Yale Department of Economics

Fall 2016 Annual Alumni Newsletter

Greetings from the Chair –



I am delighted to present you with the revived newsletter from Department of Economics after a ten-year hiatus. A digital version can be found on the departmental website, as well as recent news, updates, and events. The department and its associated research centers, the Cowles Foundation for Research in Economics. and the Economic Growth

Center continue to thrive and attract world-class students, researchers and faculty.

Over the last two years, the department has been growing with new young faculty members and postdoctoral scholars. This past year **Ilse Lindenlaub**, who works on search and matching in labor markets, came to us from NYU where she started her academic career after receiving her Ph.D. from the European University Institute in Florence. **Nicholas Ryan**, who studies energy markets and environmental regulation in developing countries, joined us from MIT after a Prize Postdoctoral Fellowship at Harvard. We were also fortunate to welcome back **Ed Vytacil** this past year who rejoined the econometrics group after a few years at NYU.

In the coming year, the economic theory group will be noticeably strengthened with the arrival of Mira Frick and Ryota Iijima, who both received their Ph.D.s from Harvard University. Mira works on choice theory, behavioral economics and dynamic games. Ryota has similarly broad research interests in evolutionary and dynamic game theory, decision theory and networks. Yusuke Narita, who completed his Ph.D. at MIT in empirical work on school matching, is joining the labor and public economics group. These three new colleagues will first enjoy a year as postdoctoral fellows of the Cowles Foundation before they formally join the ranks of the faculty. Finally, Zhen Huo will join the macroeconomic group. Zhen completed his Ph.D. at the University of Minnesota and spent a year as a postdoctoral fellow with Tom Sargent at NYU Stern before joining us this summer.

The members of the Department are being continuously recognized for their outstanding research and teaching performance. During the last year, **Dean Karlan** received the prestigious John Sim Guggenheim Memorial Fellowship, **Bill Nordhaus** was awarded the Carnegie Foundation

Fellowship, and **Amanda Kowalski** received the Annual NIHCM Research Award following up her National Science Foundation Career Fellowship from the previous year. Over the last three years a number of faculty have been elected to the American Academy of Arts and Sciences; among them **Steve Berry**, **Penny Goldberg**, **Mark Rosenzweig**, and the newest member, **Sam Kortum**, who was elected into the 2016 class. Nobel Prize Laureate **Bob Shiller** was elected President of the American Economic Association (AEA) this year, while **Bill Nordhaus** can lend advice as a Past President of the AEA after stepping down in 2015.

Our colleague and current Chair of the Department of History, Naomi Lamoreaux, was awarded the Graduate Mentor by the Graduate School, and Steve Berry won the Lex Hixon '63 Prize for Teaching Excellence from Yale College. Steve was also appointed as the inaugural David Swensen Professor of Economics in 2014. The professorship was established as a result of the Swensen Initiative, which was organized by a group of alumni and friends to raise funds in David Swensen's honor in recognition of his contributions to Yale as the university's chief investment officer since 1985. David himself was a Ph.D. student and has been teaching for more than thirty years in our Department. Gifts such as those by a group of generous alum ensure that we continue to support our distinguished and renown faculty for their ground-breaking research and excellent teaching.

Sadly, we faced the loss of a revered teacher and researcher, **Herbert Scarf**, who passed away in November 2015. In a moving memorial service in Battell Chapel, many of his former colleagues and students came together with his family to pay their respects. A new summer research program that supports research fellowships and mentoring for undergraduate students has been established in his honor. The first group of 37 students worked on research projects with faculty and graduate mentors, filling the department with noise and life during the usually quiet summer months.

In the spring, we had the pleasure of hosting distinguished alum, former Italian Prime Minister, and Commissioner of the European Community, **Mario Monti**, who stopped by for a surprise visit. I encourage all our undergraduate and graduate alumni to visit the department whenever you are in New Haven. The faculty, staff and I are always delighted to welcome you back to Hillhouse Avenue!

Remember to look us up on http://economics.yale.edu, follow us on Twitter, like us on Facebook, and send us your updates to economics@yale.edu.

Dirk Bergemann

Faculty Highlights 2015-2016



Steven Berry was awarded the Lex Hixon '63 Prize for Teaching Excellence in the Social Sciences last spring. Yale College Dean Jonathan Holloway said of Introductory Microeconomics, "Students who have taken this course with you have been amazed at your ability to teach such a large class so effectively." Berry was also appointed as the inaugural David

Swensen Professor of Economics, established in recognition of David Swensen '80 Ph.D, in fall 2014.

Dean Karlan was named a 2016 Guggenheim Fellow from the John Simon Guggenheim Memorial Foundation. During his yearlong fellowship, Karlan will focus on research to understand the relationship between psychosocial interventions (cognitive behavioral therapy in Ghana; religious teachings through church in the Philippines) and



economic interventions (grants, training, coaching and access to savings) to increase income sustainably for those in extreme poverty. Karlan's research is devoted to microeconomic issues of poverty in developing countries. In an effort to improve social policies and financial inclusion for the poor, his research typically employs experimental methodologies to examine what works, what does not, and why related to interventions in microfinance, health, behavioral economics and charitable giving.



Sam Kortum was elected into the 2016 class of the American Academy of Arts and Sciences for his leadership and research contribution in the field of economics. In announcing this year's fellows, Academy President Jonathan F. Fanton said, "As individuals, in their respective fields and professions, these newly elected members have extended the limits of what we can

do as a people, a nation, and a world." He and the other 212 members will be inducted at a ceremony on October 8, 2016, in Cambridge, Massachusetts. Kortum focuses on international economics, Industrial organization, and macroeconomics.



William D. Nordhaus was one of 33 winners of the 2016 Andrew Carnegie Fellows Program for his project proposal, "Economic modeling of irreversible and path-dependent processes in climate change." His project will use the example of the Greenland Ice Sheet (GrIS) to analyze optimal climate policy in the face of irreversible or partially reversible

responses to accumulating greenhouse gases. According to Nordhaus, the end result of the project will produce a major research publication, open-source software that will be available to other scholars and analysts, and an article for a general audience explaining the significance and interest of these approaches and their importance for understanding how policy should address irreversible and path-dependent processes.

Robert J. Shiller was honored with the 2016 PROSE Award by the Professional and Scholarly Publishing Division of the Association of American Publishers for his book *Phishing for Phools: The Economics of Manipulation and Deception* (co-written with George A. Akerlof), in the Economics category (honorable mention). The awards are given annually "to recognize the very best in professional and scholarly



publishing by bringing attention to distinguished books, journals, and electronic content." He was also elected President of the American Economic Association for 2016.

Ebonya Washington was named the new Director of Undergraduate Studies (DUS) succeeding Sam Kortum beginning the 2016-17 academic year. She is affiliated with both the Economics and Political Science Departments, and specializes in public finance and political economy with research interests in the political efficacy of low-income and minority constituents and the



processes through which low-income Americans meet their financial needs. Washington has been at Yale since 2004 after receiving her Ph.D. from MIT in 2003.

