

Duke Dept of Medicine



Duke Internal Medicine Residency Program

Resident Research Showcase 2019

Friday, May 3

7:00 a.m. – 9:00 a.m.

Medicine Grand Rounds

Trent Semans Center for Health Education

Resident Research Showcase 2019

Agenda

7:00-8:00 am **Poster Viewing Session**

8:00-8:45 am **Research Presentations**

Jordan M. Gales, MD PGY-2

Mentor: Richard A. Krasuski, MD

Emergency room evaluation of chest pain in adult congenital heart disease patients: Etiology, resource utilization, and outcomes compared with matched controls

Michael J. Grant, MD PGY-3

Mentor: Mitchell Horwitz, MD

Treatment with foscarnet after allogeneic hematopoietic cell transplant is associated with long-term loss of renal function

Benjamin L. Ranard, MD, MSHP PGY-3

Mentor: Kevin P. Shah, MD, MBA

You get what you pay for: an analysis of pay-for-performance in multi-site, academic primary care practice

8:45-9:00 am **Award Presentations**

Robert M. Califf, MD, Medicine Resident Research Awards

"Clinical research provides the connection between scientific discoveries and helping our fellow human beings" –Robert M. Califf, MD

Poster Awards for Clinical Research and QI Projects

Department of Medicine Best Grand Rounds Awards

Joseph C. Greenfield, Jr., MD, Research Mentorship Award

To be awarded to S. Nicki Hastings, MD, at Medicine Grand Rounds on June 7

Poster Session – List of Presenters

A systematic review of randomized and non-randomized trials comparing dual therapy with triple therapy in patients with atrial fibrillation undergoing percutaneous coronary intervention

Presenter: Alexander Sullivan – Mentors: Sunil Rao and David Kong

Redefining high risk: Examining intermediate risk pulmonary embolism and healthcare utilization

Presenter: Alexander Sullivan – Mentor: W. Schuyler Jones

Contemporary treatment and outcomes of acute pulmonary embolism: A single large academic center's perspective

Presenter: Alexander Sullivan – Mentor: W. Schuyler Jones

Movement disorder and small fiber neuropathy secondary to atezolizumab

Presenter: Alexandria Mara – Mentor: Jason Webb

Atypical presentation of cutaneous polyarteritis nodosa treated with cyclosporine

Presenter: Alexandria Mara

Patients with diabetes and peripheral artery disease: Results from EXSCEL trial

Presenter: Anish Badjatiya – Mentor: W. Schuyler Jones

Rituximab induced progressive multifocal leukoencephalopathy (PML): a rare complication of a common medication

Presenter: Anmol Singh

Seizures or syphilis? An uncommon presentation of a common disease

Presenter: Anmol Singh

Fibrosing mediastinitis turned thymolipoma turned nodular sclerosis hodgkin lymphoma

Presenter: Anmol Singh

The Relationship between emotional distress and understanding of prognosis in patients with acute myeloid leukemia (AML)

Presenter: Anmol Singh – Mentor: Amit Patel

Esophageal baseline impedance from high resolution impedance manometry (BI-HRIM) correlates with mean nocturnal baseline impedance (MNBI) regardless of manometry manufacturer

Presenter: Anthony Horton – Mentor: Amit Patel

You get what you pay for: An analysis of pay for performance results in a large multi-site academic primary care practice

Presenter: Benjamin Ranard – Mentor: Kevin Shah

Prevention of delirium in hospitalized older adults with eye masks and earplugs worn at night: A pilot study

Presenter: Bryan Golubski – Mentor: Juliessa Pavon

Metastatic squamous cell carcinoma of unknown primary presenting pancreatitis

Presenter: Chidiebube Egwim – Mentor: Amber Bowman

Antiretroviral switches and direct-acting antivirals in HIV/HCV co-infection

Presenter: Diana Mosquera – Mentor: Julius Wilder

What the gel: An unusual presentation of acute digital ischemia

Presenter: Erin Frost – Mentor: Aubrey Jolly Graham

Prognostic value of late gadolinium enhancement on cardiac MRI in patients with ischemic cardiomyopathy: A systematic review

