# Penn IUR News

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**SPRING 2016 |** NO. 23

# CONVENING

# PRAI on University-Led Innovation Initiatives

On October 7-8, Penn IUR and the Penn Center for Innovation (PCI) hosted the "Penn IUR Roundtable on Anchor Institutions: University-Led Innovation Initiatives," which convened leaders from some of the nation's most engaged urban universities to discuss how their institutions are fostering innovation and commercialization in their cities. The program began with a panel open to the

public followed by a day of closed-door sessions.

At the well-attended panel, the speakers described their respective programs, highlighting the interactions between their institutions and their surroundings. The speakers were Jim Kiriakis, Interim Director, UCSF Innovation, Technology & Alliances, University of California-San Francisco; Todd Sherer, Associate

Vice President for Research and Executive Director of Technology, Emory University; Jon Soderstrom, Managing Director, Office of Cooperative Research, Yale University; John Swartley, Associate Vice Provost for Research and Executive Director, PCI, University of Pennsylvania; and Alan Thomas, Associate Vice President and Director, Center for Technology

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TALKING TECH TRANSFER: From left, Jon Soderstrom, John Swartley, Todd Sherer, Alan Thomas, Jim Kiriakis, and Penn IUR Co-Director Eugénie Birch.

# CONVENING

# Housing Finance Reform: Where Do We Go From Here?

On November 10, Penn IUR and the Penn Wharton Public Policy Initiative (Penn Wharton PPI) convened housing policy researchers and economic experts to a symposium on "Housing Finance Reform: Where Do We Go From Here?" at the Capitol Visitors Center in Washington, D.C. to discuss roadmaps for U.S. housing finance reform. Participants in the day's events, which included two panels and a closing roundtable discussion, were: Scott Frame, Financial Economist and Senior Policy Advisor, Federal Reserve Bank of Atlanta; Akash Kanojia, Senior Trader/Analyst, Federal Reserve Bank of New York; Wayne Passmore, Senior Advisor, Division of Research and Statistics, Board of Governors of the Federal Reserve System; Roberto Quercia, Trudier Harris Distinguished Professor and Chair, Department of City and Regional Planning, UNC Center for Community Capital, University of North Carolina; Philip Swagel, Professor, University of Maryland School of Public Policy; Joseph Tracy, Executive Vice President and Senior Advisor to the President, Federal Reserve Bank of New York; Mark Willis, Executive Director, Furman Center for Real Estate and Urban Policy, New York University; and Penn IUR Co-Director Susan Wachter, Albert Sussman Professor, Professor of Real Estate and Finance. Penn's Wharton School.

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# Upcoming Events

VISIT WWW.PENNIUR.UPENN.EDU FOR MORE DETAILS AND TO REGISTER

#### **FEBRUARY 5. 2016**

PENN IUR COMMUNITY EVENT
MUSA LUNCH SPEAKER SERIES: GUY THIGPEN
MEYERSON HALL, PENN IUR CONFERENCE ROOM, G12 | 12:00 - 1:30 PM

Penn IUR's first MUSA lunch session of 2016 features Guy Thigpen, Director of Analytic Sciences, Philadelphia Land Bank. He will discuss the creation of the Land Bank, how it is used, and how GIS can be employed to remediate vacancy and the social problems that accompany it. Lunch will be served.

#### **FEBRUARY 16, 2016**

PENN IUR COMMUNITY EVENT

PENN IUR URBAN DOCTORAL POSTER SESSION AND METHODS WORKSHOP MEYERSON HALL, G-12 | 11:00 AM - 2:00 PM

This event highlights the work of urban-focused doctoral students from across the University and celebrates the research contributions of Penn IUR Faculty Fellows. The event will include poster presentations by doctoral students followed by a discussion with Penn IUR Faculty Fellows.

#### **FEBRUARY 19, 2016**

PENN IUR CO-SPONSORED EVENT
URBAN TRANSFORMATION AND ENERGY CONSUMPTION: WHAT IS THE
ROLE OF URBAN PLANNING?
FISHER FINE ARTS, KLEINMAN FORUM | 4:00 PM - 6:00 PM

Join Penn IUR and Penn's Kleinman Center for Energy Policy to discuss the relationship between transportation, energy consumption, and urban planning with top planners from the field. Speakers include Penn IUR Scholar Bob Cervero, Professor and Chair of Urban and City Planning, University of California-Berkeley; Matt Turner, Professor, Economics Department, Brown University; Penn IUR Faculty Fellow Gilles Duranton, Dean's Chair in Real Estate Professor and Chair, Real State Department, Penn's Wharton School; Penn IUR Faculty Erick Guerra, Assistant Professor Urban Planning, Penn School of Design. Co-sponsored by Penn IUR and the Kleinman Center for Energy Policy.

#### **FEBRUARY 25, 2016**

PENN IUR PUBLIC INTEREST EVENT SHAPING URBAN HEALTH & THE ENVIRONMENTAL LANDSCAPE FISHER FINE ARTS, KLEINMAN FORUM | 3:00 PM - 6:00 PM

How do we design urban places? Come hear the latest research on best practices and health outcomes and learn how low-cost, place-based initiatives can transform health in urban areas. Speakers include Penn IUR Faculty Fellow Charles Branas, Professor of Epidemiology, Penn's Perelman School of Medicine; Penn IUR Faculty Fellow Sara Heller, Professor of Criminology, Penn School of Arts and Sciences; Rupal Sanghvi, Founder, HealthxDesign; and Bob Grossman, Senior Director, Vacant Land, Philadelphia Horticultural Society. Co-sponsored by the Penn Center for Public Health Initiatives (CPHI), Penn School of Design, and the Penn Urban Health Lab.

#### **MARCH 1, 2016**

PENN IUR CO-SPONSORED EVENT

HEALTHY HORIZONS: INNOVATION AND THE INFORMAL ECONOMY FISHER FINE ARTS, KLEINMAN FORUM | 5:30 PM - 7:00 PM

Join Next City and Penn IUR for a discussion of healthcare innovations for a rapidly urbanizing world in concert with Next City's column "Healthy Horizons: Innovation and the Informal Economy." Speakers to be announced.

#### MARCH 18, 2016

PENN IUR COMMUNITY EVENT MUSA LUNCH SPEAKER SERIES

MEYERSON HALL, PENN IUR CONFERENCE ROOM, G12 | 12:00 - 1:30 PM

Penn IUR's last lunch session of the 2015-2016 academic year features Jeff Frankl, UI/UX Designer, Azavea. Frankl will present on his current GIS work with Azavea. Lunch will be served.

#### **APRIL 22, 2016**

PENN IUR PUBLIC INTEREST EVENT MUSA EARTH DAY LECTURE

VAN PELT, CLASS OF '68 PAVILION, 6TH FLOOR | 3:00 PM - 7:00 PM

Join Penn IUR and MUSA for a panel discussion on emerging research on employing geospatial technologies to benchmark and monitor sustainable urban development.

#### MAY 13, 2016

PENN IUR COMMUNITY EVENT
PENN URBAN DOCTORAL SYMPOSIUM
INN AT PENN, HOURGLASS BALLROOM | 11:00 AM - 2:00 PM

Co-sponsored with Penn's Urban Studies program, this symposium celebrates the work of graduating urban-focused doctoral candidates. Graduates will present and discuss their dissertation findings.

#### **MAY 2016**

MIDATLANTIC REGIONAL CONVENING ON HABITAT III

As part of the national preparations for the upcoming UN Conference on Housing and Sustainable Urban Development (Habitat III), Penn IUR and Perry World House are partnering with the U.S. Department of Housing and Urban Development and the U.S. Department of State to discuss U.S. contributions to the New Urban Agenda, the Habitat III outcome document. Details will be added to Penn IUR's website (www.penniur.upenn.edu) as they become available.

# Faculty Spotlight: William Burke-White



WILLIAM BURKE-WHITE is the Richard Perry Professor and Inaugural Director of Penn's Perry World House and Deputy Dean and Professor of Law in Penn's Law School. Burke-White joined Penn in 2005 and has been a Deputy Dean of the Law School since 2011. From 2009-2011, he served on the Policy Planning Staff of U.S. Secretary of State Hillary Rodham Clinton. Burke-White has written extensively in the fields of international law and institutions, with a focus on international criminal and international economic law. His current research explores gaps in the global governance system and the challenges of international legal regulation in a world of rising powers and divergent interests.

1. YOU ARE THE INAUGURAL DIRECTOR
OF PERRY WORLD HOUSE, A
UNIVERSITY-WIDE CENTER FOR
PENN'S GLOBAL INITIATIVES. PERRY
WORLD HOUSE WAS FOUNDED
IN 2014—THOUGH IT WILL NOT
FORMERLY OPEN UNTIL SEPTEMBER
OF 2016, PROGRAMMING HAS BEGUN.
WHAT IS YOUR VISION FOR THIS
CENTER?

