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## Inside this issue:

<i>Ogmius Exchange</i>	1
<i>The Cherry Pick</i>	
<i>By Roger Pielke, Jr.</i>	
<b>Center News</b>	
• Bob Frodeman Awarded Fellowship	3
• Recent Visitors to the Center	3
• New Center Additions	3
• Anne Ruggles to serve on wolf management panel	3
<b>Project News</b>	
• Carbon Cycle Science	4
• Cities and Rivers: Interdisciplinary and International Perspectives	4
• Decision Making Under Uncertainty	4
• Future Trends in Environmental Philosophy	4
• Western Water Assessment	5
• Improving Operational Streamflow Forecasts in the Colorado River Basin	5
• Prometheus-New Science Policy Weblog	6
<b>Research Highlight</b>	
• Lightning in Stadiums Article	6
<b>Recent Center Presentations</b>	7
<b>Recent Center Publications</b>	8
<b>Educational Opportunities</b>	8
<b>S&amp;T Policy Opportunities</b>	9
<b>About Us</b>	10
<b>Donation Information</b>	10

## Ogmius Exchange *The Cherry Pick* By Roger Pielke, Jr.

Lawyers get paid considerable sums to do it. Journalists do it on a daily basis. According to their critics, President George Bush and his Administration do it routinely. I'm sure that I do it, and no doubt you do it as well. Everyone does it, so it must be OK, right?



"It" refers to the cherry pick -- the careful selection of information to buttress a particular predetermined perspective while ignoring other information that does not. In other words, take the best and leave the rest. An obvious example of the cherry pick is the allegation that the Bush Administration emphasized those pieces of intelligence that supported its desire to invade Iraq. But if you look around, you'll see it everywhere, embraced across ideological perspectives. And you'll see it a lot in debate over highly politicized issues related to science and technology.

For instance, the Union of Concerned Scientists recently released a [report](http://www.ucsusa.org/global_environment/rsi/index.cfm) ([http://www.ucsusa.org/global\\_environment/rsi/index.cfm](http://www.ucsusa.org/global_environment/rsi/index.cfm)) signed by numerous scientists, including a number of former officials in the Clinton Administration's Office of Science and Technology Policy, asserting that the Bush Administration cherry picks science to support its ideological

agenda. In response (<http://www.ostp.gov/html/ucs.html>), John H. Marburger III, science adviser to President Bush, suggested that the report itself selectively chose its evidence and did not accurately portray the Bush Administration's use of science.

The cherry pick is appealing when one's commitment to a particular course of action is based on considerations other than information, such as one's political or religious ideology. I see this in my courses on policy analysis when a student comes to me and asks something like the following: "I want to argue that the moon is made of green cheese, can you point me toward peer-reviewed articles that support this claim?" When I ask the student, "What information would change your perspective on this topic?", often the answer is "None!"

Consider for example, when Diane Sawyer asked President Bush to distinguish between Iraq possessing WMDs versus having the potential to develop them in the future he replied, "So what's the difference?" The presence (or absence) of WMDs in Iraq in spring 2003 apparently was not a central factor in the President's decision to go to war, even though their presence was central to the Administration's public campaign in support of the war. This illustrates how information is used selectively to market policy options to others with the hope that that information will affect their decision making. Consider Colin

## Ogmius Exchange Continued

Powell who apparently spoke out of step with the rest of the Administration (he was, in his own words, “a little forward on his skis”) when referring to the decision to go to war he suggested that the “absence of a [WMD] stockpile changes the political calculus; it changes the answer you get.”

How the media reports the latest findings – scientific or otherwise -- facilitates the cherry pick. The constant drip-drip-drip of studies and reports – frequently embargoed by leading journals and agencies to enhance the appearance of newsworthiness – is routinely followed by advocates of this or that perspective scrambling to issue press releases highlighting how the new finding vindicates their perspective and demolishes that of their opponents.

Consequently, the general public may be confused when reading this week that coffee causes cancer, because last week the media reported that coffee prevents cancer. But this is how science, or intelligence gathering more generally, actually works. The most recent study adds only a bit of information to a vast sea of previous research and knowledge, and consequently is rarely definitive. Smoking guns are rare. Often the most accurate appraisal of information is “we simply don’t know for sure.” But decisions -- Drink coffee? Invade Iraq? Regulate emissions? -- have to be made anyway.

