



**HUMAN
CAPITAL &
ECONOMIC
OPPORTUNITY**
global working group



HIGHLIGHTS

ISSUE 4: Fall-Winter 2018-2019




IN THIS ISSUE

For the fourth issue of “Highlights,” HCEO’s biannual publication, we take a look back at both our recent international programming as well as new member research.

Since our last issue, HCEO has been busy hosting a full slate of summer and fall programming. We held training programs for early career faculty and Ph.D. students in China and hosted Summer Schools on Socioeconomic Inequality in Bonn, Germany and Chicago. We welcomed our two 2018 dissertation prize winners, Tímea Laura Molnár and David Lydon-Staley, to the University of Chicago to present their research. Lastly, we held six conferences at institutions around the U.S., on topics ranging from improving health equity to development economics.

In 2019, we look forward to training a new crop of Ph.D. students at our SSSI programs which will take place in Guangzhou, Bergen, and Chengdu. We will also hold our first summer school for undergraduates at Jinan University.

We thank you for your support of HCEO’s mission to connect cross-disciplinary experts in the study of inequality. You can stay up to date with our work all year by following us on social media. 

Research Spotlight **2**

New Working Papers **8**

3 Questions **13**

Featured Conference **16**

Perspectives on Inequality **24**

Dissertation Prize **23**

About HCEO **26**

First Time Reader? Flip to page 26 to learn about who we are and what we do.

 www.hceconomics.org

 [hceconomics](https://www.facebook.com/hceconomics)

 [@hceconomics](https://twitter.com/hceconomics)

 [hceconomics](https://www.youtube.com/hceconomics)



RESEARCH SPOTLIGHT

Publishing and Promotion in Economics: The Tyranny of the Top Five

In June of 1967, George Akerlof submitted a paper to an academic economics journal in the hopes of getting published. “The Market for ‘Lemons’” examined how asymmetric information affects markets, taking the used car business as an example. The first journal rejected the submission out of hand, writing that it “did not publish papers on subjects of such triviality.” It was rejected by two more journals, one of which noted presciently that if Akerlof’s arguments were correct, “economics would be different.” The paper was eventually published by the Quarterly Journal of Economics in 1970. Akerlof would go on to win the Nobel Prize for this work and it is now considered a seminal article in the economics canon.

“We show that, compared to publication in other outlets, publishing in the top 5 increases your chances of tenure by quite a lot.”

Akerlof’s experience has been frequently recounted, as a fluke, or a funny anecdote about how the work of a brilliant economist almost never saw the light of day. But as HCEO Co-Director James J. Heckman and his co-author, CEHD Predoctoral Fellow Sidharth Moktan, show in their new HCEO working paper, economics publishing is still frequently defined by a narrow range of journals. Heckman and Moktan were interested in how publishing and the promotion of academic economists are influenced by the Top 5 economics journals: The American Economic Review, Econometrica, the Journal of Political Economy, the Quarterly Journal of Economics, and the Review of Economic Studies. The authors note that publishing in these journals has become a professional standard, with Top 5 publication counts often tied to tenure decisions.

“The promotion and advancement power of the Top 5 in the top 35 U.S. economics departments is unquestionable,” the authors write.

In order to examine the relationship between Top 5 publications and tenure decisions, Heckman and Moktan analyze the job histories of tenure-track economists hired by the top 35 U.S. economics departments between 1996 and 2010. This time frame allows the authors to assess the impacts of published papers but is also recent enough to describe the current economics environment.

“We show that, compared to publication in other outlets, publishing in the top 5 increases your chances of tenure by quite a lot,” Moktan says. The authors find that publishing three Top 5 articles is associated with a 370% increase in the rate of receiving tenure, compared to candidates with similar levels of publications who do not place any in the Top 5. Candidates with one or two Top 5 articles “are estimated to experience increases in the rate of receiving tenure of 90% and 260% respectively, while the estimated effects of non-top 5 publications “pale in comparison.” The authors also note that requirements for Top 5 publication decline with department quality and that “the impact on tenure of Top 5 publication increases with declines in department quality.”

“Scholars who themselves primarily publish in, read, and cite papers from non-Top 5 field journals appraise the quality of prospective candidates for promotion and hiring using their Top 5 publications.”

