Biostatistics   Epidemiology   Administration   Computational Oncology   Health Outcomes

OPEN POSITIONS

Please contact the manager for more information about open positions in our department.

❖ Assistant Research Biostatistician (Kathy Panageas)

❖ Data Software Analyst in Computational Oncology (Sohrab Shah)

❖ Post-Doctoral Fellowship in Biostatistics (Ronglai Shen/Jonine Bernstein)

❖ Post-Doctoral Fellowship in Biostatistics (Li-Xuan Qin)

❖ Post-Doctoral Fellowship in Computational Oncology (Ed Reznik)

❖ Post-Doctoral Fellowship in Computational Oncology (Sohrab Shah)

❖ Assistant Research Biostatistician (Anna Kaltenboeck)

STAFF FAREWELLS

❖ **Brooke Barrow** has been at MSK since July 2017 working as a Research Data Assistant in the Center for Health Policy and Outcomes. She has worked with many investigators in the Center over the last 2 years, notably Deborah Korenstein. She will be attending medical school in August at the Warren Alpert Medical School of Brown University.

❖ **Pranam Dey** has been a Research Data Assistant in the Center for Health Policy and Outcomes since July 2018. He has mainly worked with Aaron Mitchell and completed additional projects with Peter Bach and Anna Kaltenboeck. Pranam will start medical school in August at the Yale School of Medicine.

❖ After two years with us as a visiting investigator, **Sarah Ward** returned to her native Australia for the completion of her fellowship. While at MSK Sarah worked on a number of melanoma genetic epidemiology projects, and collaborated with various members of the Department, notably Irene Orlow, Colin Begg and Audrey Mauguen. We wish her all the best of luck finishing her fellowship down under!

❖ After 9 years in the department and simultaneously completing her doctorate in biostatistics, **Emily Zabor** returned to Ohio to join the Department of Quantitative Health Sciences in the Lerner Research Institute, with a joint appointment in the Taussig Cancer Institute. She was also appointed Assistant Professor in the Department of Molecular Medicine in the Cleveland Clinic Lerner College of Medicine of Case Western Reserve University. Congratulations Emily!

LOVE @ MSK
EPI-BIO EDITION
By Yasmeen Majoka

What better way to kick off the summer than to take a trip to sunny Cancun and revisit the spiciest wedding of the year? Our very own **Vincent Madonia** wed his one-and-only **Farheen Ajmeri** in a seaside ceremony that incorporated elements of their Italian and Indian roots over three festive days, while cheered on by their closest family and friends. MSK guests in attendance participated in a henna night, a traditional Muslim nikkah ceremony, and danced the night away under the starry Mexican sky. Lucky onlookers at the resort even got to witness a mini-parade as Vinny rode in on a horse to the beat of Indian drums and Bollywood-style choreography!

Vinny, a Grants Management Analyst, started in Epi-Bio in as an intern for Ethan Basch's group and impressed us all with his good-natured work ethic. He subsequently worked in Irene Orlow's lab before transitioning to a grants-related role on the administrative team. Farheen started off as an administrative assistant supporting the Biostatistics group and has taken on ever-increasing responsibilities over the years—expanding both her knowledge of healthcare administration and her repertoire of songs to sing in the office. In her current position as a Financial Analyst, she provides essential support to the department and to hospital administration.

Farheen and Vinny now live in Queens and have big plans…to travel internationally and grace the rest of the world with their beautiful faces. Please join us in wishing these two Epi-Bio lovebirds a long and happy marriage and fruitful careers at MSK.

GRANTS

Jonine Bernstein received funding for the R01 grant "Characterizing germline and somatic alterations by glioma subtype and clinical outcome." Other investigators include I**rene Orlow** and **Ronglai Shen**.

Sigrid Carlsson was awarded a K22 grant for her project "Improving shared decision making in cancer screening."

Sigrid Carlsson, along with co-PI **Andrew Vickers**, was awarded a Patty Brisben Foundation for Women's Sexual Health grant for "'It's not like we're a car engine' – A qualitative interview study to improve patient-reported outcomes questionnaires in women's sexual health."

