

Ogmios

CENTER FOR
SCIENCE & TECHNOLOGY
POLICY RESEARCH

NO. 28
SUMMER 2010

Online ISSN 1936-9921
Print ISSN 1936-9913

NEWSLETTER OF THE CENTER FOR SCIENCE AND TECHNOLOGY POLICY RESEARCH

CENTER FOR SCIENCE AND TECHNOLOGY POLICY RESEARCH
COOPERATIVE INSTITUTE FOR RESEARCH IN ENVIRONMENTAL SCIENCES
UNIVERSITY OF COLORADO AT BOULDER



Subscribers to Ogmios 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/ogmios>.

Introduction to Ogmios Exchange

In this issue of Ogmios, ENVS Professor (and former Director of the Center for Science and Technology Policy Research) Roger Pielke, Jr., reflects on the failure



of the recent attempt to pass climate change legislation, and offers another path forward. Roger's arguments are elaborated in his new book, *The Climate Fix: What Scientists and Politicians Won't Tell You About Global Warming*.

Comments welcome!
info@sciencepolicy.colorado.edu

Inside this issue:

Introduction to Ogmios Exchange	1
Ogmios Exchange <i>Rethinking Climate Policy</i> by Roger Pielke, Jr.	1
Research Highlight Colorado Climate Preparedness Project	2
Center News • Announcing the New CSTPR Website!	3
Center Books	3
Recent Publications	4
Center Events • Association for Educators in Journalism and Mass Communication Conference • Gordon Research Conference on Science & Technology Policy • 8th Annual Environmental Policy Conference • Noontime Seminar Series Fall 2010 • ENVS Colloquium Series Fall 2010	6
Center in the News	9
S&T Opportunities	10
About Us & Donation Info	12

Ogmios Exchange *Rethinking Climate Policy* By Roger Pielke, Jr.

The recent decision by Senate Democrats to pull the plug on climate legislation led to acrimonious finger pointing. The Obama Administration expressed frustration with environmental advocacy groups, complaining that despite \$100 million invested promoting the legislation, they failed to deliver a single Republican vote. In return, Joe Romm, who covers climate for one advocacy group, the Center for American Progress, declared the entire Obama presidency a failure.



Opponents to the legislation are happy to watch the carnage. As engrossing as it is to watch, the fact that climate change has become such a partisan issue is troubling, because there remains a problem to be addressed.

One of the challenges of climate policy has always been that people simply do not agree on what sort of problem it

presents. For some, the threat of a human influence on climate is sufficient to call for dramatic lifestyle changes. For others, the main concern is government intervention in the global energy system. Not coincidentally, these perspectives fit comfortably with pre-existing world views, making climate another battleground for poisonous partisan politics.

Lost in the debate is a fundamental reality – virtually everyone agrees that greenhouse gases, primarily carbon dioxide through the burning of fossil fuels, have the potential to influence the climate. As the late climatologist Stephen Schneider explained, “uncertainties so infuse the issue of climate change that it is still impossible to rule out either mild or catastrophic outcomes, let alone provide confident probabilities for all the claims and counterclaims made about environmental problems.”

In such a situation, we are simply not going to have certainty about impacts or costs on the time scales of decision

Ogmius Exchange Continued

making. This would seem to create a bias toward inaction. Yet, policy makers routinely take action in the absence of certain information, such as in the context of the economy, national security and health.

A poll conducted last year found that a majority of Americans supported climate legislation when the cost was about \$7 per month, but dropped to only about 10% support when the cost was \$70 per month. The sensitivity of political support to perceived cost is shared by people around the world, and is particularly acute in developing countries where energy costs comprise a significant part of household expenditures.

Appreciably increasing the costs of fossil fuels is simply not a politically feasible option, regardless of its theoretical elegance.

If the ability of policy makers to increase the costs of fossil fuels is limited, the obvious alternative is to reduce the costs of alternatives to fossil fuels. Diversifying energy supply technologies and pursuing efficiency gains makes good sense for reasons beyond the prospect of climate change. The world is going to need vastly more energy in the future, especially as the more than 1.5 billion people worldwide who lack access to electricity seek to attain higher standards of living.

An energy technology revolution will only come about through a sustained and significant investment in innovation on the scale of investments in health (~\$30 billion annually in the US) or the military (~\$100 billion annually in the US) for decades. One way to pay for investments in tomorrow's energy supply is based on today's consumption. Consider that a \$1 surcharge per barrel of oil would raise \$100 billion and would not be noticeable at the pump. Similarly, a \$5 per ton tax on carbon dioxide would raise \$150 billion per year, while raising the price of gasoline by only four cents per gallon.