Presenter: Godefroy Chery – Mentor: Sna Al-Khatib

Hepatitis B virologic failure to tenofovir-based therapies in patients with HIV/HBV

Presenter: Helen Zhang – Mentor: Susanna Naggie

Poster Session – List of Presenters

The power of a strong handshake: Association of hand grip strength and cognitive function in older adults

Presenter: **James Deardorff**

Blood-based genomic profiling of cell free DNA (cfDNA) to identify microsatellite instability (MSI-H), tumor mutational burden (TMB) and Wnt/B-catenin pathway alterations in patients with gastrointestinal (GI) tract cancers

Presenter: **James Isaacs** – Mentor: John Strickler

When sugar isn't sweet enough: A rare case of metastatic insulinoma

Presenter: **Jeremy Brooksbank** – Mentor: John Roberts

The impact of age on the relationships of comorbidities with outcomes in heart failure with reduced ejection fraction

Presenter: **Jessica Regan** – Mentor: Rob Mentz

Goals of care documentation in the MICU

Presenter: **Jessie Gu** – Mentor: Anthony Galanos

Chronic hypersensitivity pneumonitis in the Southeastern United States

Presenter: **Jessie Gu** – Mentor: Yuh-Chin T. Huang

Pulmonary tumor micro-embolism: Merging old and new diagnostic tools

Presenter: **Jessie Gu** – Mentor: Charles W. Hargett

A unique acylcarnitine profile is independently associated with diabetic heart failure and associates with adverse clinical outcomes: Insights from the FIGHT trial

Presenter: **Joseph Lerman** – Mentors: Svati Shah and Robert McGarrah

Patient demographics and clinical presentations of hyperglycemic emergencies

Presentors: **Kathryn Hutchins and Tamara Saint-Surin** – Mentor: Dave D'Alessio

Strategies for improving the care of patients hospitalized with heart failure: Baseline data from the CONNECT-HF trial

Presenter: **Kent Feng** – Mentor: Adam DeVore

Clinical practice and outcomes with cardioversion in the NOAC-Era: Insights from ORBIT-AF

Presenter: **Kyle Geurink** – Mentor: Sean Pokorney

Fulminant liver failure: A startling presentation of hairy cell leukemia

Presentors: **Lauren Donnangelo and Tsion Aberra** – Mentors: Murat Arcasoy and Bill Hargett

Resource-stratified diagnostics in India: Current practices and aspirations for a national standard

Presenter: **Manisha Bhattacharya** – Mentors: Yousuf Zafar and Nelson Chao

Characterization of tumor mutational burden (TMB), PD-L1, and DNA repair genes to assess correlation with immune checkpoint inhibitors (ICIs) response in metastatic renal cell carcinoma (mRCC)

Presenter: **Matthew Labriola** – Mentor: Tian Zhang

Characterization of genomic alterations as biomarkers of immune checkpoint inhibitor (ICI) response in metastatic urothelial carcinoma (mUC)

Presenter: **Matthew Labriola** – Mentor: Tian Zhang

Pembrolizumab in men with heavily treated metastatic castrate resistant prostate cancer

Presenter: **Matthew Tucker** – Mentor: Andrew Armstong

Synchronous presentation of small cell lung cancer and acute myeloid leukemia

Presenter: **Matthew Tucker** – Mentor: Andrew Armstong

Treatment with foscarnet after allogeneic hematopoietic cell transplant (AlloHCT) is associated with long-term loss of renal function

Presenter: **Michael Grant** – Mentor: Mitch Horwitz

Poster Session – List of Presenters

Identifying gastroesophageal reflux disease post lung transplant is not improved with intraluminal impedance versus pH-metry

Presenter: Nancy Yang – Mentor: David Leiman

Esophageal motility is augmented and gastroesophageal reflux does not worsen after lung transplantation

Presenter: Nancy Yang – Mentor: David Leiman

Change in tricuspid annular plane systolic excursion predicts mortality after initiation of treatment for pulmonary arterial hypertension

