Not far from where the Cuyahoga River empties into Lake Erie, the History of Science Society’s annual meeting took place in the classic Renaissance Cleveland Hotel from 3 to 6 November 2011. Meetings of the Society for the History of Technology and the Society for the Social Studies of Science took place (or, in conference metaphysics, “were co-located”) at nearby hotels. The easily manageable distances between the three meetings afforded a tour of downtown Cleveland’s stunning architecture—an enduring legacy of civic pride. The HSS meeting had 614 registered attendees, while SHOT and 4S had 344 and 1,115 attendees, respectively.

On Thursday afternoon the three societies came together for a timely, well-attended joint plenary on “Dealing with Disasters: Perspectives on Fukushima from the History and Social Studies of Science and Technology,” with presentations from Spencer Weart (HSS), Gabrielle Hecht (SHOT), and Hugh Gusterson (4S). In a superlative display of restraint and professionalism, all the speakers and the commentator, Yuko Fujigaki, offered succinct and sobering cross-sections of how our complementary fields can illuminate the post-tsunami nuclear catastrophe in Japan. The speakers left plenty of time to reflect while walking over to the Great Lakes Science Center for a stunning reception, arranged by the local organizing committee. The plenary exemplified the two overriding characteristics of this HSS meeting: high standards of scholarship and a tremendous concern for how our field intersects with “the real world.”

First, to the scholarship, on fine display throughout the conference. The first session listed on the program for Friday morning was entitled “Defending Science against Standardization,” and that could just as well encapsulate the tenor of the sessions throughout the meeting. If the presentations, which spanned the Comtean gamut from astronomy to the social sciences, from antiquity to an email from last April, and ranged across all corners of the globe, are any indication, historians of science are in no danger of becoming standardized. Unless members cease to submit such interesting abstracts, no planning could preclude the perennial problem: which session to attend when pulled in umpteen directions. Engage with Robert Westman’s magnum opus? Explore the conjunction of history of science and media studies? Plumb the Antikythera mechanism? Recall the highs and lows of the FDA amid tales of regulatory capture? Explore 1960s counterculture or mail-order science? Engage with the two overriding characteristics of this HSS meeting: high standards of scholarship and a tremendous concern for how our field intersects with “the real world.”
undertaken with SHOT, with three panels from that conference appearing on the HSS program and five of our sessions appearing on theirs. Foot traffic among all three hotels—and often through the “Occupy Cleveland” protest—was substantial.

The second theme, engagement with the present day, was omnipresent. Of concern to every member of the Society is the future of the history of science as an academic field. While every HSS meeting confronts the difficult job market, this year such concerns figured prominently in regular sessions, as well as in every lunch slot, with numerous presentations on publishing, public engagement, and networking (as well as a syllabus workshop on Thursday afternoon sponsored by the Women’s Caucus). One fine discussion, sponsored by the Committee on Education, concerned pedagogically robust—and institutionally pragmatic—approaches to integrating history of science within STEM more generally in a time of deep pressure on the humanities and the social sciences. A session sponsored by the Graduate Caucus stressed the importance of practical strategies and of working at state and local levels, not just in the D.C. beltway. A wonderful presentation of a middle schooler’s website about Copernicus served as a powerful reminder both of what brought us into the material and of that material’s power when taught well. “Public engagement,” in various guises, crept into the intellectual components of the program as well, with a large number of sessions on regulation and policy, rendering the bifurcation between the two themes presented here more than a little artificial.

Many people deserve thanks for making this 2011 meeting possible: Jay Malone and Gregory Macklem at the HSS office, for coordinating the 14 different components, from LCD projectors to coffee cups, necessary to pull off a meeting like this so the rest of us don’t have to think about it; Molly Berger and Alan J. Rocke, local arrangements co-chairs, and the rest of their team on the Local Arrangements Committee, for their extraordinary efforts; the plethora of local staff who made sure the LCD projectors worked, the coffee was there (even if it didn’t make it to the fourth floor every time), the book exhibit was up and running, and the Internet was functioning, along with many more silent victories; and all those who came and made this meeting such a success.

