriminatory effects of what the authors call “gender issues that are deeply entrenched in our interpersonal relations and social structures.” This leads to a very “leaky pipeline” between graduation rates and lengthy workforce participation for women in engineering.

The prize committee was impressed with the wealth of evidence the authors draw from the women’s responses, so as to reach and buttress their conclusion. The authors do so with exceptional perceptiveness, originality, thoroughness, and attention to detail. This is research in the social sciences applied in exemplary ways to the historical and social study of technology.

Historians of technology concerned about gender issues will want to read the article both because of its wealth of evidence and its very salient conclusions. All historians of technology, we think, should also pay attention to the method the authors have used because it is a

novel method (at least to historians) of drawing conclusions from oral history interviewing,

We also want to commend the first author, Laura Ettinger, Associate Professor of History at Clarkson University, who was the PI on the NSF grant that funded this research, for giving her research assistants co-authorship.

International Scholars

Each year the Society for the History of Technology designates up to four International Scholars for a two-year term. The International Scholars program is administered by the Internationalization Committee

2020-2021

To be announced in November.

2019-2020

Jethron Ayumbah Akallah
Timpoko H el ene Ki enon-Kabor e
Liang Yao

Computer History Museum Book Prize (SIGCIS)

The Computer History Museum Book Prize 2020 has been postponed until 2021.

Mahoney Prize (SIGCIS)

To be announced.

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Pamela Laird Research Grant (Mercurians)

To be announced.