Presenter: Nicholas Shelburne – Mentor: Sudarshan Rajagopal

Transitioning parenteral prostacyclins to selexipag in pulmonary arterial hypertension

Presenter: Nicholas Shelburne – Mentor: Sudarshan Rajagopal

Not your average sinusitis

Presentors: Samantha Dizon and Lara Hayes – Mentor: Joanna Kipnes

Efficacy and safety of rivaroxaban versus warfarin in patients with nonvalvular atrial fibrillation and a history of cancer: Observations from ROCKET AF

Presenter: Sean Chen – Mentor: Chiara Melloni

Bariatric metric improvement: Evaluating inpatient care of morbidly obese patients at Duke University Hospital

Presenter: Shannon Niedermeyer – Mentor: Joel Boggan

Metastatic hepatocellular carcinoma secreting intact PTH: A case report

Presentors: Stephanie Garbarino and Lindsey Shantzer – Mentor: Steve Choi

Practice management, eradication rates and resistance patterns in Helicobacter Pylori infection

Presentors: Stephanie Garbarino and Jon Reichstein – Mentor: David Leiman

From sore throat to metastatic disease: The syndrome that should not be forgotten

Presenter: Tamara Saint-Surin

2019 Faculty-Resident Research Grant Recipients

Colorectal cancer screening quality improvement at DOC

Diana Mosquera Aguirre, PGY-2 – Mentor: Azalea Kim

Beta-blocker and ACE-inhibitor dosing as a function of body surface area: Insights from HF-ACTION

Jeremy Brooksbank, PGY-2 – Mentor: Robert Mentz

Hypophosphatemia as predictor of clinical outcomes in acute pancreatitis: prospective study

Kimberly Cocce, PGY-1 – Mentor: Rodger Liddle

Outcomes after HCV treatment in the setting of alcohol use

Lauren Donnangelo, PGY-2 – Mentor: Cynthia A. Moylan

NGS mutational pattern in veterans with NSCLC and response to PD-1 inhibitors

Christopher Ferreri, PGY-2 – Mentor: Michael Kelley

Real world analysis of next generation sequencing data impact upon targeted therapy utilization

Jordan Gales, PGY-2 – Mentor: Matthew McKinney

Acute MI in persons living with HIV: Does gender make an impact? A meta-analysis

Keva Garg, PGY- 2 – Mentor: Pamela Douglas

2019 Faculty-Resident Research Grant Recipients

Evaluating use of high cardiovascular risk ARTs in persons living with HIV

Keva Garg, PGY- 2 – Mentor: Lance Okeke

Electrophysiological assessment of lesion formation in pulmonary vein isolation

Tanmay Gokhale, PGY-1 – Mentor: Jonathan Piccini

Association between molecular markers in Barrett's esophagus with endoscopic eradication

Bryan Golubski, PGY-2 – Mentor: Katherine Garman

Analysis of novel esophageal function metrics in gastroesophageal reflux disease

Anthony Horton, PGY-2 – Mentor: Amit Patel

Impact of financial toxicity on outcomes associated with allogeneic hematopoietic cell transplantation

Syed Hussaini, PGY-2 – Mentors: Anthony Sung and Yousuf Zafar

The association of shock burden with survival in patients with implantable cardioverter defibrillators.

Nicholas Kamp, PGY-2 – Mentor: Sana Al-Khatib

Tumor mutational burden as a marker of clinical response in non-small cell lung cancer

Chester Kao, PGY-1 – Mentor: Tian Zhang

Clinical and implantable cardiac device characteristics of cardiac amyloidosis

Payton Kendersky, PGY-1 – Mentor: Michel Khouri

Carboxyhemoglobin as Predictor of Poor Outcome for Patients with ARDS on ECMO

Govind Krishnan, PGY-3 – Mentor: Bryan D. Kraft

Incidence and risk factors for CRE colonization and subsequent CRE Infection

Cassandra Lautredou, PGY- 1 – Mentors: Becky A. Smith and Sarah Lewis

Hypophosphatemia as a predictor of clinical outcomes in acute pancreatitis, a retrospective cohort study

