# Northwestern POLICY RESEARCH

# **NEWS**

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### **IPR Welcomes New Director**

Economist Schanzenbach brings research, policy expertise



Incoming IPR Director Diane Whitmore Schanzenbach leads a Hamilton event in Washington, D.C.

Northwestern University has appointed prominent economist Diane Whitmore
Schanzenbach, who is Margaret Walker
Alexander Professor, as IPR director, effective
September 1.

An IPR fellow whose research examines issues related to education and child poverty, Schanzenbach joined Northwestern in 2010 and is a faculty member in the department of human development and social policy with a courtesy appointment in the department of economics. For the past two years, she was on leave as director of The Hamilton Project, a research group within the Washington,

D.C.-based Brookings Institution, where she was also a senior fellow in economic studies.

As IPR's seventh director, Schanzenbach will succeed David Figlio, who will become dean of the University's School of Education and Social Policy. He has served as IPR's director since September 2012 and is Orrington Lunt Professor of Education and Social Policy and of Economics. During his tenure, Figlio oversaw many important changes, including structural enhancements and new collaborations with other Northwestern schools and with external partners. He will continue to contribute as an IPR fellow.

(Continued on page 12)

# Expanding the NorthwesternEvanston Education Research Alliance

# New funding propels research-practice partnership

Evanston's educational research-practice partnership will expand thanks to \$1 million in combined support from the Lewis-Sebring Family Foundation and the Spencer Foundation. The partnership, which brings together Evanston schools, their administrators, and Northwestern University researchers from IPR and the School of Education and Social Policy (SESP), seeks to improve the lives of Evanston students through the implementation of practical research findings.

The "Northwestern-Evanston Education Research Alliance" will assure a continuous cycle of research, feedback, policy implications, and ongoing study that will create more opportunities for refining practical, on-theground policies and further research.

The initiative strengthens the reciprocal relationship between Northwestern and Evanston's two school districts—Evanston/ Skokie School District 65, which serves pre-K through eighth grade, and Evanston

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#### **Newsletter Staff**

Editor: Patricia Reese

**Assistant Editors:** Evelyn Asch, Sara Schumacher, and Katie Scovic

**Newsletter Design:** Jeanine Shimer

Layouts: Katie Scovic

Institute for Policy Research Northwestern University 2040 Sheridan Rd. Evanston, IL 60208-4100

www.ipr.northwestern.edu ipr@northwestern.edu @ipratnu

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For mailing list updates and corrections, please email ipr@northwestern.edu.

## IPR RESEARCH NOTES

### **Earthquake Faults: Smarter Than We Think**

A team of Northwestern University researchers now have an answer to a vexing age-old question: Why do earthquakes sometimes come in clusters?

The research team has developed a new computer model and discovered that earthquake faults are smarter—in the sense of having better memory—than seismologists have long assumed.

"If it's been a long time since a large earthquake, then, even after another quake happens, the fault's 'memory' sometimes isn't wiped out, so there's still a good chance of having another," said geophysicist and IPR associate **Seth Stein**, the study's senior author.

"As a result, a cluster of earthquakes occurs," he said. "Earthquake clusters imply that faults have a long-term memory."

The model shows that clusters can occur on faults with long-term memory, so that even after a big earthquake happens, the chance of another earthquake can stay high. The memory comes from the fact that the earthquake did not release all the strain that built up on the fault over time, so some strain remains after a big earthquake and can cause another.

"This isn't surprising," said IPR statistician **Bruce Spencer**, who co-authored the study. "Many systems' behavior depends on their history over a long time. For example, your risk of spraining an ankle depends not just on the last sprain you had, but also on previous ones."

Seismologists have usually assumed that the timing of the next big earthquake on a fault depends on the time since the last one happened. In other words, a fault has only short-term memory—it only "remembers" the last earthquake and has "forgotten" all the previous ones.

This assumption goes into forecasting when future earthquakes will happen, and then into hazard maps that predict the level of shaking



Seth Stein

for which earthquake-resistant buildings should be designed.

However, Leah Salditch, a graduate student in Stein's research group, explained, "Long histories of earthquakes on faults sometimes show clusters of earthquakes with relatively short times between them, separated by longer times without earthquakes. For example, during clusters on the San Andreas, big earthquakes happened only about 50 years apart, while the clusters are separated by several hundred years. Clusters also have been found on the Cascadia fault system off the coast of Oregon, Washington, and British Columbia, and along the Dead Sea fault in Israel."

These results could be important for forecasting when future earthquakes will happen, said IPR graduate research assistant Edward Brooks, an author of the study.

"When you're trying to figure out a team's chances of winning a ball game, you don't want to look just at what happened in the last game between those teams," Brooks said. "Looking back over earlier games also can be helpful. We should learn how to do a similar thing for earthquakes."

Seth Stein is William Deering Professor of Geological Sciences and an IPR associate. Bruce Spencer is professor of statistics and an IPR fellow. Edward Brooks is an IPR graduate research assistant.

### A Two-Generation Approach to Reducing Poverty

Pairing early childhood education for low-income children with career training for their parents has the potential to break the cycle of poverty, according to IPR researchers.

The Two-Generation Research Initiative, led by IPR developmental psychologist Lindsay Chase-Lansdale and IPR research associate professor Teresa Eckrich Sommer, is studying CareerAdvance®, a model two-generation program in Tulsa County, Oklahoma.

One year into the study, the researchers report promising early evidence that targeting both parents and children with education interventions increases success rates for both.

The researchers are tracking three indicators—parents' education and employment, parents' psychological well-being, and children's attendance—among approximately 250 Head Start children and their parents, half of whom participated in CareerAdvance, while the other half received Head Start services only.

After a year, 61 percent of participants attained a career certificate and 49 percent of program parents were employed in the healthcare sector, compared with 3 and 31 percent, respectively, in the comparison group.

"By combining the two and embedding career training, postsecondary classes, and support services for the parents within the Head Start program, the two-generation approach capitalizes on the parents' dedication to their children," Chase-Lansdale said.

Pairing the programs also has benefits for children. Head Start attendance was 3 percentage points higher for children in the program, and chronic absenteeism was 17 percentage points lower.

"What's truly impressive about these findings is that all are above and beyond the benefits of CAP Tulsa's Head Start impacts, which is a very high bar," said developmental psychologist and IPR associate Terri Sabol.



Lindsay Chase-Lansdale

"These educational benefits to parents and children from disadvantaged households may compound over generations and help families become more upwardly mobile and promote economic self-sufficiency," Sommer added.

Lindsay Chase-Lansdale is Frances Willard
Professor, an IPR fellow, and Associate Provost
for Faculty. Teresa Eckrich Sommer is IPR research
associate professor. Terri Sabol is assistant professor
of human development and social policy and an IPR
associate. For more, visit www.ipr.northwestern.edu.

# 'Masking' the Loss of U.S. Manufacturing Jobs

Without the housing boom of the early 2000s, unemployment would have spiked years before the start of the Great Recession, according to a recent study by IPR economist Matthew Notowidigdo and his colleagues. Instead, the housing boom—and the related increase in construction jobs—concealed a substantial loss in manufacturing jobs between 2000 and 2007.

"Things were happening before the recession in the labor market," Notowidigdo explained. "There were structural changes that we might



Matthew Notowidigdo

have noticed but were masked by the housing boom."

Published in the *Journal of Economic Perspectives*, the article details how the
U.S. economy lost about one-third of its
manufacturing jobs between 2000 and 2015.
Despite this large decline, the employment
rate for men aged 25–54 without a college
degree only fell about 3 percentage points
between 2000 and 2007.

This smaller decrease is due to the housing boom pushing employment rates for less-educated workers upwards, the researchers found. Between the mid-1990s and mid-2000s, construction jobs surged by 3 million, peaking at almost 8 million jobs in 2006. Notowidigdo explains that the housing boom almost exactly made up for the lost manufacturing employment for non-college men, "masking" the labor market effects of that sector's decline.

When the housing market collapsed in 2007, it brought down the construction sector, and there was a sharp decline in employment among male workers without a college education. These men faced the disappearance of jobs related to the housing boom, as well as fewer opportunities in the manufacturing sector. Many of the men who had been employed in construction ended up leaving the labor force entirely.

Beyond increasing understanding of the unemployment rate, Notowidigdo's study also illustrates how the decline in manufacturing has added to inequality.

"Our results account for some portion of the increased earnings inequality between higher- and lower-skilled workers that has occurred since the early 2000s," the researchers wrote.

Matthew Notowidigdo is associate professor of economics and an IPR fellow.

### **Manufacturing a Better Organ Transplant Process**

What do organ transplants and manufacturing have in common?

According to Jane Holl, pediatrician and IPR associate, a common technique in the manufacturing world—known as a Failure Mode Effects and Criticality Analysis (FMECA)—can also be used to improve complex processes in healthcare such as procuring and transporting organs.

"Organ transplantation is one of the most risky and complex methods of healthcare," she explained, noting that only 22,000 deceased organs are donated each year, yet over 120,000 people are on the organ waiting list. With such a shortfall of supply, identifying possible failures in the processes of organ procurement, and working to correct them, is critical.

Holl outlined a three-step study she conducted with her co-authors, which included a detailed risk assessment of "what can go wrong" in the organ procurement process, the development of an

implementable solution, and a pilot test of this new method.

The researchers began by using the FMECA method to identify vulnerabilities and potential errors in the transplantation process. Through interviews with representatives of organ transplant non-profits and centers, they pinpointed the two most commonly reported errors: data entry and issues with labeling the organs.

"We're still writing labels by hand for these precious 22,000 organs that we spend hundreds of thousands, if not millions, of dollars to recover in the United States," said Holl. She emphasized how mistakes such as writing the wrong donor ID number can result in an organ being delivered to a recipient who is not the correct match for it.

To address such errors, the researchers developed a new app and label printer to standardize and improve the procurement process. They then tested the app and printer



Jane Holl

through lab-based simulations that involved real organ procurement teams working to obtain, label, and transport an organ.

The new method is estimated to address about 65 percent of the highest-risk failures by reducing the number of organs discarded in the process and lowering procurement costs. Moving forward, the method could be important for encouraging live donations to address the supply shortage, according to Holl.

Jane Holl is Mary Harris Thompson, MD, Professor and an IPR associate.

# Identifying Barriers to HIV Prevention for Young Gay Men

While rates of HIV infections have fallen for Americans overall, one demographic group, gay teens and young adults between the ages of 13 and 24, now accounts for more than 70 percent of new cases. Given the high risk, this group stands to benefit the most from a new drug that can prevent HIV infection, according to IPR researchers.

IPR associates **Gregory Phillips II** and **Brian Mustanski**, medical social sciences faculty, and their colleagues, explore awareness and

use of pre-exposure prophylaxis (PrEP), a drug that prevents HIV infection, among young men who have sex with men.

The researchers surveyed a sample of 759 racially diverse, young gay men aged 18–29 about what they knew about and/or their use of PrEP. While 67 percent reported being aware of the drug, less than 9 percent said they used it. For those who did not, more than 30 percent had either never heard of PrEP—or had heard of it but did not know what it was.

Uncertainty about how to access PrEP was the most common reason respondents gave for not using the drug. Other barriers included its price, concerns about its side effects, and the lack of health insurance.

Mustanski, who is principal investigator, called for giving adolescents access to PrEP for HIV prevention, just as they can access HIV testing and contraception. Phillips, meanwhile, recommended doing more to

increase awareness of PrEP, especially in areas outside of cities.

"There's not very much marketing at all around PrEP, and even people who do hear these messages tend to be limited to cities," Phillips said. "There are many young men who are gay or bisexual living in the suburbs who just don't know about this intervention."

Phillips is currently working on projects with the Chicago Department of Public Health that could inform future interventions to address the lack of awareness and uptake of PrEP. He and his collaborators are targeting high-risk populations like young gay men and transwomen for PrEP roll-out, and will examine not just uptake, but also awareness among both healthcare providers and study participants.

Brian Mustanski is professor of medical social sciences. Gregory Phillips II is assistant professor of medical social sciences. Both are IPR associates.



Brian Mustanski

### **Communicating Science in a Politicized Era**

"When it comes to climate change, there's about as much of a scientific consensus as you can get," according to IPR political scientist James Druckman. Yet a clear partisan divide exists, with about half of the U.S. public believing that humans are the primary drivers of climate change and the other believing that it is a naturally occurring phenomenon.

Druckman has been studying public opinion on climate change to understand the hurdles to effectively communicating information on seemingly controversial scientific topics. Drawing on several of his recent studies, he identified three key challenges to this "complex problem"—a tendency to rely on irrelevant or inaccurate information, partisan polarization, and the politicization of science.

#### **Relying on Inaccurate Information**

In a study in *Nature Climate Change*, Druckman found individuals based their climate change beliefs on the temperature that day—which in the experiment was 10 degrees higher than normal.

He was able to mitigate this "local warming effect" by prompting respondents to consider the weather over the entire year. This nudge also endured for at least some time, with a replication study finding the prompt continued to affect beliefs seven days later.

The key for scientists here, Druckman said, is to use language that minimizes "attribution substitution," where people believe the information most readily available in their mind no matter how relevant (or not) it is to the topic—which means prompting people to think about temperature changes over time.



James Druckman

#### **Partisan Polarization**

People increase their support for an issue when told their political party endorses it, according to a survey by Druckman, IPR social policy expert Fay Lomax Cook, and Toby Bolsen of Georgia State University. When the endorsement comes from the opposite party, however, individuals' support for the issue drops.

But the study also shows it is possible to overcome such partisan reasoning by asking respondents to justify their opinions.

