

UNIVERSITY OF COLORADO

Center for Science and Technology Policy Reseach

WORKING TO IMPROVE HOW SCIENCE AND TECHNOLOGY POLICIES ADDRESS SOCIETAL NEEDS.

Annual Report July 1, 2007 - June 30, 2008

Center for Science and Technology Policy Research Cooperative Institute for Research in Environmental Sciences University of Colorado at Boulder









Center for Science and Technology Policy Research

2007 - 2008 Annual Report

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July 1, 2007 - June 30, 2008 Annual Report

he vision of the Center for Science and Technology Policy Research is to serve as a resource for science and technology

decision makers and those providing the education of future decision makers. Our mission is to improve how science and technology policies address societal needs, including research, education and service. The Center fulfills • Help make the nation's science portfolios more responsive to societal needs.

Example areas include climate and global change, disasters, nanotechnology, biotechnology, and renewable/sustainable energy.

- Provide various means for people with differing perspectives to discuss research and practice related to science in its broader societal context.
- Build a sustainable, diverse and productive institution at the University of Colorado-Boulder.

OUR MISSION

to improve how science and technology policies address societal needs, including research, education and service

these objectives through activities within the following four "Strategic Intents":

 Help guide the University of Colorado in educating the next generation of science and technology policy decision makers.

MESSAGE FROM THE ACTING DIRECTOR

e offer here the 2007 – 2008 annual report of the University of Colorado's Center for Science and Technology Policy Research, Cooperative Institute for Research in Environmental Sciences (CIRES). This report describes the Center's work in research, outreach, and education.



The FY 2007 – 2008 fiscal year has been a time of transition for the Center. Founding director Roger Pielke, Jr. stepped down from the directorship. Center personnel missed his strong guidance, especially since he was on sabbatical and therefore absent altogether for much of the year. Roger will continue to be actively involved with the Center in the future, but believes that the Center will benefit from a change in leadership through selection of a new director.

The selection of a new director has been more difficult than anticipated. CIRES began a search in August of 2007, for a new faulty member who would be Director. Three candidates were interviewed, but the process did not result in a hire. Although the Center has maintained all of its existing programs, as shown by this report, there was some frustration on the part of members and affiliates of the Center in not being able to take the exciting forward step of bringing in a new Director.

CIRES decided to take the step of recruiting a new Director from the CU Boulder faculty, and hiring a new junior faculty member from outside to fill the open faculty line that was to be held by a new Director. It was felt that this plan was likely to maximize the probability of success in the search, as the developing academic area of policy research is producing substantial numbers of junior faculty of high quality. A final decision on a course of action was made in August 2008, and William Travis, University of Colorado Associate Professor of Geography, was hired as the new Center Director. Professor Travis began his appointment on September 25. Roger Pielke, Jr. will chair the search committee for a new junior faculty member and the search should produce a decision by the end of the fall semester, 2008, or shortly thereafter.

One important development over the past fiscal year has been of hiring of Lisa Dilling as Assistant Professor to work with the Center and to teach for ENVS. Lisa has been with the Center as a CIRES Visiting Fellow working on the carbon cycle, but her new position as assistant professor ensures her continued involvement with the Center. She has already begun work on new proposals and to help ensure the continuity of the Center's research programs, and she will supervise graduate students. The affiliation of Ben Hale, Assistant Professor in ENVS with interests in environmental ethics, also has been a boon to the Center's research programs and graduate student development.

The Policy Center has been fortunate to retain its experienced and highly qualified staff, consisting of Roberta Klein as Managing Director and Ami Nacu-Schmidt as Outreach Coordinator. During July 2008, the Center hired Sarah Leshan to manage the Center's front office. Linda Pendergrass, who had been doing this work parttime, has returned to the CIRES administration group, but will assist the Center in managing events, which is her specialty for CIRES at large. It is good to have Sarah in the front office and to enjoy the continuity of experienced staff who have been with the Center since its early days.

Although Roger Pielke, Jr., has been on leave, he has continued to enhance the Center's reputation with his outstanding contributions to numerous policy debates; some of his work has been published in the most widely circulated science journals worldwide, as summarized in this report. The Center also continues to enjoy the notoriety of his very favorably reviewed book, The Honest Broker.

The following report will show that the Center, under the capable management of its senior staff, has maintained successfully all of its continuing programs. Thus, some disappointment in not being able to come to closure with the directorship earlier in the past year did not prevent the Center from maintaining momentum. With the appointment of Professor Travis, the Center is in a position to continue its success under his capable leadership.

I have been honored to serve as Acting Director for the Center over the last fiscal year. I have drawn heavily on the experience and the opinions of the senior staff and faculty, as well as others who are affiliated with or value the Center for its academic mission. I am confident that the Center has a great future.

William M. Lun N.

William M. Lewis, Jr. Acting Director william.lewis@colorado.edu

The Center is within the Cooperative Institute for Research in Environmental Sciences (CIRES) at the University of Colorado at Boulder. It was founded in 2001.



Number of unique website visitors (May 2008)

57,142



Number of Center's Science Policy E-Briefing recipients

3,536



Number of subscribers to Ogmius, Center's quarterly newsletter

200



Number of media references to the Center and/or its personnel

131



Number of presentations by Center staff and students

57



Number of publications

32







Number of talks at or sponsored by the Center by non-Center personnel

15

Number of Center students who have graduated since 2001 (4 PhDs, 2 Masters, 1 Masters/MBA, 1 Law)

8

Number of graduate students who worked at the Center this year

6

CENTER HIGHLIGHTS



Center interim Director Dr. William (Bill) Lewis testified at an oversight hearing before the House Committee on Natural Resources on July 31. The topic was "Crisis of Confidence: The Political Influence of the Bush Administration on Agency Science and Decision-Making". Dr. Lewis testified about his experience as chair of the Committee on Endangered and Threatened Fishes in the Klamath River Basin ("Klamath Committee").



The U.S. Climate Change Science Program published "The North American Carbon Budget and Implications for the Global Carbon Cycle." Lisa Dilling served as co-lead of the author team. The report analyzes the amounts of carbon emitted by industry sector, the amount absorbed naturally and how these amounts relate to the global carbon budget influenced by other regions of the globe, with particular attention given to characterizing the certainty and uncertainty with which these budget elements are known. Lisa briefed Congress and members of the media in conjunction with the report's release.



In honor of the 50th anniversary of the appointment of Dr. James Killian, the first presidential science adviser, Roger Pielke, Jr., had a commentary in the November 15 issue of Nature titled "Who Has the Ear of the President". He also appeared on National Public Radio to discuss the Nature article and the past 50 years of science advice.

Photo: BETTMANN/CORBIS, President Eisenhower (right) chats with the inaugural science adviser James Killian at a dinner in 1959.



Roger Pielke, Jr's Nature commentary, Dangerous Assumptions (with Tom Wigley and Chris Green), generated significant international attention since its publication on April 3. It has been cited, referred to or commented on at least 68 times by media around the world.



Lisa Dilling, who has been with the Center for the past few years as a CIRES visiting fellow, joined the Environmental Studies department as an assistant professor in January.



Ben Hale, newly hired as an assistant professor in Environmental Studies (ENVS), joined the Center last fall. Ben's expertise is in philosophy and ethics, and he is adding humanities expertise to the Center.



ENVS and CSTPR graduate student Elizabeth McNie, who recently received her Ph.D. in Environmental Studies, accepted a joint appointment at Purdue University as an Assistant Professor of Political Science & Earth and Atmospheric Sciences, and will be affiliated with the Purdue Climate Change Research Center.

CENTER HIGHLIGHTS



Former Center Visiting Scientist Melanie Roberts, who has been an AAAS Science & Technology Policy Fellow, was recently awarded a 1-year CIRES Visiting Fellowship.



Former Center graduate students Genevieve Maricle and Nat Logar recently finished their dissertations and accepted postdoctoral positions at the Consortium for Science, Policy and Outcomes at Arizona State University where they are studying science policy for sustainability.



ENVS and CSTPR graduate student David Cherney was awarded a 2008-2009 CIRES Graduate Research Fellowship and was named a 2008-2009 Fellow at the Center for the Humanities and Arts.



The Center's website, sciencepolicy, is one of the most heavily trafficked websites on the CU-Boulder campus, receiving more than 2% of all traffic on CU websites. Aside from the CU homepage and various housekeeping sites, only four CU sites receive more web traffic than Sciencepolicy. Sciencepolicy received more traffic than the computer science and business school sites.



Former CIRES director and current faculty affiliate Susan K. Avery, who played an instrumental role in founding the Center, was named President and Director of the Woods Hole Oceanographic Institution.



Faculty affiliate Paul Komor shared in the 2007 Nobel Peace Prize, awarded to Al Gore and the Intergovernmental Panel on Climate Change (IPCC).

Research

- Scales of Decision Making and the Carbon Cycle
- Science Policy Assessment and Research on Climate ("SPARC")
- Communicating About Climate Change
- State of the Carbon Cycle Report (SOCCR)
- Nanotechnology in Society



I. The following research projects are in furtherance of the Center's strategic intent to "help make the nation's science portfolios more responsive to societal needs."

Scales of Decision Making and the Carbon Cycle (L. Dilling)

This project is examining the relationship of scales in carbon cycle science to



scales needed for decision-making. It studies the institutions and individuals whose practices and policies influence the biospheric portion of the carbon cycle in two U.S. states-Colorado and Pennsylvania-to create a matrix of decisionmaking at federal, regional and local levels that affects carbon storage and release land that will be mapped onto the scales at which usable scientific knowledge of policy-relevant carbon exchange processes is organized. The study desires to gain a better understanding of what drives land management decision making, at what scale (federal, state, county, and individual) influences are most important, and how carbon information from scientists might inform potential policies at those scales.

Betsy Failey was hired as a research assistant for this project in October 2007.