Political realities mean that any price on carbon will necessarily have to start low. Rather than seeing a carbon price as a way to change behaviors, it should be looked at as a source of revenue for investment in clean energy innovation.

A simplified approach to decarbonization would focus on establishing such direct mechanisms for investing in energy innovation. To be successful such an approach would not only have to avoid noticeably increasing the costs of energy to consumers, but politicians would have to be held accountable to using the resources raised to invest in innovation rather than for general government expenditures.

Environmentalists will complain that an innovation-led approach does not guarantee certainty in emissions reduction. However, another lesson that we should take from the failures of climate policy thus far is that there are no certainties for any policy proposal. Alternatives to fossil fuels are not going to comprise a significant part of our energy supply until they are cost competitive on an economic basis. That process can be accelerated by focusing policy on energy technology innovation.

The alternative is continued policy failure, not just with respect to climate, but to meeting tomorrow's energy needs -- which should concern everyone today.

Roger Pielke, Jr.
pielke@colorado.edu

Roger Pielke, Jr.'s new book, [The Climate Fix: What Scientists and Politicians Won't Tell You About Global Warming](http://sciencepolicy.colorado.edu/publications/special/climate_fix) (http://sciencepolicy.colorado.edu/publications/special/climate_fix), was published on September 16th, 2010.

Research Highlight

Colorado Climate Preparedness Project

Bobbie Klein and Bill Travis recently began work on a Western Water Assessment-funded project that will address the state of Colorado's progress toward Governor Ritter's goal of preparing the state to adapt to unavoidable climate change. The primary purpose of the project is to set the stage for the next governor to continue to plan for climate variability and change by providing a catalog of climate vulnerabilities and current activities, personnel, products, and projects from Colorado and other entities along with policy relevant, but not prescriptive, suggestions for future actions.



The project will focus on five key sectors in Colorado:

1. water
2. agriculture
3. wildlife, ecosystems and forestry
4. climate-sensitive recreation and tourism
5. energy

The project will also examine cross-sectoral interactions and impacts. Activities include a literature search, structured interviews with key decision makers and other personnel, and creation of a publicly searchable, web-based database of climate response personnel and activities underway, planned and/or desired. These efforts will culminate in a final report which is due in early January 2011.

Center News

Announcing the New CSTPR Website!

The Center for Science and Technology Policy Research recently released its new website (<http://sciencepolicy.colorado.edu>). The new site has an updated look as well as improved content and

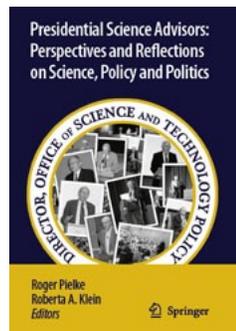


functionality, making it easy to find information about Center research, events, publications, and other activities. Many thanks to Rob Burris, Teri Hoyer, Lisa Ho and Ami Nacu-Schmidt for all their hard work on the website revision. Please contact Ami Nacu-Schmidt (ami@cires.colorado.edu), with questions or comments.

Center Books

Presidential Science Advisors: Perspectives and Reflections on Science, Policy and Politics

edited by Roger Pielke, Jr. and Roberta A. Klein
(Springer, now available)
<http://sciencepolicy.colorado.edu/publications/special/psa>



For the past 50 years a select group of scientists has provided advice to the US President, mostly out of the public eye, on issues ranging from the deployment of weapons to the launching of rockets to the moon to the use of stem cells to cure disease. The role of the presidential science advisor came under increasing scrutiny during the administration of George W. Bush, which was highly criticized by many for its use (and some say, misuse) of science. This edited volume includes, for the first time, the reflections of the presidential science advisors from Donald Hornig who served under Lyndon B. Johnson, to John Marburger, who served under George W. Bush, on their roles within both government and the scientific community. It provides an intimate glimpse into the inner workings of the White House, as well as the political realities of providing advice on scientific matters to the President of the United States. The reflections of the advisors are supplemented with critical analysis of the role of the science advisor by several well-recognized science policy practitioners and researchers. This volume will be of interest to science policy and presidential history scholars and students.

This book offers unique first-hand perspectives of the science advisors to the president, from Lyndon Johnson to George W. Bush. It includes some very unique history (e.g., Edward David's chapter provides perspective on how President Nixon used the science advisor for political purposes that has been reported nowhere else to our knowledge).

