

# Newsletter

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of the History of Science Society

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## *Notes from the Inside*

Activity in the HSS Executive Office continues to quicken as our highly anticipated annual meeting in Phoenix approaches. Since this year's conference will feature numerous changes, I want to provide you with an update on a few of these changes. We are meeting later than usual, the weekend before the U.S. Thanksgiving, and part of the reason for doing so is that hotel rates are significantly cheaper this time of year. Since Phoenix is a vacation destination, we also thought that members might want to linger in the area and sample the natural beauty of the Southwest. But perhaps the biggest change in the conference is its format. We are building on last year's successful prize ceremony where we detached the prize ceremony from the banquet so that more members could attend the ceremony. We received many positive comments regarding the ceremony, but we learned that our Saturday night was now too full: prize ceremony, distinguished lecture, reception, and Society dinner. Therefore, we have moved the prize ceremony to Friday night, to be followed by the distinguished lecture, which will be given by M. Norton Wise. After the lecture we will host an open reception honoring the prizewinners, allowing us to set aside all of Saturday evening for an experiment. This is the experiment. After the sessions end on Saturday, everyone is invited to make their way to the beautiful Heard Museum for the Society dinner where we will celebrate the prizewinners and the history of science (there is a space on the registration form to indicate if you plan to attend). We expect some 300 attendees at the dinner, and we wish to create an atmosphere that will allow delegates to circulate freely, converse, enjoy good food, and admire the splendid holdings at the Heard (guided tours will be provided). It is our hope that this event will facilitate discussion and friendship. The end result will be a stronger Society, one well positioned to foster interest in the history of science. Since this new format for the conference is experimental, I will be grateful if you would provide me feedback on what worked, what did not work, and what we could do to make the meeting even better.

And as always, thank you for your membership in the HSS.  
Jay

## NEWS AND INQUIRIES

### Cartooning Evolution

Mark Aldrich has collected and posted images of cartoons on evolution culled from numerous newspapers and journals. With many images on Darwin and the Scopes Trial, Cartooning Evolution provides a rich repository of tongue-in-cheek representations of evolution. For further information, visit <http://sophia.smith.edu/~maldrich/evolution>.

### Evolution: A Journal of Nature, 1927-1938 available online

*Evolution: A Journal of Nature* was published 1927-1938 by a New York-based group of pro-evolutionists following the 1925 Scopes Trial. The magazine included commentary on events, resources for teachers, and reviews/advertisements for supporting materials. For further information: <http://www.ucl.ac.uk/sts/cain/projects/ejn>.

### Generation to Reproduction: Wellcome Strategic Award for Cambridge History of Medicine

The University of Cambridge has secured major funding in the history of medicine from the Wellcome Trust. A strategic award of £785,000 for five years from 1 October 2009 will allow a cross-disciplinary group of researchers to take a concerted approach to the history of reproduction. The research will provide fresh perspectives on issues ranging from ancient fertility rites to IVF. A strongly grounded account, building on a lively field of historical investigation, will offer a fresh basis for policy and public debate. For more information: <http://www.hps.cam.ac.uk/generation/> or contact [generate@hermes.cam.ac.uk](mailto:generate@hermes.cam.ac.uk).

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##### Moving?

Please notify both the HSS Executive Office and the University of Chicago Press.

##### EDITORIAL POLICIES, ADVERTISING AND SUBMISSIONS

The *History of Science Society Newsletter* is published in January, April, July, and October, and sent to all individual members of the Society.

The *Newsletter* is edited and published in the Executive Office. The format and editorial policies are determined by the Executive Director in consultation with the Committee on Publications and the Society Editor. All advertising copy must be submitted in electronic form. Advertisements are accepted on a space-available basis only, and the Society reserves the right not to print a submission. The rates are as follows: Full page (7 x 9.25"), \$625; Horizontal or Vertical Half page (7 x 4.6"), \$375; Quarter page (3.5 x 4.6"), \$225. The deadline for insertion orders is six weeks prior to the month of publication and should be sent to the attention of the HSS Executive Office. The deadline for news, announcements, and job/fellowship/ prize listings is firm: Six weeks prior to the month of publication. Long items (feature stories) should be submitted eight weeks prior to the month of publication. Please send all material to the attention of the executive office: [info@hssonline.org](mailto:info@hssonline.org).

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### Recent Doctoral Dissertations in the History of Science

The latest batch of recent doctoral dissertations pertaining to history of science has been downloaded to [http://www.hslls.pitt.edu/guides/histmed/researchresource/dissertations/index\\_html](http://www.hslls.pitt.edu/guides/histmed/researchresource/dissertations/index_html).

Because of budget cuts at the host institution these dissertation lists are now bimonthly. For further Information: [http://http://www.hslls.pitt.edu/guides/histmed/researchresource/dissertations/index\\_html](http://http://www.hslls.pitt.edu/guides/histmed/researchresource/dissertations/index_html)

### Official Web site of the 14th Congress of Logic, Methodology, and Philosophy of Science

The official Web site of the 14th Congress of Logic, Methodology, and Philosophy of Science, which will be held in Nancy (France), 16-19 July 2011, is now available at <http://www.clmps2011.org>.

### International History & Philosophy of Science Teaching Group Newsletter

The latest IHPST newsletter is available on the web at: <http://www.ihpst.org/newsletters.html>

### 2009 James T. Cushing Memorial Prize in History and Philosophy of Physics

The John J. Reilly Center for Science, Technology, and Values, along with the Graduate Program in History and Philosophy of Science at the University of Notre Dame and the Advisory Committee of the James T. Cushing Memorial Prize in History and Philosophy of Physics has awarded the 2009 prize to Hanneke Janssen. She is being honored for her Master's Thesis—"Reconstructing Reality: Environment-Induced Decoherence, the Measurement Problem, and the Emergence of Definiteness in Quantum Mechanics."

### Notice of Closure of the National Cataloguing Unit for the Archives of Contemporary Scientists

The University of Bath Libraries announces the closure of the NCUACS at the University of Bath to take effect 31 October 2009. If you have any queries concerning this closure, please address them to Howard Nicholson, University Librarian, University of Bath at [H.D.Nicholson@bath.ac.uk](mailto:H.D.Nicholson@bath.ac.uk). In the 22 years since the Unit moved to Bath, it has secured the future of and processed nearly 200 scholarly archives now placed in many institutional libraries throughout the UK. For further information: <http://www.bath.ac.uk/ncuacs/>.

### 2010 Archaeoastronomy Workshop Announced

The 2009 Conference on Archaeoastronomy of the American Southwest (CAASW) advanced the study and practice of archaeoastronomy of the American Southwest. To continue to build upon the success of the 2009 conference, a two-day technical workshop to be held 11-12 March 2010 has been scheduled to include such topics as methodological principles, surveying techniques, mathematical modeling, standardization of terms and forms, and more. For further Information: <http://www.caasw.org> or e-mail [administrator@caasw.org](mailto:administrator@caasw.org).

### "Fathers of Astronomy"

In celebration of the International Year of Astronomy in 2009, the Frazier International History Museum presents the mini-exhibition, Fathers of Astronomy, featuring authentic, first-edition books written by ground-breaking scientists Galileo and Copernicus as well as the "Nuremberg Chronicle." The exhibit closes 3 January 2010. For more information: <http://www.fraziermuseum.org> or call (502) 753-5663.

## Colloquium on the History of Psychiatry and Medicine, Francis A. Countway Library of Medicine, Harvard

The Colloquium on the History of Psychiatry and Medicine offers an opportunity to clinicians, researchers, and historians interested in a historical perspective on their fields to discuss informally historical studies in progress. Colloquiums will be held on 19 November, 17 December, 2009, each from 4:00 – 5:30pm. For further information e-mail David G. Satin at [david\\_satin@hms.harvard.edu](mailto:david_satin@hms.harvard.edu) or call/fax: 617-332-0032. For further information: <http://https://www.countway.harvard.edu/menuNavigation/historicalResources.html>.

## Call for Proposals: Book Series in History of Medicine

Praeger is looking for potential projects for a book series entitled *Healing Society: Disease, Medicine, and History*. The object is to publish books that offer reliable overviews of particular aspects of medical and social history while incorporating the most up-to-date scholarly interpretations. Books are intended to be narrative surveys that serve as practical introductions or handbooks to their topics. Some topics of particular interest (although proposals on any appropriate topic would be welcome) are: history of caesarean section; history of pandemics (in general, or a particular disease such as influenza); history of drugs of abuse (or a specific drug such as opium); history of specific disabilities, diseases and medical conditions (e.g., cerebral palsy, bipolar disorder, leprosy, yellow fever, etc., either comprehensively or within a specific country/time period with appeal to a broad, general English-speaking audience). If interested, contact John Parascandola at [jparascandola@verizon.net](mailto:jparascandola@verizon.net). For further information: <http://www.praeger.com/praeeger.aspx>.

## CFP: Special Theme Issue: Religion and Biotechnology

Papers are welcome for a special theme issue of the *European Legacy* that will seek to delineate, analyze and discuss the current stage of the relationship between religion and biotechnology and the impact of all sorts of human genetic engineering on traditional theological attitudes to life and the notion of the human person. The special issue is expected to present as many religious positions as possible and offer a representative array of themes and methodological approaches, encompassing discussions in epistemological, ethical, historical or socio-political terms. Submission deadline: 31 August 2010. To submit please contact: Byron Kaldis at [bkald@eap.gr](mailto:bkald@eap.gr).

## Paolo Rossi Monti awarded the 2009 Balzan Prize

Paolo Rossi Monti, an emeritus professor at the University of Florence, has been awarded the 2009 Balzan Prize for the history of science. He was honored for his contributions to the study of the intellectual foundations of science from the Renaissance to the Enlightenment. Each prize carries an award of one million Swiss francs, half of which must be used for research.

