QUOTES

• “Hope is patience with the lamp lit.” Tertullian

• “Patience is not simply the ability to wait - it's how we behave while we're waiting.” Joyce Meyer

• “Have patience. All things are difficult before they become easy.” Saadi

• “I have just three things to teach: simplicity, patience, compassion. These three are your greatest treasures.” Lao Tzu

KUDOS

Many, many thanks to Suprateek Kundu and Mary Abosi for their hard work on Georgia Statistics Day!
GEORGIA STATISTICS DAY!

- Monday is Georgia Statistics Day.
  - CNR 1000
  - Xihong Lin from the Department of Biostatistics at Harvard T.H. Chan School of Public Health will be our keynote speaker!
  - Meet colleagues from the University of Georgia, Georgia Institute of Technology, Emory University, and many others!
  - Student posters! Prizes!
  - Featured speakers include: Howard Chang (Emory), Vladimir

UPCOMING DEPARTMENT MEETINGS

- BIOS Department Meeting, 12-1, RAR
  - DRAFT AGENDA
    - (I realize that some may be out of the office for Fall Break…more cake for the rest of us!)
    - Kutner Alumni Award Reception
    - Data Science Initiatives at WHSC, Emory, and Georgia Tech
    - BIOS 507 and 511
    - Georgia Statistics Day recap and thank yous!
    - Birthdays (Sept and Oct are the biggest months for the department!)
    - Anything else?
INTERESTING READS

- Ten simple rules for structuring papers (very good advice!)
  - http://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1005619
- Learn about NIH Certificates of Confidentiality (new policies now in effect, see below)
  - https://humansubjects.nih.gov/coc/index
  - For instance, did you know NIH will issue Certificates of Confidentiality automatically?
  - Did you know NIH will issue Certificates of Confidentiality for non-federally funded projects?
  - Did you know CDC will issue Certificates of Confidentiality?

INTRESETTING PODCAST

- Greetings, Our S+SS Episode 42, "Visualization and reporting goals: truth, function, beauty, insight, enlightenment and morality" is now available. This episode features a conversation with Alberto Cairo (@albertocairo), Knight Chair in Visual Journalism at the University of Miami. He's the author of *The Functional Art: An Introduction to Information Graphics and Visualization* and *The Truthful Art: Data, Charts, and Maps for Communication*. He also writes regularly about visualization in his personal blog.
  - To listen now, please visit www.statsandstories.net or Apple Podcasts. Please forward information about S+S and S+SS to any of your colleagues or friends who might enjoy exploring the statistics behind the stories and the stories behind the statistics.
  - As always, comments and suggestions for future guests are welcome, and you are invited to post comments and program ratings on Apple Podcasts. If you are enjoying the program, we would appreciate it if you would go to Apple Podcasts to rate the program. A minimum number of ratings are required to display an average for a podcast.
    - Thanks! John (for the S+S team)
    - John Bailer baileraj@MiamiOH.edu (+1) 513.529.7879
    - President-Elect International Statistical Institute (ISI)
    - University Distinguished Professor and Chair
    - Department of Statistics, Miami University, Oxford, Ohio 45056 USA
• **Request for Information (RFI): Next-Generation Data Science Challenges in Health and Biomedicine** *(NOT-LM-17-006)*
  - On behalf of the National Institutes of Health (NIH), the National Library of Medicine (NLM) seeks community input on new data science research initiatives that could address key challenges currently faced by researchers, clinicians, administrators, and others, in all areas of biomedical, social/behavioral and health-related research. The field of data science is broad in scope, encompassing approaches for the generation, characterization, management, storage, analysis, visualization, integration and use of large, heterogeneous data sets that have relevance to health and biomedicine. Data science undergirds the broad and interdependent objectives of the NIH Strategic Plan ([www.nih.gov/about-nih/nih-wide-strategic-plan](http://www.nih.gov/about-nih/nih-wide-strategic-plan)).
  - Information about data science research directions that could lead to breakthroughs in any or all NIH interest areas is welcomed, whether applicable across wide swaths of health and biomedicine, or focused on particular research domains.
  - **Background:** During the past five years, and in response to a 2012 working group report on data and informatics issued by the Advisory Committee to the NIH Director (ACD) ([acd.od.nih.gov/working-groups/diwg.html](http://acd.od.nih.gov/working-groups/diwg.html)), NIH has made substantial investments in a data science infrastructure of tools, resources and workforce components of a digital research ecosystem for health and biomedicine. ([commonfund.nih.gov/bd2k](http://commonfund.nih.gov/bd2k)). Building on this foundation, the landscape of data science research has evolved and is rapidly changing, within and beyond the NIH, its institutes, centers, and offices. In 2015, another ACD working group recommended that NLM become the programmatic and administrative home for data science at NIH, complementing NIH’s efforts to catalyze open science, data science and research reproducibility ([acd.od.nih.gov/documents/reports/…](http://acd.od.nih.gov/documents/reports/…)). Accordingly, to help NIH continue to strengthen and expand the scope of its investments in data science, NLM seeks information from public and private organizations (e.g., universities and industry) and individuals on promising data science research directions in health and biomedicine.
  - **Information Requested:** **NLM requests information on the three focal areas listed below:**
    - 1. **Promising directions for new data science research in the context of health and biomedicine.** Input might address such topics as *Data Driven Discovery and Data Driven Health Improvement.*
    - 2. **Promising directions for new initiatives relating to open science and research reproducibility.** Input might address such topics as *Advanced Data Management and Intelligent and Learning Systems for Health.*
DATA DATA DATA! (cont.)