The Climate Fix: What Scientists and Politicians Won't Tell You About Global Warming

by Roger Pielke, Jr. (Basic Books, now available)
http://sciencepolicy.colorado.edu/publications/special/climate_fix



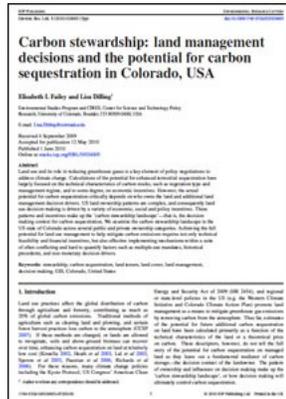
The world's response to climate change is deeply flawed. This book is where we begin to get it back on track. The relationship between humans and the earth system that we inhabit is two-way - humans affect the planet and the earth system processes affect us. This symbiosis is characterized by empirical complexities and uncertainties, the most intense of which is the global climate change debate in recent years. These debates are often characterized by a considerable amount of heat, but unfortunately too little light. Environmental studies and science policy expert Roger Pielke, Jr. recommends we should first comprehend why the current approach is failing and then consider better alternatives. While tearing down the venomous politics that have surrounded the debates, Pielke calls for an alternative to the various wishful proposals, typified by the Kyoto Protocol, that hold essentially that ordering climate change to go away will make it go away. The conventional wisdom on how to deal with climate change has failed us, Pielke argues, and it's time to change course. Using nothing more than arithmetic and logical explanation, Pielke provides a comprehensive exploration of the problem and its resolution - such as investing to create a more carbon-efficient economy and cost-efficient carbon-capture technologies. With the goal of advancing the discussion on climate change and contributing to the ongoing national debates in Europe, the United States, Japan, Australia, India, China, and other developed and developing countries, *The Climate Fix* offers something new to the climate-change discussion - a common sense perspective. A thought-provoking yet pragmatic discussion of the interaction between science and politics, *The Climate Fix* proposes a means for digging ourselves out of this climate-change mess that we have created.

Recent Publications

Carbon stewardship: land management decisions and the potential for carbon sequestration in Colorado, USA

by Elisabeth L Failey and Lisa Dilling
 Environ. Res. Lett. 5 (2010) 024005 (7pp)
http://sciencepolicy.colorado.edu/admin/publication_files/2010.16.pdf

Abstract: Land use and its role in reducing greenhouse gases is a key element of policy negotiations to address climate change. Calculations of the potential for enhanced terrestrial sequestration have largely focused on the technical characteristics of carbon stocks, such as vegetation type and management regime, and to some degree, on economic incentives. However, the actual potential for carbon sequestration critically depends on who owns the land and additional land management decision drivers. US land ownership patterns are complex, and consequently land use decision making is driven by a variety of economic, social and policy incentives. These patterns and incentives make up the ‘carbon stewardship landscape’—that is, the decision making context for carbon sequestration. We examine the carbon stewardship landscape in the US state of Colorado across several public and private ownership categories. Achieving the full potential for land use management to help mitigate carbon emissions requires not only technical feasibility and financial incentives, but also effective implementing mechanisms within a suite of often conflicting and hard to quantify factors such as multiple-use mandates, historical precedents, and non-monetary decision drivers. (read more: http://sciencepolicy.colorado.edu/admin/publication_files/2010.16.pdf)



Geoengineering, Ocean Fertilization, and the Problem of Permissible Pollution

by Benjamin Hale and Lisa Dilling
 Science, Technology & Human Values (2010) August 3
 doi:10.1177/0162243910366150
<http://sciencepolicy.colorado.edu/>



[admin/publication_files/2010.22.pdf](http://sciencepolicy.colorado.edu/admin/publication_files/2010.22.pdf)

Abstract: Many geoengineering projects have been proposed to address climate change, including both solar radiation management and carbon removal techniques. Some of these methods would introduce additional compounds into the atmosphere or the ocean. This poses a difficult conundrum: Is it permissible to remediate one pollutant by introducing a second pollutant into a system that has already been damaged, threatened, or altered? We frame this conundrum as the “Problem of Permissible Pollution.” In this paper, we explore this problem by taking up ocean fertilization and advancing an argument that rests on three moral claims. We first observe that pollution is, in many respects, a context-dependent matter. This observation leads us to argue for a “justifiability criterion.” Second, we suggest that remediating actions must take into account the antecedent conditions that have given rise to their consideration. We call this second observation the “antecedent conditions criterion.” Finally, we observe that ocean fertilization, and other related geoengineering technologies, propose not strictly to clean up carbon emissions, but actually to move the universe to some future, unknown state. Given the introduced criteria, we impose a “future-state constraint”. We conclude that ocean fertilization is not an acceptable solution for mitigating climate change. In attempting to shift the universe to a future state (a) geoengineering sidelines consideration of the antecedent conditions that have given rise to it --conditions, we note, that in many cases involve unjustified carbon emissions --and (b) it must appeal to an impossibly large set of affected parties. (read more: http://sciencepolicy.colorado.edu/admin/publication_files/2010.22.pdf)