When Perry World House opens in the fall of 2016, we will perform three key functions: we will serve as a public forum for international events and programs, will give an academic home to students interested in international affairs, and will function as a policy- and international affairs-oriented think tank. In our role as a public forum, we will partner with Penn's existing schools and centers to enhance and promote events—making them even more interdisciplinary and even more engaging across different parts of the University-and we will start a lot of new programs and events as well. For example, Perry World House spearheaded the visit of the German president this past September and the Russian punk activist group Pussy Riot last Spring—these are the kinds of things that, in the past, haven't had a natural home on Penn's campus because Penn doesn't have an international affairs school. The kinds of conferences and events that might otherwise happen at that type of school will happen at Perry World House.

The second pillar of the vision for Perry World House is to give students who are interested in international affairs and international issues an intellectual and academic home on campus. While we are not going to be a school or a major, we will create programs for students interested in international affairs. For example, we are launching the World House Fellows program next year for undergraduate students. These students will get to serve as research assistants and, through Perry World House, will be able to intern in a policy-oriented and international affairs-oriented think tank. This program will create a community

for students who have passions for international affairs. Perry World House will serve a similar function for international students; the building will be a place for them to hang out, physically, but the center will also serve as a kind of community-creating mechanism for them.

Third, Perry World House will be a think tank on Penn's campus committed to linking academic knowledge with global policy challenges. So we will take themes—like the theme that we'll be working on with Penn IUR, about urbanization and migration—and bring groups of visiting postdocs, visiting scholars, and visiting policymakers to work with Penn faculty and students with the ultimate goal of producing policy-relevant outcomes: a big conference that links academe and policy, for example, or a signature report on a timely topic. We will use Perry World House to convene scholars and visitors across disciplines around some of the world's most pressing challenges.

# 2.A NEW FACILITY HOUSING PERRY WORLD HOUSE WILL OPEN IN SEPTEMBER 2016. WHAT OPENING ACTIVITIES ARE YOU PLANNING?

There will be a grand opening on the 19th and 20th of September that will include a ribbon cutting as well as addresses by significant international policy figures. These activities will be embedded in a two-day conference that will examine some of the themes that Perry World House is focusing on: themes such as urbanization and migration, the future of the international economic and political order, and the intersection of technology and policy. This conference will launch the Perry World House's think tank side. It should be a really exciting two days.

3.PERRY WORLD HOUSE WILL DRAW ON ALL TWELVE OF PENN'S SCHOOLS TO DEVELOP SOLUTIONS TO PERSISTENT AND EMERGING INTERNATIONAL CHALLENGES. WHY IS THIS CROSSDISCIPLINARY APPROACH TO GLOBAL

# CHALLENGES VALUABLE? WHAT DOES IT OFFER THAT MORE TRADITIONAL APPROACHES DO NOT?

Penn's comparative advantage—working on almost anything but particularly in the international affairs space—is that we have professional schools and graduate schools that have extraordinary expertise that, when you bring them together, can be really transformative. So take for example the technology governance issues: we have some of the best drone labs in the country in the School of Engineering, and we have the lawyers in the Law School who think about regulation and governance issues, and the faculty at Wharton who think about how to finance solutions. If you bring those people together you can truly transform thinking around global challenges in a way that you can never do within one discipline. For example, the work in Engineering is wonderful but, in in order to come up with solutions to global challenges, the lawyers, the business people, and the philosophers are going to have to be part of the conversation.

Part of Perry World House's mandate is to link up and build together the centers of excellence that exist on Penn's campus and make them more than the sum of their parts. We hope to have this kind of catalytic effect across a whole range of places at Penn where we have great academic expertise and a real potential for policy influence.

4.YOUR SCHOLARLY WORK HAS
ADDRESSED ISSUES OF POSTCONFLICT JUSTICE, THE
INTERNATIONAL CRIMINAL COURT,
INTERNATIONAL HUMAN RIGHTS, AND
INTERNATIONAL ARBITRATION. YOU
HAVE ALSO BEEN PARTICULARLY
ACTIVE IN THE POLITICAL SPHERE,
HAVING SERVED IN THE OBAMA
ADMINISTRATION FROM 2009-2011
ON SECRETARY HILLARY CLINTON'S
POLICY PLANNING STAFF. HOW HAVE
YOUR ACADEMIC AND POLITICAL

# Penn GIS Day Focuses on Real Estate and Housing

Penn GIS Day, sponsored by Penn IUR and hosted by the Master of Urban Spatial Analytics (MUSA) program in conjunction with International GIS Day on November 18, is an annual celebration that focuses on real-world applications and innovations stemming from uses of geographic information systems (GIS). This year's event, "MUSA GIS Day 2015: The Intersection of Geography, Real Estate, and Civil Rights," focused on the role of spatial analytics in the fields of real estate and housing. The morning panel included speakers Alan Lightfeldt, Senior Data Analyst, Zillow's StreetEasy; Al Parker, Research Associate, The Reinvestment Fund; and Robert Renner, Social Science Analyst, U.S. Department of Housing and Urban Development (HUD). The event's afternoon programming served as a celebration of MUSA's 10th anniversary, and featured a panel discussion among MUSA alumni and a data visualization workshop. Penn GIS Day was co-sponsored by MUSA, Penn's Cartographic Modeling Lab, Wharton's GIS Lab, and the Penn School of Design; technical workshop co-sponsors include the Penn Injury Science Center and Urban Spatial.

Penn IUR Co-Director Susan Wachter introduced the speakers and the day's topic. Lightfeldt began with a description of Zillow's StreetEasy, a popular online marketplace for real estate, highlighting the site's use of maps and visualizations, which he said consumers have come to expect and rely on, and of the book The New Rules of Real Estate, authored by Zillow researchers, which discusses the use of data in real estate analysis. His presentation explored a variety of questions addressed by the book, such as: How fast does an area appreciate or depreciate? How might real estate appreciation or depreciation affect development strategies? How does the "halo effect," the phenomenon in which some areas gain value from their proximity to prosperous neighborhoods, play out in particular cities and districts?

Parker's presentation focused on another question related to data and urban geography: How can cities efficiently allocate resources? He offered the Reinvestment Fund's Market Value Analysis (MVA) tool as a resource city governments can use to inform policymaking. Nonprofit and advocacy organizations, too, can use MVA to help residents understand neighborhood real estate trends. This tool combines census data, housing market information, and geospatial analysis to create unique, local housing market imagery. Originally tested in Philadelphia in 2001, MVA has since been used by other municipalities and HUD.

Renner discussed HUD's eGIS (Enterprise GIS), a public portal that offers access to HUD's geospatial datasets, application programming interfaces (APIs), and web-based mapping tools. Some of the data available through eGIS is intended to illuminate "opportunity" through a variety of metrics such as access to jobs, neighborhood walkability, and housing affordability. These data may reveal social and economic trends, such as changing levels of segregation or school proficiency; notably, overlaying data on school quality with data on racial composition consistently shows an enormous inequality of access to quality education.

After the panelists' presentations, audience questions inspired conversations about unequal access to opportunity, how government agencies can use data about market value, and the degree to which housing is not affordable in New York City. During this conversation, all of the panelists emphasized the importance of data visualization and geospatial analysis in identifying emerging real estate trends and in advocating for fair housing.

The afternoon panel served as a celebration of MUSA's 10-year anniversary. MUSA Faculty Director Amy Hillier, Assistant Professor in City and Regional Planning and Social Policy and Practice, Penn School of Design, looked back on the program's first decade and introduced the panel of MUSA alumni, which included Sarah Cordivano, Project Manager, Data Analytics, Azavea; MUSA Instructor Ken Steif, Lecturer, Department of City and Regional Planning, Penn School of Design; and Guy Thigpen, Director of Data (CONTINUED ON P. 19)



GIS DAY: From left, Guy Thigpen, Ken Steif, Amy Hillier, and Sarah Cordivano.

# Perry House and Penn IUR Commence Partnership on Urbanization

On November 4, Penn IUR co-hosted a symposium entitled "Sustainable Global Urbanization," the first of several collaborations with Perry World House, the University's new hub for global engagement and international policy research. The event included a keynote address by Jeffery Sachs, Director, The Earth Institute, Columbia University and Director, UN Sustainable Development Solutions Network, who spoke about the challenges of sustainable development, the need for systemic change, and the potential for cities to lead the way. In addition, a panel featuring leading thinkers on sustainable urbanization examined the challenges of providing affordable housing with public services in a rapidly urbanizing world and how to grow healthy cities through sustainable development policy and effective real estate regulation.