Website: <u>http://sciencepolicy.colorado.edu/about</u> <u>us/meet_us/lisa_dilling/ccycledecisions/</u>

Presentations

Dilling, L., 2008. The Usefulness of Carbon Science for Decision-Making, invited talk at "Designing Climate Change Policy: Implementing California AB 32," University of Southern California, May 21-22.

Dilling, L., 2008. Scales of decision-making in land use and carbon management, University of Colorado, Department of Geography – Colloquia Spring, February 28.

Dilling, L., 2007. 'Usable' carbon science: Supporting carbon governance and decision making across scales. IBS Brown Bag, December 3.

Science Policy Assessment and Research on Climate ("SPARC") (R. Pielke, L. Dilling)

PARC is a joint project of the University of Colorado's Center for



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Science and Policy Technology Research and Arizona State University's Consortium for Science, Policy, & Outcomes, sponsored by National Science Foundation (NSF). SPARC conducts research and assessments, outreach, and education aimed at helping climate science policies better support climate-related decision making in the face of fundamental and often irreducible uncertainties.

Website: http://sciencepolicy.colorado.edu/sparc/

Presentations

Dessai, S., M. Hulme, R. Lempert, and R. Pielke, Jr., 2008. "Climate Prediction: A Limit to Adaptation?" Paper prepared for Workshop of Limits to Adapation, Tyndall Centre for Climate Change Research, London, UK, February 7-8.

Dilling, L., 2008. "Designing Climate Change Policy: Implementing California AB32". Invited speaker, University of Southern California, May 21.

Dilling, L., 2008. "Governing the carbon balance: Land use, decision making, and opportunities for usable science". Invited talk at NOAA, Boulder CO, June 2.

Lövbrand, E., J. Stripple, and B. Wiman, 2008. "Earth System Governmentality. Critical Notes on Science in the Anthropocene". 2008 Berlin Conference on the Human Dimensions of Global Environmental Change, Berlin, February 22-24.

Maricle, G., 2007. Society for the Social Studies of Science Annual Meeting: "Wrestling with Engagement: Tools for Iterating Intervention in STS." Montreal, Canada, October 12.

Maricle, G., 2007. Society for the Social Studies of Science Annual Meeting: "Shifting Research Priorities: The Role for Human Dimensions of Global Change Research." Montreal, Canada, October 13.

Maricle, G., 2007. Center for Science and Technology Policy Research Noontime Seminar Series. "Shaping Science: Turning Science Studies into Science Action". Boulder, CO, December 13.

McNie, E., 2007. "Boundary Work and Negotiation Support to Link Knowledge with Action in Indonesian Agroforestry Research". Paper presentation at the Sustainability Science Program Seminar Series, October, Center for International Development, Kennedy School of Government, Harvard University. McNie, E., 2007. "The Agora Explored: Producing Useful Climate Science for Policy Makers". Paper presentation at the Society for Social Studies of Science Annual Meeting, October 15, Montreal, Canada.

McNie, E., 2008. "Linking Knowledge with Action for Sustainable Development: Lessons from Indonesian Agroforestry Research". Presentation at the Center for Science and Technology Policy Research, University of Colorado, Boulder, Noontime Seminar Series. February 11.

McNie, E., 2008. "Lessons from the RISA Program: Co-Producing Useful Climate Science for Policy". National Academies of Science 'Strategies and Methods for Climate-Related Decision Support' Panel, Division on Behavioral and Social Sciences and Education, Human Dimensions of Global Change. University of Irvine, Irvine, California. May 12.

Pielke, Jr., R. A., 2008. "Verification of IPCC Predictions," James Martin Institute for Science and Civilization, Oxford University, February 6.

Pielke, Jr., R. A., 2008. Keynote Address, "Global Warming, Risk Management and Insurance, Managing Risk in Sustainable Building," Chicago, IL, February 8.

Pielke, Jr., R. A., 2008. "Adaptation to Climate Change – challenges for research and governance," UFZ Helmholz Research Center, Leipzig, Germany, February 29.

Pielke, Jr., R. A., 2008. "Disasters, Development, and Global Warming, Summit on Global Warming and Climate Change: State of Knowledge and Implications for the Insurance Industry," April 18.

Pielke, Jr., R. A, 2008. "Air Capture of Carbon Dioxide: Economic and Political Considerations," Department of Atmospheric and Ocean Sciences, University of Colorado, April 25.

Pielke, Jr., R. A, 2008. "Have We Underestimated the Mitigation Challenge?" Café Scientifique, Boulder, CO, May 13.

Vranes, K. 2007. "What does 'success' mean for earthquake mitigation policy?" Presentation at the Center for Science and Technology Policy Research, University of Colorado, Boulder, Noontime Seminar Series. February 22.

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Publications

Lemos, M.C. and L. Dilling, 2007. Equity in forecasting climate: Can science save the poor? Science and Public Policy, 34(2): 109-116.

Pielke, Jr., R. A., 2008. Blinded by Assumptions. Bridges - OST's Publication on Science & Technology Policy, Vol. 17, April.

Pielke, Jr., R. A., 2008. End of 2007 Hurricane-Global Warming Update, AIR Currents, January.

Pielke, Jr., R. A., 2008. Overheated Claims. Financial Post, June 17.

Pielke, Jr. R. A., 2007. Vulnerability to natural disasters, Chapter 10 in B. Lomborg, (ed.) Solutions for the World's Biggest Problems (Cambridge University Press), pp. 178-196.

Pielke, Jr. R. A., 2007. Mistreatment of the Economic Impacts of Extreme Events in the Stern Review Report on the Economics of Climate Change, Global Environmental Change. 17:302-310.

Pielke, Jr. R. A., 2007. Future Economic Damage from Tropical Cyclones: Sensitivity to Social and Climatic Changes, Philosophical Transactions of the Royal Society, 365 (1860):1-13.

Pielke, Jr. R. A., 2007. The case for a sustainable climate policy: Why costs and benefits must be temporally balanced, University of Pennsylvania Law Review, 155:1843-1857.

Pielke, Jr., R.A., J. Gratz, C.W. Landsea, D. Collins, M. Saunders, and R. Musulin, 2008. Normalized Hurricane Damages in the United States: 1900-2005. Natural Hazards Review. 9(2):29-42.

Pielke, Jr. R. A. (with contributions from P. Hoeppe and S. McIntyre), 2008. Case studies in disaster losses and climate change, pp. 131-140 in the Proceedings of the 15th 'Aha Huliko'a Winter Workshop on Extreme Events, University of Hawaii, Honolulu, January 2007.

Pielke, Jr., R. A., T. Wigley, and C. Green, 2008. Dangerous assumptions. Nature, 452: 531-532.

Vranes, K., and R. A. Pielke, Jr., 2008, in press. Normalized earthquake damage and fatalities in the United States: 1900 – 2005. Natural Hazards Review. **II.** Other Center research projects focus on communicating about climate change, providing information to decision makers about the carbon cycle, and developing policy recommendations to guide the future development of nanotechnology:

Communicating About Climate Change (L. Dilling)

hile a large majority of Americans now know and are concerned about climate change, most do not feel a sense of urgency to act on the problem.

- Why if people know about climate change is there no sense of urgency?
- How have communicators of climate change succeeded or failed in conveying the challenge of climate change?



- Can better communication of climate change lead to more concerted societal response to the problem, and if so, what and how should communicators talk about climate change?
- What other factors hinder or facilitate societal response and social change?

These broad questions require multi-disciplinary answers. This project therefore brings together experts in communication with those on behavior and social change. We hope to advance understanding in this crucial area of human dimensions of global change research, but also generate practically useful strategies for communicators, advocates, policy-makers, and social change agents to promote needed action to minimize and be better prepared for climate change and related hazards.

Website: <u>http://www.isse.ucar.edu/communication/</u> index.html

Presentations

Dilling, L., 2008. Creating a climate for Change: Rethinking communication and climate change, CU Environmental Engineering, February 8.

Dilling, L., 2008. Climate Change Communication Challenges, panel for CU's "Focus the Nation: Campus Teach-in on Global Warming" January 31.

Dilling, L., 2007. "Creating a Climate for Change", Boulder Valley Rotary, September 11.

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State of the Carbon Cycle Report (SOCCR) (L. Dilling)

The State of the Carbon Cycle Report (SOCCR) is a broadly conceived activity designed to provide accurate, unbiased, and policy-relevant scientific information



concerning the carbon cycle to a broad range of stakeholders. The two overarching objectives for the SOCCR are:

- To summarize scientific knowledge about carbon cycle properties and changes;
- To provide scientific information for decision support and policy formulation concerning carbon.

Website: <u>http://cdiac.ornl.gov/SOCCR/</u>

Presentations

Lisa Dilling participated in briefings of the U.S. Congress in the Senate and the House. In addition she participated in a media briefing to the national press. Several national press articles were published referencing the SOCCR results:

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14 November 2007 Rocky Mountain News article on US CCSP recent study.

13 November 2007 Associated Press article on latest US CCSP report.

13 November 2007 USA Today article on US Climate Change Science Program's recent report.

13 November 2007 E&E News article on US CCSP's recent report on Carbon Cycle.

13 November 2007 NY Times Blog.

13 November 2007 NOAA press release on U.S. Climate Change Science Program's latest report.

Publications

The final version of the State of the Carbon Cycle Report (SOCCR) CCSP Synthesis and Assessment Product (SAP) 2.2 was released November 13, 2007:

The First State of the Carbon Cycle Report (SOCCR): The North American Carbon Budget and Implications for the Global Carbon Cycle. A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research [King, A.W., L. Dilling, G.P. Zimmerman, D.M. Fairman, R.A. Houghton, G. Marland, A.Z. Rose, and T.J. Wilbanks (eds.)]. National Oceanic and Atmospheric Administration, National Climatic Data Center, Asheville, NC, USA,



242 pp, <u>http://www.climatescience.gov/Library/</u> <u>sap/sap2-2/final-report/default.htm</u>.

