Ogmius

Newsletter of the Center for Science and Technology Policy Research

NO. 14
WINTER 2006

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

Subscribers to Ogmius will be notified by email when a new edition is available, and may access it either in pdf or html format. The newsletter is also available online at http://sciencepolicy.colorado.edu/ogmius.

Inside this issue:

Ogmius Exchange
Introduction

In this edition of Ogmius David Goldston, Republican Chief of Staff for the House Committee on Science, offers an upbeat perspective on the state of science policy in the nation's capitol, highlighting congressional interest in issues such as technologies to reduce U.S. dependency on foreign oil and mitigate the impacts of climate change, new pollution regulations governing emissions of fine particles, new risk assessment guidelines proposed by the Office of Management and Budget, the balance between science and security, and agency-specific science policy questions.

We invited David Goldston's piece as an opportunity to respond to an article by Robert Palmer, Democratic Staff Director of the Committee on Science, U.S. House of Representatives, 1993 – 2004, about the current state of science policy in Congress titled "Science Policy: The Victim of Partisan Politics" (http://sciencepolicy.colorado.edu/ogmius/archives/issue_12/ogmius_exchange.html) featured in the July 2005 edition of Ogmius.

We appreciate your feedback. pielke@cires.colorado.edu

Resources

Our Presidential Science Advisor series website (http://sciencepolicy.colorado.edu/scienceadvisors/) has an extensive library of science policy materials.

AAAS Science Policy Programs, http://www.aaas.org/programs/science_policy/

Center for Science, Technology, and Congress, http://www.aaas.org/spp/cstc/

AGU Science Policy, http://www.agu.org/sci_soc/policy/sci_pol.html

Consortium for Science, Policy and Outcomes, http://www.cspo.org/

Government, Performance and Results Act of 1993 ("GPRA"), http://www.whitehouse.gov/omb/mgmt-gpra/gplaw2m.html

House Committee on Science, http://www.house.gov/science/welcome.htm

Democratic Caucus House Committee on Science, http://sciencedems.house.gov/

National Science and Technology Policy, Organization, and Priorities Act of 1976, http://caselaw.lp.findlaw.com/casecode/uscodes/42/chapters/79/subchapters/i/sections/section_6601.html

Office of Science and Technology Policy (OSTP), http://www.ostp.gov/

Ogmius Exchange

Science Policy: The Year Ahead

The cover of the January 14 issue of National Journal promotes an article titled, "The Science Scare." Inside, the teaser for the piece begins, "Not since Sputnik have so many U.S. leaders pushed for paying more attention to science, but is the competitiveness crisis real?" The Journal may be overdoing it with the Sputnik reference; "competitiveness" was a buzzword in the 1980s, and the sense of alarm is neither as keen nor as widespread as in the late 1950s. But the article is certainly an indication that science policy is likely to be a prominent topic of debate in Washington in 2006.

Indeed, the President addressed aspects of science policy in his State of the Union Address, and in response to questions at a meeting with the U.S. Chamber of Commerce, White House Chief of Staff Andrew Card endorsed the thrust of the National Academy of Science's recent report, The Gathering Storm (http://fermat.nap.edu/catalog/11463.html), which is basically a brief for investing more in science and engineering research and education.

It's not entirely clear what has pushed science policy on to the "front burner" – the concerns about U.S. leadership in science and technology have been brewing for quite some time – but it is clear that both Republicans and Democrats want to highlight the innovation issue and their solutions to it. Already, this has produced both partisan sniping in press releases and bipartisan teamwork in bill introductions.

The debate over how to maintain U.S. leadership in innovation will play out through the year, particularly as Congress reviews the Administration's fiscal year 2007 budget. But the debate is likely to delve into more specific questions than whether the federal government is spending enough on basic research in the physical sciences. Government and industry officials are also raising questions about how research can help address particular national needs.

This is most apparent in the energy arena, in which calls are multiplying for a focused effort – a "crash effort" or "Apollo-like effort," some would say – to come up with technologies both to reduce U.S. dependency on foreign oil and to mitigate the impacts of climate change. The Gathering Storm, for example, recommends setting up a new entity, ARPA-E, modeled on the Defense Advanced Research Projects Agency (DARPA), to develop energy technologies.

Congress is likely to debate proposals like ARPA-E in 2006, which, ideally, will prompt a fuller discussion not only of what kinds of federal investments are needed to help develop new technologies, but also of what kinds of federal policies are needed to get those technologies into homes and offices. (There were some surprising signs late last year of a willingness within Congress to discuss policy questions. During the debate over the Arctic National Wildlife Refuge, several conservatives raised the notion of toughening federal fuel economy standards for cars and trucks (CAFE standards) as part of a deal to allow oil drilling in Alaska.) Energy investments and policy will also be front and center when the House Science Committee holds a hearing on the Department of Energy's Climate Change Technology Plan, which was released last fall, to poor reviews.

