

FROM THE PRESIDENT...

Like most everyone these days, I find that the months have flown by since the last issue of the *AERE Newsletter* when I wrote my first message as AERE President--there is much to report in this issue. So many individuals volunteer their time to serve this association and I am sincerely grateful to them for all they do. Their interest and efforts are reflected in the summaries below. If any members are thinking about serving on any of our committees, I sincerely encourage you to let me, one of the members of our Board, or the current Chair of that committee know of your interest.

AERE Elections

AERE's Nominating Committee is chaired this year by AERE Vice-President Steve Polasky and includes Hilary Sigman and Jeff Vincent. This committee has put together an impressive slate of candidates for this year's election. I hope as many AERE members as possible have returned their ballots. (There's still time, however, since the deadline is **December 1**.) In advance of knowing the results, let me sincerely thank this year's nominees on behalf of our organization. There will be some winners and some non-winners in this round, of course, but candidates who are unsuccessful this year should by no means conclude that there is little support for the prospect of their service in our elected offices. AERE elections have often been extremely close. I hope that all of this year's candidates, win or lose, understand how greatly our organization values their willingness to put their egos on the line to participate in our election process.

Proposed AERE Annual Conference

In June, I attended the 2007 annual conference of the European Association of Environmental and Resource Economists (EAERE) in Thessaloniki in Greece. It was good to see a respectable contingent of AERE members in attendance. Among many other activities at the conference, I engaged in a series of informal discussions with a group of interested parties from within AERE who wished to discuss with our sister European organization the possibility of starting a similar AERE annual conference. (Past-President of AERE, Richard Carson, first raised this possibility at the last World Congress in Kyoto.) Further discussion and debate about the relative merits of starting such a venture

TABLE OF CONTENTS

From the President...	1
AERE News	
<i>In Memoriam</i>	4
AERE Board Meeting	5
AERE Annual Meeting and Luncheon ...	5
AERE Workshop 2007	5
AERE Fellows	6
AERE Membership Office	6
AERE Home Page	6
Institutional/University Member Program	7
<i>REEP</i>	7
2007 Institutional/University Members ...	8
Calls for Papers/Contributions	
<i>AERE Newsletter</i>	9
AERE Workshop 2008	9
AAEA 2008.....	10
ASSA 2009	10
EAERE 2008.....	11
CEEP 2008.....	11
Fourth World Congress 2010.....	12
Meetings, Conferences, and Workshops	
ASSA New Orleans.....	13
13 th CTN Workshop	16
<i>Organisation Monaco Méditerranée</i>	16
Easy-Eco Vienna Conference 2008	16
Edmonton Waste Management Centre of Excellence	16
Essays	
<i>How Much Does IQ Raise Earnings? Implications for Regulatory Impact Analyses</i> by Scott Grosse	17
<i>The Greening of Higher Education</i> by Lea Kosnik	22
<i>Three Ships that Pass in the Night: Risk, Ambiguity and the WTP/WTA Disparity</i> by W. Douglass Shaw and Richard T. Woodward	26
Bulletin Board	
ANAI Stream Biomonitoring	30
Environmental Economics Blog.....	30
Fellowships and Positions	31

continued over the summer. I collected ideas and reactions from AERE Board Members, and summarized (and documented) these for the management team at EAERE (including then-current President Anastasios Xepapadeas and President-Elect Thomas Sterner).

The plan proposed to EAERE was that we begin a rotation of annual conferences with different scopes, coordinated with EAERE and on a cycle keyed to the World Congress schedule every four years (which is next planned for 2010). Given the sizeable representation of AERE members at the annual EAERE conference, we are sensitive to the fact that we share some of the same audience. Some advocates within AERE wish to start an AERE annual conference as soon as possible, but the EAERE group has pointed out that plans are already in place for their 2008 conference in Göteborg, Sweden, and their 2009 conference in Amsterdam. Adding another major conference to the travel menus of both AERE and EAERE members could potentially compromise the financial viability of those two conferences which have already been planned based on historical attendance patterns.

Given AERE's recent transitional budgetary challenges (as we adapt to the membership effects of wide availability of digital subscriptions to *JEEM*, as well as higher administrative costs) it seems that the near-term launch of an annual conference may be too ambitious, especially with too little information about how such a venture might impact the plans already in place for EAERE conferences and the existing AERE Workshop and AERE-sponsored sessions at other conferences. In the absence of a huge infusion of external financial support, as well as the stepping forward of one individual and his or her institution to sponsor the initial effort, it seems likely that we will postpone any all-AERE annual conference at least until after the 2010 World Congress.

Fourth World Congress

It is exciting that we are preparing for the fourth World Congress of Environmental and Resource Economists to be held in 2010. The deadline for organizations to respond to the solicitation for expressions of interest in being selected as the Local Organizing Committee and Congress Venue is **December 15th**. (Complete information is available on the AERE Web page.) We appreciate the willingness of Vic Adamowicz and Alan Krupnick to serve on the Selection Committee.

AERE at the AAEA

In the meantime, we will take advantage of opportunities to explore the local elasticity of demand for conference presentation opportunities among AERE members by sequentially expanding some of the existing venues for AERE researchers to publicize their research. At this year's American Agricultural Economics Association (AAEA) meetings in Orlando, Florida at the end of July, AAEA President Otto Doering has approved a 50% increase in AERE sessions (from six to nine formal sessions). The AERE sessions at the 2007 AAEA meetings in Portland were very well attended relative to many non-AERE sessions, so I am optimistic that this expansion of AERE offerings at the AAEA meetings will draw more good papers on a wider variety of topics, and enough participants to provide healthy audiences for these expanded sessions. At the Portland meetings, however, I also participated in a roundtable for the heads of a variety of related organizations who are affiliated, as is AERE, with the AAEA. I learned a lot of new information about trends in the management of professional meetings and changes in the hospitality industry that can be expected to adversely affect the costs of such meetings, especially smaller ones, in the future. It is also possible that AERE, like many other organizations, will be considering a larger role for poster presentations at some conferences.

Regional Meetings

Another expansion of AERE presentation opportunities at existing meetings is also in the works. Based on a survey of "western" AERE members that I conducted last winter, I have arranged to institute a set of AERE-sponsored sessions beginning at the 2009 Western Economics Association International (WEAI) meetings scheduled for Vancouver, British Columbia, Canada (conditional, of course, on the success of the 2008 expansion at the AAEA meetings). WEAI President-Elect Michael Intriligator is very enthusiastic about the prospect of AERE's formal participation. I envision AERE's presence at these meetings to be comparable to our current regional participation at the Southern Economic Association (SEA) meetings, presently coordinated by John Whitehead (i.e., six nonconcurrent sessions clustered over two adjacent days—see the listing in the May issue of the *AERE Newsletter*). I will volunteer to be the initial coordinator of these meetings, but will rely on other volunteers from the AERE constituency in western states and provinces to fill out an ad hoc paper selection committee. The one-year delay will also allow me to complete my responsibilities as AERE President before adding this new activity to the list.

I hope that these first two expansion possibilities will demonstrate that there is a considerable untapped pool of research in environmental and resource economics on this side of the Atlantic. I also hope that with enough advance notice of enhanced and growing presentation opportunities, many AERE members who have not traditionally contributed their work for consideration by our program committee may begin to do so. Furthermore, I hope that news of these expanded opportunities to participate might encourage new members to join AERE and more graduate students to contemplate Environmental and Natural Resource Economics as one of their main fields.

This gradualist approach to the expansion of AERE conference opportunities seems to be the most prudent strategy. We do not wish to decimate participation at any traditional AERE venues, including the annual AERE Workshop. I have gathered a lot of information concerning the financing and logistics of EAERE's annual conference from EAERE's Managing Director and the local host for the EAERE meeting in Thessaloniki. One thing that might be difficult for us to duplicate in North America would be the tradition of corporate sponsorship (e.g., EAERE's funding from Pireus Bank). I would prefer to put some effort into building AERE's financial reserves before undertaking a venture as resource-intensive as an annual conference, especially since we have very little information about the crucial elasticities that will determine the general equilibrium consequences for all of AERE's other national and regional meetings and workshops.

What remains clear is that AERE must find new ways to enhance the private benefits that members associate with their paid participation in our organization. Without these, membership remains a case of "voluntary contribution to a public good." As always, I am eager to hear your ideas for broadening AERE's base and increasing the visibility of our field more generally within the profession.

AERE Management and Support

As I mentioned in the May newsletter, management services were transferred over the summer to Executive Director, Inc., a leading association management company situated in Milwaukee, Wisconsin. Terry Haffner, formerly of the AAEA, accepted a position with EDI and will work with the team there as they learn the ropes about AERE. Marilyn Voigt, AERE Executive Director, traveled to Milwaukee earlier this month to meet with staff at EDI. Association management has become more complex over the years and AERE will be working to stay in line with current association

requirements. These services come with costs so we are extremely grateful to our Institutional and University Members for their generous support of AERE which helps us to defray some of these expenses. See the full list of these special members on page 8.

This is the appropriate point to once again acknowledge Marilyn Voigt, at Resources for the Future, for all her tireless and longstanding efforts on behalf of AERE. The behind-the-scenes attention she devotes to AERE keeps the enterprise afloat, on course, and as much on schedule as is feasible, given the proportion of academics involved. She is also the institutional memory of our organization, which makes her indispensable.

Hearty thanks also go to Ramesh Sethuraman of Industrial Economics Inc., for his generous volunteer efforts in maintaining AERE's Web pages. We are grateful for his (and IEC's) support.

AERE Workshop

Plans are underway for the AERE Workshop 2008 which is heading out west next June 21-23 to Berkeley, California. The topic will be "Health and the Environment." The Call for Abstracts is on page 9 and will be mailed to the AERE Membership as well as posted on the AERE Web. The efforts of the Workshop Committee, chaired by Michael Greenstone, are certainly much appreciated. Members of this committee include John Charbonneau, Norman Meade, Marca Weinberg, Ann Wolverton and David Zilberman.

This year's 2007 Workshop on "Valuation and Incentives for Ecosystem Services" in Mystic, Connecticut came together quite successfully under the direction of David Zilberman. A full report is on page 5. These workshops would not be possible without the support of the National Oceanic Atmospheric Administration, (NOAA), the U.S. Environmental Protection Agency, and the U. S. Department of Interior, Fish and Wildlife Service.

AERE in New Orleans

Carolyn Fischer served as the Program Chair this year in organizing what looks to be an excellent set of papers for the AERE sessions at the Allied Social Science Associations (ASSA) meeting in January. Mary Evans and Dietrich Earnhart worked with her on this important task. See the list of sessions and papers on page 14.

Also, do remember to sign up as soon as possible for AERE's Annual Luncheon at the ASSA meetings in

New Orleans at the Sheraton New Orleans Hotel. (Convenient online registration is available at www.aere.org but the deadline to make reservations is **December 20th**.) We will attempt to take some candid snapshots again this year, for the AERE Web site. The luncheon meeting will again involve a whirlwind of awards presentations, since we have our third batch of six new AERE Fellows to honor in addition to the Publication of Enduring Quality Award. I want to thank Scott Barrett (Chair), Jason Shogren and Douglass Shaw for their work on the Publication Award committee. After this year, the annual complement of new Fellows will decrease to no more than three honorees. The selection process faced by the AERE Board continues to be difficult, since there are many worthy long-time AERE members still in the queue. If you find, in January, that your favorite distinguished economist in our field has still not been so honored, please begin to assemble nomination materials well in advance of the **June 1** deadline. Our May *AERE Newsletter* has proven to be a rather late reminder.

I've been told that the Sugar Bowl is scheduled for New Orleans before the ASSA—and the NCAA Division I National Championship game is immediately after—so hotel rooms will be hard to get if you haven't reserved by now. There are usually some cancellations, however, so don't give up if you haven't made reservations yet. I look forward to seeing many of our members in that special and resilient city.

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In Memoriam

Duane Chapman

AERE members will be saddened by the passing,
at age 66, of Cornell resource economist
Duane Chapman.

Duane was a long-time AERE member prior
to his retirement in 2006. He died at his home
in Newfield, New York, July 29, 2007,
after a brief illness.

<http://www.news.cornell.edu/stories/July07/obitChapman.sl.html>

Note: Please help AERE share memorial notes with current members by conveying announcements to Co-Editor Marilyn Voigt (Voigt@rff.org).

AERE NEWS

AERE BOARD OF DIRECTORS' MEETING

The annual meeting of the AERE Board of Directors will be held on Friday, January 4th, from 5:30 to 8:30 p.m. at the Sheraton New Orleans Hotel, Gallier A. Anyone with matters to be brought before the Board should contact the president, Trudy Ann Cameron, at cameron@uoregon.edu.

AERE ANNUAL MEETING AND LUNCHEON

All 2007 members of AERE as well as recent new members are invited to attend the annual meeting and luncheon on Saturday, January 5th, from 12:15 to 2:15 p.m. at the Sheraton New Orleans Hotel, Gallery Ballroom. This is a very popular annual event and a great chance to get together with old and new friends. The luncheon reservation form is posted on the AERE Web page with the option to pay online by credit card: www.aere.org

Return the form to the AERE Membership Office in Milwaukee, Wisconsin **by noon on Thursday, December 20th**, to hold your place. Please make your reservation on time as we are unable to guarantee seating for walk-ins!

AERE SUMMER WORKSHOP 2007

The 2007 AERE summer workshop was held at the Hilton Mystic Hotel in Mystic, Connecticut, on June 7-9. The topic this year was "Valuation and Incentives for Ecosystem Services." All who attended found the workshop to be a great success. The 2007 Workshop Committee selected eleven excellent papers, and had three outstanding invited papers. The presentations were followed by lively discussions and interaction, resulting in a creative direction for innovative research and identification of new opportunities.

The three invited papers presented an excellent introduction to cutting-edge thinking on environmental services. Geoffrey Heal, Columbia Business School, articulated on how payments for environmental services

fit within the greater appreciation of the economic value of natural capital and the need to finance it in order to sustain it. Kathleen Segerson, University of Connecticut, provided a microeconomic foundation for designing and estimating the benefits of payments for environmental services programs. Peter Kareiva from the Nature Conservancy gave a fascinating presentation introducing us to the practical considerations of implementing payments for environmental services in an organization such as the Nature Conservancy.

The selected papers illustrated the richness of the ecosystem issues addressed by economists including water quality management, soil carbon sequestration, stewardship of tropical forests, and agricultural conservation. The titles of the sessions provide a flavor of the topics: economics and policies of ecosystem services, carbon sequestration strategies, studies on Costa Rica, potentials of payments for ecosystem services, efficient management of ecosystem services program, and land and conservation policies. The papers emphasized that payment of environmental services is an extra tool complementing cap and trade and pollution taxation available to policymakers in addressing environmental problems at the regional, national, and global levels. The authors creatively employed a diverse set of methodologies including computable general equilibrium to assess impacts and various nonmarket evaluation techniques to assess benefits and a wide array of econometric approaches. There was a strong emphasis on understanding biological phenomena and integrating economic and biophysical processes in developing useful decisionmaking tools. Many of the authors emphasized the challenge of designing policy incentives that sustained and improved ecosystem quality, while, at the same time, serving to improve human well-being and reduce poverty.

Attendees enjoyed the Mystic location with its colonial history and the proximity of the Hilton to picturesque Olde Mystic Village. The Mystic area is alive with the historic charm of maritime New England and we had a fabulous outdoor lobster feast at Abbott's Lobster in the Rough at Noank Harbor.

We are extremely grateful for the support provided by the National Oceanic Atmospheric Administration (NOAA), the U.S. Environmental Protection Agency, and the U. S. Department of Interior, Fish and Wildlife Service.

David Zilberman
University of California, Berkeley

2007 Workshop Committee:

Chair: David Zilberman, University of California, Berkeley
Gardner Brown, University of Washington
Michael Greenstone, Massachusetts Institute of Technology
John Charbonneau, U.S. Department of the Interior, Fish and Wildlife Service
Norman Meade, U.S. Department of Commerce, NOAA
Ann Wolverton, U.S. Environmental Protection Agency

AERE FELLOWS

AERE has instituted program to recognize outstanding contributions to the field by members of the association. Details are given below.

Criteria: Awardees will have demonstrated a significant contribution to the advancement of the profession of environmental and resource economics. A candidate must be living at the time of nomination and be a current member of the association or have been a member for at least ten years (not necessarily continuously).