Chapter in Report:

Dilling, L., R. Mitchell, D.M. Fairman, M. Lahsen, S. Moser, A. Patt, C. Potter, C. Rice, and S. VanDeveer, 2007: How Can We Improve the Usefulness of Carbon Science for Decision Making?

Nanotechnology in Society

The Center for Nanotechnology and Society (CNS-ASU) is working side by side with scientists who are making nanotechnology a reality to anticipate and



understand the societal consequences of this new area of innovation. Sponsored by the US National Science Foundation, CNS-ASU is located at Arizona State University and involves researchers at Georgia Tech, North Carolina State University, Rutgers University, University of Colorado at Boulder, and University of Wisconsin-Madison.

Faculty affiliate Carl Mitcham, together with Jennifer Schneider (both at Colorado School of Mines), organized a consensus conference on nanotechnology in conjunction with the Center for Nanotechnology and Society at Arizona State University. Preparation work began in summer 2007, continued through a month-long consultation with 14 interested citizens (March 2008), with analysis of data still in progress.



Graduate Certificate Program in Science and Technology Policy

he Graduate Certificate in Science and Technology Policy, a rigorous educational program to prepare students pursuing graduate degrees for careers at the interface of science, technology, and decision



making, is completing its fourth year. Eighteen students are currently enrolled in the certificate program. They come from a variety of CU departments and institutes including Atmospheric and Oceanic Science, CIRES, Computer Science, Engineering (Aerospace, Civil, Chemical, and Mechanical), Environmental Studies, Geography, Geology, JILA, Journalism, and Psychology. Fourteen have already completed the program. Program alumni are serving on the staff of the House Science Committee, interning for the Office of Management and Budget (OMB), staffing a congressional office, and pursuing postdoctoral positions in science policy.

Website: http://sciencepolicy.colorado.edu/stcert/

Students at the Center

The Center fulfills one of its primary strategic intents - helping to guide the University of Colorado in educating the next generation of science and technology policy decision makers - through the active involvement of CU graduate students. The following graduate students worked with the Center over the past year.

Marilyn Averill is a Ph.D.

candidate in Environmental Studies. She holds Master's degrees in Public Administration from the Kennedy School of Government and in Educational Research and Evaluation Methodology from the



University of Colorado, and a law degree from the University of Colorado. Before returning to graduate school, Marilyn was an attorney with the Office of the Solicitor, United States Department of the Interior, where she provided legal advice to the U.S. Fish and Wildlife Service and the National Park Service. Her research interests focus on international environmental governance, the politics of science, and science and technology policy, particularly in the context of global climate change. Her most

EDUCATION

recent work involves the use of science and the treatment of uncertainty in litigation relating to climate change, and the effects these cases may have on law, science, and policy. Her tentative dissertation topic is "Who Runs the Greenhouse? The Role of the Federal Judiciary in U.S. Climate Policy." She is a member of the Planning Committee (essentially the Board) for the Research and Independent Non-Governmental Organizations (RINGOs) to the United Nations Framework Convention on Climate Change.

David Cherney is a doctoral student at the University of Colorado at Boulder's Center for Science and Technology Policy Research and is a research associate with the Northern Rockies Conservation Cooperative in Jackson, WY. He holds a



master's degree in environmental management from Yale University and a bachelor's degree in environment, economics, and politics from Claremont McKenna College. David serves on the executive council for the Society of Policy Scientists and on the program committee for the Society of Conservation Biology's Social Science Working Group. David was awarded the 2008-2009 Cooperative Institute for Research in Environmental Sciences (CIRES) Graduate Research Fellowship and the 2008-2009 Center for Humanities and the Arts Fellowship. David's dissertation research focuses on conservation nongovernmental organizations in greater Yellowstone.

Elizabeth McNie recently received her Ph.D. in Environmental Studies, accepted a joint appointment at Purdue University as an Assistant Professor of Political Science & Earth and Atmospheric Sciences, and will be affiliated with the



Purdue Climate Change Research Center. Her areas of interest include environmental and climate policy; science and technology policy; adaptation to climate change; the role of boundary organizations in linking science and policy; and the process of co-producing useful science information for policy through engagement between scientists and civil society. She will continue to explore such issues in the context of the National Oceanic and Atmospheric Administration's "Regional Integrated Sciences and Applications" program that is dedicated to providing policy-relevant climate science to a range of public and private natural resources, public health, agricultural, and other decision makers. This research will be a continuation of her dissertation, titled: "Co-producing useful climate science for policy: Lessons from the RISA program". Elizabeth is also interested in the role of climate science in U.S. state climate-change adaptation plans; sustainability science; marine transportation in the Arctic; and interdisciplinary research and teaching. This fall she will teach two courses, an upper division course called "Global Green Politics" and a graduate level course called "Environmental Politics and Policy". She will also teach courses in climate change science and policy, sustainability science and policy, policy analysis, science and technology policy, and others.

Shali Mohleji is a Ph.D. candidate in Environmental Studies. Shali graduated from the University of Virginia with a Bachelor's degree in Environmental Sciences, concentration



in Atmospheric Sciences. She received her M.S. in Atmospheric Sciences from Purdue University. Following Purdue, she worked in private industry as an environmental consultant specializing in air pollution as well as homeland security projects. Since becoming a student at the Center, Shali has spent two summers interning at the Office of Management and Budget. Her interests are in the federal budget process, agency management, and science funding. Shali's research assesses the decision making process for homeland security R&D, specifically the processes used by decision makers to evaluate, prioritize, and fund countermeasure R&D.

Alumni

Our alums are working in a variety of interesting positions at the interface of science and decision making:

- Adam Briggle received his Ph.D. in Environmental Studies and is working as a postdoc in the Netherlands at the University of Twente on a project called 'Evaluating the Cultural Quality of New Media.'
- Erik Fisher received his Ph.D. in Environmental Studies and is working as a postdoc at Arizona State University jointly for the Consortium for Science, Policy, and Outcomes (CSPO) and the Center for Nanotechnology and Society (CNS).
- Joel Gratz received a Masters in meteorology and policy as well as an MBA and is working at ICAT Managers, a Boulder-based hurricane and earthquake insurance company, in a role

Education

that combines both science and business responsibilities.

- **Nat Logar** received his Ph.D in ENVS and is doing a postdoc with the Consortium for Science, Policy, and Outcomes at ASU.
- Jessica Lowrey received her Masters in Environmental Studies and is working with the Western Water Assessment in Boulder.
- Genevieve Maricle received her Ph.D in ENVS and is doing a postdoc with the Consortium for Science, Policy, and Outcomes at ASU.
- Anne Ruggles received her law degree after completing an externship at the Center. She recently accepted a position as Executive Director of the Alaska Bird Observatory.
- Shep Ryen received his Masters in Environmental Studies and has been working for the staff of the U.S. House of Representatives Committee on Science in Washington, D.C. since the summer of 2005.

Courses taught by Center staff and students

Science and Technology Policy (ENVS 5100)

Lisa Dilling, Spring 2008

The U.S. has maintained a high level of commitment to publicly-funded science and technology since the end of World War II. From agriculture to defense to space studies to basic

disciplinary research, a vast scientific enterprise has emerged as a result. The utilization of science and technology in society has also grown exponentially, with discoveries in drug therapies, computing, genetics, communication technology and many other areas fundamentally changing the way we live our lives. The field of science and technology policy research seeks to understand how we decide what science and technology is prioritized and funded, how we justify such expenditures in society, how we conduct science and technology for societal benefit, and how we govern the use of scientific and technological results in society. Scholars in STP research ask questions such as: "Can research help solve a particular problem? If so, how much is required, how do we organize our efforts, and how do we judge success? What science is "the right science" to do? How does science benefit society, and how might public investments improve quality of life?

What policies do we need to supply the human resources involved in science and technology? What is the appropriate role of government versus private industry? What is the appropriate role of scientific advice in society? How is science used in decision making? What is the appropriate way to govern or monitor the scientific or technological community and its output? How can the public interact to ensure democraticallyheld ideals such as participation and transparency are upheld in the production or use of highly technical information?

This course seeks to introduce students to science and technology policy research and, as a result, set the stage for improved understandings of science and technology and their broader outcomes in society.

Environment Disasters (ENVS 4100)

Shali Mohleji, Spring 2008 This undergraduate senior-level topics course in the Environmental Studies Department focused on natural disasters, covering both the natural and anthropogenic aspects. The course was organized into three sections: the science of natural disasters, the sociological issues leading to vulnerability, and the policy aspects of disasters.

The science section covered the earth sciences relevant to earthquakes, landslides, mud and

debris flows. Topics also included the hydrology associated with streams and floods and the meteorology behind hurricanes.

The sociological section explored the sociological factors that contribute to vulnerabilities of populations in the different temporal phases of a natural disaster.

The policy section addressed the processes of disaster declarations, response and recovery policies at local, state, and federal levels, land use management, technical solutions, and the policy process framework.

Case studies were used throughout the course, some of which included: Hurricane Mitch, 2007 Mexican floods, 2007 Chilean earthquake, Hurricane Katrina, 2004 Asian tsunami, and the Netherlands flood protection system.



2007-08 Publications

January 1 – June 30, 2008

Averill, M. 2008. Climate Litigation: Ethical Implications and Societal Impacts. Denver University Law Review, Vol. 85, Issue 4, pp. 899-918.

Cherney, D.N. and S.G. Clark. 2008. The American West's Longest Large Mammal Migration: Clarifying and Securing the Common Interest. Policy Sciences.

Hale, B., 2008. Book Review: Do Animals Have Rights?, by Alison Hills. Philosophical Quarterly, Vol. 58, No. 231, pp. 379-382. Hale, B., 2008. More Justice for Prisoners, Guest Opinion, Daily Camera, February 14.

Hale, B., 2008. Philosophy Looks at Chess. Open Court Press, 288 pp.

