In an article released by the Associated Press on March 13, “Government designs color-code system to rank security alerts,” Dennis S. Miletis is quoted as an authority on responding to emergencies. He said a five-level system for categorizing risk is just right. It’s not really important whether the five levels are described with colors or numbers or letters; what matters is that they are backed up by warning and alert systems at the local level that tell people how to respond. At least 13 newspapers across the country carried articles including mention of Miletis relating to creating a terror warning system.

In an April 9th Washington Post article written by Abigail Trafford “Second Opinion: Remotely Related” about television and violence, Delbert S. Elliott is in part quoted as saying, “television violence by itself in the absence of other risk factors doesn’t raise the odds in a predictive model very much.” The article concludes by saying, “Much on television is a turnoff. Common sense says to turn it off. But a crackdown on TV won’t be enough to stop the violence in people’s lives.”

KUDOS

To Richard Rogers we extend hearty congratulations. He and three other faculty members were selected by CU-Boulder students to receive the 2002 Teacher Recognition Award. They were honored at the 72nd Annual Alumni Association Award Ceremony on May 7 in the Old Main Chapel.

Congratulations to Joanne Belknap—she has been promoted to Professor of Sociology and Women’s Studies.

Cristobal Ridao-Cano, PhD candidate in Economics and research assistant in the Population Processes Program, successfully defended his dissertation “Child Labor and Schooling in Rural Bangladesh” on May 16. We wish him well as he embarks on his research position at the World Bank beginning in September.

Program Activities on Page 2
IBS ON THE WEB

We, as the editors of the IBS Newsletter, are looking at ways to make this Newsletter more “Web friendly.” To that end we will continue to provide 1) links, wherever possible, within the text of the Newsletter, 2) notification via email when the newest Newsletter is up on the Web (let us know and we will be happy to include you).

PROGRAM ACTIVITIES

ENIRONMENT AND BEHAVIOR PROGRAM

John D. Wiener and Charles W. Howe attended the Third Symposium on Environmental Applications: Facilitating the Use of Environmental Information at the American Meteorological Society’s annual meeting on January 13-17 in Orlando, Florida. They presented “A simple approach of increasing usefulness forecasts.” They also attended the Mississippi River Climate & Hydrology Conference of the American Meteorological Society, NOAA, NASA, and others on May 13-17 in New Orleans. They presented “Moving water: Water banks, forecasts, and obstacles.” This project began with inquiries into current and potential uses of climate information for purposes of water management in Colorado, Utah, and New Mexico, and within the Zuni, Navajo, Southern Ute, and Ute Mountain Ute Tribes. The approach of using a calendar of decisions that may rely on climate information was taken from classical ethnographic methods, and it has illustrated the need for effective communication between producers and users of information. The project generated requests for several kinds of climate information, as well as information about current uses of climate information. In Colorado, the authors found significant opportunities for use of climate information in the design and operation of a pilot water bank program to facilitate water transfers, as well as new applications in the agricultural sector itself, including irrigation ditch management and individual farm water application. They have also encountered obstacles to the further use of climate information, as well as resistance to the water bank concept itself, including regulatory constraints on river system operating rules in general. Their studies emphasize the value of persistent involvement with user groups and continuing participation in the decision processes of interest. An extended abstract with graphics is available electronically. Please e-mail requests to John Wiener at: john.wiener@colorado.edu

Lori Hunter participated in the grant proposal review panel of the USDA’s National Research Initiative, Rural Development Program held in Washington, DC on May 13-16. The National Research Initiative (NRI) Competitive Grants Program of the Cooperative State Research, Education and Extension Service of the USDA is charged with funding research on key problems of national and regional importance in biological, environmental, physical, and social sciences relevant to agriculture, food, and the environment on a peer-reviewed, competitive basis. See: http://www.reeusda.gov/nri/nrinfo/about.htm Within the NRI, the Rural Development Program funds research related to: 1) Understanding forces and opportunities affecting rural areas and 2) Designing and evaluating new approaches to rural development.

