# CSTPR

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, 2006 - June 30, 2007

Center for Science and Technology Policy Research

CIRES

NOAA



















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

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# Center for Science and Technology Policy Research

## *2006 - 2007 Annual Report*

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2006-2007 Annual Report

# Center for Science and Technology Policy Research

## July 1, 2006 - June 30, 2007 Annual Report

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

### Our Mission

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

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

# Message from the Director

Welcome to the 2006-2007 Annual Report of the University of Colorado/CIRES Center for Science and Technology Policy Research. This report describes the Center's FY 2007 research, education, and outreach activities.

The past year has been a productive one for us and a time of growth for our Center. Center staff published two books with Cambridge University Press: Creating a Climate for Change: Communicating Climate Change and Facilitating Social Change, by Lisa Dilling (with Susi Moser from NCAR), and The Honest Broker: Making Sense of Science in Policy and Politics, by Roger Pielke, Jr. We also continued an active and diverse range of research resulting in peer-reviewed papers in various outlets.

We extended our outreach activities under the leadership of our Outreach Coordinator, Ami Nacu-Schmidt, and we offer a quarterly newsletter, Ogmius; a bi-monthly briefing; a popular weblog; and a dynamic homepage. We also have created several focused, topical list-servs. Center staff have engaged in a wide range of outreach activities including providing testimony to the U.S. Congress, authoring opinion and analysis pieces for popular media, and giving public lectures across the country and internationally. In this report you can learn more about these outreach activities.

Our graduate certificate program continues to thrive, with new students entering the program at a rapid rate, and students who have participated in the certificate program finding careers in academia, government service, industry, and non-governmental organizations. The homepage for the program lists our participants and alumni, and their impressive accomplishments.

The past year also saw some very positive changes at the Center. Our faculty search resulted in the hiring of our own Lisa Dilling onto the faculty of Environmental Studies. The Center is also happy to have Ben Hale coming on board who is also joining the Environmental Studies faculty. Ben is a philosopher and adds a valuable dimension to our expertise. In 2007-2008 we anticipate hiring another faculty position, meaning that we will have grown from one to four faculty members in only two years!

In 2007, I completed my term as the first director of the Center, feeling good that the Center is in solid shape for sustainability at the University of Colorado. Over the next year the Center will be led by William Lewis, a faculty member in biology and fellow of CIRES, who is an expert in science and policy issues associated with wetlands.

Overall, the past year has been one of great accomplishments for us, and the future looks even brighter. In the pages that follow you will find a detailed report of our many activities for 2006-2007. We hope that you will find this report to be informative. We encourage you to read the report, but also to follow its pointers to look more closely at our research, education, and outreach activities readily available on our website. And of course, your feedback is always welcome.

Roger Pielke, Jr.
Director
pielke@colorado.edu

# The Center at a Glance

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.

For the period July 1, 2006 – June 30, 2007:

**607,051**

Unique website visitors

**3,520**

Recipients of Center's Science Policy Briefing


**195**

Subscribers to Ogmius, Center's quarterly newsletter

**66**

Media references to the Center and/or its personnel

**62**

Presentations by Center staff and students


**28**

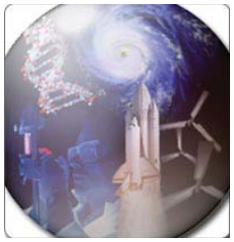
Publications

**24**

Talks at or sponsored by the Center by non-Center personnel

**7**

Graduate students working at the Center



**24**

Students receiving certificate in Science and Technology Policy

# Center Highlights

In January 2007 Center Director Roger Pielke, Jr., was invited to testify before the U.S. House of Representatives Government Reform Committee on the subject of Political Interference in the Work of Government Climate Change Scientists.

In May 2007 Roger Pielke, Jr. was invited to testify before the U.S. House of Representatives Committee on Science and Technology on "The State of Climate Change Science 2007, Pt. III"

The Center's NSF-sponsored project, Science Policy Assessment and Research on Climate (SPARC), published reports from the following four SPARC workshops:

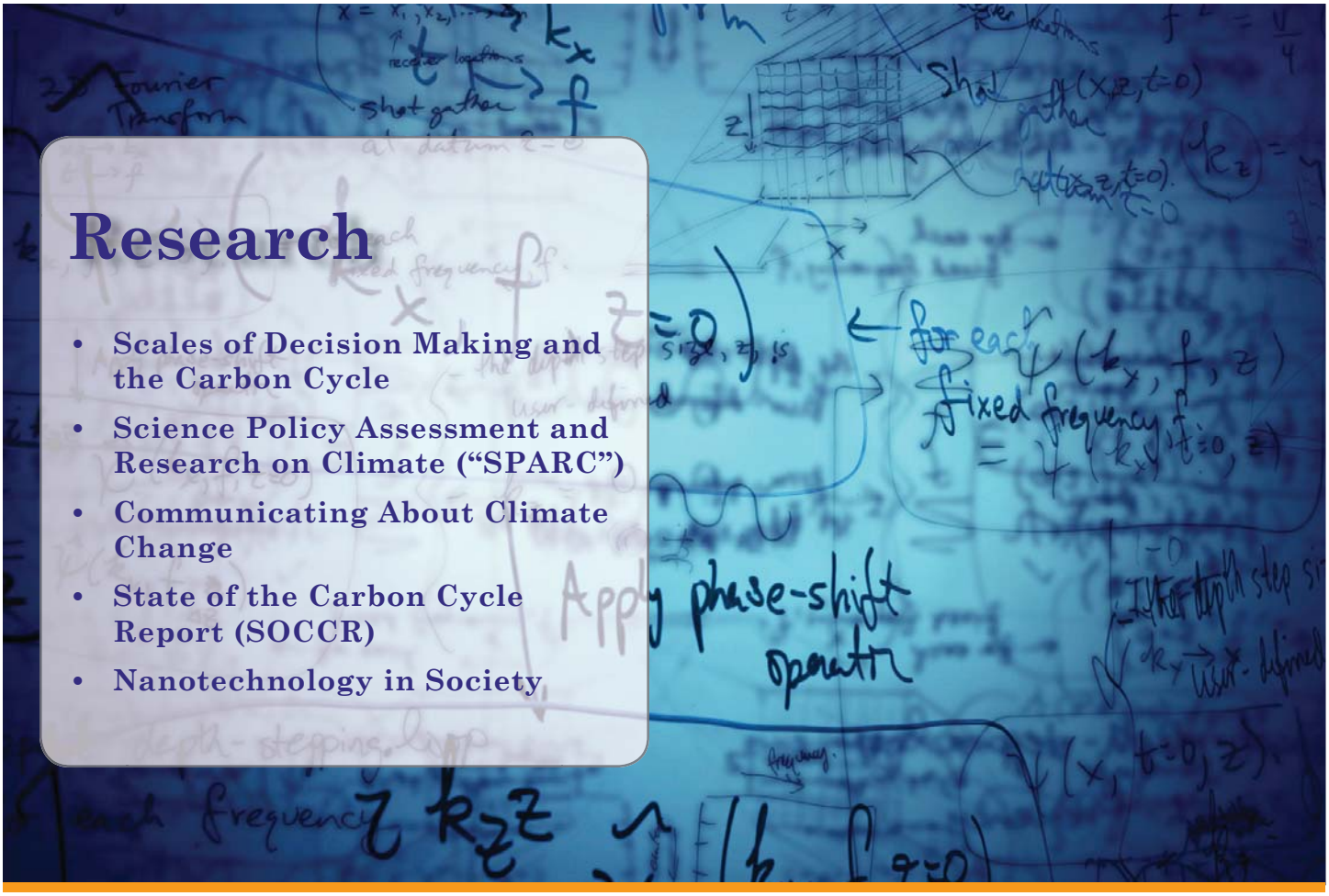
- 2006 Workshop on Climate Change and Disaster Losses: Understanding and Attributing Trends and Projections
- 2006 Workshop on Multiple Stressors on Central Arizona Water Resources
- 2005 Workshop on Climate Science Policy: Lessons from the RISAs
- 2005 Decision Support and Carbon Cycle Science: Practical Strategies to Reconciling the Supply of and Demand for Carbon Cycle Science

Center visiting fellow Lisa Dilling (with NCAR's Susi Moser) has a new edited volume from Cambridge University Press titled "Creating a Climate For Change: Communicating climate change and facilitating social change."

Roger Pielke, Jr. has a new book out from Cambridge University Press titled "The Honest Broker: Making Sense of Science in Policy and Politics."

Roger Pielke, Jr. was awarded the Eduard Brückner Prize for outstanding achievement in interdisciplinary climate science.

Center graduate student Shali Mohleji was one of seven students awarded the highly competitive CIRES Research Fellowship for the 2007 fall semester.



# 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 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 decision-making 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.

**Website:** http://sciencepolicy.colorado.edu/about_us/meet_us/lisa_dilling/ccycledecisions/

### *Presentations*

Dilling, L., 2006. Cross-scale carbon governance challenges in the U.S., Carbon Management at Urban and Regional Levels: Connecting Development Decisions to Global Issues, Mexico City, September 4-8.

### *Publications*

Dilling, L., 2007. Toward carbon governance: Challenges across scales in the United States, Global Environmental Politics, v. 7, n. 2, pp. 28-44, May.

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

SPARC is a joint project of the University of Colorado's Center for Science and Policy Technology Research and the 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*

Averill, M. Climate Ethics, ENVS Seminar, Jan. 19, 2007.

Dilling, L. Communicating about climate change, Feb. 28, 2007.

Dilling, L. "Usable" carbon science: Creating new science policies to support decision making, Feb. 27, 2007.

Dilling, L. The Challenge of Communicating About Climate Change To Support Societal Action, AAAS Meeting, Feb. 16, 2007.

Dilling, L. Carbon Management and Human Dimensions in the NACP, Jan. 25, 2007.

Dilling, L. Terrestrial Carbon Sink Thresholds, Ecothresholds Project meeting, Nov. 9, 2006.