Congressional discussion of science issues in 2006 will not revolve entirely around questions linked to spending. For example, the Science Committee will continue to pursue issues raised at a hearing last fall on the environmental ramifications of nanotechnology. This is a rare moment when industry, academia and environmental groups are all interested in learning more about the potential environmental consequences of nanotechnology and are open to discussions about appropriate regulation. Congress needs to foster that discussion.

Other, more contentious environmental matters are also likely to come to the fore. The Administration has announced new pollution regulations governing emissions of fine particles (PM 2.5). The last time the particle regulations were changed, in 1997, numerous Congressional committees held hearings on the science behind the proposals. While the science is far more settled than it was then, the regulations remain controversial, and a range of hearings is again likely.

New risk assessment guidelines proposed by the Office of Management and Budget (OMB) may also come in for Congressional scrutiny. But OMB has asked the National Academy of Sciences to review the guidelines, and Congress may wait for Academy guidance before opening up the discussion. When OMB issued peer review guidelines, it eventually heeded Academy advice, and Congress never felt the need to take up the issue.

Congress may once again debate climate change science as well. In the Senate, debate could be sparked by renewed efforts to limit carbon dioxide emissions. In the House, debate would more likely begin if the Energy and Commerce Committee chooses to pursue its investigation of the authors of the so-called "hockey stick article" – a paper that argued that recent warm temperatures are without precedent in the past 1,000 years.

Ogmius Exchange Continued

Another area of focus in Congress is likely to be the balance between science and security. At the request of Congress, the National Academy of Sciences recently initiated a study designed to identify and evaluate the primary concerns scientists have about how the post-9/11 emphasis on security may be hampering the scientific enterprise. And expected action on new export control regulations proposed by the Department of Commerce could also bring this issue to a head.

Congress has already played an active role in the security debate. The House Science Committee took the lead in 2004 raising concerns about the extraordinary backlog of visas for scientists and science students. A Government Accountability Office (GAO) study requested by the Committee documented the problem, which was also the subject of several hearings. The public debate helped lead to changes in Administration policy, which have significantly reduced the backlog (although the U.S. is still having problems attracting foreign students).

And Congress will also be debating agency-specific science policy questions, including the future of NASA and the fate of the National Polar-orbiting Operational Environmental Satellite System (NPOESS). Congress last year enacted a NASA Authorization Act that both endorsed the President's Vision for Space Exploration and declared that NASA must be a multi-mission agency with robust programs in space science, earth science and aeronautics as well as human space flight. The debate over the fiscal year 2007 budget will determine how NASA goes about satisfying both those requirements.

The NPOESS program, which is building the next generation of weather satellites, is more than 25 percent over budget and years behind schedule. At hearings last year, the House Science Committee took the Administration to task for the program failures. A revised program plan is due this spring to the Science Committee and the Armed Services Committee (the program is jointly run by NASA, the National Oceanic and Atmospheric Administration and the Air Force).

In short, this hardly seems the time to lament the lack of debate over science policy in Washington or the unwillingness of Congress to air science issues. What remains to be seen is how much progress a divided Congress will make in an election year in resolving these issues. As of now, the outlook is promising.

David Goldston
David.Goldston@mail.house.gov

Research Highlight
Embedded Nanotechnology Policy Research

Introduction

Erik Fisher, a doctoral candidate in the Environmental Studies program at the University of Colorado, is conducting research investigating the possibility and utility of integrating societal considerations with technology development, especially during (as opposed to before or after) R&D, as called for by the 21st Century Nanotechnology Research and Development Act of 2003. Our Center will be collaborating on a new NSF project with ASU's Consortium for Science, Policy and Outcomes to explore the societal implications of nanotechnology. Erik's research is described in the following article.

Embedded Nanotechnology Policy Research
By Erik Fisher

Nanotechnology generally refers to the understanding and control of matter at atomic and molecular scales and presently constitutes the largest U.S. federally funded multi-agency scientific research program since the Apollo space program. While policy makers optimistically tout the environmental and economic benefits associated with the up and coming field, including its role in the pursuit of global competitiveness, some of the same voices express caution that the tiny tech's future could be stunted by societal concerns, as happened with prior emerging technologies.

Accordingly, the 21st Century National Nanotechnology Research and Development Act of 2003 reflects something of a dual focus on the "rapid" but also "responsible" development of nanotech. Markedly, it calls for societal concerns about envisioned applications to be considered and addressed during the early stages of research and development.

