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INSTITUTE OF BEHAVIORAL SCIENCE ■

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UNIVERSITY OF COLORADO

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AT BOULDER ■ OCT/NOV 2006 ■

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## NEWSLETTER

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### IN LOVING MEMORY

On October 5, our dear friend, colleague, and mentor, Gilbert White, passed on. The world is a better place for having had Gilbert in its midst. Gilbert was that rare combination—a distinguished scientist and an outstanding humanitarian—committed to translating scientific evidence into policy and programs to better people's lives. His was a life to celebrate. We will always remember Gilbert not only as a man of science and humanity, but as the person who set IBS on its present course and whose leadership and friendship was always accompanied by wisdom and enlightenment. Gilbert's family is planning a memorial on Saturday, November 11 at 1pm at the Spice of Life Event Center, 5706 Arapahoe Avenue, Boulder. Please visit the website that records his memorable life at <http://www.colorado.edu/hazards/gfw>.

### KUDOS

Congratulations to Jani Little for having completed 25 years of service and to Dorothy Watson for having completed 20 years of service to the University of Colorado at Boulder!

### PROGRAM ACTIVITIES

#### ENVIRONMENT AND SOCIETY PROGRAM

**Nicholas Flores** is serving as chair of the Economics Department. In addition, he is a principal investigator at the National Center for Earth Surface Dynamics at the University of Minnesota, Minneapolis campus. The center which recently had an NSF site renewal visit received excellent reviews including a recommendation to fund the Center for another five years.

**Chuck Howe** gave the opening plenary talk at the annual Illinois State Water Conference at the University of Illinois at Urbana-Champaign on October 4. The topic was "Sharing Western Water Lessons with the Midwest," which emphasized that semi-arid regions have evolved institutions and agencies to deal with water scarce situations. Riparian water law that evolved in England when water was used to power mills and that has been adopted by states east of the Mississippi is not, however, suitable for places dealing with water scarcity. In the light of climate change and the likelihood of more frequent and more intense droughts in the upper Midwest, consideration of adoption of versions of the western institutions is more appropriate now before Midwestern water systems come under stress due to droughts. In particular, the use of water withdrawal permits (somewhat akin to western water rights) that are tradable and divisible would be a desirable and probably acceptable first step.

**Lee Alston**, hosted the International Society for New Institutional Economics (ISNIE) Tenth Annual Conference, "Institutions: Economic, Political and Social Behavior,"

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## PROGRAM ACTIVITIES

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September 21-24 at the Millenium Harvest House Hotel in Boulder. The program included over fifty panel sessions and a keynote lecture by the 1993 Economics Nobel Laureate Douglass C. North. Alston is currently serving as president of ISNIE.

### Natural Hazards Center

NHC welcomes two Research Experience for Undergraduates (REU) students, **Nick Passanante** and **Ashly Barlau**. Passanante is a sophomore in the Political Science Department at CU. His major academic interests include the American political system, with particular interest in how specific social aspects of society (i.e., terrorism, natural disasters, cultural aspects of individual geographic areas) impact political legislation, political leaders and political “language” and vice versa. Barlau is a junior in the Anthropology Department at CU. She is currently interested in both the physical (forensic anthropology) and cultural aspects of her discipline. The Center looks forward to working with these two talented undergraduate researchers.

In September, the Natural Hazards Center launched a new, updated, and reorganized web site at <http://www.colorado.edu/hazards/>.

### In Print

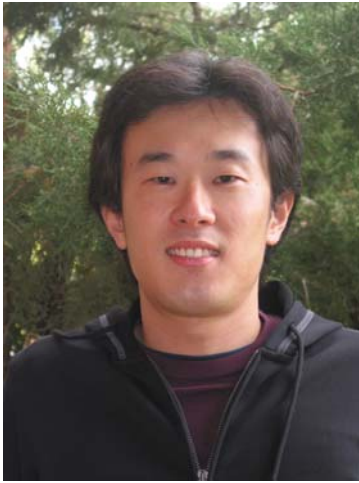
**Sutton, Jeannette**. Review of “In the Wake of Disaster: Religious Responses to Terrorism and Catastrophe,” by Harold G. Koenig, M.D. *Journal of Homeland Security and Emergency Management* 3, no. 3 (2006): Article 10. A well-respected author has created an overview of faith-based responses to disaster and the role of clergy in providing mental health and spiritual care to victims. The text surveys a range of issues including the effects of traumatic events on psychological and spiritual health and the roles of disaster response agencies, both state-sponsored and faith-based organizations, and offers practical guidance in how to prepare for a disaster. He includes a reference section that directs readers to additional resources on the mental health aspects of disaster and disaster response. The author also develops a strategy to overcome barriers to the incorporation of clergy and faith communities into disaster response and strongly encourages collaboration and the building of cross-disciplinary relationships. Overall, the book serves as a good primer on disaster response for persons within faith communities who wish to provide effective disaster relief.