Hale, B., 2008. Private Property and Environmental Ethics: Some New Directions, Metaphilosophy, Vol 39, No. 3, pp. 402-421.

Kenney, D.S., C. Goemans, R. Klein, J. Lowrey, and K. Reidy. 2008. Residential Water Demand

Management: Lessons from Aurora, Colorado. Journal of the American Water Resources Association 44(1): 192-207.

Lahsen, Myanna. 2008. Experiences of modernity in the greenhouse: A cultural analysis of a physicist "trio" supporting the backlash against global warming. Global Environmental Change, 18: 204-219.

Pielke, Jr., R. A., 2008. Blinded by Assumptions. Bridges, Vol. 17, April.

Pielke, Jr., R. A. 2008. Climate predictions and observations. Nature Geoscience 1: 206.

Pielke, Jr., R. A., 2008. End of 2007 Hurricane-Global Warming Update, AIR Currents, January.

Pielke, Jr., R. A., 2008. Overheated Claims. Financial Post, June 17.

Pielke, Jr., R. A., 2008. Trading technologies. Nature Reports Climate Change, online pub 29 May 2008.

Pielke, Jr., R.A., Laurens Bouwer, Ryan Crompton, Eberhard Faust and Peter Höppe.

PUBLICATIONS

2008. Catastrophe Losses in the Context of Demographics, Climate, and Policy. Managing the Changing Landscape of Catastrophe Risk. 10th Aon Re Australia Biennal Hazards Conference, September 16-18 2007. Queensland Australia.

Pielke, Jr., R. A., Gratz, J., Landsea, C. W., Collins, D., Saunders, M., and Musulin, R., 2008. Normalized Hurricane Damages in the United States: 1900-2005. Natural Hazards Review, Volume 9, Issue 1, pp. 29-42.

Pielke, Jr. R. A. (with contributions from P. Hoeppe and S. McIntyre) 2008. Case studies in disaster losses and climate change, pp. 131-140 in the Proceedings of the 15th 'Aha Huliko'a Winter Workshop on Extreme Events, University of Hawaii, Honolulu, January, 2007.

Pielke, Jr., R. A., Wigley, T., and Green, C., 2008. Dangerous assumptions. Nature 452(3): 531-532.

July 1 - December 31, 2007

L.M. Bouwer, L.M., Crompton, R.P., Faust, E., Höppe, P., and Pielke, Jr., R.A., 2007. Confronting Disaster Losses, Science, Vol. 318, November 2, p. 753.

Carmen Lemos, M. and Dilling, L., 2007. Equity in forecasting climate: can science save the world's poor? Science and Public Policy, Vol. 34, No. 2, pp. 109-116.

Dilling, L., Mitchell, R., Fairman, D., Lahsen, M., Moser, S., Patt, A., Potter, C., Rice, C., VanDeveer, S., 2007. How can we improve the Usefulness of Carbon Science for Decision Making? Chapter 5 in: The First State of the Carbon Cycle Report (SOCCR): The North American Carbon Budget and Implications for the Global Carbon Cycle., US Climate Change Science Program.

King, A.W., Dilling, L., Zimmerman, G.P., Fairman, D.M., Houghton, R.A., Marland, G., Rose, A.Z., and Wilbanks, T.J. (eds.), 2007. The First State of the Carbon Cycle Report (SOCCR): The North American Carbon Budget and Implications for the Global Carbon Cycle. National Oceanic and Atmospheric Administration, National Climatic Data Center, Asheville, NC, 242 pp. Lahsen, M., 2007. Anthropology and the Trouble of Risk Society, Anthropology News, December, pp. 9-10.

Lahsen, M., 2007. Earth System Governance: Research in Aid of Global Environmental Sustainability, Global Change NewsLetter, No. 70, December.

Lahsen, M., 2007. Trust Through Participation? Problems of Knowledge in Climate Decision Making. Chapter in: M. Pettinger (ed.), The Social Construction of Climate Change, Ashgate Publishing.

Pielke, Jr., R. A. 2007. The Case for a Sustainable Climate Policy: Why Costs and Benefits Must Be Temporally Balanced, University of Pennsylvania Law Review, Vol. 155, June, pp. 1843-1857.

Pielke, Jr., R. A., 2007. From "Is it True?" to "So What?". Bridges, Vol. 14, July.

Pielke, Jr., R. A., 2007. Future Economic Damage from Tropical Cyclones: Sensitivities to Societal and Climate Changes, Philosophical Transactions of the Royal Society, Vol. 365, No. 1860, pp. 1-13.

Pielke, Jr., R. A., 2007. Late Action by Lame Ducks, Bridges, Vol. 15, September.

Pielke, Jr., R. A., 2007. Mistreatment of the economic impacts of extreme events in the Stern Review Report on the Economics of Climate Change, Global Environmental Change, Vol. 17, pp. 302-310.

Pielke, Jr., R. A., 2007. NASA needs a new vision. San Francisco Chronicle, October 7, Pg. E-5.

Pielke, Jr., R. A., 2007. Technology Assessment and Globalization. Bridges, Vol. 16, December.

Pielke, Jr., R. A., 2007. Who has the ear of the president?, Nature, Vol. 450, pp. 347-348, November 15.

A complete list of all Center publications and links to many of those publications can be found at the Center's publications page, <u>http://</u> <u>sciencepolicy.colorado.edu/publications/</u>.



he Center's outreach disseminates research and ideas and provides various means for people with differing perspectives to discuss research and practice related to science in its broader societal context through the following publications:

- in both peer-reviewed and non-peer-reviewed journals
- talks and presentations by Center staff and students as well as by visitors to the Center or sponsored by the Center
- a newsletter (Ogmius)
- periodic briefings
- a website
- a popular science policy weblog (Prometheus)
- and extensive media coverage

Talks and Presentations

C enter staff and students give presentations about their research and topics of interest to the science and technology policy community in the U.S. and abroad. The Center also sponsors talks at the University of Colorado, brings speakers and visitors to the Center, and hosts a Noontime Seminar Series which is an opportunity for Center staff, students, and affiliates to present and discuss their work in an informal setting. Our Speakers page contains a list of all talks given at or sponsored by the Center. When available, Powerpoint presentations and other materials are posted on the Speakers page.

Website: <u>http://sciencepolicy.colorado.edu/</u> <u>center_info/center_talks.html</u>

Staff Presentations

Rad Byerly

Byerly, R., 2007. "'Health Care' as a Science Policy Issue", October 4.

Lisa Dilling

Dilling, L., 2008. "Governing the carbon balance: Land use, decision making, & opportunities for usable science", June 2.

Dilling, L., 2008. "The Usefulness of Carbon Science for Decision-Making", U. of Southern California, May 21-22.

Dilling, L., 2008. "Scales of decision-making in land use and carbon management", University of Colorado, Department of Geography – Colloquia Spring 2008. February 28.

Dilling, L., 2008. "Creating a climate for Change: Rethinking communication and climate change", February 8.

Dilling, L., 2008. "Focus the Nation: Campus Teach-in on Global Warming", CU-Boulder, January 31.

Dilling, L., 2007. "'Usable' carbon science: Supporting carbon governance and decision making across scales", Dec. 3.

Dilling, L., 2007. "Climate Change: Is It Debatable?", EcoArts Panel at Norlin Library, September 25.

Dilling, L., 2007. "Creating a Climate for Change", Boulder Valley Rotary, September 11.

Hale, B., and L. Dilling, 2008. "Carbon Sequestration, Ocean Fertilization, & the Problem of Permissible Pollution", April 11.

Benjamin Hale

Hale, B., 2008. "The Cumbers of Ontology, Thinking through Nature", University of Oregon, June 19-22.

Hale, B., 2008. Comment on Rob Figueroa's "Expanding Environmental Justice." Joint Meeting of ISEE and IAEP. Allenspark, Colorado. May 22-May 25.

Hale, B., 2008. "Trajectory of Research". Environment, Philosophy, and Technology Workshop. University of Twente, Netherlands. May 21-24.

Hale, B., 2008. "Tongue Tied: How Non-human Animals Lose their Voice in Habermas's Discourse Ethics", Giving Voice to Other Beings, Vanderbilt University. May 2-4.

Hale, B., and L. Dilling, 2008. "Carbon Sequestration, Ocean Fertilization, and the Problem of Permissible Pollution". Energy and Responsibility: A Conference on Ethics and the Environment. University of Tennessee. April 11.

Hale, B., 2008. Coordinated research on "prisoners and other vulnerable populations conference", February 14-15, CU-Boulder.

Hale, H., 2007. "Can We Remediate Wrongs?", Center for Science and Technology Policy Research. October 25, 2007. Hale, B., 2007. "What's Fair, What's Right? Respecting Autonomy in Population Policy", coauthored with L. Hale. Conference: Setting an Ethical Agenda for Health Promotion. University of Ghent, Belgium. September 22.

Hale, B., 2007. Peer-Reviewed Participant via Submitted Paper. Conference: "Applied Philosophy as Common Ground. Society for Applied Philosophy". Princeton University. October 14-15.

Hale, B., 2007. Panelist. "Building Bridges to Care for Creation", Sponsored by the CU Energy Initiative. October 5.

William Lewis (policy center-related)

Lewis, W., 2007. "Klamath Redux", September 13.

Eva Lövbrand

Lövbrand, E., 2008. "The Democracy Paradox in Studies of Science and Society", April 9.

Roger Pielke, Jr.

Pielke, Jr., R., "Have We Underestimated the Mitigation Challenge?" Café Scientifique, Boulder, CO, May 13.

Pielke, Jr., R., 2008. "Air Capture of Carbon Dioxide: Economic and Political Considerations," Department of Atmospheric and Ocean Sciences, University of Colorado, April 25.

Pielke, Jr., R., 2008. "Disasters, Development, and Global Warming", Summit on Global Warming and Climate Change: State of Knowledge and Implications for the Insurance Industry, April 18.

