MIT Center for Real Estate

Founded in 1984, the MIT Center for Real Estate (MIT/CRE) is moving through its third decade strong and reenergized. The mission of MIT/CRE is to serve as a global forum and network for intelligent discussion around issues relating to international real estate development, investment, and finance. The Center for Real Estate aspires to be the global leader in research, contributing to the mission of the School of Architecture and Planning by studying spatial issues related to economics, finance, management, business, product design, innovation, marketing, customer and user metrics, market trends, and entrepreneurship in real estate development and the built environment. Additionally, CRE continues to grow a network of global thought leaders and enlightened entrepreneurs shaping the future of the industry, capital markets, and the built environment.

CRE students obtain an education that prepares them to become future leaders of the industry. Students enter the industry as the visionaries who re-invent the built environment and its social, economic, and environmental footprints. CRE's research and scientific productions has have had tremendous social and economic impact. Intellectual tools developed here have become common staples in real estate valuation, investments, and development. Real estate economics—as a business and practically oriented academic discipline—was developed at MIT. CRE publications and books are widely used and consulted by students, professionals, and practitioners globally. The CRE greatly values its partner, alumni, and industry network, which connects leaders and firms in the real estate industry.

Faculty Appointments, Staff, and Visiting Scholars

R. Kelly Cameron is the career development officer at CRE. He is responsible for all of the strategic and operational requirements of providing career-related services and resources to the Master of Science in Real Estate Degree students. He will also play a substantial role in providing strategic thinking about aligning industry and alumni relationships and resources with the career interests of CRE graduate students.

Shihe Fu is a Fulbright Scholar from Southwestern University of Finance and Economics in China, where he is a professor of urban and real estate economics. Fu received his doctoral degree in economics from Boston College in 2005. Fu's current research interests lie in housing markets, labor markets, and the environmental issues in urban China. His primary research while at the CRE focused on determining if Asian immigrants have gentrified the US urban housing markets.

Wei Lin joined CRE as a postdoctoral associate in August and is working with Professor Albert Saiz on improving statistical methods for empirical research in urban and real estate economics. She is an econometrician who is interested in devising econometric strategies for applied microeconomic research questions. Lin received her PhD in economics from Michigan State University in 2016.

Robert (Rob) Lovett works closely with Kelly Cameron on CRE's Employer-in-Residence program. In addition to serving as a medium for recruitment through international partnerships with companies like Investbridge Capital, the Employer-in-Residence

program provides global access to high-quality, experiential learning opportunities to both foreign and domestic students during MIT's Independent Activities Period (IAP).

Paige Mazurek joins the case study team in the role of video producer and editor. She is responsible for producing, editing, and serving as the creative lead for integrating video and other multimedia elements into the CRE case study platform. As an integral member of the case study team, Mazurek collaborates with faculty and staff from the MIT Department of Urban Studies and Planning (DUSP) and the Samuel Tak Lee (STL) Real Estate Entrepreneurship Lab on two pilot case studies, as well as with MIT faculty/ staff across the Institute on six case study projects currently under way.

Jeffrey Soyk is the Samuel Tak Lee Case Study Initiative creative director. He helps lead the case study team's creative vision to ensure quality, innovative stories, and educational experiences for students and professors. He ensures the user experience design and storytelling for each case, setting the tone for this new, innovative, multimedia, educational product.

Fan Yang is a PhD student from Dalian University of Technology and a visiting PhD student at MIT majoring in architecture and urban planning. His research mainly focuses on city space regeneration, urban planning evaluation, and sustainable development of real estate and global urbanization.

Master of Science in Real Estate Development

MIT's Master of Science in Real Estate Development (MSRED) is the most concentrated science-based graduate degree in real estate available. Launched in 1983 by MIT/ CRE, the MSRED is the first degree of its kind, fulfilling a need for real estate specific education beyond the scope of the traditional MBA.

Naming and Endowment

In the interest of long-term stability, the naming and endowment of the CRE continues to be a major focus. During FY2017, the center worked closely with the Dean's Office and other School of Architecture and Planning staff to identify and cultivate key donors.

