



BIOSTATISTICS SEMINARS

All seminars are held
from 10:30AM – 11:30AM

485 Lexington Ave, Conference Room B (2137)
-Streaming via Zoom during PAUSE-

- ❖ May 27, 2020 Kay See Tan
MSK
- ❖ June 3, 2020 Li-Xuan Qin
MSK
- ❖ June 17, 2020 Zhigang Zhang
MSK
- ❖ June 24, 2020 Andrea Knezevic
MSK

COMPUTATIONAL ONCOLOGY SEMINARS

Meetings will resume in the fall.

EPIDEMIOLOGY SERVICE MEETINGS

Meetings will resume in the fall.

HEALTH OUTCOMES RESEARCH GROUP SEMINARS

All seminars are held from 12PM – 1PM

485 Lexington Ave, Conference Room B (2137)
-Streaming via Zoom during PAUSE-

- ❖ May 15, 2020 Allison Snyderman &
Ben Roman
MSK
- ❖ June 12, 2020 Maria Widmar
MSK

POPULATION SCIENCES RESEARCH PROGRAM SEMINAR SERIES

Meetings will resume in the fall.

COVID-19 DISCUSSION SERIES: THURSDAYS 3:30PM

Kay See Tan, I-Hsin Lin, and Anna Kaltenboeck are hosting a discussion series with the intention of bringing together colleagues who are interested in sharing and discussing COVID-related research. Discussion topics have included the impact of COVID-19 on ongoing clinical trials, a critical review of the IHME prediction models, specificity of antibody testing for COVID-19, and how to measure and monitor COVID-19 so that it can inform policies such as re-opening plans. More relevant topics will be covered in future seminars. In addition to the discussion series, please [join the Microsoft Teams group](#), which will serve as the central repository for other resources such as articles and upcoming webinars. Members are encouraged to share resources, collaborate, and contribute discussion topics.



DEPARTMENT CHAIR
Colin Begg, PhD
EDITORS
Narre Heon
Lauren Rogak, MA
Amethyst Saldia
Molly Samson
Yesenia Werner
Prusha Patel
Richard Koppenaal
Shireen Lewis, MPA
Joseph Kanik

BENJAMIN GREENBAUM JOINS COMPUTATIONAL ONCOLOGY SERVICE

Benjamin Greenbaum, PhD, is a new Associate Attending in the Computational Oncology Service. Dr. Greenbaum's research seeks to quantify the interaction of tumors with the immune system and to predict immune driven evolution of tumors and viruses. His work utilizes a broad range of tools, from statistical physics and information theory to evolutionary biology. As part of his new role, he will establish a new program in Computational Immuno-Oncology. This program will bring computational approaches to immunotherapy and act as a bridge between the Computational Oncology Service and the Parker Institute for Cancer Immunotherapy, a collaboration of six academic centers including MSK with the goal to use the power of the immune system to fight cancer. Dr. Greenbaum has a PhD in theoretical physics from Columbia University and has trained at Los Alamos National Laboratory and the Institute for Advanced Study. He previously held the role of Associate Professor at Icahn School of Medicine at Mount Sinai in the Departments of Medicine and Oncological Sciences, where he was the founding director of the Center for Computational Immunology. Dr. Greenbaum authored many publications in high-ranking journals and holds several awards including a Phillip A. Sharp Award for Innovation in Collaboration from Stand Up to Cancer, a Pershing Square Sohn Prize, and a Mark Foundation Fellowship.



Benjamin Greenbaum, PhD

EMERGENCY REDEPLOYMENT

In the midst of the global COVID-19 pandemic, it's safe to say that many of us have had to make sacrifices in order to flatten the curve. Despite these challenges, the department has continued moving forward, and everyone should take pride in their continued efforts in spite of the global pandemic.

However, two members of our department, Nicole Rusk and Yessie Werner, are deserving of special recognition. When the hospital requested volunteers to help combat the virus, Nicole and Yessie answered the call. They have since been redeployed to Memorial Hospital: Nicole has been working in the staff lounge and Yessie is stationed outside the 67th Street entrance handing out masks. On behalf of the department, we would like to thank Nicole and Yessie for their brave work on the front lines of this fight against the coronavirus.

When you join your neighbors for the nightly 7pm round of applause, we ask that you please do so with Nicole and Yessie in mind. And the next time you see Nicole or Yessie – be it in person or on a video chat – please be sure to thank them for their hard work and selflessness.

As of May 14 both are back and working remotely for Comp Onc.

Thank you, Nicole and Yessie!



GRANTS

Jonine Bernstein, along with Co-PI, Jung Hun Oh, received funding for their R21 grant "Radiation-associated breast cancer: machine learning on genotypes to predict individualized risk." Irene Orlow is also a Co-I on the grant.

Elsa Bernard recently received an NOA from the Edward P Evans Foundation for the EvansMDS Young Investigator Award for her project titled "Beyond genetic heterogeneity in MDS: Towards molecularly guided classification, risk stratification and treatment decisions."