When faced with uncertainty we frequently base our commitments to particular actions on factors other than facts. Familiar examples of strategies that we use include: innocent until proven guilty, the precautionary principle, and the doctrine of preemption. In such cases, “facts” are simply resources for marketing our preferences to others. As Ivo Daalder and James Lindsay observe in their recent book on United States foreign policy, “Journalists and intellectuals often assume that beliefs are built on a foundation of facts. This assumption is usually wrong... people generally come to their beliefs about how the world works long before they encounter facts.”

The cherry pick is facilitated by the world’s fundamental complexity and uncertainty and the corresponding diversity of information at our disposal. A former aid to Vice President Dick Cheney explained in an interview with Seymour Hersh how the cherry pick works in practice: “There’s so much intelligence out there that it’s easy to pick and choose your case. It opens things up to cherry-picking.” This is a familiar situation to those who study the role of scientific information in decision making. As Daniel Sarewitz [observes \(http://www.cspo.org/products/articles/excess.objectivity.html\)](http://www.cspo.org/products/articles/excess.objectivity.html), “Rather than resolving political debate, science often becomes ammunition in partisan squabbling, mobilized selectively by contending sides to bolster their positions.”

So what to do? You can ask yourself the following question in any policy context to see if information actually matters to you: “What information would lead me to change my commitment to a particular course of action?” If the answer is “no information” then watch out! When you make arguments claiming that the “facts” dictate a certain course of action you might be engaging in the cherry pick.

For policy making more broadly, if we want to avoid competing political positions each using cherry-picked information then we need to encourage leaders and institutions to support “honest information brokers” as a counterweight to special or partisan interests. But such “honest brokers” need to do more than just focus on “facts;” they also need to place facts into policy context. Rather than using information to narrow the scope of choice, as is the province of issue advocates, such brokers might contribute to the expansion of choice. These types of honest brokers might play two important roles.

First, they could facilitate effective decision making by developing policy alternatives that are robust to information uncertainty. Everyone who has a retirement account is familiar with an investment strategy of “diversification.” Diversification seeks to accommodate uncertainties in future market performance by developing a portfolio that will perform well under any conditions. Policies that are robust to information uncertainty might perform well no matter whose “facts” are eventually borne out to be true.

Second, honest brokers foster democratic accountability. There is a reason why intelligence organizations and scientists are expected to be independent of political pressures. Yet, we also ask those same groups to provide information that is directly relevant to the needs of policy makers. Simultaneously meeting the challenges of policy relevance and political independence is not easy. Even though information often can’t dictate a single course of action, it can inform the scope of choice, and in some cases, point to paths unseen and alternatives untried.

Unlike any time before our era is characterized by easy access to complex information. The challenge before us is to develop the skills and tools necessary to use such information effectively in policy and politics. Otherwise information will play little or no role in decision making because everyone has access to information and experts that bolster their particular perspective. Today, we need honest brokers more than ever.

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## Center News

### *Bob Frodeman Awarded Fellowship*

Center Research Scientist **Robert Frodeman** has been awarded an Economic and Social Research Council (ESRC) fellowship to visit Lancaster University, England in the fall of 2004. The ESRC fellowship is designed to support US scholars to visit and



engage in collaborative activities with members of ESRC-supported projects in Britain. Frodeman will explore collaborative opportunities between Lancaster's Institute for Environment, Philosophy, and Public Policy, and the CIRES Policy Center in the areas of environmental philosophy and policy, nanotechnology, and biotechnology.

## Center News

### *Recent Visitors to the Center*

**Gunilla Öberg** from the Department of Thematic Studies, Campus Norrrköping, Linköpings universitet, visited the Center March 4-11, 2004 to begin a collaboration on a project for which she has recently been awarded support in Sweden. The project is called "Climate Science and Policy Beyond 2012" or CSP 2012+. The overarching objective of CSP 2012+ is to develop action alternatives to support international climate change decision making with an explicit focus on the period 2012 and beyond. The project's focus is on the current, expected future and potential role of knowledge in international climate negotiations. The operational aims are as follows: (i) to identify and specify the knowledge that will be needed to inform future climate policy and (ii) to suggest and



develop strategies for helping decision makers and scientists to effectively create, communicate and ultimately use this knowledge to improve policy. The CIRES Policy Center is a major international collaborator. The project formally kicks off this summer.