Panelists included Penn IUR Co-Director Eugénie Birch, Lawrence C. Nussdorf Professor of Urban Research and Education Professor and Chair of the Graduate Group, City and Regional Planning, Penn School of Design; Robert Buckley, Senior Fellow, Milano School of International Affairs, Management and Urban Policy, The New School; Maruxa Cardama, Executive Coordinator and Founder, Communitas Coalition for Sustainable Cities and Regions in the New UN Development Agenda; Marja Hoek-Smit, Adjunct Professor of Real Estate, Director and Founder, International Housing Finance Program, Zell/Lurie Real Estate Center, Penn's Wharton School; and Stephen

Malpezzi, Professor, Real Estate and Urban Land Economics, Wisconsin School of Business, University of Wisconsin-Madison. William W. Burke-White, Richard Perry Professor, Penn School of Law and Inaugural Director, Penn's Perry World House, introduced the day's topic and speakers, and Penn IUR Co-Director Susan Wachter, Albert Sussman Professor, Professor of Real Estate and Finance, Penn's Wharton School, moderated the panel.

In his keynote address, Sachs reported that, in spite of current trends, keeping the globe from warming more than 2 degrees Celsius—the limit climate scientists agree will prevent the direst consequences of climate change—continues to pose a serious challenge. One bright spot, however, is the adoption by the United Nations in September of the UN Sustainable Development Goals (SDGs), 17 goals that together serve as a framework for international growth and action. In his talk, Sachs focused on two of the goals in particular: SDG 13, a commitment to "take urgent action to combat climate change and its impacts," and SDG 11, a commitment to "make cities and human settlements inclusive, safe, resilient, and sustainable." Sachs emphasized the importance of SDG 11, noting that over half the world's population now lives in urban areas and that most of the population growth projected for the next several decades is expected to be in cities. So, as he reminded the audience, if we can figure out how to develop our cities in a sustainable manner, we will go a long way toward meeting the other SDGs as well. He went on to highlight another reason for optimism: in his experience, city leaders seem to understand the urgency of taking action on climate change and many have already adopted the SDGs.

However, while many city leaders are eager to take action, the scale of the problem overwhelms them. Switching to a near-zero carbon economy will be necessary, Sachs argued, which will require a fundamental overhaul of how energy is produced and distributed as well as a revolution in transportation systems. Cities need help making these changes. In addition, in much of the world, air and water pollution are still enormous urban problems. Sachs stressed that overhauling our energy, transportation, and public service systems is going to be very, very expensive and technically difficult. What's more, these transformations will need to be managed in a fiscally sound, democratic, and equitable manner.

Sachs did not underplay the enormity of the challenges, but he found reasons for hope in the adoption of the SDGs as a framework for global development and in the willingness of subnational actors, particularly cities, to work within this framework. Cities are on board, he said, but they need help figuring out how to achieve sustainable development and that, he stressed, was where academics and others in the audience could play a role: working metro by metro to help each city realize sustainable urban development.





CITIES CAN LEAD THE WAY: From left, Eugénie Birch, Stephen Malpezzi, Marja Hoek-Smit, Susan Wachter, Robert Buckley, and Maruxa Cardama. Right: the event drew a full house.

# Self-Driving Cars Will Shape Cities

Penn IUR co-hosted with the Center for Technologies for Safe and Efficient Transportation (T-SET) and Penn's Office of the Provost a public panel discussion on how technology will shape our cities and surroundings. "Automation and the Future of Cities," held in the Penn School of Design's Meyerson Hall, included panelists Vinn White, Senior Policy Advisor, U.S. Office of the Secretary of Transportation; Daniel Lee, Professor, Penn School of Engineering, Director, General Robotics Automation, Sensing, Perception (GRASP) Lab, and Penn Director, T-SET; Faculty Fellow Erick Guerra, Assistant Professor, City and Regional Planning, Penn School of Design; and Megan Ryerson, Assistant Professor, City and Regional Planning, Penn School of Design, and Assistant Professor, Electrical and Systems Engineering, Penn School of Engineering. Penn IUR Co-Director Eugénie Birch, Lawrence C. Nussdorf Professor of Urban Research and Education Professor and Chair of the Graduate Group, City and Regional Planning, Penn School of Design, moderated.

White began with a big-picture look at the population trends that will shape the U.S. transportation system in coming decades, presenting findings from a report, now in draft form, entitled "Beyond Traffic 2045." This report, which is being developed by the Office of the Secretary of Transportation, is a framework plan for the U.S. transportation system over the next thirty years, intended to inform transportation policy through data-driven analysis, research, expert opinions, and public engagement. According to "Beyond Traffic 2045," the nation's population is expected to grow by 70 million people over the next thirty years, with much of that growth absorbed into the country's "megaregions," a term (first coined in an Urban Design studio taught by Penn IUR Faculty Fellow Jonathan Barnett) that refers to clusters of urban areas bound together through infrastructure, aligned economies, and

social relationships. This population growth will have enormous implications for how Americans live and move, affecting such things as the amount of time spent in traffic, disparities in opportunity and income, workforce development, and the movement of freight. Not only will transportation policies and investments need to respond to these trends, but they will need to take into account the effects of climate change, limitations on the financial resources available for transportation improvements, and the political process.

Lee presented on the technological side of automated transportation. Using videos of autonomous vehicles, humanoid robotic drivers, and other robotic innovations, Lee illustrated how advances in robotics, information technology, and artificial intelligence have the potential to transform transportation systems. He pointed out, however, that major limitations are still apparent, with technology not yet capable of human performance on many tasks and in many situations. Nonetheless, great potential exists, which he argued should be developed to enhance our lives, in a safe manner, with input from government and industry.

Guerra's talk addressed two questions: How will automated vehicle technologies change cities? And how should an uncertain but potentially transformative transportation technology influence today's planning and investment decisions? He noted that automation technologies have the potential to improve transportation safety, as over 90 percent of traffic accidents are due to driver error. Automated vehicle technology could also allow closer, more rational interactions among vehicles and, as a result, increase road capacity. Guerra said that safety and capacity improvements are the primary benefits of advances in automation technology, but that automation may also have a variety of other consequences, such as enhanced personal mobility for older or disabled individuals, economic restructuring, public transit expansion,

and changes to urban form caused by diminished demand for parking. Guerra said that planners have not yet incorporated these possibilities into their thinking, as so much is still uncertain.

Ryerson focused on inter-city transportation, and specifically on travel between cities within 500 miles of one another. Currently, these trips are heavily dominated by automobile travel (86 percent of trips between NYC and Philadelphia are in automobiles, for example). How many people will choose to take autonomous vehicles for trips between cities, once that option exists, and whether these autonomous vehicle trips will take the place of driving or of taking trains, buses, or planes, will have enormous consequences for the environment and the economy. She noted that determining what these consequences will be, however, is very difficult, given the uncertainties around emissions, ridership, and attitudes. To better understand attitudes, Ryerson recently conducted a survey that revealed that people who are more inclined to use driverless vehicles for inter-city travel are also people who: are concerned with personal safety and made uncomfortable by public transit, place greater importance on the ability to use electronic devices while traveling; have a high level of community engagement; and are concerned about flexibility in scheduling. Sociodemographically, this translates to people who are young, mobile and connected (yet without a vehicle), and relatively low- (but rising-) income.

Following presentations, panelists answered audience questions for nearly an hour, and then continued the discussion at a reception. While so much is uncertain, the event made clear that the introduction of autonomous vehicles will have enormous, though as-yet-unknown, repercussions in terms of urban form, economy, and inner- and inter-city travel. To watch a video of the event, go to the "Events" section of Penn IUR's website (www. penniur.upenn.edu) and select "View past events."





IMPACT OF AUTOMATION: From left, Meghan Ryerson, Erick Guerra, Daniel Lee, Vinn White, and Eugénie Birch.

INSTRUCTION

# Speaker Series Demonstrates Application of MUSA Program

Fall 2015 speakers in the MUSA Brown Bag Lunch series included Amory Hillengas, Geospatial Analyst, City of Philadelphia's Department of Health; Jonathan Sinker, GIS Analyst, JMT Technologies; and Kate Raman, Associate Director, Econsult Solutions. Every semester, Penn IUR sponsors a series of seminars hosted by the Masters in Spatial Analytics (MUSA) program in which participants learn from practitioners about real-life applications of geographic information systems (GIS) and spatial analysis. Over lunch, speakers present their work and engage with attendees, allowing students unique opportunities to network, ask about potential career paths, and learn new skills, tools, and GIS applications. Speakers this fall focused on urban applications of GIS technology including MUSA graduates' work.

Hillengas (MUSA '14) kicked off the series on September 11 with a discussion of the Philadelphia Department of Public Health's Get Healthy Philly, a public initiative to encourage healthy behavior and development in Philadelphia. This program includes the Healthy Corner Store initiative, tobacco cessation programs in schools, and more. Hillengas explained how she gathered, analyzed, and displayed geographic information about food access and its relationship with poverty for the City's annual Get Healthy Philly progress report, which will be released in early 2016. She described how she used Network Analyst, a GIS program that analyzes distances based on street and sidewalk paths rather than Euclidean distances, to assess food access: "Most people don't walk through

someone's backyard or through a building to get to the grocery store, so we need to take that into account," she said. Network Analyst can define "walksheds," or areas within walking range of a particular location. Another GIS program, Map Algebra, allowed her to quantify access to fresh foods by ranking different types of stores—such as convenience stores versus supermarkets—and assigning point values to the walksheds defined by Network Analyst. By mapping this data against poverty data, Hillengas was able to highlight areas of high poverty and low food access. With these areas of highest need identified, the Department of Public Health is able to target these places.

