

<u>Geospatial Services</u> Paul Torrens joins Center

Through a special agreement for the 2012-13 academic year, Dr. Paul Torrens, Geographical Sciences and the Institute of Advanced Computer Studies, is available to con-



sult with faculty regarding the use of geographic information, geocoding, and geospatial resources within the context of their proposed research projects. Consultation includes on types of analysis that may be available for existing data as well as how best to collect data that includes a geospatial component.

Dr. Torrens specializes in Human Geography, which he describes as "how people acquire geographic information and use it to inform their behavior." This can include the ebbs and flows of complex urban systems as well as how humans cognize their surrounding space and how they seek and find information in the environment.

In addition to providing expertise on geospatial analysis and data collection, Torrens has already provided valuable guidance to Sangeetha Madhavan on mapping kinship networks as part of her recent R21 proposal submission to study extended kin for the children of single mothers living in informal settlements in Nairobi, in which Dr. Torrens is a Co-Investigator. He also has participated in an NICHD funded project with Michael Rendall: On an R01 subcontract he geocoded the evacuation and resettlement locations of displaced New Orleans residents. Results will be included in a presentation by Dr. Rendall scheduled for March 28.

Proposal Submissions

You can use a quick and easy form to let us know about your proposal:

www.popcenter.umd.edu/resources/public-documents/intent-to-propose

Research Profile

Ruth Zambrana, Women's Studies

"Stress for Success: A Study of Underrepresented Minority Faculty in a U.S. Research University," Robert Wood Johnson Foundation

Occupational stress has been identified as a factor in stress-related disorders (both physical and mental), poor work performance, reduced productivity and retention of qualified employees in the workforce. The nature, severity and type of stress vary according to gender, minority status, tenure status, discipline and institutional type. Job-related stress for faculty has increased and may be more severe than in other similar direct service occupations. The lack of diversity in higher education institutions is a national concern (In 2003, 15% of U.S. faculty in colleges and universities were minorities, 6% of the faculty was Black, 4% were Hispanic, with nearly half of college faculty (47%) White males, while 36% were White females). For historically under-represented minority (URM) men and women faculty, complex role configurations (worker



/ partner / parent) combined with organizational demands and perceived racism have been found to be associated with a decrease in faculty productivity, propensity to leave positions especially from the assistant to associate level professoriate, and stress-related physical and mental health disorders. Limited inquiry has explored the relationship between occupational stressors and retention rates for underrepresented U.S. born URM (African American, Mexican American, and Puerto Rican) men and women faculty. The study will examine the effects of occupational stressors of URM faculty by gender, race / ethnicity and rank on physical and mental health, 2) assess the role of personal resources and self-efficacy among URM faculty in moderating the effects of occupational stressors on physical and mental health status by gender, race / ethnicity and rank, and 3) qualitatively identify how organizational factors, organizational climate, and work-family balance are associated with perceived career path and progression among URM faculty by gender, race / ethnicity, and rank.

Mixed-methods, quantitative and qualitative measures, are used. Data will be collected from four sources; 1) survey, 2) focus groups, 3) personal in-depth interviews, and 4) review of Curriculum Vitae (CV). The sample will consist of 300 URM male and female faculty, assistant and associate professors in Research I and II institutions. The implications include contributing to gaps in the literature in both occupational health disparities and retention and productivity among URM faculty across disciplines.

Ruth Zambrana is Director of the Consortium on Race, Gender, and Ethnicity.

New Faculty

We welcome the following Faculty Associates who recently joined MPRC.

Jie Chen, Assistant Professor, Health Services Administration, received her Ph.D. in Economics from Stony Brook University. She conducts research in two fields: health disparity and health policy analysis. Her health disparity research focuses on identifying and quantifying the factors associated with the disparities in health care access, utilization and expenditure among different racial and ethnic groups and immigrants in the United States. Her research on health policy focuses on investigating the efficiency and quality of the health care delivery system.