Nomination Process: Any member of AERE can nominate a candidate for Fellow. A nomination packet should include a vita of the nominee, three letters of support, and a two-page nomination letter outlining what contributions the individual has made that warrant the award. In addition, members of the AERE Board of Directors can consider candidates that have not been otherwise nominated that they feel are especially worthy.

Selection Process: Nomination packages are to be submitted by **June 1** to:

Trudy Ann Cameron
Department of Economics, 430 PLC
1285 University of Oregon
Eugene, OR 97403-1285
cameron@uoregon.edu

The president will distribute copies to each of the Board members who will select newly appointed Fellows from the set of nominations. Nominations will not be carried over to future years. Announcements of the new Fellows will be made formally at the annual AERE luncheon; newly elected Fellows will be notified ahead of time to provide ample time for travel arrangements. In future years, a separate Fellows Committee may be impaneled to aid in the initial screening of candidates.

Maximum Number of Awards: Three per year after the third year. In the first three years, up to six Fellows can be selected per year.

AERE MEMBERSHIP OFFICE

Please direct any questions or requests regarding your membership, subscriptions to *JEEM* and *REEP*, workshop registrations, receipts, or related membership matters to:

AERE Membership Services
555 E Wells Street, Suite 1100
Milwaukee, WI 53202
info@aere.org
Telephone: 414-918-3186
Fax: 414-276-3349

Marilyn M. Voigt, AERE's Executive Director, can be reached at:

AERE
1616 P Street NW, Suite 600, Box 6
Washington, DC 20036-1400
voigt@rff.org
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Fax: 202-939-3460

AERE HOME PAGE

www.aere.org

Webmaster: Ramesh Sethuraman
Industrial Economics, Inc.

Please direct conference and meeting listings, links, personal Web pages, etc. to Ramesh at:

Webmaster@aere.org

INSTITUTIONAL AND UNIVERSITY MEMBERSHIP PROGRAM

The AERE Officers and Board of Directors invite research institutions, nonprofit organizations, government agencies, and corporations to become Institutional Members of AERE and colleges, universities, and university research centers to become University Members of AERE.

Intellectual entrepreneurship is a distinguishing characteristic of AERE. Equally important, AERE research activities also display a remarkable degree of involvement with other disciplines because the issues require it. But the dues of its individual members are not sufficient to support the growing needs of the organization. AERE needs the help of organizations involved in the same fields of interest to help with its programs and outreach to students and young professionals in both the U.S. and overseas. In addition, financial support will help with the increasing costs of managing membership services including the membership database, journal subscriptions, and workshop and annual meeting registrations among other association costs.

To become an Institutional Member of AERE, a contribution of \$1,000 is required. With this contribution, institutions may:

- designate one staff member to receive a 2008 individual membership in AERE (which includes a print and electronic subscription to *JEEM*, an electronic subscription to *REEP*, the bi-annual AERE Newsletter and a reduced fee for submitting articles to *JEEM*);
- be entitled to a sponsorship listing on the AERE Web page (www.AERE.org), in the *AERE Newsletter*, and every issue of *JEEM*;
- receive one free advertisement this year on the AERE Web page and in the *AERE Newsletter* (a savings of \$250);
- receive two nontransferable tickets for institution staff to the annual AERE luncheon and business meeting;
- receive one nontransferable registration for the annual AERE Workshop;
- receive recognition at the annual AERE luncheon and business meeting.

To become a University Member of AERE, a contribution of \$350 is required. With this contribution, colleges and universities may:

- designate one faculty member to receive a 2008 individual membership in AERE (which includes a print and electronic subscription to *JEEM*, an electronic subscription to *REEP*, the bi-annual AERE Newsletter, and a reduced fee for submitting an article to *JEEM*);
- be entitled to a sponsorship listing on the AERE Web page (www.AERE.org) and in the *AERE Newsletter* and *JEEM*;
- receive one free advertisement this year on the AERE Web page and in the *AERE Newsletter* (a savings of \$250).

Please see the list below of the organizations that have already joined this program. If you think your institution would be interested in supporting AERE through this program, please contact Marilyn M. Voigt, AERE Executive Director (voigt@rff.org).

REVIEW OF ENVIRONMENTAL ECONOMICS AND POLICY (REEP)

Oxford Journals and AERE are pleased to announce that the 2008 subscription prices have been released for *Review of Environmental Economics and Policy (REEP)*. The journal price has been kept deliberately low at £99/\$168/€149.

AERE members get a substantial discount on their personal subscriptions and are strongly encouraged to notify their institutions about the opportunity to subscribe to *REEP* by notifying the proper department. Please act now to ensure your colleagues and students have access to *REEP* in 2008.

You can find a library recommendation form at: www.oxfordjournals.org/help/library_recommendation.html

A 5% discount is available for print-only and online-only subscription options. More details including how to process institutional subscriptions can be found online under subscriptions at:

www.oxfordjournals.org/our_journals/reep/

2007 INSTITUTIONAL AND UNIVERSITY MEMBERS OF AERE

Institutional Members

Industrial Economics, Inc.
Resources For the Future
Stratus Consulting, Inc.

University Members

Appalachian State University* Department of Economics	University of California, Los Angeles* Department of Public Policy, School of Public Affairs
Centre Interuniversitaire de Recherche en Économie Quantitative (CIREQ)* (of Concordia University, McGill University Université de Montréal)	University of California, San Diego Department of Economics
Colorado State University Dept of Agricultural and Resource Economics	University of California, Santa Barbara Donald Bren School of Environmental Science and Management
Duke University* Nicholas School of the Environment and Earth Sciences	University of Central Florida College of Business Administration
Georgia State University* Department of Economics	University of Connecticut
Harvard University The Environmental Economics Program at Harvard University (EEPHU)	University of Delaware* Department of Economics
Iowa State University Center for Agricultural and Rural Development Department of Economics	University of Guelph* Department of Economics
Massachusetts Institute of Technology Department of Economics	University of Maryland, College Park Department of Agricultural and Resource Economics
North Carolina State University Center for Environmental and Resource Economics Policy (CEnREP)	University of Michigan School of Natural Resources and Environment
Texas A&M University* Department of Agricultural Economics	University of Michigan Erb Institute
Tilburg University (renew pending) CentER	University of Minnesota Department of Applied Economics
Tufts University* Tufts Institute of the Environment	University of Oregon Department of Economics
University of Alberta Department of Rural Economy	University of Tennessee* Department of Economics
	University of Washington* Department of Economics
	University of Wyoming* Department of Economics and Finance
	Virginia Tech* Department of Agricultural and Applied Economics

* Denotes new member in 2007

CALLS FOR PAPERS/CONTRIBUTIONS

AERE NEWSLETTER

The *AERE Newsletter* is soliciting essays about natural resource and environmental economics issues of general interest to the membership. These essays can be relatively short (6-10 double spaced pages) and address a topic that does not fit into the traditional journal outlet. There is currently no backlog, so your essay would likely be published in the following *AERE Newsletter*. Marilyn Voigt and I need your essay in February for the May issue and August for the November issue. If you wish to float an idea by me, feel free to contact me.

John Loomis
AERE Newsletter Co-Editor
jloomis@lamar.colostate.edu
Telephone: 970-491-2485

AERE WORKSHOP 2008

Health and the Environment

June 21-23, 2008
University of California, Berkeley
Berkeley, California

Call for Abstracts

The theme of this year's AERE summer workshop is human health and the environment. We are looking for research that estimates willingness-to-pay to avoid environmental impacts on human health, the effect of environmental regulation on human health, or the relationship between pollution and human health. We are also interested in theoretical or methodological papers related to health and the environment.

The AERE workshop is a unique opportunity for researchers to investigate a given topic within environmental and natural resource economics in greater depth. The workshop will provide ample opportunities for discussion and interaction between authors, discussants, and the audience, and we welcome the participation of graduate students.

To present a paper at this workshop, please submit an abstract of no longer than three pages, double-spaced,

to Michael Greenstone, Workshop Chair, at the address below. **Abstracts are due by February 29, 2008.**

Authors will be notified of the status of their submissions by **March 28, 2008**. Accepted papers are due **May 15, 2008**, and must not be published before the time of the workshop.

Travel expenses of paper presenters will be covered up to a maximum of \$1,000, including airfare, ground transportation, hotel, meals, and incidental workshop-related expenses. All expenses must be documented with original receipts. The registration fee for paper presenters will also be waived.

Further information, including registration forms and travel and lodging information, will be mailed to AERE members in February 2008 and posted on the AERE Web site: **www.aere.org**

The Association of Environmental and Resource Economists gratefully acknowledges the funding provided for this workshop by the National Oceanic and Atmospheric Administration, U.S. Department of Commerce; the U.S. Environmental Protection Agency; and the Fish and Wildlife Service, U.S. Department of the Interior.

Send abstracts by e-mail ONLY to dgarrity@mit.edu. Please put "AERE Workshop 2008" in the subject line.

2008 Workshop Committee:

Chair: Michael Greenstone, Massachusetts Institute of Technology
John Charbonneau, U.S. Department of the Interior, Fish and Wildlife Service
Norman Meade, U.S. Department of Commerce, National Oceanic Atmospheric Administration
Marca Weinberg, U.S. Department of Agriculture
Ann Wolverton, U.S. Environmental Protection Agency
David Zilberman, University of California, Berkeley

**AMERICAN AGRICULTURAL
ECONOMICS ASSOCIATION (AAEA)
ANNUAL MEETING**

**July 27 – July 29, 2008
Orlando, Florida**

The 2008 Summer meeting of the American Agricultural Economics Association (AAEA) (joint with the American Council on Consumer Interests (ACCI)) will be held in Orlando, Florida from July 27 - 29, 2008. Mary F. Evans, University of Tennessee, is serving as Chair of the AERE Program Committee. All submissions are to be sent electronically via e-mail. Only .pdf files will be accepted as electronic format. No submissions will be accepted via fax or postal mail.

Authors wishing to have a paper considered for the AERE sessions should send a .PDF file by e-mail to: mevans12@utk.edu
(With "AERE AAEA" in the subject line of the e-mail)

Files should be sent by the proposed presenter, who will be the contact for correspondence. No more than one submission will be accepted per presenter.

The file should contain the following information:

- (I) name and institutional affiliation of paper presenter and co-author(s);
- (II) title of paper;
- (III) address and e-mail address of paper presenter;
- (IV) up to six key words;
- (V) JEL codes;
- (VI) long abstract of the paper (about 1,000 words).

The total file length should be 2-3 pages (maximum), including all information and references. Papers submitted without all the required information will not be considered. Electronic acknowledgements of submissions will be sent to all submitters. The deadline to submit is **January 15, 2008**.

Proposals for complete sessions are also encouraged. Organizers of proposed sessions should submit abstracts for EACH of the papers following the above instructions. Papers may be accepted or rejected on an individual basis unless the organizer specifically requests the session be considered only in its entirety. Please note that all selected presenters and discussants must be current AERE members.

**Prof. Mary F. Evans
Department of Economics
University of Tennessee
mevans12@utk.edu
865-974-1700**

**ALLIED SOCIAL SCIENCE
ASSOCIATIONS (ASSA)**

**January 3 - 5, 2009
San Francisco, California**

The 2009 Winter meeting of the ASSA will be held in San Francisco, California on January 3-5, 2009. Mary F. Evans, University of Tennessee, is serving as Chair of the AERE Program Committee. All submissions are to be sent electronically via e-mail. Only .pdf files will be accepted as electronic format. No submissions will be accepted via fax or postal mail.

Authors wishing to have a paper considered for the AERE sessions should send a .PDF file by e-mail to: mevans12@utk.edu
(With "AERE ASSA" in the subject line of the e-mail)

Files should be sent by the proposed presenter, who will be the contact for correspondence. No more than one submission will be accepted per presenter.

The file should contain the following information:

- (I) name and institutional affiliation of paper presenter and co-author(s);
- (II) title of paper;
- (III) address and e-mail address of paper presenter;
- (IV) up to six key words;
- (V) JEL codes;
- (VI) long abstract of the paper (about 1,000 words).

The total file length should be 2-3 pages (maximum), including all information and references. Papers submitted without all the required information will not be considered. Electronic acknowledgements of submissions will be sent to all submitters. The deadline to submit is **April 15, 2008**.

Proposals for complete sessions are also encouraged. Organizers of proposed sessions should submit abstracts for EACH of the papers following the above instructions. Papers may be accepted or rejected on an individual basis unless the organizer specifically requests the session be considered only in its entirety. Please note that all selected presenters and discussants must be current AERE members.

**Prof. Mary F. Evans
Department of Economics
University of Tennessee
mevans12@utk.edu
865-974-1700**

**EUROPEAN ASSOCIATION OF
ENVIRONMENTAL AND RESOURCE
ECONOMISTS (EAERE)**

**EAERE 16th Annual Conference
June 25 - 28 2008
Gothenburg, Sweden**

Information: www.eaere2008.org

Submission Deadline: February 1, 2008

**Call for Proposals for Articles in the Review of
Environmental Economics and Policy**

Proposals for articles are welcomed by the *Review of Environmental Economics and Policy*, published by Oxford University Press for the Association of Environmental and Resource Economists. The *Review* fills the gap between the popular press and scholarly environmental and resource economics journals. The *Review* publishes articles that serve one of several diverse goals: to synthesize and integrate lessons learned from active lines of environmental economic research; to provide economic analysis of environmental policy issues; to encourage cross-fertilization of ideas among the various sub-fields and perspectives of environmental economics; to offer readers an accessible source for state-of-the-art thinking; to suggest directions for future research; to provide insights and readings for classroom use; and to address issues relating to the environmental economics profession.

If this sounds somewhat like a description of the *Journal of Economic Perspectives*, it is not by coincidence. Our goal is to produce a journal — the *Review of Environmental Economics and Policy* — which is to the flagship *Journal of Environmental Economics and Management*, as the *JEP* is to the *American Economic Review*. Rather than focusing on technical and methodological aspects of research, let alone on specific analytical models, the articles in the *Review* tend to focus instead on the broad lessons that can be learned — for environmental and resource economics or for public policy — from broader lines of research.

Authors of recent, current, and forthcoming articles in the *Review* include, among others: Orley Ashenfelter, Maureen Cropper, Partha Dasgupta, Larry Goulder, Michael Hanemann, Geoff Heal, Tom Lyon, Rob Mendelsohn, Bill Nordhaus, Wally Oates, Billy Pizer, Bob Pindyck, Paul Portney, Jay Shogren, Kerry Smith, Nick Stern, Joe Stiglitz, Larry Summers, Catherine Wolfram, Kip Viscusi, and John Weyant.

Articles published by the *Review* are commissioned by the Editors, but also subject to anonymous peer review. Although the submission of unsolicited manuscripts is not encouraged, we welcome proposals for articles in the form of brief outlines or informal queries. All such proposals should be sent to the editorial office (www.reep@aere.org), and all will receive prompt attention.

**Rob Stavins, Editor
Carlo Carraro, Co-Editor
Charlie Kolstad, Co-Editor**

**EUROPEAN CONSORTIUM ON
LANDSCAPE ECONOMICS (CEEP) 2008**

3rd Workshop on Landscape Economics

**May 29 - 30, 2008
Paris (Versailles) - France**

Deadline for Submission: March 21, 2008

The European Consortium on Landscape Economics will hold its 3rd workshop in Versailles on May 29-30, 2008, at the National School of Landscape Architecture (www.ecole-paysage.fr). This workshop aims at bringing scientific insight to the provision and management of rural, peri-urban and urban landscapes. Scientific keynote speakers, international government representatives, and practitioners will attend the workshop, insuring a dynamic and profitable exchange on the subject.

Contributions in the following fields are welcome:

- analysis of the public/private provision of the landscape,
- the place of the landscape in local/regional/urban development,
- landscape valuation and cost-benefit analysis,
- the spatial/temporal dynamics of the landscape.

Both analytical and empirical work will be considered for oral presentation; syntheses will also be appreciated. While the workshop is designed for economists, scientists from other fields are welcome and are encouraged to submit their work on related topics (geography, sociology, ecology, etc.). The working language of the workshop is English.

Deadlines:

- **Paper submission:** March 21, 2008
- **Notification of acceptance:** April 15, 2008
- **Registration:** May 5, 2008

Full papers of no more than 35 pages with abstract and detailed contact information should be submitted by e-mail in Word (or LaTeX) and pdf.

Registration fees: 150€ (including conference materials, coffee breaks, lunches and dinners, and a post-workshop tour).

