



Architecture faculty members Darius Sollohub and James Dart are leading NJIT's efforts to assist in the rebuilding of New Orleans.

REBUILDING AND RESTORING

The New Orleans Connections

“A major focus of New Jersey School of Architecture is the living laboratory approach to community interaction. The school’s Urban Lab focuses on the urban dimension of contemporary architecture and planning problems, and the importance of local community participation in their resolution. We give our students the opportunity to get involved in projects aimed at improving the quality of life in urban communities through architectural, urban design, and infrastructure planning interventions.”

— Urs Gauchat, dean, New Jersey School of Architecture

WHEN HURRICANE KATRINA STRUCK THE GULF COAST IN AUGUST 2005, NEW ORLEANS NATIVE JAMES DART, UNIVERSITY LECTURER AT NEW JERSEY SCHOOL OF ARCHITECTURE, KNEW THAT HE HAD TO DO SOMETHING TO HELP THE CITY’S RECOVERY.

“You never really leave New Orleans, and that sense of deep roots — of belonging to a place — is one of the things I love about the city. It was hard to see it so devastated and not want to do something. The studios at NJIT — and a group of very dedicated students — became a way to help people in the city rebuild.”

Dart established his NOLA (New Orleans, La.) studio to get students involved in analyzing the problems, surveying the damage, and offering solutions in the form of designs and prototypes of housing that will better withstand flooding as well as plans for retrofitting surviving homes.

Dart’s group collaborated with Assistant Professor **Darius Sollohub**’s Infrastructure Planning studio, which also looks at issues like transportation and landscaping. The NJIT team focused on the low- to-moderate-income New Orleans East neighborhood.

these factors will not limit its applicability. "The methodologies used in the design and planning studios for New Orleans serve as a model for recovering unsustainable patterns of development across the nation," he said.

Starting at the scale of the individual citizen and his or her house-lot, the studios developed the Backyard Project, a lot-scaled strategy for storm water management. According to USDA's National Resource Conservation Service, for instance, the massing of multiple small plots of water-retaining landscape can be as effective as a major drainage project, and the Infrastructure Planning studio made detailed recommendations for landscaping and the types of trees and shrubs that would be most useful. According to Dart, the results of the studio's work have been embraced by the community and the local agencies, and are in the process of being codified into city ordinance by local planners.



Both Hyung Kang (design above left) and John Rago (design above right) won third place prizes in the International "New Orleans Housing Prototype Student Competition" sponsored by Architectural Record and Tulane University for their work in the NOLA Lab.

In Other Projects...

Dale Gary, professor and chair of physics at NJIT, was quoted in the cover story that appears in the



June 9, 2007 edition of *Science News Online* as well as the July 2007 issue of *Sky & Telescope* magazine. Director of the Owens Valley Solar Array, he was among the first to recognize the magnitude of last December's outburst of solar radio noise, which caused massive disruptions of Global Positioning Satellite receivers worldwide. With more than \$1 million in research support from NASA and NSF, Gary studies space weather to identify and predict solar activity that may disrupt cell phones and other communications. Above, he oversees observations by students such as Jabeen Reza. ■

David Mendonca, associate professor of information systems, is leading the first large-scale study to



investigate improvisation at the nexus of cognitive, behavioral, and social

phenomena in emergency response. Supported by an NSF grant, the study aims to improve scientific understanding of improvisation in emergency response, thereby informing educational and policy initiatives to improve how society plans for, responds to, and learns from disasters. The study will also develop and evaluate tools, techniques, and other materials to support training and policy making regarding improvised response to disaster. ■

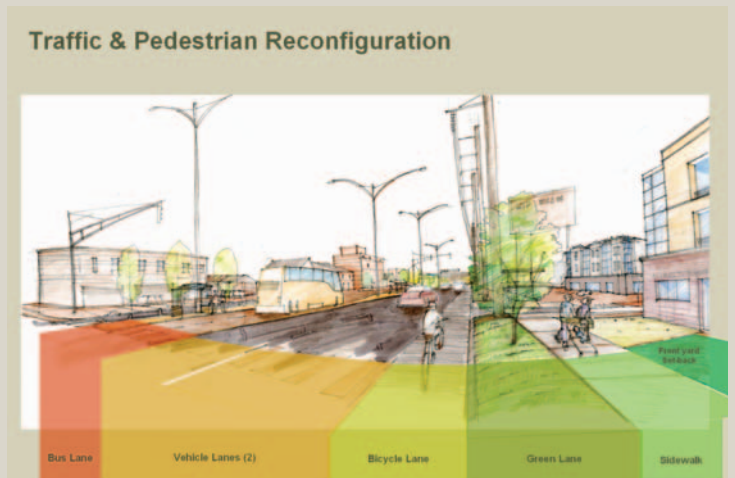


Elizabeth Avery Gomez, who completed her doctorate

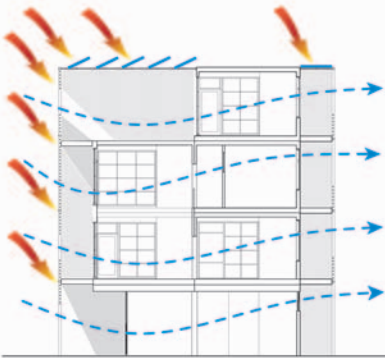
in information systems in May, did her doctoral research on community crisis response teams with her advisor, **Murray Turoff**, distinguished professor emeritus of information systems. Because volunteers from grassroots organizations who are often the first to respond in a local emergency often do not have adequate training and practice with quick-response tactics and mobile two-way device usage, she proposed web-based training text messaging for all appropriate personnel to create a common communications medium. ■



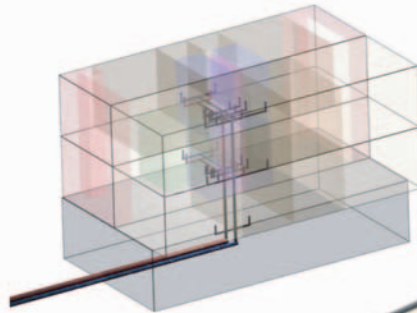
The backyard landscape strategy proposed by NJIT's Infrastructure Planning studio plays a critical role in storm water management.