Sinker spoke on October 2, discussing projects he worked on in his previous position as a GIS analyst for Philadelphia's Department of Health as well as his current work with JMT Technology Group, a consulting firm that specializes in software development, enterprise content management, and GIS. At the Department of Health, Sinker analyzed bike crash incidence using kernel density tools, which demonstrate clustering of crashes, to help drive policy; pedestrian crash analysis using Penn DOT crash data; and Chinese takeout food as part of the Get Healthy Philly initiative, using data from Pennsylvania Spatial Data Access (PASDA), an online database created by Penn State University. In his current position, Sinker uses GIS to create interactive databases to collect information; for example, he recently helped design a database that allows field collectors to gather information about historic building in high detail, directly collecting

into ArcGIS such information as photographs, historic status, building condition, and more, to create a fine-grained map of New Jersey's historic building stock.

Raman (MUSA '15) concluded the semester's Brown Bag Lunch series on December 4 with a discussion of the tools she learned in the MUSA program and how she applies them in her job with Econsult. Emphasizing the importance of the statistical courses she took at Penn, she demonstrated how she uses statistics, Business Analyst, and econometrics analysis on current projects. The majority of Raman's work focuses on economic modeling for development. She said that geospatial analysis tools she finds most useful include IMPLAN, STATA, Pro Formas, and econometric analyses. She also discussed her use of QGIS and GEODA, two free online spatial analysis resources.

After exploring her current work at Econsult, Raman presented on her capstone project for the MUSA program, which she wrapped up in Fall 2015. For MUSA, she analyzed mass shootings at the state and county level using data from the CDC and the Stanford Geospatial Center collected over the past 50 years. She found that mass shootings have increased in recent years, although the overall number of gun deaths from shootings has declined.

For information on the Spring 2016 MUSA Brown Bag Lunch series, see page 2 or visit the "Events" section of the Penn IUR website (www.penniur. upenn.edu).

LEADERSHIP

# Global Engagement in Preparation for Habitat III

Penn IUR's Global Urban Commons (The Commons), a publicly accessible online directory of urban research centers from around the world and a source for information about global urban research, is now the public face of the new General Assembly of Partners (GAP). GAP is a nongovernmental stakeholder engagement platform created by the UN's World Urban Campaign as part of the preparation process for the UN's Habitat III conference, the world's premier conference addressing urban issues, to be held in Quito, Ecuador in October 2016.

GAP consists of 14 Partner Constituent Groups (PCG), each of which is involved with the advancement of new concepts, ideas, and methodologies in the field of sustainable urbanization and human settlement development; each represents a stakeholder group, including local and sub-national authorities, research and academia, civil society organizations, grassroots organizations, women, parliamentarians, children and youth, business and industries, foundations and philanthropies, professionals, trade unions and workers, farmers, indigenous people, and media. GAP will develop recommendations for Habitat III, working through its PCGs to ensure broad stakeholder involvement. As part of this preparatory process, GAP will meet several times in different regions of the world October 2015 (New York)

February 2016 (Berlin), March 2016 (Prague), July 2016 (Indonesia), and October 2016 (Quito).

News, events, and research related to GAP and the 14 PCGs will be disseminated by The Commons. GAP member organizations and the 14 PCGs have been added to The Commons member directory and their profiles are searchable and mapped on The Commons "Members" page, accessible here: www. globalurbancommons.org.

Penn IUR created The Commons in response to scholar and practitioner requests for a platform to build awareness about the breadth and depth of global urban research.

RESEARCH

# University and City Partner on White House Initiative

Penn IUR will lead the University of Pennsylvania's partnership with the City of Philadelphia as part of the White House's new Metro Lab Network, which aims to improve urban infrastructure and foster equitable development in cities. The initiative brings together University researchers with city decision-makers to advance technologically and analytically based improvements to the urban systems and infrastructure on which citizens, cities, and regions depend.

"We are thrilled to be partnering with the City of Philadelphia to identify and implement real-world solutions to some of our City's biggest challenges," said Penn IUR Co-Director Susan Wachter. "Research universities have the physical and human resources to help their cities meet complex urban challenges through undertaking research, development, and deployment of innovative projects at lower cost."

The Metro Lab Network, launched on September 14 at the White House Smart Cities Forum, aims to improve American cities by creating university-city partnerships committed to improving urban infrastructure, services, and other public sector priorities. The Network will connect university researchers and

city leaders to research, develop, and deploy (RD&D) innovative solutions to urban challenges.

As part of the Metro Lab Network, the City of Philadelphia and Penn will collaborate on projects that incorporate technology and analytics for improving infrastructure and city services and for fostering equitable development. Penn will use technology to measure the impacts of new infrastructure (including green infrastructure) on neighborhood values. In collaboration with City partners, Penn will apply this new technology to reduce blight, improve land banking strategies, and further local economic development; the Philadelphia Redevelopment Authority, the Philadelphia Land Bank, and the Mayor's Office of Community Empowerment and Opportunity will be active partners in these efforts.

The national Metro Lab Network is organized by the White House Office of Science and Technology Policy and will be managed by a Management Team, initially led by Carnegie Mellon University (visit their website at www.metrolab. heinz.cmu.edu to learn more).

URBAN BOOK TALK

# Al Argues for Value of Informal Urban Villages

On December 9, Penn IUR Faculty Fellow Stefan Al, Associate Professor of Urban Design, School of Design, founder of Stefan Al Architects, and editor of Villages in the City: A Guide to South China's Informal Settlements (Hong Kong University Press, 2015), discussed at the Penn Bookstore his recently published book at an event hosted by Penn IUR with the Department of East Asian Languages and Civilizations, School of Arts and Sciences; Department of City and Regional Planning, School of Design; Mellon Humanities, Urbanism, Design (H+U+D) Initiative; and Perry World House. Speaking to a crowd of Penn professors and students, Al traced the evolution of China's informal settlements and their replacement by formal housing complexes.

The titular "villages" refers to the informal settlements (commonly described as slums) that were originally settled along cities' peripheries, but which have been swallowed up by South China's rapidly expanding metropolitan areas. These villages—easily identifiable in satellite images by their non-linear streets and low-density buildings, which stand out in contrast to the planned grids characteristic of modern Chinese city planning—are typically very crowded, with buildings that stand so close to one another that they do not meet building or health and safety codes. Nonetheless, they offer affordable and well-located entry points for poor and struggling

migrants to the city and, as Al pointed out during his talk, they are typically walkable. relatively close to the central metropolis, and sometimes located along rivers and ports. giving their residents access to jobs in and around the city.

However, as Al went on to explain, they are disappearing in South China.

being replaced with large, formally planned housing complexes. These new landscapes, while they meet building codes, are not affordable, pedestrian-friendly, or accessible for those new to the city, who tend to be low-wage earners.

Al's interest in the topic, as he explained at the December event, grew when he lived in Hong Kong from 2010-2012. During this time, he



organized a team of city planning and architecture professionals and academic researchers to document the value and challenges of informal settlements in the country's fastest growing cities, a project that became *Villages in the City*. Contributors include Margaret Crawford, Jiong Wu, Marco Cenzatti, Jiang Jun, Nick Smith, and Laurence Liauw. The book can be found at the Penn Bookstore and on Amazon.

URBAN BOOK TALK

# McDonald Speaks on Chicago's History

On September 9, Penn IUR Scholar John McDonald, Professor Emeritus, Department of Economics, University of Illinois-Chicago, discussed Chicago's economic history, tracing the evolution of one of the nation's foremost urban areas from the start of the 19th century through the city's heyday around the turn of the 20th century and to the present day. Drawing from his recently published book, *Chicago: An Economic History* (Routledge, 2015), McDonald shared his research findings as well as personal stories and observations about the city's development at a book talk held at the Penn Bookstore and sponsored by Penn IUR.

McDonald described the city of Chicago as "a node and critical connection" within a regional network that historically included grain and cattle industries, ports along the banks of Lake Michigan, rail lines, and manufacturing industries that provided jobs for waves of immigrants. He explained the political conditions that promoted settlement and growth in the mid-1800s: the development of infrastructure, particularly rail lines, in the 19th century that connected the Midwest to the urban centers of the East Coast and to the agricultural resources of the West and South, and the impact wars had on local



manufacturing and job creation in the first half of the 20th century. He discussed the catastrophic urban decline precipitated by the creation of highways around the city in the mid-20th century and the shifting demographics of Chicago's suburbs in recent decades. In his book, McDonald uses economics as a lens through which to understand Chicago's development; *Chicago* offers urban thinkers a historic perspective on one city's economy. McDonald's book is on sale at the Penn Bookstore and on Amazon.