MICHAEL D. GORDIN
MATTHEW L. JONES
For the Program Committee

HSS PRIZES FOR 2011

NATHAN REINGOLD PRIZE

The Reingold Prize Committee unanimously selected “Fighting Chance: The Science of Probability and the Forecast Controversy between the Blue Hill Meteorological Observatory and the U.S. Signal Service, 1884–1890,” by James H. Bergman (Harvard University), as the winner of the 2011 Nathan Reingold Prize for the best unpublished article by a graduate student. Engagingly written and finely textured, Bergman’s essay details the history of the struggle between the Blue Hill Meteorological Observatory and the U.S. Signal Service in the late 1880s. Favorably placed on the highest land in eastern Massachusetts, the Blue Hill Observatory, under chief meteorologist Henry Helm Clayton, had an unobstructed view of the horizon within a twenty-five-mile radius and effectively relied on local weather patterns. “Fighting Chance” offers a detailed narrative that relies on both published and unpublished sources, displaying a firm command of the current secondary literature and historiographic issues; the result is a work that successfully addresses different audiences: historians of late nineteenth-century science, of weather forecasting, and of probability, as well as the broader community of historians of science interested in amateur science and the role of maps, tables, and images. Unlike earlier “controversy studies” that identify winners and losers and in which a resolution occurs, “Fighting Chance” shows readers the struggles to define what counted as a successful weather prediction. The issue was not simply to provide more and more detailed and accurate solutions to partial differential equations, but to navigate the complex interplay between the visual and the numerical, the theoretical and the practical, the local and the global.

DOMENICO BERTOLONI MELI (Chair)
RICHARD KREMER
GEORGINA MONTGOMERY

JOSEPH H. HAZEN EDUCATION PRIZE

Pamela Henson, this year’s winner of the Joseph H. Hazen Education Prize for excellence in the teaching of history of science, is Director of the Institutional History Division at the Smithsonian
Institution Archives, where she directs the institutional history program documenting the history of the Smithsonian and American science. She is also Adjunct Professor in the Museum Studies Program at George Washington University.

Pamela Henson offers a highly diversified teaching portfolio of educational activities. She has produced plentiful and clearly outstanding work as an educator, reaching varied audiences and employing imaginative educational strategies. These strategies include exhibitions on a wide range of topics and the use of many different types of historical sources. As the Director of the Institutional History Division of the Smithsonian Institution, it is not at all obvious that she would be expected or able to accomplish so much, so directly, as an educator. We are really impressed by what she has done, over a long period of time. Clearly, she has been an excellent and much-appreciated advisor, to a large number of researchers, on a broad range of topics.

Pam has worked with great energy and creativity to nurture K–12 educators to use primary sources in their classrooms. She has offered training courses on oral history, and those who have come under her care praise her work as transforming their teaching. It is a pleasure to recognize someone who clearly manifests the joy that one can find in historical discovery, whether probing the national archives, creating lessons for K–12 classes, conducting oral history interviews, or educating through museum exhibitions.

MURIEL BLAISDELL (Chair)
LIBA TAUB
SARA SCHECHNER

DEREK PRICE/ROD WEBSTER PRIZE

The Derek Price/Rod Webster Prize for the best article published in Isis was awarded to Nuria Valverde Pérez (Universidad Autónoma Metropolitana) for “Small Parts: Crisóstomo Martínez (1638–1694), Bone Histology, and the Visual Making of Body Wholeness” (Isis, 2009, 100: 505–536).

In her essay, Nuria Valverde deftly explores Baroque notions of unity and community through the lens of the human skeleton, linking anatomical visual culture to broader cultural and epistemic values in a creative and illuminating fashion. In this ambitious article, she draws on the historical studies of anatomy and the technology and rhetoric of visual representation to provide a powerful analysis of visualization practices and the relationship between early modern art and science in seventeenth-century Spain. In careful detail, Valverde gives us a tour of the unpublished anatomical atlas of Crisóstomo Martínez, linking his work to broader concerns of human destiny and political unity and disunity—especially in relationship to his community of engravers and anatomists.