### POPULATION PROGRAM

**Jason Boardman** was asked to serve as a participant in two NIH-sponsored conferences in order to provide NIH program staff with advice for needed research and training. The first conference, “Behavioral and Social Science Contributions,” was held October 23-24 in Bethesda, Maryland. The conference focused on three broad areas of action influencing health disparities: policy, prevention, and healthcare. It emphasized both basic research on the behavioral, social, and biomedical pathways giving rise to disparities in health, and applied research on the development, testing, and delivery of interventions to reduce disparities in these three action areas. The conference employed a multi-level analytic framework. It included research relevant to a wide range of U.S. population groups residing in the United States, while not attempting to provide detailed analyses of each and every group. Consideration was given to multiple public health issues and their interactions and to risk factors or causal processes common to various health conditions. The second conference, “Mapping the Environment: Measuring the Social Environment in Drug Research,” was also held in Bethesda, November 1-2. The

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## IN FOCUS



Yohei Mitani  
Visiting Scholar  
Environment and Society Program

I find that respondents' preferences for the restoration project are made based not only on their attitudes and motivations but also on their perceptions about that project, and at the same time the subjective perceptions are made based on their prior knowledge and information provided in a survey.

## Valuing Environmental Preferences through Hypothetical Choice in Survey

*Yohei Mitani is a visiting scholar with the Environment and Society Program for the 2006-2007 academic year. He is a Research Fellow of the Japan Society for the Promotion of Science and a fourth-year Economics Ph.D. candidate at Waseda University in Japan. He received his B.A. in Economics (2003) and M.A. in Economics (2005) from Waseda University.*

My current work focuses on using environmental valuation methods to elicit an economic value of non-market goods, such as protection of habitat for endangered species, by using a questionnaire. As Professor Nicholas Flores indicated in the March/April 2004 issue of the *IBS Newsletter*, it is really important to capture the benefit from environmental goods in order to realize their optimal provisions.

In Japan, the Nature Restoration Project (NRP) has become a great issue since the Law for the Promotion of Nature Restoration took effect in 2003. As part of the NRP, I am working on a project which attempts to evaluate the Kushiro Mire Ecosystem Restoration Project. The Kushiro Mire Ecosystem is the largest wetland in Japan and has suffered from various human disturbances. Our group, which includes ecologists, is investigating what is happening in this ecosystem and drawing up restoration scenarios. I designed and recently concluded conducting a web-based computer-assisted survey to elicit respondents' preferences for the various scenarios. The web-based survey allowed us to make several measurements including those regarding restoration of biodiversity, the protection of endangered species, the improvement of water quality, and the recreational use regulation. Most respondents were unfamiliar with the restoration project and ecosystem services and the information provided by the survey will be important in measuring their understanding of the project and services.

Preferences for environmental conservation can vary across individuals and groups. Some people may have a great interest in the natural environment, while others are completely unconcerned about it. In one research project I estimated the economic value of a vegetation restoration project of an endangered species in Japan. I found that respondents' preferences varied in according to their attitudes, motivations, and gender. Results of the project showed that as the extinction risk of that species is decreased, it was easier to build a consensus about the project and therefore the heterogeneity of preference also decreased.

Environmental valuation methods are potentially useful for capturing environmental preferences of the general public, but there are several critical problems caused by hypothetical settings. My research focuses on exploring the validity of the environmental valuation methods by studying respondents' decisionmaking in hypothetical

## IN FOCUS

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settings. First, most respondents are frequently unfamiliar with the goods to be valued in a survey—unlike market goods. So, the following questions occur: “Can respondents perceive the goods?” and “How do they form their preferences?” We need to do a lot with such problems that standard economics so far has treated as a “black box.” I am working on this question by integrating psychological variables with the economic choice. I find that respondents’ preferences for the restoration project are made based not only on their attitudes and motivations but also on their perceptions about that project, and at the same time subjective perceptions are made based on their prior knowledge and information provided in a survey. Second, the environmental valuation methods are based on the stated choice in a hypothetical scenario. The divergence may occur between the stated choice with hypothetical nature and the actual choice in real setting. I attempt to clarify the relationship by using the experimental economics approach in which we can control the participants’ incentives.

I would like to apply the methodology to other problems. Indeed, I have worked on valuing the practical use of cultural heritage, valuing the effect of regulation in national parks, and analyzing voters’ behaviors. I am also interested in wildfire risk, health problems, and water management.

I really like Boulder because it is surrounded by beautiful environments—it is quite different from Tokyo. I also love to do field studies. So, if you go out to study any fields around here, please invite me!