The attention to societal considerations that the Act mandates in this "ethics policy" is a considerable step forward in terms of prior societal research, implications, and assessment programs. While there has been a trend over the years toward more explicit linkages between science and society, the Act's mandate calls for a much more interactive and outcomes-oriented relationship between R&D and societal research.

Research Highlight Continued

Significantly, this type of approach appears to be gaining momentum, as evidenced by recent discussions of "upstream engagement" of science by social perspectives, and by the National Science Foundation's decision to establish a Center for Nanotechnology in Society at Arizona State University that will carry out "real-time technology assessment."

Broad scale implementation of the Act's "ethics policy" will, however, prove challenging. The lack of both published research and clear programmatic precedents raise fundamental questions of how to integrate societal considerations into R&D activities and what the possible effects on research quality and productivity might be.

To this end, Erik Fisher, a doctoral candidate in Environmental Studies and a Center affiliate, is investigating the role of nanotechnology researchers in shaping their research with societal considerations. As an "embedded humanist" within the Thermal and Nanotechnology Lab of the Mechanical Engineering department at CU Boulder, Fisher interacts closely with the lab's director, Dr. Roop Mahajan, and its researchers to develop a proof of concept for what Fisher terms "midstream modulation."

"Midstream modulation" highlights two distinct features of the Act's prescription. First, science policy tends to take place either upstream (as in budget decisions) or downstream (as in product approval) of science and engineering activities. When it does take place midstream, science policy rarely focuses on end-user considerations. Secondly, given the hierarchical nature of technologies and the limits on predicting social systems, engineering and scientific researchers rarely have opportunities to make decisions that directly affect societal outcomes. Nor do those outside the research process always have a clear picture of what is and is not technologically possible.

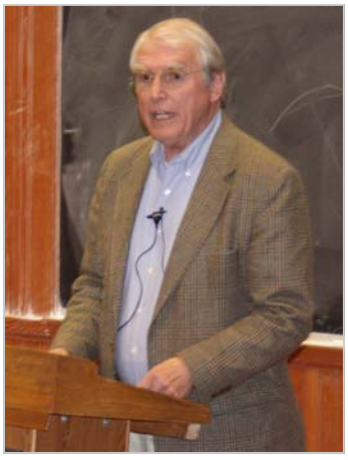
Given that "command and control" approaches to ethical and societal issues in technology are suspect, researchers might do well to modulate the evolution of research paths by incrementally expanding their perception of available alternatives and enhancing the process of selection. The possibility and utility of this idea is what Fisher is presently studying.

Erik Fisher
fishere@cires.colorado.edu

Project News

Presidential Science Advisor Lecture Series

The Center's lecture series, "Policy, Politics, and Science in the White House: Conversations with Presidential Science Advisors (http://sciencepolicy.colorado.edu/scienceadvisors/)," winds down this spring. On January 31, Dr. George (Jay) Keyworth, science advisor to President Ronald Reagan from 1981 to 1986, spoke to approximately 175 people on the University of Colorado campus about issues such as his role in promoting the Strategic Defense – or "Star Wars" – initiative during the Reagan presidency. Dr. Keyworth also visited undergraduate and graduate classes and met informally with faculty, students, and researchers to discuss science policy. The series has also included talks by Drs. John Marburger (G.W. Bush), John Gibbons (Bill Clinton 1st term), Neal Lane (Bill Clinton 2nd term), Edward David (Richard Nixon), and Donald Hornig (Lyndon Johnson).



Dr. Keyworth

The final speaker in the series, Dr. Frank Press, science advisor to President Jimmy Carter, will give a free public talk on April 11 at 7 pm in MCD Biology Room A2B70 on the CU-Boulder Campus. For more information including transcripts and webcasts of past talks visit the series website (http://sciencepolicy.colorado.edu/scienceadvisors/). To be placed on the science advisor mailing list and receive email notices of upcoming events click here (http://sciencepolicy.colorado.edu/mailman/listinfo/scienceadvisors). Each science advisor forum will be broadcast on Boulder Municipal Channel 8 television station and also as a live webcast – check the Channel 8 schedule (http://www.ci.boulder.co.us/channel8/schedule.html) for more information.

The Center will be compiling a book based on the series featuring contributions by each of the advisors who appeared in the series and chapters by other authors addressing science and technology policy issues at the federal level.

Project News

Science Policy Assessment and Research on Climate ("SPARC")

SPARC research has been submitted to a special issue of Environmental Science and Policy discussing reconciling supply of and demand for carbon cycle science, with papers by Roger Pielke, Jr. and Dan Sarewitz, Nat Logar and Rich Conant, Elizabeth McNie, Lisa Dilling, Myanna Lahsen, and Eva Lovbrand.