Dilling, L. Enhancing Reliability and Usability of Science Information, GSA specialty Meeting, Sept. 18-20, 2006.

Dilling, L. Cross-scale carbon governance challenges in the U.S., Carbon Mgmt at urban/regional lvls., Sept 4-8, 2006.

Dilling, L. Implications of mismatched supply and demand for climate science, GRC Conference, Aug. 13-18, 2006.

Logar, N. Models for societal benefit from federally-funded mission institutions, April 3, 2007.

Logar, N. Relevant knowledge and user collaboration in the U.S. Department of Agriculture, Nov. 11, 2006, Beijing, China.

Pielke, Jr., R. Decision making in a world of uncertainty, GRC Conference, August 17, 2006.
Pielke, Jr., R. Climate Change: Understanding the Degree of the Problem, July 20, 2006.
Vranes, K. Global Warming/Climate Change and Energy Use, Colorado Academy, Oct., 2006.

### *Publications*

Dilling, L., 2007. The opportunities and responsibility for carbon cycle science in the U.S., Environmental Science & Policy, Vol. 10, pp. 1-4.

Dilling, L., 2007. Towards science in support of decision making: characterizing the supply of carbon cycle science, Environmental Science & Policy, Vol. 10, pp. 48-61.

Lahsen, M. and C. A. Nobre, 2007. Challenges of connecting international science and local level sustainability efforts: the case of the Large-Scale Biosphere–Atmosphere Experiment in Amazonia, Environmental Science & Policy, Vol. 10, pp. 62-74.

Logar, N. J. and R. T. Conant, 2007. Reconciling the supply of and demand for carbon cycle science in the U.S. agricultural sector, Environmental Science & Policy, Vol. 10, pp. 75-84.

Lövbrand, E., 2007. Pure science or policy involvement? Ambiguous boundary-work for Swedish carbon cycle science, Environmental Science & Policy, Vol. 10, pp. 39-47.

McNie, E., 2007. Reconciling the supply of scientific information with user demands: an analysis of the problem and review of the literature, Environmental Science & Policy, Vol. 10, pp. 17-38.

McNie, E., Pielke Jr., R.A., and Sarewitz, D. (Eds) 2006. SPARC Reconciling Supply and Demand of Climate Science: Lessons from the RISAs, Workshop Report. SPARC Reconciling Supply and Demand of Climate Science Workshop, August 15-17, 2005, East-West Center, Honolulu, HA.
Pielke, Jr., R. A. 2006. Climate change is serious, but we have to have a realistic response, Guardian Unlimited, London, United Kingdom, 13 October, http://www.guardian.co.uk/zurichfuturology/story/0,,1920333,00.html.

Pielke, R.A., 2006. What just ain't so: It is all too easy to underestimate the challenges posed by climate change. Book review of Kicking the Carbon Habit: Global Warming and the Case for Renewable and Nuclear Energy by William Sweet, Nature, Vol 443, pp. 753-754, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2475-2006.12.pdf.

Pielke, Jr., R.A., Gratz, J., Landsea, C.W., Collins, D., Saunders, M., and Musulin, R., 2007. Normalized Hurricane Damages in the United States: 1900-2005. Natural Hazards Review, (submitted).

Pielke, Sr., R.A. and R.A. Pielke, Jr. 2006. Climatology: between Science and Politics, Heartland: Eurasian Review of Geopolitics, 2, pp. 59-63, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2467-2006.10.pdf.

Pielke, Jr., R.A., Prins, G., Rayner, S. and Sarewitz, D., 2007. Climate change 2007: Lifting the taboo on adaptation. Nature, 7 February.

Sarewitz, D. and R. A. Pielke, Jr., 2007. The neglected heart of science policy: reconciling supply of and demand for science, Environmental Science & Policy, Vol. 10, pp. 5-16.

### *Workshop Reports*

Dilling, L. (ed.), 2006. Workshop on Decision Support and Carbon Cycle Science: Practical Strategies to Reconciling the Supply of and Demand for Carbon Cycle Science, Final Workshop Report. Boulder, Colorado, 13-14 June 2005, http://sciencepolicy.colorado.edu/sparc/research/projects/rsd/workshop_report.pdf.

Höppe, P. and R.A. Pielke, Jr. (eds.), 2006. Workshop on Climate Change and Disaster Losses: Understanding and Attributing Trends and Projections, Final Workshop Report. Hohenkammer, Germany, 25-26 May, http://sciencepolicy.colorado.edu/sparc/research/projects/extreme_events/munich_workshop/workshop_report.html.

**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)


While 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:** http://www.isse.ucar.edu/communication/index.html

### *Presentations*

Dilling, L., Communicating about climate change: Moving beyond the myths toward more effective strategies for societal engagement, February 28, CU-Boulder.

Dilling, L., The Challenge of Communicating About Climate Change To Support Societal Action, February 16, AAAS Meeting, San Francisco.

### *Publications*

Moser, Susanne C. and Lisa Dilling (eds., 2007). Creating a Climate for Change: Communicating Climate Change and Facilitating Social Change, Cambridge, UK: Cambridge University Press, 549 pp.

## 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:** http://cdiac.ornl.gov/SOCCR/

### *Draft Versions of the Report*

March 2007 version of SOCCR/SAP 2.2, March 2007 revision of government review draft, http://cdiac.ornl.gov/SOCCR/noaa_review_draft_report.html

January 2007 version of SOCCR/SAP 2.2, government review draft, http://cdiac.ornl.gov/SOCCR/govt_review_draft_report.html

September 2006 version of SOCCR/SAP 2.2, CCSP public review draft, http://cdiac.ornl.gov/SOCCR/public_review_draft_report.html

## 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.

The Center for Science and Technology Policy Research is contributing to CNS-ASU by:

- Organizing a National Consensus Conference panel to identify values to guide policymakers and develop policy recommendations for the future development of nanotechnology;
- Conducting exploratory research aimed at assessing the implementation of federal policies on the societal dimensions of nanotechnology at local university lab settings

### *Poster*

Integrating Societal Concerns into Nanotechnology Research, http://sciencepolicy.colorado.edu/nanotechnologyinsociety/nano_poster.pdf

### *Presentations*

Fisher, E., 2007. Integrating Science and Society in the Laboratory. Center for Integrated Nanotechnologies, Los Alamos National Laboratory. Los Alamos, New Mexico. June 28.

Fisher, E., 2007. Socio-Technical Integration at Macro and Micro Levels. Rathenau Institute, Den Haag, The Netherlands. June 18.

Fisher, E., 2007. Drilling Down on US Ethics Policy for Nanotechnology. Center for Interdisciplinary Research (ZiF), Bielefeld, Germany. June 14.

Fisher, E., 2007. Investigating the Implementation of US Nanotechnology Ethics Policy. Institute for Technology Assessment and Systems Analysis. Karlsruhe, Germany. June 11.

Fisher, E., 2007. Social and Policy Issues in Nanotechnology. 5th CINT Users Workshop, Center for Integrated Nanotechnologies. Albuquerque, New Mexico. January 16-17.

Fisher. E., 2006. Current Societal Considerations in Nanotechnology. Center for Integrated Nanotechnologies, Los Alamos National Laboratory. Los Alamos, New Mexico. November 20.

Fisher, E., 2006. Socratic Engagement of Nanotechnology: A Case Study in Ethics Policy, September 7, University of North Texas, Department of Philosophy and Religion Studies.

Fisher, E., 2006. Midstream Modulation: US Federal Nanotechnology Policy Implementation, July 14, NanoNed day, Utrecht University, The Netherlands.

Fisher, E., 2006. Midstream Modulation: Implementing US Federal Legislation on Societal Considerations and Nanotechnology, July 5, University of Twente, Enschede, The Netherlands.

### *Publications*

#### Peer Reviewed Publications

Barben, D., Fisher, E., Selin, C. & Guston, D.H., 2007. Anticipatory Governance of Nanotechnology: Foresight, Engagement, and Integration. In Hackett, E.J., Amsterdamska, O., Lynch, M.E. & Wajcman, J. (Eds.), New Handbook of Science and Technology Studies, MIT Press. (In press)

Fisher, E., 2007. Nanotechnology, Policy, and Ethics. In Zelkowitz, M. (Ed.), Advances in Computers: Nanotechnology, Vol. 71. Elsevier.

#### Conference Papers

Fisher, E., 2007. Socio-technical integration and the nanotechnology laboratory. Visions about Nanoscience and Technology Workshop. Leuven, Belgium. 20 June.