## PROGRAM ACTIVITIES

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social environment is becoming increasingly important to understanding drug use and abuse. However, it is often misunderstood and inadequately measured, analyzed, and applied. There is a need to conceptualize the social environment and to develop methods for measuring it. Moreover, a number of questions remain for advancing drug abuse research and the impact of the social environment, including the development and use of common sound measures. The purpose of this workshop was to bring together researchers interested in mapping the environment, including those who study the social environment. In particular, the workshop brought together researchers who are interested in linking the social environment to the biological/genetic and physical environment and vice versa. The workshop brought together experts in epidemiology, social and behavioral sciences, genetics and other related disciplines to (1) define the social environment, (2) address methodological challenges, and (3) to identify the relevance of drug abuse research that considers the social environment.

**Richard Rogers** was invited to Texas A&M University, September 18-20, to consult with faculty and administrators about building a new interdisciplinary population center. These interactions further enhance our University of Colorado Population Center’s goal of bridging departments, programs, centers, institutes, and universities.

### **Working Papers**

<http://www.colorado.edu/ibs/pop/pubs/wp.html>

**Rogers, Richard G., Patrick M. Krueger,** and Robert A. Hummer. “Religious Attendance and U.S. Adult Cause-Specific Mortality.” (POP2006-06). Little research

*Program Activities continue on page 5*

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## PROGRAM ACTIVITIES

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has examined the relationship between religion and specific causes of death, although cause of death analyses may provide insight into the mechanisms that lead from religious involvement to premature mortality. Causes of death that closely link to specific health behaviors and to social ties and support, are most likely to be associated with religious involvement. For example, cancer, and circulatory and respiratory disease mortality risks may be lower among those who report higher levels of religious involvement because religious groups often disapprove of smoking and excessive drinking. Religious communities may also champion less violent and less risky lifestyles which may protect against mortality from external causes. The authors examine the effects of religious involvement on cause-specific mortality for the adult population as a whole and by age and sex using a national data set and controlling for important confounding factors. The overall mortality differentials across levels of religious involvement are similar by sex, but greater for middle-aged than for older adults. Although religious involvement is not always protective, the authors do find that more frequent religious attendance reduces the risk of death from such causes as circulatory diseases, respiratory diseases, infectious diseases, and lung cancer. Overall, their results demonstrate how cause-specific analyses add greater insight into how religious attendance affects mortality.

**Boardman, Jason D., Jarron M. Saint Onge, Brett C. Haberstick, David S. Timberlake, and John K. Hewitt.** “Schools and the Heritability of Smoking Behaviors: Theoretical and Methodological Considerations.” (POP2006-07). In this paper, the authors develop and test theoretical models that position the social environment (both normative and institutional) as a critical component of sociological inquiry into behavioral genetics. They focus on schools as important social institutions that condition the magnitude of genetic influences on smoking behaviors. Specifically, they develop and test five hypotheses that examine gene-environment interactions using the sibling-pair data from the National Longitudinal Study of Adolescent Health. Based on estimates using traditional quantitative genetic techniques, they find that fifty-nine percent of the variation in smoking behaviors is heritable in nature. However, when this estimate is obtained using a multi-level modeling framework with adolescent pairs nested within schools, they observe a significant reduction in the overall estimate ( $h^2=.46$ ). Most importantly they also demonstrate significant variation in heritability across schools. They find that heritability is significantly reduced within schools characterized as having strong norms regarding smoking behaviors and within schools with limited resources.

**Boardman, Jason D., Liam Downey, James S. Jackson, J. Bryce Merrill, Jarron M. Saint Onge, and David R. Williams.** “Proximate Industrial Activity and Psychological Distress: The Interactive and Interpretive Roles of Gender, Work, and Family Statuses.” (POP2006-08). In this paper the authors examine the role of multiple social positions (gender, occupational status, family status) in the interpretation of industrial activity as an ambient stressor. Using a unique spatial assessment of industrial activity in conjunction with individual-level data from the 1995 Detroit Area Study, the authors find that residents of neighborhoods in close proximity to industrial activity report elevated levels of psychological distress compared to those whose homes are removed from this type of activity. They also find the distressful effects to be more pronounced among women compared to men, but this relationship is strongly conditioned by the occupational and parental statuses of the respondents. The authors highlight important relationships between individuals, society, and the physical environment and how these interplays may

## PROGRAM ACTIVITIES

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complicate strategies to alleviate psychological distress brought on by neighborhood-level stressors.

