# **Department of Urban Studies and Planning**

# **Urban Science Major**

This report marks the completion of the first full year of the Department of Urban Studies and Planning's (DUSP) new undergraduate major in urban science and planning with computer science (Course 6-11), approved by the MIT Faculty in May 2018. As of the end of the spring semester, the new degree had 11 declared majors. To support this program, the department undertook a faculty search to fill two new tenure-track positions in urban science and planning as well as one part-time technical instructor and lecturer position.

#### **Research Growth**

DUSP has seen remarkable and sustained growth in sponsored research, especially in the areas of mobility, urban technology, urban health, and the study of development in China. To assist and continue to build our research capacity, we have made a concerted effort to increase the available staff support. A full-time financial assistant has joined the Senseable City Laboratory, and DUSP hired Jackie Dufault as the laboratory's executive director to manage the growing research portfolio and support business development and fundraising. A dedicated financial assistant supports the Transit Lab and the Singapore-MIT Alliance for Research and Technology research portfolio. The department may also hire an additional full-time support staff member to help with day-to-day research activities.

The department also hired Esmeralda Barreiro as a financial manager dedicated to research administration. She is responsible for managing and overseeing pre- and post-award functions for labs and individual faculty members and for supporting research staff in the department's Community Innovators Lab. Beyond adding personnel, DUSP is investing in an existing online tool for forecasting expenses and revenues on research grants that was developed in the School of Engineering and customized for the department's needs. The intent is to use this tool for all department-wide grants to help faculty members ensure efficient and effective management of their sponsored resources.

## **Admissions and Financial Aid**

A number of changes in recent years have allowed DUSP to provide more generous financial aid to all the department's students, beginning in academic year 2019. These include recent efforts within the School of Architecture and Planning and DUSP to raise funds for endowed fellowships, an increase in faculty research capacity (and a resulting increase in sponsored research assistantships), the channeling of revenues and surplus funds toward fellowships, and changes in admission policies.

Below is a summary of steps that have been taken to improve funding of graduate students.

- Limited class size, in both the master of city planning (MCP) and doctoral
  programs, to increase financial aid for all admitted students. In previous years,
  high yield rates had resulted in larger-than-expected class sizes, particularly in
  the MCP program. In the spring 2018 admissions cycle, the number of admitted
  students was lowered and the target class size was reached.
- Raised minimum funding level for all students admitted into the MCP program. There had been a minimum financial aid offer of 50% tuition for students

receiving departmental financial aid (some students received no aid but still accepted an offer of admission). In spring 2018, minimum funding was increased to 75% tuition, and all admitted MCP students were funded at or above the minimum. By fall 2019, all MCP students in the department will receive at least 75% tuition, with at least 35% receiving research assistant funding as well. A small number will have 100% of their tuition covered with a combination of DUSP funding and sponsored research assistantships.

- Implemented a waitlist. To control class sizes more precisely and allow minimum funding offers for all admitted applicants, the department implemented an admissions waitlist in spring 2019.
- Leveraged DUSP financial aid offers with faculty-sponsored funds. DUSP is offering departmental financial aid as an incentive for faculty to add sponsored research assistantships to cover the remaining 25% of tuition or a stipend.

# **Comings, Goings, Promotions**

# **Faculty Appointments**

Two new faculty members started in the department in 2018.

Devin Bunten joined as assistant professor of urban economics and housing. Her research uses economic theory and tools to study a range of urban topics, including gentrification and neighborhood change, restrictive zoning, and urban economic history. Previously she was an economist at the Federal Reserve Board in Washington, DC. Bunten completed a PhD in 2016 at the University of California, Los Angeles, and an MA in 2010 at Colorado State University, both in economics. Her bachelor's degree, from the University of Colorado, Denver (2005), was in film studies. She also helped to co-found the group Abundant Housing Los Angeles to organize for more housing production in the Los Angeles region. In AY2019, Bunten taught 11.S946 Housing Markets, Policy, and Social Stratification in the fall and 11.203/11.202 Microeconomics/Planning Economics in the spring.