Paper submission:

Prof. Walid Oueslati
walid.oueslati@inh.fr

Dr. Julien Salanié
julien.salanie@inh.fr

CEEP Web site: <http://www.ceep-europe.org>

**FOURTH WORLD CONGRESS
OF ENVIRONMENTAL AND
RESOURCE ECONOMISTS**

2010

**Call for Expressions of Interest
Local Organising Committee and Congress Venue**

Deadline: December 15, 2007

The Association of Environmental and Resource Economists (AERE – www.aere.org) and the European Association of Environmental and Resource Economists (EAERE – www.eaere.org), solicit proposals for the Local Organising Committee and for the Venue for the 4th World Congress of Environmental and Resource Economists, to be held in year 2010 tentatively between late June and early July.

Universities, research organisations, or groups of organisations, that intend to propose their candidature for the Local Organising Committee and Venue are kindly requested to send their expressions of interest to the Chair of the Selection Committee by 15 December 2007. Complete guidelines are posted on the AERE and EAERE web sites.

Expressions of interest consist of (1) a formal letter stating that the candidate will assume all of the administrative, organisational and financial responsibilities listed in the “Guidelines for Expressions of Interest” available in the AERE and EAERE Web sites (www.aere.org and www.eaere.org, respectively); (2) a presentation of the candidate including the candidate’s relevant experience in organising and hosting conferences; (3) a preliminary conference budget; and (4) a presentation of the conference venue. Expressions of interest may be accompanied by any other documentation that the candidates judge useful for the evaluation process. The Selection

Committee may ask candidates to present additional documents at a later date.

Expressions of interest should be sent by e-mail to the Chair of the Selection Committee at the address below by 15 December 2007. Any material that cannot be sent electronically should reach the Chair of the Selection Committee by mail or fax by 15 December 2007.

Selections will be made by the Selection Committee which is comprised of:

Carlo Carraro, Fondazione Eni Enrico Mattei and University of Venice, Italy - Chair

Vic Adamowicz, University of Alberta, Canada

Frank Convery, University College Dublin, Ireland

Alan Krupnick, Resources for the Future, USA

Anastasios Xepapadeas, University of Crete, Greece

Members of the Selection Committee were jointly appointed by AERE and EAERE.

Proposals will be evaluated according to the following criteria: (a) location (including consideration of travel cost and time for participants, amenities, on-site transportation, etc.); (b) accommodation (cost, quality, capacity); (c) session facilities (quality of plenary rooms, quality and number of meeting rooms, equipment, meals, social programme, etc.); (d) communications plan (evaluation of the plan for advertising the congress, registrations, availability of papers, etc.); (e) administration (budget, qualifications of Local Organising Committee and local supporting agencies); and (f) funding (grants for students, grants for participants from developing countries, other sponsorships). A final decision is expected to be taken by May 2008.

Expressions of interest should be send to:

Prof. Carlo Carraro

Fondazione Eni Enrico Mattei

Castello, 5252 - I-30122 Venice, Italy

Phone: +39.041.2711458

Fax: +39.041.2711461

E-mail: carlo.carraro@feem.it

MEETINGS, CONFERENCES, AND WORKSHOPS

ALLIED SOCIAL SCIENCE ASSOCIATIONS (ASSA)

January 4 - 6, 2008
New Orleans, Louisiana

AERE Sessions

Public Health Impacts of Air and Water Pollution **(Q53)**

Presiding: Mary Evans
University of Tennessee, Knoxville
mevans12@utk.edu

Mary Davis, University of Maine and the Harvard School of Public Health, and Thomas Smith, Harvard School of Public Health--*The Relationship between Economic Trends and Pollution Exposure in a Population of Workers Exposed to Diesel Exhaust*

Valerie Mueller, Columbia University, Alexander Pfaff, Duke University (January 2008), John Peabody, University of California at San Francisco, Yaping Liu, First Hospital of Tsinghua Hospital, Beijing, China, Travis Riddell, Boston Children's Hospital, and Kirk Smith, University of California at Berkeley--*Evaluating the Health Impacts of Improved Stoves in China Using Propensity Score Matching*

Timothy Beatty and Jay Shimshack, Tufts University--*School Buses, Diesel Emissions, and Children's Health*

Shanti Gamper-Rabindran, University of Pittsburgh, Shakeeb Khan, Duke University, and Chris Timmins, Duke University--*The Impact of Piped Water Provision on Infant Mortality in Brazil: A Quantile Panel Data Approach*

Discussants:

Natalie Simon, U.S. Environmental Protection Agency
Subhrendu Pattanayak, Research Triangle Institute
Joseph Aldy, Resources for the Future
Sylvia Brandt, University of Massachusetts

Technologies and Trade-offs **(Q55)**

Presiding: Ian W.H. Parry
Resources for the Future
parry@rff.org

David Popp, Syracuse University, and Richard Newell, Duke University--*Where Does Energy R&D Come From? - A First Look at Crowding Out from Environmentally-Friendly R&D*

Timo Goeschl and Grischa Perino, University of Heidelberg--*On Backstops and Boomerangs: Environmental R&D under Technological Uncertainty*

Sjak Smulders, University of Calgary, and Carrado di Maria, University College Dublin--*Endogenous Technological Change and the Cost of Environmental Policy*

Erin Baker, University of Massachusetts, Amherst, Leon Clarke, University of Maryland, College Park, and Ekundayo Shittu, University of Massachusetts, Amherst--*Technical Change and the Marginal Cost of Abatement*

Discussants:

Iain Cockburn, Boston University
Charles Kolstad, University of California, Santa Barbara
Larry Goulder, Stanford University
Carolyn Fischer, Resources for the Future

Resource Management, Uncertainty, and Institutions **(Q2)**

Presiding: Wolfram Schlenker
Columbia University
ws2162@columbia.edu

Nicholas Brozovic, University of Illinois, Urbana-Champaign, and Wolfram Schlenker, Columbia University--*Resilience, Uncertainty, and the Role of Economics in Ecosystem Management*

Junjie Zhang and Martin Smith, Duke University--*Bias Correction in an Empirical Fishery Model: A Two-Stage Approach*

Shubhayu Saha, North Carolina State University, Erin Sills, North Carolina State University, Subhrendu

Pattanayak, Research Triangle Institute, and Jill Caviglia-Harris, Salisbury University--*Impact of Social Capital on Natural Capital: Farmer Associations, Social Interaction and Land Use Choices in the Amazon Frontier*

Gregmar Galinato, Washington State University--*Endogenous Property Rights Regimes, Common Pool Resources and Trade*

Discussants:

Steve Newbold, U.S. Environmental Protection Agency
Kurt Schnier, University of Rhode Island
Maureen Cropper, University of Maryland
Michael Margolis, University of Guanajuato

Understanding Environmental Preferences
(Q51)

Presiding: Sandra Hoffmann
Resources for the Future
Hoffmann@rff.org

David Kingsley, University of Colorado, Boulder--*The Role of Preference Uncertainty in the Willingness to Pay - Willingness to Accept Disparity: An Experimental Test*

Debra Israel, Indiana State University--*Gender, Household Decision-Making and Environmental Giving*

Ikuho Kochi, Colorado State University, and Laura Taylor, Georgia State University--*Estimating the Value of a Statistical Life for Heterogeneous Risks in a Revealed Preference Framework*

Cameron Speir and Amy Ando, University of Illinois--*Modeling Recreational Anglers' Response to Fish Consumption Advisories Over Time*

Discussants:

Catherine Kling, Iowa State University
Sandra Hoffmann, Resources for the Future
J.R. deShazo, University of California, Los Angeles
Martin Smith, Duke University

Extensions and New Applications
of the Hotelling Model
(Q3)

Presiding: Janie Chermak
University of New Mexico
jchermak@unm.edu

Robert H. Patrick, Rutgers University, and Janie M. Chermak, University of New Mexico--*Irreconcilable Differences: Tests of the Theory of Exhaustible Resources*

Michael R. Caputo, University of Central Florida--*A Nearly Complete Test of a Vertically Integrated, Capital Accumulating, Nonrenewable Resource Extracting Model of the Competitive Firm*

Ujjayant Chakravorty, University of Central Florida and University of Toulouse, Michel Moreaux, University of Toulouse, and Mabel Tidball, University of Montpellier--*Ordering the Extraction of Polluting Nonrenewable Resources*

Peter Hartley and Kenneth B. Medlock III, Rice University--*A Model of the Operation and Development of a National Oil Company*

Discussants:

Peter Berck, University of California, Berkeley
Scott Farrow, University of Maryland, Baltimore County
Stephen Holland, University of North Carolina at Greensboro
Denise Young, University of Alberta

Roundtable Session
The Stern Review of the Economics of Climate Change
and Its Critics
(Q54)

Presiding: Robert Stavins
Harvard University
robert_stavins@Harvard.Edu

Panelists: William Cline, Peterson Institute for International Economics
Scott Barrett, Johns Hopkins University
Robert Mendelsohn, Yale University
William Nordhaus, Yale University
Nicholas Stern, London School of Economics and Political Science
Martin Weitzman, Harvard University
John Weyant, Stanford University

Land Use Change, Urban Sprawl, and Open Space
(Q24)

Presiding: Margaret Walls
Resources for the Future
walls@rff.org

Elena Safirova, Winston Harrington, Sébastien Houde, and Conrad Coleman, Resources for the Future--*Can Infill Fill the Gap? Evaluating Urban Growth Management Policies in a General Equilibrium Model of Land Use and Transportation*

Jordan Suter, Nelson L. Bills, David L. Kay and Gregory L. Poe, Cornell University, --*Assessing the Impact of Open Space on Residential Property Values in Urban, Suburban and Rural Areas: A Hedonic Pricing Study in Upstate New York*

Antonio Bento, University of Maryland, Sofia Franco and Daniel Kaffine, University of California, Santa Barbara--*Framework for Evaluating the Efficiency and Distributional Impacts of Anti-Sprawl Policies*

Spencer Banzhaf, Georgia State University, and R. Walsh--*Distributional Effects of Local Environmental Improvements in Tiebout General Equilibrium*

Discussants:

Jan Brueckner, University of California, Irvine
Jacqueline Geoghegan, Clark University
Richard Arnott, Boston College
Anna Alberini, University of Maryland

Regulation, Enforcement, and Public Disclosure (Q58)

Presiding: Carl Pasurka, Jr.
U.S. Environmental Protection Agency
Pasurka.Carl@epamail.epa.gov

Dietrich Earnhart, University of Kansas, and Dylan Rassier, Bureau of Economic Analysis--*The Effect of Environmental Regulation on Corporate Financial Performance: Short-Run versus Long-Run Implications*

Christian Langpap and Jay Shimshack, Tulane University--*The Role of Private Enforcement in Environmental Regulation*

Arun Malik, George Washington University--*The Desirability of Forgiveness in Regulatory Enforcement*

Nicholas Powers, University of Michigan, Allen Blackman, Resources for the Future, Thomas Lyon, University of Michigan, and Urvashi Narain, Resources

for the Future--*Does Public Disclosure Reduce Pollution? Evidence from India's Pulp and Paper Industry*

Discussants:

Karen Palmer, Resources for the Future
Wayne Gray, Clark University
Thomas Lyon, University of Michigan
Joshua Linn, University of Illinois at Chicago

Evaluating Environmental Policies
(Q58)

Presiding: Antonio Bento
University of Maryland
abento1@umd.edu

Anna Alberini and Antonio Bento, University of Maryland--*The Effects of the Federal Brownfield Tax Incentive*

Sumeet Gulati, University of British Columbia--*Evaluating the Incentives for Hybrid Vehicles*

Lea Kosnik, University of Missouri, St. Louis--*Balancing Environmental Protection and Energy Production in the Federal Hydropower Licensing Process*

Ellen Hanak, Public Policy Institute of California--*Building behind Levees: Public Policy and Housing Prices in the Flood Zone*

Discussants:

Lucas Davis, University of Michigan
Maximilian Aufhammer, University of California, Berkeley
John Tschirhart, University of Wyoming
Jaren Pope, Virginia Polytechnic Institute

AEA/AERE JOINT SESSION

Research Frontiers and Opportunities in Environmental Economics (Panel Discussion)

Presiding: Alan Krupnick
Resources for the Future
Date/Time: Sunday, January 6, 2008, 10:15 a.m.

Catherine Kling, University of Iowa
John List, University of Chicago
Antonio Rangel, California Institute of Technology
Thomas Schelling, University of Maryland

13th COALITION THEORY NETWORK WORKSHOP

Integration and Cooperation in Socio- Economic and Environmental Networks and Coalitions

January 24-25, 2008
Venice, Italy

This conference will be mainly concerned with the processes of integration, coordination and cooperation in socio-economic and environmental networks and groups. Prominent examples are international environmental policy, enlargement and functioning of economic unions, formation and dissolution of trade blocks and custom unions, role of international relation networks in international cooperation. One section of talks will be devoted to contribution in the area of integration and segregation in socio-economic networks; both theoretical and empirical works are welcome. Possible applications range from racial policies to models of cultural (e.g. linguistic) diversity and colonization. The program will be announced December 10, 2007. Updates on the workshop program and logistics at

<http://www.feem.it/ctn/>

ORGANISATION MONACO MÉDITERRANÉE FOUNDATION

Finance and Sustainable Development: Opposition or Partnership?

November 30 – December 1, 2007
Monaco, Montecarlo

Sustainable development is “a development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs (...)” (definition coined by the World Commission on Environment and Development on 1987). The Overview 2007 meetings will explore the meaning of this definition from a general perspective and, in particular, from the point of view of the Mediterranean area. The Symposia will be opened by Edmund Phelps, 2006 Nobel Prize for Economics, with a speech on: How should economists model the future?

Monaco Méditerranée Foundation

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info@overviewmonaco.org

<http://www.overviewmonaco.org/>

EASY-ECO VIENNA CONFERENCE 2008

Governance by Evaluation: Institutional Capacities and Learning for Sustainable Development

March 11-14 2008
Vienna, Austria

The conference is organized by RIMAS, the Research Institute for Managing Sustainability at the Vienna University of Economics and Business Administration.

For further information, please contact Judith Galla at: judith.galla@wu-wien.ac.at. For regular updates on the event, please visit: www.easy-eco.eu

EDMONTON WASTE MANAGEMENT CENTRE OF EXCELLENCE

An international conference on the environmental, social, and economic aspects of waste management
May 11-15, 2008

About the Conference

The theme of this strategically important conference is “Urban Issues and Solutions.” While many conferences focus on the technical aspects of wastewater and solid waste management, this much-anticipated event is unique in addressing the critical environmental, social and economic implications. The aim is to share ideas, stimulate discussion and accelerate development of the tools and knowledge needed to make sustainable waste management decisions.

A wide range of multidisciplinary researchers and practitioners will provide a holistic perspective on waste management. Municipal leaders and others will gain valuable insights into the social and environmental factors that must be considered in integrated decision-making.

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ESSAYS

*How Much Does IQ Raise Earnings? Implications for Regulatory Impact Analyses **

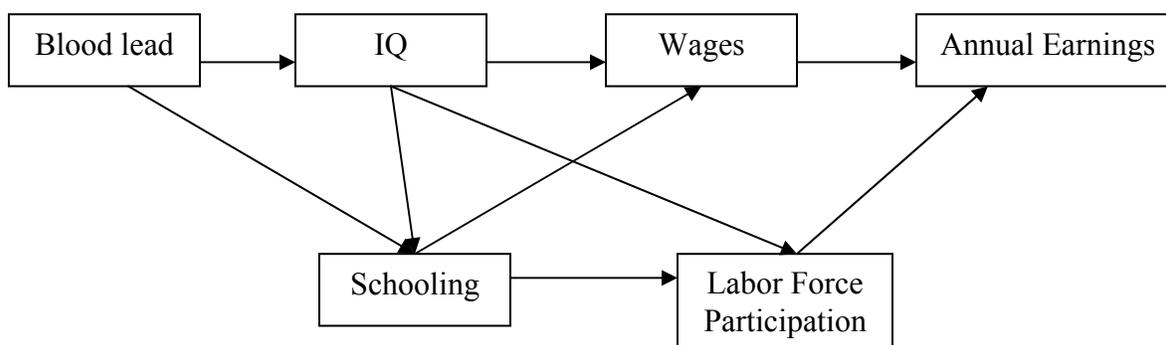
Scott Grosse, Senior Health Economist
National Center on Birth Defects and Developmental Disabilities
Centers for Disease Control and Prevention, Atlanta, Georgia

Disclaimer: *The findings and conclusions are those of the author and do not necessarily represent the views of the Centers for Disease Control and Prevention.*

Regulatory analyses of the economic benefits of reducing lead and mercury exposures in utero or in early life have largely been based on estimated losses in IQ points and future earnings. For example, in 2000 the U.S. Environmental Protection Agency (EPA) estimated that standards to reduce the use of lead-based paint

would yield total economic benefits of \$191 billion (in 1997 dollars), of which \$188 billion was associated with IQ gains and future earnings. That analysis used a framework for modeling the earnings effects of IQ reductions caused by lead exposure developed by Joel Schwartz and colleagues that included both direct effects on hourly wages and indirect effects on annual earnings through schooling and labor force participation. The pathways of direct and indirect effects are illustrated in Figure 1.

