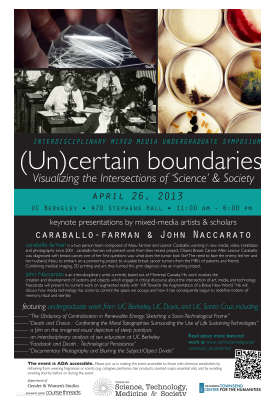
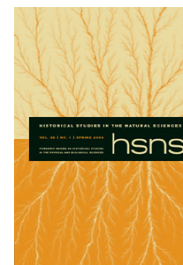
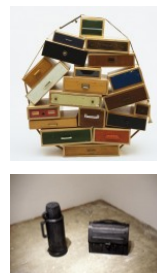
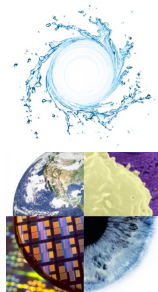




Center for Science, Technology, Medicine & Society

CSTMS @ Berkeley



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Director's Narrative

By Cori Hayden, Outgoing CSTMS Director

Inaugurated in the fall of 2009, the Center for Science, Technology, Medicine, & Society (CSTMS) is a major interdisciplinary center on the Berkeley campus, and a flagship unit within the newly constituted Integrative Institute for the Social Sciences. CSTMS is a consolidated, dynamic home for Berkeley's intellectual communities in Science and Technology Studies, the History of Science and Technology, and the Medical Humanities. In the two years since the Center's previous report, CSTMS has continued to grow and to register significant success in our three major areas of activity: pedagogy and student training; interdisciplinary research; and innovative programming and outreach.

Reflecting the diversity of our constituent communities—which has benefitted from strong involvement of our faculty, graduate students, undergraduates, and visiting scholars—the Center continued to build its footprint in 2011-2013. We organized 10 major conferences and symposia, from the STS Forum on Fukushima (with Rensselaer Polytechnic Institute) to Enlightenment 2.1.3; we held public lectures by over 30 invited speakers from across the world; and we hosted 33 visiting scholars from Europe, East Asia, the US, and Latin America.

We also secured funding for new research and pedagogical initiatives. The latter has largely been made possible by the intellectual energy provided by our three Postdoctoral Fellows and our Associate Director for Research. As a continuing NSF-funded postdoctoral fellow with PI Cathryn Carson, Dr. Mary Sunderland has created groundbreaking, effective pathways for teaching Ethics for Engineers within the College of Engineering. Dr. Harlan Weaver (CSTMS NSF Postdoctoral Fellow) organized two high-profile workshops on Critical Animal Studies (including the Spring 2013 Funny Kinds of Love: The Ethics and Affects of Human-Animal Relationships), drawing on his own research on the sciences of kind and breed. Dr. Nicholas D'Avella received a two-year grant from the UC Humanities Network for a multi-campus initiative on Cloud and Crowd, which will generate multiple opportunities for graduate and faculty involvement on campus and within the UC system. Alongside our postdoctoral fellows, the Center's growth reflects the efforts of our Associate Director for Research, Dr. Samuel Evans. Among his many achievements, Dr. Evans has developed the Center's international profile in the arenas of Security, Policy, and STS, with an IGCC seed grant on Science Governance and Risk Futures (with co-PI Professor David Winickoff) that led to Prof. Winickoff's successful bid for an NSF project on geoengineering and Dr. Evans' collaboration with several British universities (Exeter, UCL, Bradford) on a project analyzing security concerns within the life sciences. Together, our researchers have brought wonderful intellectual energy, programmatic substance, critical mass, and new opportunities to CSTMS.

The graduate communities in History of Science & Technology, and Science & Technology Studies are also thriving. Our second cohort in the Graduate Designated Emphasis (DE) in STS was admitted in Fall 2012, and the DE students initiated the new STS Working Group and organized a major Spring 2013 conference, “Is there a New Development?” The OHST Working Group and Master Class series are also thriving, and we congratulate two of our 2013 graduates in the Designated Emphasis and in OHST (Emily Redman) for receiving tenure-track jobs in major universities within the US. Javiera Barandiaran will take up a position as Assistant Professorship in Global Environment and Law at UC Santa Barbara’s Global & International Studies Program. Emily Redman has accepted an Assistant Professorship in the University of Massachusetts Department of History.

CSTMS undergraduates, funded through the Townsend Center’s Course Threads program, conceived and organized our first Undergraduate Science and Technology Studies Symposium, “(Un)Certain Boundaries,” in Spring 2013. The event was notable for its scope and degree of participation, drawing over 20 undergraduate presenters from UC Santa Cruz, UC Davis, and UC Berkeley, and featuring keynote presentations on the interface of art and science from visiting artists John Naccarrato (Montreal) and caraballofarman (New York).