## American Association for the History of Nursing Awards

At its 26th annual conference in Minneapolis, Minnesota, the American Association for the History of Nursing awarded the Lavinia L. Dock Award for Exemplary Historical Research and Writing to Julie Fairman (University of Pennsylvania) for her *Making room in the clinic: Nurse practitioners and the evolution of modern health care* (Rutgers University Press). The Mary Adelaide Nutting Award for Exemplary Historical Research and Writing was awarded to Barbra Mann Wall (University of Pennsylvania) for the article “Catholic Sister Nurses in Selma, Alabama, 1940-1972,” which was published in *Nursing History Review* in

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2009. The article analyses the complex roles that race, gender, and religion played in the practice of health in the southern United States in the mid-20th century. The AAHN's Teresa E. Christy Award recognizes excellence in historical research and writing done while the research was a doctoral student. This year the award was presented to Jacqueline Margo Brooks Carthon (University of Pennsylvania), for her dissertation "No place for the dying: A tale of urban health work in Philadelphia's Black Belt." For further information, go to: <http://www.aahn.org>.

### PACHS Fellowships

The Philadelphia Area Center for History of Science offers fellowships for Dissertation Research (one-month, with a \$2,000 stipend) and Dissertation Writing (nine months, with a \$20,000 stipend) for doctoral candidates whose projects are concerned with the history of science, technology or medicine. One-month fellowships are for students who wish to use the collections of two or more of the Center's member institutions, which include some of the premier repositories of primary source materials in the United States. Nine-month fellowships are for students who wish to participate in our interdisciplinary community of scholars while completing research and writing their dissertations. Applications must be submitted online by 4 January 2010. For more information on the Center's fellowships, resources for research, events and activities, see [www.pachs.net](http://www.pachs.net).

### Kenneth O. May Medal

Ivor Grattan-Guinness, a historian of mathematics and logic, has received the Kenneth O. May Medal for outstanding service to the history of mathematics. The medal was bestowed by the International Commission for the History of Mathematics (ICHM) on 31 July 2009 at the 23rd International Congress for the History of Science. The May Medal is named for the mathematician and historian of mathematics who was instrumental in starting the ICHM.

### In Memoriam: Olga Amsterdamska

Olga Amsterdamska, sociologist of science and historian of science and medicine, died Thursday, 27 August 2009, from cardiac insufficiency, a complication of myositis. Olga was born in Lodz, Poland in 1953. She studied philosophy and sociology at Yale University (BA, 1975) and completed her graduate education in sociology at Columbia (PhD 1984). Her dissertation, written under the supervision of Robert K. Merton, was published as *Schools of Thought: The Development of Linguistics from Bopp to Saussure* (Reidel, 1987). Since 1984 she has worked at the University of Amsterdam, first in the Department of Science Dynamics and more recently in the Department of Sociology and Anthropology. Her research focused on social studies of science and medicine, particularly the historical development of the biomedical sciences and their relations to medical practice. She will be greatly missed by all her colleagues and friends.



## HSS Fellowship in the History of Space Science

The History of Science Society Fellowship in the History of Space Science, supported by the National Aeronautics and Space Administration (NASA) History Division, funds a nine-month research project that is related to any aspect of the history of space science, from the earliest human interest in space to the present. The program is broadly conceived and includes the social, cultural, institutional and personal context of space-science history. Proposals of advanced research in history related to all aspects of the history of space science are eligible. Sciences of space and sciences affected by data and concepts developed in connection with space exploration include astronomy, Earth science, optics, meteorology, oceanography, and physiology. The fellowship is open to applicants who hold a doctoral degree in history or a closely related field, or students who have completed all requirements for the Ph.D., except the dissertation, in history of science or a related field. The stipend is \$17,000 US; the fellowship term is nine months and must fall within the period of 1 July 2010 to 30 June 2011. Go to <http://hssonline.org> for further information and an application form. The deadline for applications is 3 March 2010.

### 2010–2011 Fellowship in the History of Space Science

The fellowship, offered by the History of Science Society and supported by the National Aeronautics & Space Administration (NASA) History Division will annually fund one Fellow, for up to one academic year, to undertake a research project related to the history of space science.

### What is Space Science?

The HSS Fellowship in the History of Space Science is intended to fund research in the history of space science broadly conceived, including its social, cultural, institutional and personal context. The history of space science predates the founding of NASA.

For example, the organizers of the International Geophysical Year (1957-1958) realized the important contributions spacecraft data could make to science, and the launch of Explorer I in 1958 demonstrated that feasibility with its discovery of the Van Allen radiation belts. In addition, scientific questions that motivated space sciences and scientific principles from which it evolved have even earlier roots.

Space science has implications for our understanding of the moon and planets, fields and particles in space, celestial bodies beyond the solar system such as stars and galaxies, the Earth itself, and the life sciences, especially exobiology. Some works on space science are listed at the NASA History Office Web site: <http://history.nasa.gov/on-line.html>.

### OBLIGATIONS OF THE RECIPIENT

1. The recipient shall engage in space science research for nine months, normally August-May, but within the period from 1 July 2010 to 30 June 2011.
2. While receiving the stipend, the fellow shall devote at least 50% of his/her efforts to the research program.
3. The Fellow shall provide to the NASA History Office a copy of any publications that emerge from the research undertaken during the fellowship year.
4. The Fellow will be responsible for office space, equipment, and supplies.
5. The Fellow will be expected to present a paper or public lecture on the findings of the research.
6. The Fellow will write a report at the term's conclusion.
7. By accepting the fellowship, the recipient incurs no obligations to NASA or HSS as regards future publications.

### Eligibility

Applicants must possess a doctorate degree in history of science or in a closely related field, or be enrolled as a student in a doctoral degree-granting

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program and have completed all requirements for the Ph.D., except the dissertation, in history of science or a related field. Eligibility is not limited to U.S. citizens or residents.

### Term and Stipend

The Fellowship term is for a period of nine months. The Fellow will be expected to devote the term largely to the proposed research project. The stipend is \$17,000 for a nine-month fellowship during the period 1 July 2010 to 30 June 2011. The starting and ending dates within that period are flexible. Funds may not be used to support tuition or fees. Sources of anticipated support must be listed in the application form.

### Application

The applicant must complete an application form and offer a specific and detailed research proposal that will be the basis of the Fellow's research during the term.

### Please Note:

- Submit your completed original application plus 3 copies (each copy should contain an application form, proposal, and CV collated).
- Fill in the application form on your computer or with a typewriter and use an additional sheet if necessary (e.g., names of references for the letters of recommendation). Applicants are responsible for gathering the letters of recommendations and sending them in their sealed envelopes to the address below. The letters should address the historical competence of the applicant, his/her ability to use historical concepts and methods, and his/her ability to communicate.

### Deadline, Submission Information, and Notification

**Applications must be received by 3 March 2010.** Submit to: History of Space Science Fellowship, History of Science Society, PO Box 117360, 3310 Turlington Hall (for courier delivery), University of Florida, Gainesville, FL 32611-7360. Notification: The names of the winner and an alternate will be announced in early May 2010.

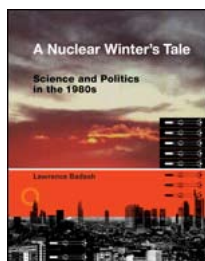
### Resources

Among the resources available to historians of space are the NASA Archives. These include materials related to the International Geophysical Year and NASA missions, as well as to the history of the institution itself. NASA's History Office is dedicated to documenting and preserving the agency's history. More information, including a list of some works on the history of space science, is available at: <http://history.nasa.gov/>.

NASA's space science programs today are managed by the Science Mission Directorate (SMD) at NASA Headquarters, and carried out by its Goddard Spaceflight Center and Jet Propulsion Laboratory. More details are available at <http://www.nasa.gov/missions/science/index.html>, including a list of all current NASA missions.

For Application Form, click on <http://www.hssonline.org/images/Newsletterimages/2009/October/NASAApplication2010.pdf>

## MEMBER NEWS



**Lawrence Badash** (University of California, Santa Barbara, emeritus) recently published *A Nuclear Winter's Tale: Science and Politics in the 1980s* (MIT Press). Badash maps the rise and fall of the science of nuclear winter, examining research activity, the popularization of the concept, and the Reagan-era politics that combined to influence policy and public opinion.

**James R. Fleming's** response to Bjørn Lomborg's "Climate engineering: Its cheap and effective" in *The New Security Beat* can be found at <http://newsecuritybeat.blogspot.com/2009/08/guest-contributor-james-r-fleming.html>.

**Nancy Nersessian** has been elected a Fellow of the Cognitive Science Society. She has also received a grant from the National Science Foundation RE-ESE Program: "Becoming a 21st Century Scientist: Cognitive practices, identity formation and learning in integrative systems biology."



A retirement symposium was held 17 April 2009 at the University of Minnesota in honor of **Alan Shapiro**. Speakers recognized Alan as a leading scholar on Newton's optics, an influential and effective teacher, and thoughtful advisor and friend. His leadership includes twice serving on the Council of

HSS, as program chair, and as head of the Committee on Honors and Prizes. He also has had notable involvement with the Midwest Junto, the AAAS, and Sigma Xi. Although retired, Alan remains active on the editorial board of five journals and is Vice President of the International Academy for the History of Science.

**The History of Science Society would like to congratulate members who won ACLS fellowships in 2009.**

Michael C. Carhart, Old Dominion University  
Alex Csiszar, Harvard University  
Peter L. Galison, Harvard University  
Monica H. Green, Arizona State University  
Jen Hill, Dartmouth College  
Susan Lamb, Johns Hopkins University  
Tara E. Nummedal, Brown University  
Emily J. Pawley, University of Pennsylvania  
Chitra Ramalingam, Harvard University  
Justin Sytsma, University of Pittsburgh  
Matthew C. Underwood, Harvard University  
Theresa Marie Ventura, Columbia University  
Alex Wellerstein, Harvard University

Further information: <http://www.acls.org/fellows/new>.