MIT/CRE received a significant gift of \$250,000 annually for the next three years from Real Capital Analytics. This gift was for the purpose of supporting Professor David Geltner's research in the area of price indices. Geltner's Price Dynamics Platform serves at the intersection between academics and industry. This research utilizes the newest data combined with cutting-edge and interdisciplinary econometric techniques from many fields beyond real estate, including space navigation, meteorology, and health care. The team develops innovative tools with a potential global impact for real estate stakeholders, resulting in a more transparent real estate market. Research focuses on developing applications and models used for real estate price indices in markets with scarce observations, for forecasting prices, and for the mass valuation of real estate using machine learning.

CRE also is pursuing student fellowships as a key initiative. One of the center's partner firms, Prologis, started a fellowship for students with a specific interest in industrial real estate and logistics industries. This fellowship was first offered in AY2016 in the amount of \$50,000. Prologis is offering the fellowship again for AY2018.

Marketing and Student Recruitment

The center continues to strengthen the MIT/CRE brand and increase the visibility of the Industry Partners Program, the MSRED Program, and the Professional Education Certificate Program. CRE hosted a live-feed open house this summer with 96 potential applicants streaming globally and another 33 attending in person. This summer session was created in addition to the annual fall information session, which is also live-streamed and attended in person.

In FY2017, we refocused and implemented a new program—extended open house—as a part of our recruitment strategy. Created as a week-long event, prospective students come to campus and sit in on classes, attend events with alumni and current students, meet one-on-one with faculty and admissions staff, and fully immerse themselves in the MSRED experience. Sixty-five students participated in FY2017 and eight members of the 2018 MSRED class attended the extended open house last year. CRE will continue this program in AY2018.

Our online and social media presence has been enhanced and expanded to better serve our industry Partners and students—and to support our student recruitment strategy. We reinvigorated our Twitter, Facebook, and LinkedIn accounts, and have leveraged these platforms to reach our constituents more effectively. This strategy has also enabled the center to engage in conversations across and amongst School of Architecture and Planning departments, labs, and centers.

The Student Experience

Enrollment

Twenty-eight students matriculated in fall 2016, including two dual-degree students from DUSP. The Class of 2017 consisted of 10 women and 18 men. Of these, 13 are international students (from China, Mexico, India, Colombia, Chile, Belgium, and South Korea) and 15 are domestic students. Twelve of the 28 students of the Class of 2017 are women and/or from an underrepresented minority group.

In March 2016, the 33rd MSRED program class was admitted. The applicant pool increased 62% from AY2015. This increase is likely at least in part due to marketing initiatives, CRE community outreach, and key enhancements to our admissions process and requirements. For example, CRE made a strategic decision to accept applicants' GRE scores, in addition to GMAT scores.



MSRED Students with Professor Gloria Schuck and Hamid Moghadam, Chief Executive Officer of Prologis.

Connecting Students to Industry

With a community of more than a thousand alumni professionals in real estate, the MIT Center for Real Estate offers multiple opportunities for engagement between students and industry professionals. As an integrative practice, CRE welcomes the professional community to campus for special presentations, to serve as guest lecturers, and in panel discussions. Through our experiential learning model and professional networking sessions, students gain a competitive advantage and valuable insight into careerbuilding opportunities.

Experiential Learning

Professional learning opportunities and placement assistance is available during the independent activities period and summer recess. CRE has worked with students to secure learning opportunities with major corporations and center partners throughout North America, parts of Central and South America, Europe, the Middle and Far East, and Asia. A partial list of CRE industry partners includes:

- Investbridge Capital
- Hines
- Skanska
- MIT Investment Management Company
- The Davis Companies
- Carr Properties
- Prologis
- JLL
- Boston Properties
- Terranum
- LStar Ventures
- Taurus Investments

