



BIOSTATISTICS SEMINARS

Streaming online

- ❖ Nov 17, 2021 **Kaleab Abebe**
Univ. of Pittsburgh
- ❖ Dec 1, 2021 **Alexia Iasonos**
MSK
- ❖ Dec 8, 2021 **Ronglai Shen**
MSK
- ❖ Dec 15, 2021 **Marinela Capanu**
MSK

COMPUTATIONAL ONCOLOGY SEMINARS

Streaming online

- ❖ Nov 16, 2021 **Alexander Anderson**
Moffitt Cancer Center
- ❖ Dec 21, 2021 **Barbara Englehardt**
Princeton

EPIDEMIOLOGY SERVICE MEETINGS

Streaming online

- ❖ Nov 8, 2021 **Michael Marchetti**
MSK
- ❖ Nov 15, 2021 **Tarlise Townsend**
MSK PFACQ
- ❖ Nov 22, 2021 **Mustapha Abubakar**
NCI
- ❖ Dec 13, 2021 **Robert Burk**
Albert Einstein
College of Medicine

POPULATION SCIENCES RESEARCH PROGRAM SEMINAR SERIES

Streaming online

- ❖ Nov 16, 2021 **Catherine Alfano**
Feinstein Institutes for
Medical Research
- ❖ Dec 14, 2021 **Linda Collins**
NYU

HEALTH OUTCOMES RESEARCH GROUP SEMINARS

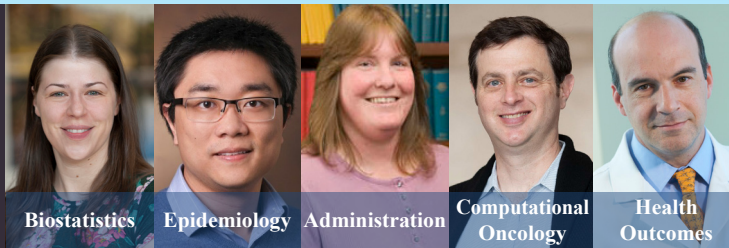
Streaming online

- ❖ Nov 19, 2021 **Bridgette Thom**
MSK
- ❖ Dec 3, 2021 **Angela Green**
MSK
- ❖ Dec 17, 2021 **DigiTs Panel**
MSK

CULTURE COMMITTEE JOURNAL CLUB

Streaming online

- ❖ Dec 16, 2021 **TBD**



DEPARTMENT CHAIR - Colin Begg, PhD
EDITORS
Lauren Rogak, MA
Amethyst Saldia
Richard Koppelaar
Shireen Lewis, MPA
Niti Trivedi
Julianna Reitz
Joseph Kanik

FAREWELL TO PETER BACH

Peter B. Bach, Director of the Center for Health Policy and Outcomes (CHPO), is leaving MSK at the end of the year to join Delfi Diagnostics as their Chief Medical Officer.



In 1999, Peter and colleagues first showed that [Black patients less often received curative surgery](#) for lung cancer than White patients then demonstrated a mechanism for the disparity in that physicians caring for Black patients had fewer resources than those who cared for White patients. The work led to the elevation of the Office of Minority Health within the NIH, and MSK recognized him with a Young Investigator Award.

When interest arose in lung cancer screening, Peter developed the first risk model for lung cancer, led multiple evidence-based reviews of lung cancer screening and accompanying guidelines, and ultimately served as the national requestor for CMS coverage of CT screening. During a two-year sabbatical as the Senior Adviser to the Administrator at CMS, Peter wrote the regulations that enabled researchers to study Part D claims and revised those for coverage under evidence development and clinical trials coverage.

In 2009, Peter wrote a [seminal paper](#) on the problems with Medicare coverage and reimbursement rules for cancer drugs and showed that cancer drug prices were rising faster than inflation – a price tracking that continues to this day. He then formed the Center for Health Policy and Outcomes to study a wide range of health policy issues. In a test of the importance of value in drug pricing, Peter and colleagues announced in a New York Times Op-Ed that MSK was [rejecting the drug Zaltrap](#) from its formulary due to its high cost. The drug’s [maker then lowered its price](#), a story that landed MSK on the front page of New York Magazine and on 60 minutes.