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New Junior Faculty



Mira Frick is starting her second year as a postdoctoral associate for Cowles, and will begin her assistant professorship in the fall 2017. She is a microeconomic theorist interested in game theory, decision theory, information economics, and behavioral economics. She received a Ph.D. in Business Economics from Harvard University in May 2015,

and completed undergraduate and graduate-level studies in mathematics and philosophy at the University of Oxford, École Normale Supérieure (Paris), and UC Berkeley.



Zhen Huo has been appointed assistant professor and will start his appointment in the fall of 2016. He is a macroeconomist whose research focuses on the role of information and financial frictions in shaping aggregate fluctuations. His current work provides a method to solve the rational expectations models with higher order beliefs to measure the

importance of belief shocks in accounting for business cycles, while also exploring the link between household financial difficulties and the recent Great Recession. He received a B.A. in Economics and Mathematics from Renmin University of China, and a Ph.D. from the University of Minnesota.

Faculty Retirement



Don Brown retired as Philip R. Allen Professor of Economics in 2015 after serving more than 40 years in the department and as a research staff member at the Cowles Foundation. A celebration was held in his honor during the 2015 General Equilibrium Conference with a tribute given by John Geanakoplos who said of Brown, "Driven by intellectual curiosity,

always eager to learn new methods and new approaches, your contributions to economics are remarkable in their variety, originality and depth. You filled every building you sat in with laughter. You have been a wonderful colleague, teacher and warm friend to fellow researchers and especially to young students."



Ryota Iijima will begin appointment in the fall 2017 as an assistant professor after serving one year as a postdoctoral associate at the Cowles Foundation. He received his B.A. and M.A. in Economics from the University of Tokyo, and completed his Ph.D. from Harvard, where he studied microeconomic theory, game theory, decision theory,

information economics, and networks.

Lindenlaub Ilse ioined department last year as an assistant professor after receiving her Ph.D. from the European University Institute in 2014 and serving one year at New York University as an assistant professor. She studies sorting, search and matching both from a micro and macroeconomic perspective. research projects focus on sorting



with multidimensional heterogeneity, matching with prematch investment, as well as on-the job search as a driver of business cycles.



Yusuke Narita will ioin the Economics Department assistant professor in July 2017 after completing a postdoctoral for the Cowles Foundation this year. He was awarded the best undergraduate thesis in the Economics Department at the University of Tokyo where he continued to earn his M.A., and later received his Ph.D. from MIT. He is

interested in market design, microeconomics theory, applied econometrics, and labor economics. Narita has previously taught both market design and labor economics courses.

Nicholas Ryan was appointed assistant professor in 2015 after spending the previous year as a Cowles Foundation Fellow. He studies energy markets and environmental regulation in developing countries. He was a Prize Fellow in Economics at Harvard University from 2012-2014, and received a Ph.D. in Economics from the Massachusetts Institute of



Technology and a B.A. in Economics summa cum laude from the University of Pennsylvania. He previously worked as a research associate in the Capital Markets group at the Federal Reserve Board of Governors in Washington, DC.

Faculty Announcements



The department announced several new appointments during the last year, including **Edward Vytlacil**, who returned to Yale last year after spending two years at New York University. He had been at Yale from 2008-2012. Vytlacil is an econometrician, whose work has focused on the micro-econometric methodology for treatment effect and policy evaluation using disaggregate data. A theme in

his research has been in allowing for the effects of a treatment to vary across people, and allowing individuals to have some knowledge of their own idiosyncratic treatment effect and to act upon that knowledge. In addition to his work in econometric methodology, he has published empirical work in labor economics and health economics evaluating the returns to schooling, the returns to job training programs, and the effectiveness of medical interventions. Vytlacil received his Ph.D. in Economics from the University of Chicago in 2000, and has been on the faculty at Stanford University, Columbia University, and most recently New York University.

Costas Arkolakis, Henry Kohn Associate Professor of Economics and an NBER Research Associate, was recently tenured. Arkolakis joined the Department of Economics at Yale University in 2007 and became an Associate Professor in 2013. He received his undergraduate degree from Aristotle University of Thessaloniki in Economics, and his Master's and Ph.D. degrees in Economics from the



University of Minnesota. He has been awarded two National Science Foundation grants including an NSF CAREER grant and published in a variety of journals (including the Journal of Political Economy, American Economic Review, Quarterly Journal of Economics). He is a co-editor of Economic Theory and the Journal of International Economics. His research and teaching specializes in general equilibrium trade theory, spatial economics, and macroeconomics.

Eva Chalioti was named the new associate chair beginning this fall. She has been a visiting assistant professor in the Department of Economics since 2014 after coming to Yale from the University of Illinois at Urbana-Champaign. Chalioti also spent one year as a visiting assistant in research in the Yale Department of Economics in 2010 while attending Athens University of Economics & Business as a Ph.D. student.





Finally, the department welcomes William Hawkins as a senior lecturer who will begin his appointment this fall. Coming from Yeshiva University, Hawkins served as a visiting faculty member to the department in the spring teaching two sections of introductory macroeconomics. He focuses in the field of macro-labor and is interested in the aggregate predictions of random and directed

search models with heterogeneous firms for understanding business cycle fluctuations, the dispersion and dynamics of the firm size distribution, and the efficiency of the aggregate labor market. Hawkins received his Ph.D. in Economics from the Massachusetts Institute of Technology, after which he taught at the University of Rochester until 2012 before becoming faculty at Yeshiva University.

Faculty Honors

Chris Udry, the Henry J. Heinz II Professor of Economics, was awarded with an honorary degree for his "distinguished scholarship" from the University of Ghana in March with the special congregation led by former Secretary-General, Kofi Annan. Udry's citation stated that he is "internationally recognized for outstanding research and publications in the area of development microeconomics. He has supported research at University of Ghana and enhanced capacity building for several Ghanaian and African development economists for many years."



Chancelor Kofi Annan presents Professor Christopher Udry an honorary degree from the University of Ghana on March 23.

Cowles Foundation News -



The Cowles Foundation has as its purpose the conduct and encouragement of research in economics. The Foundation has been doing so in ever more varied and vigorous ways.

The heart of Cowles' activities are organized around its program areas. These have long included economic theory, macroeconomics, econometrics and structural microeconomics. We have recently

added a program area in international trade, and have been exploring ways to cooperate with the political science department in supporting activities in political economy. In general, Cowles remains open to supporting research across the economic spectrum, with a constant emphasis on rigorous scholarship, whether it be theoretical or empirical, and critical thinking.

The Cowles visitor program is flourishing. During the 2016-2017 academic year, Cowles brought nearly 80 scholars to the economics department for visits of at least a week but very often longer, and in many cases for visits of a semester or year. This program is a supplement to the usual collection of seminar visitors who come to campus for shorter stays each week. Our longer-term visitors collaborate with our faculty, but also make guest appearances in courses or teach courses in their specialty, participate in our workshops and seminars as both participants and critical members of the audience, work with our graduates students, and contribute to the intellectual atmosphere of the department. A common visitor characterization of the Yale economics department is that it is the most stimulating academic environment they have encountered, to which the visitors themselves greatly contribute. Highlights of the visitors program this year included Pierre-Andre Chiappori's

presentation of the Koopmans lectures and a collection of distinguished presentations in our Cowles lunch series. We are laying the groundwork for a busy and productive program in the coming year, including the expansion of our postdoc program, with eight new Ph.D.s joining us as post docs.