Other conference highlights included the highly successful “Boundaries of Narrative” event (April 2013) organized by the Program in Medical Humanities (PMH) and the Fourth West Coast Symposium in the History of Medicine (May 2013), a collaboration between OHST and the University of Calgary.

The Center’s outreach efforts also included the publication of 8 new issues of the leading academic journal, *Historical Studies in the Natural Sciences*, and we are currently overseeing several extramural grants.

CSTMS’ growth and dynamism in this period has been based in part on the effective use of start-up funding, supported by renewable funds. In the coming years, we foresee enhanced synergy with the newly-constituted Institute for the Integrative Social Sciences, which we will be an important partner in developing new research collaborations and funding opportunities.

Finally, I am pleased to welcome our new Director, Massimo Mazzotti. Professor Mazzotti is a core member of the CSTMS community and the current Director of OHST. In line with our by-laws and governance structure, Professor Mazzotti will serve as Director for the next three years, beginning July 2013. CSTMS has a great deal of momentum, and we look forward to this next phase in the Center’s trajectory.



Cori Hayden
Associate Professor

Organization and Capacities

CSTMS promotes rigorous cross-disciplinary inquiry at the intersection of science, technology, medicine and society, and generates critical engagement with our findings within academia, industry and policy arenas, and society at large.

The Center is led by a director (Cori Hayden, outgoing; Massimo Mazzotti, incoming), and is aided by a faculty Associate Director (David Winickoff) responsible for instructional programs, and the Associate Director for Research (Sam Evans). Administrative work at the Center is handled by an Assistant Director (Diana Wear) and several student workers (2012-2013 workers were Kristine Yosihara, Lindsay Crawford, and James Anderson).

For regular advice, the Director meets with an academic steering committee. The academic steering committee is composed of faculty who are directly involved in CSTMS's activities, including the heads of the Center's subsidiary units. The Center also convenes a larger faculty group on a more infrequent basis to foster dialogue on their shared research interests, and on the vision and structure of the Center's events and research programs.

CSTMS carries out its mission through center-wide programs, faculty initiatives, and topical research units. Its current subsidiary units are the following: (see Appendix 1 for descriptions of each):

- The Office for History of Science and Technology
- The Science, Technology, and Society Center, and
- The Program for the Medical Humanities

The Center seeks to support other relevant programs, and it encourages faculty proposals for new programming. Units, initiatives, and programs report to the director of CSTMS, who, in consultation with the academic steering committee, decides on their establishment, scope, resources, and terms.

CSTMS is set up to house research grants. It can administer research allowances for faculty members. These funds remain under the fiscal discretion and responsibility of the PI or faculty member. Programmatically, any program or unit within CSTMS that draws on faculty research allowances reports to the program or unit head (which may be the individual faculty member) and, through the program or unit head, to the director of CSTMS.

CSTMS partners with the campus' Research Enterprise Services (RES) for administrative services.

Achievements and Impact

Strengthening Pedagogy

CSTMS now oversees a wide range of teaching programs for Berkeley undergraduates and graduates. In 2011-2013, we continued to grow our undergraduate and graduate training programs. CSTMS is also home to the Science and Technology Studies Graduate Group, which officially confers the DE in STS.

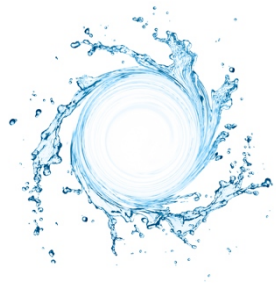


Undergraduate Course Thread in The Sciences and Society

The undergraduate Course Thread in Sciences and Society is essentially a path of relevant courses in all Divisions and Colleges on campus that can help Berkeley undergraduates explore or develop new interests in the humanistic and social dimensions of science, technology, and medicine. Courses cover topics as varied as the changing horizons of political action and social justice (as with social media and revolution); the intersections of literature and life sciences; and biomedical ethics.

The Course Thread on The Sciences and Society was mentioned as an **exemplar of the new model of undergraduate education** in the L&S Faculty Forum report on Re-Imagining Undergraduate Education at Berkeley. For more information on the program, see <http://coursethreads.berkeley.edu/course-threads/sciences-and-society>.

In April 2013 a group of five highly motivated undergraduate students organized an intercampus and interdisciplinary STS undergraduate conference addressing the “uncertain boundaries” between science and society (more below). With participation from UC Davis, UC Santa Cruz, and UC Berkeley undergraduates, as well as two outside keynote speakers, the event was an important milestone for the CSTMS community. More information about the conference can be found below in our narrative of Special Events.