These findings are corroborated using a survey of current assistant and associate professors in the top 50 economics departments. Survey respondents were asked about their beliefs of how tenure decisions are made within their departments, with an emphasis on the role played by Top 5 publications. The majority

of respondents reported that the quantity of Top 5 publications is “the most important source of influence on tenure and promotion decisions.” The importance of Top 5 publication was ranked ahead of seven other areas of performance, including teaching and external letters of review.

In the survey, the authors also tried to tease out whether faculty believe the Top 5 effect is due to these publications being better quality. To do this, they asked respondents to predict which of two hypothetical candidates were more likely to receive tenure. The candidates had equal portfolios, except that one had published in Top 5 journals and the other had not. “On average, junior faculty at the top 50 departments believe that their department would award tenure to the Top 5 candidate instead of the non-Top 5 candidate at least 89 times out of 100,” the authors write.

“That just shows that the influence of the top 5 is perceived to operate independently of article quality,” Moktan says.

The authors also try to suss out whether Top 5 articles are superior to other publications by comparing citations counts of work published in Top 5 journals to 25 other journals between 2000 and 2010. They find that “non-Top 5 non-survey journals publish a significant volume of influential research in economics, frequently outperforming some of the less-influential Top 5 journals.” Moktan notes that when looking just at mean citations, Top 5 journals do tend to generate more citations. But when they looked at by-article citations, he says “there was a big overlap in the distribution.” The paper notes that “papers published in non-Top 5 journals account for more than 70% of RePEc’s most-cited articles in the past 10 and 20 years, respectively,” and that “among the 20 most cited articles by RePEc, 35% were not published in the Top 5.”

Heckman and Moktan point out that many of the most influential economists frequently publish outside of the Top 5 journals, often in non-Top 5 working paper series. “Scholars who themselves primarily publish in, read, and cite papers from non-Top 5 field journals appraise the quality of prospective candidates for promotion and hiring using their Top 5 publications,” they write. “The appraisers do not practice what they preach.”

It is worth noting that the amount of space available in Top 5 publications has decreased over the years, as “journal space is fixed in supply and papers have become longer.” This creates a more competitive environment, the

authors write, which “implies that the cost and effort going into Top 5 publishing has increased with the decline in the probability of success.” Top 5 acceptance rates declined from 15% in 1980 to 6% in 2012.

“Without doubt, publication in the Top Five is a powerful determinant of tenure in academic economics that influences the choice of topics on which young economists work and squeezes papers into bite-sized journal-friendly fragments,” the authors write.

"Our findings should spark a serious conversation in the profession about how to develop implementable alternatives to judge quality research."

The emphasis on Top 5 publications holds several important implications for economics as a profession. Significantly, two of the Top 5 journals are in-house, meaning that editors belong to a specific university and tend to have much longer tenures than other journals.

“One must allow for the possibility of strong network bias against tenure-track faculty who lack connections with Top 5 editors, regardless of whether such bias stems from blatant editorial corruption or from the above conjectured impact-maximizing behavior of editors who seek quality papers,” the authors write.

“Corresponding with that, they tend to publish many more papers by people who are affiliated with the university,” Moktan says. “There’s a lot of influence given to just a handful of people.”

As this research shows, the Top 5 operate independent of quality, so incentivizing faculty to pursue these publications affects their research agendas and “discourages large-scale, data-intensive empirical projects.” As the

example of Akerlof’s study demonstrates, faculty are not necessarily incentivized to pursue innovative and creative lines of research.

“Our findings should spark a serious conversation in the profession about how to develop implementable alternatives to judge quality research,” the authors write. They note that solutions would at least reduce the role Top 5 publications play in tenure and promotion decisions. “Under any event, the profession should deemphasize crass careerism and promote creative activity,” they write. “Short tenure clocks and reliance on the Top 5 to certify quality does just the opposite.”



For more Research Spotlights, visit:
hceconomics.uchicago.edu/research

WORKING PAPERS

TOP 5: May to December 2018

HCEO's working paper series publishes research on the most pressing issues within human capital development and inequality, featuring contributions from members of all six networks. In order to further our agenda of disseminating research and fostering discussion, our papers are available for free download via the HCEO website and RePEc. To date, we have published over 352 papers, which have been downloaded over 19,000 times.