URBAN BOOK TALK

# Brown on Development Design, Profits, and Community Input

On October 21, Penn IUR Scholar Peter Hendee Brown, Lecturer, Humphrey School of Public Affairs, University of Minnesota, spoke at a Penn IUR Urban Book Talk on his book How Real Estate Developers Think: Design, Profits, and Community (University of Pennsylvania Press, 2015). A recent release in Penn IUR and Penn Press's The City in the 21st Century book series, How Real Estate Developers Think uses case studies to show how the basic principles of development remain the same everywhere even as practices vary based on climate, local culture, and geography.

Brown holds a Ph.D. in City and Regional Planning from Penn and, in addition to his position at the University of Minnesota, is an architect, planner, and development consultant. Brown told

audience members that he wrote the book to provide an understanding of what developers do and why they do so that community members, elected officials, and others can participate more productively in the development process in their own communities.

The book can be found at the Penn Bookstore and on Amazon.





# AL CURATES ARCHITECTURE EXHIBIT IN BEIJING

Stefan Al, Associate Professor, Department of City and Regional Planning, School of Design, together with Ali Rahim, Professor of Architecture and Director, Advanced Architectural Design Program, School of Design, curated the exhibit Chinese Architecture Practice: Past, Present and Future at the Penn Wharton China Center in Beijing. The exhibit highlights the changes in the development of Chinese architecture by featuring the work of private firms and design institutes. Al also spoke about his recent book, Villages in the City, as part of the Penn IUR Urban Book Talk series; see page 9 for more.



# BARNETT SPEAKS ON SUSTAINABLE URBANIZATION

Jonathan Barnett, Professor Emeritus of Practice,
Department of City and Regional Planning, and Director,
Urban Design Program, School of Design, presented at
the 2015 International Conference on Chinese and African
Sustainable Urbanization in Ottawa, Canada in October on a
research project he developed with students and faculty at
Southeast University in Nanjing during Spring 2015. Barnett
also spoke on his latest book, *Ecodesign for Cities and*Suburbs (Island Press, 2015), with co-author Larry Beasley as
part of the School of Design's lecture series. Additionally, a
new and enlarged edition of Barnett's City Design: Modernist,
Traditional, Green, and Systems Perspectives will be published
by Routledge in 2016.



#### BIRCH LEADS UN'S GAP

Eugénie Birch, Lawrence C. Nussdorf Professor of Urban Research and Education Professor and Chair of the Graduate Group, City and Regional Planning, School of Design, and Penn IUR Co-Director, assumed leadership of the UN's General Assembly of Partners (GAP), the civil society engagement platform for the UN's Habitat III, and was selected as one of 200 experts worldwide to serve on one of 10 Policy Units for Habitat III. Additionally, she spoke at convenings worldwide, including giving the keynote speech at a Ford Foundation event in September; speaking at three UN Economic and Social Council conferences (World Cities Day in October, International Day for the Aged in October, International Day for the Disabled in December); at the Summit for New York City in October; at the Urban Thinkers Campus in October; and at the Group on Earth Observations (GEO) XII meeting in Mexico City, in November. Additionally, she spoke at the Smart Cities World Expo and Conference in Barcelona in November and served on the jury to select the 2016 Smart Cities awards.



# BRANAS'S URBAN HEALTH LAB LAUNCHES NEW WEBSITE

Charles Branas, Professor of Epidemiology, Department of Biostatistics, Perelman School of Medicine, Co-Director, Penn Cartographic Modeling Laboratory, and Director, Penn Urban Health Lab, oversaw the launch of the new Urban Health Lab website (www.urbanhealthlab.org). The Urban Health Lab produces scientific evidence for the design and implementation of health and safety programs.



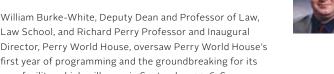
# BROWNLEE CHAMPIONS PHILLY'S HERITAGE

David Brownlee, Frances Shapiro-Weitzenhoffer Professor and Chair, Graduate Group, History of Art, Department of History of Art, School of Arts and Sciences, played a leading role in Philadelphia's becoming the first American city to be named a World Heritage City. Brownlee served on the Executive Committee and Project World Heritage Working Group and wrote much of the material that was presented to the Organization of World Heritage Cities detailing Philadelphia's attributes, including the city's history as the birthplace of the United States, its significant historical sites and architecture, and the city's contributions to arts and culture.



# BURKE-WHITE DIRECTS PERRY WORLD HOUSE

Law School, and Richard Perry Professor and Inaugural Director, Perry World House, oversaw Perry World House's first year of programming and the groundbreaking for its new facility, which will open in September 2016. See page 3 for an interview with Burke-White.





# **DIJULIO ORGANIZES PANEL ON** PHILADELPHIA ARCHDIOCESE

John Dilulio, Jr., Frederic Fox Leadership Professor of Politics, Religion, and Civil Society; Director, Robert A. Fox Leadership Program, Department of Political Science, School of Arts and Sciences; and Faculty Director of Program for Research on Religion and Urban Civil Society (PRRUCS), organized a panel marking the 10th anniversary of the 2005 grand jury reports on child sex abuse in the Philadelphia Archdiocese. He also took part in a public discussion hosted by PRRUCS and Penn's Perry World House of the local and global significance of the visit by Pope Francis to Philadelphia in September.



# CANNUSCIO AMPLIFIES VOICES OF HOMELESS YOUTH

Carolyn Cannuscio, Assistant Professor of Family Medicine and Community Health, Department of Public Health, Perelman School of Medicine, completed a major public art project, in partnership with Mural Arts Program, documenting the life experiences of homeless youths. The project was featured in the November 2015 issue of American Journal of Public Health. Cannuscio and her team from Penn have launched the Healthy Library Initiative, a partnership between Penn's Center for Public Health Initiatives and the Free Library of Philadelphia, which will provide evidence to support health-related programming throughout the library system, as well as training of community health specialist librarians at the Community Health Literacy Center opening in South Philadelphia in 2016. This first-of-its-kind partnership between the Children's Hospital of Philadelphia (CHOP), the City, and the Free Library will include a community health center, CHOP clinics, a health-focused library branch, and a recreation center



#### GRAZIAN PUBLISHES NEW BOOK

David Grazian, Associate Professor of Sociology, Department of Sociology, School of Arts and Sciences, has published The American Zoo, A Sociological Safari (Princeton University Press, September 2015), an investigation of how city dwellers have confronted and continue to confront nature and animals in the urban environment.



# **GUERRA PUBLISHES ON DRIVERLESS** CARS

Erick Guerra, Assistant Professor, City and Regional Planning, School of Design, recently investigated how large Metropolitan Planning Organizations (MPOs) are preparing for autonomous vehicles, which he argues is potentially the most transformative transportation technology since the internal combustion engine. "Planning for Cars That Drive Themselves" was published in the Journal of Planning Education and Research.



# **CULHANE REPORTS TO CONGRESS**

Dennis Culhane, Dana and Andrew Stone Chair in Social Policy, Professor of Social Policy and Practice, School of Social Policy and Practice, was co-investigator of a HUD report to Congress that found that homelessness in the United States continues to decline



# GUILLÉN WRITES ON CAPACITY AND POLICY

Mauro Guillén, Dr. Felix Zandman Professor of International Management, The Wharton School, and Director, Wharton's Lauder Institute, wrote, with Laurence Capron, an article on the how the strength of state capacity (the administrative ability to formulate and implement policy) influences which policies are adopted and how effectively they are implemented. "State Capacity, Minority Shareholder Protections, and Stock Market Development" was published in the August 2015 issue of *Administrative Science Quarterly*.



# HUGHES APPOINTED DIRECTOR OF FPRI

Mark Alan Hughes, Professor of Practice, Department of City and Regional Planning; Director, Kleinman Center for Energy Policy, School of Design, was appointed Faculty Director of the Fels Policy Research Initiative (FPRI), which will support faculty in specific public policy areas, building the translational infrastructure to enhance the policy impact of Penn research. Hughes also took part in December in a radio program entitled "Grading Nutter's Promise to Make Philly Green," about Mayor Nutter's record on sustainability; the program can be found on WHYY's Newsworks website (www. newsworks.org).



# LUM EXHIBITS IN LA

Kenneth Lum, Professor of Fine Arts and Director of the Undergraduate Fine Arts program, School of Design, has a solo exhibition of his art at Royal Projects Gallery in Los Angeles. He is also working on multiple large public art commissions.



# MACDONALD APPOINTED DIRECTOR OF FELS

John MacDonald, Chair and Professor of Criminology and Sociology, Department of Criminology, School of Arts and Sciences, Department of Criminology, was appointed Penny and Robert A. Fox Faculty Director of Penn's Fels Institute of Government. MacDonald will chair the Fels Faculty Steering Committee and focus on organizing standing University faculty to teach core courses at Fels.