Fostering more in-depth discussion prompts people to think about how accurate a party's position is on a given issue, Druckman said.

#### The Politicization of Science

Druckman has also examined how political party affects whether people agree with the scientific consensus on climate change. In an IPR working paper with Bolsen, he asked more than 1,300 randomly selected participants from across the political spectrum to what extent they think humans cause climate change versus to what extent they think it results from natural changes.

One group of respondents received a statement concluding that climate change is "primarily due to human activities." Still, this information did not lead all participants to higher levels of belief in human-induced climate change. In fact, for Republicans with higher-than-average political and scientific knowledge, the consensus information actually drove down their beliefs that human activity is fueling climate change.

"The bottom line is that basic human psychology and the nature of politics makes effective scientific communication difficult," Druckman explained. "That said, there are approaches to enhancing the impact of science on public opinion. Identifying these approaches is critical for the advancement of science and society."

James Druckman is Payson S. Wild Professor of Political Science, IPR associate director, and an IPR fellow. Fay Lomax Cook is professor of human development and social policy and an IPR fellow.

### **Do Boycotts Work?**



Brayden King

Kellogg's, Pepsi, Uber, L.L. Bean. Over the past year, a number of high-profile companies have been the targets of boycotts, many with a distinct political tone. Yet the question remains—are these boycotts effective?

According to IPR associate **Brayden King**, a professor of management and organizations, activists who call for boycotts usually set out "to put financial pressure on a company" by convincing consumers to shop elsewhere.

"But it turns out that's not the way that boycotts usually work," he explained. "The typical boycott doesn't have much impact on sales revenue."

One reason is consumers' habitual nature. Even people who publicly denounce a company might still purchase that company's products. Plus, the people boycotting a company might not be its target consumers.

Yet boycotts can still be effective. King finds that while boycotts rarely hurt revenues, they can threaten a company's reputation, especially through media coverage.

"The no. 1 predictor of what makes a boycott effective is how much media attention it creates." he noted.

His research shows that the most successful boycotts are those that generate the most media coverage, as such headline-grabbing boycotts lead to a greater fall in stock prices and are more likely to cause a company to change its behavior.

Brayden King is the Max McGraw Chair in Management and the Environment and an IPR associate.

### **FACULTY SPOTLIGHTS**

### Seema Jayachandran

IPR economist stays 'grounded in the real world'

Two years into her PhD program in theoretical physics at Harvard, IPR economist **Seema Jayachandran** realized it wasn't the right fit. In casting around for ideas, she discovered economics.

"It wasn't as abstruse as theoretical physics, and I thought that might be the right compromise—pursue academia and do something quantitative, but a little more grounded in the real world," Jayachandran said.

Today, instead of studying theories on the mass of quarks or leptons, she studies gender differences in the mass of humanity—and other issues with practical policy applications in countries such as India and Uganda.

# Why Does India Have More Boys than Girls?

One of these pressing problems involves the ratio between male and female children in India, which has worsened rapidly since the 1970s. A decreased fertility rate is generally seen as a form of progress in developing countries, but does it also relate to couples choosing to have fewer daughters?

In one study, Jayachandran quantifies the relationship between the sex ratio and how many children a couple wants. She finds that as family size decreases—which is occurring with economic development in India—the desire for a son over a daughter increases.

"The most important thing [in India] is to have one son," Jayachandran explained, noting that the eldest son is significant because his parents live with him when they are older, and he also holds the meaningful Hindu role of lighting his parents' funeral pyres.

However, as long as they have one son, couples in India are not against having daughters. In fact, if family size is larger, they actually indicate they want more daughters than sons.

Jayachandran noted that progressives in India want parents to be able to have

smaller families, and they also want women to have access to abortion so they can control their fertility.

"But once you have those two things, it makes it hard to keep the problem with the sex ratio from getting worse," she said.

#### **Changing Gender Attitudes**

In related work, Jayachandran zeroes in on the Indian state of Haryana, which has one of the most skewed sex ratios in the world. Its government pays parents cash when they have daughters, but Jayachandran found fault with this method of addressing the sex ratio.

"I just don't think it makes sense for the next 100 years to be paying people to have daughters," Jayachandran said. "So why don't we try something else, [like] try changing the root attitudes around gender?"

With Diva Dhar of the Gates Foundation and Tarun Jain of the Indian School of Business, she is assessing an attitude-change intervention in which a human rights nonprofit leads classroom discussions about gender equality.

The researchers are now conducting a survey to uncover if the program affected gender attitudes. Understanding the program's effects will go beyond the short-term solution of paying parents to have daughters to understanding the long-term effects of attitudes about gender in India.

#### Studying the Overlap in Inequality

Jayachandran is also studying how to combat deforestation in Uganda, which has some of the fastest tree loss rates in the world. Addressing it could be a cost-effective way to reduce global carbon dioxide emissions.

The program, which Jayachandran and her colleagues rolled out across 60 villages, paid landowners for every hectare of forest that they did not harvest or chop down. In villages



Seema Jayachandran

not in the program, forest cover decreased 7–10 percent, but in villages that were, it only dropped 2–5 percent.

Jayachandran calculates that the benefit of delaying the emission of one ton of carbon dioxide was \$1.11 under the program, while it cost just 57 cents.

"A tree has as much carbon in the United States as it does in Uganda," Jayachandran explained. "And the money people are getting by chopping down trees in Uganda is a lot less than in the U.S." She suggests that it makes sense for the United States and other wealthier countries to consider paying for these programs in developing countries.

While Jayachandran said she did not come into development economics ready to "save the world," she did come to appreciate what drives many people to choose the field.

"It's very rewarding to work on something where you feel like your research can make other people's lives a little bit better," she said.

Seema Jayachandran is associate professor of economics and an IPR fellow.

### **Greg Miller**

#### Examining the link between socioeconomic status and health

As a graduate student at the University of California, Los Angeles, IPR health psychologist **Greg Miller** found himself at "ground zero" of a new field investigating how the mind, body, stress, and health all connect.

"There was a lot of excitement," Miller said.
"People thought they were on to something new and they were."

Many studies have noted how a child born into economic hardship has a higher risk of heart disease, disability, and even premature mortality. This new field, though, went deeper into the cause of these disparities.

"It's fairly easy to come up with explanations for why people who are really short in resources have worse health compared to people who are very affluent," he said. "But at a certain point on the resource distribution, people have plenty of food and they have all their basic needs met. Yet, above that, there's still this socioeconomic gradient in health."

He explains that all along the gradient, psychological influences matter—they just might be different depending on where someone stands on this spectrum. Miller studies these psychological influences, focusing on how early childhood stressors can lead to disease later in life.

#### Stress and Health During Pregnancy

The link between SES and health begins early and seems to be transmitted across generations: Collaborating with other IPR faculty, Miller has shown that women who were economically disadvantaged in childhood have more adverse birth outcomes when they begin families of their own.

Using data from the Measurement of Maternal Stress study, the researchers find these women's children are more likely to be born prematurely and have a low birth weight. These babies are almost 50 percent more likely to be admitted to the Special Care Nursery, and they spend an average of almost five additional days in the hospital.

The findings suggest that "it's not just what happens in pregnancy that affects how that pregnancy ends, but also what happens before the pregnancy," Miller said.

#### Origins of Cardiovascular Risk

Socioeconomic status early in life can affect health years later—such as by raising the risk of coronary heart disease (CHD). But what leads to this increased risk?

Miller has found that low SES in childhood is linked to increased abdominal fat and inflammation in adulthood. He has also discovered this inflammation increases vulnerability to chronic diseases like CHD.

Through the My World, My Heart study, Miller and his lab are researching the pathways that lead to socioeconomic disparities in heart disease risk. They are studying a sample of Chicago-area eighth graders, and will follow up again in tenth grade, to observe health changes across the transition to high school.

"We know that the process of cardiovascular risk starts in the early years of life, and kids from more and less advantaged backgrounds diverge in adolescence in terms of their mental and physical health," Miller said. "This study adds a fine-grained look at when and how they diverge, and whether the differences in heart attack or stroke risks in later life are due to processes that start at 12 or 14."

#### The Cost of Resilience

Some low-income children beat the odds by performing well in school and going on to college. These children are considered resilient, because they achieve positive outcomes in adverse circumstances. When Miller began studying resilient youth, he hypothesized that they might avoid some health problems.



Greg Miller

However, the opposite turned out to be true. In a study of 489 rural African-American youth in Georgia, who were tracked from ages 11–19, Miller and his colleagues discovered the resilient youth were more obese, had higher blood pressure, and produced more stress hormones than their peers.

In a 2015 study, Miller found that low-income youth appeared to be resilient, based on lower rates of depression and substance abuse. But these youth also showed faster epigenetic aging—their cells looked "older" than they were chronologically, and research suggests these older cells are related to health issues.

Miller and his colleagues are considering ways to mitigate these health effects, including an intervention study that seeks to help lower-income, higher-achieving young people balance their school and health goals.

"Our country has many strong points but many big social problems," Miller said. "I like to think that the research we do helps identify some of the roots of those problems and points to potential solutions."

Greg Miller is professor of psychology and an IPR fellow.

#### Claudia Haase

#### IPR associate captures human development across the life span

Growing up in East Germany, "We had no freedom of speech, no freedom of the press, we lived behind a wall," recalled **Claudia Haase**, a developmental psychologist and IPR associate. "But there were some people who showed remarkable resilience in the face of this adversity."

From this, Haase realized that "people can—even under the same circumstances—develop in very different ways."

This realization set her on a path to research that eventually took her to the United States. Along the way, she has worked to understand why people develop the way they do, and how factors—from social to biological—affect humans across their lives.

#### The Bright Side of Aging

Aging is a natural part of human development, yet we tend to associate it with "decline and loss," Haase explained. "While that's certainly true of some aspects of human development, like our health, there are other aspects that actually improve with age."

Haase's research has uncovered "the bright side of aging" by identifying ways that our emotional and motivational functioning gets better as we get older.

Through multi-method lab experiments and large-scale surveys across more than 80 countries, she and her colleagues discovered that as adults age, they express more positive and fewer negative emotions toward their partner, they are more able to let go of unattainable goals and disengage from conflict, and they put more trust in others.

These positive changes can contribute to what researchers call the "well-being paradox" in late life. While the general perception is that we decline as we age, Haase's findings paint a brighter picture.

"We need to make an effort to better understand late-life development because the world's population is aging rapidly," Haase said. "And that's a huge shift in the challenges and opportunities our societies will be seeing."



Claudia Haase

#### Relationships, Happiness, and Health

Beyond aging, Haase also shows why understanding close relationships is key to understanding human development.

"People don't live in a vacuum," she said in discussing her work on what makes or breaks marriages. "Much of our development is shaped by the people around us."

In one study, Haase and her colleagues observed married couples discussing an area of conflict for 15 minutes. The researchers then coded facial expressions, body language, voice, and language on a second-by-second basis, noting how spouses responded to conflict—from expressing anger to shutting down or "stonewalling."

Connecting these emotional behaviors with longitudinal health data over a 20-year period, the researchers discovered that those who got angry during a marital spat were more likely to develop cardiovascular symptoms over the next two decades. On the other hand, those who shut down during the argument were more likely to develop bad backs, stiff muscles, or other musculoskeletal problems.

"There's enormous variation in how people connect with others," Haase said.

Understanding this variation is important, she explained, since whether or not people are happy in their marriages has "important consequences"—not only for their own happiness and health, but for their children and even society as a whole.

#### Biological Foundations of Development

Whether looking at aging or marital conflict, Haase's research captures differences in how people develop socially and emotionally. Yet the question remains: "Why are people so different? Why are some of us hot-headed while others remain cool and collected?"

Taking a biological perspective, she and her colleagues have examined genes that regulate neurotransmitters involved in socioemotional functioning, such as serotonin and dopamine.

In a series of studies, they have identified a specific genetic variant in a serotonin-related gene that makes individuals more sensitive to their environments and amplifies both positive and negative emotions.

"These people are like hothouse flowers, blossoming in supportive environments but withering in harsh conditions," Haase said. "People with other variants of this gene are less emotionally reactive."

Together with her colleagues, Haase also studies how regions of the brain are linked to emotional differences. In one study, the team looked at patients with neurodegenerative diseases, such as Alzheimer's, and showed that a shrinking of the brain's insula dulls the disgust response. Other studies look at Alzheimer's disease biomarkers and how cognitive and physical activity can maintain brain health in late life.

Yet Haase stresses that biology isn't everything. "Putting biology, social environments, and individual choices together gives us a more complete picture of development," she said.

Claudia Haase is assistant professor of human development and social policy and an IPR associate.

### **Onnie Rogers**

#### IPR developmental psychologist examines how children form their identities

As an undergraduate at the University of California, Los Angeles, and the only African-American gymnast on her college team, IPR developmental psychologist Onnie Rogers often felt like an "exception."

"I remember reading studies in my undergraduate courses and thinking 'I'm not supposed to be here," she said. "My parents didn't go to college, we're an African-American family, working class ... All of the data said I really shouldn't be in college."

Rogers said she was troubled by this idea of being "special" somehow, sparking questions about identity and self-perception. These questions have informed her research, which focuses on how cultural norms, expectations, and stereotypes affect how youth see themselves, particularly in terms of schooling and education.

#### **Identity Development**

When it comes to identity, "we don't live inside a little box and just decide independently who we're going to be," according to Rogers. "Our identities are inherently shaped by the contexts in which we're embedded, the historical moment, and societal beliefs, expectations, and stereotypes."