Professional Networking

CRE bridges theoretical concepts with industry practices by inviting professionals to visit the campus to provide high-quality, interactive presentations and networking opportunities. The goal is to provide degree candidates and students in the professional education program with valuable career development resources and opportunities to increase their competitive advantage. A sampling of professional networking opportunities offered by CRE include:

- Annual World Real Estate Forum
- Annual career conference with Harvard Graduate School of Design
- Improvement workshops sponsored by MIT Global Education and Career Development

- Access to CRE alumni through the Alumni Association of the Center for Real Estate
- Sponsored learning activities by Urban Land Institute, Building Owners and Management Associates, CoreNet Global, and fellowships by National Association of Real Estate Investment Managers
- Recently launched Employer-in-Residence program

Career Exposure

Exposure to industry and professionals is an important component of the CRE student experience. Through a collaborative effort with the Harvard Graduate School of Design, students from both institutions attend an annual career conference to encounter industry professionals across the real estate spectrum for a day of panel discussions and private networking.



MSRED, DUSP, and Harvard students listen attentively as MSRED alumna Amanda Strong '02 (pink blazer) leads a roundtable discussion at the Harvard/MIT Real Estate Career Day.

Graduate Student Trips

Now in its fifth year, MIT CREATE (Cultural, Research, Entrepreneurship and Technology Exchange) is a team of researchers, practitioners, and faculty committed to building productive urban spaces that reflect the dynamics of the exchange and the voices of the people who utilize a space. The team researches and contributes to the development of inclusive design, development, and governance of public spaces. Mixing research and action, the team is reimagining the types of methodologies and related tools that can be used to capture information on the complexities of markets often misunderstood by authorities, collecting data to build urban intelligence, and working with communities to act on the data collected — and to use the tools developed to shape the productive spaces in communities. The aim is for this collaboration to build knowledge that can help shape better policies, design, and investments into the physical spaces that contribute to the social and economic strength of communities.

As part of the CREATE program, over the last year, CRE launched a new class in spring 2017,11.S938 Vibrant Marketplaces: The Design, Use, and Governance of Productive Public Spaces, in collaboration with two Special Program for Urban and Regional Studies (SPURS) fellows from DUSP, Heba Khalil (Egypt) and Thabang Nare (Zimbabwe). This class led a group of students to develop a recommendation for how to integrate built environment research into ongoing work with street vendors in Bulawayo, Zimbabwe, to contextualize their access to shelter, water, energy, and physical places for their vending.

During IAP and summer 2017, CREATE offered two extended research and practice workshops in Durban, South Africa, with collaborator Asiye eTafuleni, a design firm in Durban. In both workshops, researchers worked to understand the nature of street vendors' businesses and how physical places affect the strength of their business—and to understand how informal marketplaces contribute to the cities of which they are a part. Two undergraduates participated during IAP 2017 as well. Teresa de Figueiredo (Materials Science) and Emma Castaños (Mechanical Engineering) joined us for four weeks in Durban.

During summer 2017, four graduate students participated in the Durban workshop: Rida Qadri (DUSP, PhD student), Sarah Dalton Brown (DUSP and CRE '18), Jessica Sadye Wolff (Master in City Planning [MCP] '18), and Ayna Delivrans Verella (MCP '18). This process gave students an opportunity to learn about the built environment factors that shape small-scale entrepreneurship in Durban, including access to basic amenities, environmental conditions, and urban policies.

Ongoing research throughout the school year has been supported by de Figueiredo and Castaños, both Undergraduate Research Opportunities (UROP) students, as well as Rida Qadri.

John Kennedy, CRE lecturer, and Kate Mytty, MCP '15 and CREATE co-founder and research associate as well as D-Lab instructor, will deepen the CREATE workshop by integrating a field experience over IAP and during summer 2018. They intend to teach a half-semester class on the subject in spring 2018, "Prototyping Research and Designs for Productive Public Space." In addition, CREATE is running ongoing mini-experiments during the semester to test research methods in the Boston area.



Lime and Impepho Market in Durban, South Africa, where over 50 vendors earn their living. CREATE students surveyed vendors to understand their access to basic amenities.