PhD Designated Emphasis in Science and Technology Studies

UC Berkeley boasts one of the strongest concentrations of faculty in the United States working in Science and Technology Studies (STS). In late 2011, the University approved the new PhD Designated Emphasis (DE) in STS. The DE provides advanced graduate training in this field for UC Berkeley PhD students. It is also a valuable

recruiting tool for top PhD students whom Berkeley has too often lost to universities with formal Science Studies programs. The DE is run by Associate Professor David Winickoff (ESPM). Our current students are:

- **James Anderson** PhD Candidate, History of Science
- **Javiera Barandiaran** PhD Candidate, Environmental Science Policy and Management
- **Patrick Baur** PhD Candidate, Environmental Science, Policy and Management
- **Liz Carlisle** PhD Candidate, Geography
- **Shannon Cram** PhD Candidate, Geography
- **Michael D'Arcy** PhD Candidate, Joint Program in Medical Anthropology, UCB, UCSF
- **Eduardo A. Escobar** PhD Candidate, Department of Near Eastern Studies
- **Dana Greenfield** PhD Candidate, Medical Anthropology
- **Freyja Knapp** PhD Candidate, Environmental Science Policy & Management
- **Matt Langione** PhD Candidate, English
- **Greta Marchesi** PhD Candidate, Geography
- **Victoria Massie** PhD Candidate, Anthropology
- **Heather Mellquist** PhD Candidate, Geography
- **Michael Mendez** PhD Candidate, City and Regional Planning
- **Ryan Whitacre** PhD Candidate, Medical Anthropology

The PhD DE students have become so engaged in their STS training that they set up their own **STS Working Group**, which meets bi-weekly and provides a forum to share and discuss works in progress and review key and novel papers in the field. It also serves as a place to plan workshops, including the very successful “Is there a New Development?” workshop held in April 2013 (more below).

Javiera Barandiaran is our first graduate of the DE, and has accepted an Assistant Professorship in Global Environment and Law at UC Santa Barbara's Global & International Studies Program. Barandiaran's dissertation, *Contesting Democracy, Buying Experts: Environmental Conflicts and Assessments in Chile*, examines how scientific and technical rationality are used in public decision-making.



Graduate Training: History of Science

The existing PhD graduate field in History of Science continues to be a leading training ground for PhD students in this field. Run by OHST, the program provides critical research experience for graduate affiliates, of whom there were 8 in 2011-2012. Four graduate students were supported by OHST's research and publishing projects. Current PhD students are:

- **James Anderson**
- **Angelo Matteo Caglioti**
- **Darren Hsiung**

- **Doug O'Reagan**
- **Emily Redman**
- **Daniel Robert**
- **Matthew Sargent**
- **James Skee**

We send our congratulations to our students who completed their dissertations this year:

- **Andrew Mamo** "[Post-Industrial Engineering: Computer Science and the Organization of White-Collar Work, 1945-1975](#)"
Mamo is currently a student at Harvard Law School
- **Theodore Varno**
Varno teaches high school in Los Angeles
- **Alyse Han**
Han is Psychiatrist at UCSF
- **Emily Redman**
Redman will be completing her PhD in the Summer of 2013, and will begin an Assistant Professorship in History of Science at University of Massachusetts, Amherst

Special Events

The Center hosted 10 major conferences and symposia during 2011-2013.



Enlightenment 2.1.3 (2 October 2011)

Co-sponsored by CSTMS, the Department of History, and the Division of Social Sciences



BerkeleyDesignSTS (2 December 2011)

This workshop explored the social and cultural dynamics of contemporary design. It was a chance to foster dialogue among the design studies community, professional designers and architects, historians, and science and technology studies scholars. These communities often engage very similar objects and problems, and the Center used this event to strengthen their interaction, analytic insights, and practical implementations. From urban planning to the design of everyday objects to creating our digital landscape, questions of design led each of these communities to rethink how the social is embedded in and shaped by our built environment. Some of the themes that we engaged with included: materials and their politics; fabrication, labor, and

craft; the built, the made, the real, the discursive; changing conditions of knowledge- and thing-production; new and old; innovating, imitating, and replicating.

WHAT'S NEW ABOUT

NEW MATERIALISMS—?

What's New about New Materialisms? (4-5 May 2012)

CSTMS's inaugural graduate student symposium, this event took as its starting point the view that the social sciences and humanities have long been engaged in the study of matter, materiality and materialisms. So what to make of recent announcements of the arrival of a variety of “new materialisms”? This conference brought together scholars from across the university and country to discuss a multiplicity of orientations and critical approaches to the use—and in some cases misuse—of the term and conceptual apparatus of “new materialisms” in their own work. Intentionally named as a question, What's New about New Materialisms? was intended as an exploration of the benefits and limitations to “new” modes of thinking about and through the material. The four questions that guided contributors' presentation are: What is new about matter? What is a method adequate to a new matter? Do “new materialisms” mark the limit of discourse? How might we attend to materiality as a property of the digital? The first day of the conference featured faculty presentations, including two keynote addresses, and the second day featured papers by graduate students. See <http://cstms.berkeley.edu/current-events/whats-new-about-new-materialisms/> for further information. The conference was organized by Eric Plemons, Daniela Rosner, and Michael D'Arcy.