In 2015, he founded the Drug Pricing Lab and presented the first value framework for drugs called the ‘[Drug Abacus](#)’, which is still the most searched feature on the [DPL website](#). When confronted with poor access to hepatitis C treatments due to their high cost, he and his frequent colleague Mark Trusheim created the ‘[Netflix model](#)’ of Hepatitis C financing that was then adopted by Louisiana and Washington State.

In 2016, he and his colleagues exposed the waste and cost of [oversized vials](#) of single dose cancer drugs, which resulted in an OIG investigation and ultimately to legislation that allows Medicare to reclaim almost \$3B in funds going to drug companies for discarded drugs. The policy was described by Sen. Dick Durbin Senate in a floor speech ([Link to YouTube video](#)).

Peter is a member of the National Academy of Medicine, the American Society for Clinical Investigation, the American Association of Physicians, the Council of Foreign Relations, and the Johns Hopkins Society of Scholars. He was selected to [PR Week’s “2020 Health Influencer 50 List”](#) and [Crain’s NY Business Notables in Health Care 2021](#). He has published more than 200 peer-reviewed articles and scientific editorial and essays in the lay press, and he has been featured in the New York Times, New York magazine, the Wall Street Journal, the Washington Post, Reuters, Boston Globe, Associated Press, Forbes, Barrons, The New Yorker, NPR, CNBC and 60 Minutes. We wish Peter all the best on his next steps!

HACKATHON

Sixteen members of the Department of Epidemiology and Biostatistics participated in MSKCC’s Strategy & Innovation’s Hackathon on September 30 - October 1. Participants included [Nate Aiken](#), [Xing Bai](#), [Sammi Brown](#), [Esther Drill](#), [Meier Hsu](#), [Hannah Kalvin](#), [Caroline Kostrzewa](#), [Jessica Lavery](#), [Jasme Lee](#), [Sabrina Lin](#), [Stephanie Lobaugh](#), [Shaun Porwal](#), [Ryan Weber](#), [Junting Zheng](#), [Christine Zhou](#), and team captain [Dan Sjoberg](#). The team was incredibly productive and worked on the following: several features related to the {gtsummary} package, including making a reference sheet, improving documentation, adding new functions and migrating functions from other packages; creating a framework for the development and maintenance of GitHub repositories related to project organization for projects involving SAS and for storing SAS macros and templates in a central location; creating a departmental computing resource including resources for getting set up in RStudio and GitHub; creating the {amplior} package for the large code base underpinning the Amplio project; updating {biostatR} core packages; and releasing a new version of {broom.helpers} to CRAN. Congratulations to the Epi Bio Hackathon team on a job well done!

STAFF PROMOTIONS

Nate Aiken promoted to Senior Data Analyst.

Samantha Brown promoted to Research Biostatistician.

Jasme Lee promoted to Research Biostatistician.

Amy Tin promoted to Research Biostatistician II.

Emily Vertosick promoted to Research Biostatistician II.

Gordie Watt promoted to Instructor.

Sophia Zimbalist promoted to Research Data Analyst.

STAFF FAREWELLS

We bid farewell to **Xing Bai**, Assistant Research Biostatistician in the Biostatistics Service, who will be joining Regeneron as a Statistical Analyst Consultant and supporting BDM (biostatistics & data management) deliverables on the study design, analysis, and reporting of clinical trials. We wish him the best of luck in this new position and in all his future endeavors!

STAFF ACHIEVEMENTS

Congratulations to departmental colleagues, **Niki Schultz** and **JJ Gao**, both of whom played leading roles in the development of **OncoKB, a precision oncology database** that helps doctors match targeted therapies to a patient's somatic mutational profile, thus providing a key tool for making precision medicine a reality. OncoKB recently received partial recognition status from the Food and Drug Administration, the first such tool to be recognized by the FDA. OncoKB includes information about the clinical and biological effects of more than 5,600 genomic changes in more than 680 cancer-associated genes. OncoKB is freely available for academic research use and its contents can also be licensed commercially. The next steps for OncoKB include the annotation of germline alterations, including several that have been validated as predictive of drug response, and the development of a clinical trial matching system.