One moment of great sadness this past year was the death of **Herbert Scarf**, a longtime member of Cowles and the economic department, and one of the giants of economic theory. Herb was an inspiring and inspired teacher, and I am pleased to say that he will continue to have an impact on students. In cooperation with the department, the Cowles Foundation has created the Herbert Scarf Summer Research Opportunities program for undergraduates, with 37 participants this year. We have visions of expanding this program into the academic year and expanding the participation, in the process nurturing future generations of economists.

Each June, Cowles sponsors four conferences that span a week between them, in economic theory, macroeconomics, econometrics and structural microeconomics. We also sponsor a yearly spring conference on general equilibrium theory, as well as occasional conferences such as a political economy conference in December of 2015. The Cowles conferences have become established as the definitive venue for presenting the state of the art in these areas.

Under the tireless direction of **Peter Schott**, the Yale Research Data Center, a partnership between Yale and a collection of federal statistical agencies, including the Census Bureau, now makes a wealth of data accessible to Yale researchers. We expect this to open new horizons for members of the department and for researchers across campus. The Cowles Foundation looks forward to continuing its current ventures and exploring new ones over the course of the coming year, all with an eye toward supporting rigorous research in economics.

Larry Samuelson

News from the Yale Research Data Center -

We are excited about the increased usage of the Federal Statistical Research Data Center which has been open since June 2015. The Yale Research Data Center (YRDC) is a branch of the New York Research Data Center and is generously funded by the Cowles Foundation for Research in Economics at Yale University, the Department of Economics, and the School of Management. Located in the heart of the Yale



campus within the Economics Department on Hillhouse Avenue, we encourage Yale faculty and student researchers to find out more about the micro data available from the U.S. Census Bureau and the National Center for Health Statistics, and whether these data might be helpful in their research.

With the successful turnout at our informational session held last April with Shirley Liu from the NYFSRDC, we are planning to hold another session in October with both Shirley and Negasi Beyene from the Center of Disease Control. Watch the Economics and Cowles websites for upcoming events, and contact our administrator Stephanie Bailey about how to apply for access to the data. For additional information on the Yale Research Data Center and available data sets, please visit our page at http://cowles.yale.edu/yrdc.

Peter Schott, Executive Director Juan Trippe Professor of International Economics

Focus on Faculty Research: How Economic Policy Affects the Environment

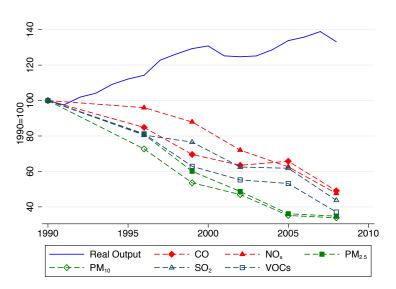


Joseph Shapiro is an empirical environmental and energy economist whose research agenda covers three general areas: trade and the environment; adaptation to environmental change; and water pollution regulation.

One current research paper studies the extent to which local environmental regulation causes pollution emissions to relocate rather than to decrease overall.

The research, which is joint with Arthur van Benthem from the University of Pennsylvania and which recently received a grant from the National Science Foundation, focuses on "smog check" policies. In many U.S. cities, used vehicles must regularly pass pollution inspections; dirty vehicles which repeatedly fail inspections face substantial repair and maintenance costs. Rather than paying these costs, owners of such dirty vehicles can trade them via inter-state auctions to buyers in cities and counties without smog check regulations, where these regulations do not apply. By combining data on hundreds of millions of smog check tests and vehicle registrations, the analysis is quantifying the extent to which these regulations merely shift rather than decrease pollution, and the extent to which these regulations are moving pollution emissions to areas where pollution may create lower social costs.

Another current paper, joint with Reed Walker from UC Berkeley, investigates why pollution emissions from U.S. manufacturing are declining. Between 1990 and 2008, emissions of most pollutants from U.S. manufacturing fell by over 50 percent, while real output from U.S. manufacturing increased by nearly 50 percent (see Figure 1). What has allowed manufacturing to produce more output while emitting less



pollution? The analysis uses confidential plant-level data on production, pollution emissions, pollution abatement, and trade. It also builds a mathematical model of firms with heterogeneous productivity levels choosing investments in pollution abatement.

The paper combines the data and model to obtain three main results. First, the decrease in pollution from manufacturing is largely not because firms are now making different types of products, but instead because manufacturing plants now emit less pollution to produce a given product. Second, the stringency of environmental regulation more than doubled over the period 1990-2008. Third, these changes in environmental regulation account for a large share of the emissions reductions; changes in trade policies and increasing overall productivity account for much less of the emissions reductions.



Alum in the News

Yale alumnus **Urjit R. Patel** Ph.D. '90 was appointed the 24th governor of the Reserve Bank of India (RBI) by India's Prime Minister Narendra Modi on August 20. Serving as deputy governor since January 2013, Patel began his three-year term as governor on September 4. His Yale graduate advisor, Professor Emeritus of Economics T. N. Srinivasan, is quoted as saying, "Urjit Patel is the right man for the RBI governor's job."

Before attending Yale, Patel received an M. Phil. from Oxford and his Bachelor of Arts degree in Economics from the London School of Economics. He has an extensive resume having worked with the International Monetary Fund, the Ministry of Finance, Department of Economic Affairs in New Delhi, The Boston Consulting Group, and The Brookings Institute.

Focus on Faculty Research:

New Research Shows How to Learn More from Experiments



Associate Professor Amanda Kowalski has been advancing the frontier for credible evidence by bringing structural methods to experiments. Specializing in applying econometric techniques to answer questions that inform current debates in health policy. Kowalski's research has become increasingly relevant. As experiments gain popularity within the field of economics (and

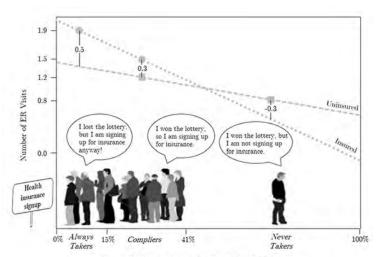
the standard for credible evidence increases), analysis still focuses on the simple comparison of lottery winners to lottery losers, even as data availability and computational power are spurring developments in structural microeconomics. Kowalski addresses a fundamental limitation of experimental evidence by combining overlooked information within an experiment with minimal structure: generalizability.

Kowalski applies these methods to generalize a central and controversial result from the famous Oregon Health Insurance experiment. The simple result shows that health insurance increases emergency room (ER) utilization by 0.3 visits: "insured compliers" who gained insurance because they won the lottery made 1.5 visits; "uninsured compliers" who did not gain insurance because they lost the lottery made just 1.2 visits. Only a quarter of lottery entrants are compliers. Kowalski recognizes that the simple result from Oregon is more likely to apply in other settings if it applies beyond compliers to other entrants in the same lottery.