Do you subscribe to SCIENCE? If so, you are automatically a member of the American Association for the Advancement of Science (AAAS). You should also be a member of Section L, the History & Philosophy of Science section of AAAS. As a section member, you support history of science by giving the field more visibility, increasing the AAAS resources committed to sponsoring historians of science at the AAAS's annual meeting. Be sure to check your section membership status on the AAAS Web site at <http://www.aaas.org>.

Come to the AAAS's annual meeting, 18-22 February 2010 in San Diego – go to <http://www.aaasmeeting.org> to see the schedule. Graduate students get free registration by serving as session aides!

**"Not a member yet? HSS members are eligible for reduced rate memberships (which include SCIENCE magazine) of \$99 US."**



## In Budapest: The US Consortium for the Division of History of Science and Technology

This year more than 120 US scholars joined some 1,400 attendees at the XXIII International Congress of History of Science and Technology held in Budapest, 28 July to 2 August. The meeting was memorable for stimulating papers, cross-cultural discussions, hors d'oeuvre plates heaped with the world's best petit fours, and sightseeing on the Danube River. Joseph Dauben, Margaret Vining, Jay Malone and I attended the congress as members of a consortium charged with liaising with the Division of the History of Science and Technology (DHST).

The Division of History of Science and Technology (DHST) is the global organization for history of science with about 50 member nations. Like HSS, the origins of the DHST lie with the activities of George Sarton and others. The DHST is one of two divisions of the International Union of History and Philosophy of Science (IUHPS) and is a showcase for creative internationalism with regard to the history of science, history of technology, and philosophy of science.

The scientific academies of many DHST member nations pay dues to the organization and often select delegates to its quadrennial congresses. The US, however, is somewhat exceptional and relies on National Science Foundation funding. Many people – including Michael Sokal, Keith Benson, Joan Cadden, Jay Malone, and the HSS and DHST past-president Ron Numbers – have worked with aplomb to secure the cost-effective continuation of a US presence in the DHST. The consortium had its inception in 2003 when HSS joined with other US-based societies to represent US interests. The founding members believed it was important that the US not withdraw from the international community (although HSS is not a US society, a large number of its members reside within the US). A major goal of the consortium is to oversee US interests and to continue

funding travel grants for students and independent scholars attending the congress.

An important function of each congress is to decide where the next meeting will take place. In Budapest, the British Society for the History of Science made a successful pitch to hold the 2013 conference in Manchester.



So why go to Manchester in 2013, aside from visiting Manchester United's shrine to real football – the "Field of Dreams," or the lavish city hall built with the wealth of the Industrial Revolution, or sampling what has to be the strongest mango pickle this side

of South Asia? As science, philosophy of science and history of science have become more specialized, and the latter two more professionalized, scientists have become rare at HSS meetings. Yet they are in greater abundance at DHST meetings, where they recall the rather diminished outreach function of our profession and add much to the proceedings with their historical work, insights, and concern with the praxis of science. Moreover, international scholars have distinctive views on historiography and the cultural significance of science. Engaging with them enlivens our profession and makes us all better historians. With luck, and Jay Malone's skillful grant writing, I hope the US will have substantial representation at the next congress in Manchester in 2013.

HSS members wishing to know more about the organization and its valuable projects, including the World Web of Science and its relationship to UNESCO, are directed to this Web page: <http://www.dhstweb.org>.

*Michael A. Osborne  
Oregon State University  
Officer in the Division of the History of Science and  
Technology*

## In the Service of Galileo's Ghost: A Short Guide to History, Assault, and Ideology

*As part of her 2008-2009 Guggenheim Fellowship, Alice Dreger is writing a manuscript on science and identity politics in the Internet age. In this article, she discusses her experiences – good and bad, activist and academic – that led her to this project, and the threats to both history and science.*

I had another one of those moments when I thought: “They just don’t prepare you for this in graduate school.” In June 2008, I found myself in Cincinnati for the National Women’s Studies Association (NWSA) conference, sitting in one of those interchangeable, soulless conference hotels, in the bar at midday, drinking a stiff gin and tonic, and calculating when I’d be sober enough to drive the hell away. A brave and tall and funny transgender woman named Rosa Lee Klaneski was telling me, in her remarkably soothing voice, about how she’d developed the independence of mind and the fortitude of gut to stand up against a panel of other transwomen who’d been assailing me and my work an hour earlier.

I’d had to sit quietly and listen to this panel, a panel that included a Hollywood-based trans-entrepreneur whom the editors insist I identify only as “Madam X” (for reasons that will soon become apparent). Since writing of my young son as my “precious womb turd” – a phrase now turned into a family joke – Madam X, had spent her time mounting Web pages mocking not



only my work, but also my appearance. (*Très feminist, non?*) At one point in the panel, I heard a young Women’s Studies student next to me say to her friend, “This Dreger woman is terrible!” I whispered to her, “Um, I’m that Dreger woman, and I don’t recognize the person they are describing.” She looked stunned and quietly moved away from me, as if she’d just run into an armed skinhead wanted for murder.

As I listened in the bar to Rosa’s wry and wise remarks about transgender politics and contemporary feminist theory, I realized that her unexpected appearance during the panel’s Q&A reminded me of that big angel who comes crashing through the ceiling in *Angels in America*. When I had turned to see who from the audience would speak first, and saw it was a tall transwoman, I had assumed I was in for more of the same in terms of utter misrepresentation of my work. So much for my stereotyping. Instead of ganging on, Rosa

stood up and said:

Rosa Lee Klaneski, Trinity College. I cite Alice Dreger’s academically-rigorous work all the time in my own work. She doesn’t know who I am but I know who she is. And I am just wondering[...] – and I’m a transgender person myself – what gives any transgender person the right to abrogate someone else’s first amendment right to

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freedom of speech just because they hold an unpopular minority view? In my opinion [regarding] the person that you are arguing against [i.e., scientist Michael Bailey, my historical subject], I completely agree with you. Bunk. Ridiculous science. And should be classified as such. I got that. What gives us the right to censor [Dreger's or Bailey's work] just because we don't like it?

The objection raised in return was that the panel didn't constitute censorship. Technically this was true, but anyone with any background on this knew – as Rosa and I did – the intimidation tactics used to try to silence Bailey, me, and others.

The latest had arrived in the form of a note posted on the door of that very meeting room, stating that anyone entering automatically consented to being filmed by the aforementioned panelist, Madam X, and that she could use the film at will. I had the notice removed by a conference organizer before I entered, but I still made sure I said nothing in the session.

After the session dissolved, I went to Rosa and said, "You're right, I don't know you, but I want to know you. Can I buy you a drink?" Then, just after we walked out of the session room on our way to cranberry juice with soda water and lime for Rosa and something stronger for me, X came up and towered over me. She said something like, "Alice, honey, I am not done with you. In fact, I haven't even started with you. *I am going to ruin you.*" She started naming how she would do it. I stayed upright, but uncontrollable tears ran down my face. And at that point, Rosa crashed through the ceiling again. She stepped between us, and told me (but actually X) that the legal definition of assault did not require physical touch, and that I could call the police right now. That made X go away.

No one tells you the legal definition of assault in graduate school.

Taking on controversial work has been my choice, and knowing full well X's capabilities, I could have chosen to skip the trip to Cincinnati. But I had grown, by that time, to be consumed by the issues of academic freedom and standards of scholarship. I felt I had to make a stand not in my

own name (which seemed, in that identity-politics-crazed environment, hopeless), but in the name of...well, Galileo.

If, during my Ph.D. in History and Philosophy of Science at Indiana University, some had told me that, by the time I reached full professor, I would be rhetorically strung up at the National Women's Studies Association and, the very next summer, treated as something of a heroine at the Human Behavior & Evolution Society – you know, the sociobiologists – I would have told them they'd been reading my tea leaves in a mirror.

After all, my dissertation and my first book were on the social construction of sex categories, specifically on the theoretic and clinical treatment of people labeled "hermaphrodites" in late 19th- and early 20th-century France and Britain. Through that work, I found myself embroiled in the intersex rights movement, and ended up being one of that movement's leaders for about a decade. (Among other activities, I helped run the Intersex Society of North America, whose legal address was, for about seven years, my home.) That work made me a queer rights activist, and then a disability rights activist, too, and a steady critic of scientists and clinicians whose work, I argued, harmed people by treating them as pathological merely because they were atypical. My work was (and probably still is) commonly used in Women's Studies and Queer Studies courses.

What happened?

I took on a new historical project in 2006, one that ultimately made me realize that my allegiance to truth, scholarship, and justice had, for years, been misunderstood as an allegiance to left-wing identity politics.

My research covered the Bailey book controversy. In 2003, J. Michael Bailey, a sex psychology researcher at Northwestern University, published a book called *The Man Who Would Be Queen: The Science of Gender-Bending and Transsexualism*. In the book, Bailey supported the work of the researcher-clinician Ray Blanchard who argues that male-to-female (MtF) transsexualism is not primarily about gender identity, as the mainstream media and transgender rights movements would have us believe, but rather about sexuality (eroticism).

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Blanchard believes MtF transsexuals divide logically into: (1) “homosexual transsexuals,” meaning MtF people who are sexually attracted to men, and who transition in part to take straight male lovers; and (2) “non-homosexual transsexuals,” who Blanchard calls “autogynephilic,” because this latter group are sexually aroused by the idea of being of becoming women. “Autogynephiles” are gynephilic (attracted mostly to females), but their gynephilia is (at least in part) self-directed. According to Blanchard’s demographic research, virtually all prominent transwomen, particularly the academics would fall into the latter group. Blanchard’s theory is not popular among these women; most who (dare to) express an opinion believe it paints them as sexual perverts rather than people with gender-genital mismatches.