Fellowships

The Gerald Blakeley Fellowship was inaugurated in FY2017. This fellow designation is awarded to a student who not only has a financial need, but also pursues the real estate industry with the same passion, imagination, innovation, entrepreneurship, and vision that Gerald Blakeley embodies.

Thesis Awards

Each year, the Center for Real Estate presents three awards: two for outstanding theses, and one for the student who best exemplifies the values and mission of the center. A panel of faculty and staff review and select the submissions and present the awards during our graduation dinner.

The Govan Entrepreneurship Award is a thesis award presented to an MSRED student whose thesis exemplifies a unique, entrepreneurial idea that embodies the entrepreneurial success and legacy of CRE alumni. This award has been made possible through the generous sponsorship of MSRED alumnus Craig Govan '94. The 2016 Govan Entrepreneurship Award recipient was Avi Spielman, for his thesis "Blockchain: Digitally Rebuilding the Real Estate Industry." His topic acknowledges the tremendous potential applications for blockchain technology within the real estate industry.

The Center for Real Estate Director's Award for Thesis Excellence is presented to the student who has prepared a thesis which is recognized as achieving a level of excellence above and beyond the high standards of MIT. Creativity and originality are considered, as well as analysis, execution, and presentation of the final thesis product. This award was presented to Yifei Lu '16 for his thesis "Transforming Industrial Heritage Sites in Major Chinese Cities: Reintegrating Minsheng Wharf into the Life of the City," and also to Jason Andrew Tilley '16, for his thesis "The Value of Mixing Uses: An Empirical Analysis of Mixed-Use Developments in Boston, MA."

The Exemplar Award acknowledges a member of the MSRED class with great potential for industry leadership. Key qualities considered by the award committee are: authenticity, integrity, academic focus, leadership, ethics, perseverance, positive attitude, responsibility, commitment to the center and classmates, vision, and a strong team attitude. MSRED students, faculty, and staff are invited to nominate students for this award. The recipient is acknowledged as someone who exemplifies the mission of the center to foster the highest standards of academics, ethics, and professionalism in the real estate industry. The recipient of the award for 2016 was Jason Andrew Tilley, '16.

Professional Education Certificate Program

Together with MIT Professional Education, CRE had another successful program year. There was an excellent level of participation, with 63 certificate applicants and 45 participants completing their master's certificates in Real Estate Development and Finance during the first two weeks of June. There were 21 countries represented during the Certificate Program this year.



Certificate Program participants on tour of the MIT Plasma Fusion Center.

Industry Partner Program

During FY2017, 23 real estate firms with offices both domestically and internationally were listed as partners and friends of the center. CRE cultivated and secured seven new partners this year: General Electric, GlaxoSmithKline, Quiero Casa in Mexico City, Gensler, Taurus Investment Holdings, Capital One, and the Dubai Land Department.

MIT/CRE held its annual partners meeting, with 140 industry leaders, alumni, faculty, and students, on May 18, 2017. The keynote speaker for the evening was Professor Jeffrey A. Hoffman of the MIT Department of Aeronautics and Astronautics. Hoffman is director of the MIT Man Vehicle Laboratory, a decorated NASA astronaut, and a five-time veteran of the US Space Shuttle. He delivered a captivating presentation about the future of commercial space travel and human settlement on new planets.

Industry partners enjoyed an exciting program during the two-day World Real Estate Forum from May 18–19, 2017, held at the MIT Media Lab. This year's Forum featured five panels and nine "Edge Sessions," covering myriad topics and events impacting the real estate industry — from modular and 3D construction to cyber-security and data infrastructure. The World Real Estate Forum highlights CRE's global reach—attracting 55 speakers and more than 450 registrants and industry partners, and representing 26 countries.



Rob Lovett, left, managing partner of CRE industry partner Investbridge Capital, with current MSRED student Suneeth John.