Respecting Autonomy in Population Policy: An Argument for International Family Planning Programs

by Benjamin S. Hale and Lauren Hale
 Public Health Ethics (2010) May 17
http://sciencepolicy.colorado.edu/admin/publication_files/2010.25.pdf

Abstract: This paper addresses whether universal, general education programs are enough to satisfy basic criteria of human rights or



Recent Publications Continued

whether comprehensive family planning programs, in conjunction with universal education programs, might also be morally required. Even before the Reagan administration instituted the 'global gag rule' at the 1984 conference in Mexico City, prohibiting funding to nongovernmental organizations that included providing information about abortion as a possible method of family planning, the moral acceptability of family planning programs has been called into question. This paper makes a moral argument for family planning by appealing to both data and theory: data about the efficacy of universal and comprehensive family planning education programs at reducing fertility and infant mortality and theory about what is required for the establishment of autonomy. It reasons that universal educational programs are insufficient for the promotion of autonomy and, therefore, argues on substantive autonomy grounds for comprehensive family planning programs in addition to universal education programs. (read more: http://sciencepolicy.colorado.edu/admin/publication_files/2010.25.pdf)

In Retrospect: Science - The Endless Frontier

by Roger Pielke, Jr.

Nature Vol. 466 (2010) doi: 10.1038/466922a

http://sciencepolicy.colorado.edu/admin/publication_files/2010.24.pdf

Excerpt: The US government's landmark report *Science - The Endless Frontier* was published 65 years ago last month. Commissioned by President Franklin D. Roosevelt and prepared by electrical engineer Vannevar Bush, who directed US government research during the Second World War, the document distilled the lessons of wartime into proposals for subsequent federal support of science. Although its bold recommendations were only partly implemented, the document is ripe for reappraisal today: it marked the beginning of modern science policy.

Bush's report called for a centralized approach to government-sponsored science, largely shielded from political accountability. The creation of the National Science Foundation in 1950, a small agency with a limited



mandate, was far from the sweeping reform set out in the 30-page report and its appendices. However, its publication ushered in a new era in which science was viewed as vital for progress towards national goals in health, defense and the economy. Government funding for research and development consequently increased by more than a factor of ten from the 1940s to the 1960s.

The influence of *Science - The Endless Frontier* stems largely from its timing, coming at the tail end of a war in which science-based technology had been crucial. The development of the atomic bomb, radar and penicillin meant that Bush's declaration that "scientific progress is essential" to public welfare found a receptive audience. Bush also adopted innovative language that capitalized on this new-found government credibility. (read more: http://sciencepolicy.colorado.edu/admin/publication_files/2010.24.pdf)

Sport: An Academic's Perfect Laboratory

by Roger A. Pielke, Jr.

Bridges vol. 26 (2010) July

<http://www.ostina.org/content/view/5048/1351>

Excerpt: Big sporting events tend to bring out the armchair social scientists. For instance, when Europe advanced only three teams to the quarterfinals of this year's World Cup it was hailed by some as an indication of the decline in Europe's geopolitical standing role, to the benefit of South America. That theory lasted only about as long as it took for Argentina and Brazil to fly home after losing to rivals from Old Europe. Similarly, Gideon Rachman of the Financial Times points to the columnist in Spain's *El País* who suggested that "England's loss to Germany over the weekend reflects Thatcherism's demoralising effects on the English proletariat. (And there was I, thinking that it had something to do with lumbering centre-backs and a disallowed goal.)"

As much fun as it is to poke fun at sports-infused pseudo-social science, there is actually much of value to be gleaned from sports for understanding human behavior and important societal questions. (read more: <http://www.ostina.org/content/view/5048/1351>)



Center Events

Association for Educators in Journalism and Mass Communication Conference

On August 3 the Association for Educators in Journalism and Mass Communication conference hosted a panel on communicating climate change that brought together academic researchers (including CSTPR's Max Boykoff) from multiple disciplines and practitioners from different perspectives. Visit the conference website (<http://www.aejmcdenver.org>) for more information.