Helena Furberg-Barnes received an R01 grant for "Body composition and the obesity paradox in clear cell renal cell carcinoma."

Elli Papaemmanuil, along with **Sean Devlin**, received a Gabrielle's Angels grant for "Investigating the impact of oncologic therapy on clonal hematopeieses and subsequent risk of developing therapy related leukemia."

Allison Snyderman received funding for her R21 grant "Linking population-based data sources to examine health disparities in clinical trial participation and outcomes." Co-PIs include **Peter Bach**, **Colin Begg** and **Angela Green**.

Andrew Vickers received funding for a PCORI grant "Comparing 'just-in-time' to conventional consent for randomized trials with usual care controls." **Sigrid Carlsson** is also a clinical researcher on the grant and **Emily Vertosick** is contributing statistics.

STAFF ACHIEVEMENTS

Renee Gennarelli was an invited speaker at the Marist College Department of Mathematics Seminar Series on April 26, 2019. Her talk "Data Driven: The Role of Biostatistics in Cancer Research & Health Policy" focused on her journey from Marist to MSK and what it is like to be a biostatistician at a top cancer center. It included a discussion of her current simulation study with **Mithat Gonen** and **Peter Bach**, which explores the effects of high volumes of clinical trials on oncology drug approvals by the FDA. Renee also gave a guest lecture to Marist's Applied Statistics class and shared information about the QSURE program with interested undergrads.

Mithat Gonen was selected as part of the Society of Clinical Trials Fellow Committee for 2019.

Daniel Sjoberg was invited by the European School of Urology (ESU) to give a class on Selecting and Presenting Your Statistical Analysis at the EAU (European Association of Urology) Congress 2019.

For her leadership role in the development of U.S. colorectal cancer screening guidelines, **Ann Zauber** received the Research Service Award by the American Gastroenterology Association, which recognizes individuals whose work has significantly advanced gastroenterogical science and research.

STAFF PROMOTIONS

❖ **Nate Aiken** promoted to Data Analyst II

❖ **Martin Axel** promoted to Research Biostatistician

❖ **Mike Curry** promoted to Research Biostatistician

❖ **Esther Drill** promoted to Principal Biostatistician

❖ **Alexia Iasonos** promoted to Attending

❖ **Stephani Lobaugh** promoted to Assistant Research Biostatistician

❖ **Kathy Panageas** promoted to Attending

❖ **Barry Taylor** promoted to Associate Attending

❖ **Amy Tin** promoted to Research Biostatistician

❖ **Emily Vertosick** promoted to Research Biostatistician

NEW FOOD IN THE NEIGHBORHOOD

GAI Chicken & Rice boasts a fast-casual space where customers order on their in-store iPad and get their Thai Fried Chicken, Wings, and Hainanese-style Steamed Chicken lunch in about 5 minutes. *(158 E 45th St)*

Blank Slate has opened a midtown location. Known for an array of artisanal sandwiches, coffee and salads, it's a great place for a chance to sit down and take a break.

PUBLICATIONS

Lauren Rogak, Ethan Basch, and their colleagues co-authored a paper, "Patient free text reporting of symptomatic adverse events in cancer clinical research using the National Cancer Institute's Patient-Reported Outcomes version of the Common Terminology Criteria for Adverse Events (PRO-CTCAE)", in JAMIA, the Journal of the American Medical Informatics Association. The objective of this study was to describe and understand patient-entered supplemental information on symptomatic adverse events (AEs) as reported in 3 multicenter cancer clinical trials. The data clearly shows that participants frequently added supplemental information beyond study-specific survey items. Patient reporting of symptomatic AEs using a text box functionality with mapping to existing terminologies is both feasible and informative.