Pielke, Jr., R., 2008. "Science Between Policy and Politics: Where are the Honest Brokers?" An Interview of Roger Pielke, Jr. by Helga Nowotny, Bruno Kreisky Forum for International Dialogue, Vienna, Austria, March 3.

Pielke, Jr., R., 2008. "Adaptation to Climate Change – challenges for research and governance," UFZ Helmholz Research Center, Leipzig, Germany, February 29.

Pielke, Jr., R., 2008. Keynote Address, Global Warming, Risk Management and Insurance, Managing Risk in Sustainable Building, Chicago, IL, February 8.

Dessai, S., M. Hulme, R. Lempert, and R. Pielke, Jr., 2008. "Climate Prediction: A Limit to

Adaptation?", Workshop on Limits to Adaptation, Tyndall Centre for Climate Change Research, London, UK, February 7-8.

Pielke, Jr., R., 2008. "Verification of IPCC Predictions," James Martin Institute for Science and Civilization, Oxford University, February 6.

Pielke, Jr., R., 2007. "Disasters and Climate Change," Property Casualty Insurance Association of America, Boston, Massachusetts, October 31.

Pielke, Jr., R., 2007. "Science in Policy and Politics," Princeton University, Princeton, New Jersey, October 29.

Pielke, Jr., R., 2007. "The Economics and Politics of Direct Air Capture of Carbon Dioxide from the Atmosphere," James Martin Institute, Oxford University, October 24.

Pielke, Jr. R., 2007. "The Effect of Demographic Trends on Catastrophe Loss", Aon Re Australia Hazards Conference 2007, Gold Coast, Queensland, Australia, September 17-18.

Pielke, Jr., R., 2007. Guest Lectures on Climate Policy and Science Policy, Lund University, "Environmental Governance: Globalization, Trade and the Transatlantic Agenda", July 16-17.

Kevin Vranes

Vranes, K., 2008. "What's Wrong with Earthquake Mitigation in the United States?", April 7.

Vranes, K., 2007. "What does 'success' mean for earthquake mitigation policy?", Presentation at the Center for Science and Technology Policy Research, University of Colorado, Boulder, Noontime Seminar Series. February 22.

Graduate Student Presentations Marilyn Averill

Averill, M., 2008. "Managing Climate Uncertainties." Poster presented at the Climate Decision Making Center Student Conference, Pittsburgh, May 21.

Averill, M., 2008. "Climate Change." Presentation to fifth grade class at Alpine Elementary School, Longmont, CO, May 1.

Averill, M., 2008. "Bali and the Roadmap." Presentation to the Environmental Law Society at the University of Colorado School of Law, Boulder, April 1.

Averill, M., 2008. "Communicating Climate Uncertainties." Presentation to the International Arctic Workshop, Boulder, March 5.

Averill, M., 2008. "Climate Litigation: Ethical Implications and Societal Impacts". Sturm School of Law, University of Denver, Symposium on Global Climate Change: Integrating Environmental Justice into Policy, Regulation, and Litigation, Denver, February.

Averill, M., 2008. "Managing Climate Uncertainties." Paper presentation, American Meteorological Society, January 20-24, New Orleans, LA.

Averill, M., 2007. "Ethical Dimensions of Climate Uncertainties." Side session panel on Ethical Issues Raised by the IPCC, United Nations Climate Change Conference, December, Bali. This presentation was cited in ENB on the Side, the daily report of side sessions at the United Nations Climate Conference: <u>http://www.iisd.ca/climate/cop13/</u> <u>enbots/</u>. It was also summarized in climateethics.org: <u>http://www.iisd.ca/climate/cop13/enbots/</u>.

Averill, M., 2007. "The Ethics of Uncertainty in Climate Change." Paper presentation for panel on "Climate Modeling and Uncertainty: Epistemology and the Construction of Climate Facts," Society for the Social Studies of Science, October 12, Montreal, Canada.

Averill, M., 2007. "Beyond Federal Agency Litigation: tort theories, claims against state regulation, and the Inuit human rights petition." Invited presentation, CLE International conference on "Climate Change Law," September 25, Denver, CO.

David Cherney

Cherney, D., 2008. "GYE Conservation Organizations: Organizational Ecology", May 8-9.

Cherney, D., 2008. "Reforming Conservation: Moving beyond persistent policy conflict in greater Yellowstone", March 3.

Cherney, D., 2007. "American West's Longest Large Mammal Migration: Clarifying and Securing the Common Interest", November 15.

Genevieve Maricle

Maricle, G., 2007. Society for the Social Studies

of Science Annual Meeting: "Shifting Research Priorities: The Role for Human Dimensions of Global Change Research." Montreal, Canada, October 13. Maricle, G., 2007. Society for the Social Studies of Science Annual Meeting: "Wrestling with Engagement: Tools for Iterating Intervention in STS." Montreal, Canada, October 12.

Maricle, G., 2007. Center for Science and Technology Policy Research Noontime Seminar Series "Shaping Science: Turning Science Studies inot Science Action." Boulder, CO, December 13.

Elizabeth McNie

McNie, E., 2008. "Lessons from the RISA Program: Co-Producing Useful Climate Science for Policy". National Academies of Science 'Strategies and Methods for Climate-Related Decision Support' Panel, Division on Behavioral and Social Sciences and Education, Human Dimensions of Global Change. University of Irvine, Irvine, California, May 12.

McNie, E., 2008. "Exploring the Agora: Co-producing useful Climate Science for Policy", April 25.

McNie, E., 2008. "Linking Knowledge with Action for Sustainable Development: Lessons from Indonesian Agroforestry Research." Presentation at the Center for Science and Technology Policy Research, University of Colorado, Boulder, Noontime Seminar Series, February 11.

McNie, E., 2007. "Boundary Work and Negotiation Support to Link Knowledge with Action in Indonesian Agroforestry Research". Paper presentation at the Sustainability Science Program Seminar Series, October, Center for International Development, Kennedy School of Government, Harvard University.

McNie, E., 2007. "The Agora Explored: Producing Useful Climate Science for Policy Makers." Paper presentation at the Society for Social Studies of Science Annual Meeting, October 15, Montreal, Canada.



Thomas Chase - February 4, 2008



Paul Komor - April 14, 2008



Eva Lövbrand - April 9, 2008



Kevin Vranes - April 7, 2008

Other Talks at or sponsored by the Center

- William Travis, 2008. Sustainability
 Questioned: Appraising the Viability of
 Land Use Systems, June 19.
- Andrea Ray, 2008. Lessons learned from the 2000s Western drought: Evolving linkages between research and services, April 28.
- Reiner Grundmann, 2008. Path dependency in the cases of ozone layer protection and climate change, Apr. 23.
- Paul Komor, 2008. New energy education programs at CU: What does it mean to teach 'energy'?, April 14.
- Rebecca Morss, 2008. Interactions among Flood Predictions, Decisions, & Outcomes, April 7.
- Joe Ryan, 2008. Abandoned Mine Cleanups, the Clean Water Act, and Environmental Good Samaritans, March 31.
- Kathleen Tierney, 2008. The Good the Bad and the Ugly: Post-Katrina Trends in Hazards Policy and Research, March 17.
- Jana Milford, 2008. Clean Air Rules: Challenges in Air Pollution Control Strategy Design, February 18.
- Balaji Rajagopalan, 2008. The Once and Future Pulse of Indian Monsoonal Climate, February 18.
 - Karen Fisher-Vanden, 2008. Technology, Development and the Environment, February 7.
- Thomas Chase, 2008. To What Degree are Climate Models Useful in Guiding Policy Decisions?, February 4.
- René von Schomberg, 2007. EU Science and Technology Policy: Addressing Societal and Ethical Aspects, Dec. 12.
- Ted Nordhaus and Michael Shellenberger, 2007. Break Through Lecture, CU-Boulder, November 12.
- Paul Ohm, 2007. The Internet Privacy Debate: The Problem with Balancing Security and Privacy, November 1.

Ogmius

E ach issue of the Center's newsletter, Ogmius, features an opinion by a leading voice or voices in the science and technology policy field on important issues. The lead articles over the past year have been:



- Can a concept (World Heritage Status) Save a Sea (the Aral Sea)? by Mickey Glantz (summer 2007)
- Mother Gruesome's Nursery by Benjamin Hale (fall 2007)
- Something to Talk About: Rethinking Communication and Climate Change by Lisa Dilling (winter 2007/08)
- A caution to policy makers: Climate models fail key tests for accuracy, by Tom Chase (summer 2008)

Ogmius also includes a research highlight, as well as Center news and information of interest to the S&T policy field. Current and past issues of Ogmius are available online and in pdf format. Ogmius has 200 subscribers from institutions such as Arizona State University, Harvard, Cornell, Princeton, Rutgers, Tufts, UC - Davis and San Diego, the University of Chicago, private industry, USAID, NOAA, US Army Corps of Engineers, Lawrence Livermore Laboratory, state agencies in Arizona, Colorado, New York, Texas, Washington, and Wisconsin, organizations such as AAAS, Red Cross, and Pew, as well as from Australia, Canada, India, Japan, New Zealand, and the UK.

Website: http://sciencepolicy.colorado.edu/ogmius/

Prometheus I^{n 2004, the} Center added Prometheus: The Science Policy



Weblog to its outreach efforts. Prometheus began as a class project of Center graduate student Shep Ryen and was designed to present a forum for science policy news and commentary, as well as public comment and discussion. The site provides a useful service to the science policy community. It was cited as one of the top 50 science blogs by Nature and was referred to as an example of an "excellent, informative" blog by Science. It recently underwent a substantial redesign.

Website: http://sciencepolicy.colorado.edu/prometheus/

Briefings

In March 2006, the Center launched the first issue of a new email briefing about its science policy work. Each briefing contains examples of recent Prometheus entries and publications. The email is sent to 3,536 science and



technology policy decision makers in Washington, D.C., and around the country, and is also posted on the Center's website.

