University of Minnesota Sociologist Dr. Carolyn Liebler’s work examines changes in racial self-identification over time. Working with her collaborators at the U.S. Census Bureau, Liebler has analyzed a unique big dataset of linked census records — and the results have the potential to revolutionize public policy.

Making Connections

Liebler’s interest in racial and ethnic self-identification was piqued early in life via her brother, a transracial adoptee. For both her Masters and Doctoral research at the University of Wisconsin-Madison, Liebler studied American Indian identity through analysis of census data.

Building on her experiences using Census data for research on race and ethnicity, Liebler joined the IPUMS-USA project as a post-doc in 2002 to organize, harmonize, and expand the race and Hispanic origin variables. Her work on IPUMS-USA gave her a deeper understanding of how these concepts have been measured over time and the strengths and weaknesses of the data.

“I started to understand where there were holes in the data,” she explains. “For example, in 1970 the Census Bureau included a Hispanic origin question which was so poorly worded that many Hispanics did not self-identify, while many people of non-Hispanic origin did.”

Liebler has continued to work on understanding how race and ethnic identity are expressed in the Census. In a 2014 *Demography* article, “More than One Million New American Indians in 2000: Who Are They?” Liebler and co-author Timothy Ortyl, took a close look at numerical and proportional growth of subgroups within this population. Their research identified characteristics of a million “new” American Indians — people who reported this race for the first time in 2000.

Working with the hypothesis that race response fluidity may affect all groups, and not only American Indians, Liebler conducted qualitative interviews with people who changed race responses. Early results showed “that these changes are not conscious.” According to Liebler, “Instead, they reflect subtle changes in relationships with family and friends of varying race and ethnic groups.”

After approaching U.S. Census Bureau researchers in Suitland, Maryland, to further her understanding of race and ethnic identity in census data, Liebler began collaborating with Sonya Rastogi, Remika Bhaskar, James Noon, Sharon Ennis, and Leticia Fernandez of the Census Bureau’s Center for Administrative Records Research and Application (CARRA).

Using an unprecedented big data set — nearly 200 million individual-level

continued on page 6
MPC is Booming!

By all measures, it has been a spectacular year for the Minnesota Population Center. MPC is now the largest research center at the University with respect to sponsored research. If we were a department, we would rank fifth in sponsored research out of 877 departments at the University—just after Physics & Astronomy and ahead of Chemistry/Materials Science.

We have put those funds to good use. We added six fabulous new faculty members in the past two years through a University-wide search in Population Studies. We now have nearly 100 faculty affiliates spread over 26 departments in nine colleges. MPC researchers are making extraordinary new discoveries in topics like changes in marriage and families, demographic measurement and methods, changes in racial identification, and educational disparities. You will learn about some of them in this issue.

Our staff has grown in size as well. Since January, we have added a dozen new full-time staff to support our research, bringing us to 85 staff members and 100 undergraduate and graduate student assistants. All this growth has required physical expansion. In January 2015, we opened two new offices: the IPUMS-International project moved into space in the Humphrey Center, and the Historical Census Projects moved to 1200 Washington Avenue.

Most importantly, our efforts to integrate and disseminate the world's largest collections of demographic data and metadata continue to have a global impact. Over the past 15 years we produced 70 times more microdata than the Census Bureau, and we are now the world's largest distributor of population data, exporting over two terabytes of data a week to some 70,000 researchers around the world. These data result in an average of one new publication every nine hours, and MPC-produced data are the most frequently-used data source in the top journals of the field. It is a great time to be Director of this spectacular center, and I want to thank all of the employees and members who make it all possible.

Steven Ruggles
Director, Minnesota Population Center
Regents Professor of History

MPC News Editorial Staff
Editor/Writer: Pamela Vold
Co-Editor and Contributing Writer: Gina Rumore
Contributing Writer: Melissa Kelley
Graphic Designer: Shawn Welch

MPC by the Numb3rs

<table>
<thead>
<tr>
<th>Year</th>
<th>Data Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>9</td>
</tr>
<tr>
<td>20,618</td>
<td>New users</td>
</tr>
<tr>
<td>68,592</td>
<td>Data extracts</td>
</tr>
</tbody>
</table>
Data-Driven Connections
BETWEEN MATERNAL HEALTH AND INEQUALITY

Assistant Professor Katy Kozhimannil uses demographic methods to see a more complete picture of the connections between reproductive health and the lives of girls and women.

