



## Association of American Geographers Spatial Analysis and Modeling (SAM) Specialty Group Newsletter

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### FROM THE CHAIR

Greetings from Florida State! I hope this column finds SAM members well as they finish up their spring terms.

First, I would like to thank the SAM membership for electing me as the new chair at the 2006 business meeting in Chicago. I will do my best to uphold the high standards of service set by my predecessors. Along those lines, thanks to David Wong for his service as SAM chair for the last three years. David has done a fine job for SAM, and has left our specialty group in great shape. David has been very helpful as we have transitioned the web page from GMU to FSU (the new SAM web page will be located at <http://www.fsu.edu/~geog/sam>). SAM also welcomes Darla Munroe of Ohio State University, who was elected to the vacant SAM board position.



Second, due to concerns about spam, and high e-mail volume, I will strictly use the AAG's communication tools to disseminate information electronically about SAM. You can check to be sure you are receiving SAM postings by logging into your AAG membership account through the AAG web site and viewing the preferences associated with your 'Communities'.

Third, I wish to revisit one of my 'campaign promises' regarding the idea of expanding our student paper competitions to include session(s) focused on undergraduate research. Planning is already under way for an AAG 2007 roll-out of this new competition, which I hope will dovetail nicely with our successful graduate student and emerging scholar competitions. If you have any ideas or suggestions regarding an undergraduate paper competition session, or wish to volunteer with helping me to organize such an activity, please contact me ([mhorner@fsu.edu](mailto:mhorner@fsu.edu)).

Finally, I wish you all a productive summer and encourage you to begin planning SAM sessions for AAG 2007 in San Francisco. Please forward me your calls for papers and we will post them to the SAM web page immediately.

Mark W. Horner  
Assistant Professor  
Department of Geography  
Florida State University

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## NOTEWORTHY

Mark W. Horner of The Florida State University received a grant of \$64,760 from the NSF Geography and Regional Science Program and the NSF Decision, Management and Risk Sciences Program for a study entitled "Rethinking Representation in Discrete Spatial Modeling: Theoretical Developments and a Computational Study of Hurricane Disaster Relief". The project will investigate strategies for mitigating error and uncertainty in spatial models used to facilitate efficient hurricane disaster relief goods provision.

Darla Munroe and Ningchuan Xiao, Assistant Professors of Geography, and Catherine Calder and Tao Shi, Assistant Professors of Statistics, all from Ohio State University, were awarded a three-year NASA Land-Cover/Land-Use Change grant entitled, "A Comprehensive Statistical Analysis System to Associate Local Land-Cover/Land-Use Change and Regional Aerosol Composition and Concentration".

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## NEWS

### SAM Specialty Group – Chicago AAG

At the 2006 Annual Meeting of the AAG held in Chicago, Illinois:

- SAM sponsored or cosponsored a total of 38 sessions;
- SAM sponsored a plenary lecture by Kingsley Haynes of George Mason University. Alan Murray organized a reception sponsored by Geographical Analysis after the lecture;
- SAM cosponsored a panel session on current trends in spatial statistics in geography with the GISS Specialty Group. The featured speaker was Keith Ord and panelists included Luc Anselin and Daniel Griffith; and
- Mark Horner was elected SAM Chair and Darla Munroe was elected to the SAM Board at the SAM Specialty Group Business Meeting.

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## CALLS

**Winemiller 2006 Conference on Methodological Developments of Statistics in the Social Sciences** sponsored by Social Science Statistics Center and University of Missouri, Department of Statistics.

The conference is to be hosted by the University of Missouri and is to be held from Wednesday, October 11<sup>th</sup> to Saturday, October 14<sup>th</sup>, 2006 in Columbia, Missouri USA. All the required information, forms and addresses for submission can be found at <http://www.socialsciencestatistics.com>.

**North American Regional Science Association International Conference (RSAI)** sponsored by the North American Regional Science Council (NARSC) and the Canadian Regional Science Association (CRSA). The conference will be held at the Fairmont Royal York in Toronto Canada from Thursday, November 16<sup>th</sup> to Saturday, November 18<sup>th</sup>, 2006. You can learn more about the conference, submit an abstract and register for the conference at the NARSC Website at: <http://www.narsc.org>.

The **Australian Consortium for Social and Political Research, Incorporated (ACSPRI)** is hosting a conference to be held at the University of Sydney in Sydney Australia from Monday, December 11<sup>th</sup> to December, 2006 in order to provide a national forum focusing on current issues in social science methodology. Conference invited speakers include Professor Merrill Shanks, University of California, Berkeley and Professor Michael Greenacre, Universitat Pompeu Fabra, Barcelona, Spain. Direct enquiries to [ken.reed@deakin.edu.au](mailto:ken.reed@deakin.edu.au).