Website: <u>http://sciencepolicy.colorado.edu/outreach/</u> <u>cstpr_briefings.html</u>

Sciencepolicy Website

The Center makes extensive use of the Internet for its outreach activities. Each project listed above has its own unique web page. The following is a sample of additional pages on the site:



- Speakers page, <u>http://sciencepolicy.</u> <u>colorado.edu/outreach/center_talks.html</u> Provides a list of all past and upcoming speakers, dates and titles of their talks, and presentations, if available.
- Science & Technology Jobs, <u>http://</u> <u>sciencepolicy.colorado.edu/students/jobs.html</u> Links to pages with science and technology policy jobs, internships, fellowships, etc.
- Science and Technology Policy Education at CU, <u>http://sciencepolicy.colorado.</u> <u>edu/students/st education at cu.html</u> Links to science and technology policy related

programs and classes at the University of Colorado.

• Science and Technology Policy Education elsewhere, <u>http://sciencepolicy.colorado.edu/</u> <u>students/st studies prgs.html</u> Links to educational institutions other than those at the University of Colorado, as well as

• Science and Technology Organizations and Centers, <u>http://sciencepolicy.colorado.edu/</u> <u>students/st_organizations.html</u> This page provides links to S&T organizations and centers around the country.

to science and technology studies programs.

• Media Resources, <u>http://sciencepolicy.</u> <u>colorado.edu/outreach/media_resources/</u> This page provides the media and other interested readers with links to Center resources on selected topics such as space policy, hurricanes and global warming, politicization of science, and drought policy.

Website Vists

Traffic to the Center's website, sciencepolicy, remains high with over 57,000 unique visitors in May 2008. Sciencepolicy is one of the most heavily trafficked websites on the CU-Boulder campus, receiving more than 2% of all traffic on CU websites. Aside from the CU homepage and various housekeeping sites, only four CU sites receive more web traffic than Sciencepolicy. Sciencepolicy received more traffic than the computer science and business school sites.

Media Coverage

The Center continues to be viewed as a serious source of analysis and information by science and technology policy decision makers. Since opening in the fall of 2001, Center staff and projects have been referenced by the following media:

ABC Science (Australia) Aerospace America Magazine AFP Against the Grain Alaska Highway News Albuquerque Journal American Prospect American Spectator Arkansas Democrat Gazette Ars Technica Associated Press Audubon Magazine Baltimore Sun BBC Radio Bloomberg Boston Globe CanWest News Service Capital Times CBC News China Daily Chine Post (Taiwan) Christian Science Monitor Chronicle of Higher Education Climateandinsurance.org Climatewire CNN **CNN** Money Colorado Daily Colorado Springs Gazette Colorado Springs Independent Concord Monitor Daily Camera Daily India Daily Reporter-Herald Daily Utah Chronicle Dallas Morning News dBTechno Denver Business Journal Denver Post Der Spiegel Discover Magazine Discovery Channel Drug Development and Discovery Earth & Sky TX eCanadaNow Economist E&E News eFluxMedia eNews 2.0 (UK) Environmental Research Web (UK) EOS EU Reporter Financial Post Financial Times Forbes Fort Collins Coloradoan Fortune Fox News Free Internet Press Galileo (Italv) Geotimes Globe and Mail Globe Insider Greenwire Guardian Gulf Times (Qatar) Herald Times (IN) Houston Chronicle HULIO **IEEE Sprectrum** Il Messaggero (Italy)

Innovations Report Inside Bay Area Insure.com International Herald Tribune Investor's Business Daily Jackson Hole News and Guide Javno (Croatia) Journal of Young Investigators Kansas City Info Zine Kansas City Star KazInform (Kazakhstan) KCPW Radio KMGH Channel 7 news KNUS Radio KOA Radio Kristeligt Dagblad (Denmark) LA Times Le Monde Longmont Daily Times-Call Malaysia Sun Marketplace Radio Marketwire Miami Herald Minnesota Public Radio Montreal Gazette Mother Jones **MSNBC** Naples Daily News Nashua Telegragh National Geographic News National Journal National Ledger National Public Radio National Review Natural Hazards Observer Nature New Orleans Times-Picayune New Scientist New York Sun New York Times New York Times Blog NewIndPress (India) Newsreview.com Newsmax.com On Point One News (New Zealand) Ottawa Citizen Pacifica Radio Pensacola News Journal Philadelphia Inquirer Pittsburgh Post Gazette Pittsburgh Tribune-Review Pravda (Russia) Press-Register Radio Radicale The Register-Guard



Reuters UK Rocky Mountain News Rush Limbaugh Show RxPG News San Francisco Chronicle San Francisco Sentinel Santa Fe New Mexican Sarasota Herald Tribune Science Science Blog Science Centric (Bulgaria) Science Daily Scienceline Scientific American The Scientist Scripps-Howard News Service Seattle Post Intelligence Seed Magazine SETI Radio Network Smithsonian Spectrum St. Petersburg Times Sun Herald Swedish Public Radio Tampa Tribune Taipei Times TCS Daily Telegraph.co.uk Thaindian News (Thailand) The Cheers (Estonia) The Moderate Voice The Money Times (India) The Telegraph (Calcutta) The Times The Times-Picayune Travel Weekly The Trumpet UCAR Quarterly UPI USA Today Utah Public Radio Vancouver Sun Wall Street Journal Washington Observer Washington Post Washington Times Weather Channel Weekly Standard Westword Winston-Salem Journal Wisconsin Technology Network World Magazine World Net Daily

The following media references to Center personnel, affiliates or projects appeared in 2007-2008:

Center for Science and Technology Policy Research

• CSTPR referenced in 5 November 2007 *CU News* article on 40th anniversary for CIRES.

Lisa Dilling quoted, cited, interviewed, or referred to in:

- 24 April 2008 *ClimateWire* article on pine beetles possibly spurring global warming.
- 18 February 2008 *Rocky Mountain News* article on carbon footprint calculators.
- 14 November 2007 *Rocky Mountain News* article on US CCSP recent study.
- 13 November 2007 USA Today article on US Climate Change Science Program's recent report.
- 13 November 2007 Associated Press article on latest US CCSP report.
- The First State of the Carbon Cycle Report highlighted in 13 November 2007 New York Times Blog.
- 13 November 2007 *NOAA press release* on US Climate Change Science Program's latest report.
- 13 November 2007 *E&E News* article on US CCSP's recent report on Carbon Cycle.
- 15 October 2007 Chronicle of Higher Education Blog on Al Gore's recent Nobel Peace Prize.
- 15 October 2007 *Denver Post* article, Climate activists looking to Ritter.
- 13 August 2007 Santa Barbara's Business and Technology radio show.
- 16 July 2007 *Daily Camera* article, The Battle Against Climate Fatigue.

Benjamin Hale quoted, cited, interviewed, or referred to in:

• 12 March 2008 *Denver Post* article on Eliot Spitzer's ethics.

Roger Pielke, Jr. quoted, cited, interviewed, or referred to in:

- 24 June 2008 *Globe and Mail* article on carbon taxes.
- 18 June 2008 *New York Times* article on climate model projections.
- 18 June 2008 *Financial Post* article on climate change model predictions.

- 2 June 2008 *Denver Post* article on the "cap and trade" bill.
- 1 June 2008 *Press-Register* article on historical data on hurricanes.
- 24 May 2008 *Taipei Times* article on hurricane damages and insurance rates
- 18 May 2008 *Washington Times* article on climate model predictions.
- 2 May *ABQjournal.com* article about polling data about global warming views.
- 14 April 2008 *Christian Science Monitor* article on global warming and hurricanes.
- Pielke et al. *Nature* article the subject of 68 international media references.
- 3 April *Daily Camera* article, Boulder likely to miss Kyoto Protocol goals.
- 3 April *Denver Post* article, Climate change a moving target, experts note.
- 26 March 2008 *Wall Street Journal* article on adapting to climate change.
- 26 March 2008 *Los Angeles Times* article on adapting to climate change.
- 26 March 2008 *Boston Globe* article on adapting to global warming.
- 26 March 2008 *Seattle Post Intelligencer* article on adapting to global warming.
- 29 February 2008 *New Scientist* article on zero emissions study.
- 23 February 2008 *Daily Camera* article.
- 22 February 2008 NOAA news release.
- 21 February 2008 *Colorado Daily* article on carbon capture.
- 29 January 2008 *Greenwire* article on campus politics and climate.
- Radio Radicale (Rome, Italy) on his book The Honest Broker.
- 4 January 2008 *Science* article on Democratic Candidate Hillary Clinton.
- 4 January 2008 *Pittsburgh Tribune-Review* article on global warming.
- 1 January 2008 *New York Times* Article on global warming and the media.
- 10 December 2007 *Christian Science Monitor* article on the Kyoto Protocol.

- 7 December 2007 *Coloradoan* article on recent study on extreme storms in Colorado
- 6 December 2007 *Newsreview.com* article on CIRES director, Koni Steffen.
- 3 December *New York Times* blog on climate science.
- 29 November 2007 *National Review* article on science censorship in the Bush administration.
- 23 November 2007 *Science* article on global warming.
- 16 November 2007 *MSNBC.com* article on science and politics in next presidential administration.
- 16 November 2007 NPR's Science Friday to discuss recent article in Nature.
- November 2007 edition of *Geotimes* on his book: *The Honest Broker*.
- 1 November 2007 New York Times article on drought in the US.
- 25 October 2007 New Scientist article on climate models and accurate predictions.
- 15 October 2007 *Chronicle of Higher Education* article on Gore's Nobel Peace Prize.
- 6 October 2007 *Scienceline* article on the 1938 storm that hit New York City.

