Ogmius



NO. 19 SUMMER 2007

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 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:

| Introduction to Ogmius | 1 |
|---|--------|
| Ogmius Exchange Can a concept (World Heritage Status) Save a Sea (the Aral Sea)? By Mickey Glantz | 1 |
| Research Highlight Research for benefit in federally funded mission agencies By Nat Logar | 3 |
| Letter to the Editor What's the "Point" of Peak Oil? | 4 |
| Center News Changes at the Center Roger Pielke, Jr. Testifies Before Congress | 5 5 |
| Project News Graduate Certificate in Science and Technology Policy | 6 |
| Graduate Student News | 6 |
| Recent Publications | 7 |
| Recent Prometheus Blogs | 8 |
| Center in the News | 8 |
| S&T Opportunities | 10 |
| About Us & Donation Information | 12 |

Introduction to Ogmius Exchange

his edition of Ogmius features an essay by Michael (Mickey) Glantz titled "Can a concept (World Heritage Status)



Save a Sea (the Aral Sea)?" Mickey is a Senior Scientist and was the Director of the Environmental and Societal Impacts Group, a program at the National Center for Atmospheric Research (NCAR), for 17 years. He is currently the director of NCAR's Center for Capacity Building (http://www.ccb.ucar.edu/). Mickey is interested in how climate affects society and how society affects climate, especially in how the interaction between climate anomalies and human activities affect quality of life issues. For more information visit Mickey's website (http://www.ccb.ucar.edu/glantz/).

Ogmius Exchange Can a concept (World Heritage Status) Save a Sea (the Aral Sea)?

This article is a condensed version of a longer article that appeared in the June 2007 issue of Ambio, vol. 6, no. 4, titled "Aral Sea Basin: A Sea Dies, a Sea Also Rises" by Michael Glantz



he Aral Sea is in a vast basin in Central Asia and lies as an island sandwiched between two deserts, the Karakum and the Kyzlkum. It is fed primarily by Central Asia's two major rivers, the Amudarya and the Syrdarya. During the past 35,000 years, its level has varied widely. The Aral Sea was once the world's fourth-largest inland sea. Its most recent anthropogenic problems began in the 1960s and 1970s with sharply increased diversion of water from the main rivers that feed the sea. In addition, there is in fact a third manmade 1400km long major river in Central Asia, the Karakum Canal. By 1987, the Aral Sea had lost about 60% of its volume, its depth had dropped by 14 m (45 feet), and its salt concentration had doubled, killing the commercial fishing industry. Wind storms carried toxic dust onto farms a few hundred kilometers downwind, carrying fine grains of pesticide-and

Ogmius Exchange Continued

herbicide-laden dust that had been deposited for decades on the newly exposed sea floor. Life expectancies in the districts near the sea are significantly lower than in surrounding areas. The sea is now a quarter of the size it was 50 years ago and has broken into several parts, the North Aral Sea and the South Aral Sea (which is nearly separated into two parts). Reengineering a barrier to separate the Little (North) Aral from the Big Aral has served to retain water in the North Aral Sea.

The region was under the control of the Soviet Union from the mid-1920s until 1991. Climate and soils were excellent for cotton production. Fertilizers, herbicides, and pesticides were applied to the cotton fields in great amounts, based on the assumption that if a little amount did some good, then a lot would do even greater good for cotton production. It was revered as a crop and for its high level of production in the region. Little, if any, political attention was paid, however, to the environmental costs associated with the long-term environmental and societal consequences of cotton production. Quotas set in Moscow drove regional political leaders and collective farm managers to push hard on the workers to meet the unrealistic quotas, quotas that were often met only on paper.

Increasing streamflow diversions during the past five decades have led to a sharp and relatively rapid decline not only in level, but also in societal and ecological well-being. The drying out of the deltas has caused a loss in wetlands, an increase in salinity, a decrease in biodiversity, and an attendant loss in revenue with the destruction of various economic activities dependent on delta habitats for flora and fauna.

Maternal mortality and respiratory and diarrhea diseases are worse there than in the rest of the region. The tuberculosis level is the highest in Europe as well as in the former Soviet Union, and anemia levels are among the highest in the world. Other adverse health effects include hepatitis, malnutrition, high infant mortality, kidney dysfunction, neurological disorder, and cancer.