Congratulations to **Dan Sjoberg** for winning the @AmstatNews Award for Innovations in Statistical Programming and Analytics (AISPA) for his work on the `gtsummary` `rstats` package! Dan was recognized at the Statistical Programmers and Analysts Section at JSM2021 in August.

Li-Xuan Qin was selected to serve as a Regular Member of the Biostatistical Methods and Research Design Study Section, Center for Scientific Review, for the term beginning July 1st, 2021 and ending June 30th, 2025. Congratulations to Li-Xuan!

NEW FACULTY

Andrea Arfè, Assistant Attending Biostatistician

Andrea Arfè is a new Assistant Attending Biostatistician in the Biostatistics service. His research focuses on developing novel adaptive clinical trial designs based on machine learning algorithms. Andrea received a PhD in Statistics from the Bocconi University of Milan, Italy. Before joining MSK, he was a post-doctoral researcher at Harvard Medical School, where he was supported by a fellowship from the Harvard-MIT Center for Regulatory Science. He also conducted research at the Dana-Farber Cancer Institute.



Teng Fei, Assistant Attending Biostatistician

Teng recently joined Biostatistics Services as an Assistant Attending. His research interests include latent class analysis for joint longitudinal and survival data, batch effect adjustment for high-throughput omics data, and microbiome data analysis. Teng received his PhD in Biostatistics from Emory University. He works closely with the Division of Hematologic Malignancies on microbiome-related research projects.



Yuan Chen, Assistant Attending Biostatistician

Yuan Chen, PhD, is a new Assistant Attending in the Biostatistics Service. Yuan graduated from Columbia University in 2021 with a PhD in Biostatistics. Yuan's research focuses on developing statistical machine learning methods to facilitate precision medicine. She is interested in integrating evidence from multiple data domains to address patient heterogeneity and tailoring dynamic treatment regimens for recurrent disease management. Yuan is currently collaborating with the breast medical oncology group at MSK.



EMPLOYEE SPOTLIGHT

Gordon "Gordie" Watt joined the Department in 2018 as a Postdoctoral Research Fellow and was recently promoted to Instructor. Gordie works with Jonine Bernstein and Malcolm Pike on various studies related to breast cancer epidemiology. Since starting at MSK, he has co-authored publications in Breast Cancer Research, JAMA Network Open, JNCI, and the International Journal of Cancer, among others, examining the role of biomedical imaging and genetics to identify women with increased risks of breast cancer. As a grateful recipient of a National Institutes of Health Loan Repayment Award, he would like to strongly recommend this to all young investigators with any education loan debt! During the pandemic, he received two conference travel awards to amazing places, neither of which happened in person: the International Society of Radiation Epidemiology in Sitges, Spain (cancelled) and the Radiation Research Society in San Juan, Puerto Rico (virtual). Some of his current research, as part of a 2020 Population Sciences Research Program Pilot Funding Award, aims to develop and test an automated measure of background parenchymal enhancement on contrast-enhanced mammography, which is a promising new risk factor for breast cancer. He is also interested in creating polygenic risk scores for cancer survivors at risk of treatment-related subsequent cancer diagnoses.



Gordie lives with his husband, David, and cat, Harvey, in Astoria. Over the pandemic, urban gardening has taken over his apartment and he is racing against the coming winter to harvest some kale and squash! He also learned to embroider and is happy to show you how to create a custom bucket hat. He has been reading some great fiction lately and recommends *Sorrow and Bliss* by Meg Mason and *On Earth We Are Briefly Gorgeous* by Ocean Vuong. He's a big fan of *Girls5eva* and *The Other Two*, but still mainly watches re-runs of *30 Rock*. As an undergraduate Linguistics major, Gordie spends a lot of time reading about rare languages online and is resolving to make 2022 the year of language learning. He is typically in the office Monday, Wednesday, and Thursday. Please stop by and say hello!

NEW STAFF

Duaa H. Al-Rawi, MD, PhD, Medical Oncology Fellow

Duaa is a Medical Oncology fellow focusing on Gynecologic Medical Oncology and is jointly mentored in her postdoctoral research by Sohrab Shah and Sam Bakhroum. Her research focuses on the epigenetic consequences of genomic instability ovarian cancer. She earned her PhD in Cell Biology at MIT and her MD at Stanford University.