Case Study Initiative

Over the last fiscal year, the Samuel Tak Lee Real Estate Entrepreneurship Lab's Case Study Initiative has made enormous progress in developing a groundbreaking digital pedagogical tool. The team has created a custom software platform and a library of case studies for graduate built environment education focused on positive social impact.

The case study method is a proven pedagogical approach to teaching in many practicebased disciplines such as business, public policy, and law. Undergraduate and graduate programs in urban planning, real estate, urban policy, and related fields rely heavily on site-specific examples, even though case-based learning has not yet been integrated into these fields' curriculum. MIT Case Studies were created to help students develop an emotional connection to a site and to better understand the complexities facing urban decision makers around the world. In addition, educators are able to customize MIT cases to better fit the needs of their classrooms, and even create their own content to suit students' needs.

The team has finished and is currently testing a customized software platform that allows students to view and professors to view, edit, rearrange, and add content to case studies. The case studies themselves are bringing curriculum into the 21st century by pioneering an interactive, multimedia format. The cases are created and custom-based on MIT faculty's learning objectives by a team of multimedia designers, filmmakers, writers, and urban-planning experts. They merge video, text, interactive media, data, assessments, and more to form immersive, engaging stories that resonate with students.

Over the last fiscal year, in addition to building and testing the software platform, the Case Study Initative team traveled to Florida and Mexico City, and produced the following a case studies:

- "Rethinking Urban Revitalization in Panama City, Panama" Faculty Investigator: Albert Saiz, associate professor
- "Climate Change Resiliency in Southeast Florida" Faculty Investigators: Miho Mazereeuw, assistant professor, and Fadi Masoud, assistant professor of landscape architecture and urbanism in the Daniels Faculty at the University of Toronto
- "Local Impacts of a Real Estate Megaproject in Johor, Malaysia" Faculty Investigator: Lawrence Susskind, professor
- "Public-Private Partnerships to Achieve Transit-oriented Development in Mexico City, Mexico"
 Faculty Investigator: Chris Zegras, associate professor

The Case Study Initiative is being led by MIT graduate and initiative manager Danya Sherman, creative director Jeff Soyk (an Emmy Award-winning interactive documentary filmmaker), and producer Paige Mazurek, under the guidance of Albert Saiz (CRE director) and Eran Ben-Joseph (DUSP director).

Alumni Association of the Center for Real Estate

There are more than a thousand graduates of the MSRED program. Approximately 20% live outside of the United States in over 14 countries. There are significant concentrations of alumni in New England, New York City, Boston, Washington, DC, San Francisco, Toronto, Beijing, Seoul, Tokyo, and Hong Kong. The alumni group is an all-volunteer organization.

Annual Case Competition

For the eighth annual Alumni Association of the Center for Real Estate (AACRE) Case Competition, the AACRE selected a development site in Brooklyn, NY. Fourteen teams analyzed and underwrote the redevelopment of the 85 Jay Street mixed-use development site owned by Kushner. The preliminary, semi-final, and final rounds were held in Boston, MA. The top three teams, in order, were: Villanova University, MIT, and Cornell University.

New York City Back-to-School Event

The AACRE revived the popular alumni "back-to-school" event. Hosted by the Kaufman Organization in New York City, the event brought together alumni, current students, faculty, and distinguished real estate professionals for a series of panels and presentations.

Topics of discussion included post-Brexit real estate in the UK, the current state of commercial mortgage-backed securities, and New York City development. Presentation panels included CRE alumni Peter Madden, Yali Wang (Pembroke Real Estate), Kevin Fagan (Moody's), Mike Kazmierski (Kaufman Organization), and Thomas Lee (Boston Properties).