It is time now to consider partially restoring and maintaining the Big Aral Sea. It would be impossible to refill the Aral to the level of the 1960s without crippling economic development prospects and considerable regional sacrifice. Even if the political and humanitarian will to do so were there, the regional economies are linked so strongly to the production of cotton that water would have to be found elsewhere to "save the seas." However, it would be possible to refill and stabilize it at an intermediary level by letting predetermined amounts of Amudarya streamflow reach the sea each year for the next several decades. Restoring both seas would help to improve the living conditions in the pre-Aral region and regional human as well as ecological health. In

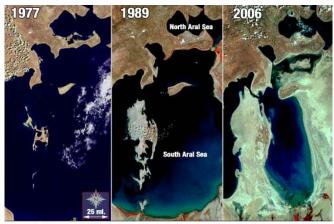


photo by NASA/GSFC

addition, a partially restored Big Aral would serve as an example of how creeping (seemingly insignificant but cumulative) local and regional environmental changes can lead to major national catastrophes in a relatively short period of time.

A partially restored sea could serve both as a symbolic result for present and future generations regarding the lack of understanding of the interactions between humans and nature and as a symbol of human capabilities to restore with time parts of nature that society had destroyed. As an example, arresting the continued decline in sea level in the Big Aral and embarking on a program of partial restoration of the sea could serve to restore faith in learning from experience. Perhaps more to the point is my feeling that if the Big Aral Sea were to disappear, global humanitarian interest in the sea and in the region would dissipate sharply and quickly. In other words, humanitarian aspects for getting involved in efforts to "save the sea" would likely dry up.

The Aral Sea's impacts on ecosystems and societies have been positive over time. It has produced a rich environment for a range of flora and fauna, terrestrial and aquatic. The region's two major rivers produced two highly productive inland deltas. The stream ecosystems were also abundant in species of aquatic life at different stretches of the river. The sea in the past had a steady supply of water each spring from the melting glaciers in the nearby mountains.

The positive aspects of the sea for society include the availability of abundant river water for human settlement and economic development purposes and a restoration of biodiversity in the delta as well as the sea. There had been, until recently, a sustainable balance in the Aral Basin's hydrological cycle; that is, before human intervention disrupted that cycle.

Providing the Aral Sea with World Heritage Status can serve to encourage governments in the region to seek ways to restore the sea to a usable level. Bringing back healthy deltas

Ogmius Exchange Continued

can restore biodiversity. It can restore a level of fishing and other economic activities and, therefore, livelihoods. It can provide a modicum of hope for the future for inhabitants near the sea, the Karakalpak people, who have been left with little hope and few options short of migrating to other parts of Uzbekistan. There are examples of heritage sites that serve as memorials to sad experiences in human history. The Aral Sea,

once the world's fourth largest inland sea and now not even on the list, deserves Heritage Status as well as restoration. It will take a long time to accomplish this task. Better, then, to get started now.

> Mickey Glantz National Center for Atmospheric Research glantz@ucar.edu

Research Highlight

Introduction

he Research Highlight in this edition of Ogmius was written by Center graduate student Nat Logar. Nat graduated from Brown University with a BS in Geology-Biology and is currently working toward his Ph.D. in Environmental Studies at CU-Boulder. 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, which is the subject of his Research Highlight, focuses on how federally funded institutions can fashion science policies that contribute to the benefit of targeted decision makers. His dissertation will examine science policies in the USDA's Agricultural Research Service, the Naval Research Laboratories, and the National Institute of Standards and Technology. See Nat's home page (http://sciencepolicy.colorado.edu/about_us/ meet us/nat logar/) for more information.

Research for Benefit in Federally Funded Mission Agencies

ost of the funding that the U.S. government devotes to scientific research goes to mission agencies that are responsible for supporting a defined set of users. Typically, there is an explicit or implicit common interest connection between the benefit of these users and the advancement of U.S. society at large. For example, people in the U.S. value national security, so our

government funds groups such as the Naval Research Laboratory (NRL) to pursue research that will have potential military applications. NRL maintains its reputation and funding by working to ensure that its work does result in user benefit. By focusing on policy processes within NRL and other federally funded institutions, we can assess how different mechanisms contribute to, or detract from, the effective execution of agency missions.