**Professor Wolfgang Krohn**, provost and professor of science, technology, and society at the University of Bielefeld, Germany, is visiting the Center for three months. Professor Krohn works at Bielefeld's Institute for Science and Technology Studies, and does research on questions at the intersection of history, philosophy, science, and culture. During his visit he will be finishing a manuscript on the philosophy of technology, and will be exploring opportunities for future collaborations with the Center.



## Center News

### *New Center Additions*

**Lauren McCain** recently joined the Center as a Visiting Scholar. Lauren received her Ph.D. from the University of Colorado Political Science department in 2003. Her dissertation appraised key policies shaping the Human Genome Project research and technology development. Lauren has worked on S&T policy issues with the International Rivers Network in Berkeley, California, the National Center for Genome Resources in Santa Fe, New Mexico, and the Center for



Science, Policy, & Outcomes in Washington, DC.

**Diana Roth** recently joined the Center. Diana is working with the Environmental Technology Lab (ETL) at NOAA and the Center to develop a research program in the societal aspects of weather, focusing on the use and value of weather information in decision making. Diana has a background in soil science and statistics and has experience in policy and consulting.



## Center News

### *Anne Ruggles to serve on wolf management panel*

Center Visiting Scholar **Anne Ruggles** was one of 21 people selected to serve on a new panel that will design a management plan for wolves migrating into Colorado.

Anne previously served on the Alaska Wolf Management Planning Team.



## Project News

### *Carbon Cycle Science: Reconciling Supply and Demand--Understanding and enhancing the linkages between decision making and carbon cycle research*

On September 16-17, 2004, the Carbon Cycle Science project (<http://sciencepolicy.colorado.edu/carboncycle/>) will host a workshop entitled "Carbon Cycle Science: Reconciling Supply and Demand" (<http://sciencepolicy.colorado.edu/carboncycle/workshop/>) to bring together actors representing both supply and demand sectors of carbon cycle research, research administrators, and policy analysts to discuss and debate findings and develop a



recommendation for a research agenda and institutional structure that would enhance and enable the ability of the North American Carbon Program to effectively reconcile supply and demand for carbon cycle information.

For more information, contact [elizabeth.mcnie@colorado.edu](mailto:elizabeth.mcnie@colorado.edu).

## Project News

### *Cities and Rivers: Interdisciplinary and International Perspectives*

The New Directions Initiative (<http://sciencepolicy.colorado.edu/newdirections/>) was awarded a \$48,000 grant from the National Science Foundation for a workshop in St Petersburg, Russia in June of 2004 for 30 participants (12 American and 18 Russian), on the theme of "Cities and Rivers: Interdisciplinary and International Perspectives." This workshop will build upon the work of the New Directions Initiative in order to develop a testable model for interdisciplinary collaborations on issues at the intersection of science and society. The

workshop is part of The Neva Project (<http://fla.esf.edu/research/Nevaproject/home.htm>), a collaborative attempt to look at four sites on the Neva River in St. Petersburg, Russia, from both the ecological and cultural perspectives simultaneously.



## Project News

### *Decision Making Under Uncertainty*

The National Science Foundation selected the Center's Science Policy Assessment and Research on Climate (SPARC) proposal for a site visit in March (see the October 2003 issue of Ogmios for more information about the proposal ([http://sciencepolicy.colorado.edu/ogmios/archives/issue\\_6/](http://sciencepolicy.colorado.edu/ogmios/archives/issue_6/)

[news.html](#))). The 5-year, \$7 million proposal was submitted under the NSF's Decision Making Under Uncertainty program. A final decision on the proposal is anticipated within the next few months and will be reported in a future issue of Ogmios.

## Project News

### *Future Trends in Environmental Philosophy*

The first annual meeting intended to bring together the environmental philosophy community will occur from June 1-4 at the Highlands Center, on the border of Rocky Mountain National Park 40 minutes from



Boulder, Colorado. The meeting, sponsored by CU's Policy Center, will bring together the International Association for Environmental Philosophy and the International Society for Environmental Ethics. In addition to contributed papers, the program will include leading figures in the field.