NEW STAFF

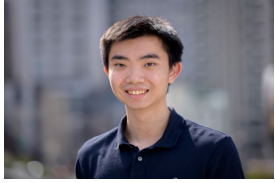
Jenna Bhimani, Research Associate

Jenna joins the Epidemiology Department to work with Elizabeth Kantor. She completed her Master of Public Health from Columbia University in May and has since worked as a research assistant for the Lancet Commission on Women and Cancer. Prior to moving into public health, she spent the last 5 years working as a physician in internal medicine in the UK, most recently at Imperial College, London. She is looking forward to getting involved in her research, the department, and life in New York City.



Alex Chu, Computational Biologist I

Alex joins the Computational Oncology Service as a Computational Biologist I. Alex was a summer intern in Benjamin Greenbaum's Lab at the Icahn School of Medicine at Mount Sinai, working on a bioinformatics pipeline to predict neoantigen quality from whole-exome sequencing data. Alex graduated from Columbia University with a B.A. in Computer Science and hopes to use computational tools to contribute to the field of cancer immunotherapy research.



Benjamin Freedman, Intern

Benjamin is an intern in the Reznik Lab. He recently graduated from Princeton with degrees in Chemistry and Visual Arts. Benjamin's thesis was a computational mechanistic investigation of an iron-based isotope-exchange catalyst. His prior experience with translational research includes a summer spent with Ari Hakimi's group at MSK in 2019. He is currently working on a mix of kidney and germ cell tumor genomics projects and will be collaborating on a metabolomics project with the Tansey Lab.



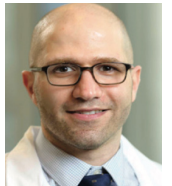
Justin Jee, Oncology Fellow

Justin is a medical oncology fellow co-advised by Sohrab Shah and Bob Li. He works to integrate liquid biopsies and other genomic platforms with large-scale clinical data mining to better choose and predict responses to lung cancer therapy. He has an MD and PhD from NYU and completed his Internal Medicine residency at Columbia.



Sari Khaleel, Urology Fellow

Sari Khaleel is a first-year urologic oncology fellow working with Ed Reznik, Ari Hakimi and the Medical Oncology team on several translational projects that aim to identify biomarkers for therapeutic response in advanced renal cell carcinoma. Sari completed a master's degree in bioinformatics and computational biology before going to medical school where he worked at a computational biology lab and discovered his passion for urology. Sari recently finished his urology residency at the University of Minnesota.



Jovana Olaizola, Program Assistant

Jovana joined MSK in April of 2018 and transitioned into the Department Epidemiology and Biostatistics as a Program Assistant in August 2021. She provides administrative support to the Chief of Biostatistics, Mithat Gonen and the Director of Research Support, Katherine Panageas. Before joining Epi-Bio, she was an Office Coordinator in the Department of Surgery, Urology Service, supporting Brett Carver since 2018. Jovana holds a bachelor's degree in Business Management from Hofstra University.



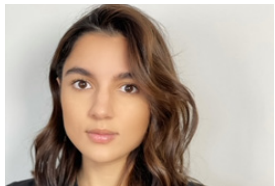
Xiyu Peng, Postdoctoral Research Fellow

Xiyu joins the Department of Epidemiology and Biostatistics as a postdoctoral fellow, working with Drs. Ronglai Shen, Katherine Panageas and Margaret Callahan. Her current research focuses on flow cytometry analysis to identify immune cell subpopulations and pharmacodynamics changes upon treatment. Prior to joining the MSK, Xiyu obtained her PhD in bioinformatics and statistics from Iowa State University. For her dissertation, Xiyu worked on microbiome and single cell RNA-seq data and developed several model-based clustering methods for clustering sequence data.



Genesis Pineda, Administrative Assistant II.

Genesis Pineda has joined the department of Epi-Bio as an administrative assistant to Drs. Elli Papaemmanuil and Jian Carrot Zhang. Prior to joining MSK, Genesis worked at NYU Langone Orthopedic Hospital for 5 years as a Project Associate. She assisted program directors in the planning of educational programs for residents and fellows. She is excited to join the computational oncology administrative team.