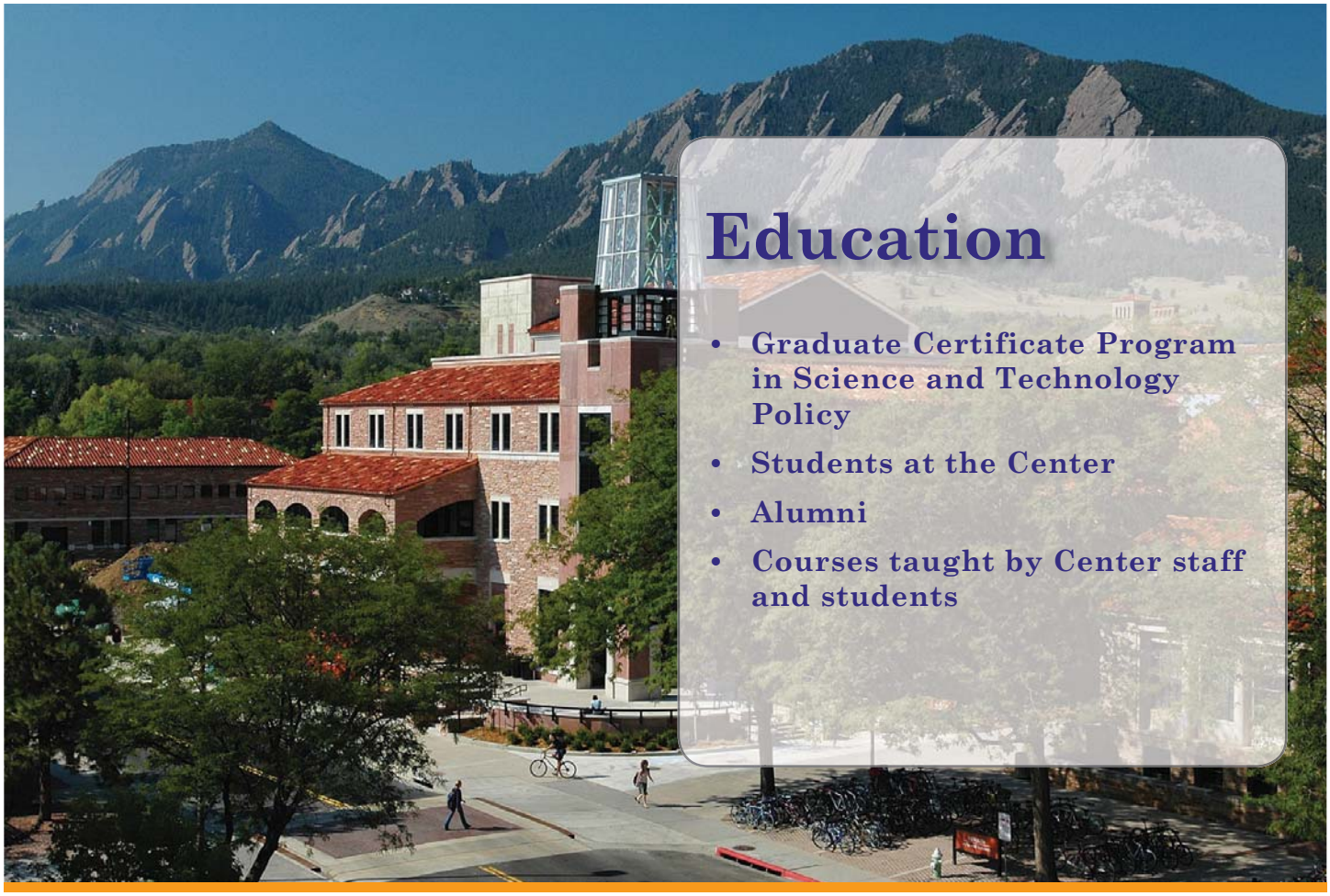
Fisher, E., 2007. "Midstream Modulation: Engaging the Reflexive Capacity of Nanotechnology Researchers." Nanotechnology, Ethics & Sustainability. Bergen, Norway. June 8.

Fisher E. and R. Mahajan, 2006. Midstream Modulation of Nanotechnology Research in an Academic Laboratory. American Society for Mechanical Engineers International Mechanical Engineering Congress and Exposition. Chicago, Illinois. November 5-10.

Fisher, E., 2006. Reflecting on the Shape of Nanotechnology Research from Within. Silence, Suffering, and Survival. Society for the Social Studies of Science Annual Meeting. Vancouver, B.C. Canada. November 1-5.

McNie, E. and E. Fisher, 2006. Questioning Utility: What Should Count as Useful (Scientific) Information? Silence, Suffering, and Survival. Society for the Social Studies of Science Annual Meeting. Vancouver, B.C. Canada. November 1-5.

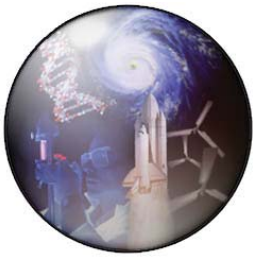
Fisher, E., 2006. The Societal Influencing of Nanotechnology. Poster presentation. From Science and Technology Inputs to Policy Outcomes: What are the Determining Factors? Gordon Research Conference on Science and Technology Policy. Big Sky, Montana. August 13-18.



# Education

- **Graduate Certificate Program in Science and Technology Policy**
- **Students at the Center**
- **Alumni**
- **Courses taught by Center staff and students**

## Graduate Certificate Program in Science and Technology Policy



The 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 third year. Fifteen students are currently enrolled in the certificate program. They come from a variety of CU departments and institutes including Atmospheric and Oceanic Science, Computer Science, Geography, Journalism, Environmental Studies, CIRES, JILA, and Engineering (Aerospace, Civil, Chemical, and Mechanical). Fourteen graduate students 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 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. Marilyn expects to graduate early in 2008. Her tentative dissertation topic is "Who Runs the Greenhouse? The Role of the Federal Judiciary in U.S. Climate Policy."

**David Cherney** is a Ph.D. candidate in Environmental Studies and 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 has conducted research on natural resource policy and management in California, New England, Ecuador, and greater Yellowstone. His current research projects in greater Yellowstone include investigating (1) ungulate migration policy, (2) science policy, and (3) learning ways to mitigate the negative effects of intractable policy problems. David's tentative dissertation title is "Searching for Greater Yellowstone's Science Policy: Improving the integration of science and decision making in management." He expects to graduate in December 2009.

**Jimmy Hague** recently completed an M.S. in Environmental Studies and the Certificate in Science and Technology Policy. Jimmy graduated in 2000 from the University of North Carolina-Chapel Hill with a B.S. in physics and in 2002 with an M.S. in astronomy from the University of Maryland. While completing his studies at the University of Maryland, Jimmy interned with the Committee on Science of the U.S. House of Representatives. After graduation he joined the Science Committee staff of the Subcommittee on Research. He helped execute the Committee's oversight responsibilities of federal research and development efforts, particularly at the National Science Foundation. Then, after nearly 3 years on Capitol Hill, Jimmy enrolled at the University of Colorado to learn more about decision making and science and technology policy. His interests are in decision making in science and technology issues broadly. He hopes to return to science and technology policy work at the federal level after graduation.

**Nat Logar** is pursuing a Ph.D. in Environmental Studies. Nat graduated from Brown University with a BS in Geology-Biology. Following his undergraduate degree, he worked as a tour guide in Glacier National Park, an assistant on debris flow research for the U.S. Geological Survey in Golden, CO, and an environmental consultant in Boston. Nat's undergraduate work, and his first year of graduate school, focused on carbon cycle science. As he became exposed to policy research in graduate school, Nat's interests shifted from climate science to science policy. In the past, he has performed research on the FDA approval process for transgenic fish and on climate science policy, as a part of an NSF-funded interdisciplinary group called Carbon, Climate, and Society. Nat's current work focuses on the how federally funded institutions can fashion science policies that contribute to the benefit of targeted decision makers. His dissertation focuses on science policies in the USDA's Agricultural Research Service, the Naval Research Laboratories, and the National Institute of Standards and Technology. Its tentative title is "Decision processes, knowledge production, and essential science in federally funded mission agencies." Nat expects to graduate in December.

**Genevieve Maricle** is a Ph.D. candidate in Environmental Studies. She graduated from Northwestern University with a BA degree in both Mathematics and Environmental Science. Her undergraduate studies were primarily in the sciences but she maintained a keen awareness and interest in the political implications of her work. She became extremely interested in studying problems that transcend traditional disciplinary boundaries as she began to see a disconnect between the scientific and political worlds. She is working on her dissertation titled: "Shaping Science: How to Turn Science Studies into Science Action" and expects to graduate by September 2007.

**Elizabeth McNie** is a Ph.D. candidate in Science and Technology Policy Research/ Environmental Studies. She holds a Master of Arts degree in Psychology-Organization Development from Sonoma

State University in California and undergraduate degrees in Marine Transportation and Engineering (minor). Elizabeth's research interests relate to climate policy and how to facilitate the development of stronger linkages between scientists and policy makers so that scientists produce information that is both needed and used by policy makers in their decision processes. She is currently working on her dissertation titled "Co-producing useful scientific information for climate policy: informing science policy research and decision support." For 2007, Elizabeth is working as a doctoral fellow at the Center for International Development in the Kennedy School of Government at Harvard University. She is researching the role of 'boundary organizations' in sustainable development and agroforestry in Indonesia.

**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. She has spent two summers interning at the Office of Management and Budget. Shali's interests are in the federal budget process, agency management, and science funding. Her research assesses the decision making process for homeland security R&D, specifically the decisions on how risk assessment and prioritization processes are used to evaluate science-based threats and ultimately allocate federal funding. Shali expects to graduate in the summer of 2008. Her dissertation topic is "Investigating the Federal Decision Making Process for Homeland Security R&D Funding."

Our graduate students continue to make inroads into decision-making circles. During the summer of 2006 a Center graduate student interned for the second year with the Office of Management and Budget (OMB) and another interned for the U.S. State Department in London.

The Center employs other students to assist with vital Center functions.

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

## 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 that combines both science and business responsibilities.
- **Jessica Lowrey** received her Masters in Environmental Studies and is working with the Western Water Assessment in Boulder.
- **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.
- **Edouard Von Herberstein** received his Masters in Environmental Studies and is working for Glacier Re in Switzerland.

## Courses taught by Center staff and students

### *International Environmental Law and Policy (ENVS 4100)*

**Marilyn Averill, ENVS Ph.D. candidate**

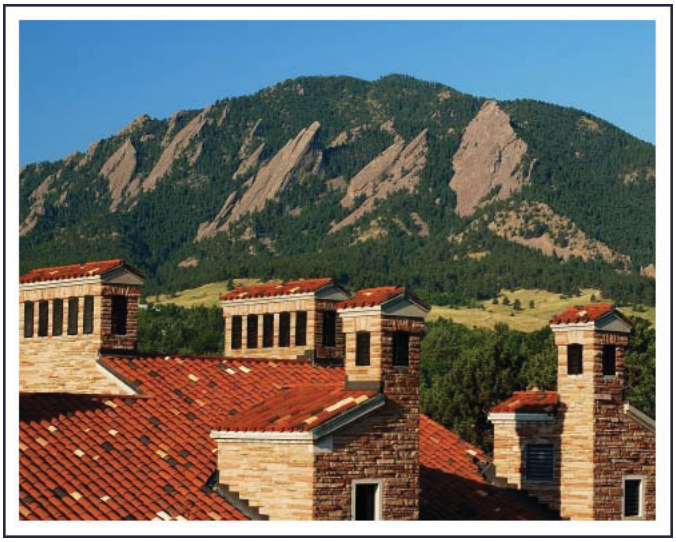
This upper level undergraduate course provides overviews of the organization of the international system and of a number of significant international environmental problems so that students can participate in public debate and analyze proposed policy alternatives. While the class focuses

primarily on law and policy, other issues such as politics, science, ethics, economics and uncertainty pervade international environmental problems and are addressed throughout the course.

