School of the Art Institute of Chicago (SAIC) in Major Collaboration Uniting Artists with Researchers, Architects, City Officials; NSF Grants $600,000

Chicago—Over the next several decades, the population of the world’s cities will nearly double, increasing by 2.6 billion people. Concurrently, an unprecedented volume and diversity of data is being collected and published by an increasing number of cities, providing opportunities to optimize their operation and anticipate the impact of their growth using computational methods and tools.

To seize this opportunity, the new Urban Center for Computation and Data (UrbanCCD) will apply the most advanced computational and data-driven techniques to the challenge of intelligent urban planning and design. Within this organization, SAIC faculty—through its Department of Architecture, Interior Architecture, and Designed Objects (AIADO)—will apply their research perspectives and understanding of urban architecture and design to translating social, economic, and health policy research into urban design curricula. SAIC students will study the impact of mobile computation, urban sensing, and embedded systems on architecture, urban design, and urban planning as these technologies change the way people interact with the city.

"We’re all walking around with an amazing amount of computational power in our pockets, and it’s only going to get better, especially as cities begin to embed sensors and interaction mechanisms in the built environment" says Douglas Pancoast, Associate Professor of Architecture, Interior Architecture, and Designed Objects at SAIC. "The big question is if this pervasive and physical computation and access to data will allow us to change how we create areas of density in the city around particular activities and infrastructural changes."

The center will unite researchers from SAIC and other Chicago institutions, city departments, and private enterprise under the leadership of the Computation Institute (CI), a joint initiative between the University of Chicago and Argonne National Laboratory. A starting point for UrbanCCD research will be hundreds of data sets published by the City of Chicago Data Portal, an initiative of Mayor Rahm Emanuel’s office dedicated to open government data.

The UrbanCCD’s first major project is a $600,000 grant from the National Science Foundation to create the Urban Sciences Research Coordination Network (USRCN), which unites social, economic, health, and computational scientists to develop a roadmap for data-driven urban sciences. The USRCN will engage collaborators internationally, with an initial team from CI, UChicago, Argonne, University of Chicago Medical Center, Chapin Hall, City of Chicago, SAIC, and the Chicago-based international architecture firm Skidmore, Owings & Merrill. More information is available via the UrbanCCD website at urbanccd.org.
SAIC students, faculty, and alumni have a history of significant contributions to areas of urban planning. In October SAIC faculty members George Aye and Sara Cantor Aye received a City 2.0 grant from TED to support Designing Chicago: New Tools for Public Transit, a project from the Ayes’ Greater Good Studio that leverages public participation and design to improve citywide navigation. In 2011 Aye and his class “Living in a Smart City" were the recipients of a $10,000 “Smarter Planet Faculty Innovation Award” from IBM, and SAIC faculty member Tristan d’Estreé Sterk participated in the Economist magazine’s conference on intelligent infrastructure. Sterk is an expert on responsive architecture who has worked with Pancoast at Skidmore, Owings and Merrill’s BlackBox Studio research team. SAIC alumnus and adjunct faculty member Bo Rodda (MFA 2010) is Building Intelligence and Energy Efficiency Specialist at Argonne National Laboratory.

SAIC President Walter E. Massey is a prominent physicist who served as Director of the Argonne National Laboratory from 1979 to 1984, oversaw three Department of Energy laboratories as Provost of the University of California system, and was Director of the National Science Foundation from 1991 to 1993. He is an outspoken champion of the integration of artists and the creative process into research and development, an area supported at SAIC by public programs such as its Conversations on Art and Science lecture series, annual Knowledge Lab (KLab) courses, and employer partnerships made possible by SAIC’s Career + Co-op Center.

“SAIC students move freely among disciplines to integrate content and technique. They cut across boundaries. They create hybrid practices, and they explore all aspects of their creativity in order to address complex issues. This kind of education is exactly what is needed to develop the talented individuals who will drive innovation in society," Massey notes. “Whether the issue is sustainability, urban policy, or social justice, artists and designers engage, adapt, reimagine, and continue to move the definition of innovation forward."

Image credit: Collaborators Charlie Catlett, Douglas Pancoast and Brett Goldstein discuss the new Urban Center for Computation and Data at the headquarters of architectural firm Skidmore, Owings & Merrill. Photo: Robert Kozloff/University of Chicago

ABOUT THE SCHOOL OF THE ART INSTITUTE OF CHICAGO
A leader in educating artists, designers, and scholars since 1866, the School of the Art Institute of Chicago (SAIC) offers nationally accredited undergraduate and graduate degrees and post-baccalaureate programs to nearly 3,200 students from around the globe. SAIC also enables adults, high school students, middle school students, and children to flourish in a variety of courses, workshops, certificate programs, and camps through its Continuing Studies program. Located in the heart of Chicago, SAIC has an educational philosophy built upon an interdisciplinary approach to art and design, giving students unparalleled opportunities to develop their creative and critical abilities, while working with renowned faculty who include many of the leading practitioners in their fields. SAIC’s resources include the Art Institute of Chicago and its new Modern Wing; numerous special collections and programming venues provide students with exceptional exhibitions, screenings, lectures, and performances. For more information, please visit saic.edu.