As I documented in my work on the subject, in 2003 three very visible transwomen decided to take it upon themselves to try to “kill” Bailey, the dangerously articulate messenger of Blanchard’s work. Andrea James, Lynn Conway, and Deirdre McCloskey mounted what became an international campaign, organizing formal charges against Bailey, accusing him of, among other things, doing IRB-qualified human subjects research without IRB oversight, writing about subjects without their consent, having sex with a transsexual research subject, and falsifying key parts of his book.

When I took on this project, I thought it would be a he-said/she-said history of communication disconnects involving an insensitive scientist and some mostly well-meaning activists. Instead, I found that Bailey had not committed the crimes attributed to him, and that Conway, James, and McCloskey had reason to know that. I showed that the attacks nearly ruined Bailey’s professional and personal lives, all for the sin of supporting an unpopular theory. It was an ugly history.

My fate since then: false charges lodged with my administration; threats made against my own colleagues; and a powerful take-over of my Internet identity. Just my luck to piss off a population so computer-savvy! Though it does come with occasional comic relief. My favorite moment so far: a transwoman filed a formal complaint with my husband’s dean essentially charging my husband with having had sex with me.

(To explain the “logic” behind this would take another 1,000 words.)

Part of me has thought about returning to study dead people; there’s nothing like this kind of experience to turn an historian necrophilic. But first, I’m going to finish a Guggenheim-funded book about science and identity politics in the Internet age. I’m looking at several cases, including Bailey’s and my own twin experiences – my intersex identity activism, wherein I pushed against scientists, and my post-Bailey experience, wherein I’ve been constructed as a privileged academic (true) with an anti-trans-rights, even eugenical agenda (false).

As part of the book project, for the last nine months, I’ve looked at what happened after self-styled “journalist” Patrick Tierney published *Darkness in El Dorado: How Scientists and Journalists Devastated the Amazon*. Tierney charges the late geneticist James Neel and anthropologist Napoleon Chagnon with a host of crimes against the Yanomamö of South America. And I’ve looked at what happened to Randy Thornhill and Craig Palmer following their book *A Natural History of Rape* (death threats); to Elizabeth Loftus when she challenged “recovered memory syndrome” (California Supreme Court case); to Bruce Rind when he co-authored a meta-analysis showing maybe people aren’t *quite* so harmed by childhood sexual abuse (denounced by an Act of Congress); and to Charles Roselli, who had the dubious honor of finding out what happens when People for the Ethical Treatment of Animals (PETA) teams up with LBGT activists. These odd bedfellows charged Roselli with developing an anti-gay eugenic program via his research on “gay rams.” Bizarrely, Roselli, a mild-mannered animal researcher in Oregon, found himself taken on by none other than Martina Navratilova. Oh, and 20,000 e-mails were sent to Roselli’s university president calling for his firing.

More than one person has suggested I title my book *I Am Not Making This Up*.

Lacking space for a complete report, let me say what I think is most important for my fellow historians of science to know. First and foremost, we academics are all in danger. Maybe you already know this, but if so, I want you to think about it some more: We live in

a world where our work, our identities, and even our values can be reconstructed in utterly crazy ways at the speed of light. The “democratization” of knowledge, enabled by the Internet, has led to a widespread attitude that a peer-reviewed article is not that different from a well-turned blog. And blogs move faster than we possibly can. If you think what happened to me cannot happen to you or your colleagues, think again.

We must reassert the difference between scholarship and other, and do this not only with our students, the media, our elected representatives and our religious leaders, but also with each other. (Paging NWSA.) A disturbing amount of what I see at conferences and even in some journals is plain sloppy in terms of reasoning and language and weak in terms of evidence. We can no longer afford to politely allow those with whom we agree to get by with substandard work. Taking academic freedom seriously must include the responsibility to put solid reasoning and evidence before all else – before ideology, before allegiances, before our desire to seem or to not seem challenging. (Quick bottom line application: Ward Churchill must go; see the outstanding report by the Colorado faculty on what he actually did in his “scholarship.”)

And good news: as I’ve wandered from discipline to discipline, I feel that historians are way ahead in terms of protection of standards. I’ve become enormously proud of being an historian in the last two years. As I worked on the Neel and Chagnon history, I ran into previous work done by Susan Lindee, John Beatty, Diane Paul; to encounter fellow scholars so committed to evidence, clarity, and honesty is like finding water in the desert.

Historians have not, in my estimation, lost their way amid all the well-intentioned academic politics of the last half-century. As a class, even as we recognize the imperfection of the historical record, the subjectivity of the historian, the inevitable need to look at history in artificially bounded ways, we retain at our core a sense that a good argument is one with good support. To quote my colleague Joel Howell, who helped correct the public record on James Neel, we historians can agree that making shit up is simply not acceptable.

For this reason I believe that historians of science

in particular now have an opportunity, perhaps even a duty, to take the lead as these controversies break, to ask the evidentiary questions of who really said, found, and did what, and what the historical context was. By providing this kind of accountability, we have an opportunity to become guardians of the environment in which good science can happen.

I do not suggest that we become handmaidens to science, but rather that we become standard-bearers of quality scholarship (regardless of discipline) – that we reassert often why universities are not corporations; why tenure is necessary for those doing hard inquiry; and why peer review is fundamentally different from the court of public opinion.

As the mainstream press collapses, this role will become ever more important. No longer can we count on good science reporters and excellent investigative journalists to sort out what’s happened. As I’ve worked on this book, I’ve met reporter after reporter who told me she or he wanted to pursue some of what I pursue, but were blocked for lack of time or funding.

I am not suggesting most of us turn to dealing with ongoing scientific controversies. I think it is critically important that most of us deal with the past, in part because it is from these histories of “finished” events that we gain insight about how human knowledge works. But I suggest that we go to the archives fully aware of what’s happening outside our climate-controlled mausoleums. Because, in the end, we can’t live in the archives as if they were bomb shelters outfitted with 50 years’ worth of supplies. We must make sure the world is kept safe for real scholarship – be it history or science.

I feel in the last year, as I never did in graduate school, a true vocation as an historian of science. I feel urgently aware of what is at stake, of what we can (and must) do for the world. Having now experienced the contemporary equivalent of house arrest, on many days I feel I can hear the ghost of Galileo. And he’s asking us to make damned sure we move.

*Alice Dreger is Professor of Clinical Medical Humanities and Bioethics at the Feinberg School of Medicine, Northwestern University.*



## Some Thoughts on Historians and Contemporary Anti-evolutionism

By John M. Lynch

In a recent book review for *The British Journal for the History of Science*, Thomas Dixon asks what contribution historians of science can make to the debate about intelligent design (ID).<sup>1</sup> As myself and others noted in a 2008 *Isis* Focus article, historians have many opportunities to make contributions to this most public of debates, yet our community has largely resisted the Siren's call of engagement with creationism.<sup>2</sup> In this brief note, I would like to offer some thoughts on current creationist tactics with regards to the history of science and hopefully inspire some readers to engage in this significant debate.

The modern ID movement arose in the last two decades of the last century, although to a significant degree its roots were planted in the Young Earth Creationist movement which re-emerged in America in the 1960s. The Discovery Institute (DI, the leading proponent and funder of ID) disputes this historical fact even in the face of manifest evidence presented in the *Kitzmiller v. Dover* trial. While purportedly beginning with the secular purpose of convincing scientists that their adherence to naturalistic explanation was misplaced, the ID movement's religious motivations became obvious both in private and public writings.<sup>3</sup> Having failed to convince the scientific community – and having been dealt a significant blow by the ruling in *Kitzmiller* – the movement has recently stepped up its incursions into historical analysis with a series of works that collectively see modern biology, in the guise of an historically uncontextualized “Darwinism,” as both the product

of Epicurean (i.e. pagan, anti-Christian) materialism and a cause of many modern ills.<sup>4</sup> Even the briefest examination of some

of these works clearly indicates the furrow that the ID movement is attempting to plough.

Political scientist John West outlines these claims in his book, *Darwin Day in America: How Our Politics and Culture Have Been Dehumanized in the Name of Science*. According to West, who echoes a claim previously made by Benjamin Wiker, the pagan materialism of the Greek philosopher Epicurus and the Roman poet Lucretius gave rise to modern scientific naturalism. As West sees it, this influence in turn has led to the rule of a scientific elite over democracy, utopian idealism, moral relativism, censorship of dissent, and dehumanization.

This theme of dehumanization has become something of an *idée fixe* for modern anti-evolutionists. Darwin is seen as, if not a causative factor of, then an inspiration for, the totalitarian regimes of the 20th century. Darwin's work, we are told, led to the devaluation of human life, eugenics, the Holocaust, Planned Parenthood, and fetal stem cell research. Nowhere is this theme more evident than in the pro-ID movie *Expelled: No Intelligence Allowed*, in which Ben Stein unsavily portrays Darwin's writ-



John M. Lynch

1 T. Dixon, *British Journal for the History of Science* (2009) 42:440.

2 G. Gooday et al. *Isis* (2008) 99:322-330.

3 See, for example, the notorious “Wedge” document (<http://www.antievolution.org/features/wedge.html>) for the former and the evolution of the writings of Philip E. Johnson or William Dembski for the latter.