Faculty, Lecturers, and Research Staff

Professor Albert Saiz

Media

- "Real estate innovation by the numbers," MIT News
- "3 Questions: how urbanization and revolutionary innovation are shaping global real estate," MIT News
- "Global warming or not, we still want our house on the beach," The Patriot Ledger
- "Albert Saiz presents at Midyear Mortgage Conference," CRE News
- "Professors Siqi Zheng and Albert Saiz in Scientific Committee of Chinese Economics Workshop," CRE News
- "Oslo Housing Prices Soar 24% Amid 'Social Engineering' Debate," Bloomberg
- "People.cn Interview with CRE Director Albert Saiz," STL News

Speaking Engagements and Professional or Executive Education

- China Development Bank Executive Course, September 2016
- Greater Boston Area Urban and Real Estate Economics Seminar, October 2016
- MIT Better World Campaign Hong Kong, December 2016
- CoreNet Conference, March 2017
- Norwegian Property Conference, March 2017
- Real Estate and Urban Economics Meeting, April 2017
- Presentation to Dubai Land Development, May 2017
- Regional Urban Economics Conference China, June 2017
- Midyear Mortgage Conference, June 2017
- Global Real Estate Markets Course, June 2017

Professor David Geltner

Publications

Completion of new book, now in production forthcoming from Wiley Blackwell: *Flexibility and Real Estate Valuation Under Uncertainty: A Practical Guide for Developers by David Geltner & Richard de Neufville*

Research accepted for publication in peer-reviewed academic journals:

- "Commercial Buildings, Capital Consumption, and the United States National Accounts," Sheharyar Bokhari and David Geltner, *Review of Income & Wealth*
- "Do Different Price Points Exhibit Different Risk & Return in Real Estate?" David Geltner and Alex van de Minne, *Journal of Portfolio Management*

Speaking and Presentation Engagements

- Keynote Address, The American Real Estate and Urban Economics Association (AREUEA) International Meeting, Amsterdam, June 30, 2017: "Real Estate Price Dynamics & the Value of Flexibility"
- AREUEA-ASSA (Allied Social Science Associations) Conference, Chicago, January 2017: "Riskiness of Real Estate Development: A Perspective from Urban Economics and Option Value Theory," by David Geltner, Anil Kumar, and Alex van de Minne
- Real Estate Research Institute, Chicago, May 2017: "Do Different Price Points Exhibit Different Risk & Return in Real Estate?" by David Geltner and Alex van de Minne

Presentations of Executive or Professional Education Courses

- "Dynamics of Real Estate Development" (with Richard de Neufville and Xin Zhang): June 2017, Tsinghua University Beijing and Shanghai University of Finance and Economics
- "Real Estate Finance Advanced:" June 2017, MIT/CRE and MIT Professional Education
- Presentation to Development Research Center of the State Council of the People's Republic of China, Conference on Land Tenure and the Real Estate Market: "Real Estate Price Dynamics: Some International Observations and Implications for Land Value Dynamics"

Research

• Real Estate Innovation Lab, principal investigator with Professor Dennis Frenchman

Events/Other

• Real Capital Analytics Price Dynamics Platform Launch

Media

- "CRE Alumni Gathering in Shanghai," CRE News
- "A novel approach to teaching socially responsible real estate: games," MIT News
- "MIT's David Geltner on the Data Revolution in Real Estate," REIT.com
- "New faculty, promotions, and leadership roles in the School of Architecture and Planning," MIT News
- "Real estate innovation by the numbers," MIT News

Professor Dennis Frenchman

Research

- Real Estate for Entrepreneurship, principal investigator with Andrea Chegut
- The Real Estate Innovation Lab, principal investigator with Geltner and Chegut (Chegut is director of the Lab)
- MIT-Tsinghua Beijing Studio, 30th anniversary of MIT-Tsinghua Joint Urban Design Studio Program

Media

- "3Q: Dennis Frenchman on the rise of innovation districts in Cambridge and Beyond," MIT News
- "Entrepreneurship by Design," MIT News
- "Beijing Studio' Celebrates 30 Years," MIT News
- "Design innovations for improved life in cities," MIT News
- "DesignX selects first cohort," MIT News
- "Real estate innovation by the numbers," MIT News
- "New faculty, promotions, and leadership roles in the School of Architecture and Planning," MIT News
- "An autonomous fleet for Amsterdam," MIT News
- "DUSP, CRE, and STL Lab awarded \$1.1 million in second round of faculty research funding," MIT News

Industry

Responsible for the master plan and redesign of the 1988 Olympic Site and Stadium in Seoul Korea, including a new convention center, ballpark, river front park, and an innovation district for creative industries.