Figure 1. Causal model of lead exposure, cognitive ability and economic productivity.



That framework was first used in a report of the U.S. Department of Health and Human Services (1991) and a regulatory impact analysis prepared for EPA (Wade Miller and Abt, 1991). Schwartz (1994) calculated that a 1-point increase in cognitive ability could raise a person's annual earnings by about 1.8%. Subsequently, Salkever (1995) calculated that a 1-point IQ difference is associated with a roughly 2.4% difference in earnings, averaged across men and women, and the Salkever

estimates have been used in subsequent EPA regulatory analyses (EPA, 1997; 2000; 2005; 2006).

In a recent analysis of the economic impact of mercury emissions, Gayer and Hahn (2006) argued that the economic value of IQ has been overstated in regulatory impact analyses. They reported that estimates in the relevant labor economics literature range from 0 to 1.1% reduction in earnings per IQ point. One implication of this argument is that the economic benefits of reduced neurotoxicity from lead and mercury in fetuses and young children have been overstated in regulatory impact analyses. In this essay, I revisit the debate by reviewing the relevant literature in both labor economics and environmental health with consideration of differences in methods used. No perfect estimate of the

* Lisa Robinson encouraged the preparation of this essay and provided important references and critical input. Helpful input was also received from Joel Schwartz and colleagues at the Centers for Disease Control and Prevention.

relation between IQ and earnings exists, and findings in any given study depend on the assumptions made by the investigators. I suggest that the best estimate of the association might be close to the upper end of the range cited by Gayer and Hahn, 1.1% difference in earnings per IQ point. However, the relevance of this finding is lessened by the realization that behavioral factors influence earnings at least as much as does cognitive ability (Heckman and Rubinstein, 2001). Because neurotoxins such as lead can influence both cognitive and noncognitive ability, economic analyses of the effects of reducing neurotoxin exposures on cognitive ability alone can understate the overall economic benefit.

Empirical Estimates of the Effect of IQ on Earnings

The literature on the effect of IQ on earnings provides a range of estimates using a variety of methods and data sets. One assumption that is common to virtually all analyses is that cognitive ability has a linear association with the natural logarithm of earnings. This means that a variation in cognitive ability, whether expressed in IQ points or standard deviation scores, is associated with a fixed percentage difference in earnings. Schwartz (1994) cited Griliches (1977) as reporting a direct effect of IQ on hourly earnings of 0.5% per IQ point in young men studied in 1969. To model the indirect effect of IQ on earnings through schooling, Schwartz used data on average IQ and years of schooling from a cohort of children exposed to lead. He projected that grade attainment rises by 0.131 per IQ point and the difference in probability of graduating from high school rises by 4.5% per IQ point. Schwartz (1994) also assumed that high school graduation was associated with a 10.5% difference in labor force participation. That is, Schwartz estimated the pathways from lead exposure to schooling and from schooling to labor force participation and employment, scaled in terms of IQ points, but did not estimate the pathways from IQ to schooling or from IQ to employment. These estimates presumably reflected the effects of lead on schooling caused by both cognitive and noncognitive changes. The indirect effects operating through schooling accounted for more than two-thirds of the overall 1.8% difference in earnings associated with lead exposure sufficient to cause a 1-point decline in IQ.

Salkever (1995) recalculated the direct association of cognitive ability with hourly earnings using Armed Forces Qualifying Test (AFQT) scores collected in the National Longitudinal Study of Youth 1979 (NLSY79) as a measure of cognitive ability. He estimated that a 1-point difference in normalized AFQT score, controlling for years of schooling and family background, was associated with direct effects on hourly wages of 1.2%

for men and 1.4% for women. However, AFQT scores vary with age and schooling (Blackburn and Neumark, 1993). Neal and Johnson (1996), who standardized AFQT test scores for age, estimated the direct effect of a 1-point difference in cognitive ability on wages to be 0.8% for men, one third lower than the effect reported by Salkever who did not standardize for age. Cameron and Heckman (1993), in an analysis of NLSY79 data that adjusted for selection bias, estimated a 0.5% differential in hourly wages for a 1-point difference in normalized cognitive ability. A meta-analysis of 24 studies by Bowles et al. (2001) found that the mean estimate of the direct effect of cognitive ability on earnings is a 0.5% increase for a 1-point difference in IQ. Consequently, the Salkever estimate of the direct effect of ability on earnings is inconsistent with the findings of other economic studies, as noted by Gayer and Hahn.

Salkever (1995) recalculated the effects of ability on earnings operating through schooling by estimating the pathways from ability to schooling from schooling to labor force participation. He also estimated the direct effect of IQ on labor force participation (see Grosse et al., 2002 for details). Salkever estimated that a 1 IQ point difference in ability would raise participation by 0.2% for men and 0.4% for women, independently of schooling, which raised the total direct effect of IQ on annual earnings to be 1.4% for men and 1.8% for women. A 1 point difference in IQ was estimated to raise grade attainment by 0.1 years. With a year of schooling estimated to raise labor force participation by 0.4% for men and 2.8% for women and to raise wages by 4.9% for men and 10.1% for women, Salkever estimated the indirect effect of a 1 IQ point difference on annual earnings to be about 0.5% for men and 1.4% for women. The total effects on annual earnings were 1.9% for men and 3.2% for women.

Two recent economic analyses offer new estimates of the association of cognitive ability with earnings. Unlike the Schwartz and Salkever analyses, they do not attempt to estimate the effect of ability on schooling. Rather, both analyses estimated the association of cognitive ability with earnings both controlling for years of schooling and not controlling for schooling. The estimates controlling for schooling represent the direct effect of ability on earnings. The estimates from models that do not control for schooling represent the total effect of ability on earnings and implicitly include the pathways from ability to schooling and from schooling to earnings.

Heckman, Stixrud, and Urzua (2006) estimated latent variable models of earnings using NLSY79 data and measures of both cognitive and noncognitive ability.

They estimated latent cognitive ability by using five items on the Armed Services Vocational Aptitude Battery (ASVAB): arithmetic reasoning, word knowledge, paragraph comprehension, math knowledge, and coding speed. The latent variables correct for measurement error in observable test scores. Unlike Salkever (1995), Heckman and colleagues also modeled the dependence of achievement test scores on years of schooling. First, they modeled schooling as an endogenous choice variable dependent on cognitive and noncognitive ability. They estimated the direct effect of a 1-point difference in normalized cognitive ability on hourly wages for 30-year-old men to be 0.6%. The total effect of ability on male wages, including the effects of cognitive ability on schooling and of schooling on wages, was estimated to be 0.9%. These estimates do not incorporate the effects on hours of work and are thus likely to be an underestimate of the association of IQ with annual earnings. They also do not include women, for whom the estimated associations between earnings and observed test scores are 30-40% larger than for men. Finally, the estimates reflect wages only at age 30, which does not take into account increasing skill differentials in earnings with rising age.

Zax and Rees (2002) estimated a series of models of determinants of annual earnings using the Wisconsin Longitudinal Study of Social and Psychological Factors in Aspiration and Attainment (WLS), a unique dataset that included a sample of Wisconsin high school graduates who were surveyed at both ages 35 and 53. They estimated three regression models: the first did not include any variables other than IQ, the second controlled for family characteristics, and the third controlled for college aspirations and community and school characteristics as well as family characteristics. The results from the third model imply a direct effect of IQ on earnings of 0.39% per IQ point at age 35. The overall association at age 35 was 0.75% higher earnings per IQ point. When researchers controlled for family characteristics, the association at age 35 was 0.58%. Among graduates at age 53, the associations were approximately twice as large as those observed at age 35, with an overall association of 1.39% per IQ point and a net effect controlling for family and community characteristics and college aspirations of 0.74% per IQ point. This study is the first that allows for an analysis of the effect of cognitive ability on earnings over the lifespan. Also, the study included both wages and annual hours of work in its estimate of annual earnings.

A key question in choosing among the estimates reported by Zax and Rees is which covariates are appropriate to include and which might be in the causal pathway from ability to earnings. The third model

includes variables such as college aspirations that are clearly endogenous with respect to cognitive ability; consequently, those estimates understate the true effect of cognitive ability. The inclusion of family characteristics also is likely to understate the effect of cognitive ability because of shared genetic determinants of ability between parents and biological children. Economic studies indicate that most parental characteristics have a much weaker association with the educational attainments of adopted offspring than with those of biological children (Plug and Wijverberg, 2003; Plug, 2004; Sacerdote, 2007), suggesting that shared genes are responsible for most of the association for biological children. If that is correct, inclusion of parental schooling and income as covariates would result in substantial underestimation of the effect of cognitive ability on earnings.

The analyses by Zax and Rees (2002) and Heckman, Stixrud, and Urzua (2006) imply a total effect of a 1-point difference in IQ scores of 0.8% or 0.9% on earnings for people (both men and women) in their early 30s. According to the estimates in Zax and Rees, the overall association with earnings for people in their early 50s is substantially stronger: 1.4% per 1-point difference in IQ scores. Whether including family background variables as independent variables in regression models is appropriate is subject to disagreement. Blackburn and Neumark (1992) reported that the coefficient on IQ scores in wage equations was substantially larger when family background variables were used to instrument IQ scores rather than included as covariates alongside reported IQ (Blackburn and Neumark, 1992). One implication of that finding is that inclusion of family background variables as independent regressors leads to an understatement of the effect of cognitive ability on test scores.

Conclusions

In conclusion, both Schwartz (1994) and Salkever (1995) appear to have overestimated the overall association of cognitive ability with earnings. In particular, Salkever reported direct effects of cognitive ability on earnings of men and women that are high relative to estimates from the labor economics literature, whereas Schwartz's estimate of the direct effect based on data for men alone is consistent with recent findings for both men and women. One implication is that environmental health studies are likely to have overstated the economic impact of changes in cognitive ability resulting from environmental exposures to children, particularly those studies that have used the Salkever estimates. For example, Grosse et al. (2002) estimated that each year's U.S. birth cohort gained \$110

billion to \$320 billion in total lifetime productivity (in year 2000 dollars) as a result of reductions in lead exposure in the United States between the mid-1970s and the late 1990s. That analysis used the Schwartz and Salkever findings to define the lower- and upper-end estimates. If the average of the two age-specific estimates of the total effect from the Zax-Rees study (0.8% and 1.4%) were applied, the range would have been reduced to about \$70 billion to \$150 billion. Offsetting this reduction, however, are recent findings that the slope of the relationship between blood lead levels and IQ is higher at lower levels of lead exposure (Canfield et al., 2003; Lanphear et al., 2005). If the Canfield et al. (2003) estimate of an average 0.46 IQ point loss per 1 µg/dl increase in blood lead were combined with a 1.1% increase in earnings per 1 IQ point, the estimate of economic benefits would have been \$210 billion in 2000 dollars, virtually identical to the base-case estimate in Grosse et al. (2002).

An important issue ignored in the environmental economics literature is that both cognitive and noncognitive abilities affect earnings (Bowles et al., 2001; Heckman and Rubinstein, 2001). Indeed, a number of studies have found that noncognitive measures could be even more important determinants of earnings than cognitive ability (Heckman et al., 2006). If the two are positively correlated and only cognitive ability is measured, the effect of the latter will be overstated. From the environmental health perspective, to the extent that neurotoxins cause disruptions in behaviors such as attention as well as cognitive abilities, the effect of behavioral factors may be captured at least in part by estimates of the returns to cognitive ability. Because the Schwartz estimate incorporates the effects of lead on schooling and earnings resulting from both cognitive and noncognitive changes, it could be more appropriate for estimating the total effect of lead exposure on earnings than would an estimate of the overall association of cognitive ability alone with earnings. Whether the same might be true for mercury is unknown.

References

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The Greening of Higher Education

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Introduction

Climate change and energy concerns are regular front-page issues nowadays. Al Gore won an Academy Award for his documentary on global warming, Sir Richard Branson pledged approximately \$3 billion in 2006 to develop new fuels that don't contribute to global warming, and nearly every 2008 U.S. presidential candidate has an environmental platform that takes air pollution, energy concerns, and global warming seriously. As this race to sustainability heats up, how (if at all) is it affecting college and university campuses? Environmental awareness has a long history on academic campuses, but today there does seem to be a difference. It is no longer just about recycling a few paper products, or raising awareness through seminars on Earth Day, it is about reorienting university practices through all levels of operations and management. It is about buying organic produce for university dining halls, implementing combined heat and power systems for physical plant departments, re-landscaping dormitory grounds to consume less water, and developing new courses in sustainability across the curriculum. Colleges and universities appear to have entered a race to become "sustainability leaders" in order to attract positive media attention, donors, and students (Makower 2006).

The modern higher education sustainability movement can be traced to 1990 when university administrators from over 40 countries signed a commitment in France (The Talloires Declaration) to respond to the challenge of helping to create a more sustainable world. Today, there are more than 320 signatories to the Talloires Declaration, and the number grows every year. There is little agreement, however, on what constitutes sustainable university practices, much less how to determine their cost-effectiveness. Davis Bookhart, the sustainability projects manager at Johns Hopkins, believes "sustainability means focusing exclusively on how we get the most out of our resources, like energy, water and landscape" (Carlson 2006). Tom Kelly, director of the office of sustainability at the University of New Hampshire, takes things further, stating that sustainability "is about redirecting society in fundamental ways," including changing assumptions about lifestyles and quality of life (Chronicle of Higher Education, 2007). While there is no consensus on what constitutes viable sustainability practices for college and university campuses, that has not slowed the movement

down.¹ In the following essay we discuss current initiatives across college and university campuses to address the sustainability challenge, as well as some of the underlying motivations for engaging in sustainable policies.

Initiatives

The depth and diversity of campus sustainability initiatives have been growing at an astonishing pace. The Association for the Advancement of Sustainability in Higher Education (AASHE), which for the past two years has published compilations of campus sustainability initiatives across the U.S. and Canada (*AASHE Digest 2005* and *AASHE Digest 2006*), notes that the number of recorded initiatives has more than doubled, from 250 published initiatives in 2005 to 629 published initiatives in 2006.² The range of institutional participation has also grown, with not just universities and four-year colleges reporting, but increasingly, community colleges and technical schools as well. While many initiatives are tailored to the realities of particular campuses, there are still broad categories of sustainable initiatives useful for discussion. These include: building construction and renovation, energy management, operations, transportation, and water use.³

Building Construction and Renovation

The primary goal of a green building, whether newly constructed or renovated, is to minimize energy and water consumption. Often, these buildings produce fewer emissions, have lower operating costs, and provide educational benefits as well. LEED certification is the standard, and in the last few years more and more universities have sought to achieve not just LEED-silver certification, but even LEED-gold and LEED-platinum

¹ Eighty-four percent of universities surveyed by *University Business* magazine indicate that sustainability was taken into account on decisions ranging from new construction and building systems, to a whole range of purchasing categories.

² There is an inherent bias in tallying only published initiatives – those sustainability practices that didn't garner media attention were not written up, and could not be counted. These numbers, therefore, are likely to be underestimates of the pace of sustainability initiatives across U.S. campuses.

³ Many of the following examples have been taken, courtesy of Carrie Meyer, from the following George Mason University senate task force report:

<http://mason.gmu.edu/~cmeyer/Green%20Campuses.pdf>.

ratings. *University Business* magazine surveyed 470 colleges and universities last year and found that 75% said they would consider LEED certification in future construction or renovation projects.⁴ The same survey also found that 90% of universities reporting would use green criteria to evaluate future building products and furnishings.