Talya Salz, Jessica Lavery, Allison Lipitz-Snyderman, Deborah Korenstein, and their colleagues co-authored a paper, "Trends in opioid use among older survivors of colorectal, lung, and breast cancers", in the Journal of Clinical Oncology. In this paper, the authors analyze and describe data from SEER and Medicare to understand the increased risk in cancer survivors for chronic opioid therapy. Data from survivors of three common cancers were collected and matched with non-cancer controls. Results show that in the first few years post-diagnosis, chronic opioid use among colorectal and lung cancer survivors exceeded that of controls, while chronic use among breast cancer survivors was less than that of controls. However, by 6 years post-diagnosis, survivors were no longer more likely to be chronic users than controls.

Jessica Lavery, Allison Lipitz-Snyderman, Diane Li, Peter Bach, and **Kathy Panageas** co-authored a paper, "Assessing whether cancer stage is needed to evaluate measures of hospital surgical performance", published in the Journal of Evaluation in Clinical Practice. Fee-for-service (FFS) Medicare claims present a potential resource from which to measure outcomes following cancer surgery given the national scope of patients and providers. The administrative nature of the data and consequential lack of clinical information regarding a patient's cancer diagnosis presents a potential limitation for adequate risk-adjustment. Utilizing the linked SEER registry-FFS Medicare claims data source, the authors were able to demonstrate that provider quality of cancer surgery can be measured in the absence of cancer stage. These findings support the use of FFS Medicare claims for hospital-level analyses of short-term outcomes following cancer surgery. Future efforts to report quality based on these analyses can be used to help patients choose among hospitals and for evaluating policies to improve surgical cancer care.

Michael Curry, Renee Gennarelli, and their colleagues co-authored a paper, "Higher clinical suspicion is needed for prompt diagnosis of esophageal adenocarcinoma in young patients", in The Journal of Thoracic and Cardiovascular Surgery. Incidence of esophageal adenocarcinoma in young patients is increasing. However, current guidelines suggest that patients under 50 should not receive an endoscopic evaluation. The National Cancer Database was used to estimate survival by age group. The youngest patient group (18-57 years) had the highest rate of metastatic disease (34%) and was more likely to undergo treatment despite advanced stage at diagnosis. Overall 5-year survival was better for younger patients with local disease, but the difference was less pronounced in locoregional and metastatic cases. In this study, young patients were more likely to have metastatic disease at diagnosis. Advanced stage in young patients may reflect the need for more aggressive clinical evaluation in high-risk young patients instead of an age cutoff driving clinical evaluation.

Allison Lipitz-Snyderman, Michael Curry, Diane Li, and **Peter Bach** co-authored a commentary, "Cancer hospital advertising and outcomes: trust the messenger?", published in The Lancet Oncology. Patients might wish to select their cancer care provider based on objective measures of cancer care quality and outcomes. However, few measures are publicly available. Advertising has the potential to provide valuable information about screening and treatment options, and it could benefit patients by attracting them to hospitals with the best outcomes. However, if hospital advertising for cancer services is not correlated with patient outcomes, information shared through advertising might mislead patients and generate inaccurate expectations of treatment benefit. We assessed the relationship between hospital advertising spending for cancer services in 2014 and risk-adjusted 5-year mortality ratios. Our findings suggest that cancer care advertising is not reliably valuable for patients as a surrogate of cancer care quality. The absence of correlation underscores the need for publicly available objective data on cancer centers' patient outcomes and other measures of quality that can be easily accessed and interpreted by patients to aid them in decision making. Patients, clinicians, and other stakeholders should view cancer center advertisements with scrutiny.

CYCLE FOR SURVIVAL

The Epi-BioCyclers would like to thank everyone for their support and donations. Our team raised over $17,000! Being a part of Cycle for Survival was inspiring, humbling, and motivating. We are so excited for next year's ride and invite you to join our team!

Epi-BioCyclers: **Isidora Autuori, Cynthia Berry, Roxana Damian, Renee Gennarelli, Margie Hannum, Jessica Lavery, Melissa Lavery, Shireen Lewis, Diane Li, Maha Mamoor, Axel Martin, Irene Orlow, Arfath Pasha, Lauren Rogak, Sohrab Shah, Yessie Werner,** and for the second year in a row, our very special guest rider, Caden Berry.

