USC Dornsife Research Cluster in Science, Technology and Society
Activities Report:
Fall 2010 - Spring 2013
The first decades of the 21st century witnessed a series of highly charged public controversies at the intersection of science, technology and society: political and religious groups launched an effective campaign to curb human stem cell research despite the promise of impressive medical breakthroughs; skeptics of anthropogenic climate change challenged the claims of leading climatologists in the face of widespread scientific consensus; parents of autistic children led an anti-vaccination campaign despite public health officials’ assurances of vaccine safety; and US states debated the merits of teaching creationism in public school biology classes, to the chagrin of evolutionary biologists.

Such discussions were characterized by widely divergent views on the role of science and technology in contemporary life. From one vantage, science promised to deliver improvements in collective wellbeing: better health, cleaner energy, improved knowledge of ourselves. But from another perspective, developments in science and technology provoked widespread anxiety and uncertainty: Would synthetic genomics lead to the creation of deadly new pathogens? Did genetically modified organisms pose invisible threats to the environment or to human health? Were developments in neuroscience and psychopharmacology undermining traditional notions of human agency and reason? While public officials routinely sought scientific advice in settling policy debates, they often seemed skeptical of its findings – whether about climate change or about guidelines for breast cancer screening. In many cases, economic interests, scientific advice and ethical reflection pointed in divergent and seemingly incommensurable directions.

Given the promise of continued scientific and technical innovation, on the one hand, and pervasive public anxiety on the other, these tensions are likely to intensify in the coming years. And in an era of rapid globalization, such debates will extend across political and cultural borders. The stakes for solving our most pressing social, political and environmental problems are high: as we have seen in recent years, lack of trust in the capacity of experts to contribute to political deliberations can result in paralysis, or worse. Indeed, over the next two decades many of the most crucial challenges we face will require the integration of societal values with scientific and technological developments – whether in managing end-of-life care, preserving the environment, or continuing to nurture scientific innovation.

To address these problems, the STS Research Cluster has sought to develop a unique conversation among humanists, social scientists, and natural scientists about the role of science and technology in public life. Our research cluster has two overlapping goals: first, to create a vibrant intellectual community comprised of scholars interested in the contexts in which expert knowledge is produced, the processes of its dissemination, and the societal impact of new technologies. And second, to train USC graduate students to approach these issues within the burgeoning interdisciplinary field of science and technology studies.
Mike Annany
Assistant Professor, Annenberg School of Communication and Journalism

Mike Annany’s work focuses on systems for networked journalism.

Daniela Bleichmar
Assistant Professor of Art History and History

Daniela Bleichmar specializes in the history of visual culture and the natural sciences in Europe and the Spanish Americas in the period 1500-1800.

Manuel Castells
Wallis Annenberg Chair of Communication, Technology and Society and Professor of Communication and Sociology

Manuel Castells is an expert on globalization and the information age.

K. C. Cole
Professor, Annenberg School of Journalism

K.C. Cole is a distinguished science writer and author of eight non-fiction books.

Antonio R. Damasio
David Dornsife Chair in Neuroscience and Professor of Psychology and Neurology

Antonio Damasio is an internationally recognized leader in neuroscience.

Susan L. Forsburg
Professor of Biological Sciences

Susan Forsburg is a molecular and computational biologist who studies cell division and cancer.

G. Clinton Godard
Assistant Professor of History

Clinton Godard’s research focuses on the intellectual history of modern Japan, and in particular, the hybrid zones where science, religion, and philosophy meet.
**Deborah Elizabeth Harkness**  
Professor of History

Deborah Harkness is a historian of science and medicine from antiquity to the present.

**Andrew Lakoff**  
Associate Professor of Anthropology, Sociology and Communication

Andrew Lakoff’s areas of interest include globalization processes, the history of the human sciences, and the implications of biomedical innovations.

**Katie Hasson**  
Assistant Professor of Sociology and Gender Studies

Katie Hasson specializes in the sociology of medicine, sexuality, the body, health and illness.

**Dan Lainer-Vos**  
Ruth Ziegler Early Career Chair in Jewish Studies/Assistant Professor of Sociology

Dan Lainer-Vos studies the formation of national attachments using insights from Science and Technology studies.

**Paul Frederick Lerner**  
Associate Professor of History

Professor Lerner is a historian of nineteenth and twentieth-century Germany and Central Europe with particular interest in the history of the human sciences.

**Shrikanth Narayanan**  
Andrew Viterbi Professor of Engineering, Professor of Electrical Engineering, Computer Science, Linguistics and Psychology

Shrikanth Narayanan’s research interests include human communication and information processing and theory & applications of signal processing.