Energy Management

The National Wildlife Federation reports in their *Campus Ecology Yearbook 2005* (Jones and Cragg 2005) that 37% of campuses surveyed have written policies for improving energy conservation. Examples of such initiatives include purchasing computers that power-down when not in use, shifting to efficient fluorescent lighting, installing “Vending Miser” vending machines that are designed to save energy, replacing exit signs with high efficiency light emitting diodes, and installing occupancy and sunlight detectors. But many schools aren’t just conserving energy; they are actively switching to renewable energy sources as part of their campus sustainability efforts, including solar, wind, and biomass. Solar panels currently provide power to more than 100 college campuses, more than a dozen campuses have built their own wind turbines, and biomass is gaining ground as campuses convert boilers to run on salvaged woodchips from local timber operations. A more practical alternative to building on-campus renewable power sources is to purchase renewable energy off-site, and hundreds of colleges and universities have gone that route. The EPA’s Green Power Partnership facilitates renewable energy purchases by U.S. institutions of higher education, and more than 200 colleges and universities currently purchase renewable energy through the Green Power Partnership.

Operations

Student recycling competitions, either between dorms or across neighboring campuses, are still the most common way to encourage recycling of everyday trash on university campuses, but some universities are going further by hiring independent recycling coordinators within their waste management departments. Other recent efforts include recycling campaigns at large campus events, including concerts and football games, or with targeted drives, such as for cell phones, eyeglasses, printer cartridges, or used computer equipment. The National Wildlife Federation reports in their *Campus Ecology Yearbook 2005* that 56% of

campuses surveyed report setting goals to improve solid waste reduction and to maximize recycling. The purchasing of eco-friendly supplies, including certified green cleaning products, 100% recycled and Green Seal certified paper towels and toilet paper, and 100% recycled copier paper and letterhead, is another operations reform geared towards sustainability. The National Wildlife Federation reports (Jones and Cragg 2005) that 47% of institutions surveyed have set goals to improve purchasing of environmentally sound goods, and *University Business* magazine finds that 75% of universities and colleges surveyed are switching to environmentally-friendly janitorial products and equipment. Finally, dining services have been targeted as campuses begin to make efforts to recycle compost at dining halls, and to purchase produce that is either locally grown, organic, or animal-friendly. More than 80 universities, for example, have switched to cage-free eggs in their dining halls. UC Berkeley has also instituted the first on-campus organic kitchen, while other universities and colleges have opened cafes and coffee houses that provide organic and locally grown food. Policies are also in place on many campuses to increase purchases of produce from local farmers, which reduces travel miles and associated emissions and energy use. The National Wildlife Federation finds (Jones and Cragg 2005) that 9% of campuses surveyed have set goals to purchase organic food in their dining halls, and that 48% are composting food scraps.

Transportation

In the transportation arena, colleges and universities are making changes in the direction of cleaner fuels and fewer cars on campus. Many universities have large campus fleets that now run on B20 biodiesel (a blend of 80 percent diesel fuel and 20 percent vegetable oil), sometimes supplied through waste vegetable oil produced from university food services. Efforts to reduce the number of cars on campus include: raising parking fees, engaging in car sharing programs like Zipcar or Flexcar (which by the end of 2006 had announced partnerships with nearly 50 colleges and universities), integrating with local mass transit (the EPA reports more than fifty institutions that currently provide fare-free transit service to over 825,000 students and staff), promoting carpooling and shuttle services, and improving bicycle access with on-campus bike repair stations and free re-conditioned bikes left around campus for anyone’s use.

Water Use

Universities and colleges are instituting an array of programs to reduce water consumption and recapture

⁴ The survey, *Institutions of Higher Education: A Study of Facilities and Environmental Considerations (Executive Summary)*, was conducted by Martin Akel & Associates in June, 2006.

and reuse treated wastewater. The National Wildlife Federation reports (Jones and Cragge 2005) that 21% of campuses surveyed have written policies on water conservation, and 72% plan to implement water efficiency upgrades. LEED certified buildings help reduce water (and energy) consumption, but universities are also engaging in other conservation efforts, including replacing old washing machines with more water efficient models, installing aerators in building faucets to restrict and reduce water flow, and installing low-flush, dual-flush, or composting toilets. Many universities have developed water reuse systems that treat campus waste water or captured stormwater and reuse it for irrigation or other non-drinking purposes. Finally, landscaping is getting increasing attention as lawns and shrubbery are replaced with drought resistant gardens. The EPA has partnered with some universities through their GreenScapes Program, which seeks to achieve more sustainable solutions for large-scale landscaping.

Motivation

The above is just a smattering of current campus sustainability efforts. There are many other types of programs, including climate change initiatives, wildlife restoration programs, and endowment review boards. An interesting question to ask is, what is driving this race to sustainability?

One answer is that universities and colleges are being driven by the positive media attention, increased donations, and attraction to students that their efforts at sustainability garner. The Chronicle of Higher Education finds that “several admissions directors report that prospective students often ask about campus sustainability and are impressed to hear a tour guide mention, for instance, that the college’s bus fleet runs on cooking oil recycled from its dining halls” (Lipka 2006). Whenever a university can claim to build the first gold-certified or platinum-certified LEED building in its state, the news makes headlines. The *Washington Post* (Eilperin 2005) reports that “the race between universities is almost like an episode of ‘Can You Top This?’”

What is rarely addressed, however, is whether or not these initiatives pass a benefit-cost test, either from the private perspective of the university, or from a wider social perspective that includes reduced negative externalities to the environment. Anecdotes abound, in both directions. Rensselaer Polytechnic Institute adopted an energy reduction plan that set temperature points for occupied areas of 68 degrees in winter and 74 degrees in summer. The cost, presumably, of man-hours to reset temperature regulators and implement this

program is small, while the estimated annual energy savings are between \$750,000 and \$1,000,000. Washington University in St. Louis, for the past 15 years, has made an effort to replace aging and inefficient boilers, lights, and other campus equipment as they expire with more energy efficient models. The cost is argued to be small because this equipment would have been replaced anyway, while the savings are estimated at “millions of dollars in energy costs annually” (Clendennen and Miller, 2006). On the other side, the University of Northern Colorado recently won an Energy Champion Award from the Colorado Governor’s Office for spending \$4.5 million in building upgrades, even though this has resulted in energy savings of just \$140,000 a year. Middlebury College will open an \$11 million biomass plant in 2008 that will burn wood chips and reduce fuel oil consumption, also cutting down on greenhouse gas emissions. Unfortunately, however, because of a shortage of wood chips available, the college will have to buy wood chips away from other biomass plants, or, perhaps, plant and harvest their own trees.

The difficulty in determining if university sustainability initiatives pass an efficiency test, is that there have been no comprehensive studies done on them to date (research paper, anyone?) For the most part, costs can be identified and quantified because they are usually clear and upfront; the benefits, however, present greater difficulties. The benefits of most sustainability initiatives include not just tangible, often private savings (i.e. reduced energy and water bills), but intangible, sometimes social benefits such as hands-on educational opportunities, positive media attention, student retention, and reduced negative environmental externalities. Quantifying these would, of course, be difficult but not impossible for AERE members.

The efficiency of and motivation for engaging in higher education sustainability initiatives will also depend on heterogeneous regional factors. Geographic considerations, for example, will make a substantial difference as to whether water-friendly re-landscaping proposals are cost effective; at the University of Arizona, most likely, at the University of Washington in Seattle, it’s less likely. Air pollution attainment status would similarly affect the net returns to emissions reductions initiatives at campuses in California versus Montana. And state legislative pressures would certainly affect the pace and style of campus sustainability initiatives. In 2006 the Governor of Oregon, for example, issued a directive requiring all state agencies, including universities, to switch to 100% renewable energy by 2010. This will likely spur universities in Oregon to develop more energy-intensive sustainability initiatives.

The case of Oregon highlights the fact that private versus public schools, as well as small versus large schools, face varying incentives and constraints in the race to sustainability. Public schools face more legislative pressure (where it exists), but the larger budgets and less red tape of big private institutions like Harvard and Yale encourages the discovery of new sustainability schemes. Smaller schools and community colleges, meanwhile, benefit from scale - The College of

the Atlantic in Bar Harbor, Maine can commit to 100% wind power because their campus and student body is so small. More research needs to be done on the quality, pace, and style of college and university campus sustainability initiatives to uncover these varying motivations and constraints. Such a research program would help to make future initiatives more efficient because, either way, the race is on for ever more green initiatives, at ever more universities across the globe.

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Three Ships that Pass in the Night: Risk, Ambiguity and the WTP/WTA Disparity

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Introduction

There are at least three ships (of interest to environmental and resource economists), that pass in the night. On ship number one (The Risk) are economists who have adopted the conventional expected utility model (EUM) to address uncertainty and risk. On ship number two (The Ambiguity) are psychologists, decision theorists, and some renegade experimental and empirical economists. Ship two's crew has concluded that individuals often express ambiguity about risks. On ship three (The Valuation) are economists who wish to estimate values to uncertain nonmarket goods or bads, e.g., health-risk reductions. The ships often seem to be oblivious to one another, but if they are carrying similar cargo and are headed in the same direction, it may be inefficient to see this situation continue. For example, combining forces might bring about a theoretically motivated *and* empirically defensible answer to the quandary about the disparity between an individual's maximum willingness to pay (WTP) and his or her minimum willingness to accept compensation (WTA).¹ This manuscript serves as a beacon of sorts, and we hope that those on board the three ships will see it.

The Ships' Crews

The Risk's crew has been sailing longer than anyone (e.g., von Neumann and Morgenstern 1944). They are comfortable with well-defined, objective, and unambiguous risk rather than Knight's (1921) uncertainty, where probabilities are not known. The framework rests on strong linearity assumptions and other restrictive axioms. Crew one has tended to view violations of the framework as "phenomena" instead of "paradoxes" (Howard 1992).

The Ambiguity's crew likely believes that we should incorporate what people think and believe rather than what scientists tell them is true (e.g., Slovic 1987). They have perhaps concluded that risks are ambiguous. The Ambiguity's crew probably knows Ellsberg's (1961) paradoxical outcome: when faced with two urns, one with a known proportion of red balls (50 percent) and the other with an unknown proportion, people generally prefer to bet on the unambiguous draw. Ellsberg's result

has led to competing explanations of ambiguity: Fox and Tversky (1995) favor the hypothesis that comparative ignorance creates ambiguity, whereas, Heath and Tversky (1991) argue that individuals who feel highly competent about a particular area (Joe knows sports) can overcome ambiguity (Joe bets on football game outcomes). Others on The Ambiguity are concerned with apparent nonlinear weighting of probabilities (e.g., Allais 1953), the apparent tendency for individuals to treat losses differently from gains (e.g., Kahneman and Tversky 1979; Loomes and Sugden 1982) and other phenomena that do not follow the strict structure of EUM.

The Ambiguity's crew has proposed a number of alternatives to the basic EUM. Camerer and Weber (1994) distinguish a large class of models that allow for ambiguity via a second order probability density function (SOP).² The Rank-Dependent Expected Utility (RDEU) model fits into this class (Quiggin 1993). The RDEU model is most easily presented in terms of a lottery in which there are n possible outcomes, x_i ; $i=1, \dots, n$, which are ordered from worst ($i=1$) to best ($i=n$). Each outcome x_i has a known probability p_i and the probability of achieving an outcome of x_i or worse is written

$F(x_i) = \sum_{j=1}^i p_j$ The RDEU functional is of the form:

$$(1) \quad V(\{\mathbf{x}, \mathbf{p}\}) = \sum_{i=1}^n U(x_i) h_i(\mathbf{p})$$

where

$$(2) \quad h_i(\mathbf{p}) = q(F(x_i)) - q(F(x_{i-1})).$$

It is assumed that the function q is monotonic with $q(0)=0$ and $q(1)=1$. Note that the decision weight, $h_i(\mathbf{p})$, is a function solely of the likelihood of x_i and its ranking position. The function $q(\cdot)$ generalizes EU analysis. If $q(F)=F$, then RDEU is equivalent to EU. However, RDEU preferences need not take the restrictive linear forms imposed by ship one's EUM crew. For example, some specifications make it possible to incorporate subjective probability estimates that involve missing information, as might be consistent with Zhao and Kling (2001). Another class of transformations

¹ Several of these ideas are fleshed out in another paper (Zhao and Kling 2004).

² If the subjective probability of state s is $p(s)$, then the SOP is $\Phi(p(s))$.

results in an inverse-S function that is capable of explaining risk aversion to low-probability losses (the case of insurance) and risk seeking for gains with low probabilities (state lotteries) (Tversky and Kahneman 1992; Diecidue and Wakker 2001).

The Valuation's crew is concerned with public policy and programs that are often advocated on the basis of the outcome of ex-ante benefit-cost analysis. For example, the Clean Air Act Amendments of 1990 require evaluation of the net benefits of pollution-control policies. The Valuation crew's goal is to inform public policy by estimating these and other policy-related net benefits. Welfare theory supports using the WTP or WTA in assessing net benefits, corresponding to the compensating and equivalent variation measures of consumer's surplus. However, these measures can diverge by several magnitudes in many instances (Horowitz and McConnell 2002). This WTP-WTA disparity has been of interest for quite some time (e.g. Thaler 1980; Knetsch and Sinden 1984). Zhao and Kling (2001) hypothesized that the difference can be attributed to a commitment cost. More information might be obtained later that would lead to a higher value, and individuals might set a higher current WTA to offset lost opportunities in the future. Zhao and Kling (2001, 2004) are mainly interested in the disparity between the WTA and WTP (see Hanemann 1991); they are on The Valuation, but their work incorporates ideas from the other ships.

The Benefit of the Beacon

Most of the Valuation's crew are acquainted with The Risk crew's ideas: Graham (1981) uses the EUM to define the option price (OP) as the point where contingent payments over two random states are equalized. Assume there are two states of nature, denoted by 0 and 1, with probabilities π and $1-\pi$, respectively. Let x^o denote the original level of x and x^1 denote a lower level. If x are prices, then the individual is assumed better off after the price decrease. Let m be income. The OP is:

$$(3) \quad \begin{aligned} &\pi U_o(x^o, m) + [1 - \pi] U_1(x^o, m) = \\ &\pi U_o(x^1, m - OP) + [1 - \pi] U_1(x^1, m - OP) \end{aligned}$$

The OP above is the ex ante WTP that would make the individual indifferent. This framework could be used to define willingness to accept (WA) as well:

$$(4) \quad \begin{aligned} &\pi U_o(x^o, m + WTA) + [1 - \pi] U_1(x^o, m + WTA) = \\ &\pi U_o(x^1, m) + [1 - \pi] U_1(x^1, m) \end{aligned}$$

The analysis of those applied economists sailing on the Valuation has been strengthened substantially by careful consideration of choices under risk, although the crew does not always follow the Risk into the most difficult waters. Although Graham's framework is rarely completely applied in actual valuation exercises, it is agreed that strong theory provides the foundations upon which valuation under risk should be carried out. Yet there remain issues that have not yet been resolved by attention to this traditional literature, issues that might be resolved by paying attention to crews on other ships.³

Ship Number Two and the WTA-WTP Disparity

Despite the efforts of some of the strongest members of its crew, the WTP-WTA disparity continues to bog down ship three. Horowitz and McConnell (2003) show that the income effect (Hanemann 1991) alone is not a credible explanation for this. As such, many scholars have sought other explanations, such as the transactions costs (Zhao and Kling 2001, 2004). The Ambiguity's crew may succeed in offering explanations of the WTP-WTA disparity where ship three's crew has failed.

Consider first, the issue of ambiguity. Valuation exercises often involve goods and services for which individuals may have little knowledge. Decision makers are faced with not only uncertainty over the value of the good, but ambiguity as to the probability distribution over the values. Segal (1987) shows that under ambiguity, decision makers give greater weight to less desirable outcomes thereby defying the linearity assumption of EUM. Following a similar line of thought, Eisenberger and Weber (1995) argue that such ambiguity will lead individuals to favor the status quo: "When buying (selling) an uncertain lottery, the decision maker will evaluate the lottery with the probability distribution that yields the lowest (highest) expected utility possible. Thus, ambiguity would increase the tendency to stick to the status quo" (p. 225). They hypothesize, therefore, that ambiguity would tend to deflate WTP values and inflate WTA values. Dow and Werlang derive similar results, but find that preference is given to the "safe allocation" rather than the status quo. Further theoretical support is provided by Basili and

³ For example, Neilsen (2001) notes that some difficulties in the EU cannot be overcome, and in fact are worse under the RDEU. Riddel and Shaw (2006) estimate values empirically, with a model that allows for ambiguity.

Fontini (2005) who show that when a decisionmaker exhibits aversion to ambiguity, a “bid-ask spread” emerges, equivalent to a gap between WTP and WTA. Although the experimental data from Eisenberger and Weber (1995) do not support the conclusion that ambiguity explains the WTP-WTA disparity, they conclude that there is need for such analysis “outside the laboratory.”