NRL has a mission to support a "broadly based multidisciplinary program of scientific research and advanced technological development directed toward maritime applications." The National Institute of Standards and Technology (NIST) works to "promote U.S. innovation and industrial competitiveness." However, stating a goal of delivering results to decision makers does not guarantee those results. Irrelevance, wasted effort, and missed opportunities for beneficial outcomes can result from research that fails to account for the needs of information users. Critical consideration of the mechanisms through which institutions such as NIST and NRL pursue science can lead to transferable lessons for science policy makers.

Analysis of these science policies leads to increased understanding of how factors such as the definition of scientific problems, science decision-making structures, quality control mechanisms, distribution of participants, and social accountability guide the process of mission oriented science. At the most general level, the key to effectively fostering a match between research, even at its most fundamental level, and outputs that decision makers find useful, is the existence of a "culture of application," in which the consideration of a useful end product, and of the product's user, is embedded in the way science is undertaken.

A culture of application may be fostered through various strategies. For example, NIST project proposals are formally required to address a set of questions, called the Heilmeier questions, which consider context through delineation of the problem's definition, the other alternatives in existence, the fit to mission, the potential impact of the research, and the

Research Highlight Continued

criteria for success. Assessing context and application also occurs informally, through frequent interactions between NIST scientists and relevant people from industry in workshops, collaborative relationships, and standards development organizations.

Military Deputies are one means through which NRL works to fit research to Navy needs. The deputies are Naval officers who are billeted in lab divisions, and who are responsible for acting as liaisons between the scientists and Naval operations. While the position is instituted formally, the way in which each deputy interacts with users and researchers is highly flexible and can allow for facilitation of effective reconciliation

between supply and demand.

Although each strategy employed by NRL or NIST may not be fully transferable to other groups, useful aspects, such as formalized consideration of use combined with encouragement of other, informal means, may prove useful in the creation and alteration of institutional science policies. Through consideration of where these institutions are and are not useful, we can bring transferable strategies to other groups concerned with making effective science policy.

Nat Logar logar@colorado.edu

Letter to the Editor What's the "Point" of Peak Oil?

Ogmius received the following letter from a current Bush Administration official in response to Frank Laird's article, Apocalypse Soon: Climate Change, the End of Oil, and the Perils of Limiting Choices from the last edition (http://sciencepolicy.colorado.edu/ogmius/archives/issue-18/apocalypse-soon.html) of Ogmius.

What's the "Point" of Peak Oil?

n Ogmius No. 18 (http://sciencepolicy.colorado.edu/ogmius/archives/issue 18/apocalypse soon.html), Frank Laird nicely demonstrates the influence of peak oil, particularly as the acknowledgement of global warming becomes widespread. Similarly, he succinctly identifies the problems brought on by advocates assuming their chosen solution is, in fact, the only logical one. But, backing up a bit, just how accurate are peak oil theorists and how useful is peak oil as a guide to policymaking?

Open your newspaper and you'll read claims that it is coming soon (based on this GAO report: http://www.gao.gov/docdblite/summary.php?rptno=GAO-07-283&accno=A66349) or listen to environmental leaders (US Green Building Council's CEO) or legislators (http://thomas.loc.gov/cgi-bin/bdquery/z?d110:h.res.00012:) that it may already here. Because the world is running out of oil, peak oilers say, we must develop a national or global strategy to deal with the impending economic and security catastrophe, preferably with a patriotic catchphrase that has been trotted out already - Manhattan, Apollo (http://www.apolloalliance.org/apollo-in-the-news/archived-news-articles/2004/11-19-04-voiceofamer.cfm), combining the two (http://www.presidency.ucsb.edu/ws/

index.php?pid=4034), or how about Overlord (http://

en.wikipedia.org/wiki/Battle of Normandy) (too militaristic perhaps but if there is a "war on climate" maybe it will surface, or perhaps signal the newest and greatest sea invasion)? And peak oil is another arrow in the quiver in the fight to win the policy battle regarding global warming and climate change, or it might just be the sign of all impending doom (http://www.amazon.com/Peak-Oil-Prep-Economic-Collapse/dp/0965900045).

