

## NEW VISIONS— NEW DIRECTOR

**H**alf a year after I joined UCSB as the Director of the Center for Spatial Studies and as holder of the Jack and Laura Dangermond Chair for GIScience, the Center is well underway to implement its new focus of enabling transdisciplinary problem solving (see the new [vision statement](#)). Together with associate director Prof. **Mary Hegarty** and research coordinator Dr. **Andrea Ballatore**, I am seeking and engaging in collaborations to broaden the scientific and social impact of spatial thinking and computing.

Before joining UCSB, I spent 17 years as a [Professor of Geoinformatics at the University of Münster \(Germany\)](#), where I led **MUSIL**, an interdisciplinary research lab on semantic interoperability and established two undergraduate and three international graduate curricula in Geoinformatics or GIScience. I hold a doctorate from ETH Zurich in Surveying Engineering and was a post-doctoral researcher with the U.S. National Center for Geographic Information and Analysis in Maine (1989–1991) as well as with the Vienna University of Technology (1991–1996).

My career path through four countries and several interdisciplinary networks has motivated me to engage in [Linked Science](#) through [new forms of knowledge discovery and use](#) enabled by campus libraries. I am thrilled by how strongly the UCSB Library is supporting this vision. I am also generally excited about the many opportunities and perspectives the Center provides, resulting from the formidable achievements under its founder, **Mike Goodchild**, and its interim director, **Mary Hegarty**. **Karen Doehner** continues to provide the organizational backbone for the Center and former program director **Don Janelle**, who coordinated the vast engagement across so many fields, remains engaged in task-specific roles as Researcher Emeritus.

Thanks to the continued funding of our program by Executive Vice Chancellor **Gene Lucas**, the Center is now an ideal environment for research, education, and service activities implementing its expanded mission. Combining the cognitive and computational perspectives of Mary and Andrea with my own emphasis on an “outward-looking GIScience,” we enjoy building and reinforcing bridges to the sciences, humanities, and social sciences on campus and beyond.

Please feel welcome to interact with us at the Center in any ways you find rewarding, ranging from attendance to Center [events](#) to suggesting collaborations in short- and long-term research projects and/or visits. Our doors and ears are always open for you!

*Werner Kuhn  
Center for Spatial Studies*



Werner Kuhn



## CENTER FOR SPATIAL STUDIES

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

[spatial.ucsb.edu](http://spatial.ucsb.edu)

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### PAST EVENTS

The Center for Spatial Studies hosted a specialist meeting, [Advancing the Spatially Enabled Smart Campus](#), in December 2013, convening academics and industry representatives to share and develop visions, insights, and best practices for designing and creating future smart campuses. It combined “thinking big” (asking what will make campuses smarter) with “acting small” (focusing on specific organizational and technological measures).

The meeting outlined new frontiers for smart campus research and deployment. It formulated scenarios of future campuses, defined a prioritized list of services, and identified research needs to realize them. The unique challenges resulting from academic environments were identified and related to the radical transformation of how universities enable learning, discovery, and invention. A particular focus combined state-of-the-art smart campuses with spatially enabled knowledge infrastructures and sensor networks.

In keeping with the theme of smart campus, the [spatial@ucsb.local2014](#) Poster and Plenary Session focused on the creation of smart places through spatially enabled technologies. In this context, *smart* is interpreted as digital, informed, adaptive, efficient, cost effective, sustainable, and green; and *place* refers to a behavioral space, such as a home, vehicle, building, neighborhood, campus, city, or region.

The June 3, 2014 [Spatially Enabled Smart Places](#) Plenary Session featured a presentation by **Alexander Stepanov** (University of Massachusetts Amherst) who demonstrated how GIS technologies can tie diverse systems together for decision support to enable a smart campus. Following, **Jon Jablonski** (Director, Map & Imagery Laboratory, UCSB) explained how geospatial technologies can be linked to information and communication systems to provide a primary platform for searching and integrating data to support research and education.

Alexander Stepanov

Photo Credit: Andrea Ballatore



# TRANSITIONS

**D**onald G. [Janelle](#) retired from UCSB and his position as Researcher/Program Director for the Center for Spatial Studies on February 28, 2014. A reception was held at the Center in his honor on the afternoon of the February 26. On his retirement he was awarded the title of Researcher Emeritus, a rare honor in the UC system and very well deserved in Janelle's case.

Janelle came to UCSB in 1999 as director of the Center for Integrated Social Science (CSISS), which morphed into the Center for Spatial Studies in 2008. A geographer with life-long interests in transportation geography, human spatial behavior, time and space, and spatial demography, Janelle was on the faculty of the U.S. Air Force Academy for four years and spent 30 years on the faculty of the University of Western Ontario, where he served as Department Chair and Assistant Vice Provost for Faculty Affairs, and is a Professor Emeritus.

While at UCSB, Janelle has been the director of the day-to-day activities of CSISS and the Center for Spatial Studies. One of his most important contributions has been the development of the academic Minor in Spatial Studies. In paying tribute to Janelle on his retirement, Mike Goodchild described his contributions as follows:

His roles in these centers truly demonstrated Don's outstanding qualities. He is a meticulous organizer, pinning down the kinds of detail that most of us happily ignore but that leave meeting participants singing a center's praises. He is unfailingly polite and friendly, qualities to be treasured in a center program director. He is ecumenical, prepared to reach out enthusiastically to any discipline where he sees the potential to spread the word about spatial thinking; and yet incredibly loyal to geography.