## Project News

### *Western Water Assessment*

The WWA recently completed its 2004 funding process. The following is a list of funded proposals broken down by research theme:

- **Research Theme 1:** "Assessments" - (mission statement clause: "identify and characterize regional vulnerabilities to climate variability and change")
  1. Assessment of the elevational characteristics of hydroclimatic variability in the Colorado Rockies in the Last 50 Years.
  2. SPRAT: Regional Vulnerability Assessment and Outreach
  3. Municipal Response to 2002 Drought Follow-up Study
  4. Flushing Flows and Community Metabolism in the South Platte
  5. User assessment of large water providers on the Colorado Front Range
  6. Water Quality and the Drought of 2002: Regulatory aftershocks from an extreme climate event
  7. The 2002 Drought: A Retrospective
  8. Overview of WWA Activity since Project Inception
  9. Regional Economic Costs of Drought
  10. Usefulness of Climate Forecasts to Water Managers
  11. Potential of Agricultural Water Transfers to Meet Front Range Water Demand during the next 30 Years



- **Research Theme 2:** "Information, Products and Processes" - (mission statement clause: "develop information, products and processes to assist water-resource decision-makers throughout the Intermountain West")
  1. Advancing Seasonal Snowpack and Streamflow Monitoring and Prediction
  2. Improving operational streamflow forecasts in the Colorado River Basin
  3. Climate Services Clearinghouse
  4. Climate Service Products for Drought Monitoring and Water Resource Management
  5. Climate Service Activities for Colorado and adjacent regions
  6. Dendro-Hydroclimatic Reconstructions for Decision Support in the Upper Colorado River Basin
- **Research Theme 3:** "Evaluation of Assessments and Information, Products and Processes" - to make sure that WWA work meets the needs of water resource decision-makers, other RISA programs, and NOAA.
  1. Implementation Analyses of Experimental Climate Products and Services in the Intermountain West

The WWA is also in the process of revising and updating its [website](http://sciencepolicy.colorado.edu/wwa/) (<http://sciencepolicy.colorado.edu/wwa/>).

## Project News

### *Improving Operational Streamflow Forecasts in the Colorado River Basin*

The National Weather Service recently awarded Center Research

Scientist Martyn Clark a three-year grant to develop and evaluate methods to assimilate station-based measurements of



snow water equivalent into the NWS River Forecast System, and to develop and evaluate methods to produce forecast inputs on time scales of days through seasons. The research will be conducted in collaboration with the Colorado Basin River Forecast Center.

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and include the following information:

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- Email Address
- How you heard about Ogmios
- Organization
- Interests & Needs

## Project News

### *Prometheus—New Science Policy Weblog*

**T**he Center is happy to announce the creation of **Prometheus: The Science Policy Weblog** (<http://sciencepolicy.colorado.edu/prometheus/>).

**PROMETHEUS**

Prometheus hosts science policy news and commentary, and provides a place for public comment and discussion. We hope the site provides a useful service to the science policy community, and we encourage readers to visit and contribute to the site.

## Research Highlight

### *Lightning in Stadiums Article*

**I**n this issue of *Ogmios* we begin to highlight research projects at the Center. Our first highlight is a study by ENVS graduate students Joel Gratz and Erik Noble, along with MBA candidate Ryan Church, examining policy responses to the threat of lightning in large college football stadiums.

#### Lightning, Outdoor Stadiums, and Spectator Safety

**W**hen lightning threatens an outdoor activity, the activity is usually postponed so that people may seek the shelter of a safe structure. When lightning threatens a large outdoor stadium, the game or event itself is usually postponed but it is often difficult to ensure the safety of tens of thousands of spectators who remain in the stadium.

A recent study completed by Joel Gratz (ENVS), Erik Noble (ENVS), and Ryan Church (MBA) found that many large college football stadiums do not have an emergency plan specifically for adverse weather situations. Although stadiums may employ a general evacuation plan, a complete stadium evacuation is counterproductive to achieving lightning safety for spectators. Simply asking fans to exit the stadium leaves people in an outdoor, high-risk environment. Further, the safety of an entire crowd is in jeopardy when stadium officials allow uncontrolled crowd movements as spectators look for sheltered areas within the stadium.

Mass outdoor events which fill stadiums to capacity (usually concerts and football games) are at the highest risk since there is little room for people to move about. The study detailed at least five lightning-related incidents which occurred at college football games within the last two years. In some cases, stadium officials did not have adequate and timely knowledge of an approaching storm. In other cases when stadium officials

did have knowledge of an approaching storm, directions given to the crowd frequently resulted in near panic situations where stadium exits were blocked and/or fans were left in the open during the lightning storm.