So what do children understand about their identities? Rogers, with Andrew Meltzoff of the University of Washington, interviewed 222 African-American, white, and mixed-race children at three racially diverse schools in Tacoma, Washington. The researchers asked the children to rate how important racial and gender identities were to them—either "not much," "a little bit," or "a lot."

In the 2016 study, children overall rated gender as a more important identity than race, but African-American and mixed-race children ranked race as more important than white children. Moreover, children who rated race as not important were more likely to define race by saying "everybody is the same." But children who said race was important to them defined racial identity as a sense of pride and an awareness of group differences.

"In some ways, it suggests that white kids and kids of color are navigating very different racial worlds, and they're thinking about the racialized self in very different terms," Rogers said.

"The issue is not that we're different. It's in the hierarchy and the value that's placed on those differences," she continued. "We really need more data and understanding of which messages promote social justice and equity, and which promote blindness, avoidance, and silence."

#### **Resisting Stereotypes**

Stereotypes influence how children form their identities, but that doesn't mean children automatically accept society's expectations.

"We all live in a system of oppression, but we're not passive recipients of that oppression," Rogers explained. "We're active agents, and one of the ways we respond is by challenging or resisting those systems of oppression as we form our identities."

Rogers examined how African-American adolescent boys resist stereotypes in a 2016 study with New York University's Niobe Way.



Onnie Rogers

Rogers and Way drew data from interviews with 21 adolescent African-American boys, finding they resist racial stereotypes more readily than gender stereotypes.

Based on the boys' responses, the researchers determined they fit into three groups: accommodators, who endorsed racial and gender stereotypes; resisters, who challenged both types of stereotypes; and exceptions, who resisted racial stereotypes but accommodated to ones about gender.

Most of the boys were able to name and reject negative racial stereotypes. However, two-thirds of the boys said there were no stereotypes about boys or that these gender stereotypes were "natural."

Rogers is extending this line of research to examine if younger children also exhibit resistance to stereotypes, and how resistance might change during childhood.

#### **Shaping Conversations About Race**

"Youth are getting messages about who and what they can and can't be" through the curriculum they are assigned, the books they read, the clubs offered at school, the media, parents, and peers, according to Rogers. She said one way to address the content of these messages is by engaging youth in conversations about race and gender.

Through the Institute for Learning and Brain Sciences at the University of Washington, Rogers has created two online learning modules as tools for teachers, parents, and community members.

The modules address what kids know about race, and how societal ideas about race can affect children's ideas about the self. They also give advice on how to talk to kids about race.

"If we are more aware of the way stereotypes restrict identity and restrict how children see themselves, we can be explicit about changing that narrative," Rogers concluded.

Onnie Rogers is assistant professor of psychology and an IPR fellow.

### **FACULTY OPINION**

### The 'Dehumanities'

#### By Gary Saul Morson and Morton Schapiro

In our new book, *Cents and Sensibility: What Economics Can Learn from the Humanities* (Princeton University Press, 2017), we argue that the best of the humanities can help transform the field of economics, making economic models more realistic, predictions more reliable, and policies more effective and just.

But what do we mean by the "best" of the humanities? Is it what is often taught in colleges and high schools? If not, might that explain why so many have said the humanities are in "crisis"?

Go to Inside Higher Ed, The Wall Street Journal and The New York Times, or read reports from Harvard University and the American Academy of Arts and Sciences, and you will discover that the humanities are in decline. Enrollments and majors continue to plummet.

For decades, literature professors have argued that there is no such thing as "great literature," but only things called great literature because hegemonic forces of oppression have mystified us into believing in objective greatness. One of the commonly taught anthologies among literature professors, The Norton Anthology of Theory and Criticism, paraphrases a key tenet of cultural studies: "Literary texts, like other artworks, are neither more nor less important than any other cultural artifact or practice. Keeping the emphasis on how cultural meanings are produced, circulated, and consumed, the investigator will focus on art or literature insofar as such works connect with broader social factors, not because they possess some intrinsic interest or special aesthetic values."

But if Shakespeare and Milton are no more important than any other "cultural artifact or practice," and if they are to be studied only "insofar as" they connect with other social factors and not because of "some intrinsic interest or special aesthetic values," then why invest the considerable effort to read them at all? Perhaps students who don't take literature

courses are responding rationally to their professors' precepts?

A good sign something has gone astray is that a work is reduced to a simple message. Only mediocre literature can be read that way.

If one cannot provide a convincing reason why any brief summaries will not do, then one has not really taught literature. The student needs to know why the book is worth reading, not just knowing about.

There's no shortcut. One needs not just to analyze "the text" but to experience the work. People are always looking for some way around all that philistine human stuff, but with a novel, one has to identify with the major characters and co-experience their inner lives.

Why not approach great literature as a source of wisdom that cannot be obtained, or obtained so well, elsewhere? The great novelists understand people better than any social scientist who has ever lived. If social scientists understood people as well as Leo Tolstoy or George Eliot, they would have been able to describe people as believable as Anna Karenina or Dorothea Brooke. And great writers present ethical questions with a richness and depth that make other treatments look schematic and simplistic.

Moreover, great literature, experienced and taught the right way, involves practice in empathy. When we read a great novel, we identify with the heroine. We put ourselves in her place, feel her difficulties from within, regret her bad choices. No set of doctrines is as important for ethical behavior as this constant practice in ethical thought or that direct sensation, felt over and over again, of being in the other person's place.

The most important lesson novels teach is not a fact or a message but the skill of empathy



Gary Saul Morson (l.) and Morton Schapiro

and of seeing the world from other points of view. Practiced often enough, that skill can become a habit.

We will at least understand people better, negotiate with them more effectively, or guess what measures are likely to work. Just as important, we will have enlarged our sense of what it is to be human. No longer imprisoned in our own culture and moment, or mistaking our local and current values for only possible ones, we will recognize our beliefs as one of many possibilities—not as something inevitable, but as a choice.

In short, the humanities, if humanists will only believe in them, have a crucial role to play in education. They have access to truths about human beings that other disciplines have not attained. And while other disciplines may recommend empathy, the humanities allow us to practice it. Their cultivation of diverse points of view offers a model for liberal arts education generally to follow. Properly taught, the humanities offer an escape from the prison house of self.

If you really want to save the humanities, make sure it is a version worth saving. Who knows, they might then just save themselves.

Morton Schapiro is Northwestern president, professor, and an IPR fellow. Gary Saul Morson is Lawrence B. Dumas Professor. A version of this op-ed originally appeared in Inside Higher Ed on June 13.

# Silencing the Guns: Peace Begins with Getting Youth to Slow Down By Jonathan Guryan and Anuj Shah

Young men growing up on the south and west sides of Chicago are exposed to a range of serious conflicts. A fight over a small rubber ball would seem trivial by comparison. But that is exactly where one anti-violence program starts, with the following exercise:

A counselor pairs up two young men, gives one of them a ball and tells him to make a fist around it. The counselor tells the other young man that he has one minute to do whatever it takes to get the ball from his partner. You can imagine the chaos that ensues as everyone tries to physically pry away the ball.

Then the counselor asks a question that seems naive: How many people simply asked for the ball? No one raises their hand. Everyone insists his partner never would have given up the ball if asked.

But is this true? The counselor asks the young men with the ball if they would have given it up if asked. Most say yes.

This exercise demonstrates how often we get things wrong when we think too quickly, and how pausing to reflect might reveal other courses of action. This is one of the opening exercises in the "Becoming A Man" (BAM) program offered by Youth Guidance at Chicago-area schools. A guiding principle in the BAM program, and in a cognitive behavior therapy program implemented at the Cook County Juvenile Temporary Detention Center, is that violence can be prevented if we can help youth to slow down, to think before they act.

After a year in Chicago as violent as 2016, we naturally wonder how to prevent it from continuing, and that begins with trying to understand why there were so many shootings and murders in the first place. We know most of the gun violence is concentrated among young people on the south and west sides, but it is hard to find a clear cause. Often, seemingly small slights and minor conflicts escalate to the point that someone pulls a trigger. Why?

Part of the answer, and potentially part of the solution to Chicago's gun violence, is revealed in the activity with the ball.

In recent work with colleagues at the University of Chicago Crime
Lab, we identified an approach that reduced arrests for violent crime among young men by nearly 50 percent and recidivism by 21 percent. This approach, based on cognitive behavioral therapy, starts with a simple observation:

People often act without thinking.

We make quick assumptions without pausing to think about whether we're right.

This is true for everyone. But this lens helps us see that the seeming lack of reason for much of the violence in Chicago is itself a reason. In the heat of conflict, someone pulls a trigger not because they thought carefully about a reason to commit murder, but rather because they never considered a reason not to.

The key point here, that we must learn to pause and think, is particularly important for youth growing up in violent neighborhoods. In many ways, they must navigate a far more nuanced social world than youth in safe neighborhoods.

Imagine you are a teenager who is talking loudly with friends at the movies. Someone bigger tells you to sit down and be quiet. Or imagine that you are in class, talking loudly with friends, and the teacher tells you to sit down and be quiet. Those situations feel similar—someone more powerful is confronting you. And if you grow up in a safe neighborhood, your response is often the same: To sit down and be quiet. You do this without thinking about it, almost automatically, and it usually serves you well.

But if you grow up in a tough neighborhood, when a stranger tells you to sit down and shut up, it is less clear what the right response is. If you give in and comply, you risk being victimized



Jonathan Guryan

again and again. Sometimes, you have to fight back. But if you fight back against your teacher, you've made a mistake. If you fight back against someone who has a weapon, you've made a mistake. You cannot respond to all situations the same way; you cannot respond automatically.

Young people growing up in violent neighborhoods shoulder a burden that the affluent do not. They cannot afford to think fast. They have to think slowly because the code of the street is different from the code of the classroom. They are constantly navigating different codes and nuances, and getting it right can be the difference between life and death. This may be why programs based on cognitive behavioral therapy are so effective.

As one staff member at the juvenile temporary detention center tells the young men in the cognitive behavioral therapy program there, "If I could give you back just 10 minutes of your lives, you wouldn't be here."

We think this highlights the real promise of this approach for preventing another year like the last one. Our challenge now is to find a way to give all youths the time they need.

Jonathan Guryan is associate professor of human development and social policy and an IPR fellow. Anuj Shah is associate professor of behavioral science at the University of Chicago. The Chicago Sun-Times first published a version of this op-ed on February 3.

#### New IPR Director (Continued from page 1)

"Diane brings extraordinary academic credentials, leadership, and experience to her new role as IPR director," said Jay Walsh,
Northwestern's vice president for research. "I am delighted that she will be advancing one of the premier university policy institutes in the United States. IPR's high-impact scholarship explores so many crucial social issues, including those at the intersection of disciplines. This is research with important implications for America's economic and social well-being, and I look forward to working with Diane to build on IPR's successes."

Founded in 1968, IPR is one of the country's preeminent academic social policy research institutes. Its faculty conduct research at the forefront of a wide range of pressing social questions, including many related to poverty, race, inequality, education reform, and social disparities and health, among others.

Schanzenbach is an internationally recognized economist, known for her work on policies regarding poverty reduction, early education interventions, and school accountability measures and their effects on child and adult health and well-being.

"It is a tremendous honor to have been appointed as the next director of IPR," Schanzenbach said. "I am excited to partner with IPR's community of top-notch policy scholars, talented students, and dedicated staff. I am very much looking forward to collaborating with them on advancing and disseminating Northwestern's brand of interdisciplinary policy research and analysis on some of the most pressing social questions of our time."

While at The Hamilton Project, Schanzenbach has co-authored more than 20 white papers, policy proposals, and reports on major national issues, including climate change, school accountability, and the decline in labor force participation. She also spearheaded and organized a dozen major events on topics such as criminal justice reform and healthcare.

"Diane has done an outstanding job as director of The Hamilton Project, developing and promulgating policies to advance inclusive economic growth," said **Robert Rubin**, co-founder of The Hamilton Project "Diane has the rare combination of exceptional research talent and remarkable ability to explain research findings to many audiences, from policymakers to members of the media to people in business and industry."

and former Secretary of the U.S. Treasury. "The Institute for Policy Research shares
The Hamilton Project's values of promoting serious, evidence-based solutions to our nation's challenges. I am confident that she will excel in her new role at Northwestern."

Schanzenbach has also testified before Congress on multiple occasions, the last of which took place on June 28 when she discussed education research and student privacy before a subcommittee on K-12 education of the House Committee on Education and the Workforce.

"Diane has the rare combination of exceptional research talent and the remarkable ability to explain research findings to many audiences, from policymakers to members of the media to people in business and industry," Figlio said.

Some of her most influential work to date has investigated the effects of food stamps, a federal program launched in 1964 and now known as the Supplemental Nutrition Assistance Program, or SNAP. In a series of articles, the most recent of which was published in the *American Economic Review* in 2016, she and her co-authors evaluated food stamps' influence on various factors,

including participation in the labor force, how recipients used their food vouchers, and the program's significant impact on improving children's long-run health and educational outcomes.

Another notable research stream for Schanzenbach evaluates the impact of policies that influence resources and incentives in schools. In a forthcoming article in the *American Economic Journal: Applied Economics* with University of California, Berkeley economists Julien Lafortune and Jesse Rothstein, she examines how more progressive school funding affects students' test scores.

Schanzenbach joined the Northwestern faculty and IPR in 2010. She is a member of IPR's Executive Committee and was chair of its research program on Child, Adolescent, and Family Studies. She is also a research associate at the National Bureau of Economic Research, a research associate at the Institute for Research on Poverty at the University of Wisconsin–Madison, and a visiting scholar at the Federal Reserve Bank of Chicago.

