Caucus of Academic Reps (CAR) Weekly Digest, February 6, 2015

http://www.amstat.org/education/aboutthecaucus.cfm

Table of Contents

Positions:

1. Computational Sciences Initiative, University of Nebraska-Lincoln: tenure track assistant professor
2. Lawrence Berkeley National Laboratory: Postdoctoral Position - Statistical Methods for Climate Science
3. Department of Biostatistics and Bioinformatics, Emory University: Postdoctoral position
4. Department of Biostatistics, Indiana University: Postdoctoral Fellow
5. Department of Forestry and Environmental Resources, College of Natural Resources, North Carolina State University: Assistant Professor of Biometry and Quantitative Ecology
6. Department of Statistics, Iowa State University: Postdoctoral research position

Funding:

1. NSF Cyber-Innovation for Sustainability Science and Engineering
2. NSF Basic Research to Enable Agricultural Development (BREAD)
3. NIJ Research and Evaluation on White-Collar Crime and Public Corruption
4. NIJ Research and Evaluation on Firearms Violence Reduction

Other opportunities:

1. Salary Survey Results
2. The latest News from The World of Statistics
3. ASA/NSF/BLS Fellowship Program
4. ASA-related opportunities at the AAAS Annual Meeting
5. Bayesian Disease Mapping Courses at MUSC
6. Applications for 2015 Natrella Scholarships Now Being Accepted
7. Neuroimaging workshop at the University of Michigan
8. Statistical methods for neuroimaging data analysis
9. The 4th Workshop on Biostatistics and Bioinformatics
10. SAMSI Undergraduate Modeling Workshop

(content begins on next page)
Tenure-track assistant professor (9-month) in Bayes (and some non-Bayes) spatial and spatio-temporal analysis with applications in agriculture and natural resources, University of Nebraska-Lincoln, start August 2015.

The primary responsibilities of this position are to lead a nationally-recognized research and teaching program in the methodological development of Bayes spatial and spatio-temporal modeling and analysis. Expected to develop methodology to make better use of available spatial and spatio-temporal data, e.g., generated through remote sensing, to provide improved inference and prediction in the general area of agriculture and natural resources. Collaborate with existing subject matter research groups already at UNL and more generally in the Nebraska agricultural and natural resources research community. Secure grants, disseminate research findings in high quality publications and presentations at regional, national, and international meetings. The usual teaching load is three courses per year, or equivalent, as assigned by the department chair. Opportunities also exist to contribute to the teaching mission through graduate student advising, instructional leadership, and similar roles. Expected to average 0.50 FTE as determined by the CASNR Academic Appointment Guidelines. Specific teaching assignments may change over time as the needs of the academic unit evolve. Expectations for this position include supporting recruitment efforts, science literacy, and engagement in the scholarship of teaching and learning. Accept committee assignments, reporting responsibilities, and other special ad hoc assignments as requested at the administrative unit, college/division, institute, and university level.

Minimal qualifications: PhD in statistics, applied mathematics, or closely related quantitative field.

Experience in Bayes analysis of spatial and spatio-temporal data as demonstrated by refereed papers, presentations, or other completed projects, e.g., PhD thesis.

Preferred Qualifications: Experience collaborating with subject matter researchers in the general area of agricultural and natural resources. Communication skills, written, verbal and otherwise, at a level sufficient to interact easily with a broad range of researchers at UNL, with the academic world more generally, and with the broader Nebraska agricultural and resources community.

To apply for this position, go to http://employment.unl.edu (requisition # F_150001). Attach letter of interest, CV, research and teaching statements (each one page). Applicants must arrange for three reference letters to be sent to sherceg2@unl.edu. Application review begins 2/28/2015.
The University of Nebraska-Lincoln is committed to a pluralistic campus community through affirmative action, equal opportunity, work-life balance, and dual careers.

(2) Lawrence Berkeley National Laboratory: Postdoctoral Position - Statistical Methods for Climate Science

The CASCADE project at Lawrence Berkeley National Laboratory (LBNL) is looking for a postdoctoral researcher to develop and apply statistical methods to the study of extreme weather events in a changing climate. The postdoc will work with statisticians at the University of California, Berkeley and climate scientists from LBNL as part of the interdisciplinary Calibrated and Systematic Characterization, Attribution, and Detection of Extremes (CASCADE) project.