### PROBLEM BEHAVIOR PROGRAM

On October 3, the Problem Behavior Program initiated an annual lecture series in criminology named after **Del Elliott**. Elliott was the program director from 1997 to 2004 and currently serves as the director of the Center for the Study and Prevention of Violence. He has made fundamentally important contributions to many aspects of criminology, including the longitudinal investigation of delinquent and criminal careers and the development of effective programs to prevent and treat offending. The annual lecture series recognizes his contributions to scholarship and to the Institute of Behavioral Science. It was launched with a stellar lecture presented by Professor David Hawkins, Endowed Professor of Prevention, School of Social Work at the University of Washington. Hawkins' scholarly career mirrors Elliott's in interesting ways. He is the director of the Seattle Social Development Project, one of our most influential longitudinal studies of delinquency and drug use. Based on the results of that study, he and his colleagues have initiated a delinquency prevention program, Communities That Care, that has been carefully evaluated and widely adopted, both in this country and abroad. His lecture presented core results from the Seattle project from grade school through age twenty-seven. He also presented compelling evidence on the long-term effectiveness of prevention programs which extend well into the person's life course. Overall it was a lively presentation and discussion, and the program looks forward to hosting the Delbert S. Elliott Lecture in Criminology for many years to come.

## IN THE NEWS

In the October 8 and October 9 issues of the *Colorado Daily*, Paula Pant wrote two articles, "What's Up, Doc?" and "For New Program, Unanswered Questions," on the new CU doctoral degree program in Technology, Media and Society. Approval by the CU Board of Regents of this new program coincided with the opening of the new ATLAS (Alliance for Technology, Learning and Society) building which will house the new program. One of the first two doctoral students to transfer into the program is **Sophia Liu**, a PhD student in computer science and a graduate research assistant at the Natural Hazards Center. She "is investigating how people use technology to communicate during natural disasters." Liu, whose research is guided by a three-person committee representing various disciplines is also quoted as saying "there's a lot more emphasis now on keeping an interdisciplinary perspective."

## UPCOMING COLLOQUIA

Please refer to the following webpage for the IBS colloquia schedules:  
<http://www.colorado.edu/ibs/events/colloquia.html>.

## RESEARCH PROPOSALS SUBMITTED

### Health and Society Program

Mollborn, Stefanie	"Effect of Material Resources on the Early Development of Teen Parents' Children"			
	Dept of HHS/Office of Public Health and Science	01/15/07-01/14/10	New	\$223,165

*Research Proposals Submitted continue on page 7*

## RESEARCH PROPOSALS SUBMITTED

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### Problem Behavior Program

Woodward, Bill	“State Homeland Security Program” State of CO Dept of Local Affairs	01/01/07-12/31/07	New	\$200,000
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## RESEARCH PROPOSALS AWARDED

### Environment and Society Program

McCabe, J. Terrence	“Collaborative Research: AOC: Parks as Agents of Social and Environmental Change in Eastern and Southern Africa” NSF	10/01/06-03/31/10	New	\$169,584
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### Political and Economic Change Program

Witmer, Frank	“Doctoral Dissertation Research: The Effects of War on Land-use/Land-cover Change: The Case of Northeast Bosnia” NSF	09/15/06-02/29/08	New	\$12,000
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### Population Program

Lu, Ying	“Collaborative Research: Variable Selection for Mixed-Effect Models” NSF	09/01/06-08/31/09	New	\$108,315
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Menken, Jane Rogers, Richard (Co-PI)	“Videoconferencing Equipment for the African Population Studies Research and Training Program” William and Flora Hewlett Foundation	10/01/06-09/30/09	New	\$23,000
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Rogers, Richard Menken, Jane and Schatz, Enid (Co-PI's)	“Global Research Training in Population Health” NIH/Fogarty International	09/20/06-10/31/11	New	\$716,468
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### Problem Behavior Program

Dunford, Frank	“San Diego Navy Experiment” Department of the Navy	09/20/06-09/19/07	Supplement	\$348,574
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Huizinga, David	“Understanding Delinquency: A Longitudinal Multi-Disciplinary Study of Developmental Patterns” Department of Justice	08/01/06-07/31/07	Continuation	\$100,000
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Thornberry, Terence	“Long-term Consequences of Exposure to Family Violence” Research Foundation of State University of New York	08/15/05-05/31/07	Supplement	\$55,984
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## RESEARCH PROPOSALS AWARDED

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Thornberry, Terence	“Intergenerational Transmission of Risk for Drug Use” NIDA	09/30/05-06/30/10	Continuation	\$2,186,583
Thornberry, Terence	“Maltreatment and Delinquency Across Three Generations” OJJDP	01/01/07-12/31/08	New	\$396,438

Jane A. Menken, Institute Director

**Environment and Society Program**

Lee J. Alston, Director  
Natural Hazards Center  
Kathleen Tierney, Director

**Health and Society Program**

Richard Jessor, Director

**Political and Economic Change Program**

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