Planning continues for an exciting workshop to be held in Munich, Germany titled "Climate Change and Disaster Losses: Understanding and Attributing Trends and Projections." In addition to SPARC support, the project is also being supported by Munich Re, a global reinsurance corporation.

Lisa Dilling presented research on the use of carbon cycle science for decision making related to energy at the Climate Change Science Program workshop on Decision Making, and Genevieve Maricle and Roger Pielke, Jr. presented a comprehensive overview of current SPARC research in the decision support section of the meeting.

SPARC research was presented at the American Geophysical Union's fall meeting in a paper by Lisa Dilling, Roger Pielke, Jr. and Dan Sarewitz titled "The missing link: Creating science policies that facilitate the use of research in environmental and water-related decision-making." Roger Pielke, Jr., Chris Landsea and Joel Gratz also presented at the AGU fall meeting in their paper "Normalized Hurricane Damages in the United States: 1900-2005."

Genevieve Maricle, Lisa Dilling and Roger Pielke, Jr. presented three co-authored SPARC presentations at the First Symposium on Policy Research at the Annual American Meteorological Society meeting in Atlanta, Georgia titled "In search of new options: Characterizing and defining atmospheric science policy research," "Assessing science policies for climate research: New options for organizing research in support of decision making under uncertainty," and "Applying science policy research: The case of the carbon cycle science program." Erik Noble gave a presentation titled "U.S. Flood Damage: Future expectations based upon historical trends" at the AMS meeting.

For more information visit the SPARC website (http://sciencepolicy.colorado.edu/sparc/).

Project News

Lessons in Technology Transfer Policy for the Atmospheric Sciences: A case study in Public-Private-Academic Partnership on Level II Radar Data

Center graduate student Joel Gratz recently completed a policy study for the National Weather Service as his Master's thesis. The policy study focused on the NWS's national network of 158 NEXRAD WSR-88D weather radars. The government completed the installation of these radars in the early 1990s, yet it was not until the late 1990s when new technologies and organizational motivation coalesced into an opportunity to openly disseminate the Level-II radar data in real time. Level-II radar data is the highest resolution data regularly produced by the government's radar network.

The study explores the development and outcomes of the current Level-II radar data dissemination system and draws three primary conclusions for leaders of the weather community:

(1) Level-II users and providers must use quantitative and qualitative measures to track the program's success and direct priorities for improvement;

(2) the use of University-based Top-Tier sites to distribute the data equates to a reliable and scalable architecture with a high level of service for clients; and

(3) the NWS should strongly consider the needs of academic and private sector users when it creates internal data and service requirements, since these two sectors are the major clients of NWS data and products.

Joel presented this research at the American Meteorological Society Annual meeting in Atlanta and is also editing his thesis for publication in the Bulletin of the American Meteorological Society with co-authors Roger Pielke Jr., Ed Johnson of the NWS, and Jim Block of Meteorlogix.

For more information visit the project website (http://sciencepolicy.colorado.edu/about_us/meet_us/joel_gratz/lttpas/index.html).

Student News

Marilyn Averill

Center doctoral student Marilyn Averill attended the first Meeting of the Parties to the Kyoto Protocol in Montreal in conjunction with the eleventh session of the Conference of the Parties to the Climate Change Convention 28 November to 9 December 2005. Marilyn gave a talk about her experiences on January 23 at the Center.

Joel Gratz

Center ENVS/MBA graduate student Joel Gratz recently completed a policy study for the National Weather Service (NWS) as his Master's thesis. The policy study focused on the NWS's national network of 158 NEXRAD WSR-88D weather radars. See Project News section for more information.

Genevieve Maricle

Center doctoral student Genevieve Maricle gave three co-authored presentations at the First Symposium on Policy Research at the Annual American Meteorological Society meeting in Atlanta, Georgia. See Project News section for more information.

Center News
Kevin Vranes Joins Center

Kevin Vranes recently joined the Center as a CIRES Visiting Fellow. Kevin has been interested in the intersections of science and society since he was an undergraduate at UC Davis studying geology, water and dams. Kevin went to graduate school at Columbia University, where he did a Ph.D. at the Lamont-Doherty Earth Observatory in physical oceanography and climatology. While at Columbia he took policy classes at the School for International and Public Affairs and later became 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. This was an exploration in blending urban planning techniques with geoscience expertise to invent a broad disaster resilience plan for a large urban center. After finishing graduate school, he was selected as the 2003 - 2004 Congressional Science Fellow of the American Geophysical Union. Kevin served as legislative fellow for U.S. Senator Ron Wyden (D-OR), covering a broad array of topics including the transportation bill (S.1072 in the 108th Congress), NASA and EPA oversight, the energy bill (H.R. 6), natural hazards legislation, and abandoned mine cleanup. Kevin then spent the past 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. For more information visit Kevin's website (http://sciencepolicy.colorado.edu/about_us/meet_us/kevin_vranes/).