2018-050: The Value of Health Insurance: A Household Job Search Approach

Gabriella Conti, Rita Ginja, and Renata Narita

Do households value access to free health insurance when making labor supply decisions? We answer this question using the introduction of universal health insurance in Mexico, the Seguro Popular (SP), in 2002. The SP targeted individuals not covered by Social Security and broke the link between access to health care and job contract. We start by using the rollout of SP across municipalities in a differences-in-differences approach, and find an increase in informality of 4% among low-educated families with children. We then develop and estimate a household search model that incorporates the pre-reform valuation of formal sector amenities relative to the alternatives (informal sector and non-employment) and the value of SP. The estimated value of the health insurance coverage provided by SP is below the government's cost of the program, and the corresponding utility gain is, at most, 0.56 per each peso spent.

2018-071: Inequality in Socioemotional Skills: A Cross-Cohort Comparison

Orazio Attanasio, Richard Blundell, Gabriella Conti and Giacomo Mason

We examine changes in inequality in socio-emotional skills very early in life in two British cohorts born 30 years apart. We construct socio-emotional scales comparable across cohorts for both boys and girls, using two validated instruments for the measurement of child behaviour. We identify two dimensions of socio-emotional skills for each cohort: 'internalising' and 'externalising', related to the ability of children to focus their concentration and to engage in interpersonal activities, respectively. Using recent methodological advances in factor analysis, we establish comparability in the inequality of these early skills across cohorts, but not in their average level. We document for the first time that inequality in these early skills has increased across cohorts, especially for boys and at the bottom of the distribution. We also document changes in conditional skills gaps across cohorts. We find an increase in the socio-emotional skills gap in the younger cohort for children born to mothers with higher socio-economic status (education and employment), and to mothers who smoked during pregnancy. The increase in inequality in early socio-emotional skills is particularly pronounced for boys. On the other hand, we find a decline in the skills gradient for children without a father figure in the household. Lastly, we document that socio-emotional skills measured at a much earlier age than in most of the existing literature are significant predictors of outcomes both in adolescence and adulthood, in particular health and health behaviours. Our results show the importance of formally testing comparability of measurements to study skills differences across groups, and in general point to the role of inequalities in the early years for the accumulation of health and human capital across the life course.

2018-087: Genome-Wide Association Analyses of Risk Tolerance and Risky Behaviors in over One Million Individuals Identify Hundreds of Loci and Shared Genetic Influences

Richard Karlsson Linnér, Pietro Biroli, Edward Kong, et al.

Humans vary substantially in their willingness to take risks. In a combined sample of over one million individuals, we conducted genome-wide association studies (GWAS) of general risk tolerance, adventurousness, and risky behaviors in the driving, drinking, smoking, and sexual domains. We identified 611 approximately independent genetic loci associated with at least one of our phenotypes, including 124 with general risk tolerance. We report evidence of substantial shared genetic influences across general risk tolerance and risky behaviors: 72 of the 124 general risk tolerance loci contain a lead SNP for at least one of our other GWAS, and general risk tolerance is moderately to strongly genetically correlated with a range of risky behaviors. Bioinformatics analyses imply that genes near general-risk-tolerance-associated SNPs are highly expressed in brain tissues and point to a role for glutamatergic and GABAergic neurotransmission. We find no evidence of enrichment for genes previously hypothesized to relate to risk tolerance.

2018-056: Willingness to Take Risk: The Role of Risk Conception and Optimism

Thomas Dohmen, Simone Quercia and Jana Willrodt

We show that the disposition to focus on favorable or unfavorable outcomes of risky situations affects willingness to take risk as measured by the general risk question. We demonstrate that this disposition, which we call risk conception, is strongly associated with optimism, a stable facet of personality and that it predicts real-life risk taking. The general risk ques-

tion captures this disposition alongside pure risk preference. This enlightens why the general risk question is a better predictor of behavior under risk across different domains than measures of pure risk preference. Our results also rationalize why risk taking is related to optimism.