Program Activities continue on Page 4
This project has been funded by the Office of Global Programs of the National Oceanic and Atmospheric Administration (NOAA) to study current and potential uses of climate information in water management. The Environment and Behavior Program (E&B) has a long history of work on Arkansas Valley water issues (“Impacts of Water Transfers on Rural Regions and Communities,” Ford Grant 885-0545A; “The Effects of Economic and Demographic Conditions on the Functioning of Water Markets: A Comparative Study of Water Transfers in the South Platte and Arkansas River Basins,” General Service Foundation). The current project includes interviews with water managers from Federal and State agencies as well as ditch companies and farmers to determine how they use and understand climate information. They were also interviewed to obtain their suggestions regarding improved presentation and content of climate data.

As this work was progressing, the Colorado Legislature authorized an experiment with a new water institution: the Arkansas River Water Bank Pilot Program. The motivation was to keep water from being sold out of the Valley by facilitating temporary transfers to the most productive uses within the Valley. E&B’s previous work on water banks and our established relationships with farmers, Agricultural Extension, State, and USDA officials made it clear that E&B had a role to play in this institutional experiment and NOAA agreed.

A “water bank” is a mechanism to facilitate low-cost, speedy, temporary water transfers among users by legally bypassing the complicated procedures required by state law for permanent water transfers. This short-term reallocation is especially important in drought periods. California established a statewide water bank in 1991, the fifth year of a severe drought. Similar practices have long been followed in Idaho where water stored in Bureau of Reclamation reservoirs can easily be traded among users.

The Arkansas Valley in Colorado is unusually dependent on agriculture and has suffered severe secondary impacts from large sales of water rights out of agricultural ownership and out of the basin, including the well-known Colorado Canal and Rocky Ford ditch sales to Aurora. Inability to make small efficiency-promoting water reallocations has hurt farming and has limited the ability of officials to reduce salt inflows into one of the most highly saline rivers used anywhere for irrigation.

Working with the Water Resources Research Institute at Colorado State University, we provided suggestions to the Office of the State Engineer on water bank design—suggestions based on lessons learned elsewhere and from economic theory. These suggestions helped to broaden the rules for the water bank so that various types of transactions could be tried. We have met often with officials and farm experts in the Valley to be certain that they understood the potential function of a water bank and that

*In Focus continues on Page 4*
we understood local views and concerns. This information in turn has been transmitted back to the State Engineer’s Office. In the process, we have identified new applications for climate forecasts and new information that will be useful to farmers and ditch companies as they contemplate the water situation in a very dry year, and to the water banking authority as it tries to bring buyers and sellers together. These findings will be transmitted to NOAA.

Now we intend to continue in the role of neutral third parties, to help inform the community of water users about the water bank potential and to help those users overcome widespread misunderstanding. Further work may also include formal modeling of the function of alternative water bank designs that incorporate climate history and forecasts.

**PROGRAM ACTIVITIES**

*continued from page 2*

**POPULATION PROCESSES PROGRAM**

This year’s Population Association of America meeting, held May 8-10 in Atlanta, was well attended by affiliates of the Population Processes Program: Charles Becker, Patrick M. Krueger, Randall Kuhn, Robert McNown, Jane Menken, Andrei Rogers, and Richard Rogers.

Charles Becker (with Erbolat Musabek, Ai-Gul Seitenova, and Dina Urzhumova) presented “The migration response to economic shock: Lessons from Kazakhstan.” The authors examine determinants of net migration between Kazakhstan and Russia on a monthly basis between January 1995 and December 1999. Using a detailed demographic and economic dataset, the authors look at response lags for different age groups, and by rural/urban residence within Kazakhstan. They find that exchange rate shocks affect migration with a one-month lag, as did the profoundly visible Russian debt default in August 1998. Migration flows also respond to changes in construction activity (with roughly a four-month lag) and average wages (seven-month lag). Urban populations tend to be far more responsive than rural populations.