### *Policy, Science, and the Environment (ENVS 5000)*

**Roger A. Pielke, Jr.**

The course has two basic goals. First, to discuss issues arising at the intersection of policy, science and the environment that create challenges for effective decision making; and second, to introduce you to conceptual tools which are useful in thinking more effectively and responsibly about any problem of policy; and third, to develop and practice skills using the tools to analyze the various dimensions of an policy issue. To meet these goals, the course focuses on three primary activities: (1) core readings and discussion on aspects of environmental policy and the policy sciences; (2) periodic individual and shared assignments on substantive issues; and (3) a semester-long term project to be completed in groups.



### *Science and Technology Policy (ENVS 5100)*

**Roger A. Pielke, Jr.**

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. It is the first in a 3-course sequence within the Graduate Certificate Program in Science and Technology Policy.

# Outreach

- 2006-07 Publications
- Talks and Presentations
- Other Talks at or sponsored by the Center
- Ogmius
- Prometheus
- Briefings
- Sciencepolicy Website
- Media Coverage

The 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 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.

The Center continues to be viewed as a serious source of analysis and information by science and technology policy decision makers. In January 2007 Center Director Roger Pielke, Jr., was invited to testify before the U.S. House of Representatives Government Reform Committee on the subject of Political Interference in the Work of Government Climate Change Scientists. Center staff were quoted or referred to by media including Nature, Science, Christian Science Monitor, Le Monde, Chronicle of Higher Education, National Review, Philadelphia Inquirer, Associated Press, New York Times, LA Times, San Francisco Chronicle, Scientific American, Boston Globe, and numerous local and regional publications.

## 2006 - 2007 Publications


Averill, M., 2007. Climate Litigation: Shaping Public Policy and Stimulating Debate. In: *Creating a Climate for Change: Communicating Climate Change and Facilitating Social Change*. S. C. Moser and L. Dilling (eds.), Cambridge Univ. Press:, 462-475.

Dilling, L., 2007. A call to global action, *Chemistry & Industry*, 9 April, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2513-2007.13.pdf.

Dilling, L., 2007. The opportunities and responsibility for carbon cycle science in the U.S., *Environmental Science & Policy*, Vol. 10, pp. 1-4, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2484-2007.01.pdf.

Dilling, L., 2007. Toward carbon governance: Challenges across scales in the United States, *Global Environmental Politics*, v. 7, n. 2, pp. 28-44, May, http://www.mitpressjournals.org/doi/abs/10.1162/glep.2007.7.2.28?journalCode=glep.

Dilling, L., 2007. Towards science in support of decision making: characterizing the supply of carbon cycle science, *Environmental Science & Policy*, Vol. 10, pp. 48-61, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2488-2007.05.pdf.

Dilling, L. and B. Farhar, 2007. Making it Easy: Establishing Energy Efficiency and Renewable Energy as Routine Best Practice. In: Moser S. and Dilling L. (eds.), *Creating a Climate for Change: Communicating Climate Change and Facilitating Social Change*, Cambridge University Press.

Fisher, E., R. Mahajan and C. Mitcham, 2006. Midstream Modulation of Technology: Governance from Within. *Bulletin of Science, Technology and Society*, Vol. 26, No. 6, pp. 485-496, December, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2482-2006.16.pdf.

Kenney, D., C. Goemans, B. Klein, J. Lowrey, and K. Reidy, 2007. Residential Water Demand Management in Aurora: Learning from the Drought Crisis, *Colorado Water*, February/March, pp. 14-16, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2503-WaterDemandAurora.pdf.

Lahsen, M. (Lead Author); (Topic Editor: S. Draggan). 2007. Large-Scale Biosphere-Atmosphere Experiment in Amazonia. In: C. J. Cleveland (ed.), *Encyclopedia of Earth*, Washington, D.C.: Environmental Information Coalition, National Council for Science and the Environment, http://www.eoearth.org/article/Large-Scale_Biosphere-Atmosphere_Experiment_in_Amazonia.

Lahsen, M. and C. A. Nobre, 2007. Challenges of connecting international science and local level sustainability efforts: the case of the Large-Scale Biosphere–Atmosphere Experiment in Amazonia, Environmental Science & Policy, Vol. 10, pp. 62-74, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2489-2007.06.pdf.

Logar, N. J. and R. T. Conant, 2007. Reconciling the supply of and demand for carbon cycle science in the U.S. agricultural sector, *Environmental Science & Policy*, Vol. 10, pp. 75-84, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2490-2007.07.pdf.

Lövbrand, E., 2007. Pure science or policy involvement? Ambiguous boundary-work for Swedish carbon cycle science, *Environmental Science & Policy*, Vol. 10, pp. 39-47, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2487-2007.04.pdf.

McNie, E., 2007. Reconciling the supply of scientific information with user demands: an analysis of the problem and review of the literature, *Environmental Science & Policy*, Vol. 10, pp. 17-38, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2486-2007.03.pdf.

Moser, S. and L. Dilling (eds.), 2007. *Creating a Climate for Change: Communicating Climate Change and Facilitating Social Change*. Cambridge University Press, 512 pp, http://sciencepolicy.colorado.edu/publications/special/creating_climate_for_change/index.html.

Pielke, Jr., R. A., 2006. Climate change is serious, but we have to have a realistic response, *Guardian Unlimited*, London, United Kingdom, 13 October, http://www.guardian.co.uk/zurichfuturology/story/0,,1920333,00.html.

Pielke, Jr., R. A., 2007. The Honest Broker. *Bridges*, Vol. 13, April, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2518-2007.15.pdf.

Pielke, Jr., R. A., 2007. *The Honest Broker: Making Sense of Science in Policy and Politics*. Cambridge University Press, http://sciencepolicy.colorado.edu/publications/special/honest_broker/index.html.

Pielke, Jr., R. A., 2006. Self-Segregation of Scientists by Political Predispositions. *Bridges*, Vol. 11, September, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2473-2006.11.pdf.

Pielke, Jr., R. A., 2006. The 2006 US Midterm Elections and Science & Technology Policy. *Bridges*, Vol. 12, December.

Pielke, Jr., R. A., 2006. UCB is a follower, not a leader, on academic earmarking, Letter to the editor, *Silver & Gold Record*, University of Colorado, 9 November, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2480-2006.15.pdf.

Pielke, Jr., R. A., 2006. Watch this space, *Weather and Society Watch*, Institute for the Study of Society and Environment, National Center for Atmospheric Research, November, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2477-2006.13.pdf.

Pielke, Jr., R. A., 2006. What just ain't so: It is all too easy to underestimate the challenges posed by climate change. Book review of *Kicking the Carbon Habit: Global Warming and the Case for Renewable and Nuclear Energy* by W. Sweet, *Nature*, Vol 443, pp. 753-754, October, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2475-2006.12.pdf.

Pielke, Jr., R. A., 2007. When the numbers don't add up. Book review of *Useless Arithmetic: Why Environmental Scientists Can't Predict the Future* by O. Pilkey and L. Pilkey-Jarvis, *Nature*, Vol 447, pp. 35-36, 3 May, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2520-2007.16.pdf.

Pielke, Jr., R. A., R. Crompton, E. Faust, J. Gratz, M. Lonfat, Q. Ye and S. Raghavan, 2006. Factors Contributing to Human and Economic Losses, Sixth WMO International Workshop on Tropical Cyclones, San José, Costa Rica, 21-30 November, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2519-2006.18.pdf.

Pielke, Jr., R. A., G. Prins, S. Rayner and D. Sarewitz, 2007. Lifting the taboo on adaptation. *Nature*, Vol. 445, pp. 597-598, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2506-2007.11.pdf.

Pielke, Sr., R. A. and R. A. Pielke, Jr., 2006. Climatology: between Science and Politics, *Heartland: Eurasian Review of Geopolitics*, 2, pp. 59-63, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2467-2006.10.pdf.

Sarewitz, D. and R. A. Pielke, Jr., 2007. The neglected heart of science policy: reconciling supply of and demand for science, *Environmental Science & Policy*, Vol. 10, pp. 5-16, http://sciencepolicy.colorado.edu/admin/publication_files/resource-2485-2007.02.pdf.

Vranes, K., 2006. Transitions, *Ogmius*, No. 16, Summer/Fall, http://sciencepolicy.colorado.edu/ogmius/archives/issue_16/transitions.html.

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

## Talks and Presentations

Center 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:** http://sciencepolicy.colorado.edu/center_info/center_talks.html

### *Staff Presentations*

#### Rad Byerly

Byerly, R., 2007. Science for Policy? A Search in Progress, Center Noontime Seminar Series, 15 June.

Byerly, R., 2006. What are the issues involved with science for policy vs policy for science?, GRC Conference, 13 August.

#### Lisa Dilling

Dilling, L., 2007. Communicating about climate change, 28 February.

Dilling, L., 2007. "Usable" carbon science: Creating new science policies to support decision making, 27 February.

Dilling, L., 2007. The Challenge of Communicating About Climate Change To Support Societal Action, AAAS Meeting, 16 February.

Dilling, L., 2007. Carbon Management and Human Dimensions in the NACP, 25 January.

Dilling, L., 2007. Defining Usable Science, AMS Meeting, 16 January.

Dilling, L., 2006. Supporting the creation of usable science: Progress and Challenges, AGU Meeting, 13 December.

Dilling, L. and G. Maricle, 2006. Creating Usable Science in the 21st Century: Strategies for More Effectively Connecting Science to Societal Needs, AGU Meeting, 12 December.

Dilling, L., 2006. Terrestrial Carbon Sink Thresholds, Ecothresholds Project meeting, 9 November.