Pedagogy and the “Animal Turn”: A Workshop (2 November 2012)

This workshop took up the recent “animal turn” in light of pedagogy, asking: what does it mean to teach about and with animals now? While earlier work in the humanities and sciences tended to focus, for example, on whether animals suffer, on the nature and ethical implications of speciesism, what it means to consume an animal, and how animals relate to one another, recent scholarship has augmented these conversations. Animal cultures, human-animal relationships, and human exceptionalism are just some of the more recent focal points scholars have introduced. Some questions have become more prominent, such as, for example, how do animals thrive? Or, in what ways do human/animal relationships inform not just species-specific divides, but also other categories such as breed, race, ability, gender, and sexuality? And how are the sciences that figure in human/animal relationships, such as applied animal behavior, caught up in these categories? While this is a deliberately broad description, it speaks to a recent and notable surge in the field of animal studies indebted to new scholarship highlighting ties among animal studies,

science and technology studies, feminist studies, disability studies, postcolonial studies, queer and transgender theories, indigenous studies, and critical race scholarship. Taking this recent work as a starting point, this workshop aims to facilitate discussion among interested scholars about pedagogy after the “animal turn.” The workshop was organized by Harlan Weaver, NSF Postdoctoral Scholar.



Is there a New Development? (5-6 April 2013)

This symposium brought together scholars from both the STS and the development studies communities and provided a forum in which some of the most contemporary ideas of “development” and expertise could be debated.

Symposium participants came together from the broader Bay Area, within the United States, and from across multiple continents. The two-day event held 8 sessions and approximately 20 individual paper presentations and a special session dedicated to a broader discussion. Emerging themes ranged from ironic perceptions of local knowledge or the “dialectic of confirmation and critique” that is embodied in all; the usefulness of thinking of southern- versus northern-led development projects; social science researchers as experts in practice; the future of critique; and new entanglements of experimentation, politics, capital, bureaucratic logics, and the material. The keynote speaker, Professor Richard Rottenburg gave an address that was both accessible to a wide audience and conceptually provocative, in which he suggested a new post-critique approach to social inquiry that embodies compassion, responsibility, and an acceptance of uncertainty. In all, approximately 75 people shared differing notions of science, technology, and expertise over the two-day event. Highlights included a robust debate on the existence of a division between the global south and north, comments and discussion representing multiple departments on the Berkeley campus, and the continuation of the conversation well after the formal conclusion of the event on Saturday afternoon. We hope to keep this discussion alive in future events with similar themes—this symposium was just one such gathering in a growing explicit conversation around “development” and STS.

Boundaries of Narrative: A Symposium in the Medical Humanities (19-20 April 2013)

Organized by Dr. Guy Micco of the Program in Medical Humanities, this symposium invited 20 participants to reflect on the place of narrative within the practice of medicine, and in the trajectory of the medical humanities more broadly. Organizing themes included Narrative Genres and Unauthorized Narratives; Aging, Sex, and Death; and the Symbiosis of American Medicine and Media.



(Un)certain Boundaries: Visualizing the Intersections of Science & Society (26 April 2013)

Under the guidance of CSTMS Director Hayden and with administrative support from the CSTMS office, a group of five highly motivated undergraduate students organized this interdisciplinary STS undergraduate conference addressing the “uncertain boundaries” between science and society. Nineteen undergraduate speakers from UC Berkeley, UC Santa Cruz, and UC Davis presented on research topics including social media and the deceased, a linguistic perspective on autism, and race-targeted pharmaceutical drugs. Presenters came from a number of departments including Geography, History, Bioengineering, Cognitive Science, and Anthropology. In addition to traditional research talks, students also presented their work through dance, film, and five-minute “implosions.” The conference featured presentations from invited mixed media artists. Canadian artist John Naccarato opened with a talk on augmented reality in today’s ubiquitous technology. The team caraballo-farman closed with a multimedia performance piece examining Leonor Caraballo’s diagnosis of breast cancer and their subsequent efforts to visualize this experience using 3-D printing and medical imaging.



Funny Kinds of Love: The Ethics and Affects of Human-Animal Relationships (9-10 May 2013)

With collaboration and funding from CSTMS, the Townsend Center for the Humanities, Gender and Science, and the Department of Environmental Science, Policy and Management, this conference explored the ethical

implications of the various kinds of love that suffuse relationships between humans and non-human animals. A wide range of academic papers were presented, with topics ranging from the question of mosquito desires to the interspecies ethics of veterinary euthanasia. There were also a number of non-academic presentations, including films exploring the work of a local low-income mobile veterinary clinic and an eco-poetic performance. Professors Donna Haraway, Colin Dayan, and Eduardo Kohn held a keynote discussion on spaces of play in times of crisis, tensions in human/non-human worldings, and canine profiling and summary disposal. Participants from McGill University, University of Alabama, Vanderbilt, UNC Chapel Hill, University of Chicago, Cal State Chico, Stanford University, University of Wisconsin, the Norwegian University of Science and Technology, Claremont Graduate University, University of Cincinnati, UC Santa Cruz, UC Davis, and UC Berkeley, the National Museum of Animals & Society, as well as numerous Bay Area advocates, artists and activists joined NSF Postdoctoral Fellow Harlan Weaver in a multidisciplinary exploration over the space of two days.