Center News
New Faculty and Research Affiliates

The Center has added several new faculty members to its growing list of affiliates.

Krister Andersson (http://sciencepolicy.colorado.edu/about_us/meet_us/krister_andersson/), Assistant Professor, Environmental Studies

Sarah Krakoff (http://sciencepolicy.colorado.edu/about_us/meet_us/sarah_krakoff/), Assistant Professor, Law

Juan Lucena (http://sciencepolicy.colorado.edu/about_us/meet_us/juan_lucena/), Associate Professor, Liberal Arts and International Studies Division (LAIS), Colorado School of Mines.

Roop Mahajan (http://sciencepolicy.colorado.edu/about_us/meet_us/roop_mahajan/), Professor, Mechanical Engineering

Mark Squillace (http://sciencepolicy.colorado.edu/about_us/meet_us/mark_squillace/), Professor of Law and Director, Natural Resources Law Center.

Richard Conant (http://sciencepolicy.colorado.edu/about_us/meet_us/richard_conant/), an ecosystem ecologist at the Natural Resource Ecology Laboratory at Colorado State University, has joined the Center as a Research Affiliate.

Stay tuned for interesting noontime talks by our new and current faculty affiliates.

Upcoming Events
Noontime Seminar Series

We have an exciting lineup of talks for our spring noontime seminar series. On January 23 graduate student Marilyn Averill kicked off the spring series by discussing the recent COP/MOP meeting on climate change that she attended in Canada. Rudy Juliano from University of North Carolina's Department of Pharmacology participated in a roundtable discussion "Building a Science Policy Program" on January 26.

The following talks, which are free and open to the public, will be held at noon at 1333 Grandview Ave., Boulder unless otherwise noted. For directions, see: http://sciencepolicy.colorado.edu/about_us/find_us.html.

Adam Briggle, ***President's Council on Bioethics***, **February 20** (http://sciencepolicy.colorado.edu/admin/announcement_info.html?header=&footer=&event_id=924).

Steve Quane, ***Peak Oil and the Struggle for Sustainable Energy: A Congressional Staffer's Perspective***, **February 23** (http://sciencepolicy.colorado.edu/admin/announcement_info.html?header=&footer=&event_id=974).

Diane McKnight, ***Climate change, acid mine drainage, and mountain sports in the Colorado Rocky Mountains***, **March 6** (http://sciencepolicy.colorado.edu/admin/announcement_info.html?header=&footer=&event_id=925).

Erik Fisher, ***Integrating societal concerns into nanotechnology research***, **March 20** (http://sciencepolicy.colorado.edu/admin/announcement_info.html?header=&footer=&event_id=906).

Krister Andersson, ***Having a Say and a Saw: Comparing Municipal Forest Governance in Bolivia and Guatemala***, **April 3** (http://sciencepolicy.colorado.edu/admin/announcement_info.html?header=&footer=&event_id=926).

Jerry Peterson, ***A nuclear option for a hydrogen economy***, **April 17** (http://sciencepolicy.colorado.edu/admin/announcement_info.html?header=&footer=&event_id=907).

Recent Center Publications

Recent publications from Center graduate student Erik Fisher and research scientist Myanna Lahsen:

Fisher, E., 2005. ***Lessons Learned from the Ethical, Legal and Social Implications program (ELSI): Planning societal implications research for the National Nanotechnology Program*** (http://sciencepolicy.colorado.edu/admin/publication_files/resource-1774-2005.40.pdf) , Technology in Society, Volume 27, pp. 321-328.

Abstract:

This paper considers federal requirements to institute a research program on societal and ethical considerations of nanotechnology, and to integrate the results of this research with nanotechnology research and development. It identifies research selection and assessment criteria derived in part from criticism of the Human Genome Project's Ethical, Legal, and Societal Implications program. This criticism concerns the capacity of bioethics research to influence policy. Since integration of societal research with nanotechnology development is meant to influence the direction of nanotechnology development, an explicit emphasis ought to be placed on the capacity of the new program's societal and ethical research to influence federal nanotechnology development policy.

Lahsen, M., 2005. ***Seductive Simulations? Uncertainty Distribution Around Climate Models*** (http://sciencepolicy.colorado.edu/admin/publication_files/resource-1891-2005.49.pdf). Social Studies of Science 35/6, pp. 895–922, December.