She received a BA from Wellesley College and a PhD from Princeton University, both in economics. From 2002–04, she was a Robert Wood Johnson Foundation Scholar in health policy research at the University of California, Berkeley.

Her research has received funding from the U.S. Department of Agriculture, U.S. Department of Education, Spencer Foundation, and Smith-Richardson Foundation. Her studies have been published in some of the nation's top journals, such as the Quarterly Journal of Economics, Review of Economics and Statistics, and Journal of Human Resources, among others.

"Now, more than ever, we need to produce evidence of unimpeachable quality and to convey this evidence successfully to disparate groups," Figlio said. "The combination of IPR and Diane Schanzenbach will make a big difference in our country and the world."

Diane Whitmore Schanzenbach is incoming IPR director and Margaret Walker Alexander Professor of Human Development and Social Policy. For more information about her, visit: www.ipr. northwestern.edu/faculty-experts.

# **Prestigious Bodies Recognize IPR Faculty**

Five faculty receive honors for their significant research achievements



David Figlio (l.) and Morton Schapiro

#### **David Figlio and Morton Schapiro**

Outgoing IPR Director **David Figlio**, an education economist, and Northwestern University President and IPR economist **Morton Schapiro** were elected to the prestigious National Academy of Education in March.

The National Academy is an honor society advancing high-quality research to inform and improve education policy and practice.

The academy consists of 209 U.S. members who are elected on the basis of outstanding scholarship related to education.

Figlio, the Orrington Lunt Professor of Education and Social Policy and of Economics, is internationally renowned for his scholarship on school accountability, school choice, school standards, welfare policy and policy design, intergenerational issues in health and education, and student learning outcomes in higher education.

Schapiro is one of the nation's leading authorities on the economics of higher education and has written on college financing and affordability and trends in educational costs and student financial aid.

"The nomination of new leaders to the academy is a testament to their scholarly contributions in the field of education research, and it is my pleasure to welcome them," said Michael Feuer, president of the National Academy of Education.

#### John Hagan

Sociologist and IPR associate John Hagan was elected to the prestigious National Academy of Sciences (NAS) in May. Membership in the academy is one of the highest honors given to a scientist in the United States.

Hagan, who is John D. MacArthur Professor of Sociology and Law, led the application of advanced crime measurement techniques to the study of genocide in his work on violence in Darfur from 2003–05 and in the Balkans from 1991–95.

He is the author of five books and numerous articles, including award-winning books drawing from his research on war tribunals in the Balkans and genocide in Darfur.

Hagan is one of 83 new members of the NAS, a society created by President Abraham Lincoln's administration to advise Congress on matters related to science and technology.

#### Charles F. Manski

IPR economist **Charles F. Manski** was named a Distinguished Fellow of the American Economic Association (AEA) in April.

The Distinguished Fellow awards annually recognize the lifetime research contributions of four distinguished economists.

AEA recognized Manski, Board of Trustees Professor in Economics, for the far-reaching impact of his research, his service to the economics and statistics professions, and the exemplary role he has played in advising the nation on research and public policy.

Manski's research spans econometrics, judgment and decision, and analysis of public policy. He has played a leading role in research on the structure of random utility models, estimation using choice based samples, non-parametric bounds of treatment effects, discrete choice problems, measuring expectations, and identification of social interactions.

He is the author of six books, including *Public* Policy in an Uncertain World (Harvard University Press, 2013), which emphasized the critical role that uncertainty plays in evaluating effective government policies.

#### Teresa Woodruff

IPR associate **Teresa Woodruff**, chief of reproductive science in medicine in Feinberg's department of obstetrics and gynecology, was named a 2017 Guggenheim Fellow in support of her research into reproductive health and fertility preservation.

Woodruff was one of 173 scientists, scholars, and artists selected this year by the John Simon Guggenheim Memorial Foundation. The fellowship is awarded on the basis of past achievement and extraordinary promise.

The founding director of the Oncofertility Consortium and incoming dean of The Graduate School at Northwestern, Woodruff is an internationally recognized expert in ovarian biology. She pioneered the field of oncofertility, which pairs oncology with reproductive endocrinology to expand fertility options for cancer survivors. She is also a leading advocate for sex inclusion in biomedical research.

The fellowship will support Woodruff's research on how inorganic elements, such as iron or lead, impact the health of egg and sperm cells collected around the globe. "A global accounting of germ cell health from humans to corals is an exciting new venture that will have big dividends as we think about the impact of a changing environment on health," said Woodruff, who is Thomas J. Watkins Memorial Professor.



Teresa Woodruff

T. Mayday

### RECENT IPR WORKING PAPERS

#### **EDUCATION POLICY**

# The Effect of Mentoring on School Attendance and Academic Outcomes: A Randomized Evaluation of the Check & Connect Program (WP-16-18)

Jonathan Guryan (IPR/Economics), Northwestern University; Sandra Christenson, University of Minnesota; Amy Claessens, University of Chicago; Mimi Engel, Vanderbilt University; Ijun Lai (IPR/Human Development and Social Policy), Northwestern University; Jens Ludwig, University of Chicago; Ashley Cureton Turner, University of Chicago; and Mary Clair Turner (IPR/Human Development and Social Policy), Northwestern University

This working paper presents results from a randomized evaluation of a student monitoring and mentoring program aimed at increasing student attendance. The program, called Check & Connect (C&C), provided a mentor to 765 first- to eighth-grade students in 23 schools in the Chicago Public School (CPS) system. Mentors tracked data to monitor students' attendance and academic progress and met regularly with students to deliver personalized interventions meant to increase attendance and engagement with school. The researchers find that participation lowered student absences for students who started the program in fifth to seventh grade by a statistically significant 3.4 days, but there was no statistically significant effect for students who began the program in first through fourth grade. However, for both cohorts of students, the effect of participating in C&C was larger in the second year of the intervention, suggesting that student-mentor relationships might be an important mechanism for the program. The evaluation did not uncover significant effects on grade point average, but did find a statistically significant decline in courses failed. There were mixed results for test scores, but no evidence that test scores increased significantly.

# **Long-Term Orientation and Educational Performance** (WP-16-12)

David Figlio (IPR/Human Development and Social Policy), Northwestern University; Paola Giuliano, University of California, Los Angeles; Umut Özek, American Institutes for Research; and Paola Sapienza (Kellogg/IPR), Northwestern University

Parents pass on a variety of traits related to their education, wealth, and income that help their children succeed in school and life. The researchers find yet another passed-on trait that aids in success: culture. They use population-level administrative education and birth records from Florida to show that when parents pass along a culture that values self-control and an ability to delay gratification, their children and future generations do better in school. These students score higher on third-grade reading and math tests, have fewer absences and disciplinary incidents, and are more likely to graduate from high school in four years.

# Simplifying Teaching: A Field Experiment with 'Off-the-Shelf' Lessons (WP-16-11)

**Kirabo Jackson** (IPR/Human Development and Social Policy), and **Alexey Makarin** (IPR/Economics), Northwestern University

The researchers analyze an experiment in which middle-school math teachers were randomly given "off-the-shelf" lessons to help develop students' deep understanding. The researchers consider the lessons in the context of two teaching tasks: imparting knowledge and developing understanding. According to their model, lessons that develop understanding can replace teacher effort on this task so that teachers who only excel at imparting knowledge can still be effective overall. They find that giving teachers access to the lessons and supports to promote their use increased students' math achievement by about 0.08 of a standard deviation, and that weaker teachers benefited the most. The intervention is highly scalable and more cost effective than most policies aimed at improving teacher quality.

# Cross-Generational Differences in Educational Outcomes in the Second Great Wave of Immigration (WP-16-10)

Umut Özek, American Institutes for Research; and David Figlio (IPR/ Human Development and Social Policy), Northwestern University
Using a new data source—matched birth records and longitudinal student records in Florida—the researchers study how student outcomes differ across successive immigrant generations. Specifically, they look at whether first-, second-, and third-generation Asian and Hispanic immigrants in Florida perform differently on reading and math tests, and whether they are differentially likely to get into trouble in school, to be truant from school, to graduate from high school, or to be ready for college. Their findings suggest that early arriving first-generation immigrants perform better than second-generation immigrants, and second-generation immigrants perform better than third-generation immigrants.

#### POLITICS, INSTITUTIONS, AND PUBLIC POLICY

# Partisan Group Identity and Belief in Human-Caused Climate Change (WP-16-21)

Toby Bolsen, Georgia State University; and James Druckman (IPR/Political Science), Northwestern University

When individuals learn of the scientific consensus about human-caused climate change, do their opinions move in the direction of that consensus? Although such a scientific consensus has existed for more than a decade, the U.S. public is starkly divided along partisan lines over whether human behavior is the dominant cause. The researchers

develop a framework that generates hypotheses about the impact of a scientific consensus statement on climate change on public opinion. They test their predictions with a survey experiment conducted on a nationally representative sample in the United States. They find that the impact of this information is conditional on partisan group identity and individuals' knowledge levels. Low-knowledge partisans shift their opinion toward the scientific consensus, while high-knowledge partisans polarize. Further, when the consensus statement is "politicized," the aforementioned effect on low-knowledge partisans disappears. The findings accentuate the highly contingent nature of climate change communication effects.

# Do Disagreeable Political Discussion Networks Undermine Attitude Strength? (WP-16-16)

Joshua Robison, Aarhus University; Thomas Leeper, London School of Economics; and **James Druckman** (IPR/Political Science), Northwestern University

How attitudes change and affect behavior depends, in large part, on attitude strength. Strong attitudes are more resistant to persuasion and are more likely to produce attitude-consistent behavior. But what influences attitude strength? The researchers explore a widely discussed, but rarely investigated, factor: an individual's political discussion network. Existing research offers a somewhat mixed picture, sometimes finding that disagreeable networks weaken attitudes and other times that they strengthen attitudes. The researchers use a novel nationally representative dataset to explore the relationship between disagreeable networks and attitude strength. They find, perhaps surprisingly, no evidence that disagreements in networks affect political attitude strength. They conclude by discussing likely reasons for the findings, which provide a research agenda for the study of networks and attitude strength.

# Motivated Responses to Political Communications: Framing, Party Cues, and Science Information (WP-16-14)

James Druckman (IPR/Political Science), Northwestern University; Thomas Leeper, London School of Economics; and Rune Slothuus, Aarhus University

Among numerous foundational contributions, the work of renowned political scientist Milton Lodge is notable for its artful adaptation of theories of psychological processing to political contexts. Lodge recognized the uniqueness of politics as a context for information processing, exploring situations which are defined, in part, by a) low information and thus situations where information acquisition occurs, b) contested informational claims, and c) over-time dynamics. This is true of his work on schemas, online processing, and motivated reasoning. The researchers focus on the last of these by studying applications of motivated thinking in three domains: competitive framing, partisan competition, and science opinion formation. They reveal how informative Lodge's work in these areas has been and elaborate his findings to highlight the conditionality of political motivated reasoning in each domain.

# Using Frames to Make Scientific Communication Effective (WP-16-07)

**James Druckman** (IPR/Political Science), Northwestern University; and Arthur Lupia, University of Michigan

For science to act as a foundation for public policy, sound scientific practice should exist alongside effective communication of scientific findings to individuals, organizations, and institutions. Such communication often involves frames—or the ways in which topics are explained and perceived—that serve to highlight certain aspects of a scientific finding or issue. Druckman and Lupia discuss ways in which frames can be used to facilitate effective scientific communication. This working paper has been published in The Oxford Handbook of the Science of Science Communication (Oxford University Press, 2017).

#### POVERTY, RACE, AND INEQUALITY

# Do Grandparents and Great-Grandparents Matter? Multigenerational Mobility in the U.S., 1910–2013 (WP-16-15)

**Joseph Ferrie** (Economics/IPR), Northwestern University; Catherine Massey, University of Michigan; and Jonathan Rothbaum, U.S. Census Bureau

Studies of U.S. intergenerational mobility focus almost exclusively on the transmission of (dis)advantage from parents to children. Until very recently, the influence of earlier generations could not be assessed even in long-running longitudinal studies such as the Panel Study of Income Dynamics. The researchers directly link family lines across data spanning 1910 to 2013 and find a substantial "grandparent effect" for cohorts born since 1920, as well as some evidence of a "greatgrandparent effect." Although these might be due to measurement error, they conclude that estimates from only two generations of data understate persistence by about 20 percent.

# Equilibrium Impacts of Credit: Evidence from the Indian Microfinance Crisis (WP-16-13)

Emily Breza, Columbia University; and Cynthia Kinnan (IPR/ Economics), Northwestern University

In 2010, the government of Andhra Pradesh, India, issued an ordinance bringing microfinance activities in the state to a complete halt, causing a nationwide shock to the liquidity of lenders. Breza and Kinnan use this episode to identify the causal impacts of a reduction in credit supply on consumption, entrepreneurship, and employment. They find that district-level reductions in credit are associated with significant decreases in daily wages, household earnings, and consumption. Their findings suggest that estimates that do not account for equilibrium effects might miss a significant part of the overall impact of microfinance, especially for the poorest households.

#### **Working Papers**

(Continued from page 15)

#### SOCIAL DISPARITIES AND HEALTH

# **Long-Run Consequences of Exposure to Natural Disasters** (WP-16-17)

**Krzysztof Karbownik** (IPR), Northwestern University; and Anthony Wray, Hitotsubashi University

Can natural disasters have negative long-run consequences for children? The researchers use World War I draft registration cards, historical hurricane paths, and the 1940 U.S. Census to explore whether fetal and early childhood exposure to stress caused by hurricanes affects human capital development and labor market outcomes in adulthood. Difference-in-differences estimates indicate that white males who were born in the South and experienced a hurricane either in utero or as infants had lower income at ages 42–53. The results are robust to alternate specifications of either the treatment or outcome variables, as well as changes in the tolerance for imperfectly matched historical data.