We seek a statistician with expertise and interest in statistical methods relevant for climate/atmospheric/environmental science. The position offers an excellent environment for working with a highly skilled interdisciplinary team in the Climate Sciences Department and Computational Research Division at LBNL and the Statistics Department at UC Berkeley. The expertise of team members include Bayesian and spatial statistics, climate analysis, climate change detection and attribution, climate modeling and dynamical systems, and high-performance computing. The successful candidate will focus on analysis of a variety of types of extremes including droughts, downpours, heat waves, atmospheric rivers, tropical cyclones, and hurricanes. Understanding such events is an area of intensive current research in the climate science community and of interest to the public at large.

The goal of this position is to develop and use statistical methods to detect and characterize extremes with an emphasis on quantifying the changing risk of these phenomena from anthropogenic influences. The position entails using a combination of statistical methods such as spatial and spatio-temporal statistics, extreme value analysis, the bootstrap, and Bayesian methods to estimate the probabilities of climate events under different scenarios. A key focus will be to quantify the uncertainty in the probabilities in light of a wide variety of sources of uncertainty, including sampling uncertainty and model error. The researcher will evaluate, extend and implement existing methods and develop new statistical frameworks and methods. The researcher will work with climate scientists to apply the methods to cutting-edge datasets of observations and model output, including models and data products developed and run at LBNL.

More details and application information available at https://lbl.taleo.net/careersection/2/jobdetail.ftl?lang=en&job=80496

Informal inquiries can be made to Chris Paciorek at paciorek@stat.berkeley.edu.
(3) Department of Biostatistics and Bioinformatics, Emory University: Postdoctoral position

The Department of Biostatistics and Bioinformatics at Emory University invites applications for one post-doctoral position. The position is open until filled and the appointment is for two years, with a possible third year. Under the supervision of Dr. Qi Long, the successful candidate will have opportunities to work on methodology projects in causal inference (including personalized medicine), missing data, and analysis of big data, with applications to national registry and electronic health record data and to omics data including gene expression data, SNP data, and metabolomics data etc. The successful candidate will also have opportunities to conduct collaborative research in the areas of cancer, diabetes, or cardiovascular diseases. Publications in peer-reviewed journals and presentations at scientific meetings are expected and encouraged.

Position Qualifications: Ph.D. degree in biostatistics, statistics, or related quantitative fields; strong methodology training in statistics/biostatistics; interest in statistical methodology research; strong programming skills in R/Matlab and possibly one lower level computer language such as C or Fortran; excellent written and oral communication skills. Expertise and experiences in one or more of the following areas are desirable: causal inference, missing data, and analysis of big data.

Emory is an Equal Opportunity/ Affirmative Action employer. Applications from historically underrepresented group members, veterans, and persons with disabilities are encouraged to apply.

Applicants should email a brief statement of research interest, CV, and contact information (email and phone) for three references to Dr. Qi Long, qlong@emory.edu (Subject line: Long postdoc, 2015).

(4) Department of Biostatistics, Indiana University: Postdoctoral Fellow

Position Description: Department of Biostatistics, Indiana University School of Medicine invites applications for an open post-doctoral fellow position. This position is created with funding support from the Regenstrief Institute, a national leader in electronic medical record systems, to explore new statistical methodological issues concerning big data analysis, with a special emphasis on the analysis of electronic health records data. The fellow will work under the joint supervision of Drs. Wanzhu Tu and Xiaochun Li, and will be supported by a team of MS-level biostatisticians and data managers. Research topics will be determined based on the needs of research team and the mutual interests of the fellow and the advisors. Possible topics include, but are not limited to, causal inference, missing data, and prediction models. Publications in peer-reviewed journals are expected. The fellow will have opportunities to participate in research projects in collaboration with clinical investigators. The initial appointment will be for a two-year period, with the possibility of extension.

Position Qualifications: Ph.D. degree in biostatistics, statistics, or related quantitative fields; interest and track record in statistical methodology research; strong programming skills in R and SAS; excellent written and oral communication skills. Indiana University
is an Equal Opportunity/ Affirmative Action employer. Applications from historically underrepresented group members, veterans, and persons with disabilities are encouraged.

Salary Range: Salary will be determined based on years of experience following the NIH National Research Service Award guidelines.

Benefits: This position will be eligible for full time benefits offered to all full time employees at Indiana University. These benefits include health, dental, life and long-term disability insurance, vacation and sick pay, and tuition assistance. Department funds will be made available for professional travel and startup costs (computer, software, books, etc.) within the NIH guidelines.