3. Promising directions for workforce development and new partnerships. Input might address such topics as *Workforce Development and Diversity and New Stakeholder Partnerships*.

- Within these general topic areas, or others related to data science in health and biomedicine, NLM invites researchers, clinicians, organizations, industry representatives and other interested parties to provide input on:
  - Research areas that could benefit most from advanced data science methods and approaches;
  - Data science methods that need updating, or gap areas where new approaches are needed;
  - Priorities for new data science research;
  - Appropriate partnerships and settings for expanded data science research.

- **How to Submit a Response**
  - Response to this RFI must be submitted to [www.research.net/r/NLMDa](http://www.research.net/r/NLMDa)taSci by November 1, 2017. Responses should be provided in a narrative form of up to 3 pages per topic, with links to pertinent supplemental information if needed. No attachments will be accepted. No proprietary, classified, confidential, or sensitive information should be included in your response.
  - Responses to this RFI are voluntary. This RFI seeks input for planning purposes only and should not be construed as a solicitation for applications or an obligation on the part of the Federal Government, the National Institutes of Health, or individual NIH Institutes or Centers. The information collected will not be considered confidential, but identifiers (names, institutions, emails, etc.) will be removed when responses are compiled. Processed, anonymized results may be shared internally or with members of health-related scientific work groups, or may be posted on an NIH public website, as appropriate. The NIH will acknowledge receipt of information submitted, but will not comment on the content.

- **Inquiries**
  - Please direct all inquiries to: Valerie Florance, PhD National Library of Medicine (NLM) Telephone: 301-496-4621 Email: NLMEPIInfo@mail.nih.gov
NIH BD2K Webinar Series: Fundamentals in Data Science
  - We are excited to announce new speakers for our 2nd year of the series. The hour long webinars will air at 9amPT/12pmET on their scheduled dates. Please view a list of scheduled speakers in the table listed below, and visit our webpage for login information. For login and registration information, visit: bigdatau.ini.usc.edu/data-science-seminars.