4 For example, B. Wiker, *Moral Darwinism: How We Became Hedonists* (InterVarsity, 2002) & *The Darwin Myth: The Life and Lies of Charles Darwin* (Regnery, 2009); R. Weikart, *From Darwin to Hitler* (Palgrave Macmillan, 2004); J. West, *Darwin Day in America* (Intercollegiate Studies Institute, 2007). All the authors are connected formally with the DI.

ings as leading to the Holocaust and “Darwinists” as waging a campaign of terror against ID proponents. Egregiously, Stein selectively quotes Darwin to make it appear as if he disapproved of measures to aid the sick and infirm. Even more egregiously, in publicity interviews Stein has baldly stated that “science leads you to kill people” and “Darwinism led – in a pretty much straight line – to Nazism and the Holocaust.”<sup>5</sup> While it would be comforting to imagine that Stein’s position was that of a politically motivated crank, it has received support from historian and DI fellow Richard Weikart, who appears onscreen with Stein during an interview conducted at Dachau. Weikart’s published attempts to link Darwin to Hitler have received negative commentary from such historians as Robert Richards, Paul Farber, Sander Gilboff, and Nils Roll-Hansen, yet these ideas have continued to be promulgated by Benjamin Wiker (again, a DI fellow) in his *The Darwin Myth: The Life and Lies of Charles Darwin*, a biography that Gilboff accurately, if caustically, compares with the writings of the journalist Rita Skeeter from the Harry Potter series.<sup>6</sup>

Given the rigorous peer review process required for publication in leading academic journals and presses, it is unsurprising that ID proponents make little attempt to engage with the community of professional historians. Their claims are made in books published largely by conservative (e.g. Regnery, Intercollegiate Studies Institute), religious (e.g. InterVarsity, an outgrowth of InterVarsity Christian Fellowship campus ministry) or vanity (e.g. Erasmus Press, owned by William Dembski) presses. Unsurprisingly papers are neither presented at conferences nor published in relevant journals and little attempt is made to undergo review by practicing historians with expertise in Darwin, his ideas, and their socio-cultural effects. In short, anti-evolutionist historical scholarship accurately mirrors creationist scientific

work in being directed at the true believers rather than the academic community. The temptation may thus be for professional historians to ignore their claims – a temptation that I feel must be rejected. As historians, we have a social duty to correct error and over-simplification where it is foisted on the public by politically and religiously motivated individuals, and this responsibility goes beyond what sociologist and ID sympathizer Steve Fuller has dismissively seen as “catching the errors” of the creationists.<sup>7</sup> There is something far more fundamental at stake. At a time where historians have eschewed Whig or “Great Man” histories, anti-evolutionists are presenting their “Not-So-Great Man” view of Darwin. They misrepresent the very nature of historical enquiry; they manipulate history until it risks becoming a mere shadow of the rich and intricate tapestry that it is.

Our collective research as historians can obviously help disprove claims made by anti-evolutionists regarding both the social effects of scientific ideas and how the scientific community functions. Many of us study scientific change, community formation over time, and the treatment of heretical ideas and controversy. In so doing, we have developed a realistic view of science and its social effects – both positive and negative – along with a clear conceptualization of how evolutionary biology has matured as a field over the past two hundred years. Our research directly opposes the erroneous and simplistic views of the anti-evolutionists, yet it remains largely unknown to the public. While I am not calling for historians to engage in popularization of their work, although that too may have benefits, I do believe that increased public engagement for those of us who have something relevant to say debunking the claims of anti-evolutionists is nothing less than a shared social responsibility. Such engagement is, thankfully, beginning.<sup>8</sup>

Such public engagement is not, however, with-

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<sup>5</sup> For more of Stein’s utterances, and a complete debunking of the claims made in the movie, see <http://expelledexposed.com>

<sup>6</sup> S. Gilboff, *Reports of the National Center for Science Education* (in press) <http://ncseweb.org/rncse/29/review-darwin-myth>

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<sup>7</sup> S. Fuller, *Isis* (2009) 100: 115.

<sup>8</sup> For example, Mark Borrello has publically engaged with John West on the claim that there is a link between Darwin and dehumanization. See <http://www.mnscience.org/index.php?id=138>

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out its perils. As detailed in the last issue of this newsletter, Peter Bowler, Sandra Herbert and Janet Browne were not given full disclosure by Fathom Media (an offshoot of the creationist organization Creation Ministries International) when interviewed for the documentary *The Voyage That Shook The World*.<sup>9</sup> Unaware of the underlying anti-evolutionary agenda of the work, the historians gave interviews that were apparently selectively edited to highlight certain aspects of Darwin's life. Equally as problematic was the equation of the contributions of historians with those of unqualified non-experts on matters of history. As Bowler *et al.* note, "if academic historians refuse to participate when movements they don't approve of seek historical information, these historians can hardly complain if less reputable sources are used instead." When we speak out, we risk being caught between the Scylla of non-engagement and the Charybdis of having our statements misused.

Still, if the past few years are any indicator, it is highly likely that the future will see further creationist manipulation of history within the public sphere, and the only way to combat that trend is active engagement. Public engagement with those communities who seek to misuse history will be frustrating and not without dangers. Yet it also offers us an opportunity to enlighten the public about the nature of historical enquiry and the fertile area that the history of science represents.<sup>10</sup>

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<sup>9</sup> P. Bowler *et al.* *History of Science Society Newsletter* (2009) [http://hssonline.org/publications/Newsletter2009/July\\_Perils\\_Publicity.html](http://hssonline.org/publications/Newsletter2009/July_Perils_Publicity.html)

<sup>10</sup> Previous discussion regarding historians' engagement on this issue resulted in a number of letters to *Isis*. I would like to encourage an ongoing dialog at <http://blog.jmlynch.org> (search for "HSS newsletter").

## Making Visible Embryos: Making a Virtual Exhibition

Electronic media and the Internet have dramatically changed academic publishing and communication across numerous disciplines, including history of science, technology and medicine. Journals are on their way to becoming exclusively electronic; jobs and conferences are advertised through discussion lists; societies communicate with their members through electronic newsletters and Web sites; groups collaborate using wikis. Now, with the expansion of digitized museum, library and archival collections, research practices have changed as well. Electronic books are not yet standard, and Google's monopolistic and commercial library digitization is a problem as well as a boon, but convenience of use and accessibility are continually attracting new readers. Funding bodies are fond of the visibility the Internet brings to a project. Yet for all the expansion of the electronic content as well as the increasingly sophisticated and user-friendly technologies, historians of science overall are putting little effort into designing material specifically for the Web. Blogs, such as Biomedicine on Display (<http://www.corporeality.net/museion/>), have acquired faithful audiences, as did the instructive podcast series The Missing Link, (<http://missinglinkpodcast.wordpress.com/>). But investing time and effort into exclusively Web-based forms of publication and communication is still rare. Here I draw on a recent personal experience of creating an online exhibition to discuss the historical and current issues surround-

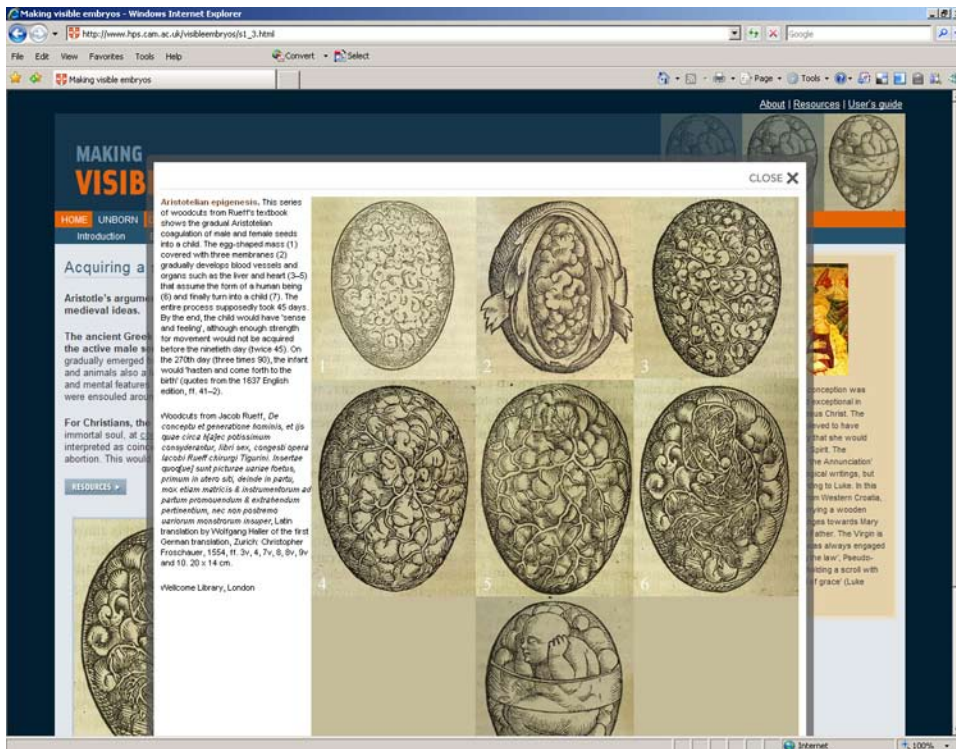


The front page of Making visible embryos ([www.hps.cam.ac.uk/visibleembryos/](http://www.hps.cam.ac.uk/visibleembryos/))

ing the production of Web-based content; the online HSS *Newsletter* seems an especially suitable place for this.

Pioneered in the early 1990s, the online – originally “virtual” – exhibition was an attempt by museums and libraries to showcase their work to wider audiences and engage with the then-new medium of the Internet. The Library of Congress's collections of files and images from the exhibitions 1492: an ongoing voyage (<http://www.ibiblio.org/expo/1492.exhibit/Intro.html>), Scrolls from the Dead Sea (<http://www.ibiblio.org/expo/deadsea.scrolls.exhibit/intro.html>) and Revelations from the Russian archives (<http://www.loc.gov/exhibits/archives/intro.html>) could be seen as the first, although in those pre-Netscape days they had to be downloaded from a FTP server. The National Library of Medicine of the National Institutes of Health, which in its 1986 Long Range Plan (<http://www.nlm.nih.gov/archive/20040721/pubs/plan/ei/contents.html>) foresaw the era of digital images distributed over high-speed





Aristotelian epigenesis in Jacob Rueff's midwifery textbook ([www.hps.cam.ac.uk/visibleembryos/s1\\_3.html](http://www.hps.cam.ac.uk/visibleembryos/s1_3.html))

computers, was especially committed to communicating history of medicine in this format.