Fourth West Coast Symposium in the History of Medicine (10-11 May 2013)

This symposium gathered graduate and postdoctoral students, new scholars, and senior undergraduates from across North America working in all fields related to the history of medicine and the life sciences from ancient times to the modern period. It was hosted by the Office for History of Science and Technology in combination with the

Department of Greek and Roman Studies and the History of Medicine and Health Care Program at the University of Calgary. Papers focused on the emergence of biomedical science, the social history of medicine, the history of medical disciplines, medical epistemology, the history of disease, cultural concepts and the medical marketplace. The event was an opportunity to foster interdisciplinary and trans-chronological exchanges and to provide a safe forum in which new and emerging scholars could share and discuss research with peers and faculty from a variety of disciplines and institutions. Calgary Professor Frank Stanish, who is also a Visiting Scholar at CSTMS, ran the Symposium.

STS Forum on the 2011 Fukushima/East Japan Disaster (11-14 May 2013)

This workshop was part of a larger project with Rensselaer Polytechnic Institute (RPI) that contributed to nuclear policy formulation in Japan following the Fukushima disaster, while simultaneously building up an international network of social science and humanities researches focused on the dynamics of industrial and environmental disasters. The workshop organized a network of scholars engaged with the recent Japanese nuclear disaster at Fukushima, attentive to problems voiced by Japanese scholars at the recent (co-located) meetings of the Society for Social Studies of Science (4S), and the Society for the History of Technology (SHOT).

More than 50 scholars gathered in Berkeley for this inaugural meeting of the STS Forum. Sponsored by the NSF and hosted by CSTMS, the conference participants pre-circulated papers and worked to build a transnational research agenda for further study. Topics of discussion included clarifying the perspective of Disaster STS, analyzing the role of social media in structuring information access, improving policy responses, comparing the Fukushima accident to other catastrophes, and examining cultural memories of disaster. The event was highlighted by a keynote lecture by Dr. Tatsujiro Suzuki, Vice Chair of the Japanese Atomic Energy Commission. The event was run by CSTMS Prof. Cathryn Carson and RPI Prof. Atsushi Akera.

Other Co-Sponsored Workshops

The Center also provided funding and support for several other workshops on campus.

- “Cancer Knowledge in the Plural: Communication of Presence, Trans|Media and the Queer Biopolitics of Prosthetic Mobilities” with Mel Chen and Gender & Women Studies
- Critical Psychiatry Medical Anthropology International Workshop (UCSF)
- “Theory and Practice of Dual-Use” workshop at Stanford (run by the American Academy of Arts & Sciences and hosted at the Center for International Security and Cooperation)
- Mutated Text Workshop
- “Science, Intellectual Property, and Innovation” (Bob Barde)
- Trans-Formation event
- NSF Dissertation Improvement Grant Workshop
- Bioethics and Sciences of Aging: The Case of Dementia
- Vital Signs: The State of the Art and Science of Medicine and Society

Synergistic Activities

The Cloud and the Crowd



This project explores the histories, contemporary forms, and conceptual and political implications of “cloud” and “crowd.” Crowd-sourcing, cloud computing, social media, and the rise of Big Data are implicated in powerful transformations in the fabric of our economic, social, and technical worlds. These shifts range from new senses of political possibility to enhanced modes of surveillance and crowd control; from collaborative

platforms for innovation to the radical dispersal of labor; from new modes of visualizing ecological change to the reconfiguration of disaster relief. Bringing into conversation scholars working at the leading edges of science and technology studies, history, social theory, and computing and engineering, this project creates a platform for critical, collective reflection on the rise of the cloud, and the return of the crowd, in different ways across the globe. Project events will include working groups, an interdisciplinary conference, course development, and more.

CSTMS Colloquium

The CSTMS Colloquium is a seminar series of invited lectures that is hosted by CSTMS, on Thursday from 4-6pm in 470 Stephens Hall during each semester. They are often sponsored by research units within CSTMS, and occasionally co-sponsored by other units at Berkeley and other UC campuses. With the speaker's permission, these events are streamed live on our website.