Jerome Dugan, Assistant Professor, Public Policy, received his Ph.D. in Eco-

Continued on page 2



<u>Research Profile</u> Robin Puett

"Air Pollution, Subclinical CVD and Inflammatory Markers in the SEARCH Cohort," NIH / National Institute of Environmental Health Sciences (NIEHS)



Robin Puett is studying air pollution effects for diabetes and cardiovascular disease through an R01 grant. She points out that Type 1 *diabetes mellitus* is one of the leading chronic conditions among children and youth, and its impact is increasing worldwide. Intense medical and nutritional management of the diabetic condition and any existing cardiovascular disease (CVD) risk factors is currently the key treatment approach. Research has shown that adults with diabetes are more susceptible than non-diabetics for increased CVD morbidity and mortality associated with exposures to outdoor air pollution. Very little research has been conducted to examine whether children and youth with diabetes are similarly susceptible; however the inference seems reasonable,

given that children typically spend more time outside and are more sensitive to environmental exposures. Since the early onset of Type 1 diabetes increases CVD risks in adulthood, there is an urgent need to understand the role of air pollution exposures in this population. With representation of diverse racial and ethnic groups and geographically distinct areas of the U.S., as well as the availability of extensive, existing information on CVD risk factors, the Search for Diabetes in Youth Study (SEARCH) offers an unprecedented opportunity to systematically study the short and long-term effects of air pollution on cardiovascular risk. The study will examine the acute effects of air pollution exposures on inflammatory markers and measures of cardiovascular function, as well as the chronic effects of these exposures on cardiovascular structure.

New Faculty, continued from page 1

nomics from Rice University. His dissertation examined the role of both public and private health insurance on medical cost, use, and access. He received his Bachelor's degree in Economics from Clemson University and was a participant in the American Economic Association Summer Training Program at Duke University. His current research focuses on managed care organizations, health disparities, and healthcare regulation.

Monica Das Gupta, Research Professor, Sociology, is an anthropologist and demographer whose work deals with various aspects of population, poverty, and development. Starting with extensive village-level research, she worked on child health, including an apparent tendency for child deaths to cluster in a few households; the community-level factors that encourage circular migration; and the ways in which communities respond to population pressure. She is currently working on the implications of China's upcoming marriage squeeze for the social protection needs of future aging bachelors: the organization of preventive public health services in Sri Lanka; and a review of the literature on population. poverty, and sustainable development.

Kuisheng Feng, Research Assistant Professor, Geographical Sciences. Dr. Feng's research focuses on spatial economic modeling and related environmental issues. His expertise is in developing regional, national and global ecological economic models to assess environmental issues, especially with regard to population and urbanization, which have been identified as main driving forces for many environmental issues.

Sebastian Galiani, Professor, Economics, is also Visiting Professor at Universidad de San Andres, Argentina. He has held positions at Universidad Torcuato Di Tella and Universidad de San Andres in Argentina and was Tinker Visiting Professor at Columbia University and Universidad de Los Andes (Colombia) and visiting Scholar at Stanford and UC Berkeley. He was the chairman of the Network of Inequality and Poverty of the Latin American and Caribbean Economic Association (LACEA) during 2004 and 2005 and a member of its executive committee between 2004 and 2008. Working in the areas of Development Economics and Applied Microeconomics, he has also contributed to projects for United Nations, Inter-American Development Bank, World Bank, and the governments of Argentina, Mexico, Panama and South Africa.

Paul Hanges, Professor, Psychology, is an organizational psychologist interested in fair employment practices whose work connects with the Social and Economic Inequality theme of the Center. He has been recently become interested in intelligence and how environmental factors such as pollution, health, and quality of education can affect employment opportunity.

Ethan Kaplan, Assistant Professor, Economics. Much of his research interest has focused on the economic and political determinants of inequality, from the impact of outsourcing on wages to the impact of campaign finance laws on political support, to the impact of Fox News on voting patterns. Future projects include estimating the persistent impact of unions on inequality using random spatial variation from the late 1930s and estimating the impact of unions on voting patterns as well as on legislator political positions.

Partha Lahiri, Professor, Joint Program in Survey Methodology, received his Ph.D. in Statistics from the University of Florida, Gainesville. His research interests focus on survey sampling, multi-level modeling, small-area estimation, Bayes and empirical Bayes inference, and resampling methods. He is a Fellow of the American Statistical Association and the Institute of Mathematical Statistics and a Member of the International Statistical Institute.

Mei-ling Ting Lee, Professor and Chair, Epidemiology and Biostatistics.

Continued on page 3

Faculty News



Christine Bachrach, MPRC Faculty Associate and current President of the Population Association of America (PAA), will present the Presidential Address at the PAA Annual Meet-

ing on April 12, 2013, in New Orleans, Louisiana.