In the case of collegiate sports, general lightning safety recommendations exist for both players and spectators. Nevertheless, each stadium is responsible for its specific action plan to ensure the safety of spectators. In most cases, weather-related emergency action plans do not exist or do a poor job of controlling crowd movements and ensuring the safety of tens to hundreds of thousands of fans.

This study recommended that stadiums and other outdoor venues develop an action plan specific to weather (main focus on lightning) situations. This action plan should incorporate crowd management strategies to ensure the efficient movement of spectators to safe locations. Or, the stadium may choose to add certain features (more lightning rods and/or suspended, grounded wires) so that spectators are protected from lightning and can remain in their seats. Either option is effective, so it is the stadium's responsibility to choose a preferred method.

Outdoor events are usually stopped when lightning is close by, but few large events have adequate plans to protect the large number of people in attendance. Outdoor stadiums should fix this safety problem before more incidents occur.

For more details, please see the [complete study](http://ucsu.colorado.edu/~gratz/lightning/) (PDF): <http://ucsu.colorado.edu/~gratz/lightning/>

A version of this article will appear on NOAA's [lightning safety website](http://www.lightningsafety.noaa.gov) (<http://www.lightningsafety.noaa.gov>) in the near future.

Joel Gratz  
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## Recent Center Presentations

Graduate student **Joel Gratz** ([http://sciencepolicy.colorado.edu/homepages/joel\\_gratz/](http://sciencepolicy.colorado.edu/homepages/joel_gratz/)) gave a presentation to 15-20 TV meteorologists in Lake Tahoe in January about his research on the policies and responses of large outdoor stadiums to the threat of lightning. Television stations in Orlando, Florida, and Tuscaloosa, Alabama ran interviews of Joel discussing his research. Joel also spoke to the Center's noontime seminar series about his research.

On January 26 **Dr. Susi Moser** of the Environmental and Societal Impacts Group (<http://www.esig.ucar.edu/index.html>) at NCAR gave a presentation at the Center entitled "Confused and Scared and Deeply in Denial: Thinking Out Loud About How to Improve Climate Change Communication and Facilitate Social Change."

On February 2 the Center sponsored a talk by **Michael Rodemeyer** (<http://pewagbiotech.org/about/staff/rodemeyer.php3>) of the Pew Initiative on Food and Biotechnology (<http://pewagbiotech.org/about/>) entitled "Lessons From the Biotech Wars: Is Nanotechnology Next?"

On February 10 **James Watt** (<http://www.centerwest.org/watt.html>), the Secretary of Interior under Ronald Reagan, spoke to Roger Pielke's Decision Process class at the Center about the role of science in decision making. Secretary Watt was in Boulder to speak as part of the Center for the American West's Secretaries of the Interior Series ([http://www.centerwest.org/secretaries\\_interior.html](http://www.centerwest.org/secretaries_interior.html)).



On February 16 Center Faculty Affiliate **Tom Chase** ([http://sciencepolicy.colorado.edu/homepages/thomas\\_chase/](http://sciencepolicy.colorado.edu/homepages/thomas_chase/)) gave a talk as part of the Center's noontime seminar series entitled "Utility of Downscaling Climate model information to guide mitigation strategies."

On March 16 **Manuel Lujan** (<http://www.centerwest.org/lujan.html>), the Secretary of Interior under President George H.W. Bush, spoke to Roger Pielke's Decision Process class at the Center about the role of science in decision making. Secretary Lujan was in Boulder to speak as part of the Center for the American West's Secretaries of the Interior Series.



On March 29 Center Visiting Scholar **Anne Ruggles** ([http://sciencepolicy.colorado.edu/homepages/anne\\_ruggles/](http://sciencepolicy.colorado.edu/homepages/anne_ruggles/)), a wildlife biologist, attorney, and Center visiting scholar working on wildlife management and policy, spoke about "How Science is Used and Misused in the Klamath Basin" as part of the Center's noontime seminar series.



On April 5 **Dr. Robert Wilby**, Climate Change Science Manager for the Environment Agency, gave a talk entitled "Application of statistical downscaling to urban heat island and water resource estimation in southeast England."

On April 6, **Andrew Revkin**, Environment Reporter for the New York Times, visited with graduate students enrolled in the Science and Technology Policy Certificate Program to discuss the role of the media in covering science, science policy, and science politics.



