FRIDAY NOTES FOR August 5, 2016

QUOTES
- “No grand idea was ever born in a conference, but a lot of foolish ideas have died there.” F. Scott Fitzgerald
- “Bridge the gap with closed minds though careful dissection of ideas and solid presentation of fact.” Maximillian Degenerez

CARTOONS
- Conference nametags:
  - https://cdn.andertoons.com/img/toons/cartoon6866.png
  - https://cdn.andertoons.com/img/toons/cartoon5955.png
- The Mr. T plot: https://twitter.com/dataandme/status/757533646614134784

UPCOMING DEPARTMENT MEETINGS
- BIOS Department Meeting, Tuesday, 12-1, RAR
  - Draft agenda
    - Orientation updates (Melissa)
    - JSM congratulations
    - ASA REU proposal
    - Emory Big Data/Cloud/Data Science information collection
    - Duo authentication
    - BD2K update
    - BA/MSPH update
    - CSI MS update
    - Birthdays
    - Other topics?

KUDOS
- Hearty congratulations to Eugene Huang, Limin Peng, and Qi Long, who all formally received recognition as new Fellows of the American Statistical Association this week at the 2016 Joint Statistical Meetings. This is a wonderful honor for each of them and recognizes their substantial individual contributions to our field. Very well deserved!

NIH NEWS
- The Predictive Nature of Criterion Scores on Impact Score and Funding Outcomes
- One page guide to Rigor and Reproducibility
- Who at NIH can answer my question about…?
- I’m submitting a proposal to a NIH Parent Announcement, can any Institute fund it?
Five ways supervisors can promote research integrity
- Be available and approachable
- Review raw data
- Communicate your expectations
- Provide training and guidance
- Know your Research Integrity Officer (RIO)

Details and INFOGRAPHIC!

https://nexus.od.nih.gov/all/2016/07/21/five-ways-supervisors-can-promote-research-integrity/?utm_source=nexus&utm_medium=email&utm_content=nihupdate&utm_campaign=jul16

RFAs
- Data, Modeling, and Coordination Center for the NHLBI’s Precision Interventions for Severe and/or Exacerbation-Prone Asthma (PrecISE) Network (U24)
  - This Funding Opportunity Announcement (FOA) invites applications to participate in the NHLBI Precision Interventions for Severe and Exacerbation Prone Asthma (PrecISE) Network. This clinical trial network will conduct sequential, adaptive, phase II/proof of concept clinical trials with precision interventions in stratified patient populations. The Network will utilize patient phenotypes and/or endotypes, predictive, and monitoring biomarkers/profiles in sequential adaptive trials to evaluate the most effective precision intervention strategies for this hard to treat patient population. PrecISE will include multiple clinical centers and a single Data, Modeling, and Coordination Center (DMCC). This FOA invites applications for the Data, Modeling, and Coordination Center (DMCC), and runs in parallel with a companion FOA (RFA-HL-17-009) that invites applications for the Clinical Centers (CC).
- From NSF listserv on the Science of Science Policy listserv:
  - Chapin Hall at the University of Chicago, in partnership with the U.S. Census Bureau, is pleased to announce the Request for Proposals (RFP) Using Linked Data to Advance Evidence-Based Policy Making: Helping Projects Utilize the U.S. Census Bureau Linkage Infrastructure. This initiative aims to conduct high-impact research projects of policies and interventions by demonstrating innovative strategies for linking across programs and levels of government to advance evidence-based policymaking. The project is supported by the Laura and John Arnold Foundation.
  - The RFP solicits research and evaluation proposals to serve as pilot studies exploring long-term outcomes of policies and interventions to inform decision makers who can improve public policies and programs. Through the RFP, we seek to identify exciting, ready-to-implement pilots that bring in data and demonstrate ways to optimize the Census Bureau linkage infrastructure to provide policy-relevant insights on Federal programs, as well as to develop an inventory of compelling use cases for future projects. We hope these projects will inform decisions by the Evidence-Based Policymaking Commission, the Administration, and Congress, particularly regarding expansion of the Census Bureau infrastructure to support more high-quality evaluation and programmatic research.
  - Proposal submissions are due 11:59 p.m. Central Time on September 20, 2016. Applicants will be notified of selection decisions by November 2016.
  - Check the project webpage for additional information and updates to the RFP: www.chapinhall.org/pages/... For specific questions about the RFP or submission process, email Leah Gjertson at lgjertson@chapinhall.org <mailto:lgjertson@chapinhall.org>

OPENINGS
- ORISE Fellowship for students (would like to identify the student within 2 weeks to start before the end of Sept.
  - The ORISE Fellowship appointment will be located in the Division of Viral Diseases/Epidemiology Branch, working within the Viral Gastroenteritis Team, primarily in support of a
longitudinal, maternal-birth cohort study, in collaboration with an Ohio medical institution.