The Committee was especially impressed with Valverde’s careful and painstaking analysis of his anatomical imagery. Exploring the significance attached to different perspectives of observing natural objects, Valverde offers a grander view of knowledge production in the early modern world. For her, the textual practices represented in Martínez’s anatomical atlas reflect his efforts to grapple with the uncertainties of knowledge, of audiences, and of the integrity of the human body. Rather than focusing only on an object’s structure, his illustrations self-consciously addressed the fragmentary nature of both the body and human knowledge. These representations, thus, become explorations of the relationships of parts (organs and individuals) and wholes (bodies and communities) and the permanence and ephemeral nature of matter. Combining careful historical and archival research with detailed visual reading and creative analysis, Valverde brilliantly interprets the deliberate juxtapositions inherent in Martínez’s style of representation. She shows how it functioned, moreover, within its intellectual and religious context, as an understanding of human nature and knowledge production in an increasingly unsettled and expanding world.

LLOYD ACKERT (Chair)
SHARRONA PEARL
KATHARINE ANDERSON

MARGARET W. ROSSITER HISTORY OF WOMEN IN SCIENCE PRIZE

The Margaret W. Rossiter History of Women in Science Prize, given this year for the best book on the history of women and science, went to Yi-Li Wu (Center for Chinese Studies, University of Michigan) for Reproducing Women: Medicine, Metaphor, and Childbirth in Late Imperial China (University of California Press, 2010).

Yi-Li Wu’s Reproducing Women: Medicine, Metaphor, and Childbirth in Late Imperial China is a learned, original study of fuke or “female medicine.” Wu argues that, beginning in the Song dynasty, the notion that pregnancy, parturition, and the postpartum period were inherently dangerous and polluting was challenged by the idea that they were ordinary manifestations of cosmic cycles.
Promoted by Neo-Confucian scholar-physicians, the new view never entirely displaced the old, which was sustained by custom, midwives, and philanthropic publications, and Wu follows this dialectic into the late nineteenth century. She argues that the benign view of women’s bodies minimized difference without denying it; that it portrayed interventions by midwives as useless or dangerous; and that it thus implied that learned male physicians, with their mastery of the universal body and its cosmological framework, had authority over female medicine.

Productively controversial, Reproducing Women earns the Margaret W. Rossiter History of Women in Science Prize both for its rigorous examination of a specific historical phenomenon and for its ability to enrich the field as a whole. Based on an array of sources, including a few by women, Reproducing Women places fake writings in a shifting political, religious, and cultural landscape, including periods of stress for scholarly elites. At the same time, in her conclusion that sameness and difference were not mutually exclusive within a system of thought comprehending multiplicity within unity, Wu provides insight for all scholars struggling to comprehend remote conceptions of the gendered body without imposing contemporary categories.

Joan Cadden (Chair)  
Elizabeth Williams  
Marilyn Ogilvie

WATSON DAVIS AND HELEN MILES DAVIS PRIZE

Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming (Bloomsbury Press, 2010), by Naomi Oreskes (University of California, San Diego) and Erik M. Conway (NASA, California Institute of Technology), won the Watson Davis and Helen Miles Davis Prize for the best book for a general audience.