Delia Duong Ba Wendel joined the department as assistant professor of international development and urban planning. She holds a PhD in urban planning from Harvard University (2016), as well as an MDes in history and theory of architecture with distinction from Harvard University (2007), an MSc in cultural geography with distinction from University College London (2006), and a BA in Architecture (2001) and a BArch (2003) from Rice University. Her dissertation, "The Ethics of Stability: Rebuilding Rwanda after the 1994 Genocide," was conducted under the supervision of Neil Brenner, Jean Comaroff, Diane E. Davis, and K. Michael Hays.

Following a successful faculty search, the department also appointed two new faculty members who will begin in AY2020.

Andres Sevtsuk will join DUSP this coming fall as an associate professor of urban science and planning. Andres comes to us from Harvard University, where he was an assistant professor of urban planning and led the urban analytics concentration for the urban planning students. His research leverages spatial data analytic tools to address three related planning domains: exploring urban form, land use, and mobility interactions that produce walkable and transit-oriented built environments; investigating the formation

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and distribution of urban centers through street commerce; and investigating the effects of new transport technologies on equitable access and the quality of the public realm. Andres holds a PhD from MIT, where he worked with William J. Mitchell as a researcher in the smart cities group at the MIT Media Laboratory. He is the author of the *Urban Network Analysis Toolbox*, which is used by researchers and practitioners around the world to study coordinated land use and transportation development along networks.

In January 2020, the department will be joined by Catherine D'Ignazio. Catherine is a scholar, artist, and designer who focuses on feminist technology, data literacy, and civic engagement. She has run women's health hackathons, designed global news recommendation systems, created talking and tweeting water quality sculptures, and led walking data visualizations to envision future sea level rise. Her forthcoming book from MIT Press, *Data Feminism* (co-authored with Lauren Klein), charts a course for more ethical and empowering data science practices. Prior to coming to DUSP, Catherine was an assistant professor of civic media and data visualization in the Journalism Department at Emerson College, a faculty director at the Emerson Engagement Laboratory, and a research affiliate at the MIT Center for Civic Media and the MIT Media Lab.

#### **Promotions and Tenure**

A half-dozen promotions and reappointments took place this year. All are effective July 1, 2019.

P. Christopher Zegras was promoted to full professor

Ceasar McDowell was reappointed as a professor of the practice

Sarah Williams was promoted to associate professor with tenure

Jinhua Zhao was promoted to associate professor with tenure

Mariana Arcaya was promoted to associate professor with tenure

Justin Steil was promoted to associate professor without tenure

## **Visitors and Affiliations**

As happens every year, in AY2019 DUSP had a wonderful group of visiting faculty and scholars, both new and returning.

- Ecologist and botanist Peter Del Tredici returned as a visiting lecturer of applied ecology and planning to teach the course, 11.S945 Urban Ecology and Climate Change.
- Anson Stewart joined DUSP as a part-time lecturer of transportation and urban planning for the spring 2019 academic term. He co-taught 11.526J/1.251J Comparative Land Use and Transportation Planning, with Chris Zegras.
- Professor David Gordon from Queen's University spent the spring semester as a
  visiting scholar at MIT's Norman B. Leventhal Center for Advanced Urbanism.
   David is an expert on planning history, community design, and urban development.
- Professor Tali Hatuka, head of the Laboratory of Contemporary Urban Design at Tel Aviv University and an expert on public space, conflicts, and dissent, visited the department during the month of March. She will be involved with the