On April 8 Environmental Studies graduate student **Genevieve Maricle** gave a talk to the AAAS Southwest and Rocky Mountain Region Annual Meeting entitled "A Science and Technology Policy for the Atmospheric Sciences." Her Powerpoint presentation is available on our speakers' page ([http://sciencepolicy.colorado.edu/center\\_info/center\\_talks.html#](http://sciencepolicy.colorado.edu/center_info/center_talks.html#)).



On April 12 **Kevin Vranes**, the 2003-2004 Congressional Science Fellow of the American Geophysical Union who covers environmental, energy, transportation, water resources, and science policy issues for Senator Ron Wyden (D-OR), visited the Center for a roundtable discussion about his experiences in Washington, DC.

On April 19, Center Faculty Affiliate **Jerry Peterson** ([http://sciencepolicy.colorado.edu/homepages/jerry\\_peterson/](http://sciencepolicy.colorado.edu/homepages/jerry_peterson/)) spoke to the noontime seminar series about "Attribution Doctrines and Policies Following WMD Attacks."



On April 27 **Andrew Price**, graduate student in the Science and Technology Policy Certificate Program, gave a talk entitled "Healthcare Rationing: A Moral Perspective."

## Recent Center Publications

- Clark, M.P., S. Gangopadhyay, L.E. Hay, B. Rajagopalan, and R.L. Wilby, 2004: The Schaake Shuffle: A Method for Reconstructing Space-Time Variability in Forecasted Precipitation and Temperature Fields. ([http://sciencepolicy.colorado.edu/admin/publication\\_files/resource-319-2004.07.pdf](http://sciencepolicy.colorado.edu/admin/publication_files/resource-319-2004.07.pdf)). Journal of Hydrometeorology, Vol. 5, No. 1, 15-32.
- Stewart, T. S., R. A. Pielke, Jr., and R. Nath, 2004: Understanding User Decision Making and the Value of Improved Precipitation Forecasts: Lessons from a Case Study ([http://sciencepolicy.colorado.edu/admin/publication\\_files/resource-489-2004.08.pdf](http://sciencepolicy.colorado.edu/admin/publication_files/resource-489-2004.08.pdf)). Bulletin of the American Meteorological Society, Vol. 85, No. 2, 223-235.
- Clark, M.P. and L.E. Hay, 2004: Use of Medium-Range Numerical Weather Prediction Model Output to Produce Forecasts of Streamflow. ([http://sciencepolicy.colorado.edu/admin/publication\\_files/resource-320-2004.06.pdf](http://sciencepolicy.colorado.edu/admin/publication_files/resource-320-2004.06.pdf)). Journal of Hydrometeorology, Vol. 5, 243-262.
- Clark, M.P. and L.E. Hay, 2004: Use of Medium-Range Numerical Weather Prediction Model Output to Produce Forecasts of Streamflow. ([http://sciencepolicy.colorado.edu/admin/publication\\_files/resource-320-2004.06.pdf](http://sciencepolicy.colorado.edu/admin/publication_files/resource-320-2004.06.pdf)). Journal of Hydrometeorology, Vol. 5, 243-262.

## Educational Opportunities

### MPhil in Technology Policy at University of Cambridge

The MPhil in Technology Policy provides students with backgrounds in Engineering or Science with the knowledge and skills required to provide competent leadership in the development and deployment of technology. The emphasis of this programme is on dual competency, offering students the opportunity to enhance their knowledge in purely technical areas while teaching them to think beyond such considerations by giving them the tools to manage its implementation in wider socio-economic, regulatory and administrative contexts.

The programme is highly relevant to many areas of emerging technology such as the internet, communications technology and biotechnology, as well as to industries such as defense and aerospace, transport, pharmaceuticals and health. These are all areas in which issues of technology strategy, policy and regulation, as well as industry standard setting and data sharing, will have a substantial impact on the development of the industry and the competitive positioning of companies and countries.

The programme is also relevant to civil engineering, environment and sustainable enterprise, international environmental negotiation, and energy planning and regulation. As barriers to trade continue to fall, large multinational companies become increasingly important, and international agreements are put into place, a country's competitive positioning will be increasingly affected by indicators such as the overall energy efficiency of its economy, and environmental health and quality of life indices. In this context, there will be an increasing demand from business, industry and government for leaders who are able to combine technical backgrounds with an appreciation of technology policy.