Merchants of Doubt provides a penetrating analysis of important aspects of science and society in late twentieth-century America, centering on the use of seemingly scientific methods to undermine scientific authority in popular culture and the halls of Congress. Through their powerfully argued and deftly structured study of the public debates engaging five of the leading environmental and public health questions of the past half-century—DDT, tobacco smoke, acid rain, the ozone hole, and global warming—Naomi Oreskes and Eric Conway reveal a historical pattern in which a small group of science advisors undermine scientific findings and raise doubt about the work of scientific experts. Relying on the nature of science to test hypotheses in the pursuit of knowledge, the funding of those who would be harmed by health and environmental regulations, and the desire of the media to present both sides on every issue, this small group of doubters have managed to hamstring, and in some cases to kidnap, national science policy. Merchants of Doubt underlines that the history of science, as a discipline of rigorous scholarship, can offer critical insights and wise counsel to citizens and policy makers on crucial contemporary issues. By doing so, it exemplifies how historical research can illumine public policy. Oreskes and Conway write in a clear, engaging style that makes their book accessible for a wide readership. For the quality of its research, analysis, and writing, we recognize Merchants of Doubt for the History of Science Society’s leading award for books in the history of science that can reach a broad popular or student audience, the 2011 Watson Davis and Helen Miles Davis Prize.

Ed Larson (Chair)  
Maria Portuondo  
Robert Smith

PFIZER AWARD

All who teach the history of science face the question of “where to begin.” Many of us start with the cuneiform tablets of the “land between the rivers.” An older generation’s scholarship, best represented by Otto Neugebauer’s Exact Sciences in Antiquity, has long informed non-specialists about the subject, even as a new generation has revised and historicized that work. The 2011 Pfizer Prize recipient at once summarizes this effort, contextualizes it, and advances the project. That awardee is Mathematics in Ancient Iraq: A Social History, by Eleanor Robson (University of Cambridge), published in 2008 by Princeton University Press.

Covering over three millennia of cuneiform texts, some of which have become available through Robson’s own efforts, Mathematics in Ancient Iraq displays a mastery of difficult technical arts, including the interpretation of archaeological and artifact evidence, the decipherment of often fragmentary texts, and the analysis of scribal mathematical procedures. Robson’s skilful use and limpid explanations of these esoteric crafts undergird the larger goal of situating the writers of these texts in their societies. Here she succeeds brilliantly. Her book informs us about how scribes learned their numbers, about the skills that mattered to the bureaucrats,
traders, and rulers of ancient Iraq, and even about the family networks in which those skills were maintained, sometimes over centuries. Throughout Robson balances the synoptic and the particular with impeccable taste. She joins the fray on such vexed questions as the relation between the mathematical traditions of Mesopotamia and Greece, but she also drills deeply into the history of particular problems, techniques, and ideas—keeping constantly before the reader a sense of the integrity of cuneiform mathematics and its roots in practical problems, especially of mensuration. Not least remarkable, Robson succeeds in bringing readers of many levels into her enterprise, often by using photographs, sketches, maps, diagrams, and tables in ways that both exhibit and elicit historical imagination.

Mathematics in Ancient Iraq, in short, is one of those uncommon gems that advance and enliven a specialty while providing outsiders clear understanding of its contours and importance.

JOHN SERVOS (Chair)
KAREN REEDS
KATHARINE PARK

SARTON MEDAL FOR LIFETIME SCHOLARLY ACHIEVEMENT

The Sarton Medal honors a lifetime of scholarship and achievement in the history of science. It is the most prestigious prize of the History of Science Society and is awarded annually to a scholar of outstanding merit and reputation. It gives me the greatest pleasure to provide a brief commentary on the achievements of this year’s Sarton Medalist, Robert J. Richards, currently Morris Fishbein Professor of the History of Science and Medicine at the University of Chicago.

The recipient of three higher degrees, including doctorates in philosophy (St. Louis University) and in the history of science (University of Chicago), Bob Richards is well known in the profession for his substantial and much-admired contributions to the history and philosophy of both psychology and biology. The depth and breadth of his expertise are reflected in his university position, where he is Professor in the Departments of History, Philosophy, and Psychology and in Conceptual and Historical Studies of Science. He has long been recognized as an outstanding authority on the history and philosophy of evolutionary theory in Europe and America, his research interests also encompassing German “Romantic” philosophy and its relevance to the development of science—and to evolutionary biology in particular. His four
single-authored books, three of which extend to many hundreds of pages, are characterized by their critical edge, their vivacity, and their sophisticated engagement with the salient archival materials. Readers of his publications, which also include at least two coedited books and more than sixty research papers, have paid tribute to a scholar with a rare gift for exposing the foundational precepts of the thinkers he has studied and the presuppositions involved in crafting histories about them.