- ongoing Israel practicum and will offer a one-week course March 11–14, 11.S950 Geographies of Political Actions: Protests and Urban Spaces in the 21st Century.
- Garnette Cadogan joined us once again as a visiting scholar. Garnette is a writer
  who focuses on history, culture, and the arts. He is the editor at large of Non-Stop
  Metropolis: A New York City Atlas (edited by Rebecca Solnit and Joshua JellySchapiro) and co-editor, with Shirley E. Thompson, of the Oxford Handbook of the
  Harlem Renaissance (forthcoming).
- Karilyn Crockett, a former MLK Visiting Scholar, returned to DUSP as a lecturer
  of public policy and urban planning. Her research focuses on large-scale land use
  changes in 20th-century American cities and examines the social and geographic
  implications of structural poverty. She earned a PhD from the American Studies
  program at Yale University, a master of science in geography from the London
  School of Economics, and a master of arts and religion from Yale Divinity School.
- Viktorija Abolina (MIT MCP 2013 and MArch 2009) rejoined DUSP as lecturer in urban design and planning. She will co-teach 11.360 Community Growth and Land Use Planning with Justin Steil.
- Kairos Shen returned to the Center for Real Estate and DUSP as a visiting lecturer of urban design and planning to teach 11.301 Introduction to City Design and Development. He will also teach a seminar on mediating private development with public panning in the fall and a real estate development studio in the spring. Kairos is the former chief planner at the Boston Redevelopment Authority, Boston's economic development and planning agency, where he managed the planning division, which includes the core functions of community planning, urban design, zoning, waterfront planning, and infrastructure planning.
- Onesimo Flores Dewey (PhD 2013) joined DUSP as a visiting lecturer to co-teach 11.S942 Guadalajara Practicum with Chris Zegras.
- Teresa M. Lynch co-taught a practicum, Nodal Economic Development:
   Building Life Sciences Capabilities across the City and Its Urban and Suburban
   Hinterland, with Amy Glasmeier. Teresa is a principal at Mass Economics,
   a research and consulting firm that works with the public, private, and
   philanthropic sectors to promote inclusive economic growth in American cities.
- Jonah Susskind co-taught 11.332 Urban Design Studio with Alan Berger and Rafi Segal in the fall and 11.123 Big Plans in the spring.
- Eric Huntley, Marie Law Adams, Mary Anne Ocampo, and Bruno Verdini continue their multi-year extension appointments as faculty in DUSP.
- The Special Program for Urban and Regional Studies Humphrey Program hosted 18 fellows from 17 countries, including Angola, Argentina, Bahrain, Bangladesh, China, Colombia, Egypt, Gambia, Germany, India, Kyrgyzstan, Mexico, Pakistan, the Philippines, Sudan, and Uruguay. Their fields of interests are urban and metropolitan growth management, housing and infrastructure development and finance, the revitalization of urban cores, sustainable and resilient design and planning, and transportation and land use planning.

## **Faculty Leaves**

Gabriella Carolini, Albert Saiz, and Jinhua Zhao were on leave in fall 2018. David Hsu, Albert Saiz, and Justin Steil were on leave in spring 2019.

#### Retirements

In spring 2019, the department recognized the retirements of Senior Lecturer Karl Seidman and Adjunct Professor Terry Szold. Both had taught in the department for more than 20 years.

### **Sad News**

Former dean of the School of Architecture and Planning, John Pierre de Monchaux passed away on April 30, after having livied with Parkinson's disease for 20 years. During his tenure as dean (1981–1992), de Monchaux achieved major milestones in the School's history, including the completion of the award-winning Rotch Library extension in Building 7, the establishment of the MIT Center for Real Estate, and the opening of the MIT Media Lab.

Lisa Peattie, a celebrated scholar and lifelong activist, professor of urban anthropology in DUSP, and recipient of the Distinguished Educator Award from the Association of Collegiate Schools of Planning, passed away on December 13, 2018.

The department hosted memorial events to remember and celebrate the legacies of both of these members of our community.

# **Research and Teaching**

## **Changes to the Master in City Planning Core**

This year, the MCP Committee implemented a change of sequencing for the MCP core curriculum to reverse the order of two first-year requirements. The incoming MCP class took 11.220 Quantitative Reasoning in the fall and 11.202/203 Microeconomics in the spring. On the basis of early returns, this change resulted in a much improved sequence and a better fit with the other core courses, such as Geographic Information Systems.