But are peak oilers right? Is the resource glass not just half empty but on its last drip? Reserves of oil are finite, but, according to even the GAO study, no one knows which period it will occur, and the shape of the curve is more than in question—dealing with a decline is a much different prospect than falling off a cliff. How many times have we run out of oil (http://www.washingtonpost.com/wp-dyn/content/ article/2005/07/29/AR2005072901672.html)? Peak oil theorists tend to ignore economic and investment cycles. We are in the midst of a 30-year boom in the global investment cycle so production will continue to increase for the shortterm and level off rather than fall off a peak. We have never been able to predict our reserves or which countries even have the most petroleum, for various reasons - see where Canada (http://www.infoplease.com/ipa/A0872964.html) now stands compared to 10 or 20 years ago or check out reserves vs. production over time on the Energy Information Administration's (http://www.eia.doe.gov/emeu/ international/contents.html) pages. While there will be an eventual point of maximum production, betting on the end of oil is a fool's game.

Much like the concept of energy independence (http://speaker.gov/newsroom/pressreleases?id=0038), which few have the courage to take on in a thoughtful manner (http://

Letter to the Editor Continued

www.energycommission.org/site/page.php?testimony=17), policymakers and politicians have a hard time confronting the obvious or simply taking on the uncomfortable. Somehow GAO judged the studies they reviewed as if they are all created equal, a dubious prospect - probably the most rigorous is this one (http://www.cera.com/aspx/cda/public1/news/pressReleases/pressReleaseDetails.aspx? CID=8444) that did not even make it into GAO's appendix

due to the limitations of its methodology.

Many "peak oilers" have it backwards. It is the fact that, for decades to come, petroleum and hydrocarbons will remain abundant and price-competitive compared to alternatives, and that we must wean ourselves from oil dependence and its attendant environmental and security vulnerabilities. If climate change mitigation is the priority, carbon must have a price because oil is all too plentiful, not because it is scarce.

Center News Changes at the Center

oger Pielke, Jr., who has directed the CIRES Center for Science and Technology Policy Research since its inception in 2001, has ended his term serving as director of the Center and is headed for a year-long sabbatical at the



James Martin Institute for Science and Civilization (http://www.martininstitute.ox.ac.uk/jmi/). He is currently taking a break from regularly contributing to the science weblog Prometheus. CIRES Associate Director **Dr. William Lewis**



(http://cires.colorado.edu/people/lewis/) will serve as the Interim Director of the Policy Center. Bill has considerable experience with science and policy issues and is a leader on campus and at CIRES. We are very pleased that he will be associated with the Center.

In addition, Ben Hale (http://sciencepolicy.colorado.edu/

about us/meet us/ben hale/), newly hired as a faculty member in Environmental Studies (ENVS), will be joining the Center this fall. Ben's expertise is in philosophy and ethics, and we are thrilled that he'll be adding humanities expertise to the Center. Learn more about



Ben at his website (http://www.practicalreason.com/) and in his recent paper: "The Moral Considerability of Invasive Transgenic Animals" (http://spot.colorado.edu/~bhale/transgenic.shtml).



Lisa Dilling, who has been with us for the past few years as a CIRES visiting fellow, will be joining ENVS as a faculty member starting in January. Many of you already know Lisa, but if you don't, please visit her homepage (http://sciencepolicy.colorado.edu/about_us/

meet us/lisa dilling/).

