

B.E.A.C.H.

DEPARTMENTAL NEWSLETTER MAY 2014 | VOLUME 6, ISSUE 3

BIOSTATISTICS SEMINAR

Except where noted, all seminars are held from 4PM - 5PM in the 3rd floor conference room (307 63rd St)

❖ May 21, 2014

Yichuan Zhao

Georgia State University

❖ May 28, 2014

Jaya Satagopan

MSK

❖ June 4, 2014

Marc Buyse International Drug Institute (IDDI) &

CluePoints

❖June 11, 2014

Alexia Iasonos

MSK

❖June 18, 2014

Marinela Capanu

❖June 25, 2014

Kathy Panageas

MSK

HEALTH OUTCOMES RESEARCH GROUP (HORG) SEMINARS

All seminars are held from 12PM - 1PM **Check emails for locations**

❖ May 16, 2014

Roxanne Jensen Georgetown University

❖ June 13, 2014

Luke Selby MSK

SURVIVORSHIP, OUTCOMES AND RESEARCH (SOAR) **SEMINAR SERIES**

❖June 10, 2014

David Harrington, PhD

4pm - 5pm

Professor, Dept of Biostatistics, Harvard School of Public Health

1275 York Ave, M-107

Biostatistics







DEPARTMENT CHAIR **EDITORS** on Bayuga, MPH sha Patel, MPH e Heon Rogak, MA

CONGRATULATIONS RONGLAI SHEN!

Ronglai Shen is the recipient of the Louise and Allston Boyer Young Investigator Award. This MSK award is given annually honoring Memorial Sloan Kettering physicians and scientists under the age of 40 who have demonstrated great promise and accomplishment in clinical and laboratory investigations. Ronglai was presented with the award at the Academic Convocation and Commencement ceremony held on Wednesday, May 14 in the Zuckerman Research Center auditorium.

Ronglai's research program has involved the development of integrative statistical methods for genomics. The contemporary landscape involves numerous genomic platforms



Ronglai Shen, PhD

that measure different aspects of the cancer genome, including expression arrays that characterize genome-wide expression patterns, methylation, micro RNA expression, copy number variation, and mutations, among others. Investigators have traditionally performed formal statistical analyses of data from these platforms individually, for example when performing clustering analyses to identify tumor sub-types. Ronglai created a method to perform integrated clustering, in which the data patterns in the different platforms are harmonized in a way that uses commonalities in the data across platforms to assist in identifying the clusters. She has developed open source software to perform these analyses, under the acronym iCluster, and this software has additional tools that help investigators to identify the genes that are influential in determining the sub-types. This tool box is exceptionally useful since it allows investigators to approach multi-platform data in a unified fashion, avoiding the puzzle of how to aggregate and reconcile the results from multiple individual platforms. Her work has been especially useful in the interpretation of data from the Cancer Genome Atlas (TCGA) and her methods have been used in several TCGA publications, in addition to reports from other investigative groups.

Her current research agenda builds on her earlier ideas for handling integrative clustering. Her goal is to modify the approach to address the task of identifying potential driver mutations from extensive genomic data from multiple platforms. The basic idea here is that the disabling of a gene can be accomplished by several different mechanisms, for example mutations, allelic changes or hyper-methylation. Consequently these somatic genetic events may tend to be negatively correlated in sets of tumors or otherwise altered in a non-random fashion. She is developing search algorithms that will interrogate the genome to identify candidate genes on this basis, using adaptations of her statistical models. Candidates would then be further examined using in vitro techniques.

FUNDING SUCCESS

Alexia Iasonos received a 2014 Translational and Integrative Medicine Research Fund (TIMRF) Award for her proposal entitled: "Personalizing Phase I dose finding studies: taking into account individual patient risk." Alexia has been focused in evaluating phase I designs with the aim of finding accurate dose levels more efficiently and improving the drug development process. In order to find an accurate dose, investigators rely on the rate of drug related adverse events. The challenge in Phase I trials is that patients have advanced disease thus it is not always clear whether adverse events are due to the disease or due to the drug's mechanism of action. In recent years Alexia has been leading an effort in quantifying toxicity attribution errors and refining eligibility criteria of Phase I studies. This proposal aims to use



Alexia Iasonos, PhD

individual patient risk in dose escalation studies. Her collaborators include Professor John O'Quigley from Université Pierre et Marie Curie in France and Dr David Spriggs, Head, Division of Solid Tumors from MSK.

CLINICAL RESEARCH PROFESSIONALS WEEK

This year's Clinical Research Professionals Week celebration will be held June 16th – 20th. MSK recognizes the efforts of the research support staff during this week with speakers, lunch reception, raffle prizes and poster presentations. Carolyn Eberle, MPH, Iris Miao, Angie Santiago-Zayas and Sean Ryan, MS will take part in the poster session.