- The goal of this birth cohort study is to better understand the natural history of infection and immune response to norovirus, rotavirus, respiratory syncytial virus, and influenza. These pathogens are the leading causes of acute gastroenteritis and acute respiratory infection in the United States, and are the focus of vaccine development or optimization. For each of these pathogens, vaccine development or optimization is hampered by lack of understanding of the natural history of infection and immunity. In particular, scientific gaps are present in understanding the full range of maternal immunity imparted to infants (immunity transferred from maternal vaccination or actively acquired pathogen-specific antibodies, from milk and microbiome, and factors influenced by single nucleotide polymorphisms passed from the mother to infant). These gaps can be addressed only through a maternal-birth cohort followed over a three-year period. One study site will be awarded a cooperative agreement through the CDC to enroll 240 mother-infant pairs in the last trimester of pregnancy who deliver in one of three birth hospitals. Serial specimens and epidemiological/medical/vaccination data will be collected. At times of an enrolled child’s active infection, further specimens and data will be collected, and a home visit will be conducted by the study staff to assess the role and dynamics of household transmission for these pathogens.

- The ORISE Fellow will fulfill the following duties:
  - Assist the CDC PI and site PI in developing a manual of procedures (MOP) and will research published literature to establish best practices for day-to-day operations of the cohort;
  - Offer clarifications and guidance to study staff based on this MOP;
  - Assist in developing a tracking system for specimen delivery, inventoring, and internal lab distribution, in conjunction with CDC laboratory staff and the CDC PI;
  - Prepare a system for monitoring and prompting necessary benchmarks and deadlines described in the protocol throughout the course of the study;
  - Participate in regular communications, documenting discussions with CDC and site staff, and arranging and joining coordinative meetings with CDC staff;
  - Work with CDC communications staff on developing a project description for the CDC internet site;
  - Assist in preparing data intake forms and data collection maintenance (RedCap experience desirable); Work with CDC data management staff on data cleaning activities, and provide descriptive analytic reports to the CDC PI;
  - Fellow will have the opportunity to participate in specific research and analytic activities intended to be published/publicly disseminate.
  - Two domestic US trips per year: 1. site visit to the participating site in Cincinnati, Ohio, and 2. attendance at an annual investigators meeting, location TBD.

**Postdoctoral associate sought for developing statistical models for imaging genetic data**

- We are looking for a self-motivated, quantitative scientist with a strong background in applied statistics and machine learning who is genuinely interested in working with Big Data in Healthcare, specifically imaging-genetics. The objective of this project is to develop a statistical model relating population genetics and neuroimage analysis. For example, to characterize the underlying hidden population structure for mental diseases such as Schizophrenia. We have unique large-scale datasets consisting of thousands of subjects each with genotype, brain image measurements, and neurocognitive scores. The position will focus on developing a general statistical model that incorporates information from multiple sources of public and private data and across different modalities of data (imaging, genetic, gene expression, etc) to infer causal relationship between gene and abnormal variations in brain structure. The project is a multi-disciplinary research collaboration between multiple universities and industry with high potential for high impact publication.

- The candidate for this position should be an expert in advanced statistical modeling and data analysis and possess excellent writing and communication skills including the ability to explain mathematical concepts to non-experts. Having experience in biostatistics and particularly analyzing genetic and imaging data in a big plus.

- Responsibilities include implementation and development of the algorithms, data
management, statistical data analysis, collaboration with scientists in multi-disciplinary teams, presenting findings at the international conferences, as well as writing manuscripts.

- **Education:** PhD in bio-/Statistics, Computer Science, Electrical Engineering or related fields; research experience with statistical machine learning using complex multivariate data.
- **Technical skills**
  - **Required:** Experience with:
    - Bayesian data analysis, graphical model development and evaluation or
    - Knowledge of machine learning algorithms with robust feature selection and optimization
    - Expert level knowledge: of at least one scientific computing languages such as R/Python/MATLAB or of low-level languages such as C/C++
    - Genuine interest in learning new concepts from biology and more specifically genetics.
  - **Preferred** The following experience are preferred but not necessary
    - Hands-on experience with statistical population genetic and epidemiology.
    - Experience with causal inference and related statistical concept and tools
    - Hands-on experience with neuroimaging analysis softwares such as FreeSurfer/AFNI/SPM
    - Expert knowledge of Unix environment and scripting
    - Experience with High-performance computing and cloud computing
- The position is supported for 2 years. However, candidates will be appointed for one year, with a second year extension possible based on progress. The primary appointment of the postdoc is with the Department of Biomedical Informatics in the University of Pittsburgh.

**WORKSHOPS AND CONFERENCES**

- **BASS XXIII** will be held Oct. 24-28, 2016 at the Radisson Hotel Washington DC-Rockville, 3 Research Blvd., Rockville, MD. As usual, we have a great mix of biopharmaceutical and regulatory topics and faculty.
  - The Biopharmaceutical Applied Statistics Symposium (BASS), founded by Karl E. Peace, PhD, Fellow of the American Statistical Association, provides (1) a forum for pharmaceutical and medical researchers and regulators to share timely information concerning the application of biostatistics in pharmaceutical environments; and (2) funding to support graduate studies in Biostatistics.
  - Please visit [BASS XXIII | 23rd Annual Biopharmaceutical Applied Statistics Symposium](#) to view in detail the program and registration options.
  - Please note that you must register for BASS (from the website) and register with the Hotel separately requesting the BASS Rate (see info from website).
  - Should you have questions, please contact Anthony Segreti (segretia@bellsouth.net), Ruth Whitworth (rewhitworth@georgiasouthern.edu), or Andreas Sashegyi (sashegyi_andreas@lilly.com)