SPATIAL SCIENCES INSTITUTE

John P. Wilson Director and Professor



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Dear GIST Students and Alumni:

As I write this, I am still energized and delighted by the many successes that the USC Spatial Sciences Institute garnered at last week's Esri International User Conference in San Diego. Congratulations to GIST students Paul Anderson, Wayne Chien, Doug Daniels, Mallory Graves, Melodie Grubbs, Brian Jopp, Kacey Pham, Rob Scobe, Carrie Steves, and Faith Webster and M.S. in GIST alumnus Luke Wenschhof for their paper and map presentations. We also had a wonderful time with faculty, alumni, students, prospective students, research funders, international colleagues, and other friends at the SSI reception. We hope to see even more of you at next year's reception, which is now a tradition on Tuesday night of the Esri UC.

At this year's USC Commencement in May, we also celebrated the accomplishments of 30 recipients of GIST Graduate Certificates and 60 recipients of GIST M.S. degrees during this academic year. Congratulations to all graduates, and especially to the M.S. in GIST GSAREH Thesis Prize winners: Andrew Isner, first place; Adrianna Valenti, second place; and Yonatan Rosen, third place. We also congratulate GIST M.S. student Charles E. Becker for his induction into the Phi Kappa Phi National Honor Society.

As our GIST alumni take their place in the world, we have multiplying reasons to be proud of the contributions they are making to human well-being. Here are just a few examples of alumni work:

Charles Franssen, data analyst for Symphony EYC, reports: "I'm helping a non-governmental organization to visualize changes in the rate of violence against civilians relative to their counter-insurgency initiatives in the Democratic Republic of Congo."

Corina Chung shares, "I got my dream job as the technical lead epidemiologist for research and mapping with the County of San Mateo Health System because of the GIST program's cartography and spatial analysis courses and the ability to show my thesis project to the interview committee."

Austin Davis reports that his Department of Defense team built a knowledge management system to display the output of high-fidelity flood and inundation models within the context of various climate change scenarios to understand future exposure to natural hazards at coastal installations in the Hampton Road, Virginia area located at the mouth of the Chesapeake Bay.

Tierney O'Dea Booker, founder of Public Science League, says, "I am organizing citizen scientists to gather vital and accurate information about the environment and their community,



and teaching high school students how to find and visualize public domain data, giving them a useful skill for the future in many fields."

This past year has been one of great growth and recognition for the Spatial Sciences Institute. We have expanded our online Graduate Programs in GIST suite to now include a GeoHealth track in the online USC Master of Public Health program, a graduate certificate in geospatial leadership, and a graduate certificate in geospatial intelligence. Our geospatial intelligence certificate is now accredited by the U.S. Geospatial Intelligence Foundation (USGIF) and is the basis for the USC Spatial Sciences Institute being one of the first institutions to be designated by the National Geospatial-Intelligence Agency (NGA) and U.S. Geological Survey (USGS) as a Center for Academic Excellence in Geospatial Sciences in June.

Our other academic programs are expanding and flourishing, as well. At the end of its second year, our undergraduate GeoDesign and Spatial Studies programs now number nearly 40 majors and minors, making this pair of programs two of the fastest growing undergraduate programs in the history of the USC Dornsife College of Letters, Arts and Sciences. Ben Banet, one of our outstanding GeoDesign majors and USC Trustee Scholar, says, "GeoDesign is the ideal major for me because it pulls three diverse interest of mine together in an interdisciplinary package. I am confident that with my GeoDesign major, I will have the skill sets that I can apply to almost any career or use to pursue my interests in the environment and natural resources."

For a second summer, Assistant Professor Darren Ruddell led an interdisciplinary team of GeoDesign and other majors from USC on a two-week field experience to the Netherlands, where they partnered with faculty from the Vrije University and Professor Carl Steinitz to deliver an intensive geodesign case study. The week-long workshop consisted of an international and multicultural delegation of 20 students from USC, Vrije University, Amsterdam, and the University of Dammam, Saudi Arabia. These students collaborated to leverage the geodesign framework and geospatial technologies to propose alternative design scenarios of the Ronde Hoep polder, a low density agricultural area in the Amstelland region of Amsterdam. The students applied rigor in critical thinking, spatial reasoning, and complex systems to produce innovative and practical solutions to the challenges of urban development in greater Amsterdam. Dr. Ruddell will be continuing as Director of Undergraduate Studies for another three-year term.

This fall we are launching two new collaborative, interdisciplinary degree programs: a new M.S. in Spatial Informatics with the Viterbi School of Engineering's Department of Computer Science and a new Ph.D. in Population, Health and Place with Dornsife College's Department of Sociology and the USC Keck School of Medicine's Department of Preventive Medicine.

In support of this growth in our academic programs, we welcome to our faculty Dr. Steven Fleming, who joins us following a distinguished career as a U.S. Army colonel and academy professor at the United States Military Academy, West Point, New York. Dr. Fleming will be

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providing leadership in our Graduate Certificate in Geospatial Intelligence and with opportunities related to our USGIF and NGA/USGS accreditations. We also welcome Drs. Wei Yang (University of Georgia: Geography) and Laura Loyola (USC: Human Ecology and Evolution) to the SSI faculty, and Drs. Noli Brazil (UC Berkeley: Demography) and Dr. Loraine Escobedo (USC: Epidemiology) as our inaugural post-doctoral research associates.

In addition, we congratulate Dr. Travis Longcore upon his joint tenure-track appointment as Assistant Professor of Architecture and Spatial Sciences and Dr. Karen Kemp upon her election to the board of directors of the University Consortium for Geographic Information Science (UCGIS). Dr. Kemp has returned to the UCGIS board 20 years after serving on the inaugural UCGIS board, as she is committed to working with this current generation of UCGIS leaders. This academic year, we are proud that Dr. Darren Ruddell will be serving as the president of the USC Dornsife Faculty Council, elected by his faculty colleagues to lead the body which represents the interests of all faculty within the USC Dornsife College of Letters, Arts and Sciences.

We thank Dr. Jennifer Swift for her tremendous contributions over the past three years as Director of Graduate Studies, and are pleased to announce that Dr. Daniel Warshawsky will serve as the Director of Graduate Studies for the next three years.

Over the past five years, the Spatial Sciences Institute has become a robust entity with everincreasing impact and potential. I'm grateful to our Institute associate director, Susan Kamei, and the remainder of our staff who work tirelessly to support and foster all that we do.

I hope you will continue to feel you can contact me at <u>jpwilson@usc.edu</u> or Susan Kamei at <u>kamei@usc.edu</u> at any time with any questions, ideas, concerns or requests, and that perhaps we will see you at this year's Homecoming tailgate on Saturday, 7th November.

With kind regards,

John P. Wilson

Professor and Director Spatial Sciences Institute

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