- 18 September 2007 New York Times article on the ozone layer and the Montreal treaty.
- 26 August 2007 *Mother Jones* article on future hurricanes hitting the US coast.
- August 2007 editions of *Science and Nature* review Roger Pielke Jr.'s book: *The Honest Broker*
- 10 August 2007 *National Ledger* article on recent Newsweek article.
- 10 August 2007 *Marketwire* article on 2005 paper Hurricanes and Global Warming.
- 7 August 2007 *CNNMoney.com* article on *Newsweek's* recent climate editorial.
- 6 August 2007 Newsmax.com article on recent Newsweek Climate Editorial.
- 19 July 2007 American Spectator on Normalized Hurricane Damages paper.
- July 2007 OST's Bridges interview about The Honest Broker.
- 13 July 2007 *Pensacola News Journal* on costs of hurricane damages.
- 10 July 2007 *Houston Chronicle* article on comparing hurricane Katrina to past hurricane
- 6 July 2007 *National Review* article on recent popularity of eco-hype actions.



Staff

Rad Byerly

Rad Byerly is a Research Scientist who has worked at the Center since its inception in 2001. Rad received his Ph.D. in experimental atomic and molecular physics at Rice



University in 1967. He is the former chief of staff for the U.S. House of Representatives Committee on Science and Technology. Since retiring he now works with students to offer his perspective as a practitioner and with faculty on various projects. He was recently appointed to the State of Colorado Air Quality Board.

Lisa Dilling

Lisa Dilling received her Ph.D. in biology from the University of California-Santa Barbara. She developed a program in integrated carbon cycle research for the Climate and Global Change Program of the National



Oceanic and Atmospheric Administration, and also helped to develop a national interagency program to study the integrated carbon cycle that links together relevant research in 6 Federal agencies for the U.S. Global Change Research Program (now the U.S. Climate Change Science Program). She spent two years as a scientist with the Environmental and Societal Impacts Group of the National Center for Atmospheric Research. Her research at the Center focuses on the use of information in decision making related to climate and, in particular, the carbon cycle. Lisa joined ENVS as an assistant professor

Betsy Failey

in January.

Elisabeth (Betsy) Failey graduated with a B.S. in Biology from Davidson College, Davidson, NC in May 2006. In college she participated in



various research projects examining the impact of land use change on herptofauna. She has worked for the past year as a research assistant at the Center, and entered entering the Environmental Studies program this fall as a graduate student.

Benjamin Hale

Benjamin Hale teaches environmental studies and philosophy at the University of Colorado, Boulder. He works primarily in the area of environmental ethics and environmental policy, though his theoretical interests span much larger concerns in applied ethics, normative ethics, and even metaethics. As for applied questions, much of his work centers on ethical and environmental



concerns presented by emerging technologies. Before joining the environmental studies program, Benjamin was the Director of the Center for Values and Social Policy in the Philosophy Department at the University of Colorado, Boulder, and earlier was the Interim Director of the Environmental Conservation Education Program at New York University. Benjamin has a Ph.D. in Philosophy from the State University of New York at Stony Brook and an M.P.A. in Natural Resource Policy from the University of Arizona.

Bobbie Klein

Bobbie Klein is the Center's Managing Director. She has a B.A. in political science from the University of Illinois, a J.D. from the University of Wisconsin, and an M.A. in Public Policy from the University of Colorado. Prior to



joining the Center she worked at the National Center for Atmospheric Research, and for state and federal appellate courts.

William Lewis

William Lewis has served as the Center's Interim Director over the past year. Since 1986 Dr. Lewis has been Director of the Center for Limnology at the Cooperative Institute for Research in Environmental Sciences (CIRES).



He is also a Fellow of CIRES, and a Professor in the Ecology and Evolutionary Biology Department at University of Colorado-Boulder. William's field of specialization is inland waters, including lakes, streams, rivers, and wetlands.

Eva Lövbrand

Eva Lövbrand joined the Center's SPARC project as a post doctoral research fellow in September 2006. Eva holds a BSc in political science and a MSc in environmental science from Lund University, Sweden. In June 2006



she defended her doctoral thesis on the role of science and expertise in the Kyoto negotiations on land use change and forestry at Kalmar University. In Sweden Eva is currently affiliated with the Department of Political Science at Lund University and the Centre for Climate Science and Policy Research at Linköping University.

Ami Nacu-Schmidt

Ami Nacu-Schmidt is the Center's Outreach Coordinator. Ami received her B.A. in Psychology from the University of Colorado.



Roger Pielke, Jr.

Roger Pielke served as the Center's Director since its inception, stepping down in June 2007. Roger joined the faculty of the University of Colorado in July 2001 where he is a Professor in the Environmental Studies Program and a Fellow of the Cooperative



Institute for Research in Environmental Sciences. From 1993-2001 Roger was a Scientist at the Environmental and Societal Impacts Group at the National Center for Atmospheric Research. Roger holds a B.A. in mathematics and a Ph.D. in political science, both from the University of Colorado.

Kevin Vranes

Kevin Vranes served as a CIRES Visiting Fellow with the Center over the past year. He obtained a Ph.D. at the Lamont-Doherty Earth Observatory in physical oceanography and climatology. He



was a Fellow of the Public Policy Consortium. He was selected as the 2003 - 2004 Congressional Science Fellow of the American Geophysical Union. Kevin spent a year and a half in the Geology Department at the University of Montana (Missoula) as a visiting Assistant Professor where he taught undergraduate and graduate courses in geology, oceanography, climate change, and science policy.

Sarab Wolfe

Sarah Wolfe is an undergraduate in anthropology who provided invaluable assistance with office operations over the past year.



PEOPLE

Affiliates

ffiliates are significant, long-term collaborators or colleagues, on the faculty either at the University of Colorado or other higher education institutions, who share an interest in science and technology policy.

- Wayne Ambler, Associate Professor • and Director, Herbst Program of Humanities for Engineers
- Krister Andersson, Assistant Professor, Environmental Studies
- Susan Avery, President and Director, Woods Hole Oceanographic Institution
- Tom Chase, Assistant Professor, • Geography, University of Colorado
- Robert Frodeman, Chair, Department of Philosophy and Religion Studies, University of North Texas
- Rudy Juliano, Professor, School of • Medicine, University of North Carolina
- Lisa Keränen, Assistant Professor, Communication, University of Colorado
- Paul Komor, Lecturer, Department of Civil Engineering, University of Colorado; Project Director, E SOURCE
- Carl Koval, Professor, Chemistry, University of Colorado; Interim Director, CU Energy Initiative
- Sarah Krakoff, Assistant Professor, Law
- Frank Laird, Associate Professor, • Graduate School of International Studies, University of Denver
- Juan Lucena, Associate Professor, Liberal Arts and International Studies Division. Colorado School of Mines
- Roop Mahajan, Director, Institute • for Critical Technology and Applied Science, Virginia Tech
- Diane McNight, Fellow, INSTAAR; Professor, Civil, Environmental and Architectural Engineering, University of Colorado
- Jana Milford, Associate Professor, Mechanical Engineering and the Center for Combustion and Environmental Research; Director, Environmental Engineering Program, University of Colorado





Ambler













- Carl Mitcham, Professor, Liberal Arts and International Studies, Colorado School of Mines
- Gunilla Öberg, Director, Institute of Resources. Environment and Sustainability, University of British Columbia
- Paul Ohm, Associate Professor, Law, University of Colorado
- Jerry Peterson, Professor, Department of Physics, University of Colorado
- R. Balaji Rajagopalan, Fellow, CIRES; Professor, Department of Civil, Environmental and Architectural Engineering, University of Colorado
- Joe Ryan, Associate Professor, Department of Civil, Environmental, and Architectural Engineering and Environmental Studies; Director, Environmental Engineering Program, University of Colorado
- Dan Sarewitz, Director, Consortium for Science, Policy and Outcomes, Arizona State University
- Doug Sicker, Assistant Professor, Department of Interdisciplinary Telecommunications, University of Colorado
- Mark Squillace, Professor, Law; Director, Natural Resources Law Center
- Kathleen Tierney, Director, Natural Hazards Center; Professor, Sociology, University of Colorado
- William Travis, Associate Professor, Department of Geography, University of Colorado
- Phil Weiser, Associate Professor, Interdisciplinary Telecommunications Program and the School of Law, University of Colorado
- Qian Ye, Research Scientist, National Center for Atmospheric Research
- Tom Yulsman, Associate Professor, School of Journalism & Mass Communication: Co-Director, Center for Environmental Journalism, Environmental Studies Program, University of Colorado.
- Michael Zimmerman, Professor, Philosophy; Director, Center for Humanities and the Arts, University of Colorado



Zimmerman

Milford

PEOPLE

Faculty Affiliate News

S usan K. Avery was named the President and Director of Woods Hole Oceanographic Institution. She is the ninth director in WHOI's 77-year history, and the first woman to hold the title. A fellow of CIRES since 1982, Susan became its director in 1994. In that role, she facilitated new interdisciplinary research



efforts spanning the geosciences and including the social and biological sciences. She helped establish the Center for Science and Technology Policy Research to make CIRES research more applicable, understandable, and accessible to the public.

Paul Komor shared in the 2007 Nobel Peace Prize, awarded to Al Gore and the Intergovernmental Panel on Climate Change (IPCC) "for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change". The IPCC consists of a large



number of scientists and researchers – including Paul, who co-authored a chapter on "Mitigation Options for Human Settlements" in the IPCC's Second Assessment Report.

Research Affiliates

Research affiliates are collaborators at CU and elsewhere who are not faculty members.