#### MARCINKOSKI WRITES NEW BOOK

Christopher Marcinkoski, Assistant Professor of Landscape Architecture and Urban Design, School of Design, has published *The City that Never Was* with Princeton Architectural Press (January, 2016), an exploration of speculative urbanization in Spain.



# MASON'S PENN PRAXIS RECEIVES GETTY GRANT

Randy Mason, Associate Professor and Chair, Department of Historic Preservation, and Associate Professor, Department of City and Regional Planning, School of Design, is Executive Director of Penn Praxis, which was awarded a \$100,000 grant from the Getty Foundation to develop a conservation management plan for The George Nakashima House and Studio in New Hope, Pennsylvania.



# MELEIS REPORTS ON WOMEN, HEALTH, AND DEVELOPMENT

Afaf Meleis, former Dean of Nursing and Professor of Nursing and Sociology, School of Nursing, is co-leader of the Commission on Women and Health, a partnership between *The Lancet*, the Harvard T.H. Chan School of Public Health, and the Penn School of Nursing. The Commission recently issued a major new report, "Women and Health: The Key for Sustainable Development," that found women are contributing around \$3 trillion to global health care, nearly half of which is unpaid and unrecognized. In November, Meleis led, with Commission co-leader Ana Langer, the Philadelphia launch of the report, which featured national and international speakers.



#### SPOONER EDITS NEW VOLUME

Brian Spooner, Professor in Anthropology, Department of Anthropology, School of Arts and Sciences, edited *Globalization: The Crucial Phase* (Univeristy of Pennsylvania Press, 2015), which brings together scholars of anthropology and social science as well as law and medicine to present a holistic and comprehensive understanding of the way the world is changing.



#### TOMLIN COMPLETES NASA PROJECT

Dana Tomlin, Professor of Landscape Architecture,
Department of Landscape Architecture, School of Design
and Co-Director, Penn Cartographic Modeling Laboratory,
recently completed a NASA-sponsored research project
in collaboration with Azavea, Inc. to develop the working
prototype for a software application called ModelLab.
ModelLab is a cloud-based platform enabling its users to
design, develop, deploy, and distribute geospatial modeling
capabilities that are expressed in Tomlin's programming
language Map Algebra.



# VOITH WRITES ABOUT WILMINGTON, DELAWARE

Richard Voith, Adjunct Professor of Real Estate, The Wharton School and President and Principal of Econsult Solutions, Inc., wrote on the past and future prospects for the City of Wilmington in *Delaware Lawyer*. Additionally, his firm, Econsult Solutions, Inc., completed an analysis of a Philadelphia Growth Coalition proposal for wage and business tax reductions (paid for by an increase in the commercial real estate tax rate) that projects an increase of 79,000 jobs in the city over the next decade, compared to an increase of just 18,000 jobs over that same period if the changes are not enacted.



# WACHTER REPRESENTS UNIVERSITY AT WHITE HOUSE METRO LAB INITIATIVE

Susan Wachter, Albert Sussman Professor, Professor of Real Estate and Finance, The Wharton School, and Co-Director of Penn IUR, represented the University as the new Metro Lab Network was announced by the White House. In addition, Wachter was interviewed for several radio, television. and newspaper stories on the housing market, including: Power Lunch CNBC's "30-year mortgage still worth it?" in November; Marketplace's "The vast inequality of rental inflation" in November; Bloomberg Business's "Homebuilder Sentiment Index Rises to 64" in October; Marketplace's "Shopping for a house?" in October; and The Christian Science Monitor's "What's really behind rising home prices" in October. Additionally, Wachter spoke at the Federal Reserve Bank of Atlanta Real Estate Conference in New Orleans on "Housing Finance Reform: Policy Options for an Informed Market" in December and at the University of Michigan Center on Finance, Law, and Policy on "Interdisciplinary Approaches to Financial Stability" in October.



# WIEBE AUTHORS STUDY ON VIOLENCE AND LOCATION

Douglas J. Wiebe, Associate Professor of Epidemiology, Department of Biostatistics and Epidemiology, Senior Scholar, Center for Clinical Epidemiology and Biostatistics, is the lead author on a Penn School of Medicine study on youth violence risks, which overlaid maps of victims' travels, shooting incidents and danger zones to determine that location is a key predictor of exposure to violence. "Mapping Activity Patterns to Quantify Risk of Violent Assault in Urban Environments" is published in the January 2016 journal *Epidemiology*.

INSTRUCTION

# Mellon Humanities, Urbanism, and Design Initiative in Third Year

The Penn Humanities Urbanism and Design (H+U+D) Initiative, funded by the Andrew Mellon Foundation, continued its mission to bridge the divide between the humanities and design disciplines around the study of cities. In Fall 2015, the start of the Initiative's third year, H+U+D welcomed new Colloquium Members and Junior Fellows, organized a Colloquium exploration of Philadelphia's planned Rail Park, sponsored a new round of city seminars, and hosted Sam Katz, founder of History Making Productions, for the annual H+U+D public lecture. Penn IUR Co-Director Eugénie Birch, Lawrence C. Nussdorf Professor of Urban Research and Education Professor and Chair of the Graduate Group, City and Regional Planning, School of Design, and Penn IUR Faculty Fellow David Brownlee, Frances Shapiro-Weitzenhoffer Professor and Chair of the Graduate Group, History of Art, Penn School of Arts and Sciences, co-direct the five-year Initiative.

Each year, the Initiative accepts a new group of faculty members from the humanities and design disciplines to participate in the Colloquium, a group of faculty from both design and humanities disciplines who meet regularly to share research, foster collaboration, and build relationships. Four new members joined the Colloquium this fall, four extended their membership, and two Junior Fellows (junior scholars who have completed their doctoral work in humanities or design disciplines, and whose work deals with

cross-disciplinary study of the built environment) were welcomed as well, bringing Colloquium membership to twenty-five scholars from across the University. Colloquium members read and discussed Stefan Al's book, Villages in the City: A Guide to South China's Informal Settlements (see page 9 for more on Al's book), and visited on October 16 the future location of Rail Park, a planned three-mile linear park along the historic elevated Reading Viaduct and City Branch rail cut of the former Philadelphia and Reading Railroad, where architect Bryan Hanes lead a tour.

H+U+D city seminars integrate knowledge from design and the humanities in the study of a particular city. Co-taught by faculty representing design and humanities disciplines, the courses enable students and faculty to travel to the city under study for in-depth experience and research. In Fall 2015, the students in the third international city seminar studied the material and cultural landscapes of Venice with Penn IUR Faculty Fellow Raffaella Fabiani Giannetto, Assistant Professor, Department of Landscape Architecture, School of Design and Fabio Finotti, Mariano DiVito Professor of Italian Studies and Director, Center for Italian Studies, and Chair, Italian, and Director, Penn in Venice, School of Arts and Sciences. Students traveled to Italy in December

Penn IUR co-sponsors the annual H+U+D lecture with the History of Art Department

and Cinema Studies Program. Katz, this year's featured speaker, discussed on October 6 the challenges of making history public through his film and Internet series, "Philadelphia: The Great Experiment." The winner of seven Emmy Awards, the series tells the story of the city that it calls "the single most compelling stage for the unfurling and testing of American ideals." At the lecture, Katz screened excerpts from several episodes, offering a close-up look at the filmmaking process and what he and his team learned in eight years of work. In addition to being a filmmaker, Katz was a founder of Public Financial Management, a nationwide public finance advisory firm, a three-time candidate for mayor of Philadelphia, CEO of Greater Philadelphia First, Chair of the Pennsylvania Intergovernmental Cooperation Authority (PICA), a leader in the biotech venture capital and financial services industries, and an advisor to politicians, including Ed Rendell.

H+U+D also co-sponsored Stefan Al's book talk on December 9. See page 9 for more on this talk.

In Fall 2015, Birch and Brownlee also attended the annual Mellon Foundation meeting of grantees. They joined other principal investigators, including representatives from Harvard University, MIT, University of California-Berkeley, University of California-Los Angeles, Washington University, Cornell University, University of the Witwatersrand, London School of Economics, and others at a two-day conference at Washington University in St. Louis, where they discussed their programs and the theme of divided cities. The convening included reports, lectures and field trips. In Spring 2016, the colloquium will host presentations by student recipients of H+U+D's research awards; will sponsor a graduate seminar, cross-listed with both Historic Preservation and Music, entitled "Cities and Sound: The Spatial Politics and Practices of Sound in Modern Urban Life;" will sponsor a domestic city seminar, entitled "The Wire and The City," for which students will study and visit the city of Baltimore; and the two Mellon H+U+D Junior Fellows will each teach an undergraduate course. For more information on the initiative and its programs visit: www. humanitiesurbanismdesign.com.



RAIL PARK TOUR: H+U+D Faculty Colloquium members visit the site of the future Philadelphia Rail Park for a tour led by architect Bryan Hanes.