2018-030: Investing in People: The Case for Human Capital Tax Credits

Rui Costa, Nikhil Datta, Stephen Machin and Sandra McNally

Estimates from the US suggest that increasing levels of human capital over the second half of the last century accounted for approximately one third of productivity growth, while some estimates of the social rate of return to R&D in the manufacturing sector have exceeded one hundred percent. Despite the contribution of both human capital and R&D to economic growth, the UK fiscal system does not treat the two equally when it comes to employer incentives to invest. Firms that invest in R&D are able to claim generous tax relief on their investments whereas there is no such across-the-board incentive to invest in the training of their workers. This is despite the fact that the rationale for government support to firm investment in human capital is similar to that for R&D and both are important for economic growth. We explain the economic rationale for government support in the form of tax credits, discuss current practice in the UK in relation to R&D, and address the evidence on effectiveness. We then discuss how the policy might be adapted to provide similar incentives for investing in human capital.

New Working Papers

No.	Paper Title	Authors	Link
2019 001	The Causal Impact of Removing Children from Abusive and Neglectful Homes	Anthony Bald, Eric Chyn, Justine S. Hastings, and Margarita Machelett	bit.ly/2MaoFj1
2018 099	Endogenous skill-biased technology adoption: Evidence from China's college enrollment expansion program	Shuaizhang Feng, Xiaoyu Xia	bit.ly/2SR3WmU
2018 098	The Race Between Demand and Supply: Tinbergen's Pioneering Studies of Earnings Inequality	James J. Heckman	bit.ly/2CnaanG
2018 097	A Very Uneven Playing Field: Economic Mobility in the United States	Pablo Mitnik, Victoria Bryant, and David Grusky	bit.ly/2FyHmMc
2018 096	Foreclosure Spillovers within Broad Neighborhoods	Weiran Huang, Ashlyn Nelson, Stephen L. Ross	bit.ly/2QRKhBK
2018 095	What is a Good School, and Can Parents Tell? Evidence on the Multidimensionality of School Output	Diether W. Beuermann, C. Kirabo Jackson, Laia Navarro-Sola, and Francisco Pardo	bit.ly/2CmeqUi
2018 094	Now You See Me, Now You Don't: The Geography of Police Stop	Jesse Kalinowski, Matthew Ross, Stephen L. Ross	bit.ly/2AMwKGP
2018 093	The Impact of a Conditional Cash Transfer Program on Households' Well-Being	Daniela Del Boca, Chiara Pronzato, Giuseppe Sorrenti	bit.ly/2CkWrxy

For more Working Papers, visit:
hceconomics.uchicago.edu/research

3 QUESTIONS

With Katherine Amato



Health Inequality network member Katherine Amato is an Assistant Professor in the Anthropology Department at Northwestern University. She is a biological anthropologist who studies the gut microbiota in the broad context of host ecology and evolution. She is particularly interested in understanding how changes in the gut microbiota impact human nutrition and health in populations around the world, especially those with limited access to nutritional resources. Trained as field primatologist, her perspectives on physiology, plasticity, and fitness in wild primates inform her research on human-gut microbe interactions. Her current research focuses on microbial contributions to host nutrition during periods of reduced food availability or increased nutritional demands, as well as microbial influences on brain growth. Amato is an Azrieli Global Scholar for the Canadian Institute for Advanced Research's 'Humans and the Microbiome' program and an Associate Editor for the journal *Microbiome*. She obtained her B.A. in Biology from Dartmouth College and earned her Ph.D. in Ecology, Evolution, and Conservation from the University of Illinois at Urbana-Champaign in 2013.

Please describe your area of study and how it relates to current policy discussions surrounding inequality.

I study the community of microbes in the large intestine —the gut microbiome. The gut microbiome affects our nutrition, immune function, and behavior and is strongly influenced by environmental factors such as birth mode, diet, social interactions, outdoor exposure, and antibiotic use. Since many of these factors have been associated with health disparities, a better understanding of host-gut microbe interactions has the potential to inform our understanding of the establishment and maintenance of health disparities. By determining which gut microbes contribute to which host physiological traits, and how environmental factors influence these microbes, we can identify the environmental factors that are most likely to affect our health via the gut microbiome. This information can then guide policy discussions toward the areas of greatest impact for reducing health disparities. My research is specifically focused on understanding the consequences of host-gut microbe interactions on host metabolism and, ultimately, conditions such as malnutrition, growth stunting, obesity, and diabetes. For example, I am interested in how gut microbial traits can help people survive acute periods of food shortage and whether the same gut microbial traits may increase susceptibility to metabolic disease in the context of long-term patterns of food-insecurity.