Max Boykoff also presented "Media Coverage of Climate Issues" at Deutsche Welle Global Media Forum 2010, June 22, 2010.

Max Boykoff also presented "Who Speaks for the Climate? Understanding Media Representations on Climate Change" at the University of Arizona, May 4, 2010.



Max Boykoff, June 22, 2010

Center Events

Gordon Research Conference on Science and Technology Policy

CSTPR's Roger A. Pielke, Jr. co-chaired this year's Gordon Conference on Science and Technology Policy August 8-13, 2010 in Waterville Valley Resort, New Hampshire. The conference focused on a wide range of research at the intersection of science, technology, policy and society, in particular on further developing partnerships between North American and European researchers. Invited speakers represented a variety of scientific disciplines in the policy sciences, social and natural sciences as



well as the humanities. The Conference brought together a collection of investigators who are at the forefront of their field, and provided opportunities for junior scientists and graduate students to present their work in poster format and exchange ideas with leaders in the field. The collegial atmosphere of this Conference, with programmed discussion sessions as well as opportunities for informal gatherings in the afternoons and evenings, provided an avenue for scholars from different disciplines to brainstorm and promote cross-disciplinary collaborations in the various research areas represented. Visit the conference website (<http://www.grc.org/programs.aspx?year=2010&program=scipolicy>) for more information.

Center Events

8th Annual Environmental Policy Conference

Roger Pielke, Jr. gave the keynote talk at the 8th Environmental Policy Conference of the Washington Policy Center. The title of his talk was "How Simple Math Adds Up to Complicates Politics". You can view Roger's powerpoint presentation from this keynote talk at: [http://www.washingtonpolicy.org/sites/default/](http://www.washingtonpolicy.org/sites/default/files/PielkeCEP.pdf)



[files/PielkeCEP.pdf](http://www.washingtonpolicy.org/sites/default/files/PielkeCEP.pdf).

Also, Roger's talk can be viewed at: <http://www.washingtonpolicy.org/events/details/8th-annual-environmental-policy-conference-luncheon> (the talk starts at 17:30 in the video).

Center Events
Noontime Seminar Series Fall 2010

Now in its 9th year, this fall's noontime

seminar series will focus on the theme "Decision Making Under Uncertainty." The presentations below have been confirmed, and more will be scheduled. Please check back

here: http://sciencepolicy.colorado.edu/news/seminars_fall2010.html for a complete schedule. Unless otherwise stated, all talks are at noon on Thursdays and held in either the CSTPR conference room: http://sciencepolicy.colorado.edu/about_us/find_us.html or at CIRES: <http://www.colorado.edu/campusmap/map.html?bldg=CIRE>.



CSTPR NOONTIME SEMINAR SERIES
DECISION MAKING UNDER UNCERTAINTY
THURSDAYS | FALL 2010

September 16 at 12:00 PM | CIRES BLDG S274
The Cost of Climate Change Adaptation for Infrastructure: The Relative Impact on Developing and Developed Countries
by Paul S. Chinowsky
Department of Civil, Environmental, and Architectural Engineering, University of Colorado

September 23 at 12:00 PM | CSTPR Conference Room
Integrating Science and Policy: Climate Change Assessments and Water Resources Management
by Christine Kirchhoff
Center for Science and Technology Policy Research, University of Colorado

October 7 at 12:00 PM | CSTPR Conference Room
Arctic Sea Changes: Prospects for Increased Marine Traffic With Unpredictable Sea Ice Conditions
by Mark Serreze
National Snow and Ice Data Center, Cooperative Institute for Research in Environmental Sciences

October 14 at 12:00 PM | CSTPR Conference Room
Declaring a Climate Emergency: Geo-engineering and the Doctrine of Last Resort
by Bill Travis
Center for Science and Technology Policy Research, University of Colorado

October 28 at 12:00 PM | CSTPR Conference Room
Producing Useful Scientific Information for Policy: How Scientists Perceive the Likely Utility of their Research
by Elizabeth McNie
Political Science Department, Purdue University

November 4 at 12:00 PM | CIRES BLDG S274
How Climate Models Gain and Exercise Authority
by Mike Hulme
School of Environmental Sciences, University of East Anglia

November 11 at 12:00 PM | CSTPR Conference Room
Observing and Understanding Changes in Ice Sheets: The Sea Level Wild Card
by Waleed Abdalati
Cooperative Institute for Research in Environmental Sciences, University of Colorado