Application Address: Applicants should arrange to send a letter of interest (including a summary of research interests), curriculum vitae, relevant transcripts, up to two publications or working papers, and the contact information for three references, to Cynthia Warburton at cmwarbur@iu.edu

(5) Department of Forestry and Environmental Resources, College of Natural Resources, North Carolina State University: Assistant Professor of Biometry and Quantitative Ecology

Position Description: We seek a tenure-track Assistant Professor (45% Research, 45% Teaching, and 10% Service) in biometry and quantitative ecology. The position is a 9-month appointment. The successful candidate will be expected to bring traditional forest biometry skills and new quantitative modeling skills to our interdisciplinary teams in the research areas of forest/ecosystem management, ecosystem modeling, and/or forest/environmental economics. We seek candidates with the potential to develop a high-quality, individual, extramurally-funded research program and to participate in interdisciplinary research and instructional activities. A more complete description is attached.

To Apply: Each applicant must apply electronically at http://jobs.ncsu.edu/postings/48040. Review of applications will begin March 13 and continue until a suitable candidate is selected. Applicants should submit a curriculum vitae, a cover letter describing the applicant's teaching experience and philosophy and research interests, an unofficial transcript of graduate courses, and the names and contact information for three references.

For more information, contact: Barry Goldfarb, Search Committee Chair, 919-515-4471, bgg@ncsu.edu or S. Tom Gower, Department Head, 919-515-3873, stgower@ncsu.edu. NC State University is an equal opportunity and affirmative action employer.
The Department of Statistics at Iowa State University invites applications for a postdoctoral research position. The successful candidate will work with faculty and graduate students to advance plant science research by the development, implementation, and application of statistical methods. Relevant topics include genomics, hierarchical modeling, functional data analysis, statistical learning, and prediction from massive training datasets containing spatially and temporally correlated observations. Position qualifications are a PhD in statistics, biostatistics, or a related field; excellent training in statistical methods; and strong programming and communication skills. The position is open until filled, with initial appointment for two years and a third year possible. To apply, send a CV, a statement of interest, and contact information (e-mail and phone number) for two references to Dan Nettleton at dnett@iastate.edu.

Iowa State University is an Equal Opportunity/Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to race, color, age, religion, sex, sexual orientation, gender identity, genetic information, national origin, marital status, disability, or protected veteran status, and will not be discriminated against.

Funding

(1) NSF Cyber-Innovation for Sustainability Science and Engineering

Cyber-Innovation for Sustainability Science and Engineering (CyberSEES)

Full Proposal Deadline Date: February 24, 2015
Program Guidelines: NSF 15-524

The Cyber-Innovation for Sustainability Science and Engineering (CyberSEES) program aims to advance interdisciplinary research in which the science and engineering of sustainability are enabled by new advances in computing, and in which computational innovation is grounded in the context of sustainability problems. The CyberSEES program is one component of the National Science Foundation's Science, Engineering, and Education for Sustainability (SEES) activities, a Foundation-wide ...

(2) NSF Basic Research to Enable Agricultural Development (BREAD)

Basic Research to Enable Agricultural Development (BREAD)

Full Proposal Deadline(s) (due by 5 p.m. proposer’s local time): April 27, 2015

Available Formats:

(3) NIJ Research and Evaluation on White-Collar Crime and Public Corruption

New NIJ Solicitation: 01/26/2015

NIJ is seeking proposals for social and behavioral science research and program evaluations that inform efforts to detect, investigate, prosecute, and otherwise combat and prevent white-collar crime and public corruption. NIJ is particularly interested in proposals for research related to public corruption.

The application deadline for this funding opportunity is April 22.

- Download the solicitation.
- View all current funding opportunities from NIJ.

(4) NIJ Research and Evaluation on Firearms Violence Reduction

New Solicitation: 01/28/2015

NIJ seeks proposals for research and evaluation of programs, practices, and policies designed to reduce firearms violence. This solicitation aims to strengthen our knowledge base and improve public safety by supporting projects with a high potential for accurately measuring the effects of efforts to reduce firearms violence. Such firearms violence reduction efforts may take any of a variety of forms, including but not limited to, those that emphasize law enforcement, prosecution, prevention, public health, or public policy.

The deadline for applications under this funding opportunity is April 27. Start today.

- Download the solicitation.
- View all current funding opportunities from NIJ.
(1) Salary Survey Results
The results of the annual survey of academic salaries in statistics and biostatistics will be available in the March Amstat News. If you need or want to see them before that, drop a note to ASA Executive Director Ron Wasserstein (ron@amstat.org), and he’ll email you a preliminary copy of the article.

(2) The latest News from The World of Statistics

(3) ASA/NSF/BLS Fellowship Program
Are you interested in expanding your research to new and interesting domains? Are you doing research that could benefit the Bureau of Labor Statistics? If so, consider applying for our Senior Research Fellow Program!