What areas in the study of inequality are most in need of new research?

The gut microbiome represents a previously unexplored mechanism by which people’s environments can affect their health. These processes are relevant throughout life, but the potential for early life environments to impact health in adulthood as well as the possibility of intergenerational effects (due to transfer of microbial communities from mothers to infants) is great. Taking advantage of new methods for describing gut microbiomes to address existing questions in the field of health disparities has the

potential to rapidly advance the field. There are many gaps in our understanding of host-gut microbe interactions that must be addressed before we can effectively integrate this research into policy.

What advice do you have for emerging scholars in your field?

Don’t be afraid of interdisciplinary research. While institutional structures don’t always support this type of research, it allows us to address a wider variety of interesting, policy-relevant questions. Microbiome research provides some wonderful examples of this approach, but it can always be improved. The more perspectives we integrate into basic research, the easier it should be to use research to implement policy change in a range of contexts.



For more 3 Questions, visit:
hceconomics.uchicago.edu/research

FEATURED CONFERENCE

Faculty Collaborative Seminar

HCEO held our Faculty Collaborative Seminar at Jinan University in Guangzhou, China from June 25-29, 2018. The training seminar was the inaugural program hosted by the new Joint Research Initiative of Jinan University's Institute for Economic and Social Research and the Center for the Economics of Human Development at the University of Chicago. The seminar was attended by more than two dozen assistant professors and post-doctoral scholars from seven countries.

Over the course of the five-day seminar, senior faculty lectured on their research, with topics ranging from skill formation to intergenerational mobility. The lectures were designed to give attendees rigorous training in the most recent methodologies across different fields.

On the first day, Lawrence Blume, the Goldwin Smith Professor of Economics at Cornell University, discussed economic theory and its applications.

Professor Blume's presentation started with an example of why it's crucial to think carefully about causality in economic models. He continued with a theory of social interaction networks. He showed the importance of modelling in several different microeconomic settings. His presentation finished with a model of intergenerational mobility which can lead to "poverty traps." Professor Blume stressed that all economic questions implicitly involve a model and that it is necessary in many cases to explicitly write that model down and to clearly state the assumptions of the model.



Petra Todd, who is the Edmund J. and Louise W. Kahn Term Professor of Economics at the University of Pennsylvania, gave a lecture on the structural modelling of microeconomic decision-making. She showed non-structural and structural approaches to microeconomic problems, as well as parametric and non-parametric estimation strategies. Professor Todd presented discrete choice dynamic programming models for policy evaluation on such decisions as female labor force participation and fertility, and discussed the differences between dynamic and static estimation strategies.



University of Wisconsin-Madison Mary Claire Aschenbrenner Phipps Professor of Economics Chao Fu presented on structural modelling in partial and general equilibrium frameworks. She discussed when partial or general equilibrium setups are needed depending on the question being answered. Her work estimates the effects of policy in general equilibrium settings, such as the effect of increased policing on crime.

Flavio Cunha, Professor Economics at Rice University, gave a lecture on human capital formation. Professor Cunha presented research on both cognitive and non-cognitive skill development and how these skills explain labor market and other outcomes. His work focuses on why different people develop such different levels of skill, and how education and parenting affect skill development. He presented his recent research on the Philadelphia Human Development Study, which tries to understand the role of parental expectations of children skill development and returns to skills in their investment decisions.

On the final day of the seminar, Steven Durlauf, who is the the Steans Professor in Educational Policy at the University of Chicago as well as HCEO Co-Director, discussed intergenerational mobility. The lecture focused on three broad topics: measurement, theory, and normative implications. Professor Durlauf noted that intergenerational mobility is closely linked to equality of opportunity.



In addition to the lectures, each participating assistant professor and post-doctoral scholar gave a brief presentation on their own research, which covered a wide variety of topics. Presenters were asked questions and given advice on furthering their research by the senior faculty members and other seminar participants. Along with the presentations, each of the senior faculty also led working groups with a smaller number of participants to give feedback on research ideas. The participants in the seminar had opportunities to interact with each other as well as with senior faculty. We look forward to fostering further research collaborations between attendees in the future through our Joint Research Initiative.