Abstract:

This paper discusses the distribution of certainty around General Circulation Models (GCMs) – computer models used to project possible global climatic changes due to human emissions of greenhouse gases. It examines the trope of distance underpinning Donald MacKenzie's concept of 'certainty trough', and calls for a more multi-dimensional and dynamic conceptualization of how uncertainty is distributed around technology. The certainty trough describes the level of certainty attached to particular technoscientific constructions as distance increases from the site of knowledge production, and proposes that producers of a given technology and its products are the best judges of their accuracy. Processes and dynamics associated with GCM modeling challenge the simplicity of the certainty trough diagram, mainly

Recent Center Publications Continued

because of difficulties with distinguishing between knowledge producers and users, and because GCMs involve multiple sites of production. This case study also challenges the assumption that knowledge producers always are the best judges of the accuracy of their models. Drawing on participant observation and interviews with climate modelers and the atmospheric scientists with whom they interact, the study discusses how modelers, and to some extent knowledge producers in general, are sometimes less able than some users to identify shortcomings of their models.

Lahsen, M., 2005: ***Technocracy, Democracy, and U.S. Climate Politics: The Need for Demarcations*** (http://sciencepolicy.colorado.edu/admin/publication_files/resource-1892-2005.50.pdf). Science, Technology and Human Values, Winter, pp. 137-169.

Abstract:

Ulrich Beck and other theorists of reflexive modernization are allies in the general project to reduce technocracy and elitism by rendering decision making more democratic and robust. However, this study of U.S. climate politics reveals complexities and obstacles to the sort of democratized decision making envisioned by such theorists. Since the early 1990s, the U.S. public has been subjected to numerous media-driven campaigns to shape understandings of this widely perceived threat. Political interests have instigated an important part of these campaigns, frequently resorting to ethically problematic tactics to undermine attempts at policy action designed to avert or reduce the threat. The disproportionate influence of such interests suggests the need for a more level political playing field characterized by more equalized access to power and influence.

Center Staff in the News

Roger Pielke, Jr. was quoted in an 8 February 2006 Denver Post article on hurricane research and the climate change debate, ***Storm researchers don't see eye to eye: The scientists, meeting in Boulder, air their disputes on climate change and last year's hurricane season as possible input for policy***, (http://www.denverpost.com/search/ci_3485318) by Katy Human.

Excerpt:

"'Yes, climate change is important, … but if the goal is to produce knowledge that helps people, we need to focus on all of these messy factors involving people: where society builds, how society builds, how society responds,' said Roger Pielke Jr., a policy scientist at the University of Colorado."

Center researcher Myanna Lahsen was quoted in the 1 February 2006 Wall Street Journal opinion column, ***Business World: A Global Warming Worksheet*** (http://proquest.umi.com/pqdweb?did=979369231&Fmt=3&clientId=56281&RQT=309&VName=PQD), by Holman W. Jenkins, Jr., regarding her paper ***Seductive Simulations? Uncertainty Distribution Around Climate Models*** (http://sciencepolicy.colorado.edu/admin/publication_files/resource-1891-2005.49.pdf), on the role of science in the climate debate.

Excerpt:

"Myanna Lahsen, an anthropologist who spent several years observing and interviewing staff at the National Center for Atmospheric Research, shows in a new paper that even climate modelers themselves, who appreciate better than anyone the limits of their work, nonetheless slip into unwarranted certainty in public. She quotes one: 'It is easy to get caught up in it; you start to believe that what happens in your model must be what happens in the real world. And often that is not true.'"

The Center's Presidential Science Advisor Series was covered in a 1 February 2006 CU Campus Press article, ***Former presidential science adviser speaks about science policy*** (http://www.thecampuspress.com/news/2006/01/reagenadviser.php), by Stacey Aldrich.

Excerpt:

"A highlight from Dr. Keyworth's lecture was his discussion on his involvement in the notorious "Star Wars" program. He said Reagan often asked for his advisement on the shield system, whose objective was to eliminate the threat of nuclear attack by intercepting missiles launched against the US mid-flight."

S&T News

American Meteorological Society's Summer Policy Colloquium June 4-13, 2006

The AMS Summer Policy Colloquium, with support from the Paleoclimate Program of the Atmospheric Sciences Division of NSF, brings a select group to Washington, D.C. for an intense, ten-day immersion in atmospheric policy. The Colloquium:

- Provides an overview of policy basics, and how decisions are made governing the course and future of atmospheric science;
- Provides opportunities for participants to meet and dialog with the federal officials, Congressional staffers, and others who make those decisions;
- Surveys current atmospheric policy issues;
- Uses the case study method to explore a limited number of issues, both past and present, in depth and detail;
- Helps participants build skills, experience, and contacts they can use throughout their careers to understand and influence the atmospheric policy process;
- Helps participants gauge their aptitude for and interest in the challenges of matching atmospheric science to national priorities, and scientific program leadership.