The program’s main objective is to facilitate collaboration between academic scholars and government researchers in fields such as statistics, mathematics, economics, survey methodology, behavioral science, and other related fields. Research Fellows have unique opportunities to expand their work to address some of the difficult methodological problems and analytic challenges BLS faces. Fellows are funded to conduct research at the BLS headquarters in Washington, DC, use BLS data and facilities, and work closely with BLS staff.

There is more information available on our website at http://www.bls.gov/osmr/asa_nsf_bls_fellowship_info.htm or in our brochure at http://www.amstat.org/careers/pdfs/ASANSFBLSFellowshipProgram.pdf. Proposals are due February 16, 2015.

Fellowship applicants should have a recognized research record and considerable expertise in their area of proposed research. Applicants must submit a detailed research proposal, which will be evaluated on the applicability of the research to BLS programs, the value of the proposed research to science, and the quality of the applicant's research record. Applicants do not need to be U.S. Citizens, but they must be employed
by a U.S. institution of higher learning or a non-profit institution (IRS code 501(c)(3) entity) and are expected to retain their position for the duration of the fellowship. U.S. Government employees are not eligible.

We encourage interested researchers to contact us before submitting a proposal, so we can provide assistance in tailoring the proposed topic to best utilize your skills and interests in addressing BLS issues.

The Bureau of Labor Statistics (BLS) coordinates our Senior Research Fellow Program in cooperation with the American Statistical Association (http://www.amstat.org/) (ASA), under a grant from the National Science Foundation (http://www.nsf.gov/) (NSF).

Please contact Jeffrey Gonzalez (Gonzalez.Jeffrey@bls.gov) if you have any questions.

(4) ASA-related opportunities at the AAAS Annual Meeting

For those of you attending the AAAS annual meeting in San Jose next month, please consider attending a reception with Professor John Ioannidis of Stanford University on February 13 at 5:30 pm. Professor Ioannidis will explain why now, more than ever, we need a public seeking and understanding evidence. For details and to RSVP (which is required), go to http://sasusa.wpengine.com/ask-for-evidence/.

Early career researchers and grad students are also invited to attend a two-hour media workshop preceding the reception about communicating science to the public: http://sasusa.wpengine.com/voys/.

Both are sponsored by Sense about Science, with whom the American Statistical Association has partnered on www.stats.org, a non-profit, non-partisan project to analyze and explain numbers and statistics in the news and to promote statistical literacy in the media and society.

(5) Bayesian Disease Mapping Courses at MUSC

A few places remain, but places are filling fast, for

Introduction to Bayesian Disease Mapping (IBDM)
Bayesian Disease Mapping with INLA (BDMI)
Advanced Bayesian Disease Mapping (ABDM)

**Offering of Introductory and Advanced BDM courses and BDM with INLA in Medical University of South Carolina, Charleston, SC, USA**

*Course content*
These courses are designed to provide a comprehensive introduction to the area of
Bayesian disease mapping in applications to Public Health and Epidemiology: The IBDM course will run on March 9th - 10th, the BDMI course will run on March 11th and the ABDM course will run on March 12th - 13th 2015.

The BDMI course provides a hands-on introduction to spatial health modeling with INLA, while more advanced INLA examples are included in the ABDM course. Both spatial and spatio-temporal analyses using WinBUGS and INLA will be considered. Examples will range over childhood asthma data from Georgia, influenza in South Carolina, foot-and-mouth disease in the UK and Ohio respiratory cancer.

*The speaker*
Professor Andrew B. Lawson (Department of Public Health Sciences, College of Medicine, Medical University of South Carolina) has published a number of books focused on disease mapping and spatial epidemiology. In particular, the 2nd Edition of the volume *Bayesian Disease Mapping* will be a course text for the IBDM course, and is included in the IBDM course fee.

*REGISTRATION INFORMATION*
Detailed information and registration form is available from http://academicdepartments.musc.edu/phs/docs/march2015.pdf

Phone registration to:
Department of Public Health Sciences
(843) 876-1578

(6) Applications for 2015 Natrella Scholarships Now Being Accepted

Make plans now to apply for the Mary G. and Joseph Natrella Scholarship by the application deadline of April 17, 2015. The scholarship will support participation of two students at the Quality and Productivity Research Conference to be held in Raleigh, NC, June 10-12, 2015.

Scholarship recipients receive a $3500 grant, a $500 travel stipend, complimentary registration for the conference and the pre-conference short course, and an opportunity to present their research work at the conference. The scholarship is presented annually by the ASA Quality and Productivity Section to honor the distinguished career of Mary G. Natrella, author of the well-known NBS/NIST handbook, Experimental Statistics, along with her husband Joseph.

