KUDOS

- Congratulations to Sam Noreen who was selected to receive a Laney Graduate School Dean’s Teaching Fellowship for 2016-2017. Sam was selected in a very competitive process and will be teaching for BIOS next year. Congratulations Sam! We know you’ll be a great addition to the teaching team next year!

INTERESTING READS

- From the ASPPH, a headline that shows that press release writers don’t quite understand the difference between association and causation:
  - “Harvard: Male Pattern Baldness May Increase Risk of Colon Cancer”
  - Sigh.
“Learn as much by writing as by reading.”
-Lord Acton

“Either write something worth reading or do something worth writing.”
-Benjamin Franklin
UPCOMING DEPARTMENT MEETINGS

• None this week due to interview visit.

NIH NEWS

• NIH now requires “rigor and reproducibility” plans in proposals. Here are three articles to help:
  1. Updates in addressing rigor in NIH applications
     http://nexus.od.nih.gov/all/2016/01/11/updates-on-addressing-rigor/
  2. Scientific rigor in grant applications
     http://nexus.od.nih.gov/all/2016/01/28/scientific-rigor-in-nih-grant-applications/
  3. Related: Scientific premise in NIH grant proposals
     http://nexus.od.nih.gov/all/2016/01/28/scientific-premise-in-nih-grant-applications/

YOUNG STATISTICIANS WRITING COMPETITION

• Entries are now open for the 2016 Young Statisticians Writing Competition

• Can you tell a statistical story in an entertaining and thought-provoking way? If you think you’ve got what it takes, and are within the first 10 years of your statistical career, we want to hear from you. Each year, Significance and the Young Statisticians Section of the Royal Statistical Society host a competition to promote and encourage top-class writing about statistics. This year's competition is now under way.

• The rules are simple. Send us your best article, of between 1,500 and 2,500 words, on the subject of your choice. The article could be on work that you have done, or it could explain the work of others. The winning article will be published in the October 2016 edition of Significance and on significancemagazine.com. Runners-up will also be published online.
**NSF NEWS**

- **Innovations at the Nexus of Food, Energy, and Water Systems (INFEWS)** is a partnership between NSF and the United States Department of Agriculture’s National Institute of Food and Agriculture to support research that aims to understand, design, and model the interconnected food, energy, and water infrastructure through an interdisciplinary research effort that addresses the natural, social, and human-built factors involved. The need for this research is increasingly urgent, as growing demand for food, changes in land use, and increasing geographic and seasonal variability in precipitation patterns are placing an ever-increasing stress on these critical resources. INFEWS supports research on the fundamental science and engineering questions at the food, energy, water (FEW) nexus and training of the next generation of researchers in this interdisciplinary area. The program seeks proposals from groups of researchers on interdisciplinary efforts using systems methodology.

- INFEWS proposals are to be submitted to one of four distinct tracks, each reflecting a different objective:
  a. **Track 1: FEW System Modeling:** "The goal is to define and understand the couplings/linkages, feedback mechanisms and processes among the FEW systems components and to elucidate the factors that influence resilience, thresholds and criticalities. [...] [INFEWS] projects should enable innovative perspectives and advances in understanding and modeling complex systems processes. Development of advanced computational methods and effective means for incorporation of large quantities of disparate data, as implemented in new and novel software and tools, is also appropriate." Additional key phrases of interest to mathematical scientists in the Track 1 description include: "define/quantify spatially heterogeneous FEW systems responses to various internal and external driving factors that occur on both short and long timescales," "evaluate minimization-of-risk with respect to FEW services, [...] and the impact of mitigation and adaptation with respect to minimization-of-risk."

  b. **Track 2: Visualization and Decision Support for Cyber-Human-Physical Systems at the FEW Nexus:** " [...] seeks to develop the core system science needed to understand the interactions between these diverse but closely coupled components that operate at multiple temporal and spatial scales.[...] Research challenges include, but are not limited to new methods, and data science algorithms for integrating multiple, heterogeneous, and high-volume FEW data from physical, ecological, engineered, and social sources, [...] modeling approaches and algorithms that can capture FEW component interactions at multiple temporal and spatial scales and support cyber- human-physical system resource management."

  c. **Track 3: Research to Enable Innovative System Solutions:** "Sustainability solutions might incorporate physical sciences, biological sciences, computer sciences, institutional, economic, behavioral, and technical components."

  d. **Track 4: Education and Workforce Development:** Seeks "... to develop a cadre of citizens, scientists and engineers capable of thinking across FEW disciplines and systems. [...] NSF (principally, but not exclusively) plans to make a limited number of Track 4 awards to support virtual resource centers. The students affiliated with the resource centers will engage in interdisciplinary research while developing expertise in their primary fields."
Bios Buzz

WORKSHOPS AND MEETINGS

Bayesian Disease Mapping Workshop at MUSC in Charleston, SC
1. Introduction to Bayesian Disease Mapping (IBDM): March 14-15
2. Bayesian Disease Mapping with INLA (BDMI): March 16
3. Advanced Bayesian Disease Mapping (ABDM): March 17-18

• These courses are designed to provide a comprehensive introduction to the area of Bayesian disease mapping in applications to Public Health and Epidemiology. 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) is a World Health Organization (WHO) advisor on Disease Mapping and organized with the WHO an International workshop on this topic which has led to an edited volume “Disease Mapping and Risk Assessment for Public Health”. He 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 at
http://academicdepartments.musc.edu/phs/docs/march2016.pdf
Booking inquiries can be made by e-mail to June Watson at watsonju@musc.edu
Only a few spots remaining!