<table>
<thead>
<tr>
<th>Date</th>
<th>Webinar information</th>
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<tbody>
<tr>
<td>10/13/2017</td>
<td>Collaborative &amp; Scalable Open Source Data Science  Jonathan Entwistle, IBM</td>
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<tr>
<td>10/20/2017</td>
<td>Topic: TBA  Ravi Madduri, University of Chicago</td>
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<tr>
<td>12/01/2017</td>
<td>Data Science Needs for Biomedical Research  Ian Foster, University of Chicago</td>
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<tr>
<td>12/08/2017</td>
<td>Big Brain Data Science &amp; Predictive Health Analytics  Ivo Dinov, University of Michigan</td>
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NIW NEWS

- IMPORTANT: New Certificate of Confidentiality Policy at NIH
  - This past Sunday, October 1, was not only the beginning of a new month but also the start date of NIH’s updated policy on issuing Certificates of Confidentiality. A CoC protects the privacy of subjects by limiting the disclosure of identifiable, sensitive information.
  - Under the revised policy, researchers no longer need to request a CoC; NIH will issue it automatically. This applies to biomedical, behavioral, clinical, or other research that is 1) funded wholly or in part by NIH, 2) supported through grants, cooperative agreements, or contracts, and 3) collects or uses identifiable, sensitive information, which is defined as:
  - Information about an individual that is gathered or used during the course of biomedical, behavioral, clinical, or other research, where the following may occur:
    - An individual is identified; or
    - For which there is at least a very small risk that some combination of the information, a request for the information, and other available data sources could be used to deduce the identity of an individual.
NIW NEWS (cont.)

- If your research calls for a CoC, you must not:
  - Disclose or provide, in any Federal, State, or local civil, criminal, administrative, legislative, or other proceeding, the name of such individual or any such information, document, or biospecimen that contains identifiable, sensitive information about the individual and that was created or compiled for purposes of the research, unless such disclosure or use is made with the consent of the individual to whom the information, document, or biospecimen pertains.
  - Disclose or provide to any other person not connected with the research the name of such an individual or any information, document, or biospecimen that contains identifiable, sensitive information about such an individual and that was created or compiled for purposes of the research.

- For more information:
  - [https://humansubjects.nih.gov/coc/index](https://humansubjects.nih.gov/coc/index) (Certificates of Confidentiality overview website)

- NIH SEEKS INPUT ON PROPOSED UPDATES TO GENOMIC DATA SHARING POLICY

- Does a resubmission remove the original scored application from funding consideration?
WORKSHOPS AND CONFERENCES

- Call For Papers: NIPS Workshop on Advances in Approximate Bayesian Inference
  - Friday, 8th December 2017, Long Beach, California
  - URL: http://approximateinference.org
  - Submission deadline: Nov 01, 2017
  - Please direct questions to: aabiworkshop2017@gmail.com
  - We invite researchers to submit their recent work on the development, analysis, or application of approximate Bayesian inference.
    - A submission should take the form of an extended abstract of 2-4 pages in PDF format using the NIPS style. Author names do not need to be anonymized and references may extend as far as needed beyond the 4 page upper limit. If authors' research has previously appeared in a journal, workshop, or conference (including NIPS 2017), their workshop submission should extend that previous work. Submissions may include a supplement/appendix, but reviewers are not responsible for reading any supplementary material.
    - The submission deadline is November 1st, 2017. Please submit via our easychair website: easychair.org/conferences/?conf=aabi2017
    - This year, the workshop offers multiple best paper awards. They are open to all researchers, and a few awards are restricted to junior researchers. Submitting by the deadline automatically entitles you for consideration for all of the following:
      - Roughly $3000 in total, to be allocated across winners
      - Four NIPS 2017 workshop registration fee waivers
    - Approximate inference is key to modern probabilistic modeling. Thanks to the availability of big data, significant computational power, and sophisticated models, machine learning has achieved many breakthroughs in multiple application domains. At the same time, approximate inference becomes critical since exact inference is intractable for most models of interest. Within the field of approximate Bayesian inference, variational and Monte Carlo methods are currently the mainstay techniques. For both methods, there has been considerable progress both on the efficiency and performance.
    - In this workshop, we encourage submissions advancing approximate inference methods. We are open to a broad scope of methods within the field of Bayesian inference. In addition, we also encourage applications of approximate inference in many domains, such as computational biology, recommender systems, differential privacy, and industry applications.
WORKSHOPS AND CONFERENCES (cont.)