- "Employer Accommodations Defined by Women Undergoing Treatment for Active Breast Cancer Treatment Recipients."
 Carolyn Eberle, MPH, Iris Miao and Angie Santiago-Zayas, and Victoria Blinder, MD.
- "Concordance Between Symptomatic Adverse Event Ratings by Clinicians and Patients: A Systematic Review." Sean Ryan, MS, Thomas Atkinson, PhD, Antonia Bennett, PhD, Sarah Jewell, MLS, Lauren Rogak, MA, Samuel Wagner, MPH, and Ethan Basch, MD.

THANK YOU AND FAREWELL TO OUR SPRING INTERNS

Ashley McFarland completed her practicum and data analysis for her thesis with Sara Olson. She will be obtaining her MPH in Epidemiology from Columbia University's Mailman School of Public Health.

Noah Levin interned with Sujata Patil. This fall Noah will be starting a graduate degree in Biostatistics at Columbia University's Mailman School of Public Health.

Fay Francis, Georgia Elysee, and Hanah Lee recently completed internships in the Epidemiology Service working with Jen Brooks, Jonine Bernstein and Sara Olson. They will be graduating with their MPH degree from Long Island University Brooklyn, School of Health Professions. Meg Woods, Amethyst Saldia, Jen Brooks, Sara Olson and Jonine Bernstein received certificates of appreciation; Meg was acknowledged for her

guidance and supervision of the interns.

SUMMER VISITORS

Catherine Solares:

Intern working with Allison Snyderman

Jill Hsia:

Intern working with Victoria Blinder

Ruth Seok:

Intern working with Victoria Blinder

Alison Glasgow:

Intern working with Sara Olson

Bingrou Alice Zhou:

Intern working with Jaya Satagopan

Sarah Searfoss:

Intern working with Irene Orlow

Ramya Ramaswami:

Intern working with Jen Brooks

<u>Arden Levy:</u>

Intern working with Andrew Vickers

Jan VanderMeulen:

Visiting collaborator of Andrew Vickers

ENAR 2014 Conference

The <u>ENAR 2014 Spring Meeting</u> was held on March 16-19 in Baltimore, Maryland. This meeting is one of the largest annual gatherings of biostatisticians in the world. Presentations from our department included:

- Trial Design and Analysis Challenges When Studying Therapies Designed to Control Growth of Brain Metastases in Cancer Patients. <u>Sujata Patil</u>
- Novel Algorithm for Stratifying Patients into Survival Risk Groups using Mutation
 Data at Selected Genes. <u>Irina Ostrovnaya</u>, <u>Sean Devlin</u> and <u>Mithat Gönen</u>
- Recursive Reclassification using Genomic Markers. <u>Sean Devlin</u>, <u>Irina Ostrovnaya</u>
 and <u>Mithat Gönen</u>

<u>Mithat Gönen</u> will serve as the Program Chair and <u>Ronglai Shen</u> is a member of the Program Committee for the 2015 Spring Meeting, which will be held March 15-18 in Miami, Florida.

Publication

"Influence of blood prostate specific antigen levels at age 60 on benefits and harms of prostate cancer screening: population based cohort study"

Sigrid Carlsson, MD, PhD and collaborators from MSK and Sweden performed a population based cohort study using data from the Gothenburg randomized prostate cancer screening trial and the Swedish Malmo Preventive Project to determine if risks of prostate cancer incidence, metastasis, and mortality associated with screening vary by serum PSA levels at age 60. The researchers found that the overall effects of PSA screening at the population level are an average of two subgroups: men with PSA levels <2 ng/mL at age 60 (about 75% of the population), who experience overdiagnosis but no reduction in prostate cancer mortality, and those with PSA levels ≥2 ng/mL, who experience



Sigrid Carlsson, MD, PhD

a large decrease in cancer mortality with moderate levels of overdiagnosis.

NEW STAFF

Elizabeth Fortier, Research Study Assistant II

Liz received an MPH from New York University in 2012. She recently moved back to New York after spending a year in South Korea. Liz will be supporting the work of <u>Talya Salz</u> and <u>Allison Snyderman</u>.



STAFF PROMOTIONS

- ❖ Melissa Budnick promoted to Department Fund/Project Manager II
- ❖Bradley Cohen promoted to Department Fund/Project Manager II
- **❖** Romina Rodriguez promoted to Research Secretary III
- **❖Sophia Chen** promoted to Research Study Assistant II
- ❖ Iris Miao promoted to Research Study Assistant II

HELP CONSERVE OUR RESOURCES AND SAVE THE ENVIRONMENT!

Please remember to bring in a mug (or two!) from home to use at work as an alternative to the paper cups provided in the kitchen. This week, the second floor alone used more than 50 cups. Bringing your own cups and mugs from home helps the department save money, and is beneficial for the environment.

HEALTHY RECIPE CONTEST WINNER!

Our very own <u>Anne Reiner</u> was the winner of the <u>Healthy Recipe</u> <u>Contest</u>, hosted by Employee Wellness. Her award winning recipe, Spicy Fish Tacos with Mango Apple Slaw, can be found on the Nutrition Weight Management page, via the link below.

Recipe for Spicy Fish Tacos with Mango Apple Slaw



Anne Reiner, MS