Dilling, L., 2006. Enhancing Reliability and Usability of Science Information, GSA specialty Meeting, 18-20 September.

Dilling, L., 2006. Cross-scale carbon governance challenges in the U.S., Carbon Mgmt at urban/regional lvls., 4-8 September.

Dilling, L., 2006. Implications of mismatched supply and demand for climate science, GRC Conference, 13-18 August.

**Eva Lövbrand**

Lövbrand, E., 2007. The politics of expertise in the Kyoto negotiations on land use change and forestry, Center for Science and Technology Policy Research Noontime Seminar Series, 13 April.

**Roger Pielke, Jr.**

### *Conferences and Workshop Presentations*

Pielke, Jr., R. A., 2007. Politicization of expert advice, Responsible Research in Europe/Science and its Publics, Federal Ministry of Education and Research, Munich, Germany, 25 June.

Pielke, Jr., R. A., 2007. The use (Nonuse and misuse) of models in policy decisions, 2nd Numerical Modeling-Policy Interface Workshop, British Geological Survey, Nottingham, UK, 21 June.

Pielke, Jr., R. A., 2007. Assessing and enhancing the usefulness of society's climate research investment, National Research Council Committee on Strategic Advice to the U.S. Climate Change Science Program, Boulder, CO, 7 June.

Pielke, Jr., R. A., 2007. The myth of the climatic "mean state"(and how it contributes to policy failures), DECVAR Societal Impacts Workshop, Kona, Hawaii, 27 April.

Pielke, Jr., R. A., 2007. Thoughts on scientists in politicized debates, Workshop on Integrating Ecological Science and Environmental Ethics, Sedna Darwin, Chiloe Island, Chile, 18 March.

Pielke, Jr., R. A., 2007. The role of scientists in the science-policy interface, USDA Forest Service Southern Research Station All Scientists Meeting, Lake Lanier Islands, Georgia, 31 January.

Pielke, Jr., R. A., 2006. Emerging Issues in Flood Risk Management, National Flood Risk Policy Summit Aspen Wye Conference Center Queenstown, Maryland, 12 December.

Pielke, Jr., R. A., 2006. (presented by Joel Gratz). Factors contributing to human and economic losses, World Meteorological Organization International Workshop on Tropical Cyclones-VI, San Jose, Costa Rica, 28 November.

Pielke, Jr., R. A., 2006. Climate Science and Decision Making: Lessons from a Flood, Deutsche Klimatagung, Munich Germany, 9 October.

Pielke, Jr., R. A., 2006. Roles for Scientists in Policy and Politics, Joint Inter-American Institute/ NCAR ASP Colloquium on Policy Planning and Decision Making Involving Climate Change and Variability, National Center for Atmospheric Research, Boulder, CO, 11 September.

Pielke, Jr., R. A., 2006. Roles for Scientists in Policy and Politics, QUEST Earth Sciences Summer School, University of Bristol, Bristol, United Kingdom, 4 September.

Pielke, Jr., R. A., 2006. Uncertainty in Science, Uncertainty in Politics, Gordon Research Conference on Science and Technology Policy, Big Sky, MT, 17 August.

### *Talks*

Pielke, Jr., R. A., 2007. The Honest Broker, Embassy of Austria to the United States, Washington, DC, 27 June.

Pielke, Jr., R. A., 2007. Science and Politics, Rotary Club, Boulder, CO, 25 May.

Pielke, Jr., R. A., 2007. Scientists in Politicized Debates, Vrije University, Amsterdam, The Netherlands, 9 May.

Pielke, Jr., R. A., 2007. Scientists in Politicized Debates, Environmental Science, Public Affairs, and Public Policy, University of Indiana, 6 April.

Pielke, Jr., R. A., 2007. Scientists in Policy and Politics, Environmental Design Lunch Talk, University of Colorado, 23 February.

Pielke, Jr., R. A., 2007. A few reactions to Al Gore's 'An Inconvenient Truth', Creative Minds Symposium, Savannah Country Day School, Savannah, Georgia, 9 February.

Pielke, Jr., R. A., 2007. Scientists in Policy and Politics, Climate Change and the Future Series, Environmental Change Institute, Tyndall Centre, and James Martin 21st Century School, Oxford University, 11 January.

Pielke, Jr., R. A., 2006. Disasters and Climate Change, Department of Political Science, Lund University, Lund, Sweden, 5 October.

**Kevin Vranes**

Vranes, K., 2007. The Mitigation and Adaptation

Issues Behind Climate Change, Investment bank UBS, 14 May.

Vranes, K., 2007. What does "success" mean for earthquake mitigation policy?, Center for Science and Technology Policy Research Noontime Seminar Series, 22 February.

Vranes, K., 2006. Examining the earthquakes damages record: what does the last 100 years of losses mean for natural hazards policy? AGU Meeting, 13 December.

Vranes, K., 2006. Global Warming/Climate Change and Energy Use, Colorado Academy, 24 October.

### *Graduate Student Presentations*

**Marilyn Averill**

Averill, M., 2007. U.S. Supreme Court's recent decision in Massachusetts vs. EPA, 10 April.

Averill, M. and A. Briggle, 2007. Limits to Relevance as a Criterion for Research Funding. Poster presentation, CIRES Science Symposium, 4 April.

Averill, M., 2007. Climate Ethics, ENVS Seminar, 19 January.

Averill, M. and A. Briggle, 2006. The Limits to Relevance. AGU Meeting, 13 December.

Averill, M. and A. Briggle, 2006. The Tyranny of Relevance. Society for the Social Studies of Science (4s) Conference, 3 November.

**David Cherney**

Cherney, D.N., 2007. Understanding Science Policy in Natural Resource Conflicts, Susan G. Clark and Dave Mattson's course Large Scale Conservation: Integrating science, management and policy, Yale University, 21 February.

Cherney, D.N., 2007. Using the Policy Sciences in Natural Resource Policy, and Understanding Science Policy in Natural Resource Conflicts, Susan G. Clark and Dave Mattson's course Foundation's of Natural Resource Policy, Yale University, 19 February.

Cherney, D.N. and J.M. Vogel, 2006. Developing Capacity in Early Career Policy Scientists: An appraisal of the 2006 policy sciences summer workshop, Policy Sciences Annual Institute, Yale University, 26 October.

**Nat Logar**

Logar, N., 2007. The decision process and the research product in federal mission agencies, CIRES Science Symposium, 4 April.
Logar, N., 2007. Models for societal benefit from federally-funded mission institutions, Center for Science and Technology Policy Research Noontime Seminar Series, 3 April 3.

Logar, N., 2006. How to achieve benefit from mission-oriented research: lessons from the U.S. Department of Agriculture and the Naval Research Laboratory, AGU Meeting, 13 December.

Logar, N., 2006. Relevant knowledge and user collaboration in the U.S. Department of Agriculture, Beijing, China, 11 November.

Logar, N. and G. Maricle, 2006. Seeking relevance: Defining and evaluating the STS/STP boundary, Society for the Social Studies of Science (4s) Conference, 3 November.

Logar, N. and G. Maricle, 2006. The role of science studies in science policy, Society for the Social Studies of Science (4s) Conference, 3 November.

**Genevieve Maricle**

Maricle, G., 2007. Knowledge transfer from academia, WSWC/CDWR Workshop, Irvine, CA, 17 May.

Maricle, G., 2007. Shaping Climate Science: The Role of Human Dimensions Research in Setting Agendas, Center for Science and Technology Policy Research Noontime Seminar Series, 10 May.

Maricle, G., 2007. Shaping Climate Science: The Role for Human Dimensions Research, ENVS Seminar, 20 April.

Maricle, G., 2007. Shaping Science: How to Craft Research Agendas to Meet Society's Needs, AAAS Meeting, 15-19 February.

Maricle, G., 2006. Shifting Research Priorities: Human Dimensions of Global Change Research, AMS Meeting, 16 January.

Maricle, G., 2006. In Pursuit of Usable Science: Assessing the Impact of Human Dimensions of Global Change Research, AGU Meeting, 13 December.

Maricle, G., 2006. An Overview of the Policy Spectrum, Colorado School of Mines Workshop, 17 November.

Maricle, G. and M. Harsh, 2006. STS/STP across the pond. Society for the Social Studies of Science (4s) Conference, 3 November.

Maricle, G., 2006. Shaping Science: The Role of Science Studies in Policy, 9 October.

### Shali Mohleji

Mohleji, S., 2007. Investigating the Prioritization Process for Homeland Security Projects, CIRES Science Symposium, 4 April.

Mohleji, S., 2007. The Challenges Facing Homeland Security S&T, Center for Science and Technology Policy Research Noontime Seminar Series, 20 March.

Mohleji, S., 2006. Investigating the Prioritization Process for Homeland Security Projects. Poster presentation, 2006 Homeland Defense Symposium, Colorado Springs, 2-5 October.

### Elizabeth McNie

McNie, E. and E. Fisher, 2006. Questioning Utility: What Should Count as Useful Information?, "Questioning Relevance: Exploring the Boundary Between Science and Technology Studies (STS) and Science and Technology Policy (STP)", Society for Social Studies of Science Annual Meeting, Vancouver, B.C., 2-4 November.

McNie, E. and G. Maricle, 2006. The Science and Technology Policy Handbook: Mapping the Field, Gordon Research Conference: 'Science and Technology Policy', Big Sky Resort, MT, 13-18 August.

### *Other Talks at or sponsored by the Center*

- Steve Nerem, 2007. Satellite Measurements of Sea Level Change: What do they tell us?, 1 June.
- Ricardo Rozzi, 2007. Cape Horn Biosphere Reserve: Biocultural Conservation & Sustainable Development, 31 May.
- Edward Dunlea, 2007. Recent Advances in Ambient Aerosol Research, 3 May.