As shown in the figure, the simple result overlooks two groups of lottery entrants: "always takers" who gained insurance regardless of the lottery and "never takers" who remained uninsured regardless of the lottery. Kowalski observes that always takers made 1.9 visits and never takers made 0.8 visits. Within the experiment, it is not possible to observe how many times the always takers would visit without insurance. However, a straightforward extrapolation that imposes minimal structure across the uninsured shows that insurance induces always takers to make 0.5 more visits. A similar extrapolation across the insured shows that insurance induces never takers to make 0.3 fewer visits.

Kowalski incorporates data and structure to extrapolate the heterogeneous impacts of insurance on ER utilization from Oregon to other settings. The extrapolations show that individuals with greater prior ER utilization increase their ER utilization more upon gaining insurance. Her findings were featured on National Public Radio's Marketplace in the spring.

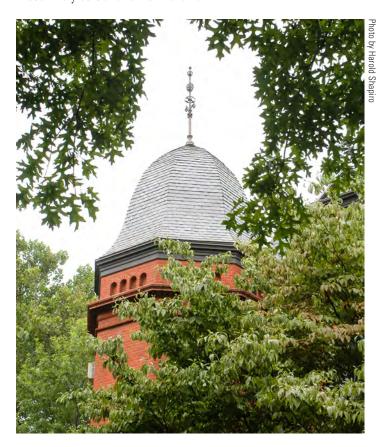
Kowalski's research has also gained her recognition within the Economics community and beyond. She, along with her coauthors Hackmann and Kolstad, were awarded the 22nd Annual National Institute for Health Care Management (NIHCM) Research Award in May for their paper, "Adverse



Percent of lottery entrants who sign up for health insurance

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Selection and the Individual Mandate: When Theory Meets Practice," (American Economic Review). More recently, she received the Arthur Greer Memorial Prize for her outstanding scholarship in social sciences. In future research, Kowalski aims to improve health by applying these methods to clinical trials to determine how to target treatments to individuals most likely to benefit from them.



Focus on Faculty Research:

Child Development, Human Capital and Economic Opportunity



Costas Meghir is the Douglas A. Warner III Professor of Economics. His primary research interests are in labor economics; the economics of education; and development economics, with a particular focus on the impact of public policy on labor supply and human capital formation.

His current research examines how the set of lifecycle decisions including education, marriage,

savings, and labor supply can be affected by public policy. In a recent article, he and his coauthors focus on the impact of taxes and welfare programs (such as tax credits and income support for single mothers out of work) on the education and work decisions of women. Since many welfare programs are designed to support single mothers who are often poor, the design of welfare programs is a delicate balance between providing insurance against earnings drops, socially desirable redistribution (say to support children in poverty) and maintaining the right work incentives. Moreover, they can have important unintended consequences, such as reducing the incentives to obtain education, or discouraging marriage.

Meghir and his colleagues show that programs such as tax credits improve welfare substantially by offering a public source of insurance without excessively distorting work decisions. This contrasts to income support for those out of work, which reduces work incentives, or indeed tax cuts, which do not provide adequate levels of insurance. The research has revealed that individuals from all social backgrounds are shown to prefer marginal increases in tax credits to equally costly reductions in taxes or increases in welfare payments to the unemployed.

Additionally, Meghir has been studying the intergenerational transmission of human capital and the design of policies that will stimulate its development in very poor communities. He and his colleagues have been conducting a number of experiments funded by the National Institutes of Health (NIH) and the World Bank (amongst others) in poorer areas of Colombia and India. The team is testing interventions intended to improve child development from a very early age when brain development is most malleable.

In their experimental interventions, women drawn from the local community are trained to deliver a specially structured curriculum to the child and the mother over a two-year period. The impact of these interventions, which are designed to be scalable, are very promising with improvements in cognition of 26% of a standard deviation and substantially more from a subsequent experiment. A key question is whether such impressive results are sustainable in the longer run, since this is the key to the success of such policies in breaking the intergenerational transmission of poverty.

To understand the longer-term effects of such policies one needs to understand household behavior and specifically how parents react to such interventions, which are an inkind transfer. Thus, part of the research program is to model parental behavior, how parents invest in children and how they change their choices when their children are offered support for their human capital development. Early findings suggest that parents in fact reinforce these interventions adding to the investments offered. This in itself holds the promise that early childhood programs lead to further increases in child investments creating a virtuous spiral out of underachievement and eventually poverty.

Subsequently, the research team is designing an extension of the India intervention to offer high quality pre-school education in India from birth to the start of primary school. The program will offer the opportunity to test various combinations of interventions, starting at birth or later and will allow the collection of five waves of data starting at age 1 and ending at age 6 tracing child development in very poor environments. The expectation is that such research will inform the design of comprehensive early childhood development policies, taking into account costs and accounting for household behavior. In the longer run the combination of cohort studies and interventions is a promising way of developing policy and understanding the process of human capital formation within poor families.

Meghir has been at Yale since 2010. He was elected a fellow of the British Academy in 2005 and was awarded the Ragnar Frisch Medal in 2000 with co-authors Richard Blundell and Alan Duncan for the *Econometrica* article "Estimating Labour Supply Responses using Tax Reforms."



IDE Program News -

In 2015, after what has been 12 exhilarating years directing the International and Development Economics (IDE) program, Dean Karlan took on the role of director, while my role has shifted to that of director of graduate studies. Dean is also now teaching one of the core IDE classes devoted to the randomized control trials approach to evaluating development policy initiatives. Our students continue the diverse and exciting career paths that are the hallmark of each and every IDE cohort. In the past academic year two alumna obtained fellowships with the British Government's Overseas Development Initiative (ODI) that places policy professionals within developing country ministries to serve as policy advisors and analysts. Nisma Elias, who previously had been at the World Bank, is with the Ministry of Education and Training in Zanzibar and Seharish Giillani is with the Financial Inclusion Stream in Uganda, where she will help in the development of their regulation structure as regards the microfinance sector. They join two prior ODI fellows in Africa, Tanya Philip (2015) posted to Sierra Leone's Ministry of Health, and Nirav Shah (2014) who is with the Ministry of Finance in Swaziland.

Nidhi Parekh (2013) wrapped up her ODI fellowship in South Africa and has recently started in her new position as the Country Economist in Kenya for the International Growth Centre (IGC). She joins Nikita Kohli, who has been based in East Africa and now Nairobi for the Abdul Latif Jameel Poverty Action Lab (J-PAL) as a research assistant and field worker since she graduated from IDE in 2015. Layane El Hor (2015) is transitioning from research assistant at the J-PAL office at MIT to a field-based RA for J-PAL based in Nairobi. Shoan Jain (2016) is working in Cambridge, MA, as a full-time RA at the MIT office and Lavanya Garg is now based in Bangalore, India, working as a research assistant on projects involving questions in environmental economics for garment manufacturers. Nina Buchmann (2015) continues her work for Evidence for Policy Design (EPoD) as a Research Associate at Duke University, and Landin Smith (2015) is transitioning from research assistant at Princeton University to research associate at EPoD in Cambridge.

