

**CCICADA/DIMACS Workshop on S&T Innovations in Hurricane Sandy Research
June 5, 2013, Rutgers, the State University of New Jersey**

On Wednesday, June 5, 2013, the Command, Control and Interoperability Center for Advanced Data Analysis (CCICADA) and the Center for Discrete Mathematics and Theoretical Computer Science (DIMACS) hosted a one-day workshop on the campus of Rutgers, the State University of New Jersey under the title: *Workshop on S&T Innovations in Hurricane Sandy Research*

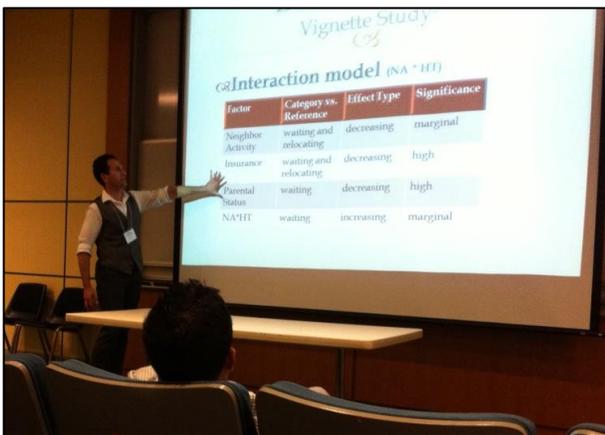


(Science and Technology – S & T). The workshop was organized by CCICADA research partner Professor David Mendonca, Rensselaer Polytechnic Institute and CCICADA Director, Professor Fred S. Roberts. Over 60 researchers, students, practitioners and other interested individuals and guests attended the event.

The primary goal of the workshop was to provide a forum for multi-disciplinary discussion by bringing together those researchers who were awarded National Science Foundation ‘RAPID’ awards to study the impacts of Hurricane/Super-storm Sandy. NSF RAPID awards are a funding mechanism that provides a means for researchers to collect perishable field data on short-lived phenomena including natural disasters with the overarching objective to support the transfer of research results and discoveries to practice. Given the likely long-term consequences of Hurricane Sandy, the results of these RAPID awards are expected to be of broad interest to government, industry, academia and the public at large.

The research, that covered topics such as coastal and structural damage assessment, population evacuation, infrastructure restoration, debris removal, and housing recovery, was conducted with the purpose of improving understanding of how individuals, organizations and communities can better plan for, respond to and recover from Sandy-like events. In addition to sharing information and findings, other important goals of the workshop were the facilitation of further collaborations among the research community in this area, the creation of opportunities to identify support for research goals and the interaction with government officials and other practitioners in focusing on research activities of mutual interest and benefit.

The Keynote Speaker was Dr. Mitchell Erickson, Science and Technology Directorate, US Department of Homeland Security. In his address, Dr. Erickson set the foundation for how the quick collection of perishable data from disaster events represents an opportunity for research to get at answers and make real contribution to impact assessment, response and recovery. The following session focused on state and local perspectives on disaster events and rapid research. Assistant Attorney General Cherrie Black, Chief of Infrastructure Protection, NJ Office of Homeland Security and Preparedness, Dr. Clifton Lacy, Director of the University Center for Disaster Preparedness and Emergency Response at Rutgers University, Alex Markowski, Assistant Commissioner for Logistics, New York City Office of Emergency Management, and Michael Greenberg, Director, Center for Transportation Safety, Security and Risk at Rutgers University, provided their views and insight on issues faced by policy makers and front-line practitioners before, during and after disaster events.



The workshop then featured talks from the RAPID award recipients from universities across the country. These included the City College of New York; Drexel University; Notre Dame University; New York University; Florida International; Texas A & M; Virginia Tech.; New Jersey Institute of Technology; Stevens Institute of Technology; Rensselaer Polytechnic Institute; University of

Akron; Rutgers, the State University of New Jersey; Texas Tech. and the University of North Carolina.

It is noted that four US Department of Homeland Security University Centers of Excellence participated in the day's agenda: CCICADA; Center for Maritime, Island and Remote and Extreme Environment Security (MIREES); Coastal Hazards Center of Excellence (CHC) and National Transportation Security Center of Excellence (NTSCOE). A COE session featured presentations by Fred Roberts of CCICADA, Gavin Smith of MIREES, Tom Herrington of CHC, and Jennifer Rovito of NTSCOE. One of the key purposes of the workshop was to engage the COEs with the RAPID researchers, with each other, and with the government agencies involved in relevant work.

The final presentation was given by Dennis E. Wenger, Program Director, Infrastructure Systems Management and Extreme Events, National Science Foundation. Dr. Wenger outlined NSF's goals, expectations and work going forward under the RAPID award design. He also stated NSF's view of the importance of these awards in the furtherance of understanding in aid of significant issues and problems.

At the conclusion of the formal talks, several affiliated graduate and undergraduate students presented related research work in a poster session. Newly arrived students from City College of New York and Howard University participating in this year's CCICADA Research Experience for Undergraduates initiative included their work in this session. All posters generated interest and discussion.



The *Workshop on S&T Innovations in Hurricane Sandy Research* was extremely successful in meeting its goals of information sharing, dialogue and networking. In the longer term, the workshop is expected to lay the groundwork for a publication with contributions from Sandy-related research. To support this longer-term goal, a second follow-up workshop is planned. There are already additional plans for working groups and collaborations among the attendees from government and academia.

For additional information on this workshop and/or other work of the CCICADA Center, please contact Fred S. Roberts, Director, at froberts@dimacs.rutgers.edu.