Others on The Valuation have explained the WTP-WTA disparity using regret theory. Loomes and Sugden (1982) proposed that individuals choose A by factoring in their regret from not making the choice B. Relevant is the following WTP_i:

$$(5) \quad E \left\{ u(x_1, y - WTP) - u(x_0, y) + R[u(x_1, y - WTP) - u(x_0, y)] - R[u(x_0, y) - u(x_1, y - WTP)] \right\} = 0$$

where E is the expectation operator and R is a regret function. The corresponding WTA would be

$$(6) \quad E \left\{ u(x_0, y + WTA) - u(x_1, y) + R[u(x_0, y + WTA) - u(x_1, y)] - R[u(x_1, y) - u(x_0, y + WTA)] \right\} = 0$$

When the function R is linear the predictions of regret theory and utility theory are equivalent and the divergence between WTP and WTA can be attributed to the income effect (Hanemann 1991). When R is convex, the gap between WTA and WTP will tend to increase.

Dubourg, Jones-Lee and Loomes (1994) find evidence that imprecise preferences do explain part, but not all of the disparity between the WTP and WTA values for changes in the risk of nonfatal road injuries. They offer no theory, but conduct experiments allowing individuals to favor lower or upper ends of a range of offered monetary sums tied to risk reductions, depending on whether they were having to pay, or were being compensated.

Conclusion

Those who sail on The Valuation have to provide a solid theoretical foundation for their valuation work. Many do so, using the conventional EUM. It is clear that this framework cannot explain all observed choices. Those on The Valuation should begin to pay more attention to what is going on as volleys are still being fired between The Risk and The Ambiguity, taking note

of alternative models of economic behavior and their strengths and weaknesses (e.g., Neilsen 2001). Doing so will lead to an improved understanding of economic choices based on a more coherent and model of choices, and a better representation of social welfare changes.⁴

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⁴ For valuation economists who want to know some more about what the crews of the Risk and The Ambiguity are thinking, see Shaw and Woodward (2007).

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BULLETIN BOARD

ANAI STREAM BIOMONITORING PROGRAM

Dear Friends,

Once again the ANAI Stream Biomonitoring Program has had a volunteer cancellation at a critical moment, and we are touching all bases in the hope that someone out there represents, or knows of, the perfect solution.

I have just returned from Costa Rica where it was my privilege to spend time with two wonderful volunteer interns from the U. of Tolima, Colombia – Ana Maria Arias and Diego Rivera. We have a Spanish couple lined up for our next major field season, beginning in February. However, when Ana Maria and Diego leave on November 15, our co-director Maribel Mafla will remain alone due to a last-minute cancellation by an expected volunteer.

November – February is the season for report and proposal writing and for developing school and community programs for 2008. With me in the US, there is a lot we can do collaboratively, but without an assistant, Maribel will be swamped. We will simply have to practice a sort of “triage”, abandoning some valuable initiatives.

Someone with interest in field biology and conservation education would make a huge difference not only in advancing the office work, but in facilitating visits to schools and communities and helping with occasional field work in streams. Principal qualifications are interest in conservation at the community level and at least modest capability in Spanish. Beyond that, we can adapt to any special interests or skills.

Apart from a tremendous and fun educational experience, we offer free lodging at our Talamanca field site and during any necessary visits to other communities or our central office in San Jose. We also provide transportation between San Jose and Talamanca and lunch during field work days.

This opportunity is available immediately; we need a minimum 3 month commitment, but are open to a longer stay – which would make possible more involvement in fish sampling and other field work. You can send inquiries, resumes, contacts, suggestions, etc. directly to

Maribel (mmafla@anaicr.org) or (especially if you are more comfortable in English) to me at anainc@dnnet.net. Also feel free to call – 828-524-8369 in the US or 506-756-8120 in Costa Rica.

If you do not have the solution in hand, please share this note widely, post it on bulletin boards, etc. Thanks in advance to all for your attention and your thoughts!

Sincerely,
Bill McLarney

THE ENVIRONMENTAL ECONOMICS BLOG

**Economists on Environmental and Natural
Resources: News, Opinions, and Analysis**

www.env-econ.net

The Environmental Economics Blog is dedicated to the dissemination of economists' views on current environmental and natural resource issues. We hope this blog will help bring economists' views on environmental issues further into the mainstream. The intended audience includes the general public and students. Posts are nontechnical.

We aim to fill the gap between traditional academic journals and the general interest press by providing a widely accessible yet Unscholarly source for [slightly uninformed] thinking on environmental economics and policy.

Tim Haab
haab.1osu.edu

John Whitehead
whiteheadjc@appstate.edu

**ENVIRONMENTAL FELLOWS
PROGRAM AT HARVARD UNIVERSITY**

Purpose: 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 will 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 \$52,000 plus health insurance, a \$5,000 allowance for travel and professional expenses, and other employee benefits. Environmental Fellows will begin work in September 2008.

Schedule: Applications and all letters of reference must be received by the Center for the Environment by 5 pm Eastern Standard Time, Tuesday, **January 15, 2008**. The Center will announce the awards in April 2008.

Complete details can be found at:
environment.harvard.edu

Harvard University is an affirmative action, equal opportunity employer.

**UNIVERSITY OF WYOMING
DEPARTMENT OF ECONOMICS
AND FINANCE**

We offer MS and PhD degree programs and research opportunities for students interested in economics and finance.

The UW economics program has a micro-economic emphasis. Both our MS and PhD programs provide you with a strong foundation in economic theory that can be applied in selected field courses. Our faculty and department are internationally recognized in the area of natural resources and environmental economics, ranking as one of the top ten U.S. programs in environmental economics. Wyoming is a natural laboratory for studying

issues related to energy development and environmental regulation.

Our program is small by design with limited fields of specialization. Our small classes enhance student-faculty interaction, and our representation of students from a variety of countries gives you a unique opportunity for participating in seminar environments in your course work. As a graduate student in our department, you can get maximum individual attention from faculty members in their fields of interest. The department typically has around 40 students actively working on degrees. Nearly half our students are from the United States with the remainder of international students coming from countries such as Canada, India, Norway, Sweden, Turkey, Greece, Pakistan, Korea, France, Russia, China and Taiwan.

We currently have approximately 20 active faculty members, including three chaired professors in economics, Dr. Jason Shogren, Dr. Edward Barbier and Dr. Charles Mason and a fourth chaired professor in finance, Dr. Sherrill Shaffer. Our faculty members have active research programs, receiving millions of dollars in research grants from organizations such as the National Science Foundation, Environmental Protection Agency and U.S. Department of Agriculture. They have also written a number of books and published in leading economic journals such as the American Economic Review and the Journal of Political Economy.

We offer competitive financial aid packages, providing tuition and fee waivers, as well as annual stipends between \$15,000 and \$20,000 for PhD students and \$5,000 for MS students. Students also receive the opportunity to actively participate in the teaching and research missions of the university.

For additional information please visit our Web site

<http://business.uwyo.edu/ECONFIN/>

or mail your enquiries to us at

**Director of Graduate Studies
Department of Economics and Finance
1000 E. University Avenue
University of Wyoming
Laramie, WY 82072**

POSITION ANNOUNCEMENTS

Hong Kong University of Science and Technology Assistant Professor in Environmental Economics or Policy, Division of Social Science

The Hong Kong University of Science and Technology, Division of Social Science invites applications for a tenure-track position in Environmental Economics or Policy. Appointment will be made at Assistant Professor level with an initial contract of three years beginning in the fall of 2008. Applicants should possess a Ph.D. degree in economics or related fields such as resource economics, public policy, political science, geography or multidisciplinary program. Research interest in Hong Kong and Chinese environmental issues is an asset. The successful candidate will teach introductory environmental economics courses, courses related to their areas of expertise, conduct programmatic research, and supervise graduate students.

Salary will be commensurate with qualifications and experience. Fringe benefits include medical and dental benefits and annual leave. Housing benefits will be provided where appropriate. A gratuity will be payable upon successful completion of contract.

Interested applicants should send a letter of application, a curriculum vitae, with a statement of research and teaching interests, sample of publications, and three letters of recommendation to: Environmental Economics Search Committee Chair, Division of Social Science, HKUST via e-mail: sosearch@ust.hk before **December 15, 2007**. For more information on the Division and HKUST, please visit: <http://www.ust.hk/~websosc/>.

I.M. Systems Group Environmental/Natural Resource Economist Office of Response and Restoration Silver Spring, Maryland

Overview: I.M. Systems Group (www.imsig.com), a contractor to the National Oceanic and Atmospheric Administration (NOAA), seeks an Economist to conduct natural resource damage assessments for oil spills and hazardous waste sites. This individual will work with NOAA's Assessment and Restoration Division under the Damage Assessment, Remediation and Restoration Program (DARRP- www.DARRP.noaa.gov/) in the areas of economics for damage assessments, methods

development, and technical support for policy initiatives. This position is located in NOAA's Silver Spring, Maryland offices.

The Assessment and Restoration Division's mission is to protect and restore coastal and marine resources injured by the release of oil or hazardous substances or direct physical impacts such as vessel groundings. Responsibilities of the incumbent will include: conducting studies to determine the appropriate type and scale of restoration to compensate the public for natural resource injuries; providing technical support to the NOAA Office of General Counsel and the Department of Justice in natural resource damage litigation; managing research conducted by academic experts and consulting firms; and developing improved, cost-effective methods and procedures for conducting natural resource damage assessments.

Core Responsibilities

- Employee shall provide technical support for the successful design and conduct of natural resource damage assessments.
- Employee shall assist in the research and evaluation of damage assessment methods. Methods will focus on scaling the level of restoration necessary to compensate the public and the environment for resource injuries.
- Employee shall maximize contributions to the office by enhancing personal professional development via identifying and seeking appropriate training and participation in professional meetings.

Required Qualifications

- Master's or Doctorate degree in economics, preferably in one of more of the following sub-disciplines: environmental, natural resource, or agricultural economics; or environmental policy with an emphasis in quantitative economic analysis.
- Strong verbal and writing skills.
- Strong computer and analytical skills
- Self-motivated, energetic, strategic thinker.

Desired Qualifications

- Experience in valuing environmental goods and services.
- Knowledge of damage assessment procedures mandated by CERCLA and OPA.
- Experience working in litigation.
- Experience working on interdisciplinary teams.

To Apply

Qualified candidates may apply by e-mailing a cover letter, resume, and three references (MS Word format strongly preferred) to the following e-mail address: jobs@imsg.com with the subject heading: **NOA07036 – Environmental/Natural Resource Economist**. Inclusion of copies of undergraduate and graduate college transcripts and a writing sample (preferably a technical paper or report) is encouraged. The vacancy announcement is open until filled. The salary for this position is commensurate with experience. IMMSG is an Equal Opportunity Employer.

International Institute for Applied Systems Analysis (IIASA)

Program on Risk and Vulnerability (RAV)

Research Scholar Position

The Program on Risk and Vulnerability (RAV) conducts conceptual and applied analyses that not only contribute to decreasing the risk and vulnerability of societies and ecosystems but also promote their adaptation and resilience to stresses imposed or aggravated by global-change phenomena such as natural disaster risk and climate change. The RAV Program is looking to fill a position for a post-doctoral or advanced doctoral student researcher in the project ALICE, Agent's Long-term Investment decision-making in the Context of the Electricity supply sector.

The ALICE Project

One of the major challenges for governments to meet climate protection targets will be for them to encourage the rapid growth of renewable energy sources, carbon capture and storage, and greater efficiency in the generation and use of electricity. It remains unclear what the effects of different policy instruments, separate or combined, will be on the long-term investments that will determine such growth. Crucial to understanding this is identifying how individual firms make investment decisions, examining issues such as how different types of firms within the market estimate future costs, respond to risk, and discount future revenue streams, and then to model such firms operating in the market in the presence of regulatory instruments. The ALICE project is engaging in this empirical and modeling research to improve our understanding of the relative effectiveness of different policy instruments. The project is a collaboration between the University of Oldenburg and the Potsdam Institute for Climate Impact Research (PIK), in Germany, and the International Institute for Applied Systems

Analysis (IIASA), in Austria. The funding agency is the German Federal Ministry for Education and Research.

Tasks

The person we are seeking to hire would lead the empirical portion of the project, and would also interact with the other researchers on the modeling side. We envision the empirical component to involve a combination of structured interactions with corporate decision-makers, and econometric analysis of European market data. Background literature review on the market structure in each of the countries of study (likely Germany, UK, Spain, France, Denmark) would also be necessary. We expect the empirical portion of the project to result in one or more published papers, and to provide important inputs into the modeling side of the project. The project will include travel within Europe, and potentially to North America and Asia.

Profile

The successful candidate should have a research background in energy economics, behavioral economics, energy systems, or a related field. She or he should be able to finalize the design of and carry out an empirical research strategy, in coordination with the other researchers on the project. A desire to become involved in the quantitative modeling portion of the project would also be desirable. Fluency in English is required, German extremely helpful, and knowledge of French or Spanish desirable.

Appointment Terms

A fixed-term contract will be offered for 24 months, starting as soon as possible. The salary is competitive and commensurate with experience. It is exempt from taxation in Austria but subject to the principle of income aggregation. The appointment includes moving and settlement allowances. Preference will be given to applicants who are nationals of IIASA member countries (http://www.iiasa.ac.at/Admin/DI/docs/IIASA_NMO.html?sb=4).

The Institute's management and staff alike are committed to a working environment that promotes equality, diversity, and tolerance. The Institute encourages applications from all qualified candidates.

Applications

To apply send a cover letter, resume, plus names, addresses (including e-mail), telephone and fax numbers of three work-

related references, as well as copies of two recent publications/papers to: Walter Foith, Head of Human Resources, International Institute for Applied Systems Analysis (IIASA), Schlossplatz 1, A-2361 Laxenburg, Austria

Fax: (+43) 2236/713-13, E-mail: foithw@iiasa.ac.at

Closing date for applications: **November 16, 2007**. Review of applications will begin immediately.

More information on the ALICE project can be found at <http://www.alice-energy.de>. For information about this position, please contact Anthony Patt (patt@iiasa.ac.at). For general information about our Institute and its research activities, please visit our IIASA Web site at <http://www.iiasa.ac.at>.

The National Regulatory Research Institute (NRRI) New Research Leadership Positions: Electricity, Gas, Telecommunications and Water

NRRI's mission is to provide state utility commissions with research services necessary to achieve utility regulation of the highest possible quality. This mission requires four types of work: (a) identifying unsolved regulatory challenges, (b) creating the new knowledge necessary to meet those challenges, (c) democratizing access to existing knowledge, and (d) stimulating discussion on principles of high quality regulation.

We are seeking applications from top experts committed to these objectives. Successful candidates will work directly with regulatory decisionmakers to design and carry out research projects addressing the electricity, gas, telecommunications, and water industries.

Employment is possible on a full time, part time or consulting basis under varying financial arrangements. We welcome responses from individuals, consulting firms, university professors and other institutes. Geographic location and work hours are negotiable.

Requirements

1. Expert knowledge in at least one regulated industry, evidenced by publications or testimony, demonstrating fluency in
 - a. the industry's history, in terms of market structure, economic and engineering developments, and legislative and regulatory intervention;
 - b. the challenges facing state and federal regulators; and
 - c. regulatory policy and process, including (i) techniques for regulating companies in the context of a

franchised monopoly, (ii) methods for determining the appropriateness of competition in relevant geographic and product markets, and (iii) the steps necessary to accommodate and ensure effective competition.

2. Degrees or other certification in economics, accounting, finance, engineering, law or public management.

Salary for full time employees: \$70-125K, depending on experience.

Application procedure: E-mail cover letter and resume, and/or your questions, to Scott Hempling, Director at shempling@naruc.org.

The National Regulatory Research Institute, funded by state utility commissions, is an equal opportunity employer.

Ohio Wesleyan University

The Department of Economics invites applicants for a tenure track position at the Assistant Professor level beginning Fall 2008. Qualifications include Ph.D. (or ABD candidates near completion), strong teaching skills and an active research agenda. The position requires the teaching of six courses per year, three each semester, including Environmental/Resource Economics, Research Methods and a one-semester Principles of Economics. Other possible courses might include Econometrics or History of Economic Thought. Excellence in teaching as demonstrated by teaching evaluations, experience and/or letters of recommendation is a prime requirement for the position.