Sohrab Salehi, Postdoctoral Research Fellow

Sohrab has joined the Department of Epidemiology and Biostatistics as a postdoctoral research fellow with Sohrab Shah. In collaboration with David Blei at Columbia University, his research focuses on causal inference in cancer evolution. He obtained his PhD in Bioinformatics from the University of British Columbia.



Xiaohui Sun, Postdoctoral Research Fellow

Xiaohui joins the Department of Epidemiology and Biostatistics as a postdoctoral research fellow. Under the mentorship of Dr. Xiang Shu, Xiaohui is working on identifying novel genetic and molecular markers for cancer risk.



Christopher Tosh, Postdoctoral Research Associate

Chris has joined the Department of Epidemiology and Biostatistics as a postdoctoral research associate with Wesley Tansey. His research focuses on adaptive experimental design of preclinical screens for combination therapy discovery. Previously, he was a postdoctoral research scientist at Columbia University's Data Science Institute working on algorithmic design and theory for machine learning. He received his PhD in Computer Science from the University of California San Diego.



Charlie White, Graduate Research Assistant

Charlie joins the Department of Epidemiology and Biostatistics as a Graduate Research Assistant, following his time spent as a summer intern. Charlie will graduate in May with a Master of Science in Biostatistics at New York University's School of Global Public Health, and he is eager to provide statistical support to advance the field of cancer research.



PUBLICATIONS

Lauren Rogak and her U01 Moonshot colleagues recently published an article in *Quality of Life Research* entitled "[Missing data strategies for the Patient-Reported Outcomes version of the Common Terminology Criteria for Adverse Events \(PRO-CTCAE\) in Alliance A091105 and COMET-2](#)". Its common knowledge that missing data will always complicate analyses in a variety of ways. Over many years of analyses, the co-authors and research team have learned that missing scores complicate analysis of the Patient-Reported Outcomes version of the Common Terminology Criteria for Adverse Events (PRO-CTCAE) because patients with and without missing scores may systematically differ. This paper focuses on optimal analysis methods for incomplete PRO-CTCAE items, with application to two randomized, double-blind, placebo-controlled, phase III trials. The analyses in this paper showed that using patients' PRO-CTCAE scores for the same symptom at different cycles to inform patients' missing PRO-CTCAE scores can mitigate problems associated with missing scores. Accurately evaluating patients' PRO-CTCAE scores promotes the safety and tolerability of treatments as well as improves the implementation and interpretation of cancer clinical trials.

Daniel Sjoberg, Karissa Whiting, Michael Curry, Jessica Lavery, and their colleague at the University of Paris published an article in *The R Journal* entitled "[Reproducible Summary Tables with the gtsummary Package](#)". The **gtsummary** package provides an elegant and flexible way to create publication-ready summary tables in R. A critical part of the work of statisticians, data scientists, and analysts is summarizing data sets and regression models in R and publishing or sharing polished summary tables. The **gtsummary** package was created to streamline these everyday analysis tasks by allowing users to easily create reproducible summaries of data sets, regression models, survey data, and survival data with a simple interface and very little code. The package follows a tidy framework, making it easy to integrate with standard data workflows, and offers table customization features through function arguments, helper functions, and custom themes.

Aaron Mitchell, Akriti Mishra, Katherine Panageas, Allison Lipitz-Snyderman, Peter Bach, and colleagues recently published an article in the *Journal of the National Cancer Institute*, titled [Real-World Use of Bone Modifying Agents in Metastatic Castration-Sensitive Prostate Cancer](#). Bone modifying agent (BMA) therapy is recommended for metastatic castration-resistant prostate cancer (mCRPC) but not metastatic castration-sensitive prostate cancer (mCSPC). BMA treatment in mCSPC may therefore constitute overuse. Authors conducted a retrospective cohort study using SEER-Medicare data of patients diagnosed with stage IV prostate cancer from 2007-2015. The primary outcome of interest was receipt of BMA (zoledronic acid or denosumab) within 180 days of diagnosis. Secondary outcome was BMA receipt within 90 days. Exposures of interest included practice location and physician specialty. BMA therapy was more common among patients treated by oncologists and in physician office locations. Among mCSPC patients who had no evidence of high osteoporotic fracture risk, over one-quarter received BMAs in recent years. This overuse may lead to excess costs and toxicity.