November 18 at 12:00 PM | CSTPR Conference Room
Doing PhD - Doing the Right Thing?
by Gesa Lüdecke
Institute for Environmental and Sustainability Communications, Leuphana Universität Lüneburg

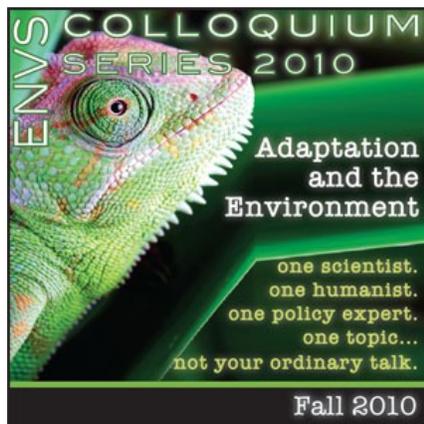
December 2 at 12:00 PM | CIRES BLDG S274
Improving Communication of Weather Forecast Uncertainty to Aid Decisions
by Rebecca Morss
Mesoscale and Microscale Meteorology Division, University Corporation for Atmospheric Research

Center Events
ENVS Colloquium Series Fall 2010

The theme for the ENVS Fall 2010

Colloquium Series is 'adaptation and the environment'. In the interdisciplinary spirit of environmental studies, one main speaker gives a more extensive talk. Then,

two commentators from varied and complementary disciplines offer insight on some other dimension of the issue at hand. The aim has been to have representation from faculty and grad students on the panels. All sessions are scheduled for the CIRES auditorium from 4-6pm (with refreshments preceding the talks, 4-430pm). For Directions see: <http://cires.colorado.edu/contact/maps.html>. Contact ami@cires.colorado.edu if you wish to be added to our mailing list to receive notices of future talks. For an updated schedule see: <http://sciencepolicy.colorado.edu/news/envs-colloquium.html>. The series is being co-sponsored by the Environmental Studies Program at the University of Colorado and the Center for Science and Technology Policy Research.



September 8, 2010

Research on Adapting to Climate Change: Are We Asking the Right Questions?

by Lisa Dilling

CU Environmental Studies Program and CIRES

Commentators: Balaji Rajagopalan, Department of Civil, Environmental, and Architectural Engineering, University of Colorado and Steve Vanderheiden, Department of Political Science, University of Colorado

October 13, 2010

Climate Change Impacts in Indian Country: Adapting "Adaptation" for American Indian Tribes

by Julie Teel

Senior Research Fellow, Center for Energy and Environmental Security, University of Colorado Law School

November 10, 2010

Adaptation and the Construction of Risk

by Ted Nordhaus & Michael Shellenberger

Chairman and President, Breakthrough Institute

December 8, 2010

Climate Change: Why we are in too deep already, and why we won't avoid serious consequences

by Jim White, CU Environmental Studies Program and Institute of Arctic & Alpine Research

Ogmios

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

<http://sciencepolicy.colorado.edu/ogmios/subscriptions.html>

Or send an email to: ami@cires.colorado.edu

and include the following information:

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

Center in the News

To read the below and other news articles about the Center see our In the News page: <http://sciencepolicy.colorado.edu/news/in-the-news.html>.

Max Boykoff was quoted, cited, interviewed, or referenced in the following media:

- 1 July 2010 Yale Forum article on climate change and the media: A Tale of Two Climate Change Stories: The Times, the Globe and the 'Front-Page Thought' by Andrew Freedman.
- 8 June 2010 Discovery News article on public perception of climate change: Is Global Warming Real? by Robert Lamb.
- 27 May 2010 Reuters article on public view of climate change: World warms, public cools to climate action by Alister Doyle.



Lisa Dilling was quoted, cited, interviewed, or referenced in the following media:

- 7 July 2010 Environmental Research Letters article on using land-management techniques to store carbon and mitigate climate change: Storing carbon: motivating landowners is key by Liz Kalaugher.

Roger Pielke, Jr. was quoted, cited, interviewed, or referenced in the following media:

- 30 August 2010 Telegraph article on recent report of the IPCC: IPCC told to stop lobbying and restrict role to explaining climate science by Stephen Adams and Robert Winnett.
- 30 August 2010 Houston Chronicle article on record heat for the summer: Record heat may be our new normal: Scientists say this summer fits the pattern of a warming world by Eric Berger.