- ## Organizers
  - Francisco Ruiz, Stephan Mandt, Cheng Zhang, James McInerney, Dustin Tran
- ## Advisory Committee
  - Tamara Broderick, Michalis Titsias, David Blei, Max Welling
Assistant Professor Position: Division of Biostatistics, Department of Population Health, NYU School of Medicine

- NYU Langone Health is one of the nation's premier academic medical centers. Our trifold mission to serve, teach, and discover is achieved daily through an integrated academic culture devoted to excellence in patient care, education, and research. The Department of Population Health (pophealth.med.nyu.edu), founded in 2012, is a leader in the discovery and translation of new knowledge into policy and practice. Through its research, education and service, the Department seeks to advance population health and health equity. Core areas of Department strength include healthful behavior change, early childhood health and development, comparative effectiveness and decision science, behavioral economics and health policy, community health improvement, healthcare delivery science, epidemiology, biostatistics and medical ethics.

- The Division of Biostatistics advances scientific knowledge to benefit individual and population health by creating, disseminating, and implementing rigorous, innovative statistical methodologies across the entire spectrum of biomedical research. We seek candidates for one or more junior faculty positions, with interest in various areas of biostatistics, including but not limited to innovative clinical trial design, causal inference, statistical genomics/proteomics, and methods for big data.

- **Position qualifications:** Candidates must possess or soon expect an earned doctorate in biostatistics, statistics, or a related quantitative field. They should be emerging scholars with evidence of a growing body of outstanding scholarship and a strong commitment to teaching. Successful candidates will engage in both methodological and collaborative research with existing faculty at NYU School of Medicine and other Schools and Centers within NYU, have a commitment to team science, and possess effective oral and written communication skills. Candidates are also expected to have or develop an externally funded, independent research program.

- **To apply:** Please submit the following (addressed to Dr. Andrea Troxel, Director of Biostatistics) to apply.interfolio.com/44244.
  - Cover letter, Curriculum vitae, Statement of current and future research agenda, Three letters of reference

- **Application deadline:** Review of applications will continue until the position is filled.

- NYU Langone Health is an equal employment/affirmative action employer and does not discriminate on the basis of race, color, religion, gender, gender identity or expression, sexual orientation, marital/or parental status, age, national origin, citizenship, disability, veteran status, or any other classification protected by applicable Federal, State, or Municipal Law. Women, racial and ethnic minorities, persons of minority sexual orientation or gender identity, individuals with disabilities, and veterans are encouraged to apply.
The Division of Biostatistics at the Perelman School of Medicine, University of Pennsylvania invites applications for up to 2 post-doctoral fellow positions under the supervision of Dr. Qi Long. The position(s) are open until filled and the appointment is for two years, with a possible extension for a third year. The successful candidate will have opportunities to develop methods and algorithms for analysis of big biomedical data, with applications to electronic health records (EHRs) data, omics data (including gene expression data, SNP data, and metabolomics data etc.), and mobile health data. We are particularly interested in applicants with expertise in a) deep learning methods particularly for analysis of EHRs data for deep phenotyping, prediction of disease risk, prognosis and progression, and identification of disease subtypes etc.; b) distributed learning and optimization for data analysis in distributed health data networks. The successful candidate will develop independence in research through given presentations and writing peer-reviewed publications for research conferences and journals, and develop grant applications. Extensive interactions with graduate students and other postdocs are expected. In addition, the successful candidate will also have opportunities to conduct collaborative research in areas such as cancer and cardiovascular diseases.

These positions will be supported by research funding from the University of Pennsylvania and a recently funded NIH R01 grant. The successful candidate can start immediately and the starting date is negotiable.

More information about our ongoing research can be found on Long Research Group's website, http://group-qilong.rhcloud.com/.