At the World Bank, Sreelakshmi Papineni and Aletheia Donald have taken up staff positions with the Gender Innovation Lab, in the Office of the Chief Economist for the Africa Region. They have been joined by a few other IDE students from more recent cohorts, including Andres Yi Chang and Priyanka Kanth. Gezime Christian wrapped up a consultancy with the DIME group at the World Bank in early 2015, and after a stint as an analyst with the Export-Import Bank, she was named a Presidential Management Fellow at the White House, where she now works in the Office of Management and Budget. Namrata Kala (2007) finished up her Ph.D. in Environmental Economics at the Yale School of Forestry and Environmental Science in 2015. She subsequently was awarded the Harvard University and J-PAL Prize Post-Doctoral Prize Fellowship in Economics, and she continues her research on issues in environmental economics in the J-PAL offices at MIT.





Michael Boozer

Dean Karlan

In the past year alone, we had four students accepted to Ph.D. programs: **Shweta Bhogale** will be a Ph.D. student in economics and public policy at Harvard's Kennedy School (where she joins her IDE classmate **Marie-Pascale Grimon**). Also in Cambridge is **Zaki Dernaoui**, who after a stint at the IMF, is now in the Ph.D. program in finance at the Sloan School at MIT. **Michael Kaiser** is heading home to Germany to attend Munich's Graduate School of Economics. **Raja Panjwani** is heading to NYU to do his Ph.D. in Political Science, and will join **Anne De Grave**, who is heading into her second year in the Political Science Ph.D. program.

Faraz Usmani is in the midst of his Ph.D. program in Environmental Policy at Duke University. Amanda Dahlstand-Rudin is wrapping up her research associate position with EPoD at Harvard's Kennedy School and heading off to The London School of Economics to start her Ph.D. in Economics this fall. There she will join Celine Harion and Clare Potter, who are both enrolled in Ph.D. programs. Stefan Hut is continuing his work in the Ph.D. program in Economics at Brown, and Eleanor Wiseman and Susanna Berkouwer are continuing their Ph.D. work in Berkeley's Agricultural and Resource Economics (ARE) program. Crystal (Haijing) Huang is a Ph.D. student at Pardee RAND Graduate School while also working as a policy analyst at the RAND Corporation. At the University of Pennsylvania's Wharton School, Hideto Koizumi is a Ph.D. student in the Applied Economics program, and Karen Zhang is a Ph.D. student in the Health Economics track. Here in New Haven, Fabian Schrey is working hard on his dissertation in Yale's Department of Economics, when he isn't working as a teaching assistant for IDE classes.

On the faculty front, **Marieke Kleemans** finished up her Ph.D. from Berkeley's ARE program and is now an Assistant Professor in the Department of Economics at the University of Illinois. **Jonas Hjort** continues as an Assistant Professor at Columbia Business School, and **Shinsuke Tanaka** is an Assistant Professor at The Fletcher School at Tufts University.

The greatest strength of the IDE program continues to be its alumnae and alumni – their generosity of time and energy by continuing to remain involved with program and the current students is both overwhelming, and crucial to our success. It is always a pleasure to welcome back old and familiar faces to campus, and if they have time, to talk to the current students about the wide world of development economics, and the potential career paths open to them.

Michael Boozer

Herbert Scarf Summer Research Opportunity

Undergraduates get experience as practicing economists in research program

Excerpted from an article by Michael Cummings published in Yale News, July 21, 2016

At a time of year when many college students were waiting tables or making copies at office internships, 37 Yale undergraduates spent their summer contending with innovative economics models and complex datasets. As Herbert Scarf Summer Research Fellows, the students worked closely with faculty in the Department of Economics and the Yale School of Management on projects covering diverse topics, such as development in low income nations, international trade, financial regulation, and investor behavior. "We hope to give the students their first experience as practicing economists," said Dirk Bergemann, the Douglass and Marion Campbell Professor of Economics and Computer Science, and chair of the Department of Economics. "The program provides them the opportunity to perform independent statistical and analytical research while sharpening their writing, presentation, and research skills."

With major funding from Yale's Cowles Foundation for Research in Economics, the summer research assistant program this year was expanded, revamped, and renamed after the late Herbert Scarf, Sterling Professor of Economics, who was acclaimed for his pioneering research and devotion to teaching. The number of research-assistant slots has nearly quadrupled relative to past years. Ph.D. candidates Tatjana Kleineberg and Fabian Eckert were charged with building a framework to foster a sense of community among the undergraduates and expose them to skills and methods that could help them in their work. Kleineberg and Eckert led weekly lunch seminars where the undergraduates, who earned a stipend, presented and discussed their projects. They organized social occasions, as well as Q&A sessions with renowned Yale economists such as John Geanakoplos, Fiona Scott Morton, and Robert J. Shiller, recipient of the 2013 Nobel Prize in Economics. The doctoral candidates served as intermediaries between the research assistants and the faculty, exchanging ideas and answering practical questions that undergraduates might hesitate to ask their professors.

The program is designed so that the students can rely on each other for help. Often two or three research assistants



collaborated on a project.

"Research can be isolating so we wanted to create a community of researchers rather than individual students sitting in an office or the library by themselves," Bergemann said. "This way, they learn enormously from their peers while having the time and freedom to pursue their research."



Jinchen Zou, a junior studying economics and global affairs, is considering pursing a Ph.D. in development economics. She worked with fellow research assistant Sarah Merchant on a project for Nicholas Ryan and Jose Espin-Sanchez, assistant professors of economics, concerning irrigation and water markets in the southern Indian state of Tamil Nadu. They analyzed data from a survey of rural households in the drought-stricken state to determine how access to irrigation there affects farmers' welfare. Zou said she faced a steep learning curve when starting the project as it involves multiple layers, but she added that the professors and graduate students were excellent mentors who guided her through the research. She said the work required patience and creativity, but after much trial and error, they made breakthroughs and discovered new trends in the data.

"The process is painting an accurate picture of what life is like for farmers in Tamil Nadu on a household and community level," she said. "Each time we extracted new information, we gleaned a bit more of the picture." She said she enjoyed the sense of community the program provided. "It's exciting to talk to others about what they're working on and also just hang out in the evenings and on weekends."

Justin Katz, a junior majoring in economics and mathematics, learned "an insane amount" as he worked on two research projects with faculty at the School of Management. With Kosuke Uetake, assistant professor of marketing, he examined the effectiveness of federal regulators' use of divestitures in restoring competitive pricing. Specifically, he studied the use of divestitures in the supermarket industry. Katz worked with "an absurd" amount of data, including records of all supermarket purchases made by 60,000 households over the past decade tracked by the Nielsen Corporation and a retail scanner database that contains weekly pricing information for every product in nearly every grocery store in the country.

