Dear Colleagues,

Welcome to the Spring 2020 edition of our medicine residency research newsletter! This publication is aimed at both highlighting our residents’ exciting projects as well as informing trainees and recruits about the types of investigations being performed at Stanford. We define research comprehensively, including scholarly work done in quality improvement, global health, outcomes research, medical education, clinical investigation, translational research, implementation science, qualitative studies, clinical trials, and device/service innovation. Without further ado:

**Stanford Resident Researcher Spotlight:**

This Spring, we have the incredible opportunity to spotlight one of our true research superstars, Sarah Waliany!

**Tell us a little about yourself**

SW: I did not always know that I wanted to become a physician. My first dream was to become a scientist. In eighth grade, I contacted several research labs near my home in Los Angeles. One person replied: Dr. Wendie Johnston, a faculty member at a local community college invited me to join her free biotechnology summer course for high school and college students. The best way for me to describe that course is Disneyland for a kid with a scientist’s soul. That summer, I learned pipetting, gel electrophoresis, and other very basic techniques. Dr. Johnston introduced me to Dr. Susan Kane at City of Hope Comprehensive Cancer Center. I spent three summers in high school in Dr. Kane’s lab studying mechanisms underlying resistance of HER-2 positive breast cancer cells to trastuzumab.

Hoping to gain context to the significance of my lab work, the summer before senior year of high school, I shadowed breast oncologist Dr. Joanne Mortimer in her clinic at City of Hope. In those months, I felt a surreal sense of humility in learning from the resilient women who were the basis behind my research. Those months were a turning point in my life. Previously on a path towards becoming a basic science investigator, I changed directions towards becoming a physician.

As an undergraduate at University of Southern California, I worked as a Clinical Research Assistant at City of Hope. For 4 years, I scheduled my courses around Dr. Mortimer’s clinic, allowing me to continue shadowing her while recruiting patients for a prospective study evaluating whether measures of physical function were correlated with self-reported fatigue in patients with cancer. As a medical student at Stanford, I co-enrolled in the Master’s Degree Program in Epidemiology and Clinical Research. Discovering my interest in cardio-oncology, I worked with Dr. Sandy Srinivas and Dr. Ronald Witteles on a retrospective study evaluating adverse cardiac events from tyrosine kinase inhibitors that target vascular endothelial growth factor in patients with metastatic renal cell carcinoma.

**Tell us about your current QI/research activities**

SW: As a resident at Stanford, I have been fortuitous enough to work on several clinical and translational studies in the field of cardio-oncology. Under the mentorship of Dr. Joel Neal, Dr. Ronald Witteles, and cardiology fellow extraordinaire Dr. Han Zhu, I have been working on a prospective study evaluating the role of troponin-based cardiotoxicity surveillance in detecting myocarditis from immune checkpoint inhibitors in patients with multiple malignancy types. This study has truly transformed my experience as a resident. With Dr. Zhu and me working together as a “cardio-oncology response team,” efficiency has become essential in allowing me to balance my duties as a resident with my role in responding in real time to cases of positive troponins.

**Why Stanford?**

SW: Having been a medical student at Stanford, I knew well before the residency application process that Stanford provides ample opportunities to find fantastic clinical and research mentors. Stanford also has an incredible group of faculty who share my interest in cardio-oncology, which has allowed me to continue my research pursuits in this field as a resident. Additionally, having seen first-hand as a medical student just how tirelessly the Stanford internal medicine residents pull together to help each other through difficult, unpredictable life circumstances, I also knew that the Stanford IM residents are a family at their core, and I have been honored to become a part of that family.

**What advice do you have for interns and residents interested in scholarly activity?**

SW: Start looking for mentors during the first half of intern year. By asking senior residents about their experiences with different faculty members, look for faculty who have a strong track record for mentoring and publishing with residents. If you have a chance to work in clinic or on the inpatient side with faculty in your field of interest, discuss your academic interests with them, and you may be surprised what opportunities come your way.
Resident Research Symposium:

Not even a pandemic could stop the Third Annual Stanford Internal Medicine Research Symposium, which took place virtually on April 21st. Twenty-five of our residents presented their research to a panel of some of the most prestigious research faculty at Stanford, all over Zoom. The turnout from residents and faculty was tremendous and inspiring.