Ricardo Rozzi, May 31, 2007

Lisa Keränen, Dec. 4 , 2006

Edward Dunlea, May 3, 2007

Steve Nerem, June 1, 2007

- Wayne Ambler, 2007. How Should We Introduce Engineering Undergraduates to STS and Policy Issues?, 18 April 18.
- Krister Andersson, 2007. Decentralized Governance & Environmental Change, 16 April.
- Doug Kenney and Chris Goemans, 2007. Managing Residential Water Demand: Lessons from Aurora, 13 March.
- Jennifer Kuzma, 2007. Emerging Technologies & the Environment: Case Studies for Science & Technology Policy, 9 March.
- Jennifer Kuzma, 2007. Oversight for Nanotechnology: No Small Matter, 8 March.
- Mark Squillace, 2007. The Future of Federal Wetlands Regulation, 6 March.
- Juan Lucena, 2007. What the field of engineering studies has to contribute to CSTPR, 21 February.
- Juan Lucena, 2007. Engaging engineers in policymaking: From problem solvers to problem definers, 20 February.
- Björn-Ola Linnér, 2006. Who gets what, how and when: Historical Responsibility and Emissions Trade in Climate Policy, 6 February.
- Katinka Waelbers, 2007. Philosophy of Science, Technology & Society: Master program at the Univ of Twente, 25 January.
- Paul Komor, 2007. Meeting Colorado's Future Electricity Needs: One Question, Many Answers, 23 January.
- Lisa Keränen, 2006. Public and Technical Argument in Science-Based Controversies, 4 December.
- Juan Bautista Bengoetxea, 2006. Science and Technology Studies in Spain, 27 November.
- Michael Zimmerman, 2006. Outline of an Integral Ecology, 13 November.
- Carl Koval, 2006. CU's New Energy Initiative, 30 October.
- Sarah Krakoff, 2006. Climate Change, Morality and Law, 18 October.
- Jana Milford, 2006. Dealing with

Uncertainty in Regulatory Applications of Air Quality Models, 25 September.

- Frank Laird, 2006. Fighting Evolution, Controlling Education: Controversy over Intelligent Design, 18 September.
- Erik Fisher, 2006. Socratic Engagement of Nanotechnology: A Case Study in Ethics Policy, 7 September.
- Erik Fisher, 2006. Midstream Modulation: US Federal Nanotechnology Policy Implementation, 14 July.
- Erik Fisher, 2006. Midstream Modulation: Implementing Legislation on Societal Considerations and Nanotechnology, 5 July.

## Ogmius


Each 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:

- Apocalypse Soon: Climate Change, the End of Oil, and the Perils of Limiting Choices by Frank Laird (winter/spring 2007)
- Arbitrary Impacts and Unknown Futures: The shortcomings of climate impact models by Ryan Meyer (fall/winter 2006)
- Transitions by Kevin Vranes (summer/fall 2006)

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 195 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/archives/issue_18/

## Prometheus


In 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. Prometheus is ranked in the top .02% of all weblogs by Technorati, one of the most recognized authorities on weblogs.

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

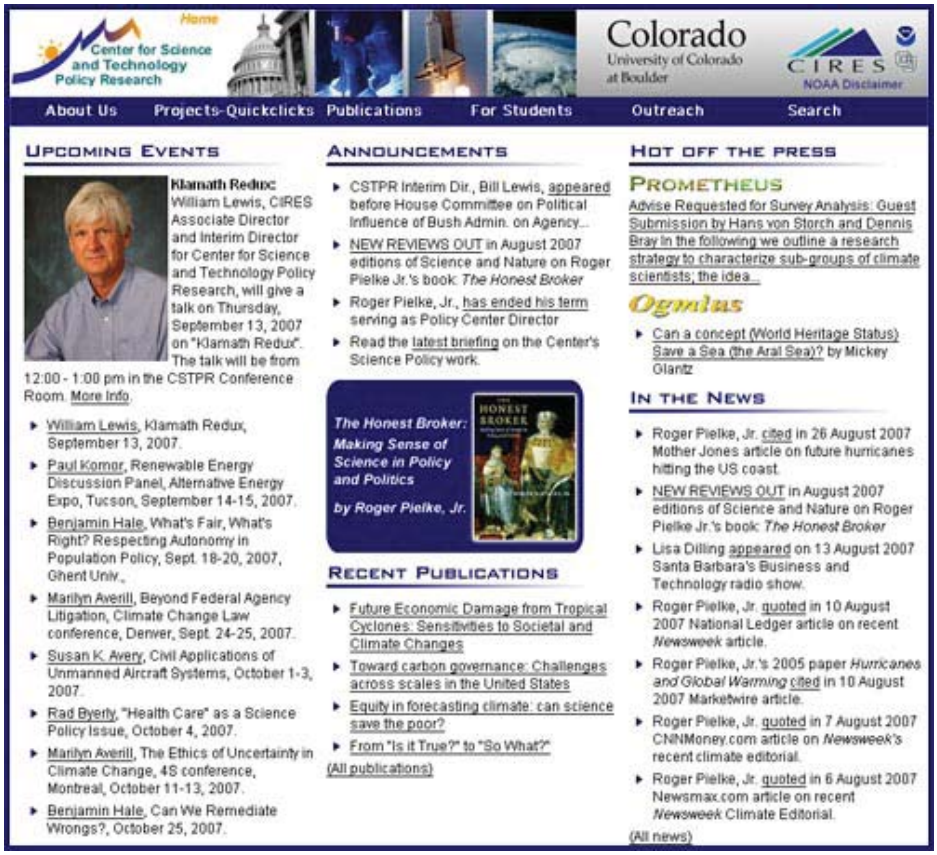
## Briefings


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 over 3,500 science and technology policy decision makers in Washington, D.C., and around the country, and is also posted on the Center's website.

**Website:** http://sciencepolicy.colorado.edu/outreach/cstpr_briefings.html

## 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**, http://sciencepolicy.colorado.edu/outreach/center_talks.html
  Provides a list of all past and upcoming speakers, dates and titles of their talks, and presentations, if available.

- **Science & Technology Jobs**, http://sciencepolicy.colorado.edu/students/jobs.html
  Links to pages with science and technology policy jobs, internships, fellowships, etc.

- **Science and Technology Policy Education at CU**, http://sciencepolicy.colorado.edu/students/st_education_at_cu.html
  Links to science and technology policy related programs and classes at the University of Colorado.

- **Science and Technology Policy Education elsewhere**, http://sciencepolicy.colorado.edu/students/st_studies_prgs.html
  Links to educational institutions other than those at the University of Colorado, as well as to science and technology studies programs.

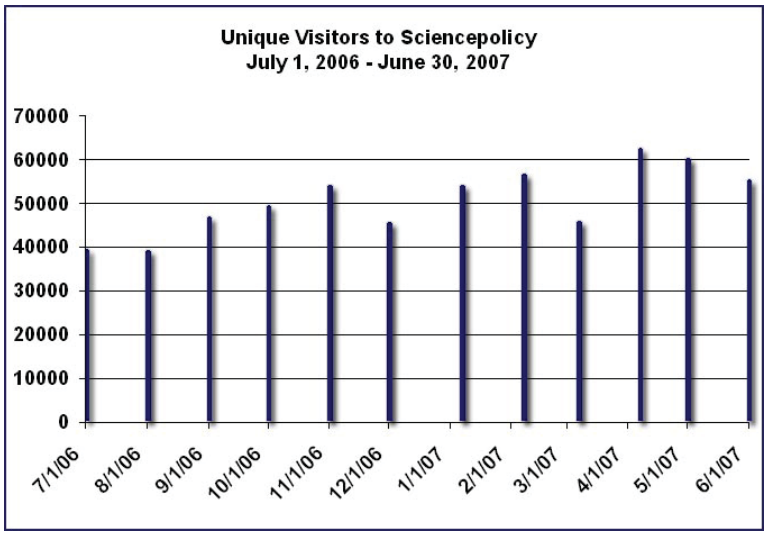
- **Science and Technology Organizations and Centers**, http://sciencepolicy.colorado.edu/students/st_organizations.html
  This page provides links to S&T organizations, and centers around the country.

- **Media Resources**, http://sciencepolicy.colorado.edu/outreach/media_resources/
  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.

- **Extreme Weather Sourcebook 2001**, http://sciencepolicy.colorado.edu/sourcebook/
  The Extreme Weather Sourcebook 2001 Edition is a source of economic and other societal impacts related to hurricanes, floods, tornadoes, lightning, and other U.S. weather phenomena.

### *Website Vists*

Website traffic on sciencepolicy.colorado.edu has grown substantially in the past year from around 39,000 visitors per month in July 2006 to over 62,000 in April 2007. The following graph shows the total number of unique visitors to our website each month July 1, 2006 – June 30, 2007:



### *Media Coverage*

Since opening in the fall of 2001, Center staff and projects have been referenced by the following media:

Aerospace America Magazine
AFP
Against the Grain
Albuquerque Journal
American Prospect
Arkansas Democrat Gazette
Associated Press
Audobon Magazine
Baltimore Sun
BBC Radio
Boston Globe
Capital Times
China Daily
Christian Science Monitor
Chronicle of Higher Education
Climateandinsurance.org
CNN
Colorado Daily
Colorado Springs Gazette
Colorado Springs Independent
Daily Camera
Daily Reporter-Herald
Daily Utah Chronicle
Dallas Morning News
Denver Business Journal
Denver Post
Der Spiegel
Discover Magazine
Discovery Channel
Drug Development and Discovery
The Economist
EOS
EU Reporter
Financial Post
Financial Times
Forbes
Fort Collins Coloradoan
Fortune
Fox News
Galileo (Italy)
Geotimes
Globe Insider


Greenwire
Guardian
Houston Chronicle
IEEE Sprectrum
Il Messaggero (Italy)
Insure.com
International Herald Tribune
Investor's Business Daily
Jackson Hole News and Guide
Journal of Young Investigators
Kansas City Star
KCPW Radio
KMGH Channel 7 news
KNUS Radio
KOA Radio
Kristeligt Dagblad (Denmark)
LA Times
Le Monde
Longmont Daily Times-Call
Marketplace Radio
Miami Herald
Minnesota Public Radio
MSNBC
Naples Daily News
Nashua Telegragh
National Geographic News
National Journal
National Public Radio
National Review
Natural Hazards Observer
Nature
New Orleans Times-Picayune
New Scientist
New York Sun
New York Times
On Point
Pacifica Radio
Philadelphia Inquirer
Pittsburgh Post Gazette
The Register-Guard
Rocky Mountain News
Rush Limbaugh Show
San Francisco Chronicle
Santa Fe New Mexican
Sarasota Herald Tribune
Science
Science Daily
Scientific American