Robert McNown (co-authored with Cristobal Ridao-Cano) presented “The effect of tax-benefit policies on fertility and female labor force participation in the United States.” In this paper the authors presented an investigation of the effects of the tax exemption for dependents and the child care tax credit on age-specific fertility rates for the US from 1948-1997. Effects of alternative tax and benefit programs on fertility and investments in child quality are analyzed in a theoretical model. Implications of the model are tested within a co-integration framework. Statistical evidence supports the existence of two co-integrating relations for each age group. One relation is identified as a fertility equation, with theoretically appropriate signs and significance of all coefficients, and the second is identified as a female labor supply equation. The two tax variables show positive effects on fertility, with the tax exemption accounting for a large portion of the short run variation in fertility for 20-24 year old women.

*Program Activities continue on Page 5*
Richard Rogers presented “Combining prevalence and mortality risk rates: Illuminating the risks of cigarette smoking” (with Patrick M. Krueger and Robert Hummer). The authors innovatively apply life tables with covariates to examine 1) the overall risk of death associated with smoking, 2) differences in smoking status specific life expectancies, 3) differences in life expectancies by smoking status for various scenarios of health and socioeconomic status, and 4) overall and age-specific deaths attributable to smoking.

Patrick M. Krueger presented “An evaluation of the effect of participation in the food stamp program on future mortality,” (with Richard Rogers, Cristobal Ridao-Cano, and Robert Hummer). The authors reveal a complex interplay between the decision to participate in the food stamp program among eligible individuals and the effect of the program itself on future mortality. Overall, food stamp receipt provides some relief from the detrimental effects of low income and helps to reduce the risk of death.

Randall Kuhn and Jane Menken presented “Migrant social capital and education in migrant-sending areas of Bangladesh: Complements or substitutes?” The authors study the role of migrant social capital on children’s education in Matlab, an area of rural Bangladesh with high rates of rural-urban and international out-migration, and high dependence on urban-rural and international financial transfers. A primary point of focus is the role of social capital, or origin-area connections to current destination-area residents, as complements or substitutes for investments in children’s education. Past research shows how investments in children’s human capital act as a substitute for retirement insurance in developing societies. In areas of high out-migration, however, high social costs and risks associated with migration may reduce the parents’ perceived marginal returns to educational investment. The current analysis combines household survey data with a series of demographic surveillance data, predicting education among current children in terms of past migration experience at the village level. The authors find that a history of male migration in the village increases the likelihood of parental investment in girls’ education, yet has no effect on investment in the education of boys, who are the group most likely to actually migrate. These effects persist in the presence of controls for household assets, which are likely to rise with the increased practice of migration by members of the household or village. Girls in high out-migration villages achieve parity with boys in terms of completing primary school, but remain significantly less likely to complete secondary school. Although migrant social capital encourages parents to allocate more of their household educational budget to girls’ schooling, household budgets, as determined by assets, still play a larger role in determining daughters’ schooling investments.

Randall Kuhn and Steven Stillman, RAND, presented “Understanding interhousehold transfers in a transition economy: Evidence from Russia.” The authors use data from the Russian Longitudinal Monitoring Survey to describe and model the determinants of interhousehold transfers in a transition economy.
of inter-household transfers. Russian households have experienced large reductions in income during the transition period, with a particularly severe decline occurring in the fall of 1998. Russia is experiencing a most unique pattern of aging. Sharply declining fertility, increasing mortality, and past demographic catastrophes (the two World Wars and the famine of the 1930’s) has left a population that is both young (few elderly) and old (one of the oldest working-age populations in the world). While Russia’s economic institutions and social safety net are underdeveloped, the typical household structure closely resembles that found in wealthier countries. Although it is typically assumed that the elderly in Russia are a highly vulnerable economic group, the authors actually find that transfers flow strongly from the elderly to their children, who are typically in the early part of the life-course and often have young children. This is especially true for the elderly in rural areas and those in extended families. While households with higher longer-term resources receive on net more transfers, the authors also find strong evidence that transfers respond to economic needs (i.e. transitory fluctuations in resources).