#### URBAN POLICY AND COMMUNITY DEVELOPMENT

#### Stop-and-Frisk and Trust in Police in Chicago (WP-16-08)

Wesley G. Skogan (IPR/Political Science), Northwestern University

Stop and frisk—when an officer stops, questions, and then searches an individual—has become the crime-prevention strategy of choice in American policing. Skogan examines some of the collateral consequences of relying on an aggressive stop-and-frisk policy. From the citizen's point of view, these stops can seem unwarranted. Additionally, police stops might be unfairly distributed according to race, age, social class, and gender. Skogan also considers how a policy of stop and frisk might undermine police legitimacy—and could lead to declines in trust in police.

#### QUANTITATIVE METHODS FOR POLICY RESEARCH

# Credible Ecological Inference for Personalized Medicine: Formalizing Clinical Judgment (WP-16-19)

Charles F. Manski (IPR/Economics), Northwestern University

This working paper studies the inference problem that arises when clinicians seek to personalize patient care by exploiting observed patient attributes beyond those used in existing evidence-based risk assessments. The literature in psychology suggests that instead of predicting patient outcomes based on all observed attributes, clinicians should use available evidence-based risk assessments even though they do not take all attributes into account. Manski's analysis shows how clinicians can make coherent and informative personalized risk assessments using all observed patient attributes.

#### PERFORMANCE MEASUREMENT AND REWARDS

# The Marginal Propensity to Consume Over the Business Cycle (WP-16-20)

Tal Gross, Columbia University; **Matthew Notowidigdo** (IPR/ Economics), Northwestern University, and Jialan Wang, University of Illinois at Urbana-Champaign

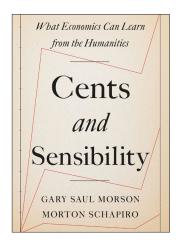
This paper estimates how the marginal propensity to consume (MPC) varies over the business cycle by exploiting exogenous variation in credit card borrowing limits. Ten years after an individual declares Chapter 7 bankruptcy, the record of the bankruptcy is removed from his or her credit report, generating an immediate and persistent increase in credit score. The researchers study the effects of "bankruptcy flag" removal using a sample of over 160,000 bankruptcy filers whose flags were removed between 2004 and 2011. They document that in the year following flag removal, credit card limits increase by \$780 and credit card balances increase by roughly \$290, implying an "MPC out of liquidity" of 0.37. They find a significantly higher MPC during the Great Recession, with an average MPC roughly 20-30 percent larger between 2007 and 2009 compared with surrounding years. They find no evidence that the counter-cyclical variation in the average MPC is accounted for by compositional changes or by changes over time in the supply of credit following bankruptcy flag removal. These results are consistent with models where liquidity constraints bind more frequently during recessions.

# Insurance and the High Prices of Pharmaceuticals (WP-16-09)

David Besanko, **David Dranove** (Kellogg/IPR), and **Craig Garthwaite** (Kellogg/IPR), Northwestern University

While expanded health insurance access, such as the Affordable Care Act and Medicare Part D, can offer treatments that patients might not be able to afford otherwise, such expansions might also have negative effects. The researchers investigate by developing a demand model where customers cannot afford expensive lifesaving treatments without insurance. They predict that in this setting insurance unambiguously increases the prices for these innovative treatments and in many cases decreases consumer surplus. Additionally, they predict that requiring insurers to cover a wide range of treatments in a single insurance bundle allows manufacturers of innovative products to set prices that exceed the value they create. The authors test these predictions using the 2003 passage of Medicare Part D, which substantially expanded the number of seniors receiving drug coverage. They find that this insurance expansion raised prices in the oncology market and increased the probability that new products would be priced above the value they create.

### RECENT FACULTY BOOKS



#### Cents and Sensibility What Economics Can Learn from the Humanities

By Gary Saul Morson and Morton Schapiro, Princeton University Press, 2017, 320 pp.

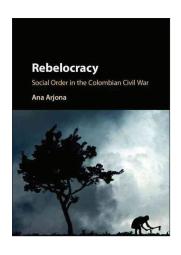
In Cents and Sensibility, Northwestern Slavic languages and literatures professor Gary Saul Morson and University president, professor, and economist Morton Schapiro make the case that the humanities, especially the study of literature, can offer economists ways to make their models more realistic, their predictions more accurate, and their policies more effective and just. The book demonstrates the benefits of a freewheeling dialogue between economics and the humanities by addressing a wide range of problems drawn from the economics of higher education, the economics of the family, and the development of poor nations. It offers new insights about everything from the manipulation of college rankings to why some countries grow faster than others. At the same time, Cents and Sensibility shows how looking at real-world problems can revitalize the study of literature. Morson and Schapiro, an IPR fellow, bring economics back to its place in the human conversation.

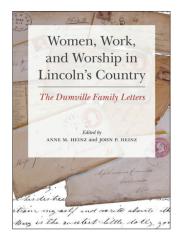
#### Rebelocracy

#### Social Order in the Colombian Civil War

By Ana Arjona, Cambridge University Press, 2016, 430 pp.

Conventional wisdom portrays war zones as chaotic and anarchic. In reality, however, they are often orderly. Political scientist and IPR associate Ana Arjona introduces a new phenomenon in the study of civil war: wartime social order. She investigates, both theoretically and empirically, the emergence and functioning of social order in conflict zones. Arjona delves into rebel behavior and civilian agency, as well as their impact on the conduct of war. Based on years of fieldwork in Colombia, her theory is tested with qualitative and quantitative evidence on communities, armed groups, and individuals in conflict zones. Arjona shows how armed groups strive to rule civilians, and how the latter influence the terms of that rule. Rebelocracy illuminates our understanding of civil war, institutions, local governance, nonviolent resistance, and the emergence of political order.





### Women, Work, and Worship in Lincoln's Country The Dumville Family Letters

Edited by Anne and John Heinz, University of Illinois Press, 2016, 240 pp.

Anne Heinz, formerly of the University of Chicago, and IPR faculty emeritus John Heinz draw from an archive at the Abraham Lincoln Presidential Library and Museum to illustrate the lives of four prairie women in the mid-19th century. In the letters, Ann Dumville and her daughters, Jemima, Hephzibah, and Elizabeth, discuss their views on Methodism, politics, education, technological innovation, and relationships with employers, offering a look at antebellum working women confronting privation, scarce opportunities, and the possibility of civil war. The book makes a case for the historical significance of women's personal writings, bringing to light voices that are often silenced, neglected, or lost. Women, Work, and Worship in Lincoln's Country received a Superior Achievement Award from the Illinois State Historical Society.

# A Moment of 'Democratic Imperative'?

## Leading international scholars debate democracy and regime change

When and why do governments become less authoritarian? Why have some countries, such as Syria, moved from authoritarianism toward instability, while others, such as Nigeria, have become more democratic? Are democracies in the United States and Western Europe headed for breakdown?

These were some of the overarching questions discussed at "The Democratic Change Research Initiative: Global Trajectories and Policy Analysis," an April workshop led by IPR political scientist Rachel Beatty Riedl.

"The question of democracy and regime change is such a globally relevant policy question," Riedl said. "We brought together scholars who are working on historical cases in Europe and across Africa, Asia, and Latin America to help us better understand these global trends."

Throughout the day, panelists from Oxford, Harvard, Princeton, Stanford, and Gothenburg, in addition to Northwestern and other universities, covered panels on "Authoritarian-Led Democratization," "New Perspectives on Democratization and Policy Implications," "Democratic Breakdown Revisited," and "The U.S. and Western Europe in Comparative Context: Autocratic Resurgence?"

#### **Authoritarians and Democracy**

A number of political theories set out to explain why authoritarian countries democratize, or move toward a more democratic form of government.

Existing arguments assume that dictatorships give way to democracies due to rising pressures they cannot control, which weaken the regime and force democratic reforms.

At the first panel of the conference, however, Riedl and her co-authors presented an alternative theory: Authoritarian parties sometimes actively pursue democratization.

They find that in both historical and contemporary cases, authoritarian parties in power have liberalized to increase their own popularity, such as by showing responsiveness to constituents, controlling elite factions within their own party, or responding to international "carrots and sticks." These strategic moves can serve as catalysts for longer-lasting democratization.

"The key insight is that it can be in the short- and medium-term interest of an authoritarian party to implement these liberalizing reforms," Riedl noted. "And authoritarians can actually lay the groundwork for stable democracy."

#### **Policy Implications**

What are the policy implications of this alternative theory of authoritarian-led democratization?

"Conventional wisdom suggests that in order to fully democratize, you have to take away power of the authoritarian," Riedl explained. "But that's not necessarily the best approach, and certainly not the only approach."

While domestic and international actors usually focus on removing authoritarians, work by Riedl and others at the workshop suggests that "authoritarian incumbents can be an important partner in the transformation itself."

"Policy inputs should focus on the carrots and sticks that would create incentives for authoritarians to liberalize" rather than seeking to rid the system of authoritarian leaders. Riedl said.

Participants at the workshop also highlighted another policy implication, one that applies to the United States today.

As right-wing political parties become increasingly fractured and dysfunctional—a phenomenon seen in the United States and across Europe—people often assume that left-wing parties will benefit. But this is not necessarily the case. Using historical cases, the workshop participants discussed how fractured parties on the right can lead to greater overall instability, rather than a consolidation of power on the left.

"These parallels coming from other regions are important for understanding the current moment," Riedl noted, such as understanding how the splintering of the U.S. Republican Party might lead to greater instability and less institutionalized political parties.

#### Democratic Breakdown?

While a large body of research studies pathways to democracy, history has shown that the reverse can be true: Democracies can—and do—break down.



Participants in "The Democratic Change Research Initiative: Global Trajectories and Policy Analysis" take a break from workshop discussions in Evanston on April 12.

What are the forces that move regimes from democracy to instability, or even to authoritarianism?

During the workshop, researchers used case studies from regions such as the Middle East and Latin America to highlight one relevant factor: populism.

Historical cases presented during the workshop—such as the case of Venezuela under Hugo Chavez discussed by Northwestern political scientist Jason Seawright—show how populist movements can erode democracy.

"Countries that we thought of as consolidated democracies are facing threatening populist actors," Seawright noted. "Should we be concerned about democratic breakdown in these core countries?"

In addition to Seawright, Harvard's Daniel Ziblatt continued discussion of the possibility that authoritarianism could resurge in the "consolidated democracies" of the United States and Western Europe in a panel chaired by IPR political scientist Daniel Galvin.

Ziblatt pointed to a number of "road signs" that indicate a country might be heading toward authoritarianism. The signs include the election of an authoritarian leader, the failure of institutions to constrain such a leader, and how effectively citizens can oppose one. IPR sociologist Anthony Chen also discussed how the election of President Trump and populist movements in the United States might fit into a wider global story.

The workshop ended with the larger question of whether we are living in a moment of authoritarian resurgence in the democratic West. Riedl said that the participating scholars planned to continue their investigations into this and other workshop topics, possibly in a special journal issue and also through collaboration with the U.S. Agency for International Development on its Democracy, Human Rights, and Governance Strategy.

Rachel Beatty Riedl is associate professor of political science and an IPR fellow. The workshop was jointly sponsored by IPR, the Buffett Institute for Global Studies, and the Department of Political Science at Northwestern University.

# **Dissecting the Political Landscape**

#### Examinations encompass geography, homes, and journalism

The 11th annual Chicago Area Political and Social Behavior Workshop (CAB) focused on key aspects shaping the current political landscape, "highlighting the reach of politics in topics such as wealth, geography, homes, and journalism," said IPR political scientist James Druckman in opening the May 5 workshop on Northwestern University's Evanston Campus.

The presentations by four of the nation's established and rising political and social scholars, including esteemed Vanderbilt political scientist Larry Bartels, set the stage for a day of exchange and networking among the more than 100 faculty and graduate students from the Midwest and beyond.

Many were returning participants, such as **Mike Wagner** of the University of Wisconsin-Madison, also one of the day's presenters. He credited a presentation by Princeton's Tali Mendelberg at CAB 2014 for generating the idea for an experiment he discussed this year.

For Druckman, those are the types of connections that the workshop is all about.

"One of the aspects that people enjoy most about CAB is the opportunity to meet scholars from other institutions," he said. "These meetings have produced subsequent interactions and, in many cases, collaborations."

Bartels discussed his research on political responsiveness in the United States and in democratic nations around the world. In the United States, Bartels has found that political responsiveness is "strongly tilted" toward the



Larry Bartels discusses his work on political responsiveness in democratic nations.

more affluent. At CAB, he extended the discussion to include countries in the Organization for Economic Cooperation and Development (OECD). He noted that "responsiveness is largely or wholly limited to affluent citizens," a trend that holds across democracies with different political cultures, institutions, and levels of inequality.

Cara Wong of the University of Illinois at Urbana-Champaign presented her work on the "politicization of place," or how politics can shape how we view the contexts around us. In one survey conducted in the United Kingdom, she and her colleagues found that respondents who were contacted by the anti-immigration U.K. Independence Party reported that their communities were becoming more diverse than those who were not contacted. Wong's presentation emphasized the subjectivity of place and how politics can affect our subjective contexts.