- Martyn Clark, Research Scientist, National Institute for Water and Atmospheric Research, New Zealand
- Richard Conant, Ecosystem Ecologist, Natural Resource Ecology Laboratory, Colorado State University
- Erik Fisher, Postdoctoral Fellow, Center for Nanotechnology in Society, Arizona State University
- Douglas Kenney, Research Associate, University of Colorado Natural Resources Law Center
- Myanna Lahsen, Social Science Officer, Instituto Nacional de Pesquisas Epaciais (INPE)

• Brad Udall, Director, Western Water Assessment

Visitors and Collaborators

The Center collaborates with other scientists and professionals from around the world. The following individuals collaborated with Center staff on proposals or projects, co-authored papers with Center staff, or visited the Center in 2007-2008:

- Christina Alvord, Western Water Assessment, Collaborator
- Laurens Bouwer, Vrije Universiteit, Co-author
- Tom Chase, University of Colorado, Speaker
- Netra Chhetri, Arizona State University, Collaborator
- Douglas Collins, Tillinghast-Towers Perrin, Co-author
- **Ryan Crompton**, Macquarie University, Coauthor
- **Richard Conant**, Colorado State University, Collaborator
- William Easterling, Penn State University, Collaborator
- David Fairman, Consensus Building Institute, Co-author
- Eberhard Faust, Munich Re, Co-author
- Karen Fisher-Vanden, Dartmouth College, Speaker
- Chris Goemans, Colorado State University, Collaborator
- Joel Gratz, ICAT Managers, Co-author
- Chris Green, McGill University, Co-author
- **Reiner Grundmann**, Ashton School of Languages and Social Sciences, Speaker
- Lori Hidinger, Arizona State University, Collaborator
- William H. Hooke, American Meteorological Society, Collaborator
- Peter Höppe, Munich Re, Collaborator
- Richard Houghton, Woods Hole Research Center, Co-author
- **Tracy Johns**, Arizona State University, Collaborator
- **Douglas Kenney**, University of Colorado, Collaborator
- Anthony King, ORNL, Co-author
- Paul Komor, University of Colorado, Speaker
- Myanna Lahsen, Instituto Nacional de Pesquisas Epaciais, Collaborator
- Chris Landsea, NOAA, Co-author

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- Jessica Lowrey, Western Water Assessment, ٠ Collaborator
- Jana Milford, University of Colorado, Speaker
- Carl Mitcham, Colorado School of Mines. Collaborator
- Rebecca Morss, National Center for • Atmospheric Research, Speaker
- Susie Moser, National Center for Atmospheric • Research, Collaborator
- Rade Musulin, Aon Re Australia, Co-author
- Mark Neff, Arizona State University, • Collaborator
- Ted Nordhaus, Breakthrough Institute, • Speaker
- Paul Ohm, University of Colorado, Speaker ٠
- Andrea Ray, NOAA, Speaker
- Balaji Rajagopalan, University of Colorado, • Speaker
- Kevin Reidy, City of Aurora, Collaborator •
- Adam Rose, Penn State University, Co-author
- Joseph Ryan, University of Colorado, Speaker
- Dan Sarewitz, Arizona State University, • Collaborator
- Mark Saunders, Benfield UCL Hazard Research Centre, Co-author
- Michael Shellenberger, Breakthrough • Institute, Speaker
- René von Schomberg, Scientific Officer for • the European Commission, Speaker
- Kathleen Tierney, University of Colorado, • Speaker
- Bill Travis, University of Colorado, speaker ٠
- Tom Wigley, NCAR, Co-author
- Thomas Willbanks, ORNL, Co-author ٠
- Gregory Zimmerman, ORNL, Co-author

Boards and Committee Membership 2005-Benjamin Hale 2007-2008 Pre-Professional Advising 2003candidate search committee 2007-2008 ENVS Colloquium Organizer with

Diana Nemergut

& Culture 2006-Member, Editorial Board, Global Environmental Change: Human and Policy Dimensions 2006-Member, Editorial Board, Environmental Hazards

Roger Pielke, Jr.

2007-

2006-Member, Editorial Board, Water Resources Research 2004-Member, Editorial Board, Environmental Science and Policy

Member, Editorial Board, Nature

- 2004-Member, Editorial Board, Darwin
- 2003-2005 Member, Editorial Board, International Encyclopedia of Science, Technology and Ethics
- 2001-2007 Member, Editorial Board, Bulletin of the America Meteorological Society
- 2001-Member, Editorial Board, Policy Sciences
- Member, Editorial Board, Natural 2001-Hazards Review
- 2006-2007 CIRES/ENVS Science Policy Faculty Search Committee
- 2006-2007 **CIRES** New Fellows Committee
- 2006 CIRES External Review Committee
- 2006 Environmental Studies Graduate Curriculum Committee
- 2006-Member, Steering Committee, The Nation's Coasts: A Vision for the Future. H. John Heinz III Center for Science. Economics and the Environment
- Member, Advisory Committee, Societal Impacts Group, National Center for Atmospheric Research
- Member, Advisory Committee, Pacific ENSO Applications Center



Center for Science and Technology Policy Research Strategic Plan Revised January 2006

Vision

The Center serves as a resource for science and technology decision makers and those providing the education of future decision makers.

Mission

The Center works to improve how science and technology policies address societal needs, including research, education and service.

Achieving this mission requires making progress toward the following four interrelated strategic intents:

Strategic Intent #1

Help guide the University of Colorado in educating the next generation of science and technology policy decision makers.

Objectives

• Build a sustainable graduate science and technology policy education program at the University of Colorado.

- Serve as a national role model in innovative science and technology policy education
- Integrate faculty skills and expertise across disciplines and fields contributing to their professional development, research, and educational goals.
- Enable the University of Colorado to serve as a leading voice in national and international science and technology policy issues.

Strategic Intent #2

Help make the nation's science portfolios more responsive to societal needs. Example areas include climate and global change, disasters, nanotechnology, biotechnology, and renewable/ sustainable energy.

Objectives

- Identify criteria for reconciling supply of and demand for scientific information in decision making.
- Identify and present criteria for developing and evaluating broad portfolios of scientific and technological research.

A P P E N D I C E S

- Identify and develop relationships with our target audiences to learn about their information needs and how we can best assist them.
- Develop an outreach strategy to disseminate the Center's products to our target audience.

Strategic Intent #3

Provide various means for people with differing perspectives to discuss research and practice related to science in its broader societal context.

Objectives

- Identify the current and potential users of our discussion fora.
- Evaluate current activities and continuously develop new activities to serve effectively our users' needs.
- Experiment with new technologies, educational tools, mechanisms of outreach, and forms of stakeholder interaction to

enhance the opportunities for discussion and debate on important topics related to science and society.

Strategic Intent #4

Build a sustainable, diverse and productive institution at the University of Colorado-Boulder.

Objectives

- Achieve sufficient and stable funding to support the Center's core activities.
- Achieve a critical mass of personnel able to carry out the Center's mission.
- Have all Center staff co-located on the main campus.
- Further improve and refine the Center's governance structure to support growth and guide its future direction.
- Develop the Center's "brand.

Grant Activity

Current/Pending Proposals, 2007-2008

Project/Proposal Title	Source	Amount	Start Date	End Date
Science Policy Assessment and Research on Climate – Decision Making Under Uncertainty	NSF	\$2.4 million	10/01/2004	09/30/2009
CU Engineering Test Beds for Real-Time Technology Assessment (RTTA)	Subcontract with Arizona State University	\$84,000	08/2005	07/2010
Scales of Decision Making and the Carbon Cycle	NOAA	\$266,088	05/01/2004	08/31/2008
Decision Making Under Uncertainty and Pragmatism	NSF	\$35,999	08/01/2006	07/31/2007
Reconciling Supply of and Demand for Research in the Science of Science and Innovation Policy	NSF	\$39,435	08/15/2008	07/31/2009
Scholar's Award Proposal for Investigating the Origins and Evolution of the "Basic Research" as a Political Symbol	NSF	\$41,378	09/15/2008	08/31/2009

A P P E N D I C E S

Staff Highlights

Rad Byerly

R ad Byerly was appointed to serve a three year term on the Colorado Air Quality Control Commission. EPA has delegated to Colorado its legal authority under the Clean Air Act, so the AQCC is the rule-making body for the State. Through his vote on the commission Rad will



be making decisions on regulations based in part on scientific information, and bringing this experience to the Center.

Lisa Dilling

Lisa Dilling co-led the "State of the Carbon Cycle Report", Synthesis and Assessment Product 2.2 of the Climate Change Science Program, which was released to the public on November 13, 2007. She briefed Congress and members of the media in conjunction with the report's release.



Benjamin Hale

Ben Hale organized the Conference on the Use of Prisoners for Medical Research in February 2008. In August 2008, Ben also co-organized the first annual Rocky Mountain Ethics Congress, an international conference geared to bring



applied and theoretical ethicists together in the highest quality, highest altitude forum available to the ethics community.

Bobbie Klein

B obbie Klein has been involved with a year-long Western Water Assessment research project examining the extent to which long-term climate change, particularly



earlier spring snowmelt, may impact the functioning of water rights in the western states.

William Lewis

William Lewis appeared before a House Natural Resources Committee hearing on July 31, 2007 on "Crisis of Confidence: The Political Influence of the Bush Administration on Agency Science and Decision-Making." To read his testimony see:



http://resourcescommittee.house.gov/images/ Documents/20070731/testimony_lewis.pdf.

Ami Nacu-Schmidt

A mi Nacu-Schmidt created an attractive new web design for the Center's Science Policy Blog, Prometheus, located at <u>http://sciencepolicy.</u> <u>colorado.edu/prometheus</u>. Ami continues to use her graphics and web skills to create beautiful brochures, reports and websites for the Center.



Roger Pielke, Jr.

In April 2008, Roger Pielke, Jr. co-authored a commentary, "Dangerous Assumptions" in Nature. The commentary, which argued that the Intergovernmental Panel on Climate Change (IPCC) underestimated the technical challenge of



responding to climate change, was cited in more than 70 publications worldwide. In 2007, Roger became an Associate Fellow of the James Martin Institute for Science and Civilization at Oxford University's Said Business School. In 2008, Roger became a Fellow of the Breakthrough Institute. Serving as a resource for science and technology decision makers and those providing the education of future decision makers.



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