His job was "to find divestiture events, match them up with the data, and begin to see what happens to prices and consumption patterns after divestitures," he said, noting that it was challenging work. He enjoyed the freedom to set his

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Graduate Student News -

Dissertations, Advisors, and Job Placements

December 2015

Dongkyu Chang, "Three Essays on Economic Theory"; L. Samuelson, J. Horner, E. Faingold; City University of Hong Kong.

Adam Kapor, "Educational Impacts of Admissions Mechanisms"; J. Altonji, S. Berry, P. Haile, K. Meghir; Colombia University.

May 2016

Shameel Ahmad, "Demography and Economic Development in Colonial South Asia"; T. Guinnane, N. Lamoreaux, D. Keniston; Brandeis University, Post-Doc.

Johann Caro Burnett, "Optimal Voting Rules in International Organizations, with an Application to the United Nations"; G. Maggi, E. Weese, A. Mobarak; Hiroshima University, Japan.

Marcelo Castello Branco Sant'Anna, "Essays in Industrial Organization and Energy Economics"; S. Berry, P. Haile, K. Gillingham; FGV Rio, Brazil

David Childers, "Computational Methods for Economic Models with Function-Valued States"; P. Phillips, A. Smith, K. Arkolakis; Carnegie Mellon University

Federico Esposito, "Essays on International Trade"; K. Arkolakis, L. Caliendo, S. Kortum, P. Schott; Tufts University.

Benjamin Friedrich, "Essays in Labor and Personnel Economics"; J. Altonji, K. Meghir, P. Goldberg, L. Caliendo; Northwestern University, Kellogg School of Management.

Julia Garlick, "Essays in Development Economics"; K. Meghir, C. Udry, J. Levinsohn; University of Iowa.

Registrar Pam O'Donnell is surrounded by new graduates tossing their mortar boards.

Sebastian Heise, "Essays in Macroeconomics and International Trade"; G. Moscarini, P. Goldberg, P. Schott; Federal Reserve Bank of New York.

Tibor Heumann Epstein, "Trading Under Incomplete Information"; D. Bergemann, J. Horner, S. Morris, L. Samuelson; Princeton University Post-Doc.

Eunhee Lee, "Essays on International Trade and Inequality"; P. Goldberg, K. Arkolakis, S. Kortum, L. Caliendo; University of Maryland.

Xiang Ma, "Public Policies in Developing Countries"; C. Udry, E. Weese, N. Qian, D. Keniston; Hong Kong University of Science and Technology Post-Doc, then Jinan University IESR.

Lorenzo Magnolfi, "Essays in Industrial Organization"; P. Haile, S. Berry, D. Bergemann, M. Igami; University of Wisconsin-Madison.

Corina Mommaerts, "Essays on Risk and Insurance in the Extended Family"; K. Meghir, J. Altonji, J. Abaluck; NBER Post-Doc, then University of Wisconsin-Madison.

Emily Nix, "Human Capital Accumulation over the Life Cycle"; J. Altonji, C. Meghir, L. Kahn, N. Qian; University College London Post-Doc, then USC Marshall School of Business.

Tommaso Porzio, "Allocation of Talent, Labor Markets, and Economic Development"; C. Udry, M. Golosov, G. Moscarini, A. Tsyvinski, N. Qian; University of California, San Diego.

Gabriella Santangelo, "Firms in Rural Economies"; C. Udry, M. Rosenzweig, N. Qian; University of Cambridge.

Stefan Schneeberger, "Essays in Behavioral and Quantitative Finance"; N. Barberis, R. Shiller, X. Chen; The Boston Consulting Group, Vienna.

Alexey Smolin, "Essays on Information Economics"; D. Bergemann, L. Samuelson, J. Horner; Bonn University Post-Doc.

Aron Tobias, "Essays on Political Economy and Mechanism Design"; D. Bergemann, A. Tsyvinski, L. Samuelson, J. Horner; Syracuse University.

The George Trimis Prize

The George Trimis Prize for Distinguished Dissertation was established in May 2003 in memory of George Trimis, a Ph.D. student in Economics, who lost his battle with cancer. The prize is given in recognition of the extraordinary example he set for the Department. The Prize is awarded to Economics Ph.D. recipients who demonstrate exceptional academic achievement. George Trimis was awarded the first prize before his death. In 2016, the prizes were awarded to two students: **Shameel Ahmad** and **Adam Kapor**.

Focus on Student Research



Meredith Startz is entering her 6th year in the Ph.D. program, studying international development and trade. Her research focuses on how contract enforcement problems shape trade patterns, and how this relates to the process of economic development.

Startz's job market paper investigates information costs in international trade, using original data she collected on Nigerian consumer

goods imports. She finds that traveling to source countries like China to do business in person is a common way of dealing with both search problems (finding out what goods are available around the world) and contracting problems (ensuring that partners follow through on agreements in an environment with poor legal enforcement). Based on willingness to pay for travel, her estimation shows that search and contracting problems pose as much of a barrier to trade as tariffs and transportation

Entering Doctoral Students

Julian Aramburu

(Buenos Aires National University, Argentina)

Nathan Barker (Georgetown University)

Sheng Cai (University of Hong Kong)

Gordon Chavez (New York University)

Robert Finlay (University of Cambridge, United Kingdom)

Disa Hynsjo (Macalester College)

Jaewon Lee (Seoul National University, Korea)

Satoshi Matsuzawa (Hitotsubashi University, Japan)

Weicheng Min (Fudan University, China)

Ahyan Panjwani (Reed College)

Luca Perdoni (University of Torino, Italy)

Vitor Augusto Possebom

(Fund Getulio Vargas, Sao Paulo, Brazil)

Sourav Sinha (Indian Instite of Technology, Delhi, India)

Jaehee Song

(Korea Advanced Institute of Science & Technology)

Siu Yuat Wong (University of Auckland, New Zealand)

Xiaochuan Xing

(University of International Business & Economics, China)

Kohei Yata (University of Tokyo, Japan)

The Powell Prize for Teaching

The Raymond Powell Prize for excellence in teaching performance was awarded in December 2015 to **Gregory Cox**, **Federico Esposito**, and **Aron Tobias**. Candidates are nominated by faculty members based on their performance as teaching assistants in economics courses. Winners are selected based on teaching evaluations from students and input from faculty.

costs combined. This has a large effect on consumer welfare in countries like Nigeria, reducing the variety of goods that are available, and making those that are available more expensive and out-of-date.

Another project (with Shelby Grossman at Stanford University) looks at the role of reputation in solving contract enforcement problems. In partnership with a mobile money company in Nigeria, Startz and Grossman have developed an escrow service that allows traders to transact electronically and acquire a track record of following through on agreements. They experimentally vary access to this service, to test whether increased information about potential partners substitutes for other costly contract enforcement strategies, and whether it works by allowing traders to identify more reliable partners ahead of time or by motivating people to behave well ex-post to protect their reputations.