Sigrid Carlsson, along with an interdisciplinary group of researchers from various institutions, recently published [Preoperative exercise interventions to optimize continence outcomes following radical prostatectomy](#) in *Nature Reviews Urology*. Urinary incontinence is a common and predictable consequence among men with localized prostate cancer who have undergone radical prostatectomy. The limited efficacy of postoperative approaches has led to a shift from the traditional reactive model of care to more comprehensive interventions incorporating exercise-based programs that begin in the preoperative period (prehabilitation) and continue after surgery. Comprehensive prehabilitation interventions include appropriately prescribed aerobic exercise, resistance training and specific pelvic floor muscle instruction and exercise training programs. Transperineal ultrasonography is a non-invasive and validated method for the visualization of the action of the pelvic floor musculature, providing real-time visual biofeedback to the patient during specific pelvic floor muscle instruction and training. Importantly, the waiting time before surgery can be used for the delivery of comprehensive prehabilitation exercise-based interventions to increase patient preparedness in the lead-up to surgery and optimize continence and health-related quality-of-life outcomes following radical prostatectomy.

Li-Xuan Qin and her colleague co-authored a paper, "[Performance Evaluation of Transcriptomics Data Normalization for Survival Risk Prediction](#)", in *Briefings in Bioinformatics*. One pivotal feature of transcriptomics data is the unwanted variations caused by disparate experimental handling. Various data normalization methods were developed to alleviate the adverse impact of such data artifacts in the setting of differential expression analysis and have since been borrowed to other analysis settings without much re-evaluation. Authors conducted an in-silico study based on a pair of microRNA microarray datasets to evaluate the performance of normalization methods in survival prediction. This study showed the dependence of normalization performance on the downstream analysis setting and demonstrated the potential of improving survival predictor accuracy by applying more suitable methods for data normalization.

Li-Xuan Qin and her colleagues co-authored a paper, "[Making External Validation Valid for Molecular Classifier Development](#)", in *JCO Precision Oncology*. Recent years have seen an increasing use of external validation for assessing the performance of a molecular classifier. However, little is known about how it is affected by ubiquitous artifacts in test data and by the use of data normalization. This paper presents the findings from a re-sampling based simulation study leveraging on a pair of microRNA microarray datasets. This study showed that data normalization mitigates the bias to varying extents depending on the specific method used. In particular, frozen normalization methods for test data outperform their conventional forms in terms of reducing the bias and variation in accuracy estimation. The authors make available their benchmarking tool as an R package on GitHub for performing such evaluation on additional methods for normalization and classification.

Sohrab P. Shah and colleagues, **Kevin M. Boehm, Pegah Khosravi, Rami Vanguri, and Jianjiong Gao** recently published a manuscript, [Harnessing multimodal data integration to advance precision oncology](#) in *Nature Reviews Cancer*. Advances in quantitative biomarker development have accelerated new forms of data-driven insights for patients with cancer. However, most approaches are limited to a single mode of data, leaving integrated approaches across modalities relatively underdeveloped. Multimodal integration of advanced molecular diagnostics, radiological and histological imaging, and codified clinical data presents opportunities to advance precision oncology beyond genomics and standard molecular techniques. Most medical datasets are still too sparse to be useful for the training of modern machine learning techniques, and significant challenges remain before this is remedied. Combined efforts of data engineering, computational methods for analysis of heterogeneous data and instantiation of synergistic data models in biomedical research are required for success. The authors offer their opinions on synthesizing complementary modalities of data with emerging multimodal artificial intelligence methods. Advancing along this direction will result in a reimagined class of multimodal biomarkers to propel the field of precision oncology in the coming decade.

GRANTS

Ann Zauber is a Co-Investigator and Subsite PI on R01CA257333 "Optimal Colorectal Cancer Surveillance Strategy for Lynch Syndrome by Genotype". The PIs are Chin Hur and Fay Kastrinos.