- 30 August 2010 Associated Press article on recent report of the IPCC: Report: Climate Science Panel Needs Change At Top by Seth Borenstein.
- 27 August 2010 Nature News article on Hurricane Katrina: Evaluating Katrina's impact on science.
- 20 August 2010 Crosscut article on sustained investment in an energy technology revolution: Climate policy wars: People want affordable solutions.
- 19 July 2010 Live Science article on manipulating nature for long-term survival: Can Humans Survive? by Jeremy Hsu.
- 16 July 2010 Financial Post article on the politicization of climate science: Bad politics: The politicization of climate science reaches new low with the development of a deniers blacklist by Terence Corcoran.
- 16 July 2010 Wall Street Journal article on recent report absolving the scientists involved in the 2009 Climategate scandal: A Climate Absolution?: More like a 160-page evasion of the real issues that confront global-warming science.
- 14 July 2010 NewScientist article on the UK's official report into the "Climategate" affair: Climate scientists respond to 'Climategate' report.
- 7 July 2010 New York Times article on British panel clearing scientists involved in Climategate scandal: British Panel Clears Climate Scientists by Justin Gillis.
- 4 July 2010 Guardian article on the changes after the 'Climategate' scandal: 'Climategate' was 'a game-changer' in science reporting, say climatologists by Fred Pearce.
- 13 June 2010 Times Colonist article on Forum to discuss Vancouver Island's energy needs: Forum to explore Island's growing energy needs by Judith Lavoie.
- 16 May 2010 Boston Globe article on global warming debate between Lindzen and Emanuel: A cooling trend by Beth Daley.
- 12 May 2010 Science Insider article on the recent Hartwell paper about how to reform climate policy: Do You Heart 'The Hartwell Paper'? by Eli Kintisch.
- 11 May 2010 BBC News article on a new direction for climate policy: After the crash - a new direction for climate policy by Mike Hulme.
- 12 April 2010 ABC News article on the House of Commons committee: Who needs a committee report to spot rank deception? by Joanne Nova.

S&T Opportunities
Christine Mirzayan Science and Technology
Policy Graduate Fellowship Program

This Graduate Fellowship Program of the National

Academies—consisting of the National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council—is designed to engage its Fellows in the analytical process that informs U.S. science and technology policy. Fellows develop basic skills essential to working or participating in science policy at the federal, state, or local levels.



Eligibility

Graduate students and postdoctoral scholars and those who have completed graduate studies or postdoctoral research in any social/behavioral science, medical/health discipline, physical or biological science, any field of engineering, law/business/public administration or any relevant interdisciplinary field within the last five years are eligible to apply.

The program takes place in Washington, D.C. and is open to all U.S. and non-U.S. citizens who meet the criteria. However, non-U.S. citizens must be currently enrolled in a U.S. university and have proof of holding valid J-1 or F-1 status.

Session Dates

Winter/Spring: January 24-April 15, 2011

Fall: August 29 through November 18, 2011

Apply

For details on criteria, application instructions, and access to the online application and reference forms please visit: <http://www.national-academies.org/policyfellows>. Please note the requirement for submission of an online reference from a mentor/adviser.

Application Deadline Dates

Winter/spring program: OCTOBER 15, 2010

Fall program: MAY 1, 2011

(Candidates may apply to both sessions concurrently.)

Stipend

A stipend grant award of \$8,240 will be provided for the 12-week session to offset expenses.

Questions should be directed to: policyfellows@nas.edu.

Below are former Fellows' comments about the program's impact:

"This is an important career building opportunity for people interested in the scientific community outside academia. Even if you plan to pursue a traditional academic track, seeing science from a policy perspective is very enlightening. There is something valuable in this experience for first year grad students to recent PhD's. Come with an open mind and expect to learn more than you...imagined."

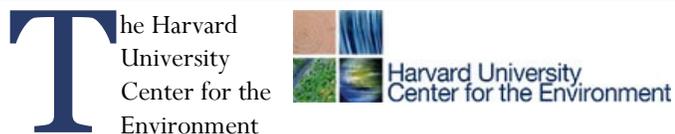
"This program will open your mind to a world rarely envisioned from the confines of laboratory bench work. I learned an immeasurable amount about the policy and politics behind science and after the fellowship opens your mind, it opens career doors."

"In just weeks in the DC S&T policy world, I substantially broadened my perspective on how I can use my engineering background to positively impact our society. I return to graduate school recharged about the value of advanced education, and more confident about my decisions to pursue studies that blend the boundaries of engineering and the humanities. By seeing the connections between your academic field and the public policy arena, you will find many new opportunities for future studies or careers. You will be enriched as a person, as a public citizen, and as a member of an academic community."