# Open Streets PHL Panel Draws Standing-Room-Only Crowd

On November 16, Penn IUR co-sponsored a film screening and panel discussion in support of Open Streets PHL, which works to provide recreation and build community by temporarily closing select streets to vehicle traffic and opening them to people. Panelists included Beverly Brown, Owner, Temples in Shape Studio, and Coordinator, Black Girls RUN; Faculty Fellow Erick Guerra, Assistant Professor, City and Regional Planning, School of Design; and Mike Lydon, Principal, The Street Plans Collaborative. Nate Hommel, Director of Planning and Design, University City District, moderated. The November event, organized by Open Streets PHL and co-sponsored with the University City District, was filled beyond capacity, a testament to the immense public interest in this idea.

Following a short film introducing the Open Streets movement, which has gained momentum nationally over the past several years, panelists discussed the concept's application in Philadelphia. Guerra brought his background in urban transportation systems and land use to bear on the discussion of the positive impacts of Open Streets programs, such as increased public transit ridership, as well as ways in which transportation disruptions are typically mitigated. Brown leveraged her background as a fitness instructor actively engaged in minority neighborhoods to discuss ways of including minorities and other underrepresented populations as equal participants in Open Streets programming and explained the benefits of active lifestyles, a major focus of Open Streets programs. Finally, Lyons spoke from experience about the best practices for hosting successful Open Streets programs, using New York City and Portland, Oregon as examples. Nate Hommel, Director of Planning and Design at the University City District in Philadelphia, represented Open Streets PHL and moderated the discussion.

Following their panel presentations, participants answered questions that centered on event logistics, equitable access, and how supporters can move Open Streets PHL from concept to reality. Some attendees expressed serious concerns about the viability of an Open Streets event in Philadelphia, which is struggling to deal with social challenges such as widespread poverty and a failing public school system.

The Open Streets PHL movement in Philadelphia grew from the City's experience with Pope Francis's visit in September 2015, which necessitated widespread road closures throughout Center City and West Philadelphia. Though the road closures disrupted many residents' and business owners' regular activities, it also opened up Philadelphians' imaginations to the prospect of enjoying roadways in the absence of motor vehicles. To learn more about Open Streets PHL, visit www.openstreetsphl.com. To learn more about the national movement, visit www.openstreetsproject.org, the website of the Open Streets Project, a collaboration between the Alliance for Biking & Walking and The Street Plans Collaborative.

# Penn IUR Announces Policy Brief Series



Penn IUR is pleased to announce the creation of Penn IUR Policy Briefs, a new series of policy briefs that brings original and published research on issues facing cities to a broad audience. Visit the "Publications" section of the Penn IUR website (www.penniur.upenn.edu) to download the following briefs:

Philadelphia's Triumphs, Challenges, and Opportunities, by Ethan Conner-Ross, Richard Voith, and Susan Wachter (December 2015)

Tracking and Explaining Neighborhood SocioEconomic Change in U.S. Metropolitan Areas between 1990 and 2010, by John D. Landis (November 2015)

Housing Finance Reform, by Susan Wachter and Joseph Tracy (November 2015)

# Sachs Speaks at Sustainable Global Urbanization Event

CONTINUED FROM P. 5)

Preceding Sachs's keynote address, the panel approached the topic of sustainable global urbanization from the perspective of housing—specifically, housing that is affordable and that supports the health and productivity of residents. Underpinning the conversation was the understanding that for the world to be equitable, healthy, prosperous, and sustainable, cities must be made equitable, healthy, prosperous, and sustainable. Buckley explained that urban policy has become one of the most effective means of furthering inclusive growth, but the potential of cities to create a more hospitable world has not yet been recognized, much less realized—if this potential is to be realized, a new approach to urban structure and management must be adopted.

In her presentation, Hoek-Smit discussed housing finance systems, a key element of urban structure and management. She argued that while progress has been made in providing housing for the world's poorest, the working poor and middle-class have been overlooked. Housing finance systems that can work for these segments of the population will require the involvement of the private sector, and should be made flexible enough to account for increasingly fluid labor markets. While she agreed with Buckley that city governments are essential players in the provision of housing, she noted that they lack both capacity and money. With these points in mind, she explained that national housing finance systems must be structured to incentivize both local governments and the private sector to pursue sustainable urbanization.

Malpezzi echoed Hoek-Smit's assessment of the fate of the working class, agreeing too that incentives can help align private and public interests. He likened these and other strategies to "ingredients" in a "recipe" for sustainable urbanization. While valuable, he argued that the problem was not

a lack of great ideas (or ingredients) but with the experts' failure to grapple directly and openly with political realities. Noting that he is an economist, he said: "Economists focus on efficiency, but most normal people—i.e. non-economists—don't care much about efficiency. They care about fairness. And they disagree about what's fair."

Both Cardama and Birch presented on UN-level efforts to grapple with the political realities of urbanization. Both stressed the pace of urbanization and the urgency of finding ways to develop sustainably. As Cardama pointed out, the international community comes together only once every 20 years to debate and agree on global development and human settlement goals. With the adoption of the SDGs in 2015, the ongoing creation of SDG indicators, and the current preparations for Habitat III in 2016, she argued that we are living through a historic moment. She urged the audience to become involved.

Birch seconded this appeal. Explaining the UN's extensive efforts to engage stakeholders in preparations for Habitat III, she argued that stakeholder engagement will be central to the conference's success; while governments must negotiate agreements, it is stakeholders who will pressure them to act on their commitments. "This is an exciting time," she said. "We have an opportunity to change the [development] paradigm."

Repeatedly, the keynote speaker, panelists, and moderators returned to versions of a common theme: managing rapid, global urbanization in a sustainable way is the key to providing affordable and humane housing, to limiting climate change, and to meeting all 17 of the UNs SDGs. To watch a video of the event, go to the "Events" section of Penn IUR's website (www.penniur.upenn.edu) and select "View past events."

# CONGRATULATIONS 2016 UURC TEAMS

The Undergraduate Urban Research Colloquiumn (UURC) is an advanced research seminar for undergraduates working on urban-focused research. Students team up with a faculty mentor with expertise in their areas of interest. Students and faculty pairs come from academic departments throughout the University.

T. Andrew Simpson Ariel Ben-Ramos, City Planning

Sabeeh Saddiqi Andrew Huemmler, Engineering

Ryan Hall Michael Nairn, *Urban Studies* 

Angela Perfetti Heather Sharkey, *Middle Eastern Studies* 

Camille Calvin
Matthew Steinberg,

Education
Jocelyn Pickens
Mary Summer,
Political Science

Roshani Waas Anne Tietelman, *Nursing* 

Zoe Blickendorfer Domenic Vitiello, City Planning

Adam Shapiro Naomi Waltham-Smith, *Music* 

# Forthcoming Releases in The City in the 21st Century book series

Eugenie L. Birch and Susan M. Wachter, Series Editors

Published by the University of Pennsylvania Press

The City in the 21st Century is a heterodox, interdisciplinary series of books addressing both topical and long-range issues confronting the world's cities, from disaster response to cultural coexistence, from civic engagement to urban revitalization.

Public Pensions and City Solvency, Susan M. Wachter, editor (Spring 2016)

Shared Prosperity in America's Communities, Susan M. Wachter and Lei Ding, editors (Spring 2016)

Slums: How Informal Real Estate Markets Work, Eugenie L. Birch, Shahana Chataraj, and Susan M. Wachter, editors (Spring 2016)

Housing Finance Reform: Principles of Stability, Susan M. Wachter and Joseph Tracy, editors (Fall 2016)

Visit www.upenn.edu/pennpress/series/C21.html for a complete list of books in the series.

FACULTY SPOTLIGHT

# William Burke-White

(CONTINUED FROM P. 3)

# INFLUENCED ONE ANOTHER OVER THE COURSE OF YOUR CAREER?

My work is really at the intersection of internal law and international relations. When I worked for Secretary Clinton I spent a lot of time looking at how to solve global challenges in a world of rising powers, such as Russia, China, India, and Brazil. How should the international system be organized? Through the G7, the old group of seven democracies? Or through the new G20? How should global institutions be structured to meet global challenges? These are big questions that come up whether the conversation is around climate change or nuclear nonproliferation or security.

When I came back to academic world after working for Secretary Clinton, I was able to bring to bear on my own scholarship what I'd learned and seen and at times been frustrated by at the State Department. You really see the role and impact of international law very differently when you actually have to do it in international institutional settings.

**5.PENN IUR AND PERRY WORLD HOUSE** RECENTLY COLLABORATED ON A SYMPOSIUM ON SUSTAINABLE URBAN **DEVELOPMENT AND WILL CONTINUE** TO PARTNER ON THE EXPLORATION OF GLOBAL ISSUES RELATED TO URBANIZATION, MIGRATION, AND **DEMOGRAPHIC CHANGE. WITH THE** UN PREDICTING THAT, BY 2050, AN ADDITIONAL 2.5 BILLION PEOPLE WILL **BE LIVING IN CITIES, URBAN POLICY** IS AT THE CENTER OF DISCUSSIONS ABOUT GLOBAL CHANGE AND SUSTAINABILITY. WHAT DO YOU THINK ARE THE BIGGEST CHALLENGES THIS MASSIVE URBANIZATION PRESENTS? WHAT ARE THE OPPORTUNITIES?