Learn more about this event, watch videos of lectures, and download slides at: hceconomics.uchicago.edu/events/faculty-collaborative-seminar-2018

RECENT EVENTS

Online Resources

Event Title	Dates	Link	Resources
Genes, Schools, and Interventions That Address Educational Inequality	Dec. 13–14, 2018	bit.ly/2DCvjgA	 
Measuring and Improving Health Equity	Dec 7–8, 2018	bit.ly/2KoDBPP	 
Polygenic Prediction and its Application in the Social Sciences	Nov. 30–Dec. 1, 2018	bit.ly/2B2SXAg	 
Social Interactions and Education	Nov. 9–10, 2018	bit.ly/2PRigxF	 
Next Generation Data Sets for Measuring Child Development	Nov. 2–3, 2018	bit.ly/2DA1hKk	 
Development Economics and Market Design	Oct. 28–29, 2018	bit.ly/2FIUIN9	 
Summer School on Socioeconomic Inequality, Chicago	Aug. 7–11, 2017	bit.ly/2vZrAll	 
Dissertation Prize Lunch Lecture: Between–Personal Differences in Sensation–Seeking: Implications for Brain–Based Models of Adolescent Risk Taking	Oct. 18, 2018	bit.ly/2B2SU7y	 
Dissertation Prize Lunch Lecture: Essays in Applied Microeconomics	Oct. 2, 2018	bit.ly/2z6dO4A	 

Masters–Level Summer School on Socioeconomic Inequality 2018, Chicago	Jul. 30–Aug. 3, 2018	bit.ly/2Dk35Gn	 
Summer School on Socioeconomic Inequality 2018, Bonn	Jul. 9–13, 2018	bit.ly/2LYAxDK	 
Student Training Summer Seminar at Peking University, Beijing	Jul. 7–9, 2018	bit.ly/2uX5nGs	
Faculty Collaborative Seminar 2018	Jun 25–29, 2018	bit.ly/2LV9omT	 
Family Inequality Workshop	Jun. 19–20, 2018	bit.ly/2HiY13x	

98 Events in **12** Countries



UPCOMING EVENTS



**Summer School
on Socioeconomic
Inequality, Bergen**
June 24-28, 2019
Bergen, Norway

The 2019 Human Capital and Economic Opportunity Global Working Group and FAIR Summer School on Socioeconomic Inequality will provide a state-of-the-art overview on the study of inequality and human flourishing. Through rigorous lectures students will be trained on various tools needed to study the issue of inequality.



**Summer School
for Undergraduate
Students, Guangzhou**
July 1-5, 2019
Guangzhou, China

HCEO and Jinan University will host the Summer School on Socioeconomic Inequality and Best Paper Competition at Jinan University, an inaugural program for undergraduate students in China. During the summer school, six economics professors from leading universities around the world will give introductory lectures on various economic topics.



**Summer School
on Socioeconomic
Inequality, Chengdu**
July 15-19, 2019
Chengdu, China

The 2019 Summer School on Socioeconomic Inequality Chengdu, which will be held at the Southwestern University of Finance and Economics, aims to provide a state-of-the-art overview on the study of inequality. Participants will learn about the integration between psychological and sociological insights into the foundations of human behavior and conventional economic models.

Stay up to date at:

hceconomics.uchicago.edu/events

DISSERTATION PRIZE

In 2017 we launched a competition for the best doctoral dissertation on a topic related to one of HCEO's six networks. The inaugural prize was awarded to Eric Chyn for his paper, "Moved to Opportunity: The Long-Run Effect of Public Housing Demolition on Labor Market Outcomes of Children." Chyn received a \$1,000 prize and presented his research to the Center for the Economics of Human Development, HCEO directors, and University of Chicago faculty. Our 2018 awardees were Tímea Laura Molnár, for the ECI submission "Essays in Applied Microeconomics," and David Lydon-Staley, for the HI submission "Between-Personal Differences in Sensation-Seeking: Implications for Brain-Based Models of Adolescent Risk Taking." Lydon-Staley and Molnár both received a monetary award, and presented their work at University of Chicago in the fall of 2018.




PERSPECTIVES ON INEQUALITY

Health Inequality network member Gene Robinson recently sat down with HCEO to discuss his research on what the genes, brains, and behavior of honeybees can tell us about human nature, an approach that he calls sociogenomics.