Who can attend? Participants include:

- Mid-level federal managers and scientists
- Mid-level private-sector executives
- University faculty
- Selected graduate students of demonstrated scientific and leadership potential
- (Under exceptional circumstances) undergraduate applications will be considered.

How do I apply? Total enrollment is limited to 50. Up to 38 paying participants will be accepted on a first come, first served basis. In addition, the Paleoclimate Program of the Atmospheric Sciences Division of the National Science Foundation will fund up to 10 students who will be selected and given full financial support on the basis of a national competition. Support is also available for up to 2 faculty members from minority serving institutions.

To be eligible, students should be U.S. Citizens and AMS (student) members, or applicants for student membership. All applicants must fill out the appropriate registration form. The fee for this year's colloquium will be $4600 for federal and private sector employees and university faculty which includes all course materials, a continental breakfast, lunch, and breaks each day, as well as two banquets. For more information and an application form visit the colloquium website (http://www.ametsoc.org/atmospolicy/colloquium_summer.html).

To Subscribe to Ogmius use the on-line form at:

http://sciencepolicy.colorado.edu/ogmius/subscriptions.html

Or send an email to:

ogmius-admin@sciencepolicy.colorado.edu

and include the following information:

- *Name*
- *Interests and Needs*
- *Organization*
- *Email Address*
- *How you heard about Ogmius*

S&T News

Science & Technology in Society: An International Multidisciplinary Graduate Student Conference, April 22nd – 23rd, 2006

This annual conference provides a forum for graduate students from a variety of disciplinary and interdisciplinary programs to present their research on the policy and social studies of science and technology. In addition to presenting papers, students will have the opportunity to interact with each other and prominent scholars and professionals related to their field(s) of interest. Andrew Jamison of Aalborg University, Denmark is one of our keynote speakers this year and will speak about "Hubris and Hybrids in Science Policy." The deadline for abstracts has passed but the **registration deadline is April 14**.

For more information and to register visit the website (http://www.stglobal.org/).

American Association for the Advancement of Science Headquarters, Washington, DC

Sponsored by: American Association for the Advancement of Science, the National Science Foundation, George Mason University, George Washington University, and Virginia Tech.

S&T News

An Earth System Science Partnership, Global Environmental Change Open Science Conference - Beijing, China, 9-12 November 2006

The ESSP Open Science Conference programme will emphasize plenary sessions in order to meet the Conference objective of bringing together practitioners from many different disciplines to focus on the integrated Earth System approach to global environmental change research. Immediately prior to the main Conference, the 2nd International Young Scientists (YSC) Global Change Conference (7-8 November 2006), organized by the ESSP SysTem for Analysis Research and Training (START), will convene in Beijing. For more details, please access the START website (http://www.start.org).

For more information about the ESSP OSC, please visit the aforementioned ESSP Conference websites. If, however, you have any specific questions, then please contact:

Martin Rice, ESSP Coordinator
Email: mrice@essp.org
Website: http://www.essp.org

S&T News

IDGEC Synthesis Conference, 6-9 December 2006 Bali, Indonesia

Institutional research is at a turning point. Over the past seven years the IHDP project on the Institutional Dimensions of Global Environmental Change (IDGEC) has promoted and stimulated a broad range of research into the ways in which institutions cause and alleviate global environmental problems. The project has investigated institutions as both independent and dependent variables. IDGEC research is now yielding results and findings that change the way we view the theory and practice of institutions. The project is now conducting a synthesis process to garner and wrest meaning from the body of findings. The culmination of this process will be the Synthesis Conference, Institutions for Sustainable Development in the Face of Global Environmental Change: Questioning, Explaining, Demysifying (QED), to be held in Bali, Indonesia, 6-9 December 2006.

We are seeking proposals for papers to be presented at the synthesis conference that advance the science relevant to the major themes and activities of the IDGEC Science Plan.

Extended deadline for paper abstracts and poster proposals: 1 March 2006

More information see http://fiesta.bren.ucsb.edu/~idgec/science/synthesis.html.

S&T News

Gordon Research Conference on Science and Technology Policy
Big Sky, MT, August 13-18, 2006

From science and technology inputs to policy outcomes: What are the determining factors?

Science and technology policy represents a truly transdisciplinary topic that crosses academe, government and industry and requires both theoretical and practical perspectives. While one can currently identify individual science and technology policy interests and agendas, there are few explanatory models or even best practice guidelines that relate science and technology inputs with policy outcomes or, on the other hand, policy inputs with science and technology outcomes. Indeed, scientists often complain that policymakers do not listen to them or "the science;" policy makers often complain that scientists not only fail to understand what it means to make policy, but also fail to provide information in formats that can be used successfully to make policy. Too often, policy discussions focus on funding rather than impact. Through comparative research and comparison of research, the goal of STP-GRC will be to discern critical variables in the relationships between inputs and outcomes. This will be accomplished by bringing together members of the highly diverse science and technology policy community to present and discuss current empirical studies. Building networks within this community will advance the critical work of developing a robust field of research in science and technology policy.