P-VALUE SEMINAR

On June 11th, members of the Biostatistics department held a roundtable discussion titled "Recent Controversy On P-values and Statistical Significance - Perfect Storm or Tempest in a Teapot?" Hosted by **Colin Begg, Marinela Capanu, Mithat Gönen** and **Chaya Moskowitz**, the panel fostered a lively discussion on this controversial topic while fielding questions and comments from the large audience in the Zuckerman Auditorium. Video of the panel discussion and subsequent Q/A session can be found at MSK Video Central (https://mskvideocentral.mskcc.org/).

SUSTAINABILITY TEAM

Help our floor be greener! A sustainability team has been formed to address waste management and energy use. Please keep an eye out for our initiatives, including the "Where do I put...?" board in the pantries and a mug sharing tree! We can all do our part to keep the floor cleaner and more sustainable. For more information or to join, please contact **Tricia Neary.**

QSURE CLASS OF 2018 UPDATES
Here are updates from last year's QSURE class!

❖Nicholas Hartman graduated from Cornell University in May, and will be attending the University of Michigan-Ann Arbor as a PhD student in Biostatistics.

❖David Hong graduated from Cornell University in May and will be pursuing a Master's degree at the Harvard TH Chan School of Public Health.

❖Elly Kipkogei graduated from Cornell University in May and in September he will begin his new position with AstraZeneca as a data scientist.

❖Chase Latour graduated from Washington University in St Louis and will be attending a PhD program in epidemiology at the University of North Carolina at Chapel Hill.

❖Christine Lin graduated from Cornell University in May and will be pursuing her MD at Pennsylvania State University.

❖Antara Mondal graduated from Carnegie Mellon University in December and has been working as a research statistician at the Cardiac Center of The Children's Hospital of Philadelphia.

❖Margaret Steiner will be graduating from George Washington University in December, and plans to pursue a PhD in bioinformatics.

❖Srini Sunil graduated this year from Duke University and will begin his new role as a quantitative analyst at BlackRock this summer.

❖Sara Szvetecz graduated this year from James Madison University and in August will begin a MS program in Biostatistics at Boston University.

❖Aijin Wang graduated from Carnegie Mellon University this year and has accepted a job as a biostatistician/consultant at the Columbia University Mailman School of Public Health. She plans on pursuing a PhD in a few years' time.

2019 SUMMER STUDENTS

Left to right:
Hector Moran, Allison Reiner, Sherry Wu, Amy Pitts, Sunny Zhong, Mohammed Rahman, Tony Chen, Xiaobin Zhou, Hannah Fuchs, Crystal Zang

Left to right:
Marco Landicino, Emery Weinstein, Rachel Lee, Joseph "Jack" Kochansky

NEW STAFF

Yannick Dueren, Graduate Research Assistant
Yannick joins the Biostatistics Research Group as a Graduate Research Assistant. He graduated in 2017 from RWTH Aachen University with a Master's in Computational Engineering and is now doing research for his PhD in Statistics at Ruhr University Bochum, Germany. Yannick will be working with Li-Xuan Qin and will be staying at MSK for the next three months.

Angela Green, Assistant Attending Medical Oncologist
Angela is an Assistant Attending Medical Oncologist in the Department of Medicine on the Gynecology Medical Oncology service with a secondary appointment in the Department of Epidemiology and Biostatistics. Her research interests include understanding the limitations of the current healthcare system to address the needs of cancer patients and studying barriers to patient access to high value and high-quality cancer care. She has a particular interest in drug regulatory policy, the cancer clinical trial infrastructure, and the use of large-scale datasets to evaluate the effectiveness, safety, patterns of use, and costs of novel cancer drugs on a population level. She is also interested in the incentives that drive unnecessary medical testing and the consequences of low value practices. She treats patients with gynecologic cancers and additionally oversees trials for the development of endometrial cancer therapies.