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## EMPLOYMENT

**COLUMBIA, MISSOURI.** Two **PhD Graduate Assistants** for the fall of 2006. One PhD graduate assistant will work to improve LANDIS modeling techniques and develop model applications. The candidate is expected to develop new memory management strategies to allow the model to operate at faster speeds and greater spatial dimensions (e.g., 10,000 by 10,000 pixels). The candidate will develop technical solutions for synchronizing multiple ecological processes at various temporal resolutions (succession, fire, wind, insect/disease and harvesting). The candidate is expected to develop applications that use LANDIS to assess the short to long term effects of forest management plans and evaluate various fuel treatment scenarios at landscape scales. The qualified candidate should have a background in ecology, forestry, geography, computer science, or closely related fields. Strong background in C++ or C-sharp programming and

GIS are necessary. The second PhD graduate assistant is expected to improve the ecological and biological realism of LANDIS succession and dispersal components while maintaining computational efficiency and the current model simplicity. The candidate will develop new algorithms to simulate forest ecosystems in which tree species with similar life history traits co-exist. The succession module should also account for density-based competition, self-thinning and age-based mortality. The candidate will further develop the LANDIS seed dispersal module to incorporate the most recent scientific information and make the module suitable for a wide range of cell sizes (e.g., 10m to 500m). The candidate will develop modeling applications to address issues such as oak decline, interaction of fuel treatments and succession and/or harvesting. A qualified candidate should have at least one degree in ecology, forestry, biology, or closely related fields. Background in ecological modeling, computer programming, GIS and statistics are desirable. Both PhD graduate assistants are expected to collaborate with a team of scientists and group members, interact with forest managers, present at national conferences and write scientific findings for peer-reviewed journal papers. The PhD graduate assistant positions are available in the fall semester of 2006. The stipend for each PhD graduate assistant is \$17,000/year for three years (50% graduate research assistantship). This stipend covers in-state and out of-state tuition waivers. APPLICATION PROCEDURES for Graduate Students: Applications will be accepted until position is filled with initial review beginning no later than April 1, 2006. Graduate application materials and information about the School of Natural Resources and the University of Missouri can be accessed at <http://www.snr.missouri.edu/forestry/graduate/index.html>. Alternatively, application materials may be obtained by writing to: Graduate Programs Director, Department of Forestry, School of Natural Resources, 203 Anheuser-Busch Hall, University of Missouri-Columbia, Columbia, MO 65211 U.S.A.

**COLUMBIA, MISSOURI. Postdoctoral Research Associate.** The postdoctoral research associate will provide technical support and coordination in helping forest managers apply LANDIS technology to national and state forests. The candidate will use a collaborative, iterative approach to develop partnerships between scientists, land managers, resource experts to develop sound and defensible

strategies for forest, fuels and fire management in the study landscapes. The candidate will develop parameters and data sets for the study landscapes in LANDIS, evaluate the current forest management plans and develop potential strategies that will achieve desired future conditions for the study landscapes. The candidate will participate in the development and application of a computer support system to assist forest management in decision-making (DSS). This two-year post-doctoral position will require the candidate to work in close coordination with scientists of the North Central Research Station in Grand Rapids, MN, Columbia MO and elsewhere. There are strong modeling, outreach and workshop components required for this candidate. A Ph.D. in landscape ecology, forest ecology, conservation biology, or related disciplines is required. Strong technical background in GIS technology (e.g. ArcGIS) and familiarity with forest landscape modeling are necessary. The candidate needs to have good organizational and project management skills. The candidate is also expected to present at national conferences, write peer-reviewed journal papers and assist with grant proposals. Salary commensurate with experience. APPLICATIONS PROCEDURES for Postdoctoral Research Associate: Applications will be accepted until position is filled with initial review beginning no later than April 1, 2006. Submit a letter (email is satisfactory) describing your qualifications, a resume, copies of your graduate and undergraduate college transcripts and the names, phone numbers and e-mail addresses of three professional references to Dr. Hong S. He, School of Natural Resources, University of Missouri-Columbia, 203M ABNR Building, Columbia, MO 65203, Phone: 573-882-7717, Fax: 573-882-1992, [HeH@missouri.edu](mailto:HeH@missouri.edu).

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## WORKSHOPS

**The Inter-University Consortium for Political and Social Research (ICPSR) Summer Program in Quantitative Methods of Social Research** offers numerous four-week as well as 5-day and 3-day workshops on quantitative methods of interest to geographers and regional scientists. Further details are available at <http://www.icpsr.umich.edu/training/summer/index.html>.

**Hierarchical Linear Modeling (HLM) Workshop** – September 7<sup>th</sup> to 9<sup>th</sup>, 2006 – Chicago, IL. This is a 3-day workshop offered by Steve Raudenbush and

Tony Bryk. More information is available at <http://www.ssicentral.com/workshops/hlmfall.html>.

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## INFORMATION

### Mission Statement

Our mission is to foster and maintain interaction, cooperation and community among individuals interested in the analysis of geo-referenced data, modeling of spatiotemporal processes and the use of analytical and computational techniques in solving geographic problems. The specialty group promotes the scientific study of physical, environmental and socioeconomic geography and the development, use and teaching of analytical cartography, geographic information systems (GIS), remote sensing, spatial statistical, mathematical and computational techniques for spatial analysis.

### Membership Dues

Regular: \$3  
Student: \$1

### Submissions

This newsletter reaches a large number of readers and is therefore an excellent venue for getting the word out on community news, departmental happenings, research findings, media appearances and the like. It is also a good place to post calls for proposals, awards, grants, fellowships, jobs and professional development opportunities. We also invite you to submit commentaries or features of broad interest to specialty group members. The newsletter relies on volunteers to submit articles, so please take a moment to send along relevant items. Please send your submissions to:

Ed Zolnik  
SAM Newsletter Editor  
Department of Geography  
George Mason University

at [ezolnik@gmu.edu](mailto:ezolnik@gmu.edu) in text or rich text format. Photos or other images, with captions in an attached text file, are also welcome (GIF, JPG or PNG).

## Officers

### Chair

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### Student Representative

#### **Scott Bridwell**

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