**John Brooks Slaughter**  
Professor of Education, Rossier School of Education  
Professor of Engineering, Viterbi School of Engineering

**Mark Edward Thompson**  
Professor of Chemistry and Materials Science

Mark Thompson researches two principal areas: molecular/polymeric materials for optical studies and nanoscale materials and devices for sensing and catalytic studies.
STS Events, 2010-2013

Fall 2010

Oct 19: The Infrastructural Human: Food Systems
Elizabeth Dunn (Geography, University of Colorado-Boulder)
Christopher Otter (History, Ohio State University)
Susanna Hecht (Public Affairs, UCLA)


Spring 2011

Feb 22: The Infrastructural Human: Transportation Systems
Robbert Flick (Fine Arts, USC)
Vanessa Schwartz (History, USC)
Lisa Schweitzer (Policy, Planning and Development, USC)

March 11: Designing the Technological Future: The Landscape of Science in Postwar Southern California

In collaboration with the Huntington/USC Institute for California and the West (specifically, its Aerospace History Project), STS co-organized a workshop at the Huntington Library on Southern California as a space for science and technology. The workshop focused on developing research and teaching agendas in this field, and included graduate students and faculty from institutions throughout the Southern California region.
Fall 2011

Sept 22: A Journey Without Maps: Film and the Cartography of Subjectivity  
Gregg Mitman (History, University of Wisconsin-Madison)

Sept 23: Documenting the World: Photography, Film, and the Scientific Record  
Gregg Mitman (History, University of Wisconsin-Madison)

Sept 30: The Social Life of DNA  
Alondra Nelson (Sociology, Columbia University)

Oct 3: Science and Its Publics: Bridging the Divide  
Antonio R. Damasio (Neurology, USC)  
K. C. Cole (Annenberg School of Journalism, USC)  
Deborah Harkness (History, USC)  
Michael Quick (Biological Sciences, USC)

Naomi Oreskes (History and Science Studies, UCSD)

Nov 29: From Bodies to Lives, Complainers to Consumers: Measuring Menstrual Excess  
Katie Hasson (Sociology, UC Berkeley)

Nov 30: Caring for Cold Blood: Life, Labor, and Gender in the Human Tissue Archive  
Joanna Radin (History and Sociology of Science, University of Pennsylvania)

Dec 7: The Self-Expressive Edge of Occupational Sex Segregation  
Erin Cech (Institute for Gender Research, Stanford University)
STS Events, 2010-2013

Spring 2012

David Freedberg (Art History, Columbia)
Antonio Damasio (Neurology, USC)

Feb 22: The Social Ontology of Newborn Screening
Stefan Timmermans (Sociology, UCLA)

Feb 29: Will We Rebuild, Bigger and Better? Public Narrative and Reflexive Resilience in Three Gulf Coast Hurricanes, 1900-2005
Brady Potts (Dornsife College Distinguished Teaching Fellow, USC)

Jennifer Tucker (History, Wesleyan University)

March 9: Golden Holocaust: Origins of the Cigarette Catastrophe and the Case for Abolition
Robert Proctor (History of Science, Stanford University)

April 11: The Stealth Effect: The Cultures of Aerospace Manufacturing in Cold War Southern California
Mihir Pandya (STS Postdoctoral Fellow, Department of Sociology, USC)
STS Events, 2010-2013

Fall 2012

**Sept 10:** Post-Industrial Metabolism, Autonomy and Incorporation
Hannah Louise Landecker (Sociology, UCLA)

**Oct 11:** Early Modern Metadata: From the Digital Archive to Mapping the Republic of Letters
Paula Findlen (History, Stanford University)
Discussant: Vanessa Schwartz (History, USC)

**Oct 30:** Plastic Bodies: Biopolitical Implications of the New Environmental Epigenetics
Julie Guthman (Social Sciences, University of California, Santa Cruz)

**Oct 31:** Model Lives: Saintly Anatomy, Moving Automata, and Ideal Societies in Early Modern Europe
Brad Bouley (History Department, USC)
Jessica Keating (Art History, USC)
Julianne Werlin (English, USC)

**Nov 7:** Crowds and Clouds: A Discussion of LIMN, Issue Number Two
Chris Kelty (Information Studies, UCLA)
Nick Seaver (Anthropology, UC Irvine)
Mike Ananny (Annenberg School for Communication & Journalism, USC)
François Bar (Annenberg School for Communication & Journalism, USC)

**Nov 9:** STS-ICW Infrastructure and Environment Working Group, Session One: Los Angeles River Revitalization Efforts, Land Use and Zoning Reform in Los Angeles
Jenny Price (Center for the Study of Women, UCLA)
Mark Vallianatos (Urban and Environmental Policy, Occidental College)
Greg Hise (History, University of Nevada)