Let me start on the opportunities side. I come at this as a foreign policy and international affairs thinker. Massive redistributions of people, such as the one you are talking about, change political dynamics within countries in enormous ways. For one thing, an individual who moves to a city is engaged in

a very different political life than the one from which he or she moved. For another thing, cities themselves are becoming much more important international actors, where they were once just part of the black box of a state. I think there's a chance to really transform domestic politics and the balance of power among governmental and non-governmental actors as populations urbanize and as cities emerge as players in an international system. To me that's a really extraordinary opportunity.

The challenge, from my perspective as an international lawyer, is that internal law regulates national governments, not city governments; as cities become more important international actors, the question of how we organize international law to take account of them arises. There are also enormous human rights and development challenges that come with population transitions. International law can play a part in solving these problems, but it is just one piece in a larger puzzle.

# PRAI: University-Led Innovation

(CONTINUED FROM P. 1)

Development and Ventures, University of Chicago. Penn IUR Co-Director Eugénie Birch, Lawrence C. Nussdorf Professor of Urban Research and Education Professor and Chair of the Graduate Group, City and Regional Planning, Penn School of Design, moderated the panel. Funding from Penn IUR Board Member Lawrence C. Nussdorf supported the effort.

Birch opened the event with a discussion of the role of anchor institutions in cities and regions She explained that "eds and meds" (universities and medical centers, which are some of the more widely recognized anchor institution) are not only invested in their neighborhoods and cities through their ownership of real estate, attraction of students and staff, and pursuit of their respective missions, but also are sources of breakthrough ideas, new technologies, and entrepreneurial activities that contribute significantly to regional economies. These innovative ideas, technologies, and activities are generated through research—which, historically, has been funded in large part by federal research dollars. However, levels of federal research funding have, in recent years, stagnated or declined. In part

for this reason, universities have undertaken strategic initiatives to find new sources of funding by partnering with the private sector, commercializing innovations made on campus, and fostering business development by university researchers.

For an hour and a half, the panelists discussed their experiences with innovation and commercialization in terms of the institutional and metropolitan environments in which they work. UCSF's Kiriakis described the variety of industry partners with which UCSF is engaged, a result of the highly dynamic and innovative culture within UCSF and throughout the San Francisco Bay area. Thomas explained that, in contrast, the University of Chicago has an entrenched academic culture (as opposed to one dedicated to applied research) and a sprawling metropolitan environment, both of which are challenges. Emory's Sherer noted that sprawl is a challenge in Atlanta as well, one that makes creating the industry clusters and collaboration essential to innovation difficult. Sherer added, though, that Emory benefits from strong institutional support for commercialization, which he explained arrived virtually overnight when the sale of two

HIV drugs brought the University hundreds of millions of dollars, proving the enormous commercial potential of innovative research.

Swartley described the evolution of Penn's culture toward one increasingly supportive of innovation and commercialization, noting that support from Penn's leadership has been a key part of this transformation. He described the most visible illustration of the institution's support of innovation: Pennovation Works, a 23-acre site adjacent to Penn's campus that will house researchers, entrepreneurs, and industry partners and that is expected to open in 2016. Soderstrom agreed that spaces like Pennovation Works-incubator and co-working spaces—are essential, noting that, at Yale, such spaces are more successful the closer they are to the center of campus. He argued that Yale has had an enormous impact on its metropolitan environment over the past two decades. generating businesses and attracting millennial entrepreneurs who support a dense, walkable, amenity-filled urban landscape.

This event constituted the public portion of the seventh Penn IUR Roundtable on Anchor Institutions (PRAI), a leadership "think tank" that convenes leaders from anchor

institutions for intense roundtable discussions, allowing participants to engage with peers, strategize solutions, compare notes from the field, and generate national knowledge that can be applied in a local context. The following day, the speakers, joined by Laurie Actman, Chief Operating Officer, PCI, and lunch speaker Vijay Kumar, Nemirovsky Family Dean, Penn's School of Engineering, met in a private session to discuss the technical aspects of their work, exchanging ideas and problemsolving approaches. Penn IUR will publish case studies and discussion outcomes in the spring.

This roundtable on universityled innovation initiatives is part of an ongoing series. Previous roundtables considered educational and medical institutions (2013), ballparks (2011), museums (2010), performing arts centers (2008), and two roundtables on city design (2008 and 2010). For more information on Penn IUR's work with anchor institutions, including reports and case studies from current and previous PRAI events and a white paper on university-led innovation initiatives, please visit the "Initiatives" section of Penn IUR's website (penniur.upenn.edu) and select "Anchor Institutions."

CONVENING

# Penn GIS Day Focuses on Real Estate and Housing

(CONTINUED FROM P. 4)

Analytics, Philadelphia Land Bank. In discussing geospatial technologies, the panelists demonstrated how the skills they gained in the MUSA program apply to their daily work. Following the panel, a data visualization workshop hosted by Ken Steif; MUSA Lecturer Karl Dailey, Adjunct Professor, Web-Based

GIS Database Administrator-Programmer, University of Pennsylvania; and Randy Olson, Post-Doctoral Fellow, Penn's Institute for Biomedical Informatics, offered technical instruction in graphic display of data.

Over 75 students, alumni, and outside practitioners attended. To watch a video of the morning session, visit the "Events" section of Penn IUR's website (www.penniur.upenn.edu).

# Housing Finance Reform: Where Do We Go From Here?

(CONTINUED FROM P. 1)

After an introduction by Wachter, Frame moderated a panel discussion among Passmore, Tracy, and Kanojia on liquidity, macroprudential policy, and the to-be-announced (TBA) market. Passmore focused on the mechanics of structuring a mortgage securitization system with macroprudential features that would vary over the real estate cycle; he concluded that, if policymakers want to retain the ubiquity of the 30-year fixed-rate mortgage and ensure that the private sector takes the first-loss position (with the government providing a backstop in the case of a major financial crisis), the government may need to require that all mortgages, whether securitized privately or through a governmentbacked program, be insured against catastrophic risk. Tracy discussed the importance of structuring the securitization industry to ensure stability over the business cycle. As a means of achieving this stability, he proposed establishing a securitization utility structured as a cooperative that shares losses and monitors itself against risky lending practices. The utility would purchase government reinsurance against systemic credit events using a vintage-based capital structure to preserve the supply of capital for mortgages. Kanojia concluded the first panel with a discussion of the importance of the TBA market in a.) attracting capital to fund mortgages and b.) in the broader functioning of the housing market; he noted that, without the existence of the TBA market, the cost of hedging interest rate risk by lenders would likely result in adjustable rate mortgages (ARMs) supplanting 30-year fixed-rate mortgages as the dominant mortgages in the United States.

In the second panel, which Wachter moderated, Quercia, Willis, and Swagel considered affordability and access as well as the legislative context of the options for reform. Quercia began with a discussion of the importance of the Federal Housing Administration (FHA) in providing market stability and in providing mortgages for first-time and minority borrowers, cautioning that reform proposals should take care to preserve these functions. Willis discussed multifamily housing and the role of a government guarantee in providing counter-cyclical capital to that segment of the market. Swagel concluded with a discussion of the 2013 and 2014 housing finance reform proposals; while all the proposed

legislative reforms stalled, Swagel noted that the debates over the proposals will inform future reform efforts

During the closing roundtable, participants put forth principles for reforming the U.S. housing finance system—focusing on the underlying structure of the housing finance system—to serve a broad range of the population while maintaining the stability of the overall financial system.

Two Penn IUR publications further explore reform of the housing finance system. The forthcoming Housing Finance Reform: Principles of Stability, edited by Wachter and Tracy, which includes chapters by all participants in the November panel as well as by other economic and policy experts, is being published by Penn Press in the City in the 21st Century series and will be available in September 2016. A Penn IUR Policy Brief, available now, encapsulates the challenges and opportunities of reform; to download the digest, visit the "Publications" section of the Penn IUR website (www.penniur. upenn.edu).







# About Penn IUR

# THE PENN INSTITUTE FOR URBAN RESEARCH (PENN IUR) is dedicated to

advancing cross-disciplinary urban-focused research, instruction, and civic engagement on issues relevant to cities around the world. As the global population becomes increasingly urban, understanding cities is vital to informed decision-making and public policy at the local, national, and international levels. Penn IUR has a strong focus on research that informs the sustainable and inclusive twenty-first-century city. By providing a forum for collaborative scholarship and instruction at Penn and beyond, Penn IUR stimulates research and engages with urban practitioners and policymakers to inform urban policy.

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