Barry Taylor was recently awarded an R01 from NCI titled "Defining the impact of mutant oncogene zygosity."

STAFF ACHIEVEMENTS

Mithat Gonen, PhD, Chief of the Biostatistics Service has been elected as President-Elect to the Board of Directors of the Society for Clinical Trials (SCT), a multidisciplinary society focusing on the methodology and conduct of clinical trials with membership spanning many disciplines including biostatistics, clinical areas, IT and systems, data management, ethics, regulatory bodies, behavioral science, research coordination, patient partners, and health outcomes research.

Karissa Whiting has been selected to be a member of the Council of Emerging and New Statisticians (CENS)

STAFF PROMOTIONS

Jessica Lavery promoted to Research Biostatistician II

Andrea Knezevic promoted to Research Biostatistician II

Margaret Hannum promoted to Research Biostatistician

Chaya Moskowitz promoted to Attending Biostatistician

STAFF KUDOS

Thank you to **Joey Kanik** for providing exceptional support assisting our department to transition in a remote work environment. The department is truly grateful that you have been able to troubleshoot technological issues, which has enabled faculty and staff to continue working effectively during this time.

ONLINE FOOD ORDERING

Amazon Fresh offers produce, pantry and household items, and more. Items are pulled from Amazon's own warehouse grocery stores with \$10 delivery fees, free for Prime members. Delivery windows open throughout the day.

Instacart offers personal shoppers to go to grocery stores for you and then delivery your goods. If any items aren't available, they'll communicate via text for substitutions.

Baldor is typically a food wholesaler that sells to restaurants but it has opened its doors to the public. Delivering to homes within a 50 mile radius of its Bronx location, buyers will have access to an array of fresh fruits and meats.

Other food wholesalers and restaurant suppliers selling their products directly to consumers can be found [here](#). Delivery zones and purchasing minimums may vary.

Local grocery pickup and delivery are available through platforms such as [Mercato](#) and [Pepper](#).

If possible, please support your favorite restaurants by calling an order for pickup or delivery, or by using their preferred online ordering system.

PUBLICATIONS

Anne Reiner, along with colleagues at MSK and other institutions, published an article, "[Radiation treatment, ATM, BRCA1/2, and CHEK2*1100delC pathogenic variants, and risk of contralateral breast cancer](#)" in the Journal of the National Cancer Institute. The article details the risk of contralateral breast cancer (CBC) for women with mutations in breast cancer-associated genes as well as the impact of radiation treatment for first primary breast cancer. Using population-based WECARE Study and SEER registry data, they reported that women carrying pathogenic mutations in BRCA1/2, ATM, or the CHEK2*1100delC variant were not at increased risk of radiation-associated CBC, suggesting that modifying radiation treatment is unwarranted for young women with breast cancer harboring pathogenic mutations in these genes. However, they did identify increased risk of radiation-associated CBC for women carrying ATM rare missense variants of uncertain significance, highlighting the need for improved tools and approaches to resolve the functional impact of such variants, their interaction with radiation treatment, and subsequent CBC risk.

Maha Mamoor, Jessica Lavery, Lauren Rogak, Deborah Korenstein, and colleagues published a paper, "[Quality of Life in Long-Term Survivors of Advanced Melanoma Treated with Checkpoint Inhibitors](#)" in the Journal for ImmunoTherapy of Cancer. Immune checkpoint inhibitors have revolutionized treatment of advanced melanoma, leading to an emerging population of long-term survivors. In this study, the authors administered cross-sectional surveys and reported on MSK's experience with long-term survivors of advanced melanoma treated with checkpoint inhibitors. Patients reported moderate symptom burden and good QOL. Ensuring appropriate symptom management will optimize clinical outcomes for these patients.

PROLIFIC AUTHORS AT MSK

Over the years numerous metrics have been developed to try to gauge the influence of individual scientists. The latest metric, designed to rank the top 100,000 authors across all scientific fields, was published recently (Ioannidis et al., PLOS Biology, 2019). This index combines 6 separate metrics: total citations; the h-index; the Schreiber hm-index; # citations as a single author; # citations as single or 1st author; # citations as single, first or last author. Looking at the rankings for all MSK scientists, we find the top 5 are unsurprising: Joan Massague, Craig Thompson, Alan Hall, Jose Baselga, Charles Sawyers. However, our own **Andrew Vickers** comes in at 13th overall among MSK scientists. Andrew is by far and away our most prolific author. This ranking shows that his work is not just voluminous, it is also highly influential. Other members of the department who made the top 250 at MSK were **Colin Begg** (20th), **Malcolm Pike** (40th), **Peter Bach** (69th), **Mithat Gonen** (129th), **Ann Zauber** (154th), **Venkat Seshan** (189th), **Glenn Heller** (206th) and **Sohrab Shah** (250th). As you can see the metric tends to favor more senior scientists!