Early on, attempts were made to define the online exhibition and delineate it from another heavily image-oriented web-based genre, digital collections. It was argued that objects had to be tied together by a narrative or in another relational form; and while collections often had a common theme too, the connection was never as tight.<sup>1</sup> Others defined them as "online, World Wide Web-based, hypertextual, dynamic collections devoted to a specific theme."<sup>2</sup> As new projects of this type followed, it became clear that any one exhibition rarely respected all the rules, whether

1 Kalafatovic, Martin R. *Creating a winning online exhibition: a guide for libraries, archives and museums*, Chicago: American Library Association, 2002, 1-3.

2 Silver, D. "Interfacing American culture: The perils and potentials of virtual exhibitions." *American Quarterly* 49(1997), 825-850 ([http://muse.jhu.edu/journals/american\\_quarterly/v049/49.4er\\_folklore.html](http://muse.jhu.edu/journals/american_quarterly/v049/49.4er_folklore.html)).

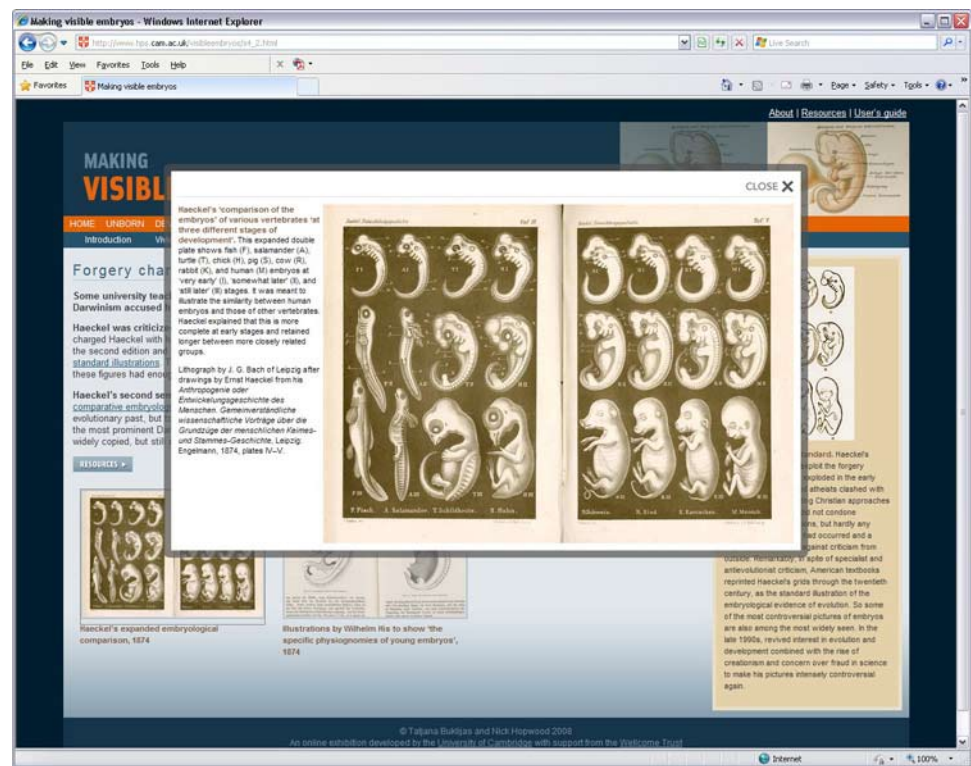
of tight narrative link, extensive hyperlinking, or frequent updating of content. Many were no longer attached to a physical exhibition but existed on the web only. Other projects, such as The virtual laboratory ([http://vlp.mpiwg-berlin.mpg.de/index\\_html](http://vlp.mpiwg-berlin.mpg.de/index_html)), combined the elements of virtual exhibitions with digital collections of images and texts into larger, looser, more open-ended entities. By the mid-2000s, virtual exhibitions had built up a tradition and achieved a certain level of recognition, but the rules of the genre were more fluid than ever. For my purposes, defining it as a web-based, structured presentation consisting of text and images will do.

In 2004, Nick Hopwood, a lecturer in the Department of History and Philosophy of Science at the University of Cambridge, and I, then a Ph.D. student there, first discussed the idea of an online exhibition about the history of embryo images, Nick's long-term research area and a theme linked to my interests in anatomical disciplines and in the visual. Images of human embryos today surround us everywhere, in clinics, classrooms, laboratories, family albums, newspapers and, not least, on the Internet. Debates about abortion, evolution, assisted conception and stem cells have made these representations controversial, but they are also routine. Our aim, in the absence of any survey of this field, was to show how, over the last two and half centuries, embryo images were produced and made to represent some of the most potent biomedical objects and subjects of our time. The exhibition was funded as the main public engagement activity under a Wellcome enhancement award in the history of medicine that the Department has used to build expertise in history



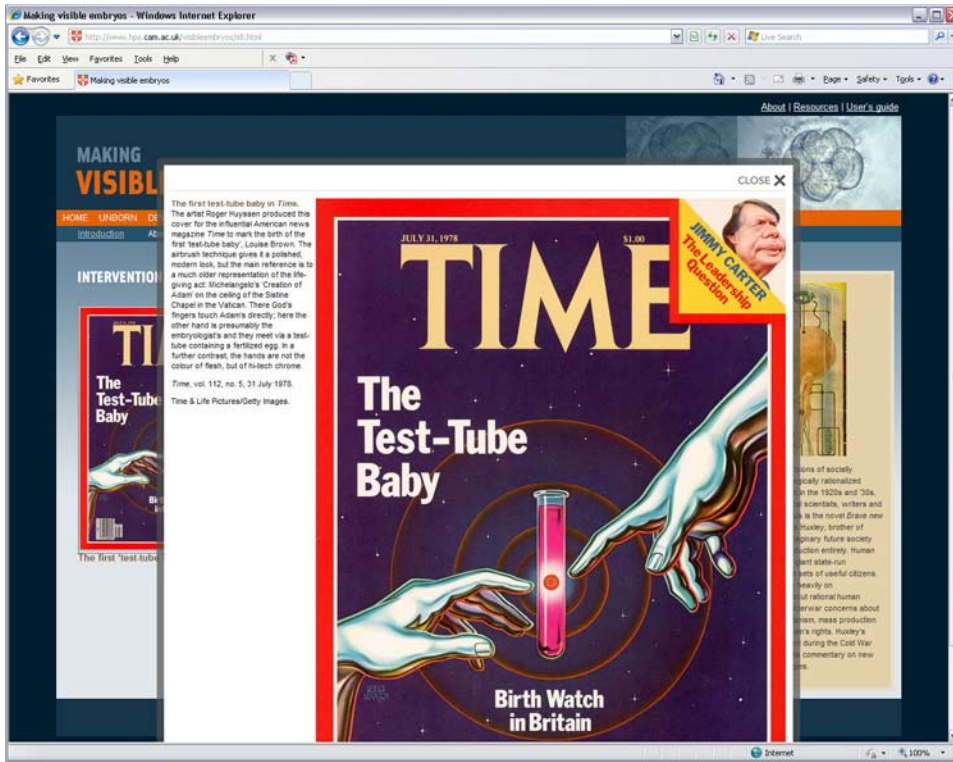
of reproduction. (It recently gained a higher-level strategic award in this field.) By using the format of a freely accessible online exhibition, we hoped to circumvent the temporary unavailability of local gallery space, to reach a wider audience in what was becoming the dominant medium for displaying embryo images, and to do so at relatively low cost. The last point was essential: the budget covered a one-year salary for a postdoctoral researcher-cum-designer (me), a modest budget for images of about £2,500, a computer, a scanner and a digital camera.

We initially intended to complete the exhibition by 2006 but it took twice as long. While much work was invested in the 36,000-word text, which was supposed to communicate major themes as well as support and explain the images, we gave images pride of place. The low cost of the web space allowed us to reproduce 125. For each of the eight chronologically arranged sections, study of the existing scholarship (listed in the Resources section, <http://www.hps.cam.ac.uk/visibleembryos/resources.html>) was followed by the often much more difficult quest for the right images and the information about them. Sometimes the choice was clear: for instance, of Samuel Thomas Soemmerring's pioneering developmental series in *Icones embryonum humanorum* (1799); Ernst Haeckel's controversial and canonical figures from the 1870s bringing human and other vertebrate embryos into the same frame, and Lennart Nilsson's vivid and widely reproduced photographs that since the 1960s have become political weapons in abortion debates. In other cases choices were more open – especially on the variety



Ernst Haeckel's controversial and canonical grid ([www.hps.cam.ac.uk/visibleembryos/s4\\_2.html](http://www.hps.cam.ac.uk/visibleembryos/s4_2.html))

of premodern representations of the unborn in the opening sections and on the interventions of the last thirty years in the closing section. Along with now-iconic images, we wanted to show those considered representative, standard or widely used—an early modern midwifery textbook image, an encyclopaedia illustration, an embryo model, an ultrasound scan—and to demonstrate how these images were produced, who made them and who saw them, in which settings. The big image databases, such as Wellcome Images and the commercial Getty Images, were a great help, but we obtained many of the most interesting representations through correspondence with scientists, artists, professional societies and curators, as well as research in libraries and archives, not least the Carnegie Institution of Washington Archives collection. Explanations of how early ultrasound machines worked or of the artistic and editorial decisions behind the *Time* cover page that announced the birth of the 'first test tube' baby simultaneously made the work on the exhibition fun and the final product fresh.