Katy Kozhimannil’s work combines her two passions, “data and women’s health.” Kozhimannil is an MPC faculty member and assistant professor in the School of Public Health in the Health Policy and Management division. Her work examines the measurement and improvement of maternity care quality, focusing on vulnerable populations and geographic variations, including rural health. Through her scholarship and advocacy on the behalf of reproductive-age women, Kozhimannil contributes to the evaluation and implementation of policy that has the power to improve maternal health care and the lives of women and their families.

Toward a Demographic Approach
Kozhimannil joined the Peace Corps in 1999 after graduating from the University of Minnesota. At her post in Mozambique she was confronted with the harsh reality of gender inequality issues in education. As an English teacher to middle-school-aged girls, Kozhimannil recalls, “I didn’t really understand the enormity of gender inequality issues and how those dynamics played out in real people’s lives until I lived and worked in southern Africa.” Half of her seventh grade students were girls. By ninth grade, girls represented just 10% of enrollment. Most of the withdrawals from school were due to the social effects of reproductive and sexual health issues. While some of the students had contracted HIV themselves, the majority had stopped their educations to care for sick family members and younger family members.

When she returned to Minnesota she taught high risk English language learners at a Twin Cities junior high school. There she noticed a similar pattern: girls stopping or curtailing their educations largely due to reproductive and sexual health issues and related family obligations. Frustrated at observing the trend again at home, Kozhimannil decided to move her work to the realm of policy. “I wanted to help fix the system that was generating these stories one after another.”

Kozhimannil quickly learned that she needed a demographer’s toolkit to understand the broader dynamics that make opportunities and resources available to some communities and not others. The “aha moment of how powerful data can be” came while completing her master’s in public policy at Princeton. Demographic methods allowed her see a more complete picture of the connections between the lives of girls and women and reproductive and sexual health that fascinated her. “If you take a disease-specific approach,” she explains, “you miss all the other factors. People have sex for a lot of different reasons, and it usually has nothing to do with diseases. It has a lot more to do with the things demographers study.”

Kozhimannil moved on from her master’s work to earn a Ph.D. in Health Policy from Harvard University in 2009. In 2010 she joined the faculty of the University of Minnesota, where she has built a reputation as one of the world’s leading scholars on a range of health care issues affecting reproductive-age women. Her current research projects include studies of cesarean rates, doula care, rural maternal care, racial disparities, and postpartum depression. She remains firmly committed to using data to illuminate connections between maternal health and inequality.

One of Kozhimannil’s recent papers, published by The Journal of Rural Health, uses a multivariate logistical regression of nationally representative hospital discharge data from nine states to analyze relationships among hospital annual birth volume, three measures of obstetric care quality, and two patient safety measures.

“I really do have to be very careful about not becoming political... and about basing my conversations and discussions on the evidence and the data. Sometimes data tell us things we don’t like.”

—Katy Kozhimannil

continued on page 8
Getting to Know MPC Faculty

The Minnesota Population Center serves almost 120 faculty members and research scientists from nine colleges and institutes and 26 departments at the University of Minnesota. The MPC employs approximately 192 people, including research support staff, research assistants, computer programmers and technicians, administrative staff, and data processing staff. Thanks to the Provost, in 2013 & 2014 we were able to conduct a University-wide hire in Population Studies, which brought us six new faculty members.

Benjamin Capistrant's research focuses on social determinants of aging and non-communicable diseases, both in the U.S. and in low and middle-income countries. As assistant professor in the Division of Epidemiology & Community Health at the School of Public Health, he is interested in how social factors like family dynamics, race/ethnicity, and education are associated with health outcomes such as disability, cognitive function, and cardiovascular disease. He received his doctorate from Harvard University and completed postdoctoral training at the Carolina Population Center at the University of North Carolina-Chapel Hill. His most recent research will appear in The Journals of Gerontology, Journal of American Geriatrics Society, and Cerebrovascular Diseases.