Please send a cover letter, vita, graduate transcripts, teaching evaluations, a research paper and three letters of reference to: Barbara MacLeod, Chair, Department of Economics, Ohio Wesleyan University, Delaware, Ohio 43015

The department will have a representative at the American Economics Association meetings in New Orleans in January. Completed applications should be received by **November 30** for early consideration for an interview in New Orleans. Applications will be accepted on a rolling basis until the position is filled. Additional information is available at:

<http://iobs.owu.edu/Search#0708-0021>

Ohio Wesleyan University is strongly committed to diversity within its community and encourages all interested applicants, including women and minorities, to apply.

**Oklahoma State University (OSU)
Assistant Professor, Natural Resource Economics and
Finance**

A full-time, eleven-month, tenure-track position, 75% research and 25% teaching. This position reports directly to the Head of the Department of Natural Resource Ecology and Management (NREM).

Responsibilities

1. Establish a nationally recognized externally funded research program in the area of natural resource economics and finance. Desirable areas of research include, but are not limited to, applications of economics and decision theory to natural resource topics such as non-industrial private forestlands; ecosystem management, conservation, restoration and sustainability; endangered species recovery; invasive species; rural development; valuing non-production amenities; environmental quality; and timber production.

2. Teach an undergraduate junior level course in Natural Resource Economics and Finance, a senior level forestry Capstone course, and develop a graduate level course in area of expertise.

Minimum Qualifications

1. A Ph.D. in natural resource economics or closely related field. A B.S. degree in forestry required.

2. Demonstrated ability and strong interest in instruction and advisement of undergraduate students.

3. Ability and desire to work cooperatively with NREM faculty to develop an active research program, including publishing in leading scientific journals and securing extramural funding. The complete job description may be found at: <http://nrem.okstate.edu>. OSU is an AA/EOE employer.

To apply

Individuals wishing to apply should submit a letter of application, transcripts, professional résumé, and the name, address, telephone number, and e-mail address of 3 to 5 references. Review of applications will begin on January 7, 2008, and will continue until a suitable applicant is identified. The position will be filled by May 1, 2008, or as soon thereafter as a qualified candidate is available.

Applications, nominations, and questions should be directed to:

Dr. Thomas C. Hennessey
Search and Screen Committee
Oklahoma State University
Dept. of Natural Resource Ecology and Management
008 Agricultural Hall Room C
Stillwater, OK 74078-6013
405-744-5443
E-mail tom.hennessey@okstate.edu.

**Resources for the Future
Leadership Position**

Q0 Natural Resource & Environmental Economics
D0 Applied Microeconomics
L1 Market Structure, Firm Strategy and Market Performance
R0 Urban and Transportation Economics
O13 Economic Development and Environment/Resources

Resources for the Future (RFF) is seeking up to two Senior Fellows to lead major prospective research programs in Urban and Transportation Policy and in Global Ecosystems Management. Ideas for different programs could also be entertained. RFF is a nonprofit, nonpartisan research institution devoted to independent economic analysis of environmental, energy, and natural resource policy issues (see www.rff.org). RFF offers an outstanding environment for scholarly publication and high-level communication of research to policy audiences.

Basic qualifications are a graduate (Ph.D.) degree in economics or other quantitative social science discipline, at least 7 years of research and/or policy experience; a well-developed research agenda; a substantial publication record; a history of successful fundraising; and experience in planning and integrating communications strategies into the research process.

Key activities include developing a program (with RFF seed money); initiating, managing and conducting high-quality research within the program; and actively participating in the dissemination of research results and leading the engagement of the policy community. Successful candidates should be recognized as leading experts in their field by people in the academic and policy communities, should be able to attract funding for themselves and others in the program; and have an abiding interest in seeing their research affect public policy. Fall 2008 is the anticipated start date.

Competitive salary and benefits. RFF is an equal opportunity/affirmative action employer. All applicants should send a letter of application indicating their interest in RFF and a curriculum vitae to:
srfellowhiring@rff.org.

Resources for the Future Senior Fellow

Q0 Natural Resource & Environmental Economics
D0 Applied Microeconomics
L1 Market Structure, Firm Strategy and Market
Performance
R0 Urban and Transportation Economics
O13 Economic Development and
Environment/Resources

Resources for the Future (RFF) is seeking to hire several positions at senior levels (Indefinite Fellow corresponds to an Associate Professor, Senior Fellow corresponds to a Full Professor). RFF is a nonprofit, nonpartisan research institution focused on independent analysis of environmental, energy, public health, and natural resource policy issues (see www.rff.org). RFF offers an outstanding environment for scholarly publication and high-level communication of research to policy audiences.

Basic qualifications are a graduate (Ph.D.) degree in economics or other quantitative social science discipline, preferably in the above areas, at least 5 years research and/or policy experience, a substantial publication record, and a well-developed research agenda. Key activities include initiating and conducting high-quality research in the field of interest, leading projects, and actively participating in the dissemination of research results. Successful candidates should be recognized as experts by people in the academic and policy communities, be able to attract funding for themselves and others on the research staff, and have an abiding interest in seeing their research affect public policy. Fall 2008 is the anticipated start date.

Competitive salary and benefits; rank commensurate with experience. RFF is an equal opportunity/affirmative action employer. All applicants should send a letter of application indicating their interest in RFF and a curriculum vitae to srfellowhiring@rff.org. Recent PhDs are encouraged to view our Fellow listing.

Resources for the Future Research Fellow

Q0 Natural Resource & Environmental Economics
D0 Applied Microeconomics
C1 Applied Econometrics
H0 Public Economics
I0 Health Economics
R0 Urban and Transportation Economics
O13 Economic Development and
Environment/Resources

Resources for the Future (RFF) invites applications for a full-time research fellow. RFF is a nonprofit, nonpartisan research institution focused on independent economic and quantitative policy analysis in the fields of environment, energy, health, and natural resources (see www.rff.org). RFF is committed to scholarly excellence and policy application, and offers an outstanding environment for academic publication and high-level communication of research to policy audiences. Candidates with backgrounds in the above-listed fields are encouraged to apply. Will consider both new Ph.D.'s and those with more experience; mid-career and senior candidates are encouraged to view our other listings. RFF's research career track closely parallels the academic tenure system. Competitive salary and benefits, and stimulating work environment. Preferred starting date September 2008.

All applicants should send letter of application indicating their interest in the position, curriculum vitae, 1 to 3 research papers/publications, transcripts and at least 3 letters of reference. Completed dissertation by September 1, 2008 required. We encourage e-mail submission of materials as PDF files to fellowhiring@rff.org. Address materials to: Chair, Fellow Hiring Committee, Resources for the Future, 1616 P Street, NW, Washington, DC 20036. Materials should be received by **November 26, 2007**. Will schedule initial interviews during January ASSA meetings for those attending.

An equal opportunity/affirmative action employer.

University of California at Berkeley College of Natural Resources Assistant Professor of the Economics of Energy and/or Environmental Economics

The Department of Agricultural and Resource Economics seeks an Assistant Professor (tenure track, nine-month appointment) starting July 1, 2008, subject to budgetary approval. Applications are sought from outstanding researchers and teachers with a specialization in energy and/or environmental economics. The department is also especially interested in a candidate with strong empirical (econometric or experimental) skills. In addition to developing a research program in this area, the new assistant professor will participate in the department's teaching program, which typically involves teaching one undergraduate and one graduate course per year in our core courses and possibly one graduate or undergraduate seminar per year. There is a possibility of summer research support. The successful candidate will hold a faculty position in the University of California as well as an appointment in the Agricultural Experiment Station.

Applicants must have a Ph.D. degree in agricultural economics, economics, or other highly related field. Applications must be *postmarked* by December 1, 2007. Please submit a cover letter (including a statement of future research plans and areas in which you would feel comfortable teaching), a one or two page summary of your research, a curriculum vitae, one or more representative papers or publications (PDF format only for all documents if sent electronically; if sending paper copies through mail, also include papers in PDF format on a CD), plus three letters of recommendation to

Chair, Search Committee
Department of Agricultural and Resource Economics
207 Giannini Hall, University of California
Berkeley, CA. 94720-3310.
and/or
Recruitment@are.berkeley.edu
(electronic submissions **strongly** preferred)

Please refer potential reviewers to the UC Berkeley Statement of Confidentiality found at <http://apo.chance.berkeley.edu/evalltr.html>.

The University of California is an Equal Opportunity, Affirmative Action Employer.

University of California, Berkeley Assistant Professor in Forest Ecosystem Management

The Ecosystem Sciences Division of the Department of Environmental Science, Policy and Management (ESPM) at the University of California, Berkeley (<http://espm.berkeley.edu>) invites applications for a tenure-track, nine-month (academic year) faculty position in Forest Ecosystem Management available starting July 1, 2008. The position includes a joint appointment in the California Agricultural Experiment Station. There are important interdisciplinary connections to the Department of Integrative Biology, Agricultural and Resource Economics, Landscape Architecture, Civil and Environmental Engineering, Economics, and the Haas School of Business.

Applicants should possess a Ph.D. in forest science, natural resource management, systems ecology and modeling, environmental engineering, hydrology, or a closely related discipline. Candidates may conduct research on a variety of contemporary and interdisciplinary problems relating to forest ecosystem management and planning. We expect their research to contribute to scholarly and applied progress in forest ecosystem management based on a rigorous quantitative ecological understanding of forest dynamics, geo-spatial analyses (GIS), landscape ecology/management, global change science, natural resource planning, economics, or other quantitative areas.

The candidate will be expected to teach an upper division course on Forest Ecosystem Management and a graduate seminar annually, and occasionally participate in environmental science courses.

We particularly encourage applications from women and under-represented ethnic minorities. Electronic submissions are preferred as a single PDF file and e-mailed to forestmanagement@nature.berkeley.edu. An application should include a curriculum vitae, statements of research and teaching interests, and recent publications.

Applications can also be mailed to:
Ms. Vinaya Gokarn, Chair's Assistant
Forest Ecosystem Management Search Committee
ESPM, 137 Mulford Hall #3114
University of California
Berkeley, CA 94720-3114

Please also arrange three letters of recommendation to be mailed separately to the above address.

Refer potential reviewers to the UC Berkeley Statement of Confidentiality found at:

<http://apo.chance.berkeley.edu/evalltr.html>. Applications must be *postmarked* by **December 1, 2007**.

The University of California at Berkeley is an Equal Opportunity/Affirmative Action Employer.

University of California, Davis Conservation Valuation Analyst

The College of Agricultural and Environmental Sciences, University of California, Davis, invites applications for a position at the tenure-track **Assistant Professor** level, with the possibility of an appointment in the California Agricultural Experiment Station. This is one of eight college positions in a Global Environmental Change and Conservation Biology cluster. The ideal candidate will have a background in both economic evaluation and the dynamics of ecological systems, and will be expected to have or develop a high-quality publication record. The research program should address how society values biodiversity, species conservation, ecosystem services, natural capital and wildlands. The research may combine methods from various approaches and disciplines including economics, applied economics, ecology, cognitive psychology, quantitative political science or sociology, survey design, and statistics. The successful candidate will be expected to develop disciplinary and cross-disciplinary collaborations with other members of the global change

cluster listed above, as well as other researchers studying ecosystem valuation at UC Davis. A Ph.D. in an appropriate discipline is required by the time of appointment.

Applicants for this position should have teaching interests in fields such as: conservation valuation, environmental/ecological economics, conservation biology, environmental policy, and quantitative methods.

Applicants should submit application materials online at: <http://recruitments.caes.ucdavis.edu>.

These include: curriculum vitae, description of current and projected research, summary of teaching interests and experience, and up to three publications. Applicants should ask three references to send recommendation letters via e-mail to lbentley@ucdavis.edu, followed by a signed copy of the letter directly to Search Committee Chair Catherine Morrison Paul, c/o Linda Bentley, CA&ES Dean's Office, University of California, Davis, 1 Shields Avenue, Davis, CA 95616.

Closing Date: Open until filled, but all application materials, including letters of recommendation, must be received by **December 1, 2007** to assure full consideration. UC Davis is an affirmative action/equal employment opportunity employer and is dedicated to recruiting a diverse faculty community. We welcome all qualified applicants to apply, including women, minorities, veterans, and individuals with disabilities.

University of California, Los Angeles (UCLA) Faculty Position in Environmental Planning

The UCLA Department of Urban Planning invites applications for a tenure-track faculty position in environmental planning. We seek bold and innovative thinkers who show intellectual leadership in addressing the environmental problems of cities and regions. The appointment is expected to be at the rank of assistant or associate professor.

Our Urban Planning program is consistently ranked among the top in North America and our undergraduate, masters, and Ph.D. students are among the best and most diverse anywhere. We have 16 ladder faculty and approximately 180 graduate students. The UCLA School of Public Affairs – home to the departments of Public Policy, Social Welfare and Urban Planning as well as nine research centers – and its sister schools and centers, including the UCLA Institute of the Environment, provide an outstanding intellectual setting. Southern California is also an

extraordinarily dynamic place to study and teach planning, and a wonderful place to live.

While applications will be accepted until the position is filled, all materials should be submitted by **October 30, 2007** to be guaranteed full consideration. Send letter of application, resume, names of three academic references, and a publication or conference paper to: Ms. Marsha Brown, UCLA Department of Urban Planning, 3250 School of Public Affairs Building, Box 951656, Los Angeles, CA 90095, FAX 310-206-5566.

CLA offers an attractive salary and benefits package including a housing assistance program for new faculty members. UCLA is an equal opportunity employer.

<http://www.spa.ucla.edu/dup/>

University of California, San Diego Graduate School of International Relations and Pacific Studies (IR/PS)

International Economics
Development Economics and/or
Environmental Economics

The Graduate School of International Relations and Pacific Studies of the University of California, San Diego, seeks applications for a position at the level of Assistant, Associate or Full Professor in the fields of international economics, economic development and/or environmental economics to begin July 1, 2008. Requirements include a Ph.D. or candidacy. Salary is based on University of California pay scales. Position is subject to availability of funds.

Please send vita, three letters of reference, and research papers to: Prof. Gordon Hanson, IR/PS International Economics Search Committee, IR/PS (0519), University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0519.

Closing date for applications is **November 15, 2007**.
For full ad visit:

<http://irps.ucsd.edu/faculty-staff/faculty-openings-recruitment/>

UCSD is an Affirmative Action/Equal Opportunity employer with a commitment to excellence through diversity.

**University of California San Diego
University of California Institute on Global Conflict and
Cooperation (IGCC) and the Graduate School of
International Relations and Pacific Studies (IR/PS)**

The University of California Institute on Global Conflict and Cooperation (IGCC) (<http://igcc.ucsd.edu/>) and the Graduate School of International Relations and Pacific Studies (IR/PS) at the University of California San Diego (<http://irps.ucsd.edu/>) faculty-staff/faculty-openings-recruitment/ invite applications for a tenured professorial position in International Environmental Policy.

Principal responsibilities would include:

Conducting high-quality research on economic, political economy, or political aspects of environmental policy issues.

Providing leadership in developing inter- and multidisciplinary research programs on international environmental issues within the school and with faculty members from other parts of UCSD like the Scripps Institution of Oceanography <http://www-sio.ucsd.edu/> and other University of California campuses.

Teaching graduate courses on international environmental policy.

Candidates must have a PhD in a social science discipline like economics or political science and demonstrate a capability to teach and conduct academic research on international environmental issues. Energy policy and natural resource policy, when linked to environmental considerations in parts of the research portfolio, are also of interest. Practical experience and scholarly writing on the design and implementation of policies to address environmental problems and experience in one or more Asian and/or Latin American countries are desired.

This is a joint appointment in the professorial ranks at IR/PS and as a Research Director for International Environmental Policy at IGCC. The person filling the position will have a reduced teaching load and spend approximately one-third of his/her time as Research Director at IGCC. The position will begin July 2008.

Salary and appointment levels depend on experience and research records and are based on University of California pay schedules.

IGCC is a University of California system-wide research unit, headquartered on the San Diego campus. It was established to conduct and encourage research and instructional programs in the causes of international conflict and the opportunities for international cooperation. The

Research Director for International Environmental Policy is responsible for organizing UC system-wide collaborative research, conferences, and policy briefings in the broad area of international conflict and cooperation on environmental issues.

Send curriculum vita, copies of research papers and names of 3 references to: IR/PS-IGCC 2007 International Environmental Policy Recruitment Committee, UCSD 9500 Gilman Drive, mail code 0519, La Jolla CA 92093-0519.