We would like to thank Dr. Angela Rogers and the Internal Medicine Residency Staff for organizing the symposium as well as the incredible research mentors and panelists who made this possible. Most of all we would like to congratulate all the residents for their inspiring work over the last year.

Symposium Presenters

Nadeem Abou-Array: Improving long-term care for patients with drug and alcohol use disorders admitted to internal medicine
Duaa Al-Rawi: Stressed out: DNA damage delivered at ultrahigh dose rates reduces cellular stress and apoptosis
Jason Batten: Variation in the Design of Do-Not-Resuscitate Orders and Other Hospital Code Status Options: A Multi-Institutional Qualitative Study
James Dickerson: Health Disparities in Variants of Unknown Significance in Cancer Care
Theresa Dunham: Electronic Antibiotic Allergy Decision Tool Increases Decision Confidence Among Residents
Erik Ekert: Assessing the Adequacy of HIV Pre-Exposure Prophylaxis and STI Prevention in MSM at the Stanford Internal Medicine Clinics
Jiho Han: Take the first available heart: Use of higher-risk donors in recipients with pre-transplant mechanical circulatory support
Mita Hoppenfeld: Resident Obesity Management: Comfort Correlates with Action
Rebecca Linfield: Does cost transparency affect prescribing patterns?
Max McClure: Presence of antibodies against Haemophilus influenzae serotype a in Alaska prior to and after the emergence of invasive infections
Eugenia Miranti: Epidemiology of Invasive Fungal Infections During Induction Chemotherapy in Adults with Newly Diagnosed Acute Myeloid Leukemia Without Antifungal Prophylaxis: A Retrospective Cohort Study
Andrew Moore: High Plasma IL-18 is Predictive of Mortality Independent of Latent Class Analysis Subphenotype: A Secondary Analysis of the SAILS and HARP-2 Trials
Olufolarin Oke: The $2.4 million dollar reminder: Reducing Medicare 1-day write-offs due to inappropriate admission orders
Shaun Pienkos: Effect of Rosuvastatin on Mortality in ARDS Patients with Low Cholesterol: A Secondary Analysis of the SAILS Study
Meera Ragavan: Impact of Dual-Eligible Status on Survival in Medicare patients with Lung Cancer
Ramon Ramirez: Characterization of Hispanics with PAH in the US: The Pulmonary Hypertension Association Registry
Manan Shah: Burden of unplanned lung cancer care attributable to therapy
Gabriela Spencer-Bonilla: Statin Use in Older Adults with Stable Atherosclerotic Cardiovascular Disease
Elena Vasti: Patients with Methamphetamine-Associated Pulmonary Arterial Hypertension (PAH) Have Less Favorable Hemodynamics Than Other Patients with Group 1 PAH
Sarah Waliany: Cardiotoxicity Surveillance with Troponin I during Treatment with Immune Checkpoint Inhibitors
Benjamin Wela: Suboptimal Screening for Primary Hyperparathyroidism Among Veterans with Urinary Stones
Thomas Yang Sun: Comparative genomic analysis of high-grade neuroendocrine neoplasms across diverse organs
Aaron Yeoh: Effects of Bariatric Surgery on Obesity-Related Visual Processing Impairment
Maggie Zhou: Single-Institution Retrospective Review of Patients with Advanced Soft Tissue Sarcoma Treated with Ipilimumab and Nivolumab Followed by Maintenance Nivolumab
**Papers and Presentations:**

Congratulations to the following authors for their recent publications and presentations in the past year!

**Third Year Residents:**


Julia Armendariz, Andrew Moore, Caton J, Hom J, Hosamani P. Communication skills workshop. Stanford School of Medicine. 4/2020. [Curriculum development and first annual workshop]


**Second Year Residents:**


First Year Residents:


Best,
Stanford Internal Medicine Research Interest Group

If you have research you’d like to have highlighted in the newsletter (or know of work other residents or recent graduates have taken part in) or are interested in being involved in the research interest group please make sure to email us at gspencer@stanford.edu