FRIDAY NOTES FOR July 22, 2016

QUOTES
- “Treat your password like your toothbrush. Don't let anybody else use it, and get a new one every six months.” Clifford Stoll
- “I do not fear computers. I fear the lack of them.” Isaac Asimov
- “A computer once beat me at chess, but it was no match for me at kick boxing.” Emo Philips

CARTOONS
- https://cdn.andertoons.com/img/toons/cartoon5418.png
- https://cdn.andertoons.com/img/toons/cartoon5107.png

UPCOMING DEPARTMENT MEETINGS
- None this week.

SPECIAL CODING WORKSHOP FOR BIOS!
MATLAB GUI-based Toolbox Development Bootcamp (here!) JULY 29!!!! P45!!!!
- Amit Verma has been working with Ying Guo to develop a MATLAB GUI-based toolbox for a hc-ICA model. The development of GUI interfaces in MATLAB has proven quite valuable for disseminating statistical methods to the neuroimaging community and can be extended to other scientific areas as well. CBIS is going to host a MATLAB GUI-based Toolbox Development Bootcamp taught by Amit on 7/29 from 10:30-4:30.
  - GCR P45 Computer Lab, 10:30-4:30 on 7/29.

NIH NEWS

OPENINGS
- **NIEHS**: The National Institute of Environmental Health Sciences (NIEHS), part of the National Institutes of Health (NIH), is seeking an experienced biostatistician at the rank of Staff Scientist in the Biostatistics and Computational Biology Branch (BCBB) of the Division of Intramural Research (DIR). The incumbent will collaborate extensively with researchers in the DIR and the Division of the National Toxicology Program (DNTP). As the principal statistician for the National Toxicology Program (NTP), he/she will provide statistical leadership and ensure the statistical integrity of its research program. In addition, the position involves management and oversight of statistical support service contracts. Development of new statistical methods is encouraged, but will not be a major component of the job.

WORKSHOPS AND MEETINGS
- **30th annual CDC and ATSDR Statistical Science Awards Ceremony, September 14, 2016**
  - Light Refreshments at 1:45 p.m.
  - Awards Ceremony and Invited Lecture at 2:00 p.m.
  - Chamblee Campus, Building 107, Room 1B
  - Skype information below
  - **Welcome and Introductions**
    - **Cathleen Gillespie, MS**, Statistical Science Awards Committee chair, Statistical Advisory Group (SAG) NCCDPHP representative
    - **Opening remarks, Harold Jaffe, MD**, Associate Director for Science, Centers for Disease Control and Prevention
  - **2016 CDC/ATSDR Statistical Science Awards Presentation**
    - **Dr. Harold Jaffe and Cathleen Gillespie** Applied Category, Theoretical Category
Invited Speaker

- **Keith Baggerly, PhD**, Ransom Horne, Jr, Professor, University of Texas, MD Anderson Cancer Center, Department of Bioinformatics and Computational Biology

- **Profile**: Dr. Baggerly has worked extensively with data from a wide variety of high-throughput assays. He is best known for his work on "forensic bioinformatics", in which reexamination of raw data shows the need for careful experimental design, preprocessing, and documentation – the careful application of basic statistics and sanity checks. His work prompted an IOM review of the evidence that should be required before omics-based assays are used to guide patient therapy. He has been profiled in the Journal of the National Cancer Institute, and is a Fellow of the American Statistical Association. Today, like the rest of us, he is struggling with the issues associated with distilling useful information from the wide variety of public data sources.

- **“When is Reproducibility an Ethical Issue? Genomics, Personalized Medicine, and Human Error”** Abstract: Modern high-throughput biological assays let us ask detailed questions about how diseases operate, and promise to let us personalize therapy. Careful data processing is essential, because our intuition about what the answers "should" look like is very poor when we have to juggle thousands of things at once. When documentation of such processing is absent, we must apply “forensic bioinformatics” to work from the raw data and reported results to infer what the methods must have been. We will present several case studies where simple errors may have put patients at risk. This work has been covered in both the scientific and lay press, prompted several journals to revisit the types of information that must accompany publications, and led to an Institute of Medicine (IOM) Review of the type of data that must be supplied before “omics”-based tests are used to guide patient care. We discuss steps we take to avoid such errors, and lessons that can be applied to large data sets more broadly.

- **Join Skype Meeting**
- **Join by phone**
  - (770) 488-3600
  - (855) 644-0229
  - Conference ID: 7166716

**DATA SCIENCE MEETINGS**

- **Health Datapalooza**
  - This was in May 2016, but check out the program and add it to your list of conferences to watch.

- **Concordium 2016 – Data and Knowledge Transforming Health**
  - [http://concordium.academyhealth.org/home](http://concordium.academyhealth.org/home)
  - Sept 12-13, 2016
  - Crystal City, VA