The first test tube baby in *Time* ([www.hps.cam.ac.uk/visibleembryos/s8.html](http://www.hps.cam.ac.uk/visibleembryos/s8.html))

But writing the text and collecting the images is just part of the work: developing and designing the exhibition represented an equally demanding task. Everyone knows what books look like and what they do, but rules for the new digital genres are much less firm. We decided that a chronological–thematic organization was best suited to convey the sense of historical change. We also wanted the images to be reproduced as well as possible, while keeping the pages uncluttered and the site light to load. These requirements were fulfilled by using a horizontal, left-to-right menu bar with titles of sections and pages, and by formatting images into small thumbnails that upon clicking opened into separate windows each containing an enlarged – and sometimes zoomed-in – image with an accompanying legend. Overall, the design was kept simple, mainly because notwithstanding the generous assistance of family and friends with professional IT experience, I am a self-taught designer.

The exhibition was launched in October 2008, first through discussion lists and then through press

releases. It was quickly picked up by blogs, online magazines and various other Web sites. Useful tools such as Google Analytics and social bookmarking collections showed us that some visitors came from parts of the world that an academic book probably would not reach – or certainly not so fast. Initial worries that the general audience might find the exhibition too dry or too difficult were dispelled by enthusiastic comments in places we had not expected. For instance, the acute remarks by the writer for the highly popular Jezebel, a Web site on “celebrity, sex, fashion for women” ([http://](http://jezebel.com/5223102/an-abridged-history-of-the-imagery-of-the-human-embryo)

[jezebel.com/5223102/an-abridged-history-of-the-imagery-of-the-human-embryo](http://jezebel.com/5223102/an-abridged-history-of-the-imagery-of-the-human-embryo)) generated several pages of discussion on Lennart Nilsson’s work and the use of his images in abortion debates. *New Scientist* (<http://www.newscientist.com/article/dn16745-how-the-hidden-contents-of-the-womb-became-visible.html>) used images from our exhibition to build a slideshow in their Galleries section. Some readings surprised us, and those were especially useful as an insight into the extent to which knowledge seen as standard in scholarly circles is accepted outside academia.

Now, almost a year later, we can ask what we have learned. What are the advantages and disadvantages of an online exhibition compared to the more traditional forms of publication? Was it worth producing, and did it fulfil our expectations?

One disadvantage is that while a good virtual exhibition may require as much research as a book, the rewards are fewer and less certain. An exhibition may be based on extensive research, have a tight argument and attract numerous reviews, not to

mention vastly more readers than most books, but it will not help an academic career in the same way. There is no compulsory peer-reviewing, and lifespans can be short. This last concern, based on the (short) history of the Web, is valid, but recent initiatives for archiving at least some Web sites for posterity, such as the UK Web Archiving Consortium (<http://www.webarchive.org.uk/ukwa/>) and the U.S. National Digital Information Infrastructure and Preservation Program (<http://www.digitalpreservation.gov/library/index.html>) might alleviate this fear. Finally, for all the immediacy and accessibility of the Web, for some people and some purposes it is more convenient to work with a book.

Many of these problems are not specific to virtual exhibitions or indeed web-based content, and are shared by academics engaged in producing other non-traditional genres such as films and TV material. Yet the ubiquity of the Internet makes them more common and more visible, and may be the reason why change is on the horizon. Less than a decade ago scholarly journals were reluctant to review (<http://blog.historians.org/publications/454/gutenberg-e-books-now-available-open-access-and-through-acls-humanities-e-book>) online books published within the Gutenberg-e Project (<http://www.gutenberg-e.org/>), a prestigious joint scheme of the American Historical Association, Columbia University Press and Andrew W. Mellon Foundation. Between 1999 and 2004, the scheme simultaneously promoted electronic publishing and helped junior scholars in need of a home for their first manuscript. In contrast, our exhibition had been reviewed in several HSTM journals and in *Nature* within a year of the launch.

Issues around intellectual property are another minefield. Some owners of images generously waive license fees for academic use, but many charge hefty rates, often higher than for print publications. This is presumably partly because the moment these images appear on the Web they are copied and used elsewhere. Easy access also makes it easier to plagiarize content. The extent to which an exhibition should hyperlink to other Web sites is another tricky issue, related to the short average lifespan and lack of permanence on the Internet.

Possibly the biggest problem lies in the fact that producing virtual exhibitions (and Web-based content more generally) requires general and more specialized skills that historians – especially those who did not grow up with the Internet – in most cases do not have. Even if they do, they may not have the time. Elisabeth Green Musselman ended her podcast project because each episode took 40-60 hours to produce. Yet while academics are commonly aware of what it takes to make a highly illustrated book, and of the design, printing and publishing networks behind it, the costs of designing a Web site are still far less obvious – just as they were to us at the start. For many less experienced users – including some reviewers – the simple fact that certain technologies exist is enough to expect them in a university-based project on a slim budget; yet they would readily accept that books can be popular without high production values. In a post discussing the reasons for the end of the Gutenberg-e scheme (<http://www.hastac.org/node/1232>), Cathy Davidson has warned that early expectations for cheap production of Web-based content were over-optimistic, and that deceptively simple Web sites depend on extensive professional teamwork.

Yet there are ample compensations. The breadth of readership is wonderful. So is feedback at speeds that leave the usual modes of response, especially in the humanities, far behind. We found that, while writing for the Web is different from writing scholarly articles, it is possible to make moderately complex arguments and to take historical specificity seriously. Some readers plan to use the exhibition in teaching and it will be interesting to see, as the academic year begins in much of the world, how this goes. The academic response indicates that Web-based publishing is on its way to acceptance. The technical demands of production remain an obstacle, but new publishing platforms (for example Wordpress) might alleviate, if not entirely remove them. Overall, the reception met and even exceeded our expectations; personally, I learned a great deal.

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## “Lusty Ladies or Victorian Victims?”

At a standing-room-only event during the 117th Annual Convention of the American Psychological Association (APA) in Toronto this past August, audiences were treated to the extremely rare, and probably unprecedented, group appearance of Dr. Lawson Tait, Dr. James Jackson Putnam, Dr. Elizabeth Garrett Anderson, and Mr. Richard Paternoster. The occasion: an early 21st century re-enactment of a late 19th-century conference to discuss a troubling case of nymphomania. The event was particularly unusual because all of the presenters have been dead for at least 90 years. Bringing them, and their views on women, madness, and sexuality to life were Jennifer Bazar, Lisa Held, Kelli Vaughn-Blount, and Laura Ball, four doctoral students in the History and Theory of Psychology graduate program at York University in Toronto.

Bazar, Held, Vaughn-Blount and Ball began to conceptualize their dramatic re-enactment in the fall of 2008, during a graduate reading course on the history of women and the asylum directed by Alexandra Rutherford. The course readings, which focused on the links between gender, insanity, and sexuality in the mid-to-late 19th century, prompted them to consider multiple historiographic issues, including a close evaluation of whose agendas and perspectives were represented in both primary and secondary readings. With their intellectual curiosity piqued, and their creative juices flowing, the students came up with an

idea for a course assignment.

The resulting script, entitled “Lusty Ladies or Victorian Victims: Perspectives on Women, Madness, and Sexuality,” was based entirely on segments taken from 19th century American and British primary source materials. Represented were the perspectives of Lawson Tait (Bazar), a women’s surgeon and gynecologist who pioneered the ovariectomy as a treatment for women’s mental distress; James Jackson Putnam (Held), a neurologist and one of the most distinguished nervous disease specialists in the United States; Elizabeth Garrett Anderson (Vaughn-Blount), a female physician, surgeon, and suffragette, and the first female physician licensed and listed on the British Medical Register; and Richard Paternoster (Ball), a barrister, former asylum patient, and co-founder of Britain’s Alleged Lunatics’ Friends Society, one of the first patients’ rights groups. The combative, yet respectful, dialogue, augmented by period-appropriate costumes, vividly presented the audience with the characters’ perspectives on the social and medical treatment of women’s insanity, sexual surgeries, patient voices, the social construction of gender, neurological theories, and patient rights.

A spirited panel discussion followed the 30-minute re-enactment, with audience members posing questions to the presenters. The four students responded to questions from



Back row, from left to right, are Jennifer Bazar (Tait), Kelli Vaughn-Blount (Anderson), Laura Ball (Paternoster), and in the front, Lisa Held (Putnam).

their character’s perspective, using their knowledge from the course and their own areas of historical research. Questions included: How was female insanity defined (or who defined female insanity and to serve what aims)? Were women truly victims, as many 1970s feminist historians have suggested, and if not, how did they express their agency? How did gender affect the diagnoses and treatments selected by female physicians, compared to their male counterparts? For what other reasons, besides insanity, were women committed to the asylum? Where can patient voices be heard in this history, and what can they tell us? Are there “villains” in this history, and should we even look for them?

The Society for the History of Psychology (SHP), Division 26 of the APA, acknowledged the presentation with their Best Student Paper Award for this year’s program. SHP’s Student Awards Committee described the performance and subsequent discussion as “innovative and original.” And by the way, they all got As in the course!

— by Alexandra Rutherford

### Lone Star Historians of Science

The Lone Star History of Science Group welcomed Angela Creager of Princeton University as the speaker at its 22nd annual meeting, held on 27 March 2009 at Rice University in Houston. Cyrus Mody hosted the meeting, which was sponsored by Rice's Humanities Research Center.

Creager, a native Texan, earned a bachelor's degree in biochemistry and English at Rice before heading to UC-Berkeley to complete a Ph.D. in biochemistry in 1991. She then moved into the history of biology and, after postdoctoral work at Harvard and MIT, has taught in the history of science program at Princeton since 1994. Her book *The Life of a Virus: Tobacco Mosaic Virus as an Experimental Model, 1930-1965* appeared in 2002, and she is currently studying how radioisotopes were used in biomedical research in the mid-20th century.

