Industrial design students experimenting with parametric designs in Assistant Professor Brooks Atwood’s studio were invited to display their work at the London Festival of Architecture.

Examples of the work exhibited by Philip Caleja (top row left), Kyle Guilford (top row right), Samantha Tartaro (bottom row right), and Samantha Goldman (bottom row left), are shown above.

Andrew Zarzycki, assistant professor of architecture, and his former colleagues at Tsoi/Kobus & Associates, Boston, submitted the winning design: Tremont Underground Theater Space (left), which laid plans for turning an abandoned subway tunnel into an art gallery/theater and event space, in the annual “design inspiration” competition sponsored by SHIFTBoston.
EXCELLENCE BY DESIGN

Last year, the New Jersey School of Architecture reconstituted itself as the College of Architecture and Design and added a second school, the School of Art + Design. The rationale for the change was both the growing need for design professionals in such fields as video game and web design, product packaging and interior design and the increasingly critical impact of design on the economy. This year, the new school began to take its place among peer institutions at exhibits and shows, while the School of Architecture expanded its longstanding reputation for excellence through recognition of the work of students, alumni and faculty.

Industrial design students experimenting with parametric designs in Assistant Professor Brooks Atwood’s studio were invited to display their work at the London Festival of Architecture. On the facing page are examples of the work exhibited by Kyle Guilford, Samantha Tartaro, Philip Caleja, and Samantha Goldman.

The Prettty Fab house in Jersey City, designed by Assistant Professor Richard Garber, Nicole Robertson, and colleagues at their firm GRO Architects, won the 2010 Green Building of the Year Award from the Jersey City Redevelopment Agency and a 2009 Merit Award from the New Jersey Chapter of the American Institute of Architects. Praised by the AIA as “inventive with a limited budget,” the project presents a 21st century solution for urban housing. Scott Corey ’07 and Justin Foster ’08 both had hands-on roles in designing the house at GRO. The geometry of the economical 1,600 square foot residence optimizes solar collection, drainage, and passive heating and cooling. Pre-cast concrete insulated panels are utilized as high energy performance structural walls between which the structure is framed. The energy performance of this house is 30 percent better than a typical single-family home and will allow the owner to be completely energy independent in an estimated seven years.

Students of the School of Art + Design exhibited their work for the first time at ICFF 2010 (International Contemporary Furniture Fair) in New York, alongside peers from Parsons, Pratt, and Yale School of Architecture.

A team comprised of New Jersey School of Architecture alumni Justin Foster ’08, Lauren Page ’08, and Phil Kuehne ’07 of the design collective KIT won first place in the New York Architecture League’s design charette competition. Their winning design, which features hundreds of hula hoops forming a connected canopy, was part of a temporary summer installation in the backyard of the SUPERFRONT art gallery to host events for New York City Explorers, a Brooklyn-based nonprofit group.

Andrew Zarzycki, assistant professor of architecture, and his former colleagues at Tsoi/Kobus & Associates, Boston, submitted the winning design in the annual “design inspiration” competition sponsored by SHIFTBoston to elicit provocative visions of what Boston could be. The winning submission, Tremont Underground Theater Space, laid plans for turning an abandoned subway tunnel into an underground art gallery, theater and event space.

Sophia Sobers, architecture student, presented “Parametric Architecture” in the design category of the research poster session at the Association of Computing Machinery’s 2010 SIGGRAPH Conference last month in Los Angeles. The first undergraduate from the College of Architecture and Design to have a research poster accepted for presentation at the premier computer graphics annual conference, she explored the idea of creating a “responsive architecture”—an architectural system that explores the idea of using a
Matthew Gosser, gallery director at the College of Architecture and Design, created "Theater Town," a huge outdoor mural (above) on the rear wall of 441 Broad Street depicting theaters that once enlivened Newark's cultural life. The unveiling of the mural coincided with a similarly-themed art show curated by Gosser and held at NJIT last fall.

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Sophia Sobers (left), architecture student, presented "Parametric Architecture" in the design category of the research poster session at the Association of Computing Machinery’s 2010 SIGGRAPH Conference recently in Los Angeles.
parametric interface that reacts and changes based on user input.

Alex Merlucci, a student in Associate Professor Darius Sollohub’s studio, was one of a group tasked with designing a new generation of practical, affordable, energy-efficient townhouses for Habitat for Humanity, Newark. His modern, cost-effective design with customizable exterior and interior elements was selected for development, and he continues to work on the project as an intern to the architect of record. Habitat’s Newark chapter plans to break ground for Alex’s townhouses during 2011. The project also won the grand prize for 2010 from the National Council of Architectural Registration Boards (NCARB).

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DESIGNING SUSTAINABLE SYSTEMS

Sustainability has long been a commitment at NJIT; even before the 1989 opening of the Otto H. York Center for Environmental Engineering and Science, the first building in the nation especially constructed for cooperative public and private research in hazardous waste management. The new strategic plan encourages teaching and research programs that apply sustainability principles to building and design, manufacturing, transportation and other fields.

High-performance, sustainable buildings, particularly housing and schools are the concern of Deane M. Evans, research professor of architecture and executive director of the Center for Building Knowledge. He directs a U.S. Department of Energy-funded project to create a comprehensive series of four courses to teach mechanical engineers in the New York Metropolitan Region how to improve the energy efficiency of existing buildings. He is also the NJIT director of a collaborative project with Building Media Inc., a DuPont subsidiary, also supported by the DOE, to develop innovative energy efficiency strategies that can be applied to American homes.

Kamalesh Sirkar, distinguished professor of chemical engineering, is known internationally for his pioneering research in membrane separation technology, widely used in the chemical, food, petrochemical, pharmaceutical and biotechnology industries to separate, purify or concentrate liquid solutions, cellular suspensions or gaseous mixtures. He directs the newly-established Center for Membrane Science, Engineering and Technology Composites, an NSF Industry/University Cooperative Research Center in partnership with the University of Colorado at Boulder. Research at the new center will focus on environmental issues including desalinization of seawater to produce pure, potable water using an innovative membrane-based desalination technique developed by Sirkar. Boris Khusid, professor of chemical engineering, is co-PI of