Review of applications will begin May 1, 2007 and will continue until position is filled. UCSD is an Equal Opportunity/Affirmative Action Employer with a strong institutional commitment to excellence through diversity. We welcome candidates whose research and professional commitments could further diversity. Applicants are welcome to include in their cover letters a personal statement summarizing their contributions to diversity. UCSD tenure and tenure track positions are posted at:

<http://academicaffairs.ucsd.edu/offices/adeo/recruitment/irps.htm>



Director and Professor, Florida, Sea Grant Program

We are seeking an innovative unit leader with broad programmatic vision and enthusiasm for leadership. The Director is the administrative head of the Sea Grant College and provides leadership and support for research, education, communications, and extension in the Florida Sea Grant programs (FSG).

Duties and Responsibilities: The Director provides vision in planning, develops and implements FSG programs, and acquires extramural funds with private support. The Director plays an active role in overseeing a diverse set of programs and leading strategic planning initiatives to design effective programs for the state, universities and stakeholders. Current Sea Grant program areas emphasize marine biotechnology, fisheries, aquaculture, seafood safety, boating and waterways, waterfront communities, ecosystem health, coastal hazards, graduate education and marine education.

The federal Sea Grant portion of the program covers about 50% of the funding for 100+ faculty and students who conduct research, education, communications, and extension programs. Approximately 12 staff are managed at the Sea Grant College located on the Gainesville campus while the remaining staff are located at various locations throughout

the state of Florida. The Director is actively engaged with stakeholders such as the National Sea Grant College Program Office located within the National Ocean and Atmospheric Administration (NOAA) in Silver Springs, MD. In addition the Director interacts with the 31 Sea Grant Programs across the U.S. to conduct regional and national programs. The current annual budget, including federal Sea Grant Funds, non-federal matching funds, and extramural funds is approximately five million dollars.

Basic Qualifications: An earned appropriate terminal degree with a record of excellence in research and scholarship in marine, coastal, natural resources, or related areas is required. A sustained record of publications and grants, graduate student mentoring, sufficient for academic appointment as Professor with tenure in a UF academic department is required. The applicant's record must document a commitment to the Sea Grant concept of research, education, communication, and extension.

Strong written and verbal communication skills are required. Extensive knowledge of ocean and coastal resources issues is preferred along with a proven record of innovative leadership and sound management. Experience working in a university environment, work with multiple external constituencies, writing interdisciplinary grant proposals, and an understanding of the federal funding process is required. Demonstrated competency in working with federal, state, and private groups involved in research, education, communications, and extension programs in the marine, coastal or natural resources area also is required.

Other Information: The Florida Sea Grant College Program (FSG) (www.flseagrant.org) is a State of Florida Center with a statewide mission within the Florida Board of Education. Ultimately, FSG reports to the Florida Board of Education, Division of Colleges and Universities, Vice Chancellor for Academic Affairs. Eleven public universities, three private universities and two private non-profit marine laboratories participate in FSG. The University of Florida (UF) is the host campus for FSG. At UF, the Sea Grant Director reports to the Provost and Senior Vice President for Academic Affairs and also the Senior Vice President for Agricultural and Natural Resources. Its mission is to enhance the practical use and conservation of coastal and marine resources to create a sustainable economy and environment. Florida Sea Grant is ranked as one of the top Sea Grant programs in the country.

The University of Florida (www.ufl.edu) is a Land Grant and Sea Grant institution, encompassing virtually all academic and professional disciplines, with an enrollment of almost 50,000 students. UF is a member of the Association

of American Universities. On the UF campus, the FSG office is located within the Institute of Food and Agricultural Sciences (IFAS) (www.ifas.ufl.edu) complex. The FSG Extension Program is carried out in partnership with the IFAS Florida Cooperative Extension Service and the Communications Program is carried out in cooperation with the IFAS Communications Services. All 16 participating campuses appoint Campus Coordinators to assist in maintaining a strong collegial network of faculty statewide.

Gainesville is an attractive city of about 120,000 located in north central Florida midway between the Atlantic Ocean and the Gulf of Mexico. The region is characterized by recreational and natural resources including many lakes, rivers and natural areas.

Application Procedures:

Interested individuals should provide -- as PDF or Word file attached to an e-mail -- (1) a formal letter of application which includes a brief statement of the applicant's leadership skills and vision, administrative philosophy, and ideas on the role of the Sea Grant College, (2) current curriculum vitae, and (3) a list of five professional references. Women and minorities are encouraged to apply.

Please address applications, nominations, and communications to:

Daniel F. Parker, Sr., President
Laurie C. Wilder, Senior Vice President
Parker Executive Search
Five Concourse Parkway, Suite 2440
Atlanta, GA 30328
Phone: 770-804-1996 ext. 109
Fax: 770-804-1917
lwilder@parkersearch.com

**University of Florida, Gainesville, Florida
Institute of Food and Agricultural Sciences (IFAS)
Professor and Chair, Food and Resource Economics
Department**

Salary: Commensurate with Qualifications and Experience

Review Date: Review of application materials will begin on or before January 31, 2008 and will continue until the position is filled.

Duties and Responsibilities

This is a 12-month tenured position available in the Food and Resource Economics Department, Institute of Food and Agricultural Sciences, at the University of Florida. The Food and Resource Economics Department has recruited six new

faculty members in the past year and the new Chair will have the unique opportunity to grow and flourish the department by hiring additional new faculty. The Chair, in coordination with statewide Food and Resource Economics faculty, is expected to lead the finalization and implementation of the Department's evolving vision and strategic plan.

The Chair will be responsible for leadership and coordination of teaching (College of Agricultural and Life Sciences), research (Florida Agricultural Experiment Station) and extension (Florida Cooperative Extension Service) functions in the Department and for coordination with Directors of Research and Education Centers that have food and resource economics faculty members. Administrative responsibilities will include program development and coordination; management of fiscal, personnel, and physical resources assigned to the Department; faculty recruitment and promotion; liaison with state, federal, and international agencies and professional and private organizations; cooperation with other units within the University; and promotion of funding opportunities for the Department. The Chair must work effectively with Department faculty and IFAS Administration in program planning and implementation and facilitation of multidisciplinary research, graduate and undergraduate teaching, and extension programs related to the Department's mission. The Chair will interact with other department chairs, research and education center directors, and county extension directors to foster cooperation among faculty in other administrative units in IFAS.

Basic Qualifications

Applicants should have an earned doctorate in agricultural economics or closely related field. In addition they should have demonstrated leadership ability, integrity, and administrative skills with a track record of soliciting advice and building consensus when making decisions. Applicants will be well-suited if they have a strong understanding of the teaching, research, and extension missions of the Land Grant University and an excellent record of scholarly and program accomplishments commensurate with the rank of tenured professor. Applicants should possess outstanding communication skills to facilitate interactions among a variety of audiences, in particular agricultural and natural resources stakeholders. Candidates should also have a strong commitment to the leadership and management needs of a comprehensive academic unit. The Chair must have experience in fostering collaborative relationships and a keen interest in doing so within the Department, IFAS, and the University, and at the state, federal, and international levels. Candidates must understand and be supportive of the land-grant system and of IFAS's core values of excellence, diversity, global involvement, and

accountability. The Chair must be committed to devoting time to private philanthropy.

Background Information

The University of Florida is a Land-Grant and Sea Grant institution, encompassing virtually all academic and professional disciplines, with an enrollment of 50,000 students. The University of Florida is a member of The Association of American Universities. The Institute of Food and Agricultural Sciences includes the College of Agricultural and Life Sciences, the Florida Agricultural Experiment Station, the Florida Cooperative Extension Service, and the College of Veterinary Medicine, and encompasses 15 academic departments and the School of Forest Resources and Conservation, 9 interdisciplinary centers, 13 research and educational centers throughout the state, and Cooperative Extension units in each of Florida's 67 counties and the Seminole Tribe. The School of Natural Resources and Environment is an interdisciplinary unit housed in IFAS but managed by several colleges on campus. IFAS employs over 3400 people, which includes approximately 950 faculty and 2450 support personnel located in Gainesville and throughout the state. IFAS, one of the Nation's largest agricultural and natural resources research and education organizations, is administered by a Senior Vice President and four deans: The Dean of the College of Agricultural and Life Sciences, the Dean for Extension and Director of the Florida Cooperative Extension Service; the Dean for Research and Director of the Florida Agricultural Experiment Station; and the Dean for the College of Veterinary Medicine. UF/IFAS also engages in cooperative work with Florida A&M University in Tallahassee.

The Food and Resource Economics Department (FRED) has 35 faculty members and 20 support staff positions in Gainesville, and nine faculty members and support staff spread across seven research and extension centers throughout the state. FRED faculty teach a wide variety of courses from agribusiness marketing to natural resource/environmental economics to welfare economics and trade theory. FRED averages ~ 400 undergraduate majors/year and 80-90 M.S., Ph.D. and Master of Agribusiness students. Research and Extension efforts reflect both the needs of the State and the mission of the Agricultural Economics profession.

How to Apply

Applicants should submit a letter of application (including professional interest statement and leadership philosophy), vita, and the names and contact information for four (4) individuals from whom letters of recommendation have been requested (sent to the address below). Formal

review of applications will begin on January 31, 2008. Women and minorities are encouraged to apply.

Refer to Position #00015054

Contact Information and Application and Nomination Submission Information:

Questions regarding the position may be directed to:

Dr. Jerry M. Bennett
Chair of Search Committee
Agronomy Department
Institute of Food and Agricultural Sciences
University of Florida
P.O. Box 110500
Gainesville, FL 32611-0500

Telephone: 352-392-1811x201
Fax: 352-392-1840
E-mail: jmbt@ufl.edu

Nominations and applications should be forwarded to:

Department Chair for Food and Resource Economics Search
Institute of Food and Agricultural Sciences
IFAS Office of Human Resources
University of Florida
P.O. Box 110281
Gainesville, FL 32611-0281

Telephone: 352-392-4777
Fax: 352-392-3226
E-mail: ewallace@ufl.edu
<http://personnel.ifas.ufl.edu/>

The University of Florida is an equal opportunity, equal access employer. The "government in the sunshine" laws of Florida require that all documents relating to the search process, including letters of application/nomination and reference, except transcripts, be available for public inspection. Persons with disabilities have the right to request and receive reasonable accommodation.

University of Maryland College Park
Assistant Professor
Assistant/ Associate/Full Professor

The Department of Agricultural and Resource Economics seeks two faculty appointees who will develop distinguished research and teaching programs in any field of economics related to agriculture, natural resources, the environment, or economic development. The appointees are each expected to develop a creative research program that

serves the public interest at the state, national or international level. The appointees are also expected to teach courses that fit into the instructional programs of the Department at the undergraduate and graduate levels and that enhance the overall quality of education in these programs. The positions are 9-month, tenure-track positions; salary is commensurate with experience. For the open rank position, the Department has a strong preference for candidates who have established a record of excellence in research and publication. Candidates should possess a doctorate in agricultural economics, economics, or an equivalent field.

A current resume/curriculum vitae, official transcripts, copies of publications or working papers, statement of research and teaching interests, and names and addresses of at least three professional references should be submitted to Professor Erik Lichtenberg, Search Committee Chair, Department of Agricultural and Resource Economics, 2200 Symons Hall, University of Maryland, College Park, MD 20742-5535 USA. For most favorable consideration, applications should be received by **December 15, 2007**. The University System of Maryland is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA employer. Women and minorities are strongly encouraged to apply.

University of Hawaii-Manoa
Department of Economics
Position No. 82777

Q Marine Resource Economics
Q Sustainable Development
Q2 Renewable Resources and Conservation
Q2 Fishery and Aquaculture Economics
Q5 Marine Ecology and Conservation

The Department of Economics invites applications for a position at the assistant professor level, full-time, tenure track beginning August 1, 2008.

Duties: Teach undergraduate and/or graduate courses in resource economics and related areas, develop and teach a new course on marine resource economics for the College of Social Sciences Graduate Ocean Policy Certificate Program, serve on M.A. thesis and Ph.D. dissertation committees, mentor students, conduct high-quality research, and seek extramural funding.

Minimum qualifications: A Ph.D. in economics by August 1, 2008, a primary specialization in resource economics or resource/environmental economics, with an interest in marine resource systems, an ability to effectively

teach graduate and undergraduate courses, and an ability to conduct high-quality research.

Desirable qualifications: Secondary interests in applied microeconomics with potential interest in marine resource systems of Hawaii and the Asia-Pacific region. A commitment to teaching excellence and an interest in innovative scholarship, such as transdisciplinary research and teaching, and community outreach.

Pay Range: Salary commensurate with qualifications and experience.

To apply: Go to:
<http://www.economics.hawaii.edu/news/jobann08.html>.

Please follow the instructions on the recruitment website. We will not accept mailed or e-mailed applications. Three letters of reference should be e-mailed directly by referees to econdpc@hawaii.edu or mailed to Recruiting Chair, Department of Economics, University of Hawaii-Manoa, 2424 Maile Way, Saunders Hall, Room 542, Honolulu, HI 96822. The closing date for applications is January 14, 2008. For full consideration for an interview at the ASSA/AEA Meetings in New Orleans, LA, January 3-6, 2008, you must upload your application to our recruitment website by **December 3, 2007**. An equal opportunity-affirmative action employer.

**University of Michigan
Erb Institute for Global Sustainable Enterprise
Post-Doctoral Researcher**

The Erb Institute for Global Sustainable Enterprise at the University of Michigan invites applications from qualified candidates who have received the Ph.D. degree between June 2006, and September 1, 2008. Fellows appointed as Post-Doctoral Scholars in the Erb Institute are expected to be in residence during the academic years of the fellowship and to devote time to their independent research. The annual stipend will be \$60,000 based on an academic calendar year, September 1 - August 31. You will be eligible for participation in the University's insurance options. Appointments are intended to extend for two years, though the Institute will also consider applications for one-year appointments.

Applications must be received by **December 31, 2007**, and must include the following:

- A cover letter explaining your interest.

- A current curriculum vitae. As an addendum, please include a list of courses taken as a graduate student. A transcript is not required.

- A short (one page, single spaced) description of your background, research and teaching interests, and a brief summary of your proposed research. If you are currently a doctoral candidate, please indicate the anticipated schedule of completion of your thesis. The Ph.D. or comparable degree is a prerequisite for this appointment.

- A research proposal for the fellowship tenure. This proposal should outline the methods and aims of research beyond your thesis. Please keep in mind that your project proposal will be read by non-specialists, as well as specialists in your field. Proposals that involve more than one discipline are especially welcome. Proposals should be 5-10 pages in length.

- Examples of your work. Because reviewers have limited time for reading each application, candidates must limit the number of work samples (two or three) and length of papers. One of these submissions should represent your dissertation (a cover sheet, signature page, and abstract). Do not send a copy of your dissertation.

- A list of three recommenders, including name, affiliation and contact information. Letters of reference should be mailed directly by your recommenders to the Erb Institute.

Please send application materials electronically to:

Mr. Drew Horning
Managing Director of the Erb Institute
ahorning@umich.edu

or by mail to:

Erb Institute Post-Doctoral Fellowship
Dana Building
440 Church St
Ann Arbor, MI 48109

For more information about the Erb Institute for Global Sustainable Enterprise, please visit:
<http://www.erb.umich.edu>

**Tufts University
The Fletcher School**

Associate/Full Professor of Environmental/Resource Economics

The Fletcher School, established in 1933 as the first graduate school of international affairs in the United States,

seeks to fill a full-time, tenure-track or tenured position at the rank of Associate or Full professor in Environmental/Resource Economics beginning September 2008. The Fletcher School's faculty is multidisciplinary with a focus on connecting theory with practice. We prepare our Masters and doctoral students to use the latest political, economic, business, and legal thinking to generate pragmatic policies that will successfully shape global events.

The new faculty member will be a member of the Center for International Environment and Resource Policy which is home to a multidisciplinary group of faculty and students that offers a field of concentration through course work, an ongoing research program and a vigorous program of speakers, conferences and other events. Special consideration will be given to candidates with research interests in any of the following areas -- international climate change and energy policy, environmental policy in developing countries and emerging market economies,

sustainable development, natural resource management, pollution control, and environmental health.

A Ph.D. or its equivalent is required along with a record of distinguished scholarly publication appropriate for rank of appointment. Review of applications will begin **December 1, 2007**. Applicants should send a curriculum vitae, any supporting materials and 3 letters of reference to:

Sandra Gasbarro
Environmental/Resource Economics Search
The Fletcher School of Law and Diplomacy
Tufts University
Medford, MA 02155 USA

The Fletcher School is an Equal Opportunity/Affirmative Action employer and the administration, faculty, and student body are committed to attracting talented candidates from groups presently underrepresented on campus. Visit our website at <http://fletcher.tufts.edu>