Selected Colloquium Talks from Fall 2011- Spring 2013

<i>"Greening" Chemistry: A Missing Affective Dimension</i> Alastair Iles ESPM, UC Berkeley 22-Sep-11	<i>The Worm, the Apple and the "Consumerization" of Hacking Practices and Culture</i> Paolo Magaudda Università di Padova 6-Oct-11
<i>How to Knit a Popular History of Media</i> Kristen Haring Auburn University & Stanford Humanities Center 13-Oct-11	<i>A Tenth of a Second</i> Jimena Canales Harvard University 27-Oct-11
<i>Fascist Pigs: Genetics, Food, and Fascism</i> Tiago Saraiva History Department , Berkeley; Research Fellow Institute of Social Sciences, University of Lisbon Dec 2011	<i>Sublime Astronomy and the End of the Enlightenment: Adam Walker and the Eidouranion</i> Jan Golinski University of New Hampshire 9-Feb-12
<i>The Fog of Freedom</i> Christopher Kelty University of California, Los Angeles 16-Feb-12	<i>The Body in Aesthetic Experience: A Neuroscientific Perspective</i> Vittorio Gallese University of Parma & IIT (Italian Institute of Technology) Brain Center for Social and Motor Cognition 23-Feb-12
<i>Steps Toward an Anthropology of the Human Subject in Experimental Psychology</i> Emily Martin New York University 15-Mar-12	<i>Control in the Operating Room</i> Rachel Prentice Cornell University 5-Apr-12
<i>American Metabolism</i> Hannah Landecker University of California, Los Angeles 19-Apr-12	<i>Wittgenstein, Metrology, Certainties</i> Martin Kusch Department of Philosophy, University of Vienna 12-Sep-12

<p><i>Hide and Seek: Camouflage, Photography, and the Media of Reconnaissance</i> Hanna Rose Shell Program in Science, Technology, and Society, MIT 27-Sep-12</p>	<p><i>Nuclear State of Exception: Nuclear Weapons, Sovereignty, and Geopolitics/Biopolitics</i> Jeffrey Bussolini Sociology, Anthropology and Social Work, CUNY-College of Staten Island 11-Oct-12</p>
<p><i>A Medium is a Medium is a Medium': Ectoplasm and the Quest for a Supra-Normal Physiology</i> Robert Brain Department of History, University of British Columbia 18-Oct-12</p>	<p><i>Enhancing Value, Reproducibility, and Access: Challenges in Scientific Publishing</i> Philip Campbell Editor in Chief, Nature 25-Oct-12</p>
<p><i>Vitreous Pursuits</i> Sven Dupré Freie Universität Berlin 1-Nov-12</p>	<p><i>Between Teleology and Mechanism: A Philosopher Looks at the History of the Concept of Organism</i> Spyridon Koutroufinis Technical University of Berlin 29-Nov-12</p>
<p><i>Estimating Ignorance: Revelations, Expertise, and Counts of the Dead</i> Brian Rappert University of Exeter 24-Jan-13</p>	<p><i>The Galileo Affair and the Berkeley Para-clericals</i> Maurice Finocchiaro University of Nevada, Las Vegas 21-Feb-13</p>
<p><i>Beyond the Bush Pump: Microworlds of Humanitarian Design</i> Peter Redfield University of North Carolina, Chapel Hill 14-Mar-13</p>	<p><i>The Russians Are Writing!: The Cold War Crisis of Scientific Translation</i> Michael Gordin Princeton University 21-Mar-13</p>
<p><i>Self-experiment, Sex, and the Care of the Self: Newton's Private Life in the Age of the Web</i> Rob Iliffe University of Sussex 11-Apr-13</p>	<p><i>Augmented Reality: Towards the Augmentation of a Brave New World</i> John Naccarato 25-Apr-13</p>
<p><i>Cursed Immortality: Temporality and Crisis in Contemporary Speculative Fiction</i> Donna Jones Department of English, UC Berkeley 2-May-13</p>	<p><i>Science at the Metaphysical Society: Defining Knowledge in the 1870s</i> Bernard Lightman York University; Editor, Isis 8-May-13</p>

Working Groups

Working Groups meet in the common space of the Center (470 or 543 Stephens Hall) for research and writing collaborations. All members of the campus community are invited to propose and form working groups. CSTMS provides meeting space and infrastructure. 2011-2013 there were the following working groups:

Science Governance & Risk Futures Working Group



The idea that political collectives have a legitimate role in governing scientific experimentation is well established where the experiments carry immediate risks to the health of research participants, researchers themselves, or the environment. Less well understood are public claims to regulate scientific activity not because of any immediate risk, but because there are foreseeable uses of the knowledge that carry potential hazards to health, social stability, or security. In these cases, given the stakes of technoscientific trajectories, should the political collective have the authority to regulate experimental activity “upstream”? If so, how should this be done?

This Working Group discusses these and related questions in the context of two cutting-edge and emerging suites of technology where immediate risks of research are not significant, but where applications could pose serious societal, political, and environmental hazards: synthetic biology and geoengineering. These technologies are chosen because issues of governance are immediately pressing, and because they will afford us some interesting comparative perspectives on technological governance more generally. This group gathers on a regular basis to discuss key texts and cases (e.g. Asilomar in the 1970s and SPICE geoengineering experiments in the UK recently) that show how states have approached this issue in the past, and what options there might be for generating better governance approaches.