Jack DeWaard joined the Sociology faculty in 2013 after completing his Ph.D. in Sociology at the University of Wisconsin – Madison, where he was a NICHD Trainee in Demography and Ecology. Jack’s primary research interests include international and internal migration, assimilation and integration, demography and ecology, and quantitative methods. Jack will be teaching Migration and Migrants in Demographic Perspective in the fall of 2015. His newest article, entitled “Recovery Migration after Hurricanes Katrina and Rita: Spatial Concentration and Intensification in the Migration System,” is forthcoming in Demography.

Audrey Dorélien joined the faculty of the Humphrey School for Public Affairs in fall 2014 after her tenure as a Robert Wood Johnson Foundation Health & Society Scholar at the University of Michigan. She earned her Ph.D. in public affairs from Princeton University with a concentration in demography. Her dissertation documented human birth seasonality in sub-Saharan Africa, identifying the social and ecological drivers of birth seasonality and analyzing the impact of birth seasonality on infectious disease dynamics and optimal timing of pulse vaccination campaigns. Her current research assesses the effects of in utero exposure to influenza on infant health outcomes. Audrey’s research has appeared in Population Development Review, Population Health Metrics, and PLoS ONE.

J. David Hacker joined the Department of History faculty as an Associate Professor in the fall of 2013 after two years at the California Institute of Technology and 11 years at Binghamton University, SUNY. Hacker received his Ph.D. from the University of Minnesota in 1999. He then worked at MPC as a post-doctoral fellow. Hacker’s research interests include historical demography, quantitative history, and the American Civil War. He is the recipient of the Dorothy Thomas award from the Population Association of America, the John T. Hubbell award from Civil War History, and a career-development award from NICHD. His research on Civil War mortality was featured in the New York Times and on NPR’s “All Things Considered.”

Janna E. Johnson is an assistant professor in the social policy and policy analysis area at the Humphrey School for Public Affairs. An economic demographer, her primary research focuses on the causal relationship between migration and mortality, especially for migrants out of rural areas in the U.S. She also works on estimating undercount and other measurement issues in the U.S. Census using demographic methods, showing the implications these problems have for economic and social research using Census data. She completed her Ph.D. in public policy at the University of Chicago. Janna’s work has appeared in Economic Development Quarterly.
Elizabeth Wrigley-Field works at the intersection of formal demography and the sociology of inequality. Her work on mortality selection considers how demographic theory can be revised to incorporate more substantively realistic models of heterogeneity within populations. Elizabeth completed her Ph.D. in Sociology at the University of Wisconsin-Madison and will join the faculty in the Department of Sociology in Fall 2016. She is currently serving as a Robert Wood Johnson Health and Society Scholar at Columbia University, where she uses demographic tools to study human-microbe interactions. She has recently published in *Demography* and *Vienna Yearbook of Population Research*.

**JUST FOR FUN!**

If you could invent an ice cream flavor, what would it be?

**Benjamin Capistrant**
Mango Chutney Sorbet — the sweetness of the mango, offset by a little savory hint of curry and the tanginess of ginger.

**Jack DeWaard**
Why invent a new flavor when peanut butter and chocolate have already been successfully combined?

**Audrey Dorélien**
I make a great strawberry cobbler and would love an ice cream version of this.

**J. David Hacker**
Bacon, because...bacon.

**Janna E. Johnson**
Swedish meatball ice cream. Can you tell I was raised in northern Minnesota?

**Elizabeth Wrigley-Field**
Olive oil, black pepper, and lime. The olive oil makes it silky, and small peppercorns add crunch along with their spice.