"A really great experience for those from the "soft sciences" who have an interest in S&T policy or if you're trying to figure out what else you might want to do outside of academia. This was a great opportunity to bridge the gap and gain a new understanding and appreciation for how it all works, the people involved, and the profound difference it can make in the end (and all long the way)."

A printer-friendly version of the announcement can be downloaded from the Mirzayan website: <http://sites.nationalacademies.org/PGA/policyfellows/index.htm>

S&T Opportunities *Environmental Fellows Program at Harvard University*



The Harvard University Center for the Environment created the Environmental Fellows program to enable recent doctorate recipients to use and expand Harvard's extraordinary resources to tackle complex environmental problems. The Environmental Fellows work for two years with Harvard faculty members in any school or department to create new knowledge while also strengthening connections across the University's academic disciplines. Environmental Fellows may include people with degrees in the sciences, social sciences, law, government, public policy, public health, medicine, design, and the full array of humanities.

The Award

The fellowship will provide an annual stipend of \$55,000 plus health insurance, a \$2,500 allowance for travel and professional expenses, and other employee benefits. Environmental Fellows will begin work in September 2011.

Schedule

Applications and all letters of reference must be received by the Center for the Environment by 5pm Eastern Standard Time, January 14, 2011. The Center will announce the awards in March 2011. Complete details can be found at: <http://www.environment.harvard.edu/grants/fellows>.

Harvard University is an affirmative action, equal opportunity employer.

Contact Information

Applications and all letters of reference must be received by the Center for the Environment by 5pm Eastern Standard Time, January 14, 2011. The Center will announce the awards in March 2011. Complete details can be found at: <http://www.environment.harvard.edu/grants/fellows>.

Website

<http://www.environment.harvard.edu/>

S&T Opportunities *George Mason University Center for Climate Change Communication Postdoctoral Research Fellow*

The George Mason University Center for Climate Change Communication (<http://climate.gmu.edu>) invites



applications for a full-time Postdoctoral Research Fellow to support an NSF-funded planning grant titled Making the Global Local: Unusual Weather Events as Climate Change Education Opportunities. The goal of this project is to establish a national network of climate and weather science organizations, and university research and teaching programs, to engage, train, and empower local broadcast meteorologists to educate and inform the American public about climate change. The project will integrate informal learning, mass communication, and experiential learning theories to develop and test new pedagogical approaches to informal science education through frequent mass media exposure, linked to realworld experience (i.e., the local weather). It will also adapt and test conflict resolution theory and practice to engage meteorologists who reject the scientific consensus and climate scientists in constructive dialogue. Collaborating institutions include National Oceanic & Atmospheric Administration, American Meteorological Society, National Weather Association, American

Association of State Climatologists, American Geophysical Union, Climate Central, National Environmental Education Foundation, and Yale and Cornell universities.

Candidates must have a PhD in a relevant social or learning science discipline, and a track record of published journal articles and/or conference papers on relevant topics of inquiry including climate change communication, science communication and/or formal or informal science education. Experience in survey research, qualitative data collection, strategic (program) planning, professional development, and climate science is preferred. Additional skills required include competence in planning and multitasking, attention to detail, excellent organizational skills, ability to communicate verbally and in writing, and the ability to adapt to the changing demands of a dynamic research environment.

For full consideration, interested and qualified applicants must submit the online faculty application at <http://jobs.gmu.edu> for position #F9401z. Applications should include (a) cover letter including a statement of research interests and career goals, and names and contact information of two professional references, and (b) a vita.

About Us

Ogmios 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/ogmios/>

Online version: ISSN 1936-9921

Print version: ISSN 1936-9913

Editor: William Travis (william.travis@colorado.edu)

Managing Editor: Bobbie Klein (bklein@colorado.edu)

Associate Editor/Web: Ami Nacu-Schmidt (ami@cires.colorado.edu)

CENTER FOR SCIENCE AND TECHNOLOGY POLICY RESEARCH



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

To Subscribe:

<http://sciencepolicy.colorado.edu/ogmios/subscriptions.html>

CENTER FOR
SCIENCE & TECHNOLOGY
POLICY RESEARCH

Support the Center!

Support our work with your tax-deductible contribution!



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

Endowment fund: Contact Bobbie Klein (bklein@colorado.edu)

Please make checks payable to the **CU Foundation** (**please 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

Attn: Gifts Processing

4740 Walnut Street

Boulder, CO 80301