STS Undergraduate Working Group

The Undergrad STS @ Berkeley Working Group is a group for undergraduates engaged in thinking, reading, writing and talking about how science, technology and medicine shape and are shaped by society. The group has three main goals: the development of a vibrant and supportive undergraduate community with shared intellectual interests in science studies across campus units; increasing knowledge of and access to campus resources that can enhance engagement with current research; promoting undergraduate curriculum development and research collaboratively. Recent activities include a film series and support for developing D.Cal courses on, for example, ADHD and an introduction to STS.

Science and Technology Studies Working Group



The STS Working Group is a group of scholars brought together by shared interest in STS practices and approaches. Research interests

cover topics in environment, technology, development, food, agriculture, and health. The working group meets periodically to share and discuss works in progress and review key and novel papers in the field. The intent of this group is to develop a community of scholars with shared knowledge.

OHST Working Group



A group composed of OHST graduate students, visiting scholars, and faculty that meets weekly for discussions on history of science topics. This working group serves as a venue for local researchers to share and receive feedback on their current research in an informal setting. Weekly speakers may be members of the working group or invited faculty from other departments.

Science, Technology & Engineering Policy Group

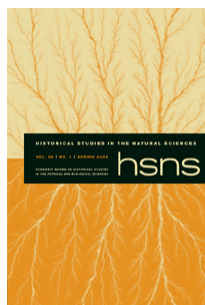


STEP is focused on creating better informed science and technology policy through collaborations between scientists and policy-makers. Many of our most pressing public policy issues have a strong science and technology component, such as developing clean sources of energy and using information technology to reduce medical errors and administrative costs in our healthcare system. However, elected officials often lack the technical expertise to make informed decisions on these issues, and scientists and engineers rarely engage in the political process. To address these needs, STEP is helping students build interdisciplinary skills at the intersection of science and policy. STEP works toward this goal through two activities: a monthly seminar series and a Science Policy Journal Club.

Visiting Scholars, Visiting Students, and Postdoctoral Fellows

CSTMS's intellectual community is enhanced through one of the most dynamic homes for visiting scholars and visiting PHD students on campus. We currently have 33 visiting scholars from Spain, Portugal, France, Austria, Sweden, Venezuela, Germany, Canada, Norway, Japan, Italy, and the U.S.

Publications

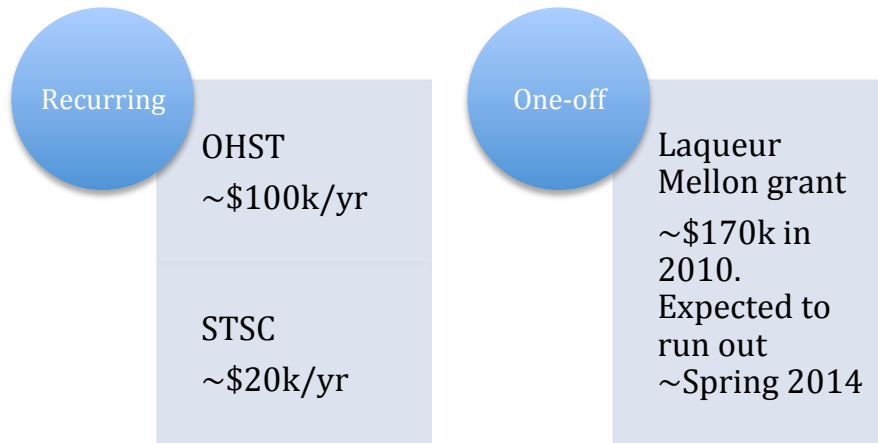


Within CSTMS, OHST produces *Historical Studies in the Natural Sciences*, a leading scholarly journal. For monographic work it disseminates the *Berkeley Papers in History of Science*. It is the original repository of the Archive for History of Quantum Physics, which it makes available to qualified researchers.

Funding

CSTMS' budget consists of two broad categories: Center support funds, and grants for research. Center support funds are used to cover the costs of our Assistant Director (Diana Wear), student workers, and to underwrite our Associate Director for Research (Sam Evans) for the portion of his salary not covered by grants and teaching. Funds have also been used to support Center events and as seed money for developing new research themes, such as Nicholas D'Avella's postdoctoral fellowship to develop the Cloud and Crowd project. Extramural grants support a particular researcher's expenses, though they may be used to cover costs of related events. *Essentially, Center support funds allow the Center to operate; grants allow it to thrive.*

Center Support Funds



Extramural Grants

In 2011-2013 CSTMS oversaw several extramurally funded projects and administered funds for many grants, such as:

Project Grant (Mellon Foundation) (\$32k)

Massimo Mazzotti

Atomic Junction: Nuclear Power in an African Suburb (NSF – OHST) (\$300k)

Abena Dove Osseo-Asare

Shaping Evolutionary Biology in Berkeley's Museum of Vertebrate Zoology (MVZ) (NSF – OHST) (\$75k)

Mary Sunderland

Mellon New Directions Post-Fellowship Award, Training in Nuclear Engineering (NSF)

Mary Sunderland

Postdoctoral Fellowship: "Dangerous" Dogs and the Fuzzy Sciences of Animal Profiling (NSF)

Harlan Weaver

Townsend Center Course Thread Development Grant (\$30k)

Science Governance and Risk Futures seed grant (UC IGCC) (\$25k)

David Winickoff & Sam Evans

Grants to support the Program for the Medical Humanities (Mellon and UCSF) (\$60k)

Tom Laqueur & Guy Micco

Grants to support various conferences (Townsend, campus funds, various departments...) (ranging from \$200-\$5,000)

URAP grants for undergraduates interested in Science and Society (\$300-600/yr)

In addition, we have several grants that will begin in the 2013-2014 year:

Cloud and Crowd Multicampus Research Group (2013-2014)

Cori Hayden, Tim Choy (UC Davis), and Anne Walsh (UC Berkeley)

The CSTMS Special Project on the Cloud and the Crowd was awarded funding to launch a Multicampus Research Group by the UC Humanities Network and the University of California Humanities Research Institute. The MRG brings together a range of humanistic scholars from throughout the system to examine the ways that innovations in media platforms, data collection, and digital labor are redefining the ways that collectives are imagined and produced. The Group will study the historical and aesthetic entailments of the 21st Century cloud and its reformatted utopian crowds; the implications for artistic creativity and labor implied in these transformations; and the political atmospheres emerging both around and through clouds and crowds.

The Formulation and Non-Formulation of Security Concerns in the Life Sciences (2013-2014) (\$47k)

Samuel A. W. Evans (Co-PI, UC Berkeley), Brian Rappert (PI, Exeter), Brian Balmer (Co-PI, UCL), Malcolm Dando (Bradford), Chandre Gould (Institute for Security Studies, South Africa)

This project seeks empirically and theoretically to assess what is not taking place in relation to the analysis of the implications of science for security. It will study what is not taking place in different case studies related to the potential for life science knowledge and

techniques to serve destructive purposes. Through doing so, the project will consider how such cases can inform other studies of emerging areas of concern and how they can inform empirical social research in general.

A number of questions that address themes of ethical blindness, taken for granted assumptions, and the social basis of assessments will be central to this project, including:

- * How, for who, between whom, and under what circumstances have some applications of science become rendered non-issues?

- * What are the everyday routines, practices, social structures that shape this process?

- * How have scientists, diplomats, security analysts, and others fostered attention to or distanced themselves from applications of their work?

The specific concern with the hostile application of the life sciences examined through the interdisciplinary programme of inquiry outlined in this application will serve as a springboard for addressing what is left outside professional and policy agendas.

Interviews will be conducted with key members of the synthetic biology community who set and/or must follow procedures for deciding what does and does not count as a security concern. The ultimate impact anticipated from this project is to support efforts to prevent the malign use of life sciences and, thus, ensuring science and technology work to improve human security.

Appendix 1: CSTMS Affiliated units 2011-2013

The Office for History of Science and Technology (OHST)



OHST advances understanding of scientific theories, practices, and technologies from their origins to the present day. Drawing from the humanities, social sciences, natural sciences, and the technical disciplines, the Office fosters broader discussion of scientific and technological developments and aims to bring a **historical dimension** to the understanding of contemporary events. OHST runs the **scholarly journal**, *Historical Studies of the Natural Sciences (HSNS)*.

The Science, Technology, and Society Center (STSC)



STSC convenes a diverse community of scholars studying the conceptual underpinnings and consequences of scientific and technological knowledge and practice. With approximately 100 affiliated faculty and graduate students in the social sciences, the humanistic disciplines, and professional and public policy fields, STSC researchers have particular expertise in the **transnational dynamics of knowledge production**, and STSC-affiliated graduate students and faculty have convened lively working groups to push common themes, from critical innovation studies to “emerging technologies”. With colleagues in OHST, STSC has contributed to placing Berkeley in the center of international research and training networks in science and technology studies.

The Program for the Medical Humanities (PMH)

PMH engages in **interdisciplinary** scholarly reflection, research, and teaching on the **goals of medicine** and the roles of physicians and other health professionals in the communities and societies of the 21st century. Through the lens of the humanities, anthropology, and the social and behavioral sciences, PMH engages critically with, and develops alternatives to, prevailing perspectives on these issues provided by medical ethics, health policy, and health law.

Appendix 2: CSTMS Organizational Structure