Center News Roger Pielke, Jr. Testifies Before Congress

oger Pielke, Jr. testified before the House Committee on Science and Technology on Wednesday, May 16 2007 on "The State of Climate Change Science 2007, Pt. III." Roger's testimony began with three assertions:

- Current debate over climate change represents a great opportunity to discuss what kind of future will result from our current decisions. This opportunity is often missed because of a focus on the negative aspects of climate change or because debate degenerates into unhelpful partisan or ideological attacks.
- The IPCC WG III indicates that the benefits of mitigation outweigh its costs, and based on this conclusion, mitigation

- should be a policy priority. Of course, the exact details of mitigation policies, and in particular the time symmetry between costs and benefits, are not trivial.
- The IPCC WG II is concerned with one of many pressing challenges to global well-being, and emphasizes greenhouse gas mitigation is only one of many avenues for confronting those challenges. However, this important message often goes unappreciated in policy debates. We need to make certain that the focus on the issue of greenhouse gas emissions does not crowd out other important challenges.

To read more see: http://sciencepolicy.colorado.edu/admin/publication-files/resource-2521-2007.17.pdf.

Project News

Graduate Certificate in Science and Technology Policy

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

For more information about the program see: http:// sciencepolicy.colorado.edu/stcert/.

Graduate Student News

he following graduate students have been working at the Center over the past year while pursuing graduate degrees in Environmental Studies at the University of Colorado. Their backgrounds, research interests, and dissertation topics are listed below.

Marilyn Averill has a master's degree 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. She is examining the use of science and the treatment of uncertainty in litigation relating to climate change, and the effects these cases may have on law, science, and policy. Her tentative dissertation title is "Who Runs the Greenhouse? The Role of the Federal Judiciary in U.S. Climate Policy."

David Cherney 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's tentative dissertation title is "Searching for Greater



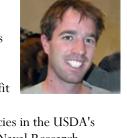
Yellowstone's Science Policy: Improving the integration of science and decision making in management."

■ **Jimmy Hague** 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. He recently completed an M.S. in Environmental Studies and the



Certificate in Science and Technology Policy at the University of Colorado.

Nat Logar graduated from Brown University with a B.S. in Geology-Biology. 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."
- Genevieve Maricle graduated from Northwestern University with a B.A. in both Mathematics and Environmental Science. 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 holds a master's 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

Graduate Student News Continued

produce information that is both needed and used by policy makers in their decision processes. She is currently working on her dissertation titled "Coproducing useful scientific information for climate policy: informing science policy research and decision support." This past year she has been working on the Boundary Organization Project at Harvard and has spent several months in Indonesia.

Shali Mohleji 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. 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 decisions on how federal funding is allocated, and the risk



assessment and prioritization process used to evaluate science-based threats. Her dissertation topic is "Investigating the Prioritization Process for Homeland Security R&D."

Recent Publications

Dilling, L., 2007. *A call to global action*, Chemistry & Industry, 9 April.

Excerpt: The documentary on global warming featuring former US vice-president Al Gore, An Inconvenient Truth, was a box office hit, at least by documentary film standards. Scientists lauded its accuracy, and praised Gore for elevating awareness of an issue that they feel has not yet reached a tipping point of public action in



the US. I have seen the movie three times, and agree that it uses science to make a compelling case. But, I am among the 'choir'. But what about those who do not see the issue as urgent? Like Gore, many scientists believe that if the public could just be convinced of the science, they would take action. But, information by itself is not enough. And, because of this, the temptation is often there to emphasise dire, scary consequences to get attention.

This might get notice, but it does not necessarily result in effective action. Fear, especially of a global scale problem, is often just as likely to result in denial, apathy, despair and resignation as it is to result in feelings that we should 'do something'... **Read more** at: http://sciencepolicy.colorado.edu/admin/publication_files/resource-2513-2007.13.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 Orrin Pilkey & Linda Pilkey-Jarvis, Nature, Vol 447, pp. 35-36, May 3.

Excerpt: The central thesis of Useless
Arithmetic, by the father-and-daughter team of Orrin Pilkey and Linda Pilkey-Jarvis, is "the virtual impossibility of accurate quantitative modelling to predict the outcome of natural processes on the Earth's surface". This is sure to cause cognitive dissonance among many readers — it simply does



not seem to accord with our lived experience.

As I write this review, I'm sitting on an aircraft safely crossing the United States.