Philip Cohen has been named a Senior Fellow at the Center on Contemporary



Families (contemporaryfamlies.org). Dr. Cohen posts regularly at *The Atlantic* and keeps up with issues – such as the status of women and the question of academic

responsibility – on his "Family Inequality" blog.



Frances Gold-scheider's Swedish project on consequences of men's involvement in the family is coming to an end. She will travel there three times in the coming year, and a special issue of *Journal*

of $Family\ Issues$ on the subject scheduled for 2014.

New Faculty, continued from page 2

Dr. Lee's current research is focused on:
(a) statistical methods for genomic and proteomic data; (b) threshold regression models for risk assessments, with applications in cancer, environmental research and occupational exposure; (c) rank-based nonparametric tests for correlated data, with applications in epidemiology and genomics; (d) statistical applications in microbiology and pharmacokinetics; and (e) multivariate distributional theory and applications.

Hongjie Liu, Associate Professor, Epidemiology and Biostatistics, received his Ph.D. in Epidemiology from UCLA. His research focuses on social and behavioral aspects of HIV / AIDS and research methodology. During the past five years his research projects mainly covered egocentric social and risk networks for HIV infection, sexual risks, non-injection and injection drug use, stigma, survey methodology (e.g., respondent-driven sampling), and advanced analytical techniques (structural equation modeling, actor-partner interdependent modeling, and psychometric analysis).

Rashawn Ray, Assistant Professor, Sociology, focuses on three key areas:

the determinants and consequences of self-evaluated social class; men's treatment of women; and how racial stratification structures social life. He is currently examining how racially mixed and segregated communities influence physical activity levels across racial / ethnic groups and contribute to healthy lifestyles and obesity rates.

Liana Sayer, Associate Professor, Sociology. One area of her research agenda focuses on cross-national and historical determinants, patterns, and consequences of gendered time use. A contribution of this work is documenting when, where, and how time use matters - such as through the heightened prominence of intensive mothering and declining significance of housework. In a variety of collaborative projects she is exploring if SES and race-ethnicity influence women's and men's daily time use in ways that indicate greater self-efficacy and future time orientation. If so, this suggests time use patterns may be one pathway through which health stratification is reproduced.

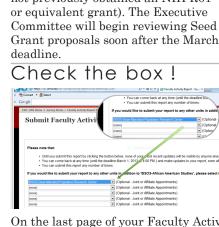
Paul Torrens, Associate Professor, Geographic Sciences. His interests and scholarship lie at the confluence of human geography (particularly behavioral geography), Geographic Information Science, and computing, where he is most keen in exploring how people acquire information about the geography of their context and surroundings and how they use that information to build understanding and behavior. (See profile on page 1.)

Leslie Turner, Assistant Professor, Economics, was awarded a Ph.D. with Distinction from Columbia University in 2012. She has a Master of Public Policy from the Gerald Ford School of Public Policy and a BA in Sociology, both at the University of Michigan. Her recent work has focused on economic evaluations of policy in the education system, as well as a review of the impact of Pell Grant aid on university pricing policies.

Yang Yu, Lecturer, Geographical Sciences, received her Ph.D. in Geography from the University of Sheffield, UK. Her research interests broadly lie on the interactions between urban development and environmental changes, and include various topics such as land use and land management, landscape perceptions and values, sustainable consumption and production, and water use issues.

March 15 Deadline Spring Seed Grant Opportunity

Researchers are invited to submit proposals for up to \$15,000 in funding for research projects that enhance population studies. Priority will be given to projects that build on current research strengths and facilitate multidisciplinary research linkages, and to junior and "new" investigators (those who have not previously obtained an NIH R01 or equivalent grant). The Executive Committee will begin reviewing Seed Grant proposals soon after the March 15 deadling.



On the last page of your Faculty Activity Report you will find a set of drop-down boxes where you can share your FAR data with an "affiliated unit." That's us! Faculty Associates should choose the entry labeled "BSOS-Dean-Maryland Population Research Center." Doing so helps us greatly with completing our annual Progress Report for NIH.



Spring Seminar Series

An ambitious series of talks by scholars in sociology, economics, family science, and other disciplines

The MPRC Spring Seminar Series, which meets Mondays at noon, will include 11 talks and a special panel session. The series underscores MPRC's dedication to interdisciplinary collaboration, with talks ranging from a perspective on Chinese population trends to methodological inquiries on how children are counted, to race issues, immigration, and social networks, as well as an economic perspective on the effects of college education on health.