Many will have been made aware of Richards’s exceptional scholarship by the appearance in 1987 of his landmark book *Darwin and the Emergence of Evolutionary Theories of Mind and Behavior*, which, through its focus on mental evolution and the understanding of human behavior, enriched and expanded the field of Darwin studies. Reviewers noted that it rolled three major pieces of scholarship into one, providing an innovative history of evolutionary psychology in the nineteenth century, proposing arguments for applying a natural-selection model to the history of science, and presenting a spirited examination of evolutionary ethics. When awarded the 1988 Pfizer Prize by the HSS for the best book in the history of science, Bob Richards was congratulated by Nathan Reingold for his impressive execution, his skillful analysis, and the clarity of his prose. The following year the book attracted an additional prize, from the International Bio-Philosophy Forum.

A second book, *The Meaning of Evolution* (1992), introduced its readers to a theme that would be developed in much of Richards’s later work: the relationship between German Romanticism and Darwin’s theory of evolution. In this study of animal morphology, he drew attention to the concept of recapitulation and its fundamental importance in nineteenth-century biology. This was the idea that, during gestation, the embryo of an individual recapitulated the forms of ancestor species, incorporating their progressive adaptations. Darwin subscribed to the idea throughout all editions of his *On the Origin of Species*, and Richards provocatively argued that, in this respect, Darwin’s debt to German sources had been severely underestimated.

The appearance in 2002 of *The Romantic Conception of Life: Science and Philosophy in the Age of Goethe* confirmed Richards’s stature as an outstanding authority on German Romantic biology. Here the sometimes difficult ideas of Goethe, Schelling, and a welter of less towering Romantic scientist-philosophers were brought to light and to life. Commenting on Richards’s achievement in this book, Lynn Nyhart has stressed that one of its many accomplishments was its demonstration that the philosophy of Romanticism was a life-philosophy that infused all the actions of its holders, not just their writing. Another strength, visible in much of his work, has been Richards’s sensitivity to aesthetic and moral parameters in the scientific construction and understanding of nature. Reviewing *The Romantic Conception of Life for Isis*, Kenneth Caneva began by saying that “in its exhaustive survey of essential primary sources, its sympathetic yet incisive analysis, and its masterful interweaving of the lives and ideas of his dozen protagonists, the bulk [of this book] constitutes the best synthetic account I have ever read of the scientific—especially biological—aspects of German Romantic Philosophy.” It provided a “model for how to do thick-description biographically contextualized history of ideas.” In an extensive essay review for *Metascience*, Joan Steigerwald referred to the “tremendous historical work” that had gone into the book and to the author’s “vast knowledge of developments in the life sciences during the eighteenth and nineteenth centuries.” Reviewed at even greater length in *History of the Human Sciences*, Richards’s thesis of Germanic influence on Darwin was described as “at once bold, unorthodox, and compelling.” The reviewer concluded that “there is no other extant work in English that explicates the complex inter-relationships between philosophy, literature, aesthetics, and scientific research in German Romanticism as clearly, entertainingly, accessibly, and comprehensively.” The book was judged important not only for the history of science but also for literary criticism. It was awarded the University of Chicago Laina Prize in 2004.