Ann Zauber received a U01 CISNET supplement titled "Modeling the Aftermath of the Disruption of Colorectal Screening and Treatment from the COVID-19 Pandemic."

Ann Zauber received a CISNET Disparities supplement U01-CA253913-02S1 titled "Comparative Modeling of Effective Policies for Colorectal Cancer Control."

Nikolaus Schultz and **Sohrab Shah** were awarded a U24CA264028 titled "The MSK Genomic Data Analysis Center for Tumor Evolution". Other investigators on this grant include **JianJiong Gao** and **Andrew McPherson**.

Li-Xuan was awarded R21HG012124 titled "Evaluation and Development of Statistical Methods for Data Harmonization in Molecular Prognostication."

Sean Devlin and **Andriy Derkach** are Co-Directors for the Biostatistics Core for Omar Abdel-Wahab and Jae Park (MPI) project "Developing Novel Therapeutic Approaches for Classical and Variant Hairy Cell Leukemia" funded by the Hairy Cell Leukemia Foundation-Leukemia & Lymphoma Society.

Sigrid Carlsson was awarded an administrative supplement to promote research continuity for her K22-CA234400 titled "Improving Shared Decision Making in Cancer Screening."

Wesley Tansey was awarded a grant from the Tow Center for Developmental Oncology for his project "A preclinical active learning platform for large-scale adaptive combination therapy screens for pediatric sarcomas."

Ronglai Shen and Margaret Callahan received an award from the V Foundation for the 2021 Translational Award Program titled "Immunotype Identifies Immune Checkpoint Blockade Responders: dissecting the mechanism and understanding the scope and impact of immunotype across diverse cancer patient populations". Other investigators on this project include **Sohrab Shah** and **Kathy Panageas**.

Elli Papaemmanuil received a Rachleff Innovation Award from Damon Runyon for the project titled "Leveraging multi-modal genome profiling approaches to study disease initiation, progression and response to therapy in TP53 mutated myeloid neoplasms."

Andrea Arfe received a CCSG Developmental Award titled "Building adaptive clinical trial designs based on Machine Learning algorithms."

Mithat Gonen and **Sean Devlin** are Co-Directors of the Biostatistics Core, and **Elli Papaemmanuil** is Director of the Genomics Core on Drs. Omar Abdel-Wahab and Marty Tallman's NIH P50 titled "The Memorial Sloan Kettering Cancer Center SPORE in Leukemia". Other investigators on this project include **Andriy Derkach**.

EMERGING LEADERS IN COMPUTATIONAL ONCOLOGY SYMPOSIUM

MSKCC's Computational Oncology service recently held the Emerging leaders in Computational Oncology Symposium. The event, held on October 14th and 15th, included talks from all Computational Oncology faculty and some members of MSK leadership, including President and CEO Craig Thompson, and Physician-In-Chief Lisa DeAngelis. Notably, the Symposium also included 12 talks by senior post-doctoral fellows from renown computational labs across the globe. Topics of discussion at the Symposium spanned a variety of subjects within computational oncology, including genomics, pathology, immuno-oncology, metabolism, machine learning, cancer genetics, and cancer evolution. The Symposium showcased the vision for Computational Oncology at MSK and how it fits within the broader mission for scientific excellence at the Center, while also providing an exciting forum discussing emerging research areas that can impact computational oncology research.

Attendees included members of the broader computational oncology community (faculty, postdoctoral fellows, and students) as well as the emerging leaders. The symposium not only showcased the great work MSK is doing to potential faculty applicants but also served as an opportunity to bring our scientific community together. The symposium would not have been possible without the hard work and contributions of **Elli Papaemmanuil**, **Cynthia Berry**, **Cristina Radu**, and **Genesis Pineda**.

STAFF CONGRATULATIONS

Lauren Rogak and husband Daniel welcomed baby Ezra Miller Shapiro on August 28, 2021.



Congratulations to the happy parents and big brother Elliott!



Akriti Mishra recently married Jesus Andres Meza, a respiratory therapist. Congratulations to the happy couple and wishing them all the best!



Joey Kanik married Megan Mills on August 28th, 2021,