Professor Emeritus William Wheaton

Speaking Engagements

- Boston, MA, November 2016, Real Estate Round table annual meeting, "Major Issues Confronting US Gateway Cities"
- Cambridge, MA, January 2017, MIT IAP talk, "Housing Since 2001: What's Different This Time"

Media

- "William Wheaton discusses changes in US housing markets," CRE News
- "U.S. Home Construction Lags Behind Broad Economic Rebound," The Wall Street Journal

Professor Siqi Zheng

Media

• "3Q: Siqi Zheng on air quality and urban development in China," MIT News

Publications

- Siqi Zheng, Weizeng Sun, Jianfeng Wu, and Matthew E. Kahn, "The Birth of Edge Cities in China: Measuring the Effects of Industrial Parks Policy," *Journal of Urban Economics*, 2017, 100: 80–103
- Yingjie Zhang, Siqi Zheng, Cong Sun, and Rui Wang, "Does Subway Proximity Discourage Automobility? Evidence from Beijing," Transportation Research Part D: Transport and Environment. 2017, 52: 506–517
- Siqi Zheng and Matthew E. Kahn, "A New Era of Pollution Progress in Urban China?" Journal of Economic Perspective. 2017, 31(1), 71–92
- Ming Lu, Cong Sun, and Siqi Zheng, "Congestion and Pollution Consequences of Driving-to-School Trips: A Case Study in Beijing," Transport Research Part D, 2017, 50: 280–291 (corresponding author)
- Weizeng Sun, Yuming Fu, and Siqi Zheng, "Local Public Service Provision and Spatial Inequality in Chinese Cities: The Role of Residential Income Sorting and Land-Use Conditions," Journal of Regional Science, 2017, 57(4): 547–567 (corresponding author).
- Weizeng Sun, Siqi Zheng, David Geltner, and Rui Wang, "The Housing Market Effects of Local Home Purchase Restrictions: Evidence from Beijing," Journal of Real Estate Finance and Economics, 2017, 55: 288–312

Research Projects

- Distinguished Young Scholar Fund, from National Science Foundation of China
- Samuel Tak Lee (STL) seed grant on China's urban land supply (with Albert Saiz)
- STL seed grant on system dynamics modeling of China's housing market (with David Geltner and Richard de Neufville)

Lecturer Kairos Shen

- Panelist, "Comparative Zoning: Looking to Other Cities," hosted by Museum of the City of New York and The Municipal Art Society of New York, April 6, 2017
- Speaker, "New Planning and Development Challenges for Boston's Downtown Waterfront after the Big Dig," Lectures in Planning Series, The Graduate School of Architecture, Planning and Preservation, Columbia University, New York, NY, February 7, 2017
- Keynote Speaker, "The South Boston Waterfront Innovation District: A New Chapter in the Redevelopment of Boston's Waterfront," Waterfront Global Talk 2016, hosted by Shanghai Jiao Tong University City Lab and Shanghai West Bund Group, Shanghai, China, November 10, 2016
- Speaker, The Rose Kennedy Greenway, "Post Big Dig Planning and Development in Boston Downtown," The International Symposium for Kyung-Bu Arterial Highway Toward the 4th Industrial Revolution in Korea, hosted by the Architectural Institute of Korea and Maekyung Media Group, Seoul, Korea, November 8, 2016
- Panelist, "Seaport Views: A Film, An Exhibition, and a Basis for Public Discussion," hosted by the US District Court, John Joseph Moakley Courthouse, Boston, MA, October 6, 2016

Lecturer John Kennedy

John Kennedy is a board member of the Epiphany School in Boston (a nonprofit school for children below the level of poverty with acceptance based on lottery). He was honored to lead the development of a new school for children zero to five years old, with the assistance of MIT students and alumni.