The plane was created with quantitative aeronautical engineering design models, its flight path dictated by quantitative routing models, and the snowy weather I experienced at takeoff was predicted by quantitative weather forecasting models. Such experiences in successfully predicting and managing natural processes would seem to indicate that without mathematical models our twenty-first-century lives would simply be impossible. What could have influenced the authors to make claims so strongly contradicted by experience?... Read more at: http://sciencepolicy.colorado.edu/admin/publication_files/resource-2520-2007.16.pdf.

Recent Prometheus Blogs

enter staff
members and
students, as well as guest writers, have contributed
many provocative posts to our science policy
weblog, Prometheus (http://sciencepolicy.colorado.edu/prometheus/). The following is a sample of recent posts
(feedback/contributions welcome at: http://sciencepolicy.colorado.edu/prometheus/AskP.html):

June 12, 2007 Aren't new problems always old problems? by Kevin Vranes

Congress is back at trying to reform the problematic National Flood Insurance Program. What's curious is the claim that NFIP's problems are recent and related to the 2005 hurricane season... Read more at: http://sciencepolicy.colorado.edu/prometheus/archives/disasters/001215arent_new_problems_.html.

June 11, 2007
A little percolation on energy policy
by Kevin Vranes

Two things I noted today:

1- From the No S#%@! category, the Bush Administration seems eager to let everybody know that there will be no movement whatsoever on regulating carbon until January 2009 at the earliest. If you caught even a bit of the G8 news you already knew that (and somebody got me saying as much before G8). But apparently the Bush Administration wants to drive the point home, so last week they turned EPA Administrator Johnson loose at a House hearing... Read more at: http://sciencepolicy.colorado.edu/prometheus/archives/energy_policy/001214a little percolation.html.

June 6, 2007 Curious quote from the recalcitrant by Kevin Vranes

It's nothing new: rather than make better cars Detroit would lobby. So it's no surprise that the big-3 chiefs are running to DC together to beg that they not be held to even the most milquetoast efficiency regulations. What is curious, though, is GM's CEO's choice of words... **Read more** at: http://sciencepolicy.colorado.edu/prometheus/archives/energy_policy/001212curious_quote_from_t.html.

Center in the News

enter personnel continue to receive national media attention on a variety of topics.

- Roger Pielke, Jr. was quoted in a June 19

 New York Times
 article about Boulder
 Soccer marketing a
 carbon offset approach. See A Passion for Soccer and the
 Environment: http://www.nytimes.com/2007/06/19/sports/soccer/19boulder.html?
 r=2&adxnnl=1&oref=slogin&adxnnlx=1182874637Jy4PJ6RuJyen0O+q8I9XAQ
- Roger Pielke, Jr. was cited in a June 13 *Tampa Tribune* article about Florida's development of a hurricane loss model. See Hurricane Model Sized Up: http://www.tbo.com/news/metro/MGBNYRO5V2F, html

- Roger Pielke, Jr. was quoted in a June 7 *Nature* article looking back at the Kyoto Protocol. See Post-Kyoto pact: shaping the successor: http://www.nature.com/climate/2007/0706/full/climate.2007.12.html
- Kevin Vranes was quoted in a June 1 New Scientist
 article about the International Climate Change
 Framework. See Bush merely 'stalling' on climate, say
 experts: http://environment.newscientist.com/channel/earth/dn11966
- Roger Pielke, Jr. was interviewed by *NPR* on May 22 about the upcoming hurricane season. See Hurricane Predictors Expect a Busy Storm Season: http://www.npr.org/templates/story/story.php?storyId=10330385
- Roger Pielke Jr.'s new book, *The Honest Broker*, was highlighted in a May 21 *Weather Channel* article. See New Book Calls for a Shift in how Scientists Engage in Policy: http://climate.weather.com/blog/9_12588.html

Center in the News Continued

- Roger Pielke, Jr. was cited in a May 7 *Philadelphia Inquirer* article on the growing cost of hurricanes. See Why hurricanes inevitably will be more costly: http://www.philly.com/inquirer/health_science/weekly/20070507 WeatherWatch Why hurricanes inevitably will be more costly.html
- Roger Pielke, Jr. was quoted in an April 11 New York Sun article about the movement against travel to exotic places and climate change. See Anti-Travel Movement Targets Exotic Destinations: http://www.nysun.com/article/52232
- Roger Pielke, Jr. was cited in a March 13 National Journal article on the global warming debate. See Global Warming: The Convenient Truth: http://www.theatlantic.com/doc/200703u/nj_rauch_2007-03-13
- Roger Pielke, Jr. was quoted in a March 4 *Tampa Tribune* article on computer modeling and insurance predictions. See Insurance Modeling Review Is Tricky: http://www.tbo.com/news/metro/MGBVP9V0VYE.html

For more In the News see: http://sciencepolicy.colorado.edu/outreach/news.html.