In Print

Pampel, Fred C. March 2002. “Cigarette Use and the Narrowing Sex Differential in Mortality.” *Population and Development Review*, 28(1), pp. 77-104. What explains the recent reversal in many countries of century-long trends toward a growing female advantage in mortality? And might the reversal indicate that new roles and status of women have begun to harm their health relative to men? Using data on 21 high-income countries that separate smoking deaths from other deaths, the author in this study answers the first question by showing that the reversal in the direction of change in the sex differential results from increased levels of smoking among women relative to men. Using additional cross-national data on cigarette consumption and indicators of gender equality, the author answers the second question in the negative by showing that the declining female advantage in smoking mortality results from patterns of the diffusion of cigarette use rather than from improvements in women’s status. Evidence of continued improvement in the female mortality advantage net of smoking deaths, and the likely decline of smoking among women in the future, imply that the recent narrowing of the differential will reverse. See: http://www.popcouncil.org/publications/pdr/pdrabs.html

Becker, Charles. May 2002. “Fertility Decline in Sub-Saharan Africa: Introduction.” *Journal of African Policy Studies*, 7(2-3), pp.1-16. This article introduces a special issue of JOAPS that examines fertility trends and determinants in sub-Saharan Africa. Evidence of increasingly broad decline is growing stronger; there is also now very strong evidence of below-replacement fertility in Addis Ababa, and near-replacement fertility in some other large African cities. This collection of seven papers (plus the introduction), from authors across the continent, North America, and France, surveys this evidence in detail, and links it to economic and social changes underway. See: http://journalofafrica.tripod.com
**PROGRAM ACTIVITIES**

*Continued from page 6*

**PROBLEM BEHAVIOR PROGRAM**

*In Print*


**Center for the Study and Prevention of Violence**

*Delbert S. Elliott,* with Colorado State Attorney General Ken Salazar, visited two Denver schools to present the Safe Communities-Safe Schools Project at Ranum High School on May 7 and the Bullyproofing Program at Vivian Elementary School on May 15. Elliott was the keynote speaker at the Children’s Partnership - Office of Juvenile Justice and Delinquency Prevention Conference in Harrisburg, Pennsylvania on May 8. He spoke on “Youth violence prevention: What works? What doesn’t?” On May 22 he was the keynote speaker at the American Psychiatric Association’s annual meeting in Philadelphia and presented *Youth violence: A report of the Surgeon General.*” On May 31, he presented “Issues in disseminating and replicating effective violence prevention programs” at the annual conference of the Society for Prevention Research in Seattle.

*Sharon Mihalic* was an invited speaker at the Colorado Association of Family and Children’s Agencies membership meeting in Denver on April 19. She discussed Blueprints for Violence Prevention by presenting “Identification of effective programs and factors for successful replication” and answered questions regarding practical application of the concepts.

**BITS AND BYTES FROM SSDAC**

*Social Science Data Analysis Center*

SSDAC is sponsoring a series of three workshops on structural equation modeling (SEM). This series will progress from an introduction to SEM concepts and using the Amos software in the first session, to measurement models or confirmatory factor analysis in the second session, and finally to modeling change in longitudinal studies in the third session. A tentative schedule for the three sessions is as follows:

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<tr>
<th>Introduction to SEM and Amos</th>
<th>August 15, 10:00 – 12:00</th>
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<tr>
<td>Jani Little, SSDAC</td>
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<tr>
<th>Measurement Models and Amos</th>
<th>August 20, 10:00 – 12:00</th>
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<tr>
<td>Mark Turbin, Problem Behavior Program</td>
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<tr>
<th>Modeling Change in Longitudinal Studies</th>
<th>August 28, 10:00 – 12:00</th>
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<tr>
<td>Angela Bryan, Health Behavior Program</td>
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Please send e-mail to jani.little@colorado.edu if you are interested in attending.
There will be no July issue of the IBS Newsletter. The next issue will be a combined July/August issue, published the first week in August. Enjoy the summer!