Senior Lecturer Walter Torous

Publications

• Juhani T. Linnainmaa, Walter N. Torous, and James Yae, "Reading the Tea Leaves: Model Uncertainty, Robust Forecasts and the Autocorrelation of Analysts' Forecast Errors," *Journal of Financial Economics*, 122:1, pp. 42-64, 2016

Manuscripts to Journal

- Sumit Agarwal, Crocker Herbert Liu, Walter N. Torous, and Vincent W. Yao, "Household Financial Decision Making When Buying and Owning a Home," revise and resubmit, *Review of Finance*, 2017
- Andra C. Ghent, Walter N. Torous, and Rossen I. Valkanov, "Complexity in Structured Finance," 2nd revise and resubmit, Review of Economic Studies, 2017
- Andra C. Ghent, Kristian R. Miltersen, and Walter N. Torous, "Second Mortgages: Valuation and Implications for the Performance of Structured Financial Products," submitted, Real Estate Economics, 2017

Seminars

- University of Zurich, Department of Banking and Finance, October 2016, "Real Estate Securitization after the Financial Crisis: Will it be Different this Time?"
- University of California at Los Angeles, May 2017, "Complexity in Structured Finance"
- Israeli Conference on Behavioral Finance, Tel Aviv, May 2017, "Complexity in Structured Finance"

Professional Education

• Real Estate Finance Fundamentals, June 2017

Lecturer Yanni Tsipis

Yanni Tsipis has been the keynote speaker, moderator, or panelist in numerous industry events hosted by groups such as the Urban Land Institute, NAIOP (Commercial Real Estate Development Association), and other industry organizations.

Lecturer Gloria Schuck

Public Speaking/Education

• CREW Networks Inaugural Leadership Certificate

Visiting Scholar Sheharyar Bokhari

Conference

• AREUEA-ASSA Annual Meetings in Chicago, IL (January 2017). Presented "Commercial Buildings Capital Consumption and the United States National Accounts," jointly with David Geltner

Publications

- Review of Income and Wealth accepted for publication the paper, "Commercial Buildings Capital Consumption and the United States National Accounts" (Bokhari and Geltner)
- "Urban Development and the Internet of Things: How Cities are transforming themselves by the use of Big Data," in collaboration with Albert Saiz, as yet unpublished

Media

- "How Much Does 'Walkability' Affect Home Prices?" The Wall Street Journal
- "How Much is a Point of Walk Score Worth?" Redfin
- "How a high 'walk score' boosts your home's value," *MarketWatch*

Professional Education

• Teacher's Assistant for Real Estate Finance Fundamentals Course, with Walter Torous, June 2017

Postdoctoral Associate Wei Lin

Working Papers

- "Loss Aversion Behavior in Hubway Users" (with Albert Saiz)
- "Testing and Correcting for Endogeneity in Nonlinear Unobserved Effects Models" (with Jeffrey M. Wooldridge)
- "A Control Function Approach in Two-Step Sieve M-Estimation of Binary Response Models with Endogenous Explanatory Variables"
- "Binary and Fractional Response Models with Continuous and Binary Endogenous Explanatory Variables" (with Jeffrey M. Wooldridge)
- "On Computing Average Partial Effects in Models with Endogeneity or Heterogeneity" (with Suhyeon Nam and Jeffrey Wooldridge)
- "Finite Sample Property of Two-Sample Two-Stage Least Square" (with Christopher Khawand)

Presentation

• Part of the Brandeis University Seminar Series

Service

• Two issues of research spotlight for the CRE newsletter

Conclusion

The Center for Real Estate builds bridges between the challenges and opportunities of technology and the environment as they relate to real estate development and investments. The center is driven by the belief that the solutions to current economic, social, and environmental challenges will come from the real estate industry and its innovative entrepreneurs. The MIT/CRE serves as a connection for the existing brainpower and entrepreneurship in the industry with research communities devoted to the same issues.

Albert Saiz Director Daniel Rose Associate Professor of Urban Economics and Real Estate