Ogmius

To Subscribe to Ogmius use the on-line form at: http://sciencepolicy.colorado.edu/ogmius/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 Ogmius

S&T Opportunities

Postdoctoral Associate: Ethnographic Studies of Science and Technology

Cornell University, Department of Science & Technology Studies

he Department of Science & Technology



Studies at Cornell University announces a position for a postdoctoral associate in the ethnographic investigation of science and technology. The position is available immediately for a one- or two-year period (negotiable). A Ph.D. or equivalent degree is required in a relevant field (e.g., science & technology studies, sociology, anthropology, history, communication, organizational behavior, strategic planning, etc.). Applicants with a degree in a scientific or technical field and a record of achievement in analysis of social dimensions of science will also be considered. The successful applicant will be expected to spend approximately half time on his or her own research and half time on a collaborative project "University-Industry Interaction in Emerging Research Collaborations: An Ethnographic Investigation." The project will examine the brokering of collaborations and universityindustry interactions around emerging nanotechnologies. The

successful applicant will be expected to carry out an in-depth study using ethnographic methods of several university-industry collaborations. This is a great opportunity for someone who wants to acquire fieldwork experience in the context of a leading S&TS department, as well as to interact with researchers in nanotechnology, nanobiotechnology, and related fields about their work. For more information on S&TS at Cornell, see http://www.sts.cornell.edu. Salary and benefits are competitive. Send a letter of application, c.v., writing sample, and the names and addresses of three references to:

Postdoctoral Application Department of Science & Technology Studies Cornell University 306 Rockefeller Hall Ithaca, NY 14853 USA

(Applications may also be submitted electronically to: Stacey Sullivan at sms252@cornell.edu; be sure to put "Postdoctoral Application" in the Subject line of the e-mail.) Review of applications will begin immediately and continue until the position is filled. Women and minorities are especially encouraged to apply; Cornell is an affirmative action/equal opportunity employer.

S&T Opportunities

Postdoctoral Research Associate: History of Science/Science Studies

University of California, San Diego, and Princeton University

The Program in Science, Technology and Environmental Policy

he use of

scientific assessment as a formalized process for evaluating knowledge for the specific purpose of informing government decision-making has expanded since the mid-1970s, but how well have these assessments worked? As part of the initial stage of a multi-year collaborative project between University of California, San Diego and The Woodrow Wilson School's Science, Technology and Environmental Policy Program at Princeton University, we seek a post-doctoral fellow to examine the history of scientific assessments of the stability of

the West Antarctic Ice Sheet and its role in sea level rise

caused by global warming. The ideal fellow will have a Ph.D. in history of science or a closely related field, and sufficient scientific background to understand the technical issues at stake in the scientific evaluations. The fellow will work under the joint supervision of Naomi Oreskes, University of California, San Diego, and Michael Oppenheimer, Woodrow Wilson School and Department of Geosciences, Princeton University.

The initial appointment will be for one year, with the possibility of renewal. The successful candidate will be based primarily at the University of California, San Diego campus but must be flexible enough to travel to the Princeton to conduct research there as needed. Research could begin anytime after **July 1, 2007**. Review of applications begins immediately and will continue until the position is filled.

The Postdoctoral Research Associate's position is open to all regardless of citizenship, but requires a completed doctorate and does not support work towards the completion of a degree. The postdoctoral fellow will be eligible for salary and

S&T Opportunities Continued

full employee benefits in accordance with Princeton University guidelines.

Applicants should send a CV and a cover letter describing their areas of expertise and interest via email to Charles Crosby at crosby@princeton.edu.