The Scientist
Scripps-Howard News Service
Seed Magazine
SETI Radio Network
Smithsonian
Spectrum
St. Petersburg Times
Sun Herald
Swedish Public Radio
Tampa Tribune
TCS Daily
The Times
The Times-Picayune
Travel Weekly
The Trumpet
UCAR Quarterly
UPI
USA Today
Utah Public Radio
Wall Street Journal
Washington Observer
Washington Post
Washington Times
Weather Channel
Weekly Standard
Westword
Wisconsin Technology Network
World Magazine

### *Media Coverage*

The following media references to Center personnel, affiliates or projects appeared in 2006-2007:

- **Roger Pielke, Jr.** was quoted in a 19 June 2007 *NY Times* article on Boulder Soccer marketing a carbon offset approach.
- **Roger Pielke, Jr.** was cited in a 13 June 2007 *Tampa Tribune* article on Florida's development of a hurricane loss model.
- **Roger Pielke, Jr.** was quoted in a 7 June 2007 *Nature* article on a look back at the Kyoto Protocol.
- **Kevin Vranes** was quoted in a 1 June 2007 *New Scientist* article on the International Climate Change Framework.
- **Roger Pielke, Jr.** was interviewed on *NPR* on 22 May 2007 about the upcoming hurricane season.
- **Roger Pielke Jr.'s** new book, *The Honest Broker*, was highlighted in a 21 May 2007 *Weather Channel* article.
- **Roger Pielke, Jr.** was cited in a 7 May 2007 *Philadelphia Inquirer* article on the growing cost of hurricanes.
- **Roger Pielke, Jr.** was quoted in a 17 April 2007 *LA Times* article on global warming posing a security threat to the US.
- **Roger Pielke, Jr.** was quoted in an 11 April 2007 *NY Sun* article on the anti-travel movement to exotic places and climate change.
- **Roger Pielke, Jr.** was interviewed on the *ClimateandInsurance.org* website on 30 March 2007.
- **Roger Pielke, Jr.** was cited in a 23 March 2007 *Science* article on the Whistleblower Protection Enhancement Act.
- **Roger Pielke, Jr.** was cited in a 13 March 2007 *National Journal* article on the global warming debate.
- **Kevin Vranes** and **Roger Pielke, Jr.** were quoted in a 13 March 2007 *NY Times* article on reactions to Gore's Inconvenient Truth.
- **Roger Pielke, Jr.** was quoted in an 11 March 2007 *San Franciso Chronicle* article on global warming and greenhouse gas emissions.
- **Roger Pielke, Jr.** was quoted in a 4 March 2007 *Tampa Tribune* article on computer modeling and insurance predictions.
- **Lisa Dilling's** book, *Creating a Climate for Change*, was referenced in a 25 February 2007 *Register-Guard* article.
- **Roger Pielke, Jr.** was quoted in a 22 February 2007 *International Herald Tribune* article on the scientific basis of global warming.
- **Roger Pielke, Jr.** was quoted in a 22 February 2007 *Globe Insider* article on politics and climate change.
- **Lisa Dilling** was cited in a 22 February 2007 *Nature* article on her upcoming book, *Creating a Climate for Change*.
- **Lisa Dilling's** book, *Creating a Climate for Change*, was highlighted in an 18 February 2007 *Science Daily* article.
- **Kevin Vranes** was quoted in a 17 February 2007 *World Magazine* article on global warming and the IPCC's latest report.

# Outreach

- **Lisa Dilling** was highlighted in a16 February 2007 *CU News* article on her upcoming book, *Creating a Climate for Change*.
- **Roger Pielke, Jr.** was quoted in a 16 February 2007 *Chronicle of Higher Education* article on the IPCC's latest report.
- **Roger Pielke, Jr.** was quoted in a 13 February 2007 *Christian Science Monito*r article on adaptation to climate change.
- **Roger Pielke, Jr.** was quoted in an 11 February 2007 *Albuquerque Journal* article on water supply and population growth.
- **Roger Pielke, Jr.** was quoted in a 10 February 2007 *Science news* article on the global warming debate.
- **Roger Pielke, Jr.** was cited in a 9 February 2007 *Chronicle of Higher Education* article on the IPCC's House Hearing.
- **Roger Pielke, Jr.** was highlighted in an 8 February 2007 *Denver Post* article on his most recent commentary in Nature.
- **Roger Pielke, Jr.** was quoted in a 6 February 2007 *Nature News* article on The Stern report about the cost of climate change.
- **Roger Pielke, Jr.** was cited in a 31 January 2007 *Scientific American* article on the IPCC's upcoming report.
- **Roger Pielke, Jr.** was cited in a 31 January 2007 *Denver Post* article on this week's congressional hearing.
- **Roger Pielke, Jr.** was cited in a 31 January 2007 *NY Times* article on the hearing about the government's handling of climate change science.
- **Roger Pielke, Jr.** was highlighted in a 31 January 2007 *Rocky Mountain News* article on his testimony before Congress.
- **Roger Pielke, Jr.** was quoted in a 30 January 2007 *AP* article on the congressional hearing about government control of climate science.
- **Kevin Vranes** appeared on 27 January 2007 *CNN's "In the Money"* on corporations joining the climate change debate.
- **Kevin Vranes** and **Roger Pielke, Jr.** were quoted in a 22 January *Houston Chronicle* article on the "overselling" of climate science.
- **Roger Pielke, Jr.** was quoted in an 18 January 2007 *Voice of San Diego* article on the IPCC's latest report.
- **Roger Pielke, Jr.** was quoted in a 15 January 2007 *Boston Globe* article on the climate change and global warming debate.
- **Roger Pielke, Jr.** was quoted in a 1 January 2007 *NY Times* article on the global warming and climate change debate.
- **Roger Pielke, Jr.** was quoted in the December 2006 issue of the *Geotimes* in a story on the top climate stories of 2006.
- **Roger Pielke, Jr.** was quoted in a 15 November 2006 *Nature News* article on evidence of 'cherry-picking' in UK politics.
- **Roger Pielke, Jr.** was quoted in a 13 November 2006 *Christian Science Monitor* article on science and technology issues.
- **Roger Pielke, Jr.** was quoted in a 6 November 2006 *Marketplace* radio broadcast on the 2006 UN Climate Change Conference in Nairobi.
- **Roger Pielke, Jr.** was quoted in a 4 November 2006 *New Scientist* article on the IPCC and the climate change debate.
- **Roger Pielke, Jr.** was cited in a 31 October 2006 *Nature News* article on the Stern Review on the Economics of Climate Change.
- **Prometheus** posting on the language of climate debates was referenced by the *Rush Limbaugh show* and *Brit Hume* on 12 October 2006.
- **Roger Pielke, Jr.** was quoted in a 6 October 2006 *Nature News* column on the Royal Society's role in the political debate.
- **Roger Pielke, Jr.** was quoted in a 1 October 2006 *The Scientist* article on science in the Bush administration.
- **Roger Pielke, Jr.** was highlighted in a 27 September 2006 *Denver Post* business section about his receipt of the Brückner award.
- **Roger Pielke, Jr.** was highlighted in a 26 September 2006 *CU News* Center on his Eduard Brückner award.
- **Roger Pielke, Jr.** was highlighted in a 24 September 2006 *Daily Camera* article on his Eduard Brückner award.
- **Roger Pielke, Jr.** was quoted in a 19 September 2006 *Daily Reporter-Herald* article on Bill Gray's views on global warming.
- **Roger Pielke, Jr.** was quoted in a September 2006 *Smithsonian* article on the global warming and hurricanes debate.

# Outreach

- **Roger Pielke, Jr.** was quoted in a 12 September 2006 *Daily Camera* article on global warming and hurricanes.
- **Roger Pielke, Jr.'s** work on hurricanes and climate change was referenced in the French paper *Le Monde* on 6 September 2006.
- **Roger Pielke, Jr.** was quoted in an 8 September 2006 *Chronicle of Higher Education* article on the "hockey stick" chart.
- **Roger Pielke, Jr.** was cited in a 1 September 2006 *Investor's Business Daily* editorial on the hurricanes/global warming debate.
- **Roger Pielke, Jr.** was quoted in a 29 August 2006 *National Review* article on U.S. hurricane policy.
- **Roger Pielke, Jr.** was quoted in a 22 August 2006 *Philadelphia Inquirer* article on the Atlantis space shuttle mission.
- **Roger Pielke, Jr.** was quoted in a 28 July 2006 *TCS Daily* article on two U.S. House Hearings just held on climate change.
- **Roger Pielke, Jr.** was quoted in a 24 July 2006 *Associated Press* article on the politics of climate science.
- **Roger Pielke, Jr.** was quoted in a 23 July 2006 *Albuquerque Journal* article on the climate science and global warming debate.
- **Roger Pielke Jr.** was quoted in an 18 July 2006 *New York Times* article on the space shuttle Discovery mission.
- **Roger Pielke, Jr.** was quoted in an 18 July 2006 *New York Times* article on computer models and decision making.
- **Roger Pielke, Jr.** was quoted in a 7 July 2006 *Arizona Daily Star* article on climate change and forest fires.
- **Prometheus weblog** was named one of the 50 most popular science blogs in a 5 July 2006 *Nature News* article.