The conference will be organized in four components: the opening session will introduce key concepts in science and technology policy; the next three days will be focused on empirical studies in which science and technology issues are analyzed in lecture/discussion sessions and posters; subsequently, as an analytic and empirical tool within the program itself, the next session will be dedicated to meta-analysis of the foregoing empirical presentations; finally the closing session will address how uncertainty influences the possibility of establishing credible policy.

First Call for Poster Proposals
Deadline: February 28, 2006 (rolling thereafter)

Posters sessions are a fixture of scientific conferences, and they can be an effective and memorable way of communicating ideas that might otherwise be missed and for provoking conversations that might otherwise never develop. Posters are an integral part of the Gordon conference, enriching the exchange of ideas by complementing oral presentations and large group discussions as well as by stimulating collegial interactions among participants. Poster presenters will engage in conversation about their posters with other participants during relaxed afternoon and/or evening sessions. Every attendee is welcome and encouraged to propose a poster. Early career participants are especially encouraged to present posters at the conference.

The deadline for submission of poster abstracts is February 28, 2006, with consideration and acceptances continuing on a rolling basis until the available positions are filled. Abstracts should be 250-300 words in length, and clearly describe the research question(s) addressed, the methodology employed, and the argument to be made. Poster proposals will be judged according to the following criteria:

a) Relevance to overall meeting themes (for more details, please see the conference website at: http://www3.utsouthwestern.edu/ethics/STP-GRC.htm) or to emerging themes for science/technology policy not covered in this research conference such as homeland security and terrorism, nanotechnology, global warming, and information technology;

b) Quality, clarity, and originality of ideas;

c) Appropriateness for presentation as a poster, including the potential for visual representations and graphics to support the arguments;

d) Priority for junior, international, and independent scholars (please indicate your status on your submission).

Upon acceptance, you will be provided with an official letter of acceptance which may be helpful in soliciting funds or grants to assist in your attendance at the conference. Further information will be provided regarding funds from the conference organizers.

If you have no experience preparing a poster presentation, the Poster Committee may offer help. For more information, to begin developing a poster idea, or to submit an abstract, please email the Poster Committee Chair: Rachel Ankeny (rankeny@science.usyd.edu.au)

For more information on the Conference generally, please contact the co-chair: Fred Grinnell (frederick.grinnell@utsouthwestern.edu).

About Us

Ogmius is the newsletter of the Center for Science and Technology Policy Research which is published four times a year. The Center is within the Cooperative Institute for Research in Environmental Sciences (CIRES) at the University of Colorado-Boulder. The mission of CIRES, which was established in 1967, is to act as a national resource for multidisciplinary research and education in the environmental sciences. CIRES is jointly sponsored by the University of Colorado-Boulder and the National Oceanic and Atmospheric Administration.

On-Line Version

(http://sciencepolicy.colorado.edu/ogmius/)

Editor: Roger A. Pielke, Jr. (pielke@colorado.edu)
Managing Editor: Bobbie Klein (bklein@colorado.edu)
Associate Editor: Ami Nacu-Schmidt (ami@cires.colorado.edu)
Webmaster: Mark Lohaus (lmark@cires.colorado.edu)

CENTER FOR SCIENCE AND TECHNOLOGY POLICY RESEARCH

University of Colorado/CIRES
1333 Grandview Avenue
Campus Box 488
Boulder, CO. 80309-0488
Phone: 303-735-0451
Fax: 303-735-1576
http://sciencepolicy.colorado.edu

To Subscribe:
http://sciencepolicy.colorado.edu/ogmius/subscriptions.html

Support the Center!

Center for Science and Technology Policy Research

Support our work with your tax-deductible contribution!

Colorado University of Colorado at Boulder

Enclosed is my gift of:

☐ $5,000 ☐ $1,000 ☐ $500 ☐ $250 ☐ $100 ☐ Other_____

Please use my gift for: *Center for Science & Technology Policy Research #01-22744*

☐ Education fund ☐ Director's discretionary fund

Endownment fund: Contact Roger Pielke (pielke@colorado.edu)

Please make checks payable to the ***CU Foundation*** (**be sure to include this form**) OR

I would like to make my gift donation by Credit Card:

☐ VISA ☐ MasterCard ☐ American Express ☐ Discover

_____ _____

Card Number Exp. Date Print Name as it appears on card

Send your gift to: University of Colorado at Boulder
Gift Processing
P.O. Box 1140
Boulder, CO 80306-1140

B1038