We seek candidates who embrace and reflect diversity in the broadest sense. The University of Pennsylvania is an EOE. Minorities/Women/Individuals with disabilities/Protected Veterans are encouraged to apply.

Position Qualifications: Ph.D. degree in biostatistics, statistics, computer science, or related quantitative fields. Excellent programming skills in R/Matlab/Python and possibly one lower level computer language such as C/C++, and excellent written and oral communication skills are desirable. Expertise and experience in the following areas are preferred: deep learning; distributed learning and optimization. Strong methodological training in statistics is considered a plus.

Benefits: www.med.upenn.edu/postdoc

Application Instructions: Applicants should email a cover letter, research statement, CV, and contact information (email and phone) for three references to Dr. Qi Long, glong@pennmedicine.upenn.edu (Subject line: Long postdoc, 2017).
The Department of Statistics and Applied Probability, University of California, Santa Barbara invites applications for an open rank position (tenure-track or tenured) in Statistics with emphasis on Data Science, starting July 1, 2018.

- Qualifications: A Ph.D. in Statistics, Biostatistics, Computer Science or related fields is required by the time of appointment. Demonstrated research and teaching excellence is preferred. The candidate must have a strong research agenda on data science and potential to play a leadership role in developing data science programs at UCSB.

- To apply submit CV, cover letter, statement of research, teaching objectives and contact information of four individuals who have agreed to provide letters of recommendation. Materials should be submitted electronically via UC Recruit: recruit.ap.ucsb.edu/apply/JPF01097

- Applications should be submitted by December 1, 2017 for priority consideration, but the position will remain open until filled. Additional information: http://www.pstat.ucsb.edu. The Department is especially interested in candidates who can contribute to the diversity and excellence of the academic community through research, teaching and service.

- The University of California is an Equal Opportunity/Affirmative Action Employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability status, protected veteran status, or any other characteristic protected by law.
Assistant Professor of Biostatistics Position, Department of Epidemiology and Biostatistics

The Department of Epidemiology and Biostatistics at the Dornsife School of Public Health at Drexel University invites Assistant Professor applicants for a tenure-track position in Biostatistics. The successful applicant will have a doctoral degree in biostatistics, statistics, or a related field, an interest in both collaborative and methodological research, and must demonstrate a strong potential for securing external funding. Responsibilities associated with this position include methodological and collaborative research, teaching, and the supervision of graduate students.

In addition to the rich academic research environment of the Drexel community, the Department is expanding its graduate degree offerings in biostatistics to include a doctoral (PhD) degree, in addition to the MS currently offered. In addition to training programs in biostatistics, the Department currently offers MPH, MS and PhD degrees in Epidemiology. The Department has 24 faculty spanning the two disciplines and is truly interdisciplinary. Research funding for the Department comes from NIH, NSF, CDC, and other federal and state agencies, as well as private foundations and industry. Current faculty expertise in biostatistics includes spatial statistics, the analysis of imaging data, clinical trials, longitudinal data analysis, Bayesian methods and epidemiologic methods. Applicants with methodological expertise in quantitative methods for high dimensional data, statistical genetics, and causal inference are strongly encouraged, however, all applications will be given full consideration.

The Dornsife School of Public Health at Drexel University is the only (Council on Education for Public Health) CEPH-accredited School of Public Health in the Philadelphia area, and recently received a $45 million gift to expand the faculty and build new research and educational programs. With the arrival of Dean Ana Diez Roux in 2013, the School has entered a period of growth with new faculty being recruited to each Department. The School is committed to our mission of health as a human right, improving health in cities, eliminating health disparities, and promoting health in all policies.

The 16th largest private university in the nation with more than 8,000 employees and 22,000 students, Drexel is composed of 10 colleges and 3 schools offering professional degrees in engineering, architecture, media arts design, business, law, medicine, nursing, and public health, among others. The University's goal to become “the most civically engaged university in America” drives its work with the City of Philadelphia and diverse community partners. Drexel is located within a short walk of the Amtrak and regional rail stations in the University City section of Philadelphia, a vibrant city with a rich array of health care, educational, and arts institutions.