---

**MPC at the Population Association of America 2015 Annual Meeting**

Thank you to our members for their support at PAA 2015, and a special thank you to the Office of the Vice President for Research at the University of Minnesota for sponsoring the MPC party at the meeting.
The team at the U.S. Census Bureau (from left to right): Sonya Rastogi, Sharon Ennis, Renuka Bhaskar, James Noon. Not shown - Leticia Fernandez

linked responses from the 2000 and 2010 Censuses — Liebler and her CARRA collaborators have studied race and ethnic response change by individuals across the many and diverse racial groups in the United States. Their papers provide insights into the social processes surrounding race and ethnic response change.

A national story

The findings from this research grabbed the attention of the popular media in May 2014 when the group presented their results at the Population Association of America annual meeting. Pew Research Center staff sat in on the talks and posted the report, “Millions of Americans changed their racial or ethnic identity from one census to the next.” Nate Cohn, a conservative blogger for the New York Times, sensationalized the Pew Report in his blog post “More Hispanics Declaring Themselves White.” Media outlets from National Public Radio to the Colbert Report followed suit.

The presentations were based on two working papers which showed that a substantial number of people changed their race or Hispanic response between Census 2000 and the 2010 Census. For example, many Hispanics gave a race response of “white” in one census and “some other race” in the other, and many people reported “American Indian” in one census and “white” in the other. Rather than being dramatically different kinds of people, Liebler and her team found that the inflow of people in a census racial or ethnic category was similar in size to the outflow of people from that same group.

While the group’s findings fit with the concept of fluid racial identity, Liebler’s previous experience with IPUMS and census data has given her a more practical take on the results. She explains, “An answer to a race question is an answer to a race question. It is not necessarily a person’s identity. Changes in an individual’s self-perception are probably only part of the story, as any data collection effort will include some messiness from differences in who answered the question for the person, changes in social context affecting how they answer, as well as subtle changes in data cleaning procedures.”

In fact, Liebler hopes her body of research will alert scholars that race responses are commonly misused in social science and health research when that research relies on the assumption that race and ethnicity are life-long characteristics that are always reported the same way across time, circumstance, and questionnaire wording. She argues that the use (or misuse) of race-response data could have huge implications for public policy, public health, and the allocation of resources for social services.

This concern is amplified and complicated by our knowledge from countless studies that race and racial identity are actively constructed in daily life. “We need to be aware of how the questions are asked and how people are responding to them in different situations,” she says. “As researchers, we need to think more carefully about the strength of our core analytic assumptions and, if reality does not match, we need to adjust.”

Race response fluidity between Census 2000 and Census 2010, by Hispanic origin

Of total number reporting this race/Hispanic origin in 2000 or 2010, percent who gave this report in 2000 only (red), percent who gave the same report in 2000 and 2010 (gray), and percent who gave this report in 2010 only (blue)

Image represents 162 million people in the 2000 Census and 2010 Census linked data (with case selection) and is not nationally representative. Number in 2010 includes only people in the data used for this study.

AIAN = American Indian/Alaska Native; NHPI = Native Hawaiian and other Pacific Islander; SOR = Some Other Race.
MPC Research and Collaboration Award

The MPC Research and Collaboration Award is a University of Minnesota-wide grant competition for the most novel and promising research projects making use of one of our flagship data sets: IPUMS-USA, IPUMS-CPS, IPUMS-International, ATUS-X, IHIS, NHGIS, IDHS, or Terra Populus. The award recipients receive $5,000 and will have the opportunity to present the results of their research project at the MPC Seminar Series in 2016.

Multi-dimensional ranking and graphical depiction of correspondence between socio-economic and environmental vulnerabilities in select societies

SINGDHANSU CHATTERJEE, Associate Professor of Statistics
UJJAL KUMAR MUKHERJEE, Ph.D. Candidate in Carlson School of Management

How are Race-Specific Mortality Rates Affected by Incorrect Race Reports on Death Certificates?

CAROLYN LIEBLER, Associate Professor of Sociology
JULIA DREW, Research Associate at MPC

MPC IPUMS Research Awards

These awards honor the best of 2014’s published research and self-nominated graduate student papers that used MPC data to advance or deepen our understanding of social and demographic processes.