Prior to beginning her Ph.D., Startz worked at Innovations for Poverty Action, first on microfinance projects in the Philippines and later helping to launch the SME Initiative. Before that, she was an analyst at Redstone Strategy Group, where she consulted to major philanthropies on issues related to global health and development. She is the recipient of a 2011 NSF Graduate Research Fellowship, a 2013 Sasakawa Young Leaders Fellowship, and a 2016 Kauffman Dissertation Fellowship. Her research is also supported by funding from the Centre for Economic Policy Research, the International Growth Centre, Innovations for Poverty Action, and the Economic Growth Center at Yale.

Carl Arvid Anderson Prize Fellowships

The prizes for 2016-17 were awarded to (left to right) Joachim Hubmer, Louise Laage, Fabian Eckert, Sumeyra Akin, Tatjana Kleineberg, and (not pictured) Gaurav Chiplunkar. The Anderson Prize relieves advanced graduate students of teaching responsibilities for one semester, allowing them to devote time to dissertation research.



News from the Director of Undergraduate Studies -



The department's undergraduate program is thriving. Economics has become by far the most popular major at Yale. In the graduating class of 2016 we had 221 students majoring in economics and another 21 majoring in economics and math. A decade ago we had only 146 economics and economics & mathematics majors. While we are pleased with this growth, it also brings challenges.

As the major becomes more popular, we want to maintain a high level of individual interaction between our professors and our students. We also want to let undergraduates address questions beyond what they learn in the classroom and to experience the rewards (and occasional frustrations) of original research. For years we have accomplished these goals on a small scale by supporting undergraduate research assistantships with faculty: Tobin RAs during the term and summer RAs. This year we have quadrupled the size of the summer program (to 37 students) and renamed it in honor of the late Herb Scarf. We look forward to a similar expansion of the Tobin RA program this coming year.

Our students also pursue research on their own. Over 60 students wrote senior essays in economics, spanning an impressively wide variety of topics. Fourteen of these essays posted on our web page, were nominated for prizes. The Dickerman Prize for the best essay went to **Edward Kong** for his essay "Estimating Competitive Effects in Firm Entry with Applications in the Generic Pharmaceutical Industry." **Anthony Tokman**'s "Crime and the Geography of the City: Measuring the Effect of Crime on Urban Residential Patterns" and **Darien Lee**'s "Unemployment Insurance: Disincentive Effects on Job Search in the Great Recession" shared the Meltzer prize. The Ellington Prize (for the best essay in finance) went to **Avery Schwartz** for "Arbitrage in the European Soccer Betting Market."

Of course, we don't want to diminish what goes on in the classroom. Special congratulations go to **Eugene Kim**, who won the William Massee Prize for his outstanding record in economic courses and **Michelle Fogarty**, who won the Louis Laun Prize for her outstanding record in all courses taken at Yale. **Vivath Ly, Eugene Kim, Jonathan Lam**, and **Darien Lee** were our Tobin Scholars, due to their top performances in our core courses of micro, macro, and econometrics. Finally, we were very proud of **Tim Rudner** who received a Rhodes Scholarship.

Sam Kortum

By the Numbers

Actively Enrolled Grad Students

- Ph.D. Program: 114
- IDE Program: 33

Degrees Granted in 2015-16

- Ph.D.: 21
- M.Phil.: 14
- M.A.: 24
- M.A. (IDE): 27
- B.A./B.S. (Econ): 225
- B.A./B.S. (Econ & Math): 21

Undergrad Course Enrollment

- Fall 2015: 2186
- Spring 2016: 2068

Rhodes Scholar!

Tim Rudner '16 was named a 2016 Rhodes Scholarship winner last November. The native German graduated with a double major in applied mathematics and economics. He is interested in exploring economic issues from a multidisciplinary perspective and has conducted research on



financial crises, international trade theory, and longrun economic growth models. A German National Academic Foundation Scholar, he performed research in the European Central Bank's Financial Research Division. Outside his studies, Rudner served as a mathematics, economics, and language tutor, and worked as a Tobin Research Assistant. At Oxford, Rudner plans to pursue an M.Sc. in applied statistics and an M.Sc. in mathematical modeling and scientific computing in preparation for further research in economics.

Staff News

The Department of Economics and the Cowles Foundation saw many staff changes this past year.

Pat Brown retired after 15 years as the Economics Department Operations Manager, and Glena Ames, Support Specialist for the Cowles Foundation, retired after 40-plus years.

Dorothy Ovelar and Lindsay Young were promoted to Operations Manager, Economics Department and Senior Administrative Assistant, **Economics** Growth Center. respectively.





Glena Ames



Pat Brown



Lindsay Young Dorothy Ovelar

Several new hires were welcomed aboard to the department this year (left to right): Matthew Regan, Communications Manager for the Cowles Foundation; Becca Stevens, Administrative Assistant; Noel Sardalla, Administrative Assistant; and Tracey Finer, Financial Assistant.



IN MEMORIAM: HERBERT SCARF

Herbert E. Scarf, Sterling Professor **Emeritus** Economics, died at his home in Sag Harbor on November 15, 2015. He was 85 years old. Scarf came to Yale in 1955 and was a member of the National Academy of Sciences, a fellow of the American Academy of Arts and Sciences, a member of the American Philosophical Society, distinguished fellow American Economic



Association, and past president of the Econometric Society. In 1973, Scarf won the Frederick W. Lanchester Prize, which recognizes the best contribution to operations research and the management sciences. A decade later, he won the John von Neumann Theory Prize for his contributions to theory in operations research.

Born in Philadelphia on July 25, 1930, Scarf taught himself mathematics as a young boy, and astonished his teachers at South Philadelphia High School by ranking first in the 1947 Statewide Mathematical Tournament. His mathematical talent earned him a scholarship to Temple University, and after placing in the top 10 nationally in the Putnam mathematics exam he obtained a scholarship to the graduate mathematics program at Princeton University, receiving his Ph.D. in 1954.

Scarf then took a position at the Rand Corporation. There he met George Dantzig, the inventor of the simplex algorithm, the economist Kenneth Arrow, and statistician Samuel Karlin, who launched Scarf on his classic derivation of optimal inventory policy. Arrow and Karlin invited Scarf to visit Stanford University, where he eventually became a faculty member in the statistics department. Soon he was recruited to Yale's Cowles Foundation to replace departing professor Gerard Debreu.

Perhaps Scarf's greatest discovery was his algorithm that always finds an equilibrium, no matter how complicated the economy. The Scarf algorithm gave applied economists the ability to work with realistic models of the economy and thus predict the consequences of major policy reforms including NAFTA and the U.S. tax system.

Scarf was known for his grace and charm and had many close personal friendships at Yale. "Herb Scarf had a great gift," said former Yale president Richard Levin. "He could convey the most complex results of his brilliant research in the simplest and clearest terms, making the difficult transparent. He was a warm friend, a devoted teacher, and a loyal colleague, who will be remembered by so many."

Remembered as an inspiring teacher, Scarf wrote, "Teaching has, of course been an important part of my life. I make elaborate notes that are instantly discarded when I enter the class, and I begin singing from the musical score of an opera that I have in my head."

He is survived by Maggie, his wife of 62 years; three daughters and their husbands; and eight grandchildren.

With Appreciation

The Economics Department and its programs extend a heartfelt thanks to all contributors. Your generosity continues to help sustain student scholarship and programming.