The confidential application process requires a cover letter describing relevant experience and goals and curriculum vitae, which should be submitted to Drexel Jobs (www.drexeljobs.com). Please search by Department 6906, requisition # 8503. Interested candidates may direct any questions to the search committee co-chairs, Dr. Scarlett Bellamy (bellamys@drexel.edu) or Dr. Loni Philip Tabb (lpp22@drexel.edu). Three letters of reference will ultimately be required for finalist candidates. Applications will be accepted until a successful candidate has been identified; however, we will begin reviewing submissions December 1, 2017. The successful candidate would ideally have an early September 2018 start date, but the timing is negotiable.

Drexel University is an Equal Opportunity/Affirmative Action employer and is proactively committed to diversity and inclusion in all of its policies, practices and services. We are especially interested in qualified candidates who can contribute to the diversity and excellence of our academic community.
JOB OPENINGS

- Duke University seeks up to three exceptional, collaborative, and creative scientists to join its faculty in tenure/tenure-track positions. We invite applications from researchers with an outstanding track record in developing and applying statistical, computational, or experimental approaches to cutting-edge problems in genomics and human genetics.
  - Candidates should hold a PhD or equivalent degree in a quantitative or experimental discipline. We are particularly interested in scientists working in evolutionary/population genomics, functional genomics, genome technology development, medical genetics, and statistical/computational genomics.
  - We strongly encourage applications from scientists with a demonstrated interest in collaborative research. Successful candidates will synergize with existing strengths at Duke in medicine, engineering, environmental sciences, and basic sciences. The collaborative nature of these positions will provide successful candidates with access to exceptional resources, including substantial cluster computing infrastructure, strong core facilities, a diverse set of large biomedical datasets, and multidisciplinary partnerships.
  - Interested applicants should submit materials (cover letter, CV, and a statement of research accomplishments and interests) and ask three referees to submit reference letters at https://academicjobsonline.org/ajo/jobs/9837. Further inquiries may be directed to kim.hall@duke.edu. Review of applications will begin on November 15, 2017.
  - Duke University is an Affirmative Action/Equal Opportunity Employer committed to providing employment opportunity without regard to an individual’s age, color, disability, genetic information, gender, gender identity, national origin, race, religion, sexual orientation, or veteran status.
  - Duke University is located in Durham, North Carolina (NC), USA
Winona State University invites applications for a tenure-track position in Data Science and/or Statistics. This new faculty member will join a group of seven statisticians who are deeply committed to teaching at the undergraduate level. The data science program at Winona State was one of the first undergraduate programs developed in the United States, and it has seen tremendous growth since its inception. Our statistics program was created over 25 years ago and has achieved a national reputation for excellence.

- Data science program: [https://www.winona.edu/math-stat/data-science.asp](https://www.winona.edu/math-stat/data-science.asp)
- Brief job description: Winona State University invites you to join our Community of Learners as an Assistant Professor of Data Science or Statistics. This is a probationary/tenure-track appointment with an expected start date of August 20, 2018. Duties associated with this faculty appointment include (1) teaching a wide variety of undergraduate data science and statistics courses using an innovative and modern curriculum; (2) developing curriculum in data science; and (3) contributing to the growth and development of undergraduate students. Minimum qualifications for this position are (1) a Ph.D. in Data Science, Statistics, or a closely related field with an anticipated completion date by August 2018; (2) demonstrated commitment to quality teaching of data science and/or statistics courses; (3) strong programming and computing skills; and (4) strong communication skills.

- For a complete job description and information on applying for this position, please go to [www.governmentjobs.com/careers/winona](http://www.governmentjobs.com/careers/winona). Initial review of applications begins 10/16/2017 and will continue until the position is filled.
- WSU is a member of the Minnesota State Colleges and Universities and is an equal opportunity educator and employer.