**Nov 13:** Conditional Texts, Visualizing Interpretation, and other Humanistic Reflections on Big Data
Johanna Drucker (Information Studies, UCLA)
Discussant: Kate Flint (Art History, USC)

**Nov 27:** Digitization and the (real)Transformation of the Humanities
Rob Iliffe (History of Science, Sussex University)
Discussant: Phil Ethington (History, USC)

**Dec 7:** STS-ICW Infrastructure and Environment Working Group, Session Two: Boulevards and the Changing Character of Architecture in Los Angeles and the History and Structure of Regional Agencies
Christopher Hawthorne (Architecture Critic, Los Angeles Times)
Wade Graham (Public Policy, Pepperdine University)
William Deverell (History, USC)
STS Events, 2010-2013

Spring 2013

Jan 11: STS-ICW Infrastructure and Environment Working Group, Session Three: Aerospace in Southern California: As Art, as History, as Anthropology
Elleni Sclavenitis (Artist)
Peter Westwick (History, USC)
Mihir Pandya (Research Cluster in Science, Technology and Society, USC)

Jan 18: Global Financial Markets: Architecture and Sociology
Karin Knorr Cetina (Institute for Advanced Study, Princeton University)

March 13: Anticipating Autism: Bodies of Science and Questions of Cause in the Post-Genomic Era
Martine Lappé (Institute for Society and Genetics, UCLA)

March 25: Emerging Research on Science, Technology and Society: Reports from the Field and the Archive
Nadya Bair, Ph.D. Candidate, Art History, USC
Justin Clark, Ph.D. Candidate, History, USC
Yasuhito Abe, Ph.D. Candidate, Annenberg, USC

April 5: STS-ICW Infrastructure and Environment Working Group, Session Four: Los Angeles Department of Water and Power: Current Concerns and Plans for the Future
Susan Rowghani (Assistant Division Head of Water Engineering and Technical Services, LADWP)

April 19: Will There Be a Good Debate About Reproductive Genetic Technologies?
John Evans (Sociology, UCSD)

May 10: STS-ICW Infrastructure and Environment Working Group, Session Five: Mapping the City and Owens Valley Lake Reclamation
Stephanie Pincetl (Director, California Center for Sustainable Communities, UCLA)
Alexander Robinson (Architecture, USC)
Initiatives and Collaborations

- **Art and Alchemy:** STS funded graduate student Sean Nelson for work with the Getty Research Institute to develop an exhibition on the historical links between art and alchemy.

- **The Fate of Interpretation in the Era of Big Data:** This series explored the implications of big data, digital archives, and their associated methodologies for interpretive scholarship in the humanities and social sciences. As more and more of the human record is born within, or converted to digital formats, the large-scale longitudinal analysis of material traditionally examined by way of intimate scholarly study has become both more feasible and more appealing. Questions addressed by speakers in this series included: How do digital technologies potentially transform humanities and social scientific research paradigms? What will the availability of large, digital data sets mean for the future of humanistic and social scientific methodologies? Is the data-intensive analysis of documents likely to discourage close reading, or will new methods and scholarly platforms be developed which combine the advantages of large data-sets with the benefits of close analysis? In short, what is the fate of close, critical and contextual scholarly interpretation in the digital age?

- **Working Group on Infrastructure and Environment:** Working Group on Infrastructure and Environment is a collaboration between USC STS and the Huntington-USC Institute for California and the West. This working group focuses on past, present and future practices of infrastructure development in Southern California in an era of increasing environmental constraints. The working group--of historians, social scientists, journalists, artists and practitioners--has met monthly this year to share current research and to learn about the work of others. For example, we have discussed the LA River, the history and culture of aerospace, the influence of regional agencies like the AQMD, zoning and land use, the revitalization of LA streets and boulevards, better understanding water and power usage trends and the Owens Valley Lake restoration project. The group also began meeting with regional agencies like the LADWP to learn what's on their agenda and how they envision the future of infrastructure development in the region. The working group has been a lively venue to discuss work across discipline and between academics and practitioners.

- **Where Minds and Matters Meet:** Stipend to support the publication of *Where Minds and Matters Meet: Technology in California and the West* (Huntington Library Press, 2012).

- **LIMN:** An experimental journal in the interpretive social sciences, focusing on contemporary problems in our global, politically interconnected, technologically intensive culture.

- **Technocratic Expertise and the Government of Catastrophe:** Scholars from USC STS and the New School University are engaged in an NSF-funded collaborative research project focusing on the development of expert practices for envisioning and mitigating potential catastrophe, from the early Cold War to the present.