For more information about applying to Princeton please see: http://web.princeton.edu/dofnew/ApplicantsInfo.htm.

Candidates may choose to complete the "Invitation to Self-Identify" form. Providing the self-identification information is completely voluntary and declining to submit the information will not adversely affect your candidacy.

Princeton University is an Equal Opportunity/Affirmative Action Employer.

S&T Opportunities

Ethics in Science and Environmental Politics Ethics of Climate Change CALL FOR ESSAYS

ajor consequences of climate change are now predictable to a reasonable degree of scientific



certainty. Many of these consequences will be experienced within the next 100 years - on time scales relevant to emergency preparedness, medical responses, infrastructure alteration, financial investments, treaty negotiations, etc. These changes will impact the globe, geographically, socially, politically and economically. Leaders of institutions concerned with law, business, medicine, science, sociology, politics and religion will face the brunt of these changes. In the face of these challenges, their actions must be honorable, moral and ethical.

The observation that citizens in poor countries often choose practices that are more environmentally sound than their counterparts in rich countries is a moral and ethical conundrum. Clearly, much more can be done at the level of the individual citizen.

To stimulate discussion of these issues, Inter-Research Science Center is sponsoring seven essay contests. The authors of winning essays will receive US \$1000.00 and their articles will be published in Ethics in Science and Environmental Politics (ESEP). The ESEP issue in which these articles appear will be made available online as an Open Access document — anyone with access to the Internet will be able to read it.

There is one contest in each of the following disciplines:

- Economics/Business
- Law
- Medicine

- Environmental sciences
- Engineering
- Philosophy/Religious studies
- Political Science

Essays within these broad subject areas should focus on climate change, and particularly on ethical issues. Please refer to the "Ethics of Climate Change Essay Contest" support document (http://www.int-res.com/fileadmin/esep-docs/ Ethics of Climate Change Essay Contest-Support Document.pdf), and the "White Paper on the Ethical Dimensions of Climate Change" (http://rockethics.psu.edu/climate/whitepaper-intro.htm) for background and guidance.

These contests are open to graduate students (post Bachelors) at any certified university or college. Proof of student status (e.g. photocopy of a valid student identification card; letter from thesis advisor) must accompany submitted manuscripts.

Essays can be a maximum of 6000 words (excluding references and Figure legends) and must include the corresponding author's name, academic institution, street address, telephone number and e-mail address. Multiple authors — who would split the prize evenly - are permitted. All essays must be submitted as digital PDF or WORD files, and should be prepared following the guidelines detailed at: http://www.int-res.com/journals/esep/guidelines-for-esep-authors/. Indicate clearly under which discipline your essay falls.

Essays must be submitted — via e-mail to esep-submissions@int-res.com - by 0000 hrs GMT on 3

September 2007. All essays will be reviewed by a panel of experts. The winners will be notified by 30 November 2007. Runner-up essays that pass the peer review process will also be published in ESEP.

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/

Online version: ISSN 1936-9921 Print version: ISSN 1936-9913

Editor: Roger A. Pielke, Jr. (pielke@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/ogmius/ subscriptions.html

| Center for Science and Technology |
|-----------------------------------|
| Policy Research |

Cuppout the Contaul



| Center for Science and Technology Policy Research | Support our work with your | | | O der | |
|---|------------------------------------|----------------------------|----------------------------|----------|--|
| Enclosed is my g | gift of: | | | | |
| \$5,000 | \$1,000 \[\] \$500 \[\] \$ | 250 | Other | _ | |
| Please use my gift fo | r: Center for Science & Tech | hnology Policy Re | search #01-22744 | | |
| Education fu | nd Directo | or's discretionar | y fund | | |
| Endownment fund: Contact Bobbie Klein (bklein@colorado.edu) | | | | | |
| Please make checks J | payable to the CU Foundatio | on (<u>please be sure</u> | e to include this form) | ЭR | |
| I would like to make m | y gift donation by Credit Card: | | | | |
| ☐ VISA | ☐ MasterCard | American Exp | ress Discover | | |
| | | | | _ | |
| Card Number | Exp. Date | Print N | 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 | | B10 |)38 | |