Henry Albers, Alfredo Vara Alonso, Kazuhiko Amakawa, John Arena, Richard Attiyeh, Hugh Auchincloss, Lee Badgett, Panle Barwick, Rene Benitez, Michael Bernstein, Avinash Bhagwat, Nancy Birdsall, Stanley Black, Margaret Blair, Erica Blom, Joseph Boyer, Willa Bruckner, Ralph Bryant, Barbara Buddington, Feliciana Burke, Melissa Burns, Shirley Buttrick, Frank Campbell, John Campbell, Phillip Carter, Yoosoon Chang, Henry Chappell, Silvia Charpentier, Adrienne Cheasty, David Chu, Kuk-Soo Chung, John Clark, Stephen Clark, William Cline, James Cobbe, Mark Cohen, William Colby, Bert Collier, Philip Corbae, Maria Cox, Prudence Crozier, John Cunningham, Alissa DeJonge, Yi Deng, David Denslow, Sanjay Dhar, Brian Dineen, Steven Ditmeyer, Trenery Dolbear, Walter Dolde, Yaxin Duan, Robert Duch, John Duffield, Noel Edelson, James Elliott, Gordon Fay, Steven Felgran, Heywood Fleisig, Edgar Francisco, Christian Francois, Garth Frazer, Jorge Freyre, Lee Friedman, Masao Fujita, Garry Gabison, Harvey Galper, William Gates, C. Daniel George, Malcolm Getz, Robert Goldfarb, Allen Goodman, Christopher Green, Herbert Grubel, Binbin Guo, Thomas Gustafson, Koichi Hamada, Daniel Hamermesh, Nancy Hampson, Henry Hansmann, Robert Harlow, Patricia Hartge, Constance Helfat, Dale Henderson, Ernesto Hernandez-Cata, Barbara Donald Hester, Karen Hester, Ronald Hicks, Marianne Hill, Catharine Hill, Edward Hirs, Guenter Hitsch, Thomas Howard, Paul Huber, Shane Hunt, Tetsuya Inoue, Farrukh Iqbal, Veikko Jaaskelainen, David Johnson, Gilbert Johnson, Leland Johnson, Lynn Karoly, Randall Kau, Kenneth Kehrer, Amit Khandelwal, Dongsoo Kim, Sunghyun Kim, Richard Klapper, Barry Kolatch, Kim Kowalewski, Jochen Kraske, Charlotte Kuh, Chionglong Kuo, Lee Kyriacou, Ronald Lang, Robert Lawrence, Brian Lebowitz, Yoon-Ho Lee, Susan Lepper, Allen Lerman, Richard Levin, Saul Levmore, Fred Levy, Jonathan Levy, Yan Li, Edward Lincoln, Robert Litan, Michael Lopez, Biao Lu, Christopher MacDonagh-Faulkner, Mado Macdonald, Bernard Markstein, Masayuki Matsushima, Alex Maynard, William McKinstry, Jean Mensch, Kent Mikkelsen, Miller Richard Miller, Douglas Miller, Joseph Minarik, Thad Mirer, Lazaros Molho, Christopher Monroe, Harry Montgomery, Marnie Mueller, Richard Murnane, Howard Newman, Michael Niebling, John Nyheim, Sister Mary Oates, Van

Ooms, Peter Orazem, Theodore Osgood, Laura Owen, Joon Park, Elizabeth Parr-Johnston, Rupesh Patel, Jose Antonio Pedrosa Garcia, Sanford Pensler, Pietro Peretto, John Perkins, Sarah Peters, Edmund Phelps, Charlotte Phelps, Hugh Pinchin, Costas Procos, William Rapp, David Rappoport, Jonathan Ratner, Rita Reicher, Peter Reuter, Daniel Richards, Harold Rolfe, Kenneth Roose, Susan Rose-Ackerman, Massimo Russo, William Rutledge, Emilio Sacerdoti, Valerie Sarris, Lisa Schineller, Roger Schmenner, Peter Schochet, David Schulz, Matthew Shapiro, William Shepherd, Robert Shishko, Donald Shoup, Michele Siegel, Donald Sillers, Stanley Silverberg, Kriss Sjoblom, Hart Smith, Donald Snodgrass, Thomas Spavins, Robert Stearns, Joseph Steiner, Craig Stewart, William Stobart, Donald Stockdale, David Stockton, Andriy Storozhuk, Peter Sturm, Richard Summerlee, Leopold Sveikauskas, Alan Sykes, Thomas Synnott, Vadim Tantsyura, Norman Taylor, Davis Thompson, John Tilton, James Trask, Edwin Truman, Joan Turek, Amy Unfried, David Vail, Harold Van Gieson, Jan Vanous, Alfredo Vara Alonso, Joao Velloso, William Walsh, Hui Wang, Xin Wang, Katharine Warne, Akiko Watanabe, Harold Watts, Leroy Wehrle, Daniel Weinberg, John Wells, Martin Werner, Ann-Margret Westin, Philip White, Will Robert Will, Timothy Williams, Richard Williamson, Sidney Winter, Bernard Wolf, Tao Wu, Shiro Yabushita, Linus Yamane, Zili Yang, Janet Yellen, Katherine Yunker.





Alumni - What are you up to?

A new page dedicated to alumni news will be featured on the Economics website and we are now taking submissions. If you are interested in sharing news with your fellow classmates, please fill out the form at http://economics.yale.edu/alumni

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Herbert Scarf Summer Research Opportunity continued from page 10

own hours and concentrate his effort on specific areas that he determined to be of particular interest or importance. He added that his research advisers were "extremely helpful" in teaching him what he had to know.

The research assistant program allowed students and professors to forge more meaningful connections than they would in a classroom setting, said Samuel Kortum, the James Burrows Moffatt Professor of Economics and the department's former director of undergraduate studies. "The professor can see the ability of students to think through a problem," he said. "It gives the students a sense of what their professors do. There are two worlds at Yale - one of teaching and one of research. This is a way to bring those two worlds together." Kortum, who worked with rising senior Michael Wang this summer, said the program also has practical value for faculty. "You can make real progress together," he said. "There might be too many demands on your time to pursue a particular project, but if there is an undergraduate there to keep it moving, then it can spring to life and you can discover something exciting that becomes a research paper."

Bergemann said research assistants met at least once a week with their assigned faculty member to discuss their progress and work through problems. "This continued conversation over the entire summer was extremely valuable," he said. "It leads the students to discover more; it leads them to concentrate a little bit better; and it leads them to develop a more coherent and consistent view of a problem that they could not develop while writing a research paper for a class." He also noted that the research could provide students the basis for their senior thesis.

Bergemann would like to expand the research assistant opportunities during the academic year so that eventually up to a half of all the approximately 200 economics majors who graduate every year have a substantial research experience. "Whether students go on to work in academia, the finance or consulting sectors, or in public policy, they need the ability to dig deeply into problems, find potential solutions, and present their ideas supported with data and insights," he said. "That's what makes the Herbert Scarf research fellowships so valuable."