# People

- Staff
- Affiliates
- Research Affiliates
- Visitors and collaborators
- Boards and committee membership

## 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.

### *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.

### *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.

### *Myanna Lahsen*

Myanna Lahsen joined the Center in June 2003 after serving as a Postdoctoral Fellow in the

Belfer Center for Science and International Affairs in Harvard University's John F. Kennedy School of Government. An anthropologist by Ph.D., she studies the cultures and politics of environmental knowledge in the US, Brazil and internationally, aiming to advance science and environmental policy and to reconcile environmental sustainability and development. She is presently Social Science Officer in the Regional Office of the International Geosphere-Biosphere Programme (IGBP) in Brazil and Project Scientist with the Swedish Institute for Climate Science and Policy Research.

### *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.

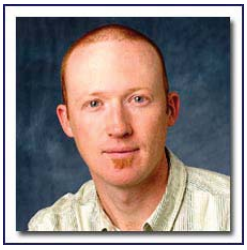
### *Linda Pendergrass*

Linda Pendergrass is the Center's Office Manager. Linda has a B.A. in Interdisciplinary Sciences with an emphasis on Environmental Biology and Chemistry.

### *Roger Pielke, Jr.*

Roger Pielke, Jr. has served as the Center's Director since its inception. 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 the 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 is a CIRES Visiting Fellow. He attended Columbia University where he did a Ph.D. at the Lamont-Doherty Earth Observatory in physical oceanography and climatology. He was a Fellow of the Public Policy Consortium. In 2001 Kevin joined a team coordinated by the Center for Hazards and Risk Research and the Urban Planning program to respond to the December 1999 debris flows in the capitol region of Venezuela. 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.

## Affiliates

Affiliates 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 of the Herbst Program of Humanities for Engineers
- **Krister Andersson**, Assistant Professor, Environmental Studies
- **Susan Avery**, Interim Vice Chancellor for Research and Dean of the Graduate School, University of Colorado

- **Tom Chase**, Assistant Professor of Geography, University of Colorado
- **Robert Frodeman**, Dept. of Philosophy and Religion Studies, University of North Texas
- **Benjamin Hale**, Director, Center for Values and Social Policy, University of Colorado
- **Rudy Juliano**, School of Medicine, University of North Carolina
- **Lisa Keränen**, assistant professor of communication, University of Colorado
- **Paul Komor**, Lecturer in the Department of Civil Engineering, University of Colorado, and a Project Director at E SOURCE
- **Carl Koval**, Professor, Chemistry, University of Colorado, and 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 (LAIS), Colorado School of Mines
- **Roop Mahajan**, Institute for Critical Technology and Applied Science, Virginia Tech
- **Diane McNight**, Fellow, INSTAAR; Professor of Civil, Environmental and Architectural Engineering, University of Colorado
- **Jana Milford**, Associate Professor, Mechanical Engineering and the Center for Combustion and Environmental Research, and director of the Environmental Engineering Program, University of Colorado
- **Carl Mitcham**, Professor of Liberal Arts and International Studies, Colorado School of Mines
- **Gunilla Öberg**, Linköping University (LiU) and Director, Swedish Institute for Climate Science and Policy Research
- **Paul Ohm**, Associate Professor of Law, University of Colorado
- **Jerry Peterson**, Professor, Department of Physics, University of Colorado
- **R. Balaji Rajagopalan**, Assistant Professor and Fellow, CIRES, Department of Civil, Environmental and Architectural Engineering, University of Colorado
- **Joe Ryan**, Associate Professor, Department of Civil, Environmental, and Architectural Engineering, Director of the Environmental Engineering Program, and Environmental Studies 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 of Law and Director, Natural Resources Law Center
- **Kathleen Tierney**, Director, Natural Hazards Center and Professor of Sociology, University of Colorado
- **Phil Weiser**, Associate Professor, Interdisciplinary Telecommunications Program and the School of Law, University of Colorado
- **Qian Ye**, National Center for Atmospheric Research
- **Tom Yulsman**, Associate Professor, School of Journalism & Mass Communication, co-director of the Center for Environmental Journalism, Environmental Studies Program, University of Colorado.
- **Michael Zimmerman**, Professor of Philosophy and Director of the Center for Humanities and the Arts, University of Colorado

## Research Affiliates

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

- **Martyn Clark**, 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
- **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 2006-2007:

- **Krister Andersson**, University of Colorado, Speaker
- **Juan Bautista Bengoetxea**, University of the Basque Country, Speaker
- **Netra Chhetri**, Arizona State University, Collaborator
- **Douglas Collins**, Tillinghast-Towers Perrin, Co-author
- **Ryan Crompton**, Macquarie University, Co-author
- **Richard Conant**, Colorado State University, Collaborator
- **Edward Dunlea**, University of Colorado, Speaker
- **William Easterling**, Penn State University, Collaborator
- **Barbara Farhar**, University of Colorado, Co-author
- **David Farnam**, Consensus Building Institute, Co-author
- **Eberhard Faust**, Munich Reinsurance Co., Co-author
- **Chris Goemans**, University of Colorado, Collaborator
- **Joel Gratz**, ICAT Managers, Co-author
- **Lori Hidinger**, Arizona State University, Collaborator
- **William H. Hooke**, American Meteorological Society, Collaborator
- **Peter Höppe**, Munich Reinsurance Co., Collaborator
- **Tracy Johns**, Arizona State University, Collaborator
- **Douglas Kenney**, University of Colorado, Collaborator
- **Lisa Keränen**, University of Colorado, Speaker
- **Paul Komar**, University of Colorado, Speaker
- **Carl Koval**, University of Colorado, Speaker
- **Sarah Krakoff**, University of Colorado, Speaker
- **Jennifer Kuzma**, University of Minnesota, Speaker
- **Myanna Lahsen**, University of Colorado, Collaborator
- **Frank Laird**, Denver University, Speaker
- **Chris Landsea**, NOAA Hurricane Research Division, Co-author
- **Björn-Ola Linnér**, Linköping University, Collaborator, Speaker
- **Jessica Lowrey**, NOAA, Co-author
- **Juan Lucena**, Colorado School of Mines, Speaker
- **Roop Mahajan**, Virginia Tech, Co-author
- **Jana Milford**, University of Colorado, Speaker
- **Ronald Mitchell**, University of Oregon, Co-author
- **Carl Mitcham**, Colorado School of Mines, Collaborator
- **Susie Moser**, National Center for Atmospheric Research, Collaborator
- **Rade Musulin**, Aon Re Australia Ltd., Co-author
- **Mark Neff**, Arizona State University, Collaborator
- **Steve Nerem**, University of Colorado, Speaker
- **Carlos Nobre**, INPE, Co-author
- **Gunilla Öberg**, University of British Columbia, Collaborator
- **Anthony Patt**, Boston University, Co-author
- **Roger Pielke, Sr.**, University of Colorado, Co-author
- **Chris Potter**, NASA, Co-author
- **Gwyn Prins**, Columbia and London School of Economics, Co-author
- **Steve Rayner**, Oxford, Co-author
- **Kevin Reidy**, Aurora Water, Collaborator
- **Charles Rice**, Kansas State University, Co-author
- **Ricardo Rozzi**, University of N. Texas, speaker
- **Dan Sarewitz**, Arizona State University, Collaborator
- **Mark Saunders**, University College London, Co-author
- **Mark Squillace**, University of Colorado, Speaker
- **Stacy VanDeveer**, University of New Hampshire, Co-author
- **Qian Ye**, National Center for Atmospheric Research, Co-author
- **Michael Zimmerman**, University of Colorado, Speaker

## Boards and Committee Membership

### *Roger Pielke, Jr.*

| | |
|---|---|
| 2007- | Member, Editorial Board, Nature & Culture |
| 2006- | Member, Editorial Board, Global Environmental Change: Human and Policy Dimensions |
| 2006- | Member, Editorial Board, Environmental Hazards |
| 2006- | Member, Editorial Board, Water Resources Research |
| 2004- | Member, Editorial Board, Environmental Science and Policy |
| 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 |
| 2001- | Member, Editorial Board, Natural 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 |
| 2005- | Member, Advisory Committee, Societal Impacts Group, National Center for Atmospheric Research |
| 2003- | Member, Advisory Committee, Pacific ENSO Applications Center |


# Appendices

- Strategic Plan
- Grant Activity
- Staff Highlights

## 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.
- 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***

- Build a 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, 2006-2007*

| 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 |
| The State of the Carbon Cycle: North America | NASA, NOAA, DOE, NSF | $272,843 | 09/15/2004 | 05/31/2007 |
| Decision Making Under Uncertainty and Pragmatism | NSF | $35,999 | 08/01/2006 | 07/31/2007 |
| Comprehensive Needs Assessment of Ethics Education in Environmental Science and Environmental Engineering (pending) | NSF | $271,737 | 09/01/2007 | 08/30/2010 |

## Staff Highlights

### *Rad Byerly*

Rad Byerly continues in his role as elder statesman at the Center, providing advice to students and researchers based on his several decades of experience as a science policy practitioner in Congress and at NIST.

### *Lisa Dilling*

Lisa Dilling (with NCAR's Susi Moser) has a new edited volume from Cambridge University Press titled "Creating a Climate For Change: Communicating climate change and facilitating social change."

### *Bobbie Klein*

Bobbie Klein continued her involvement with the Western Water Assessment, helping plan and manage a study of water demand management in Aurora, Colorado.

### *Ami Nacu-Schmidt*

Ami Nacu-Schmidt created an attractive new webpage to advertise the Center's recently and to-be published books, located at http://sciencepolicy.colorado.edu/publications/new_books.html. Ami continues to use her graphics and web skills to create beautiful brochures, reports and websites for the Center.

### *Linda Pendergrass*

Linda Pendergrass played a leading role in organizing the highly successful CU Energy Initiative/NREL Research Symposium in October and in overseeing administration of the subsequent seed grant competition.

### *Roger Pielke, Jr.*

Roger Pielke, Jr., has a new book out titled "The Honest Broker: Making Sense of Science in Policy and Politics." He was also awarded the Eduard Brückner Prize for outstanding achievement in interdisciplinary climate science.

### *Kevin Vranes*

Kevin Vranes submitted two journal articles and developed a dataset of U.S. normalized earthquake losses from 1900 – 2005. He continued to submit thought-provoking blogs to the Center's science policy weblog, Prometheus.

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