## **Practicum, Workshop, and Studio Courses**

The department engaged in practicum, studio, and workshop classes in a number of locations around the world. In the fall, these included:

- 11.332 Urban Design Studio, Los Angeles, CA (Berger, Segal)
- 11.360 Lynn, Massachusetts Community Growth and Land Use Planning Practicum (Abolina, Steil)
- 11.S942 Transit-oriented Development in Guadalajara Practicum (Zegras, Flores)
- 11.S943 Planning as a Tool for Inclusive Economic Development: Building Life Sciences Program and Policy Capabilities in Gateway Cities Practicum (Glasmeier, Lynch)
- 11.S944 Puerto Rico Practicum Infrastructure Systems in Theory and Practice (Hsu)

In the spring, such DUSP courses included:

- 11.246J/4.246J DesignX Accelerator (Frenchman, Rosenzweig)
- 11.303 Real Estate Development Studio: Complex Urban Projects (Frenchman, Shen)
- 11.304 Venice, Italy, Site and Environmental Systems Planning (Ocampo)
- 11.312 Engaging Community: Models and Methods for Designers and Planners, Mexico (McDowell)
- 11.320 Digital City Design Workshop (Ratti, Alvarez, Tan)
- 11.332 China Urban Design Studio (Ryan)
- 11.439 New Orleans: Revitalizing Main Streets (Seidman, Law Adams)
- 11.458 Crowd Sourced City: Civic Tech Prototyping (Williams)
- 11.S938 Integrating Informal Settlements: The Buenos Aires Metropolitan Area, Argentina (Sanyal)
- 11.S943 Industrial Urbanism: Places of Production, Kiryat Shmona, Israel (Ben-Joseph, Hatuka)
- 11.S946 Creating Equity through Integrated Landscape Management and Urban Metabolism, Colombia (Fernandez)
- 11.S951 China Connector Workshop: Urbanization, Technology, and the Innovation Market (Tan, Grant, Huang)

#### **New Courses**

The following new classes were offered in AY2019:

- 11.143J/11.243J Research Methods in Global Health and Development (James)
- 11.S195/11.S945 A City Is Not a Computer: Histories and Theories of the Computational City (Huntley)
- 11.S940 Race, History, and the Built Environment: Anthropological Approaches (James)
- 11.S946 Housing Markets, Policy, and Social Stratification (Bunten)
- 11.S947 Power and Place: The City as Collective Memory (Wendel)

## **Major Events and Speakers**

This past year, DUSP experimented with a new initiative to promote cross-disciplinary discussion and social interaction between a mix of students and faculty. These small "home groups" met over lunch six times throughout the fall, seeking ways to connect students, faculty, and staff across traditional lines and to discover new ways to engage the field of planning.

Professors Larry Vale and Ceasar McDowell organized a popular series of biweekly planning debates. This year, debates supported the curriculum development work of the MCP program; the series was linked to rethinking the core curriculum.

The Special Program for Urban and Regional Studies Humphrey Program celebrated its 50th anniversary on October 12, 2018. The theme for the celebratory conference was "The Reflective Practitioner Reconsidered."

On Monday, November 19, 2018, the department marked the centennial of Kevin Lynch's birth and commemorated his legacy with a special Kevin Lynch Award focused on Lynch's seminal environmental work, *Wasting Away*.

In February, the department hosted a special alumni DUSPx event in Washington, DC, to provide opportunities for networking and catching up with old friends.

In April, the Senseable City Lab coordinated with the World Economic Forum's Global Future Council on Cities and Urbanization to hold Forum on Future Cities: Urban Intelligence.

Twice this year, DUSP continued its new tradition of hosting department-wide "lightning talks" to showcase faculty and student research. During each event, approximately a dozen different DUSP faculty and students were given three minutes to present one of their research projects in layperson's language.

# **Commencement and Awards**

At the departmental commencement celebration on June 6, 2019, DUSP was pleased to welcome back Ambassador Paul Altidor (SM 2004) as Commencement speaker. Ambassador Altidor served as the ambassador at the Embassy of the Republic of Haiti in Washington, DC, from May 2, 2012, until March 2, 2019. Year-end awards were also announced at the event.