Summer Institute in Statistics for Big Data (SISBID)
• The 2nd Summer Institute in Statistics for Big Data <http://www.biostat.washington.edu/suminst/sisbid/> (SISBID 2016) will be held July 11-27, 2016 at the University of Washington in Seattle, Washington. The Institute consists of five two-and-a-half day modules designed to introduce biologists, quantitative scientists, and statisticians to modern statistical techniques for the analysis of Biomedical Big Data. The format will involve formal lectures, computing labs, and hands-on case studies. The instructors are world-class faculty with expertise in various aspects of Biomedical Big Data.
• A limited number of scholarships are currently available and participants are encouraged to enroll in multiple modules.
• Prerequisites for the SISBID program are described here <http://www.biostat.washington.edu/suminst/sisbid2016/modules>.
• Individuals attending the Institute will receive certificates of course completion in recognition of their participation.
• REGISTER TODAY <http://www.biostat.washington.edu/suminst/sisbid/register>!
Note: Lisa Elon and Caprichia Jeffers participated in SISBID 2015 and can let you know what it’s like!
Bios Buzz

JOB OPENINGS

• Faculty positions at Samford School of Public Health in Birmingham, AL

  1. Associate Professor, Department of Health Administration
     a. This tenure-track faculty position is a 12-month appointment and will begin in summer 2016. This position will be responsible for teaching in the undergraduate and graduate health administration programs with a primary appointment in the undergraduate program. He/she also will be responsible for the development of health administration courses and working with the undergraduate program AUPHA certification efforts.
     b. Qualified candidates will hold an earned doctorate in health administration or a closely related field, along with a history of excellent achievements in teaching, scholarship and service, and will have served as a full-time faculty member for a minimum of five years.
     c. Review of applications will begin Feb. 1, 2016, and will continue until the position is filled. Please forward a letter of application, curriculum vita and the names of three professional references to:

       Tondra L. Moore, Ph.D., J.D., M.P.H.
       tlmoore@samford.edu
       Chair, Department of Health Administration
       Samford University
       800 Lakeshore Drive
       Birmingham, Alabama 35229

  2. Assistant/associate professor of Biostatistics at the Public Health Department
     a. This tenure-track faculty position is a 12-month appointment and will begin in summer 2016. The position will require the individual to teach didactic courses to public health and College of Health Sciences students, both undergraduate and graduate, as well as participate in scholarly activity in an area of public health. Additional responsibilities include student advising, participation in the oversight of capstone projects, and participation in department and university service. The faculty member should support the university's Christian mission, embrace the mission and vision of the college and department, and be interested in continuing public health practice as part of his/her faculty role.
     b. Qualified candidates will hold the Ph.D. in biostatistics or in a related public health area with a demonstrated record of teaching biostatistics to graduate and/or undergraduate students. Preference will be given to applicants who have prior experience in teaching and research in a public health program. Experience in a public health practice is highly desired. The candidate must demonstrate excellent interpersonal skills and dedication to the success of the department, faculty and student body as evidenced by a collegial and positive demeanor. A commitment to Christian values, academic excellence and the ability to work effectively with faculty, students and colleagues is expected.
     c. Review of applications will begin immediately and will continue until the position is filled. Forward letter of application, vita and names of three professional references to:

       Melissa Lumpkin, Ph.D., M.P.H.
       Chair and Professor, Department of Public Health
       Samford University
       800 Lakeshore Drive
       Birmingham, AL 35229
3. Assistant/Associate Professor in the Department of Health Informatics and Information Management
   a. This tenure track faculty position is a 12-month appointment and will begin in fall 2016. This position will be responsible for working with students in both an online master’s program in health informatics, and with all students in the Samford College of Health Sciences, whose programs require or encourage health informatics training or concentrations.
   b. Qualified candidates will be graduates of an accredited university with an earned doctoral degree in a health related field such as health informatics, health administration, nursing, pharmacy, public health, etc.
   c. Preference will be given to applicants who have prior experience in using and/or teaching biomedical or health informatics. The ideal candidate will have a strong background in structured and unstructured data design and analysis, including RDBMS and NLP. Major responsibilities include teaching professional courses within the department; engaging in scholarly activity and assisting with departmental student research; serving on school, college and/or university committees as assigned; serving as an academic adviser for departmental majors; and engaging in professional service.
   d. Review of applications will begin Feb. 1, 2016, and will continue until the position is filled. Please submit electronically a letter of application, vita and names of three professional references:

   Harold Neumeier, Ph.D., M.P.P.M., RT(RN)
   hneumeie@samford.edu
   Chair, Department of Health Informatics and Information Management
   Samford University
   800 Lakeshore Drive
   Birmingham, AL 35229

• Postdoctoral Fellow Position in Epigenetics and Gene Regulation
  o Description: One postdoctoral position in computational biology focused on epigenetics and gene regulation is available at the Guo-Cheng Yuan Lab in the Department of Biostatistics and Computational Biology at Dana-Farber Cancer Institute/Harvard T.H. Chan School of Public Health. The goal of the Yuan Lab is to develop computational approaches to analyze and integrate genomic data with the aim to elucidate systems-level gene regulatory mechanisms in development and disease. Current projects include single-cell analysis, genome-wide chromatin state characterization, inference of gene regulatory networks, and functional characterization of genetic variants. Detailed description of our research can be found at our group website: http://bcb.dfci.harvard.edu/~gcyuan
  o The candidate will develop systems biology approaches and software packages to classify chromatin states, to integrate gene expression, DNA sequence, and epigenomic data, to construct and dissect gene regulatory networks, with the goals to gain mechanistic insights into cell-state transitions during stem cell differentiation and disease progression, and to systematically characterize the biological function of the disease-associated genetic variants.
  o Qualifications: The successful applicant(s) should be highly motivated to solve biological problems and to develop novel computational tools. He/she should hold a doctoral degree or equivalent qualification in computational biology, (bio)statistics, applied mathematics, computer science, or a similar field. Strong analytical, programming (in Python, R, Matlab, or C/C++) and communication skills are required. Experience in analysis, interpretation, and integration of genomic-scale data is required.
  o Additional Information: Interested applicants please send CV and at least two recommendation letters to Dr. Guo-Cheng Yuan (gcyuan at jimmy dot harvard dot edu)
JOBS OPENINGS, continued…

- Postdoctoral Fellow Position at the University of Pennsylvania, Center for Causal Inference
  - The Department of Biostatistics and Epidemiology seeks a postdoctoral researcher for the position of Penn Causal Fellow. The position is designed to be a career-building step for a scholarly career in causal inference. The Penn Causal Fellow will be supported by the Center for Causal Inference (CCI). The CCI is a forthcoming multidisciplinary center that includes faculty from Biostatistics, Statistics, and Epidemiology. Responsibilities include developing new theory and methods in causal inference, developing software, and collaborating on projects in pharmacoepidemiology. The postdoc will work under the mentorship of CCI co-directors Dr. Jason Roy and Dr. Dylan Small.
  - Candidates should have a doctoral degree in biostatistics, statistics, or a related field. Strong computational skills and expertise in causal inference are desired. Start date and term are negotiable.
  - Applicants should submit a cover letter, CV, and contact information for three references to Jason Roy jaroy@upenn.edu
    Jason Roy
    Associate Professor of Biostatistics
    Univ of Pennsylvania
    Department of Biostatistics and Epidemiology

- Postdoctoral Research position in Cancer Biology, Baylor College of Medicine
  - The Dan L. Duncan Comprehensive Cancer Center at Baylor College of Medicine invites applications for a postdoctoral research position to study cancer biology. Primary responsibilities include but not limited to analyzing next generation sequencing data (e.g., RNA-seq, whole genome/exome sequencing) using state-of-the-art bioinformatical and statistical tools, and developing new statistical methods to answer biological questions that arise in the research. The candidate will be working in a collaborative environment with faculty members in multiple disciplines including bioinformatics, biostatistics and cancer biology.
  - Applicants should have a Ph.D. or equivalent degree in Bioinformatics, Computational Biology, Statistics, Biostatistics, Computer Science, or other disciplines with strong quantitative background. Other qualifications include excellent writing skills in English, proficiency in R and scripting languages such as Perl or Python. Proficiency in C/C++ is a plus. Prior experience with next generation sequencing data analysis is a plus. Knowledge in cancer biology or genetics is desired but not required.
  - Please apply directly to vacancy 194139JC at www.bcm.edu/careers
  - In addition to completing the application, please send CV, statement of research interests, and contact information of three references to:

    Quincy Mo, Ph.D.
    Division of Biostatistics, Dan L. Duncan Cancer Center
    Baylor College of Medicine
    One Baylor Plaza, Houston, TX 77030
    Email: qmo@bcm.edu
"Your report is organized, concise and error-free...have you been multitasking again?"

"Agreed. We fund only those proposals we can understand."

"Your proposal is written with clarity and conviction. Send it up to legal for obfuscation."

CARTOONS SOURCE:
- https://s3.amazonaws.com/lowres.cartoonstock.com/education-teaching-grant_proposals-grant_writing-grant_funding-grants-universities-ccan251_low.jpg