Political scientist and IPR associate Chloe
Thurston discussed her book project, which
examines citizen engagement in response to
the federal government's efforts to increase
access to homeownership beginning in the
1930s. She explained how government
guidelines that discouraged lending to
minorities became "barriers to access for
getting a home loan." Thurston's book
examines how such barriers to access can
mobilize citizen groups to seek policy change.

Wagner closed the day by presenting results from three experiments focused on how journalists identify bias and determine what is newsworthy. In one experiment, he uncovered that journalists, regardless of their personal political stance, viewed "costly" talk that challenged the speaker's party position as more newsworthy than "cheap" talk that toed the party line. In another, he found that journalists, regardless of their gender, were more likely to select quotes from male politicians than female ones.

For more information about the CAB Workshop, go to www.ipr.northwestern.edu/events.

#### NU-Evanston Education Research Alliance (Continued from page 1)



In the Evanston Township High School (ETHS) student "Hub" (from left), outgoing IPR Director David Figlio, ETHS Superintendent Eric Witherspoon, IPR economist and incoming IPR director Diane Whitmore Schanzenbach, ETHS Principal and Assistant Superintendent Marcus Campbell, ETHS Assistant Superintendent Pete Bavis, and District 65 Superintendent Paul Goren review ongoing research that involves IPR faculty and graduate research assistants.

Township High School District 202—that dates back to the 1950s. In recent years, this relationship has been taken to a new level as the three pursue the overall objective of providing an excellent public school education for Evanston's 10,000 school-aged children, as well as seeking to close the achievement gap between high- and low-performing students.

"By further deepening Northwestern's partnerships with our local school districts, we will carry out work that will help all Evanston children to succeed, while leading to important new research findings," said outgoing IPR Director David Figlio, an education economist and incoming dean of Northwestern's School of Education and Social Policy.

"The scholars and students at IPR, combined with the practitioners and the administrators in both school districts, will be able to take on the compelling problems of public

education that we see here in Evanston," said District 65 Superintendent Paul Goren. "We're working together on common problems that we can address and try to solve together."

#### **Connecting Research and Practice**

The emphasis on the intersection of research and practice was a critical factor in why the Lewis-Sebring Family Foundation supported the partnership, said its chairman Charles Ashby Lewis. He cited work by Penny Bender Sebring (PhD SESP '85), his wife, who co-founded the University of Chicago Consortium on School Research in 1990, where she continues to be a leader. The consortium seeks to improve Chicago Public Schools through its data-sharing partnership with the school system.

Another key factor was "the idea of Evanston," a city with a unique racial, ethnic, and economic mix, Lewis continued—a city

in which he and his wife have lived for more than four decades, where they raised their family and sent their children to school, and where they now seek to sustain and improve those schools.

"So my interest in the health of Evanston, and Penny's interest in university-based research that helps to improve public schools, have come together in [our support for] the research-practice partnership," Lewis said.

The partnership also received funding from the Spencer Foundation through its nascent "research-practice partnership" grants program. The Northwestern-Evanston proposal, led by IPR economist Jonathan Guryan and Maria Allison, District 65's chief strategy officer, was developed in conjunction with school administrators in both districts and was one of only seven to be funded out of a field of almost 100.

"One of the things I liked about this application was the cooperation between the elementary school district and the high school district and the creation of a longitudinal database so that questions can be studied much more easily," said John Easton, vice president of the Spencer Foundation.

According to Easton, such partnerships can prove to be "powerful" because they motivate practitioners to "believe in the research" and put it to work.

"The grants to support our partnership will take our work to a whole new level," wrote **Eric Witherspoon**, District 202's Superintendent, in an email. "We will be able to collect, aggregate, and analyze data that helps us identify and implement best practices that will result in better outcomes for students."

#### Creating a Multidimensional K–12 Assessment System

One early project will seek to examine, select, vet, and validate key indicators of education and life success for all of Evanston's public school students, from preschoolers to high school seniors. It will be part of a larger longitudinal effort to identify and address factors contributing to the achievement gap between Evanston's high- and low-income students, which is among the highest in the nation.

Figlio, who is spearheading the research effort with Guryan, incoming IPR director and economist Diane Whitmore
Schanzenbach, and IPR developmental psychologist Lindsay Chase-Lansdale, noted that most districts tend to rely on generic, one-dimensional products, such as standardized tests, to show "who's on track."

"Grades mean different things in different places, and test scores mean different things in different places," Figlio said.

Picking a single assessment factor, like a standardized test, over others leads to an incomplete picture of each student's shortcomings and potential. Focusing on one factor misses what other potentially informative indicators—including grades,

attendance, intent to attend college, and psychological characteristics such as persistence—might add.

Through the partnership, a multidisciplinary team, including Northwestern/IPR faculty, is sifting through the latest research to identify which factors are most important in predicting success across all grades. In partnership with Evanston administrators, they will develop a "comprehensive package that is valid across the K–12 spectrum," Figlio continued. "It will be the first multidimensional system based on the latest science and research."

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#### Local Research, Wider Implications

Evanston is an "ideal place" for such a partnership, according to Figlio, because of the city's diverse population and a previous track record of Northwestern researchers and administrators—including Northwestern's President Morton Schapiro, an IPR education economist—working together to boost student achievement through research in Evanston schools.

Lewis also singled out President Schapiro's leadership in creating better relations between the University and the city as a win/ win for both. The city's demographics, which are representative of the country's, present a unique opportunity for Northwestern's social science researchers to conduct studies that can not only benefit Evanston, but the nation as a whole, according to Lewis.

"President Schapiro recognizes that a microcosm of America exists in the university's backyard," Lewis said.

Figlio thanked the foundations for taking the partnership to a new level. "We are thrilled to partner with Penny Sebring and Chuck Lewis, local philanthropists with a deep and abiding concern for improving the lives of all Evanstonians," he said. "Moreover, the Spencer Foundation, based in Chicago, will connect this partnership with other developing research-practice partnerships around the country."

Northwestern is also developing researchpractice partnerships with other local school districts, including a data-sharing partnership with the Chicago Public Schools that is expected to lead to significant collaborations as well.

"[W]e look forward to expanded research that will inform not only our two school districts in Evanston and Skokie, but also inform school districts across the country and even internationally," Witherspoon said.

Northwestern University's research team is led by IPR fellows Jonathan Guryan, associate professor of human development and social policy; and outgoing IPR Director David Figlio, Orrington Lunt Professor of Education and Social Policy and of Economics, with Diane Whitmore Schanzenbach, incoming IPR director and Margaret Walker Alexander Professor; and Associate Provost for Faculty Lindsay Chase-Lansdale, Frances Willard Professor of Human Development and Social Policy.

District 65 efforts, under its Superintendent Paul Goren, will be led by Maria Allison, its chief strategy officer, who is coordinating operations for the partnership, with Peter Godard, chief of research, accountability, and data. District 202 efforts, under the leadership of its Superintendent Eric Witherspoon and Assistant Superintendent Peter Bavis, will be coordinated by Carrie Levy, who is director of research, evaluation, and assessment.

# Short- and Long-Term Effects of SNAP

IPR economist Diane Whitmore Schanzenbach finds access to SNAP improves outcomes

#### **OVERVIEW**

The Supplemental Nutrition Assistance Program (SNAP), formerly known as the Food Stamp Program, is the fundamental safety net for American families, lifting 5 million people out of poverty in 2014 (the most recent data available). With more and more families receiving benefits from programs like SNAP, IPR economist Diane Whitmore Schanzenbach is examining the program's short- and long-term effects. She finds that SNAP improves birth outcomes and long-term health for recipients, and leads to better economic outcomes for women.

#### **FINDINGS**

Food stamps increase the ability of the poor to purchase food, and improve short-term health outcomes. This proves beneficial even before a child is born: Mothers who receive food stamps while pregnant have a reduced risk of having a low-birth weight infant. This is particularly true for African-American mothers and mothers living in high-poverty areas. The study (Almond, Hoynes, & Schanzenbach, 2011) is the first to show that although the program did not target pregnant mothers, the introduction of food stamps improved newborn health.

The health benefits of food stamps continue later in life. Individuals who had access to food stamps in early childhood have a lower risk of obesity, high

#### **POLICY TAKEAWAYS**

- Food stamps have short- and longterm positive impacts on health and economic outcomes.
- The benefits of food stamps are greatest for young children.
- Food stamps have modest employment disincentives.



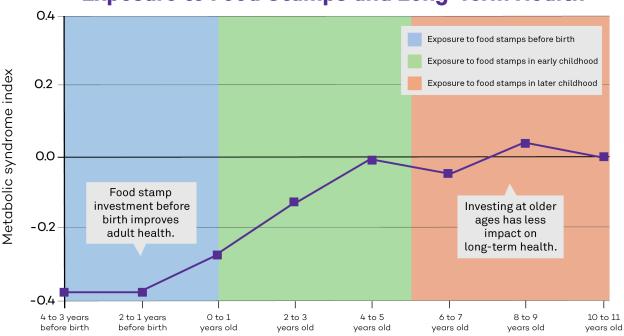
**Diane Whitmore Schanzenbach**, incoming IPR director, economist, and Margaret Walker Alexander Professor, studies policies aimed at improving the lives of children in poverty, including education, health, and income support policies.

blood pressure, heart disease, and diabetes as adults. These individuals are also more likely to report being in good health. The greatest lifelong gains from food stamps come when children benefit from them starting in utero up to age 5.

Food stamps provide economic benefits. Access to food stamps improved high school graduation rates by 18 percent. Furthermore, women who benefit from food stamps in early childhood are more economically self-sufficient as adults. These women are more likely to be a high school graduate, have a job, and have higher earnings. They are also less likely to participate in the Temporary Assistance for Needy Families (TANF) or food stamp programs.

However, there are modest reductions in employment and hours worked, as predicted by economic theory. Reductions in labor supply were larger for female-headed families, though it is worth noting that the study data were from the 1960s and 1970s. Both societal norms—such as marriage rates and women's attachment to the labor force—and the broader landscape of the safety net have changed since then.

### **Exposure to Food Stamps and Long-Term Health**



Age at introduction of food stamps in county

#### **METHODOLOGY**

The Food Stamp Program, now renamed SNAP, began as a pilot in eight impoverished counties in 1961, expanding to 43 counties in 1962–63, and then growing further with the Food Stamp Act of 1964. Schanzenbach and her colleagues use this gradual, county-by-county rollout as a natural experiment to examine the program's effect on recipients up to 50 years later.

#### **REFERENCES**

Almond, D., H. Hoynes, and D. W. Schanzenbach. 2011. Inside the war on poverty: The impact of food stamps on birth outcomes. *The Review of Economics and Statistics* 93(2): 387–403.

Hoynes, H., and D. W. Schanzenbach. 2012. Work incentives and the Food Stamp Program. *Journal of Public Economics* 96(1–2): 151–62.

Hoynes, H., D. W. Schanzenbach, and D. Almond. 2016. Long-run impacts of childhood access to the safety net. *American Economic Review* 106(4): 903–34.

Hoynes, H., and D. W. Schanzenbach. 2016. U.S. food and nutrition programs. In *Means Tested Transfer Programs, Volume II*, ed. by R. Moffitt. Chicago: University of Chicago Press.

#### **FACTS AND FIGURES**

- Food stamps lifted 5 million people out of poverty in 2014, putting the program behind only Social Security and the Earned Income Tax Credit in its anti-poverty efforts.
- Food stamp benefits average about \$126 per person per month, or \$1.40 per meal.
- Over two-thirds of food-stamp households include children.
- More than 1 in 9 people received food stamps during the Great Recession.
- Food stamps are the only U.S. public assistance program available to all family types.

# The Benefits of Increased School Spending

IPR economist Kirabo Jackson finds increased school spending improves long-term outcomes

#### **OVERVIEW**

Whether money matters for schools has been a controversial topic of debate, tracing back to the influential 1966 Coleman Report that found no connection between how much money is spent per student and their performance on tests. A new study, led by IPR economist **Kirabo Jackson**, takes a fresh approach that goes beyond examining K-12 standardized test results to observing long-term effects, such as how much students earn as adults. Based on school finance reforms in 28 states, Jackson and his colleagues find strong ties between increased school spending and positive outcomes.

#### **FINDINGS**

Increased spending raises graduation rates and boosts adult income. When per-pupil spending increased by 10 percent across all 12 school-age years, students completed more years of school, and as adults, they earned more and were less likely to live in poverty. As an example, schools in 2012 spent an average of \$12,600 per pupil that year. Jackson's findings suggest that a permanent 10 percent spending increase—or a one-time increase of \$1,260 per student over all 12 school years in this example—leads to 7 percent higher wages at age 40 and a 3 percentage-point lower likelihood of adult poverty.

**Low-income students benefit most from increased spending.** On average, these students spent about six more months in school, were 10 percentage points

#### **POLICY TAKEAWAYS**

- When per-pupil spending increased, students had:
  - higher graduation rates
  - higher adult wages
  - a lower likelihood of adult poverty
- Low-income students benefited most from increased spending.