### Participants

Students on the programme will have well-developed technical skills in engineering, science or other quantitative disciplines, and preferably some work experience. Although the primary purpose of the programme is to provide leaders in technology policy to employers in industry, business and government, it will also serve as a possible coursework component for students who want to progress to a PhD.

### Further Information, please contact:

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Or visit the programme's [website \(http://www.jims.cam.ac.uk/programmes/mphil\\_techpol/mphil\\_techpol\\_f.html\)](http://www.jims.cam.ac.uk/programmes/mphil_techpol/mphil_techpol_f.html).

The Technology Policy program is sponsoring a consortium meeting at Peterhouse, the oldest college in Cambridge, on June 28-29, 2004. The programme will emphasize contributions from postgraduate students in the areas of technology, management and policy. For more information visit the [meeting website \(http://www.jims.cam.ac.uk/programmes/mphil\\_techpol/mphil\\_techpol\\_f.html\)](http://www.jims.cam.ac.uk/programmes/mphil_techpol/mphil_techpol_f.html).

## S&T Policy Opportunities

### Program Manager, Consortium for Science Policy and Outcomes (CSPO), Arizona State University

The Program Manager will organize and coordinate activities, programs, and projects for the Consortium for Science Policy and Outcomes (CSPO) and provide staff support to the consortium's Director. Qualified candidates must be self-starters who are able to work independently to achieve objectives outlined by the Director.



#### Duties include:

- Serving as a liaison between the consortium and the university and external community to facilitate program objectives and to provide information.
- Coordinating and conducting fundraising activities.
- Conducting research and analysis.
- Writing reports, proposals, letters and other communications.
- Managing the daily operations of the office, including but not limited to; scheduling people, facilities, and services for CSPO activities, purchasing, project management, ordering and maintaining office equipment, and hiring and supervising staff and students.
- Managing CSPO budget.
- Developing and organizing events of varying size and complexity.
- Managing information flow within the office.
- Developing and managing CSPO media outreach strategy.
- Managing selected CSPO projects.

#### Minimum Qualifications:

- Bachelor's degree in a related field and five years administrative/coordinative program experience.
- OR, Master's degree in field appropriate to area of assignment AND three years administrative/coordinative program experience.
- OR, any equivalent combination of experience and/or education from which comparable knowledge, skills and abilities have been achieved.

#### Desired Qualifications:

- Evidence of effective communication skills.
- Demonstrated research experience.
- Experience writing proposals and reports.
- Coordinating events of various size and complexity.
- Managing complex projects.
- Coordinating fundraising activities.
- Supervising office operations.
- Developing and managing budgets.

- Scheduling facilities and services.
- Working with media.
- Supervisory experience.
- Demonstrated knowledge with issues in science and technology policy.
- Knowledge of computer applications (e.g., spreadsheets, databases, word processing, presentations, html).

#### General Information:

CSPO is dedicated to understanding the linkages between science and technology and its effects on society. The Consortium aims to bring scientific and technological knowledge to real social outcomes, by assessing and fostering outcome-based policies across a broad portfolio of scientific research. More information about CSPO is available at <http://www.cspo.org>. The work environment will be dynamic, demanding, and fast-paced, and is suited for individuals looking for a challenging opportunity to be involved in projects that could impact the community. Some evening and weekend work, and some travel, may be required.

#### Application Materials:

Submit Cover letter, chronological resume, writing sample and the names, addresses, and phone numbers of three professional references. Specify job title and the Staff Request Number. Any application that lacks any requested item must be rejected; or departments may provide the opportunity to all applicants to provide missing items prior to screening.

*ASU does not pay candidates for travel expenses associated with interviewing, unless otherwise indicated by the department at the time of call for interview. Work experience must be verifiable to include employment dates. ASU offers generous benefits to its eligible employees including vacation leave, paid holidays, sick leave, self & dependents-reduced tuition, retirement, group life insurance, long-term disability coverage, medical insurance programs, flexible benefits plan and dental insurance plans. You may view our web site at <http://www.asu.edu/hr/jobs/>.*

#### To Apply:

Submit material listed above specifying job title and SR# O - 114276 to:

Arizona State University  
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Tempe, AZ 85287-5612  
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Ogmios is the newsletter of the Center for Science and Technology Policy Research which is published three 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/>)

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