## **Departmental Awards**

- Outstanding Undergraduate Thesis: Kevin Li, "An Analysis of Nonprofit Board Interlock Networks"
- Outstanding PhD Dissertation: Hannah Teicher, "Climate Allies: How Urban/ Military Interdependence Enables Adaptation"
- Outstanding PhD Teaching Assistant: Laura Delgado
- Outstanding MCP Thesis: Alexander Gerard Meeks, "Accounting for Disaster: Small Business Recovery in North Carolina after Hurricanes Matthew and Florence"
- O. Robert Simha Prize: Elizabeth Haney
- Flora Crockett Stephenson Writing Prize: Aarthi Janakiraman
- American Planning Association Outstanding Student Award: Kavya Vaghul
- Outstanding Contribution to the Intellectual Life of the Department: Jay Dev

- Student Departmental Service Award: Collyn Chan
- Excellence in Public Service Award: Priya Johnson (MCP 2017)
- Rolf R. Engler Award for Outstanding Service: Jesse Kaminsky

## **Student Council Awards**

- Excellence in Advising: Marie Law Adams
- Excellence in Teaching: Laura Delgado
- Outstanding Contribution to Student Life: Mariana Arcaya, David Hsu
- Outstanding Contribution to Creating a Healthy DUSP: Ceasar McDowell
- Hebbert Award for Student Contribution to DUSP: Yael Nidam

## **Graduate Degree Program Enrollment and Activities**

In AY2019, the department's graduate programs enrolled 60 new MCP students, one new SM student, and eight new doctoral students. The department granted 80 MCP degrees, one SM degree, and 12 PhD degrees. The following table reports data on the AY2019 admissions cycle.

#### Admissions Data-AY2019

	Applications	Admitted students	To be enrolled
MCP (including dual)	419	77	58
SM	2	2	1
PhD	148	10	8

# **Undergraduate Program**

In AY2019, nine students graduated with an SB degree from DUSP.

Over the course of the year, eight undergraduates declared a Course 11 Urban Planning major, bringing the total to 19 majors for the coming year.

Eight undergraduates declared a Course 11-6 Urban Science and Planning with Computer Science major, bringing the new total to 11 majoring students for the coming year.

## **Doctoral Program**

As noted, the department graduated 12 PhD students. The following dissertations were completed in AY2019:

- 1. Brittany Montgomery, "Delivering Urban Projects: Contracting, Voice, and Anticorruption in Infrastructure"
- 2. Hannah M. Teicher, "Climate Allies: How Urban/Military Interdependence Enables Adaptation"

- 3. Hongmou Zhang, "The Social Perspective of Mobility Sharing: Understanding, Utilizing, and Reshaping Preference in Shared Rides"
- 4. Jason Spicer, "Exceptionally Un-American? Why Co-operative Enterprises Struggle in the United States, But Scale Elsewhere"
- 5. John C. Arroyo, "Shadow Suburbanism: Mexican Everyday Life, Fear, and Space in Greater Atlanta"
- 6. Michael Wilson, "Mapping under Uncertainty: Spatial Politics, Urban Development, and the Future of Coastal Flood Risk"
- 7. Miguel Paredes, "Data Science and Advanced Analytics: An Integrated Framework for Creating Value from Data"
- 8. Minjee Kim, "Negotiated Developments: Exploring the Trends, Efficacy, and Politics of Negotiating Zoning on a Project-by-Project Basis"
- 9. Parrish Bergquist, "Environmental Politics in a Polarized America: Public Mood and Policy Consequences"
- 10. Roberto Ponce-Lopez, "An Exploration of Non-Work Destinations in Singapore"
- 11. Sarah Cordero Pinchansky, "Local Regulatory and Economic Instruments to Encourage Tropical Forestry Conservation: An Analysis of the Policy Process in Costa Rica and Mexico"
- 12. Zachary Lamb, "Making and Unmaking the Dry City: The Design-Politics of Flood Mitigation from Infrastructural Modernization to Climate Adaptation"

The department's peer-reviewed journal, *Projections*, consolidated an affiliation with MIT Press Journals. Volume 13 was published in 2019, volume 14 is well under way, and teams of editors have been selected for volumes 15 and 16.

The PhD Committee continued its sponsorship of a variety of events oriented to doctoral students, combining research workshop presentations with career development activities.

Eran Ben-Joseph
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