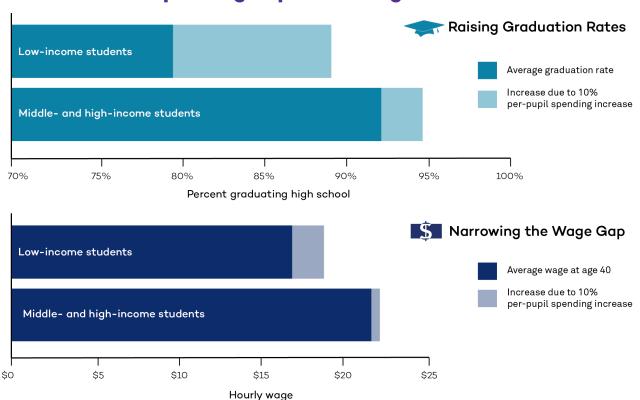
IPR economist **Kirabo Jackson** focuses on the economics of education with research covering teacher labor markets, teacher effectiveness, and how school spending affects student outcomes.

more likely to graduate high school, had 13 percent higher wages as adults, and were 6 percentage points less likely to live in poverty. Farther out, their family income increased by 17 percent. On top of this, the study suggests raising the overall spending level by an additional 15 percent could close the achievement gap between low- and high-income children.

It matters how the money is spent. Schools primarily spent the extra money on instruction and support services. When a district increased spending by \$100 due to reforms, spending on instruction increased by about \$70, and spending on support services increased by about \$40 on average. This higher spending was associated with lower student-to-teacher ratios, longer school years, and increased teacher and other support salaries. These benefits, Jackson and his colleagues explain, might help schools attract and retain more qualified instructors, counselors, and social workers.

The estimated benefits of increased school spending justify the higher spending. Jackson and his colleagues calculate an approximate cost-benefit ratio of 1 to 3. For every additional dollar invested in schools, there is a return on investment of \$3 in additional future earnings by the student.

### **School Spending Improves Long-Term Outcomes**



#### **METHODOLOGY**

The school finance reforms that began in the early 1970s and accelerated in the 1980s caused some of the most dramatic changes in the structure of K–12 education spending in U.S. history, with state supreme courts overturning property tax-based school finance systems in 28 states between 1971 and 2010. Jackson and his colleagues track the large spending increases that resulted from these cases to examine if children who were in school during or after the reforms were passed have better outcomes than children who were too old to be affected by the reforms. They look at educational attainment and adult earnings to assess the impact of the school finance reforms rather than standardized test scores, which are not necessarily good measures of learning or likely economic success.

#### REFERENCES

Jackson, C. K., R. Johnson, and C. Persico. 2015. The effects of school spending on educational and economic outcomes: Evidence from school finance reforms. *The Quarterly Journal of Economics* 131(1): 157–218.

#### **FACTS AND FIGURES**

- When school spending rose a total of 10 percent across all 12 years of public school, graduation rates increased 7 percent.
- Students exposed to this spending increase had 7 percent higher wages as adults and a 3.2 percentage point lower risk of adult poverty.
- Low-income students benefited the most from increased spending: They experienced a 10 percent increase in high school graduation rates, 13 percent higher wages at age 40, and a 6 percentage point lower likelihood of living in poverty.
- For every additional dollar spent on schools, the researchers calculated a \$3 return on investment.

# 'Alienated, Aggrieved, and Profoundly Distrustful'

#### Sociologist Andrew Cherlin explores white, working-class discontent

The writing was on the wall as early as 2014 for why working-class whites might throw their support behind current President Donald Trump, who was then a Republican candidate, according to Johns Hopkins sociologist Andrew Cherlin.

In a lecture before the presidential election, Cherlin said their deep economic distress has left them feeling "alienated, aggrieved, and profoundly distrustful," foreshadowing how working-class white votes helped flip traditionally blue states like Michigan, Pennsylvania, and Wisconsin to red in the 2016 presidential election.

An expert on family policy and children's well-being, Cherlin explored "The Economy, the Family, and Working-Class Discontent" in front of more than 80 people in his IPR Distinguished Public Policy Lecture on October 26 in Evanston.

#### White, Working-Class Politics

"There is a huge educational divide among whites in support for Secretary Clinton versus Mr. Trump," he said. "How can we understand this? I think we need to look at what's happened to the working class over the last few decades."

Already in 2014, Cherlin suggested how attitudes of the white working-class foreshadowed Trump's election. In opinion data collected through the General Social Survey (GSS), working-class whites revealed they were more likely than those of other social classes to want the number of immigrants reduced and to believe that immigrants take jobs away from Americans.

They were also less likely to be proud of American democracy today, and compared with better-off whites, working-class whites had less confidence in Congress, banks, schools, and major companies.

"[The 'worse-off' whites] seemed primed in 2014 to be receptive to Trump's 2016 campaign themes," Cherlin said.

But it would be a mistake to think of the white working class as one homogenous group of traditional "values voters," Cherlin said. Those who are the most "Trump-issue friendly" do not fit the traditional molds of the politically or socially conservative: They are not Tea Party supporters or Oklahoma evangelicals.

"They seem to accept the idea that the government should help people—although they might think that help is going to the wrong people right now," Cherlin continued, in comparing their beliefs with those who are better off. He added that new economic policies might lead to changed political loyalties among working-class whites.

#### **Economic Attitudes**

Cherlin proposed using reference group theory—or how views depend on people comparing themselves to others—to determine how people feel they are doing economically, rather than relying on reports of income levels.

"What matters ... is how adults feel about their standard of living compared to the lives their parents led," Cherlin said. "Not just how much money you make, but how much money you thought you would make. Not just what job you have, but what job you thought you'd have."

In the 2014 GSS, 20 percent of whites without a college degree said they were doing much, or somewhat, worse than their parents were at their age. Since 2000, the percentage of respondents who said their standard of living is better than their parents' has dropped.

Cherlin connected these responses to larger economic issues. Whites who identified themselves as worse off than their parents were less likely to have worked 50 or more weeks in the past year, more likely to have been unemployed in the previous 10 years, and more likely to have earned less than \$25,000 in the past year.

But not all groups were less likely to feel better off than their parents. In 2014, about 70 percent of Hispanics and 65 percent of African-Americans said their standard of living was much, or somewhat, better than that of their parents. The percentage of their positive responses to this question remained relatively stable over time; while for whites, it fell about 15 percentage points between 2000 and 2014.

#### Marriage and Families

In the mid-1990s, Cherlin formed an interdisciplinary group to study U.S. welfare reform following passage of the 1996 Temporary Assistance for Needy Families (TANF) that President Bill Clinton signed into law.



Andrew Cherlin (Continued on page 28)

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# Living on Less than \$2 a Day

#### Sociologist Kathryn Edin recounts how 'death of welfare' led to rise in extreme poverty

It was opening a refrigerator in a bare, rundown apartment and seeing nothing but a milk carton that provided the inspiration for the cover of **Kathryn Edin**'s latest book, \$2.00 a Day: Living on Almost Nothing in America (Mariner Books, 2016).

That lone milk carton became symbolic of everything the book was about, said Edin, a Johns Hopkins sociologist and Northwestern alumna (PhD '91), in her February 18 IPR Distinguished Public Policy Lecture at Northwestern University.

"Could it be that in the aftermath of welfare reform, a whole new kind of poverty had arisen in the United States—a poverty so deep, we hadn't even thought to look for it?" she said as she dove into her study of the more than 1.6 million Americans who now live in extreme poverty in "the world's most advanced capitalistic society."

Edin recounted the day-to-day struggles of those who live on less than \$2 a day—of getting fired because your roommate used all the gas in the car tank so you had no way to get to work, of standing in line to sell your blood plasma twice a week to generate much-needed cash, and of being so hungry that it made you feel "like you want to be

"Could it be that in the aftermath of welfare reform, a whole new kind of poverty had arisen in the United States—a poverty so deep, we hadn't even thought to look for it?"



Kathryn Edin

dead," as 18-year-old Tabitha told her, "because it's peaceful being dead."

Edin zeroed in on this extreme poverty in America after spending a summer in Baltimore conducting a study on young people born in public housing. What she saw led her to the larger question of how does one end up in this kind of extreme poverty—and what do you do to survive?

Edin spent part of her early career at Northwestern University, where she was an IPR fellow from 2000–04.

"Her foundation for research was born at both Northwestern and IPR," said outgoing IPR Director **David Figlio**, an education economist, in introducing her to the 90-plus attendees. "It's difficult to think of a more important research question than the line of work that Kathy does."

#### The 'Death of Welfare'

The book dissects the national data on the larger trend, with statistics from the Survey of Income and Program Participation, but it also recounts what she and her research team, including her co-author H. Luke Shaefer of the University of Michigan, found when they went to Chicago; Cleveland; Johnson City, Tennessee; and two small towns along the Mississippi Delta, seeking out people in extreme poverty and listening to their stories.

The people they met are part of a larger trend: Data show extreme poverty in the United States has increased since the passage of welfare reform in 1996. About 600,000 families with children lived on less than \$2 per person per day in 1996, growing to more than 1.6 million families in 2011. Meanwhile, food bank usage has increased and the number of homeless students has risen. The United States has also become the world's leading supplier of blood plasma, with the donations the only source of cash income for some of the country's poorest citizens.

Edin pinpoints the "death of welfare" as one cause behind the increase, explaining that welfare has become "a shadow of its former self" since reform.

In 1994, the Aid to Families with Dependent Children (AFDC) program served 14.2 million people. Today, the Temporary Assistance for Needy Families (TANF) program, which replaced the AFDC, serves about 4.1 million people, a drop of 71 percent. The enactment of welfare time limits has contributed to the drop: The 1996 welfare law prohibits states from using federal TANF funds to aid most families for more than 60 months.

The death of welfare may have led more people into poverty, but there are also factors keeping them there, including unsafe work

(Continued on page 28)

#### Cherlin

(Continued from page 26)

The resulting Three-City Study, in which IPR developmental psychologist Lindsay Chase-Lansdale was also involved, investigated how the reforms affected the well-being of low-income children and families.

Drawing on this and other research on families, Cherlin examined why working-class whites are far less likely to be married than those from a higher socioeconomic group. Just 27 percent of survey respondents who said they were worse off than their parents were currently married. Meanwhile, the percentage of women who have children outside of marriage increased, particularly among working-class women living with their partner.

Is this a response to poorer job opportunities? Cherlin explained that surveys show almost everyone would like to get married, but that working-class whites will not until they have the "economic wherewithal" to make a marriage last.

He also cited his 2016 study in the *American Sociological Review* that found men and women in areas with more working-class, well-paying jobs are more likely to marry before having their first child. But due to

"What matters is how adults feel about their standard of living compared to the lives their parents led."

globalization and automation, the United States has seen a decline in jobs for high school graduates that pay above-poverty wages. "The factories have moved away," Cherlin said.

The changes experienced by the white working class are therefore an economic

issue, according to Cherlin. Right now, working-class whites, in particular single males, "seem to be floating away from the rest of society. Living alone, not going to church, not getting married—drifting away from the college-educated middle class," he said.

His suggestion? Improving the situation of those who sit in the middle of the labor market could help politicians "bring the working class back into the mainstream."

"The presidential election reminds us about the importance of inequality in current American society," said outgoing IPR Director David Figlio, an education economist. "At IPR, we have dozens of scholars focused on understanding the causes and consequences of inequality, and proposing possible policy solutions to help the people affected. Andy Cherlin's talk is an excellent complement to this work."

Andrew Cherlin is the Benjamin H. Griswold III
Professor of Public Policy at Johns Hopkins
University. He is author of Labor's Love Lost: The
Rise and Fall of the Working-Class Family in
America (Russell Sage Foundation, 2014).

#### **Edin**

(Continued from page 27)

conditions, insufficient work hours, wage theft, and labor law violations.

Edin told the story of a woman who found a job cleaning foreclosed homes in the winter in Chicago. The mold in these homes and the chemicals used for cleaning weakened her immune system, leading to a cycle of illness and missed work. Her employer then branded her unreliable and cut her hours. The woman ended up quitting to find more stable work, but she could not find a new job and ended up homeless.

Those living on less than \$2 a day also have to worry about unsafe conditions at home, dealing with housing instability and sexual, physical, and emotional abuse. One woman was "doubling up" with family because she could not afford a place on her own, and she came home from work to find her uncle molesting her 9-year-old daughter.

"We really do need something to catch people when they fall," Edin said. "The help for the working poor only applies to them when they are working. When they lose those jobs, they have nothing."

She highlighted possible solutions such as reviving the welfare system, offering a

"When we integrate
the poor and give
them dignity, we
have a better
chance of getting
them out of
poverty."

guaranteed child allowance, or expanding the childcare tax credit. Edin also argued everyone deserves the opportunity to work. Everyone she spoke to said they wanted more work. "Nobody said they wanted more handouts," she noted.

Most importantly, Edin proposed a litmus test for any proposed reform: "Does it integrate the poor, does it weave them back into society, does it give them honor and dignity? Or does it separate them, shame them, stigmatize them?"

"When we integrate the poor and give them dignity, we have a better chance of getting them out of poverty," Edin concluded.

Kathryn Edin is Bloomberg Distinguished Professor of Sociology and of Population, Family, and Reproductive Health at Johns Hopkins University. She is co-author of \$2 a Day: Living on Almost Nothing in America (Mariner Books, 2016).

# **Recent Faculty Recognition**

#### **Awards and Honors**

Geophysicist and IPR associate **Seth Stein** will become president of the American Geophysics Union's Natural Hazards Focus Group at its annual meeting in October.

In June, developmental psychologist and IPR associate **Claudia Haase** was awarded the 2017 NARSAD Young Investigator Grant from the Behavior & Brain Research Foundation.

With his wife Anne, IPR faculty emeritus John Heinz received a Superior Achievement Award from the Illinois State Historical Society for their book,



John and Anne Heinz

Women, Work, and Worship in Lincoln's Country: The Dumville Family Letters (University of Illinois Press, 2016). See p. 17 for more about the book.