- STS is also involved in collaborative discussions with the USC Sustainability Research Group, the Dornsife 2020 Research Cluster on Climate Change in the Southern California Bight, and the Annenberg/ JPL Project on Science Communication.
Curriculum Development

Undergraduate Minor

The Minor in Science, Technology and Society (approved Spring 2012) incorporates courses from multiple departments in the College and elsewhere in the university. Students in the minor will take a lower division anchor class (SOCI 210G), and then choose four upper division courses from at least two of three categories: Science as a Social Institution; Technology and Modern Life; and Health, Environment, and Science Policy.

Undergraduate Courses

Fall 2010
Core 103: “Thematic Option: The Process of Change in Science”
Andrew Lakoff

Spring 2011
Sociology 210G: Science, Technology and Social Conflict
Dan Lainer-Vos
Core 103: “Thematic Option: The Process of Change in Science”
Andrew Lakoff

Fall 2012
Sociology 499: Race, Gender, Science
Katie Hasson

Sociology 475: Medical Sociology
Katie Hasson
Core 103: “Thematic Option: The Process of Change in Science”
Andrew Lakoff

Spring 2013
First Year Investigation. Invisible City: Technology and Urban Life
Andrew Lakoff
Sociology 210G: Science, Technology and Social Conflict
Dan Lainer-Vos

Graduate Courses

Fall 2011
History 620: “Seeing Science and Technology on the Move, 1500–present”
Daniela Bleichmar and Vanessa Schwartz

Spring 2011
Andrew Lakoff

Spring 2012
Sociology 532: Seminar in Science, Technology and Society
Andrew Lakoff
Sociology 599: Risk Society
Andrew Lakoff

Spring 2013
Communications 534: The Culture of New Technologies
Andrew Lakoff
Communications 599: Perspectives on Networked News
Mike Ananny
Sociology 480: The Sociology of Risk and Disaster
Brady Potts
Graduate Student, Postdoctoral Fellow and Faculty Recruitment

Graduate Students

- Several graduate students in Sociology have been drawn to USC at least in part in order to participate in the STS research cluster.

Postdoctoral Fellows

- STS postdoctoral fellow, Mihir Pandya joined the research cluster for a two-year fellowship in April 2012 after completing his PhD in Anthropology at the University of Chicago. Dr. Pandya’s research focuses on the history of the stealth bomber project in Southern California. He coordinates the Working Group on Infrastructure and Environment (described above).

- STS also hosted a USC Postdoctoral Distinguished Teaching Fellow, Brady Potts of Sociology, who joined the research cluster in Fall 2011. Dr. Potts works on cultural aspects of response to disaster, and helps guide our work in the area of expertise and the “risk society.”

Faculty

- STS spearheaded a collaboration with the Sociology Department and Gender Studies for a tenure-track Associate Professor position in Science, Technology and Gender. We were successful in recruiting Prof. Katie Ann Hasson (PhD UC Berkeley, 2012), who began teaching at USC in the Fall 2012.

- In collaboration with the History Department, Environmental Studies, and Earth Sciences, STS led efforts to recruit Naomi Oreskes (currently at UCSD) to USC as a Provost’s Professor, and director of a new Center for Knowledge in Society.

- Currently as part of its hiring cluster strategy, the Sociology Department and STS are targeting a major recruitment in Science, Technology and Globalization.
Graduate Training

**Working Groups:** As part of our effort to build a vibrant intellectual community, the STS Research Cluster is home to three Graduate Student Working Groups. These groups meet regularly to share their work, discuss recent developments in the field, and host visiting speakers.

- Critical Studies of Networks (13 members)
- Space/ Health/ Environment (9 members)
- Biomedical Technologies (8 members)

**Graduate Student Research Stipends:** Each summer, STS funds selected proposals for summer stipends of $2000 each to support graduate student research.

**Summer 2011**

- Kristina Burhman (History)  
- Nadine Chan (Critical Studies)  
  "Marketing and Managing the Empire: Travel, Education, and Hygiene Film in Colonial British Malaya”.
- Sean Nelson (Art History)  
  "Antonio de’ Medici and the Art of Alchemy."
- Andie Reid (History)  
  “A Change of Airs: Missionaries, Sickness and Environment in Alta California.”

**Summer 2012**

- Yasuhiyo Abe (Communications)  
  "Do-it-yourself (DIY) Movements after the Fukushima Nuclear Accident."
- Nadya Bair (Art History)  
  "Photojournalism and the Partitioning of the Post-War World."
- Justin Clark (History)  
  "Training the Eyes: Romantic Vision and Class Formation in Boston, 1830-1870.”
- Celeste Menchaca (American Studies and Ethnicity)  
  “Scientific Vision and the Construction of the U.S.-Mexico Boundary Line, 1849-1858.”