2014 IPUMS-International Research Award

Faculty:
The Double Disadvantage Reconsidered: Gender, Immigration, Marital Status, and Global Labor Force Participation in the 21st Century
KATHARINE M. DONATO, BHUMIKA PIYA, AND ANNA JACOBS

Graduate Student:
New Patterns of Structural Change and Effects on Inclusive Development: A Case Study of South Africa and Brazil
JOSHUA GREENSTEIN

2014 IHIS Research Award

Faculty:
Hispanic Older Adult Mortality in the United States: New Estimates and an Assessment of Factors Shaping the Hispanic Paradox
JOSEPH T. LARISCY, ROBERT A. HUMMER, AND MARK D. HAYWARD

Graduate Student Co-winners:
Quality of Life and Psychological Distress among Older Adults: The Role of Living Arrangements
CARRIE E. HENNING-SMITH
Labor Market and Health Insurance Impacts Due to ‘Aging Out’ of the Young Adult Provision of the Patient Protection and Affordable Care Act
HEATHER DAHLEN

2014 IPUMS-USA Research Award

Faculty:
Fertility Transitions Along the Extensive and Intensive Margins
DANIEL AARONSON, FANIAN LANGE, AND BHASKAR MAZUMDER

Graduate Student Co-winners:
Dollars and Dropouts: The Minimum Wage and Schooling Decisions of Teenagers
ALEX SMITH
Long-Term Effects of Women’s Suffrage on Children’s Education
ESRA KOSE, ELIRA KUKA AND NA’AMA SHENHAV
at rural hospitals. Her conclusions here, as well in her other work, suggest a high level of unexplained variability in maternal care quality across settings in the U.S. The academic community has taken notice: her article “Cesarean Delivery Rates Vary Tenfold Among U.S. Hospitals; Reducing Variation May Address Quality and Cost Issues” was one of the top 15 most-read articles in *Health Affairs* in 2013.

**From Research to Policy**

Throughout her career, Kozhimannil has strived to make her research results accessible and relevant to both the public and to policy makers. This work has earned her research her national coverage in the *New York Times* and on National Public Radio. More importantly, her work has had a direct impact on policy to improve maternal health. In 2013, she published a study in the *American Journal of Public Health*, which showed a 40% reduced chance of cesarean for Medicaid recipients who had a doula-supported birth. Doula care, she argues, not only provides significant benefits for health and well-being, but also offers potential cost savings for taxpayers, who finance almost half of all U.S. births.

This study, in addition to years of advocacy from the doula community and the Minnesota Better Birth coalition, sparked action in the Minnesota legislature. The “doula bill,” a law that permits Medicaid payment for doula services, was passed in May 2013.

Working to improve policy through research has not always been as straightforward and successful as the doula bill, however. In 2006, the New Jersey legislature passed a law mandating universal screening for post-partum depression, a policy for which women’s health advocates had fought very hard. Kozhimannil published a 2011 *Health Affairs* article showing that this screening had not improved maternal mental health care for Medicaid recipients. Writing in the *New York Times* in June 2014, she explained that, while mandatory screening was a progressive step, improved access to treatment was required to make the policy effective.

Kozhimannil knew the risk of making public the results of her research when the New Jersey legislature was poised to make budget cuts, and she anticipated the anger that women’s health groups expressed at her decision to publish the results. “As a researcher,” she commented, “I really do have to be very careful about not becoming political... and about basing my conversations and discussions on the evidence and the data. Sometimes data tell us things we don’t like.” To date, New Jersey has maintained mandatory screening but has not passed further legislation on treatment for postpartum depression.

Ultimately, Kozhimannil believes that the worlds of policy and academia can be complimentary. In her experience, improving the quality and efficacy of maternal health care has been a bipartisan concern and an issue in which legislators have been responsive to the advice and research of academics. The main tension between policy and academia she has experienced personally is the tension of time: impacting policy that affects real people requires building relationships in the community and in the legislature. This is a small sacrifice for Kozhimannil. Moving her scholarship beyond peer-reviewed journals to policy makers, clinicians, and non-profit organizations with decision-making power is essential to her. “It is what motivates me.”