Jennifer Hsu, Research Data Assistant
Jenn recently graduated from UC Berkeley where she studied Nutritional Sciences with a focus in Physiology & Metabolism and worked in a research lab in the Nutritional Sciences & Toxicology department. She is excited to explore research in the context of health policy and drug pricing.

Richard Koppenaal, Editorial Project Coordinator
Richard graduated from the University of Pittsburgh in 2016 with a degree in history. After graduating, Richard worked at the New York Athletic Club's communications department for nearly three years before joining MSK in March.

Andrew McPherson, Assistant Laboratory Member
Andrew McPherson is an Assistant Laboratory member at MSK. Andrew He completed his PhD in Computing Science from Simon Fraser University under the supervision of Cenk Sahinalp and Sohrab Shah, where he focused on methods for sequencing analysis, including detection and characterization of genome rearrangements, and inference of clonal phylogenies. After his PhD, Andrew worked as a post-doctoral fellow at University of British Columbia, supervised by Sohrab Shah and Samuel Aparicio. During his post-doc, he developed computational methods and infrastructure for a novel single cell whole genome sequencing platform, Direct Library Preparation, and applied these methods to the study of cells lines, patient samples and patient derived xenografts with the aim of understanding tumor evolution, tumor microenvironment and genome instability. Andrew has an interest in Bayesian inference and is inspired by new developments in probabilistic programming that allow for the development and evaluation of complex probabilistic models with application to genomics.

Jeanette Ponte, Research Regulatory Associate
Jeanette has joined the Epidemiology and Biostatistics department having previously worked as a Clinical Research Specialist at MSK Basking Ridge. She graduated in January 2018 from Boston University with her Master's in Public Health, concentrating in Epidemiology and Biostatistics. She will be working with the department to help meet all regulatory needs.

Francisco Sanchez-Vega, Assistant Attending Computational Oncologist
Francisco Sanchez-Vega has been appointed as an Assistant Attending Computational Oncologist on the Colorectal Surgery Service in the Department of Surgery and the Computational Oncology Service in the Department of Epidemiology and Biostatistics. Francisco received his PhD in Applied Mathematics and Statistics with a concentration in Computational Medicine from The Johns Hopkins University in 2012. For two years he worked as a postdoctoral research fellow at the National Human Genome Research Institute in Bethesda. Francisco joined MSK in 2015, where he has worked as a research scholar in Nikolaus Schultz's lab for the past four years.

Sara Tabatabai, Research Data Assistant
Sara joins us as a Research Data Assistant with the Health Outcomes group. She recently graduated from the University of Wisconsin with a degree in economics and previously worked as Outreach Coordinator for Epistemic Analytics, a research lab in the Wisconsin Center for Education Research.

Niti Trivedi, Research Data Assistant
Niti joins the Center for Health Policy and Outcomes as a Research Data Assistant. She was previously a breast health outreach coordinator at Robert Wood Johnson University Hospital. She graduated in 2018 from Rutgers University with a Master's in Public Health. She will be working with Aaron Mitchell, Angela Green, and other investigators on health outcomes studies.

Travis Williams, Research Scholar
Travis Williams received his PhD in Electrical Engineering from North Carolina A&T State University in 2017. His dissertation, "Advanced Image Classification using Deep Neural Networks", combined wavelet theory and deep learning to increase the accuracy and efficiency of deep learning algorithms. Currently a Research Scholar under Amber Simpson and Mithat Gonen, his research applies machine learning to classifying tumors in the pancreas and liver as cancerous, benign, predicting survival, etc.

Sarah Wood, Data Analyst
Sarah joined the Health Outcomes Group as a Data Analyst. She graduated from Montclair State University in 2015 with a Bachelor's in Psychology. She then worked as a Research Coordinator at Kessler Foundation where she analyzed data from neuroimaging studies on patients with multiple sclerosis and spinal cord Injury. She will be working with Andrew Vickers' team on the Advanced Reports and Amplio applications.