"The main issue is to reframe nature/nurture," Robinson says. "Nature/nurture has long been thought of as two separate forces, two separate influences more technically known as genes and the environment. It's possible to see things entirely differently thanks to the new science of genomics. Genomics has given us the tools to be able to study the activity of genes in real time."

Robinson and his team use animal models, which allows them to study gene activity very intensively, changing different variables, monitoring how changes in gene activity occur, and how those changes relate to behavior.

"The big discovery is that the gene expression in the brain is very, very sensitive to environmental conditions, and in particular to social stimuli. This really has changed the way we understand the regulation of behavior," Robinson says. "These changes in gene activity come from the environment. What that means then is that we can reframe nature/nurture. It's not genes and the environment, both nature and nurture act on the genome, just at different time scales. A better way to see it is that there are long-term inherited changes and influences on the genome. This is what we call nature. And then there are more short-term environmental influences on the genome. This is what we call nurture."

Robinson holds a Swanlund Chair at the University of Illinois at Urbana-Champaign, where he also serves as Director of the Carl R. Woese Institute for Genomic Biology. 



Watch Gene Robinson's interview:

Link: bit.ly/2DbN5Wq

Watch recent interviews:

Kimberly Noble

Link: bit.ly/2McVeNn

Dana Suskind

Link: bit.ly/2OT9jjX

Francesco Agostinelli

Link: bit.ly/2qNHjmU

Stay up to date by visiting our website and following us on social media at:

 www.hceconomics.org

 [hceconomics](https://www.facebook.com/hceconomics)

 [@hceconomics](https://twitter.com/hceconomics)

 [hceconomics](https://www.youtube.com/hceconomics)

ABOUT HCEO

Founded in 2010, the Human Capital and Economic Opportunity Global Working Group (HCEO) is a collaboration of over 500 researchers, educators, and policy makers focused on human capital development and its impact on opportunity inequality. HCEO's unique approach enables collaboration among scholars with varying disciplines, approaches, perspectives, and fields, and integrates biological, sociological, and psychological perspectives into traditionally economic questions. The result is innovative thinking and approaches to inequality and human capital development research.

HCEO is led by Nobel laureate James J. Heckman, the Henry Schultz Distinguished Service Professor of Economics at the University of Chicago; Steven N. Durlauf, Professor at the University of Chicago Harris School of Public Policy; and Robert H. Dugger, the co-founder of ReadyNation and Hanover Provident Capital.

HCEO focuses its efforts through six research networks that study the most pressing issues within human capital development and inequality: Early Childhood Interventions; Family Inequality; Health Inequality; Identity and Personality; Inequality: Measurement, Interpretation and Policy; and Markets. These networks produce one-of-a-kind conferences, research programs, and publications that highlight findings from the best science and the application of best practices. Through its networks and their resulting research, HCEO plays a vital role in understanding and addressing opportunity inequality around the world.



Impact

- ❖ Multidisciplinary networks result in new approaches to research and its application
- ❖ Relationships with governments and policy makers put best practices into action
- ❖ We have influenced numerous research studies and governmental policies
- ❖ Findings are being applied in one of the largest populations in the world—China



We Play a Vital Role

- ❖ Income and opportunity inequality is a global and growing problem
- ❖ Governments, private think tanks, and others each look at only a portion of the total problem in hopes of finding a lasting solution
- ❖ Only HCEO integrates biological, sociological, and psychological perspectives into traditionally economic questions addressed by multidisciplinary teams of experts
- ❖ Our research approach treats social science research as an empirical endeavor, resulting in rigorously tested public policy directions and solutions
- ❖ Our research provides insights and directions on how to best foster human flourishing and improve economic productivity



Learn more at:
hceconomics.uchicago.edu/about

www.hceconomics.org

facebook.com/hceconomics

youtube.com/hceconomics

[@hceconomics](https://twitter.com/hceconomics)

HCEO is run by the Center for the Economics of Human Development, and funded by the Institute for New Economic Thinking.

HCEO
The University of Chicago
1126 East 59th Street
Chicago IL 60637
USA

P: 773.834.1574

F: 773.926.0928

E: hceo@uchicago.edu