

## **UCGIS Research Committee Report UCGIS Annual Symposium 2017**

This report covers the activities of the Research Committee for the period of May 2016 (UCGIS Symposium in Scottsdale, AZ) to the 2017 UCGIS Symposium in Arlington, VA.

### **Recap of Recent Committee Activities**

Jeremy Mennis, Temple University, is completing his third year as chair of the committee. Mennis's term will run through the end of the 2017 UCGIS Symposium. The current research committee is composed of: Jochen Albrecht (Hunter College – The City University of New York); Ross Meentemeyer (North Carolina State University); Wenwen Li (Arizona State University); Yongmei Lu (Texas State University – San Marcos); Wei Luo (UC Santa Barbara); Ming-Hsiang Tsou (San Diego State University); Xinyue Ye (Kent State University).

Major activities included the following:

### **1. 2016 UCGIS Symposium**

The theme of the 2016 UCGIS Symposium was based on the Research Committee's GIScience Research Challenges initiative, which seeks to identify the key research advances in Geographic Information Science and Technology (GIS&T) that are necessary to address the most pressing problems now facing society. Symposium activities organized by the Research Committee included two sessions of lightning talks submitted by Symposium participants, two breakout discussion sessions, a panel presentation, and a plenary discussion. Four primary themes emerged from the initiative activities: 1) Improving processing for big, spatial-temporal data in real-time; 2) leveraging new sources of high-fidelity spatial data; 3) enhancing GIS&T accessibility; and 4) enabling interdisciplinary research.

A working group of 14 participants met at the end of the Symposium to develop short and long term goals, including interfacing with other academic societies, developing a web interface to collect UCGIS members' ideas regarding GIScience research challenges, and the development of specialist meetings sponsored by UCGIS. An executive summary of the Research Challenges initiative and Symposium highlights was produced and distributed in Fall 2016 and is available on the UCGIS website. Progress on pursuing other specific goals since then has been fairly limited, but two more accessible opportunities for advancement include incorporating specific proposed research challenge into the UCGIS webinar series and developing a more comprehensive report that could be developed into a peer-reviewed journal article or an essay appearing in a GIScience journal.

## **2. 2017 UCGIS Research Award**

The Research Awards committee for 2017 was comprised of committee chair and 2016 awardee Sergio Rey (Arizona State University), and committee members Xingong Li (University of Kansas), Sara Metcalf (State University of New York Buffalo), and Seth Spielman (University of Colorado). The committee selected Daniel Griffith (University of Texas, Dallas) for the 2017 UCGIS Research Award for his research contributions to spatial statistical analysis and modeling in GIScience.

## **3. 2017 Symposium Agenda Items**

At the 2017 Symposium the Research Committee has prepared a session in collaboration with the External Relations Committee. The session involves a series of lightning talks with speakers responding to the prompt, “Given the increasing emphasis on Big Data Analytics and Cyberinfrastructure in GIScience, what do you see as the major challenges in 1) turning geospatial data into actionable information that informs decision-making and policy, and/or 2) developing GIScience educational programs that support the skills students need for entry into the geospatial workforce?” The lightning talks will be followed by breakout group discussions and reporting on the topic.

Respectfully submitted,

Jeremy Mennis  
Chair, UCGIS Research Committee  
May 15, 2017