The panel session will include Associate Director Sangeetha Madhavan (African American Studies), Natasha Cabrera (Human Development), and Kevin Roy (Family Science) and will provide "Comparative Perspectives on Family Complexity".

Refer to the MPRC website for the latest information about the Spring Seminar Series.

PAA Scholars

MPRC will be well represented at this year's PAA Annual Meeting In New Orleans, Louisiana. Fifteen Faculty Associates and eleven Student Research Affiliates are scheduled to participate. Of the group, 18 will participate in session presentations, including a special panel discussion on Feminism in Population Studies; 15 will present posters; three will chair sessions, and another three will act as discussants.

Of special note, Faculty Associate Christine Bachrach, currently President of the PAA, will give the President's address on Friday afternoon; Associate Director Sangeetha Madhavan will assist in a pre-conference workshop examining the state of anthropological demography.



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Seed Grant Award

Karoline Mortensen and Jie Chen, Health Services Administration, examine racial / ethnic disparities in the wake of the 2007 economic collapse. Racial and ethnic minorities were disproportionately affected by the "Great Recession" of 2007-2009, they write. African Americans and Hispanics experienced significant losses of employment,



income, health insurance and wealth. The mechanisms through which these losses affected health care services use and exacerbated racial / ethnic disparities in use during the recession have not been examined. They will use data from the Medical Expenditure Panel Survey (MEPS) from 2005-2006 and 2008-2009 to examine the relationship between state-level losses in employment, insurance, income and wealth during the 2007-2009 recession and physician visits, prescription drug fills, inpatient stays, and emergency department utilization of whites, blacks, and hispanics. Models will be estimated to identify variation in utilization patterns and relationships with state-level factors affected by the recession across states by race / ethnicity. They will specifically identify health services utilization during the recession and 1) the relationship between job loss and the resulting loss of income and health insurance, and 2) the effects of wealth losses during the housing crisis.

External Grants

Michael Rendall, Sociology, and Paul Torrens, Geographical Sciences, are working on a \$61,000 subaward of the Displaced New Orleans Residents Study which will use geospatial analysis to describe and analyze the whereabouts and social, economic, and health outcomes of residents of New Orleans in August 2005, up to four years following Hurricane Katrina. They will analyze public-use and restricted-access data from the Displaced New Orleans Residents Survey (DNORS) and public-use and restricted-access Hurricane Katrina supplement data from the Panel Study of Income Dynamics (PSID). Because the DNORS and PSID both cover the 2005 to 2009 period the PSID provides a comparison group. A second objective is to create a cleaned set of location variables in the DNORS that can be used by both the present research team and other researchers using the DNORS data.

Center news

Thandika "Starr" Harper-Hicks. Starr joined the Center in January in the role of Grants Management Specialist. She has a BA and Masters in Business Finance / Public Administration. Starr developed her skill - and now love - in working with proposals in 2008; since then she has worked in grants / financial management, fund development, auditing, and administration with 501(c)3 and community-based organizations. Her grants administration background is accompanied by experience in working with public health agencies, contracts with country-wide university faculty, and the federal government. At MPRC, Starr is responsible for pre- and postaward research administration.

Population Working Papers Series

MPRC participates in the Population Working Paper Series project hosted by California Center for Population Research at UCLA. Faculty Associates can make papers available to an audience of population researchers. Info: mprc-support@umd.edu.

Grant Submissions

Between September and February MPRC Administrative Core personnel helped Principal Investigators and their collaborators to propose over \$3.4 million in new funding. An asterisk (*) denotes submissions for which funding has been awarded.

Olivia Carter-Pokras

Northeast Collaborative Center for Transdisciplinary & Regional Research in Equity & Disparities (subcontract), NIH / National Institute of Minority Health and Health Disparities

Frauke Kreuter

Collaborative Research: Decomposing Interviewer Variance in Standardized and Conversational Interviewing (subcontract), NSF

Collaborative Research: Investigating the Utility of Interviewer Observations on Survey Response Processes (subcontract), NSF

Jessica Goldberg

Leveraging Patients' Social Network to Overcome Tuberculosis Under-detection in India: A Field Experiment, NIH / National Institute of Allergy and Infectious Diseases

Sangeetha Madhavan

Measuring Kinship Support for Children of Single Mothers in Nairobi, Kenya, NICHD

Michael Rendall

* Displaced New Orleans Residents Study (subcontract), NICHD