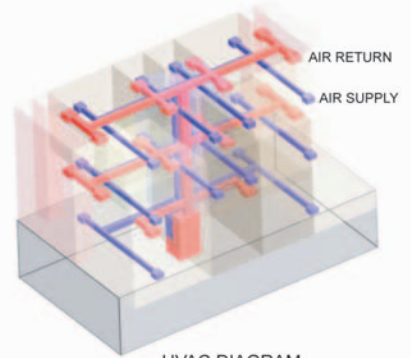
NJIT's Bus Rapid Transit Proposal for Chef Menteur Highway.



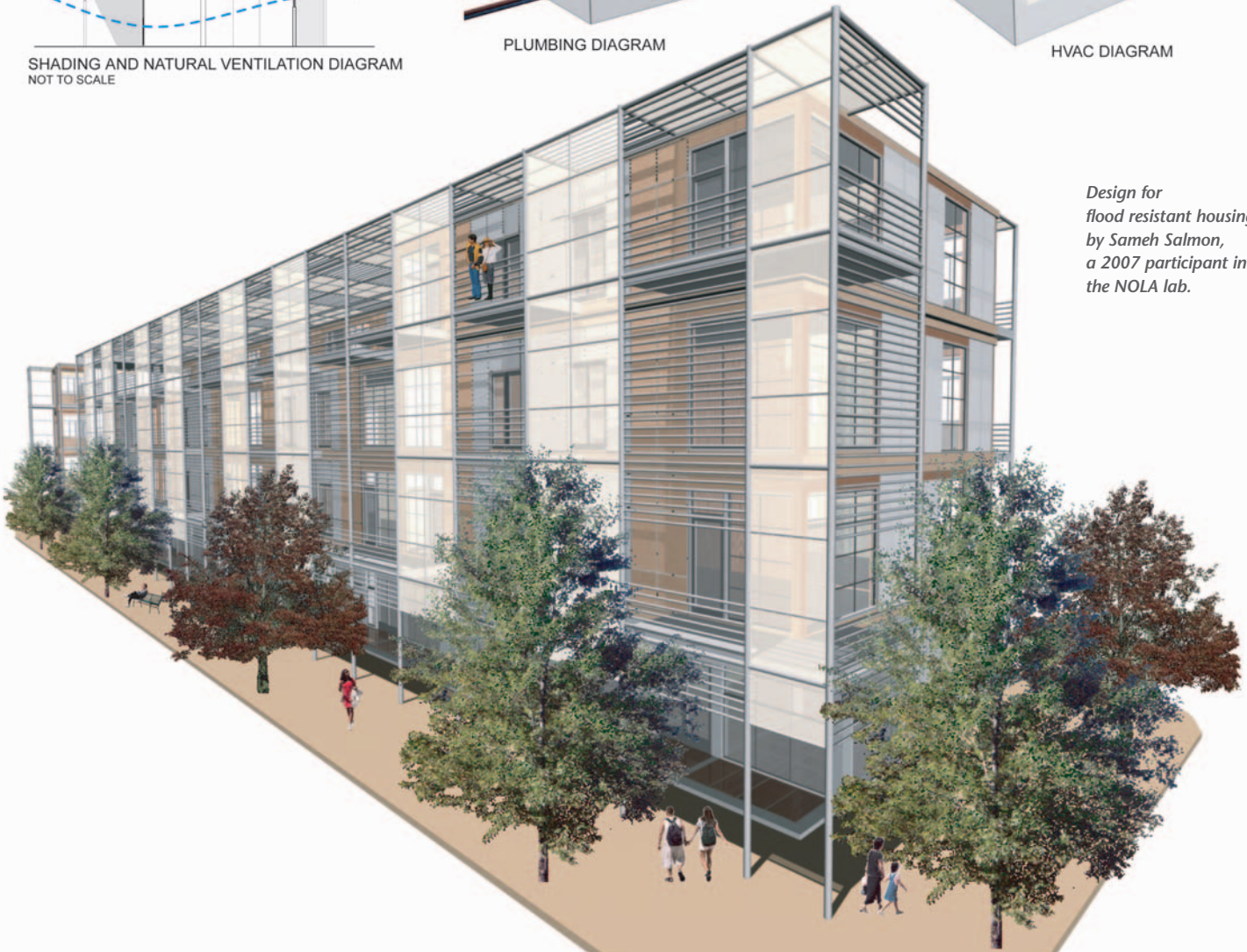
SHADING AND NATURAL VENTILATION DIAGRAM
NOT TO SCALE



PLUMBING DIAGRAM



HVAC DIAGRAM



*Design for
flood resistant housing
by Sameh Salmon,
a 2007 participant in
the NOLA lab.*