Application is open to full-time students who are currently pursuing a master's or doctoral degree in an accredited college or university, and who have a demonstrated interest in applications of statistics to quality and productivity.
Further information about the scholarship can be found on the Q&P Section web site. Alternatively, you can contact a member of the Scholarship Committee at natrella.scholarship.committee@gmail.com.


**(7) Neuroimaging workshop at the University of Michigan**

The Section on Statistics in Imaging and the Department of Biostatistics, University of Michigan, are co-sponsoring the inaugural Workshop on Statistics in Imaging to be held on the campus of the University of Michigan, Ann Arbor on May 28 and 29, 2015. This two-day workshop will include 8 invited sessions as well as a poster session and reception Thursday evening. The goal of this workshop is to bring together approximately 75-90 researchers and students in statistical imaging to exchange ideas on the current developments in statistical theory, methods, and applications in imaging research in a relaxing and stimulating atmosphere. There will be a student paper competition. Of the eight invited session, one will be a student session consisting of three speakers who win the student paper competition. There will be a poster session and reception on the evening of the 28th. The workshop is sponsored by the ASA Section on Statistics in Imaging and the Department of Biostatistics at the University of Michigan. This is the inaugural workshop organized by the ASA Section on Statistics in Imaging. Future workshops will be rotating at different locations.

Workshop details, registration and housing information can be found on the workshop website: [http://www.sph.umich.edu/biostat/imaging_workshop.html](http://www.sph.umich.edu/biostat/imaging_workshop.html)

Contact: Timothy Johnson, Professor, Univ of Michigan

**(8) Statistical methods for neuroimaging data analysis**

SAMSI, Research Triangle Park, NC, beginning Mondays 4:30 pm, August 24, 2015

Course Description: With modern imaging techniques, massive imaging data can be observed over both time and space. Such imaging techniques include functional magnetic resonance imaging (fMRI), electroencephalography (EEG), diffusion tensor imaging (DTI), positron emission tomography (PET), and single photon emission-computed tomography (SPECT) among many other imaging techniques. The subject of neuroimaging analysis has exploded from simple algebraic operations on imaging data to advanced statistical and mathematical methods on imaging data. This course on statistical methods for NDA is designed to provide students the detailed mathematical and statistical techniques underlying imaging techniques (e.g., imaging cluster) used in the field of medical image analysis, with an emphasis on computer implementation. This course is designed for researchers and students who wish to analyze and model
medical image data quantitatively. The course material is applicable to a wide variety of medical and biological imaging problems. The topics cover basic statistical principle, functional magnetic resonance imaging, diffusion tensor imaging, functional connectivity, image feature, image segmentation, image registration, shape representation, population statistics, imaging genetics, predictive models, data mining, and big data integration. This course will cover the mathematical and statistical fundamentals and implementation of these methods. For instance, participants will learn basics that will help them to understand the methods and tools built into packages like SPM, FSL, Slicers, and others in order to optimally use them. For additional information about this course, send e-mail to CCNS@samsi.info

Instructor: Hongtu Zhu, UNC

(9) The 4th Workshop on Biostatistics and Bioinformatics

May 8-10, 2015, Georgia State University, Atlanta, GA

Biostatistics and Bioinformatics have been playing key and important roles in statistics and other scientific research fields in recent years. The goal of this workshop is to stimulate research and to foster the interaction of researchers in Biostatistics & Bioinformatics research areas. The workshop will provide the opportunity for faculty and graduate students to meet the top researchers, identify important directions for future research, facilitate research collaboration. The keynote speaker is Professor Xiao-Li Meng, Harvard University. There will be invited talks by distinguished researchers, and a poster session by young researchers and graduate students.

For more information, please visit the website:
http://www2.gsu.edu/~matyiz/2015workshop/

Registration is now open. Please register for the workshop as soon as possible. A poster session is open for junior researchers and graduate students. Please register and submit the abstract on the website. The previous workshops were successfully held in Atlanta. Please check the website.

(10) SAMSI Undergraduate Modeling Workshop

May 17-22, 2015

Location: North Carolina State University, Raleigh, NC Workshop Organizer: Sujit Ghosh, Deputy Director of SAMSI

Applications received by Sunday March 15, 2015, will receive full consideration.

For further information and to apply visit:
While students from universities not in the U.S. are welcome to apply, please be aware that priority is given to students who are enrolled at U.S. schools.

Send questions to ugworkshop@samsi.info