For the full text of Goodchild's tribute and further information see <http://www.geog.ucsb.edu/events/departments-news/1378/mike-goodchild-pays-tribute-to-professor-and-researcher-emeritus-don-janelle/>.

**A**[ndrea Ballatore](#) joined the Center for Spatial Studies in February 2014 as research coordinator and a post-doctoral fellow, replacing Don Janelle in the management of the Center. Ballatore completed his Ph.D. (School of Computer Science and Informatics, University College Dublin) in 2013 in the area of geographic information science, geo-semantics, and volunteered geographic information (VGI), simultaneously lecturing at the Department of Computer Science at NUI Maynooth, Ireland. Prior to that, he worked as a software developer in Turin, and at a virtual reality firm 3dCadSoft in Dublin. He graduated from the University of Turin with a B.Sc. in computer science in 2003, and in 2006 he was awarded an M.Sc. in Virtual Reality and Multimedia from the same university.

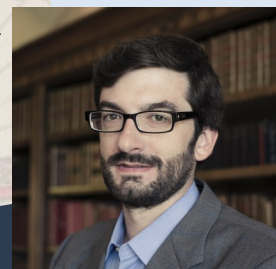
Ballatore's research focuses primarily on geographic information systems and science, crowdsourcing, and VGI, particularly from the perspective of semantics. He will be researching the representations of place in computational systems, drawing on interdisciplinary ideas from human geography, cognitive psychology, and computer science. In parallel, he is conducting research in media studies about the imaginary that surrounds digital media and cyber-utopias; he is also the webmaster and a journalist for the Italian magazine *Il Contesto*, and for the groundbreaking social communication project between convicts and broader society, *Dentro e Fuori*.



Don Janelle

## UPCOMING EVENTS, 2014

- Oct. 30–31 Spatiotemporal Thinking, Computing, and Applications IAB Meeting  
<http://stcenter.net/stc/>  
Upham Hotel, Santa Barbara
- Dec. 8–9 Spatial Search Specialist Meeting  
Upham Hotel, Santa Barbara  
*Applications deadline: Sept. 15*  
<http://spatial.ucsb.edu/specialist-meetings/2014/search>
- TBA Future Technologies for the Census Bureau Specialist Meeting  
Upham Hotel, Santa Barbara
- TBA ThinkSpatial Brownbag Series  
Linda Hill, Dept. of Geography, UCSB  
Eric Prieto, Dept. of French & Italian, UCSB  
Lisa Parks, Film & Media Studies, UCSB  
<http://spatial.ucsb.edu/thinkspatial>
- TBA Graduate Student Tech Lunch Series



Andrea Ballatore



*How many palm trees are in the courtyard beside Storke Tower?*

*What color are the door handles on the Thunderdome?*

These and other trivia questions were devised by Santa Barbara County 4-H members, ages 9–16, in a project to create a scavenger hunt on the UCSB campus while learning about GIS.

## 4-H GIS PROJECT:

### BUILDING A UCSB SCAVENGER HUNT

**4**-H is an international youth development organization that focuses on science, citizenship, and life skills. Members participate in projects in each of these areas that emphasize hands-on, experiential learning. In the United States, 4-H programs are implemented by land-grant universities—like the University of California—and the Cooperative Extension System, a nationwide, non-credit educational network.

(Source: <http://www.4-h.org/>)

Geography graduate students Kitty Currier (Center for Spatial Studies), Susan Meerdink, Marcela Suárez, and Haiyun Ye (Geography Department Outreach Committee) developed the scavenger hunt project to align with the 2013 national 4-H science theme, “Maps & Apps.” Following the 4-H “learn by doing” approach, the project was designed to teach participants how to read and navigate with a map, use a GPS receiver to collect geospatial data, and visualize their data using Google Earth. Over three consecutive Saturdays in February, participants met in Ellison Hall to learn skills and conduct activities that culminated in their final project: a scavenger hunt on the UCSB campus, complete with trivia questions, photographs, and a route map.

On Day 1 participants learned the basics of map-reading by following self-guided tours from the Interactive Campus Map (<http://map.geog.ucsb.edu/>). Day 2 was devoted to data collection: Participants selected and walked to different locations on campus, recorded their latitude–longitude coordinates, devised trivia questions, and shot descriptive photographs. Participants synthesized their data on Day 3, when they were tasked in pairs to design their own scavenger hunt. Working with a common set of data from Day 2, each pair developed a design that included a map created in Google Earth, trivia questions, and photographs, all assembled on two letter-sized pages.

“I was pretty surprised at how much some kids already knew about maps and also their passion in learning more about maps” said Ye, who, in addition to designing the project, helped lead the event. “I like seeing how kids help each other out in groups. I was impressed by how good their final scavenger hunt maps were. I was also glad to see how excited they were when looking at the products of their efforts.”

Ye, Suárez, Meerdink, and Currier became 4-H Volunteer Leaders in order to conduct the project. This brought back memories for Meerdink and Currier, who were, once members of 4-H clubs in Iowa and Colorado, respectively. Graduate students Erin Wetherley and Bonnie Bounds provided additional help in running the project.

Participants reported that they especially enjoyed walking around campus and using Google Earth. “It was fun to learn about the earth’s surface,” said one nine-year-old participant. Others mentioned teamwork and learning to use GPS receivers as highlights of their experience. Especially gratifying was feedback provided by the parent of one 16-year-old participant: “He’s now looking into GIS areas as a major for college. You hooked (at least) one!”

*Kitty Currier, Center for Spatial Studies*



Figure 1. Day 1, ready to go!  
Photo Credit: Erin Wetherley