At the Lone Star meeting, Creager spoke on "Tracing Radioisotopes through the Biomedical Complex, 1935-1955: From Gift Exchange to Commodification in the Atomic Age," focusing on the consequences of the transition from the early production of radioisotopes in cyclotrons to their mass-production in the X-10 reactor at Oak Ridge, Tennessee, the first big nuclear reactor built as part of the Manhattan Project, and their subsequent distribution for biomedical uses. As the nuclear arms race took off in the late 1940s and early 1950s, the U.S.

government sought to emphasize its radioisotope program as a way to show that atoms could cure as well as kill. Deftly illustrating her presentation with anecdotes and images, Professor Creager showed how the intersection of military and biomedical concerns behind the radioisotope program both propelled and constrained efforts to promote nuclear medicine and biology. In particular, radioisotopes shifted from being "gifts" exchanged by individual researchers to commodities distributed and controlled by government agencies. After lively discussion of Creager's talk, the group headed off to enjoy dinner and further conversation at the Black Lab restaurant (named for the breed of dog, not for some dark and mysterious experimental space).

Each spring, the Lone Star Group draws together historians of science, technology, and medicine from around Texas and the Southwest to discuss their shared interests and enjoy a friendly meal. Its constitution, adopted over dinner in an Austin restaurant in 1988, provides that there shall be "no officers, no by-laws, and no dues," and the group remains resolutely informal. The next Lone Star meeting will be held at Texas A&M University in College Station, Texas, in April 2010. Anyone interested in attending should contact Tony Stranges of the Texas A&M History Department at [a-stranges@tamu.edu](mailto:a-stranges@tamu.edu).

Seated: Steve Kirkpatrick, Victoria Sharpe, Angela Creager, Anna Fay Williams. Standing: Roger Hart, Colleen Witt, Helen Hattab, Angela Smith, Bruce Hunt, Frank Benn, Alberto Martínez, John Zammito, Tom Williams, Cyrus Mody, and Anthony Stranges.





## Centaurus, an International Journal of the History of Science and its Cultural Aspects: A New Face at a Respected Journal

When I tell my American colleagues that I will be the new editor of *Centaurus*, I run the risk of an uncomfortable silence. The reason is not, as I originally thought, because I am Dutch instead of Danish, but that my colleagues don't know about the very existence of this "International Journal of the History of Science and its Cultural Aspects." This is all the more striking, because in 2008 *Centaurus* celebrated the publication of its 50th volume. Although *Isis* is now publishing its 100th volume, most history of science journals are considerably younger than *Centaurus*, which celebrated its 50th volume with a special issue that reflected on the past by reprinting some classic articles and looked into the future through contemporary comments on these classics.

The editors of *Centaurus* have always demonstrated a good mix of acknowledging past developments along with present and future trends. Its founder, Jean Anker, reacted in 1950 to a "demand for facilities for publication" in the future, because of past developments of "increasing interest in the study of the history of science." The journal was founded with the aim of being an "international journal of an independent character." The hitherto exclusively Danish editors served the international professional community well by giving historians of science the opportunity to publish their scholarship in a first-class journal.

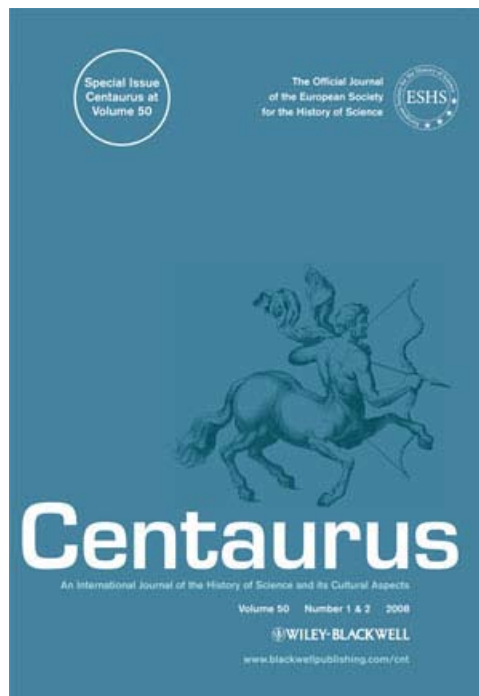
Over the years interest in the history of science increased and the discipline went through a process of institutionalization and professionalization. More journals were established. Many countries started

national journals in their own language and founded national history of science societies. International

and national journals and societies existed side by side. Although it took quite some time, ultimately political, economic, and social developments in Europe resulted in the establishment of a European Society for the History of Science (ESHS) in 2004. The editor and staff at Aarhus University, the home base of *Centaurus*, realized the moment had arrived for *Centaurus* to become the journal of that European society, although with the journal retaining its international and therefore transcontinental character. In 2007 *Centaurus* became the official journal of the European Society.

Although a non-Danish editor can be considered a natural step in the process of *Centaurus*' transformation, I was nevertheless surprised when asked to become editor. Under the guidance of Hanne Andersen, the process started by Helge Kragh – to broaden the scope of the journal and to let it reflect the latest developments in the discipline – was coming to fruition. I saw no reason to move the journal from its home base in Aarhus, where it has been nurtured almost its whole lifetime.

I was surprised not only because I was not Danish, but also because I was mainly focused on the American and the international history of science communities. I regularly attend the HSS annual meetings and participate in sessions about statistics, genetics, and women and gender in science. I also serve in various capacities, among others on the *Isis* editorial board and the Margaret W. Rossiter History of Women in Science Prize Committee. On the



international level I was for eight years the president of the Women's Commission of the international organization of history of science (IUHPS/DHST) and have been a member of the Executive Council.

But for the past couple of years I have been a dedicated associate editor of *Centaurus*. I was convinced that a journal connected to the European society would have good prospects and regularly discussed that with Hanne, the editor. I therefore trust that my taking over the editorship will again turn out to be a good combination of past attainments and future trends. I have become an honorary member of the Aarhus Science Studies Department, where the assistant editor Claire Neesham is also located. Although I am not Danish, the basis of the journal will remain in Aarhus, where it is well taken care of.

In the near future my aim is to further cultivate the relationship with the European Society, but also to offer members of the international history of science community a journal in which to publish papers that treat broad issues of general interest. My ambition, like my predecessor's, is that the journal also be used to inform ourselves about important trends in our discipline. These aims will be pursued by special submissions, one of which is a spotlight section that will bring together a number of shorter articles that focus on a common theme. This feature will offer contributors the opportunity to raise issues concerning current historiographical discussions. Another development is a section for scholarly interaction through a target article with invited commentaries and author response.

I look forward to receiving high-quality papers via our electronic submission system (see <http://mc.manuscriptcentral.com/cnt>). I am open to suggestions about topics for future spotlights sections and target articles. You can always reach me by e-mail, [stamhuis@few.vu.nl](mailto:stamhuis@few.vu.nl). I hope that *Centaurus* will receive its well-deserved place in the American history of science community. Take a look at <http://www.wiley.com/bw/journal.asp?ref=0008-8994>.

— by *Ida Stamhuis*



In this picture, taken in Aarhus, you see from left Claire Neesham, the assistant editor, Helge Kragh, Hanne Anderson, myself and Kirsti Andersen. Together Helge, Hanne and Kirsti cover many years of editorship.

## Report from the First World Congress of Environmental History

The first World Congress of Environmental History (WCEH) was held in August 2009 in Copenhagen. Titled “Local Livelihoods and Global Challenges: Understanding Human Interaction with the Environment,” WCEH included more than four hundred presentations with 560 participants from 45 countries.

Denmark was a significant choice for the first WCEH since it was the first country to establish a Ministry of the Environment, in 1971. The venue and participants shifted the narrative from an American-dominated version of the evolution of environmental history to one that includes the contributions of various countries and movements that preceded the work of Rachel Carson’s *Silent Spring*, such as the global movement to end nuclear weapons testing in the 1950s.

A sampling of just a few of my favorite panels shows the scope of the World Congress and its emphasis on a multinational analysis of policies and issues: the co-option of environmental rhetoric by NATO and Spain; recent deforestation in the coastal forests of Brazil; changing perceptions of the Arctic; the place of animals in environmental history; and making warfare’s consequences visible.

These broad views were enhanced by indigenous perspectives that created an emerging global narrative of responses and practices. For example, the Mowachaht Muchalaht First Nation, an indigenous village in Canada, experienced disproportionate exposure to industrial toxins. The case revealed the limits of western science to detect what was sensed as poisonous by the Mowachat Muchalaht and this mirrored the experience of the Navajo Nation with uranium mining pollution in the United States. For me, WCEH fulfilled environmental history’s promise to be a working template to respond to global issues, a response not limited by borders or language.

I was also privileged to participate in a pre-conference workshop for PhD students held at Roskilde

University 1-3 August, organized by European leaders in environmental history, including the chair of the World Congress Program Committee, Verena Winiwarter, who helped usher the inaugural meeting of the World Congress into reality.

At the pre-conference, Winiwarter shared her design of the “T” model of environmental history pedagogy. We broke into small work groups that mixed scientists with social scientists – based on Roskilde’s progressive multidisciplinary research units – to create a proposal using ecological history to address complex current issues. I experienced the value of combining these different approaches to address environmental history as a competent discipline (the vertical line of the T) in an interdisciplinary conversant style (the horizontal line of the T, which reaches out in understandable terms to a variety of disciplines). The T model acknowledges the need for holistic approaches to address complexity – while highlighting the case-study approach – and prepared me to glean the most out of the World Congress.

*WCEH was organized by the International Consortium of Environmental History Organizations, Malmö University (Sweden) and Roskilde University (Denmark) and included organizers from Brazil, Switzerland, UK, India, South Africa, France, Canada, China, United States, Ireland, the Netherlands, and Germany.*

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