His biography of Ernst Haeckel, *The Tragic Sense of Life: Ernst Haeckel and the Struggle over Evolutionary Thought* (2008), added another dimension to Richards’s reputation, with its convincing reappraisal of Haeckel’s science, rescuing him from popular caricature and revealing the private passion that drove his naturalistic science. In reviews of this book, one encounters the adjectives “brilliant” and “brave” as well as “bold.” “Brave,” because Richards explodes two myths, beloved of creationists, that Haeckel was guilty of fraud in his advocacy of evolutionary science and that his views were anti-Semitic and proto-Nazi. This is an enthralling biography, as Haeckel’s motivation to propagate Darwinism is traced to the psychological impact of tragedy in his life. His first wife died only two weeks into their marriage, inducing a deeply personal embitterment toward Christian-
chological portrait of one of the most significant figures in the history of science.” It is also a portrait that resplendently honors Haeckel’s great gifts as an artist, one who used his art to advance his science. It is a magnificent resource for all who give public lectures aimed at bridging the arts and the sciences.

Until 2007 I did not know Bob Richards personally, though I was well aware of the quality of his work. The context of our meeting was a conference held at Florida State University (Tallahassee) in connection with the preparation of The Cambridge Companion to the “Origin of Species,” which he was coediting with Michael Ruse. My contribution was a chapter on Darwin’s changing religious views, as evidenced in the successive editions of the Origin. I benefited greatly, as did other contributors, from his scrupulous editorial attention to detail, a characteristic of all his work. His own chapter in that book, entitled “Darwin’s Theory of Natural Selection and Its Moral Purpose,” is destined to become a classic statement of Darwin’s moral conception of nature and its progressive intent. Richards sees a teleology running through the Origin that Darwinian fundamentalists such as Daniel Dennett anachronistically deny. Those privileged to attend the Darwin festival held at the University of Chicago in the fall of 2009, of which Richards was a chief organizer, would have witnessed Dennett’s tendentious riposte that, if Richards were correct in his exegesis of Darwin, it would mean that Darwin could not have understood his own theory. Thus do some philosophers ride roughshod over informed and sensitive history!

It would be possible to expatiate at greater length on each of Richards’s major publications, including another book, Darwinian Heretics (2004), coedited with Abigail Lustig and Michael Ruse. His stature as a scholar and leader is incontrovertible, as his many honors and awards testify. He was a recipient of a Guggenheim Fellowship in 2004 and was made a corresponding member of the Akademie der Wissenschaften zu Göttingen in 2010. The leadership and inspiring mentoring he has shown at the University of Chicago, ensuring that the university has maintained its reputation as a major center for innovation in the history of science, has resulted in numerous honors conferred by the university: the Lewellyn John and Harriet Manchester Quaintrell Award for Excellence in Undergraduate Teaching (1982); an Award for Excellence in Graduate Student Teaching (1995); an appointment as Ryerson Memorial Lecturer (2005); and, in 2011, the title of Distinguished Service Professor. Those who studied under his mentorship write enthusiastically of his wit and erudition, the generosity and sensitivity of his support. His intellectual sparring partner, Michael Ruse, has described him as one who “gives and gives and gives—to his students and to others in the profession.” It is fitting that one who has given so much should, in accepting the Sarton Medal, on this occasion be a receiver, not only of the medal but also of the respect and gratitude of the history of science profession.

JOHN HEDLEY BROOKE

Frank Turner was born in Wilmington, Ohio, in 1944, the son of Ronald O. and Betty Miller Turner. He was educated at the College of William and Mary, graduating in 1966 after earning a bachelor of arts degree in history with highest honors. After that, he spent his entire career at Yale University, completing his Ph.D. in 1971 and then rising from teaching assistant in the Department of History to the John Hay Whitney Professor of History. Turner was that rare phenomenon in academic life—an accomplished scholar who was also a superb administrator. He served as Provost of the university, the second-highest position at Yale after the President, from 1988 to 1992, during one of the most difficult periods in the institution’s history. In 2003, he found an additional career as Director of the Beinecke Rare Book and Manuscript Library. His success in the renewal of that venerable Yale institution led University President Rick Levin to appoint him as University Librarian—an unusual appointment for one not trained in library science, but further testimony to Turner’s ability to set his hand to any administrative