Andrew Vickers, PhD

COVID-19 INFORMATION HUB

MSK hosts a number of resources available to staff during the Covid-19 crisis. Available below are numerous helpful links hosted on OneMSK.



Clinical Guidance



Employee Health and Screenings



Commuter Assistance



Childcare Assistance



Employee Relief Fund



Resources for Staff



Personal Protective Equipment



FAQs



MSK Heroes

HOPE EVERYONE STAYS SAFE!

NEW STAFF

Michael Curry, Research Biostatistician

Mike joined the Biostatistics Service as a Research Biostatistician. He previously worked in HORG on health outcomes and drug pricing research. Before his time at MSK, Mike was a biostatistician at the United Network for Organ Sharing (UNOS), where he helped monitor organ allocation policies. He graduated in 2015 from Northwestern University with a Master's in Biostatistics & Epidemiology.



Essam Elsherif, Lead Bioinformatics Software Engineer

Essam joined the Computational Oncology group as a Software and Data Architect for the MSK MIND platform in April 2020. Prior to joining MSK, he worked as a Solutions Architect at Elsevier, where he built a Semantic Data Integration, Search & AI Platform for life sciences. He has several years of experience in data integration and enterprise solutions architecture, and software engineering. He holds a master's degree in Information Systems from New Jersey Institute of Technology, and he is excited to create cutting edge architectures to support cancer research.



Raymond Figueroa, Facilities Coordinator

Raymond Figueroa joins the department as the Facilities Coordinator for the Joy Building. Raymond started at MSK in 2009 and spent the last 4 years in Laboratory Operations working in Zuckerman. Raymond graduated in 2017 from the Community College of the Air Force with a degree in Civil Engineering and has served in both the U.S. Navy and U.S. Air Force.



Anne I. Hahn, Project Coordinator

Anne joins the Epidemiology & Biostatistics Department as a Project Coordinator to support the research needs of Ann Zauber. Anne is currently completing her Master of Public Health in Epidemiology at Icahn School of Medicine at Mount Sinai and will graduate in June. Prior to attending Mount Sinai, Anne worked as a Clinical Research Associate in a hepatic insulin resistance lab at Yale School of Medicine.



David Hoyos, Computational Biologist

David Hoyos joins the Computational Oncology group as a computational biologist in Benjamin Greenbaum's lab. His research interests include quantitative biology, specifically in developing models describing phenomena within viruses and cancer. David graduated with an A.B. in Physics from Princeton University.



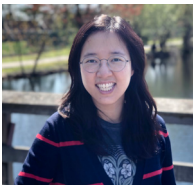
Pegah Khosravi, Sr. Computational Biologist

Pegah Khosravi has joined the Computational Oncology group as a Sr II Computational Biologist. Her research focuses on the application of machine learning methods including clinical image analysis, and integration of multi-modal data toward deeper understanding of cancer and improved clinical outcomes. She graduated from the University of Tehran, Iran in 2014 with a Ph.D. in Bioinformatics. She worked as a Postdoctoral Fellow at the Institute for Research in Fundamental Sciences, Tehran. Prior to joining MSK, she worked as a Postdoctoral Associate at New York's Weill Cornell Medicine where she developed the STORK algorithm for selecting the best embryo for transfer after in-vitro fertilization.



Jayon Lihn, Sr. Computational Biologist

Jayon Lihn joined the Computational Oncology group as a Sr. Computational Biologist in April 2020. She is interested in applying statistical and bioinformatic tools to model the immunogenicity of neoantigens in tumors and its response to immunotherapy. After graduating from Stony Brook University with a PhD, she was trained at Cold Spring Harbor Laboratory as a postdoctoral researcher and started working with Benjamin Greenbaum in 2019.



I-Hsin Lin, Principal Biostatistician

I-Hsin joined the MSK family in March and is currently collaborating with the Division of Subspecialty Medicine. In her previous work, I-Hsin served as a Biostatistician at Yale University, where she conducted and supervised the design and analysis of clinical trials and epidemiologic observational studies. I-Hsin earned her PhD in Epidemiology from the NYU School of Medicine, where she led the 9/11 disaster research and human microbiome projects. Prior to her study in New York, I-Hsin earned her MPH at Chung Shan Medical University (Taiwan). Her research has been recognized by American Association for Cancer Research (AACR) twice and a broad range of media coverage. In addition to her expertise in molecular epidemiology, I-Hsin worked as a multidisciplinary Statistician at the Center of Genomic Medicine, National Taiwan University, and the Institute of Statistical Science, Academia Sinica.



Alexander Solovyov, Senior Research Scientist

Alexander has joined the Computational Oncology group as a Senior Research Scientist working with Benjamin Greenbaum. His research interests include interactions of the viruses and non-coding RNA with tumor microenvironment and their role in evolution of cancer cells. He graduated from Princeton University with a PhD in Theoretical Physics in 2009.