IPR associate **Melissa Simon**, an obstetrics and gynecology professor, was appointed to the U.S. Preventive Services Task Force in February.

IPR developmental psychologist **Onnie Rogers** was named a "rising star" by the Association for Psychological Science in January.

The Northwestern Associated Student
Government named six IPR faculty to its Faculty
Honor Roll for 2016–17: IPR sociologist and
African-American studies researcher Celeste
Watkins-Hayes and five IPR associates:
economist William Rogerson, psychologist
Robin Nusslock, mechanical engineering
professor Elizabeth Gerber, journalism
professor Craig LaMay, and learning scientist
Matthew Easterday.

IPR associates Bernard Black, the Nicholas D. Chabraja Professor at the Pritzker School of Law and Kellogg School of Management, and Carol Lee, the Edwina S. Tarry Professor of Education and Social Policy, were inducted into the American Academy of Arts and Sciences in November.

IPR education researcher and statistician **Larry Hedges** was elected chairman of the U.S.

National Education Sciences Board in November.

In fall 2016, psychologist and IPR associate Vijay Mittal received the Federation of Associations in Behavioral & Brain Sciences Early Career Impact Award, and IPR associate David Cella, the Ralph Seal Paffenbarger Professor at the Feinberg School of Medicine, received the Gustav O. Lienhard Award from the National Academy of Medicine.

#### Grants

The William T. Grant Foundation is providing support to IPR economist **Jonathan Guryan** and a team of researchers at the University of Chicago, as they look to increase the reach of promising dropout prevention programs in Chicago schools. Guryan has also received funding from the Laura and John Arnold Foundation for his state and local innovation initiative.

With support from the National Institute of Child Health and Human Development, IPR biological anthropologist **Thomas McDade** and preventive medicine faculty and IPR associate **William Funk** will examine the biological and health effects of housing vouchers.

IPR health psychologist **Greg Miller** received funding from the National Heart, Lung, and Blood Institute for his research on the psychosocial and behavioral pathways linking family stress in adolescence to cardiovascular risk.

IPR sociologist and legal scholar **Heather Schoenfeld** received funding from an anonymous foundation for her ongoing research on state variation in decarceration reforms.

With support from the Administration for Children and Families, IPR developmental psychologist Lindsay Chase-Lansdale, IPR research associate professor Teresa Eckrich Sommer, and developmental psychologist and IPR associate Terri Sabol will continue to investigate outcomes of parents and children in CareerAdvance®, a two-generation program in Tulsa, Oklahoma (see p. 3 for more).

IPR political scientist Laurel Harbridge Yong received support from the William and Flora Hewlett Foundation to examine the limits of electoral accountability in Congress.

IPR anthropologist Sera Young received two grants from the National Institute of Mental Health to study the health consequences of food and water insecurity among HIV-infected



Sera Young

mothers and their infants. With another grant from the Department of International Development at the London School of Hygiene & Tropical Medicine, Young is working to develop a new tool to assess household-level water insecurity across cultures.

#### Notable Media Coverage

In a Washington Post op-ed, IPR political scientist Laurel Harbridge Yong explained why fear of voter retribution might keep Republican legislators from criticizing President Trump, August 2.

WTTW Chicago Tonight covered research by IPR developmental psychobiologist Emma Adam and former IPR graduate research assistant Jennifer Heissel showing how violent crime can "get under the skin" to affect stress and academic achievement in children, July 27.

The New York Times featured IPR economist **Seema Jayachandran**'s finding that paying people not to cut down their trees is a cost-effective way to reduce deforestation, July 20.

IPR associate **Crystal Clark**, assistant professor of psychiatry and behavioral sciences, told Quartz that eating a placenta post-birth has no discernible health benefits, July 7.

The Irish Times highlighted a study by professor of entrepreneurship and IPR

associate **Benjamin Jones** finding that most scientific breakthroughs come from more established scholars, June 22.

In a Washington Post op-ed, political scientist and IPR associate **Thomas Ogorzalek** discussed how the historical "rediscovery" of Confederate symbols is related to a desire to maintain whites' position in society, June 12.

Research by pediatrician and IPR associate Craig Garfield, IPR economist David Figlio, and others in Time shows that most premature babies catch up to their peers and are ready for school by kindergarten, June 12.

In CNN, neurologist and sleep expert **Kristen Knutson**, an IPR associate, explained how sleep irregularity can adversely affect health, June 12.

In The Conversation, law professor and IPR associate **David Dana** discussed the

connection between U.S. withdrawal from the Paris Climate Accord and future prospects for geoengineering in the United States, June 7.

NBC News talked to IPR sociologist and African-American studies researcher Celeste Watkins-Hayes about how living in a high-poverty or high-crime neighborhood can make it more



Celeste Watkins-Hayes

challenging for victims of sexual violence to recover, May 28.

WBEZ Chicago interviewed IPR political scientist and policing expert Wesley Skogan about a community watch effort in the Rogers Park neighborhood of Chicago, May 25. In research highlighted by NPR, oncofertility specialist **Teresa Woodruff** and her colleagues developed a 3-D printed mouse ovary, a finding that could have implications for human reproduction, May 20.

In a Wall Street Journal op-ed, Morton Schapiro, Northwestern president and IPR economist, argued that safe spaces help students voluntarily engage in uncomfortable learning, May 16.

Chicago Magazine talked to sociologist and IPR associate Mary Pattillo about why African-Americans are moving away from the city of Chicago, May 8.

Research by IPR faculty and economists

Matthew Notowidigdo and Craig

Garthwaite covered in The New York Times
shows that repealing the Affordable Care
Act could create financial problems for
consumers, May 6.

# IPR's Eric Betzold Named Northwestern's Employee of the Year

#### IPR business administrator recognized for exemplary work and dedication

While IPR Business Administrator Eric
Betzold is known for wearing his purple IPR
T-shirt on Fridays and curating an informal
Star Wars memorabilia collection in his office,
it is his handling of complex grant transfers
and budgets across Northwestern that earns
him rave reviews from faculty and funders.

The latter is why University President and Professor Morton Schapiro presented him with Northwestern's 2017 award for Employee of the Year on June 6.

Since 1978, the Office of Human Resources has annually recognized employees who go "above and beyond" their normal duties and are "dedicated and effective." Betzold is the 73rd employee to have received the award and the first from IPR.

"Eric is a key factor behind IPR's recognized excellence," said outgoing IPR Director David Figlio. "From staying late to execute a last-minute grant submission because a funder's website is down to taking care of leaky basements, no problem is too big or too small. His discretion and efficacy means that most faculty are often completely

unaware of the mountains that he has had to move to execute any number of complicated procedures!"

One of these complicated procedures involved working to quickly execute a subcontract awarded to IPR health psychologist **Edith Chen**, before a vendor doubled the cost of assays from \$6,500 to \$13,000.

"Eric stepped in and worked with both grant offices, and even came up with a back-up plan in case it didn't work," Chen said. "In the end, the subcontract was executed in the nick of time for the partner university to purchase the supplies at the lower cost."

Another IPR fellow, political scientist and IPR associate director **James Druckman**, noted how Betzold toiled over a grant where his co-principal investigator (PI) had moved to another university—also the point at which they had applied for a renewal.

"Complications were endless, and Eric, without complaint, worked probably well over 100 hours on only this to work out all the details," Druckman wrote in an email. The grant was renewed, and



Eric Betzold (l.) and Morton Schapiro

Druckman has "zero doubt" that without Betzold, none of this would have happened.

Even when facing personal challenges, Betzold excels. He kept up a full workload while his son was undergoing pediatric cancer treatments between 2014 and 2016, often working from his son's bedside in the hospital or at home.

The typically self-effacing Betzold credits his colleagues for enabling him to go above and beyond what's required.

"Everything is so interconnected at IPR,"
Betzold said. "We all depend on each other.
Everything that I do wouldn't be possible
without many other people at Northwestern
also doing their work."

# **Combating Medical Students' Racial Bias**

#### IPR associate identifies informal experiences as predictors of racial attitudes

Though many medical schools include diversity training in their curricula, racial disparities in quality of care persist. Research shows these sometimes stem from physician attitudes, leading to differences in treatment and undermining trust in medical care. A study by IPR associate Sylvia Perry and her colleagues identifies one possible cause of biased attitudes and offers possible solutions.

Perry, a psychologist, and her colleagues find that having more contact with African-Americans before medical school predicted more positive attitudes toward African-Americans at the end of four years of training, while the amount of contact with African-Americans during medical school did not significantly predict attitudes.

The researchers, supported by the National Heart, Lung, and Blood Institute, surveyed almost 3,000 white, Asian, and Hispanic students from 49 U.S. medical schools. The team asked about students' contact with

African-Americans before and during medical school, the amount of diversity-related training they received, and if they had observed people in authority make negative racial remarks about patients.

But in Social Psychology Quarterly, they also identify experiences during medical training that lead to negative attitudes: Students whose instructors made negative racial comments or jokes were significantly more willing to express racial bias themselves. The finding underscores the importance of informal, experiential elements of medical training in shaping the attitudes of future medical providers, the researchers explain.

"It's important for medical schools to recognize that the formal processes, like diversity training, are not sufficient if the behavior that's being modeled is counter to that," Perry said.

The researchers specifically recommend targeted diversity training that includes

physicians and professors. emphasizing their status as role models. Based on their findings. they argue such training might have indirect benefits for students and their future patients.



Sylvia Perry

Perry and her colleagues are continuing to follow the medical student cohort through residency training. They are currently investigating how the residents' attitudes and training experiences influence how they think about actual interactions with patients. These findings will have further implications for how biases impact patient care.

Sylvia Perry is assistant professor of psychology and an IPR associate.

# Infographic: Early Environments and Adult Health (Continued from page 32)

New research, led by IPR scholars, underscores how environmental conditions early in development can cause inflammation in adulthood-an important risk factor for a wide range of diseases of aging, including cardiovascular diseases, diabetes, and dementia.

Drawing on prior research that links environmental exposures to inflammatory biomarkers, the study, published in the Proceedings of the National Academy of Sciences, breaks new ground in helping to understand how our bodies "remember" experiences in infancy and carry them forward to shape inflammation and health in adulthood.

Using data from a large birth cohort study in the Philippines, with a lifetime of information on its participants, the researchers find that nutritional, microbial, and psychosocial exposures early in development predict DNA methylation (DNAm) in nine genes involved in the regulation of inflammation.

IPR anthropologist Thomas McDade, who led this study, and his colleagues, including IPR health psychologist Greg Miller, IPR anthropologist Christopher Kuzawa, and two Northwestern graduate students, focused on DNAm—an epigenetic process that involves durable biochemical marks on the genome that regulate gene expression—as a plausible biological mechanism for preserving cellular memories of early life experiences.

In other words, epigenetic mechanisms appear to explain-at least in part-how environments in infancy and childhood are "remembered" and have lasting effects on inflammation and risk for inflammationrelated diseases.

"Taking this a step further, the findings encourage us to reconsider the common view that genes are a 'blueprint' for the human body-that they are static and fixed at conception," McDade said.

The research suggests that altering aspects of the nutritional, microbial, and psychosocial environment early in development can leave lasting marks on the epigenome, with the potential to reduce levels of chronic inflammation in adulthood.

Environmental exposures that leave their mark on the epigenome and shape inflammation over the course of development include breastfeeding duration, microbial exposure, and socioeconomic status.

"If we conceptualize the human genome as a dynamic substrate that embodies information from the environment to alter its structure and function, we can move beyond simplistic 'nature vs. nurture' and 'DNA as destiny' metaphors that don't do justice to the complexity of human development," McDade explained.

Thomas McDade is Carlos Montezuma Professor of Anthropology and an IPR fellow.

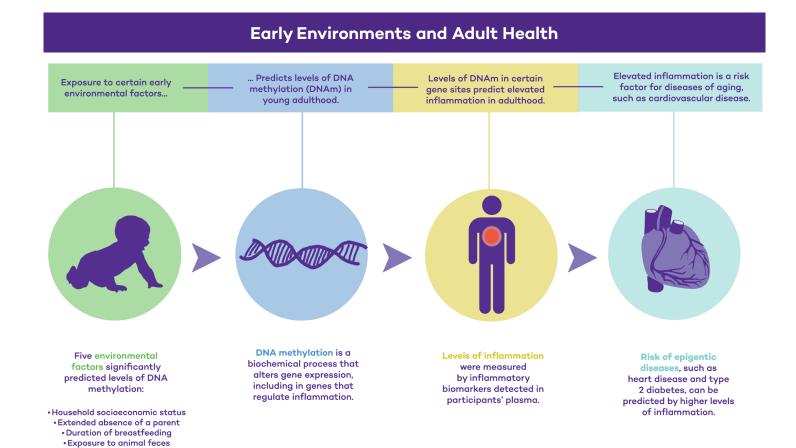
### Northwestern | INSTITUTE FOR POLICY RESEARCH

2040 Sheridan Road Evanston, IL 60208-4100

Phone: 847-491-3395 Fax: 847-491-9916

Web: www.ipr.northwestern.edu E-mail: ipr@northwestern.edu Non-Profit Organization U.S. POSTAGE PAID Permit No. 205 Evanston, IL 60201

(Read more about the infographic on page 31.)



Source: McDade, T., C. Ryan, M. Jones, J. MacIsaac, A. Morin, J. Meyer, J. Borja, G. Miller, M. Kobor, and C. Kuzawa. 2017. Social and physical environments early in development predict DNA methylation of inflammatory genes in young adulthood. *Proceedings of the National Academy of Sciences*. doi:10.1073/pnas.1620661114

• Birth in the dry season