Joshua Lee, PGY- 2 – Mentor: Rodger Liddle

How the 2017 ACC/AHA blood pressure goals affect the development of heart failure

Juliette Logan, PGY- 2 – Mentor: Robert Mentz

Prevalence of pathogenic germline variants in DNA repair in prostate cancer

Alexandria Mara, PGY-2 – Mentor: Andrew Armstrong

Evaluation and outcomes of men who received germline testing for prostate cancer

Alexandria Mara, PGY-2 – Mentor: Andrew Armstrong

Voriconazole use at Duke University Medical Center

Ahmad Mourad, PGY-1 – Mentor: John Perfect

Urine Streptococcus & Legionella antigen use at Duke University Medical Center

Ahmad Mourad, PGY-1 – Mentor: Brian Griffith

The impact of diabetes on outcomes following peripheral vascular intervention

Dennis Narcisse, PGY-2 – Mentor: W. Schuyler Jones

Tumor mutational burden associated with clinical response to immune checkpoint inhibitor therapy

Eric Powers, PGY-1 – Mentor: Tian Zhang

Attitudes, knowledge, and prescribing practices for pre-exposure prophylaxis amongst Internal Medicine residents and the effectiveness of an educational intervention.

Tamara Saint-Surin, PGY-2 – Mentor: Mehri McKellar

2019 Faculty-Resident Research Grant Recipients

Disparities between African-American and caucasian patients admitted for acute pulmonary embolism: A retrospective cohort analysis of the DUHS Deduce database

Alexander Sullivan, PGY-2 – Mentor: W. Schuyler Jones

Examining ECG findings in pulmonary embolism: Experience from a large contemporary cohort

Alexander Sullivan, PGY-2 – Mentor: W. Schuyler Jones

Examining intermediate risk pulmonary embolism and healthcare utilization: Using the European Society of Cardiology guideline definitions

Alexander Sullivan, PGY-2 – Mentor: W. Schuyler Jones

Hospital costs of acute pulmonary embolism: A retrospective cohort analysis from a large, academic health system

Alexander Sullivan, PGY-2 – Mentor: W. Schuyler Jones

Adverse cardiovascular events in diabetics with univascular versus polyvascular disease: A secondary analysis of the HARMONY

Trent Wei, PGY-1 – Mentor: W. Schuyler Jones

Clinical characteristics and genetics of *Klebsiella aerogenes* versus *Enterobacter bacteremia*

Austin Wesevich, PGY-2 – Mentor: Joshua Thaden

Point prevalence survey of outpatient antibiotic prescriptions in southern Sri Lanka

Helen Zhang, PGY-3 – Mentor: L. Gayani Tillekeratne

2018-2019 Stead Resident Research Grant Recipients

Role of sensory and cognitive impairments in Medicare utilization and costs

James Deardorff, PGY-2 – Mentor: Heather Whitson

Emergency Department assessment of acute chest pain among adult congenital heart disease patients

Jordan Gales, PGY-2 – Mentor: Richard Krasuski

Atrial myopathy and arrhythmias in cardiac amyloidosis

Kyle Geurink, PGY-2 – Mentor: Michel Khouri

Characteristics, treatment, and hospital utilization of patients admitted with pulmonary embolism

Tara Holder, PGY-3 – Mentor: W. Schuyler Jones

EMR-based marker for predicting financial toxicity in a cohort of patients at a large academic center

Syed Hussaini, PGY-2 – Mentor: David Casarett

Management of massive and submassive pulmonary embolism: A prospective registry within the Duke University Hospital System

Alexander Sullivan, PGY-2 – Mentor: W. Schuyler Jones

Kidney zone: Promoting medical school engagement in nephrology through the use of social media

Lena Vaynberg, PGY-1 – Mentor: Matthew Sparks

Predictors of NAFLD development and progression in veterans after successful treatment of chronic HCV

Nancy Yang, PGY-2 – Mentor: Cynthia Moylan

Esophageal and gastric motility effects on patient outcomes after lung Transplantation

Nancy Yang, PGY-2 – Mentor: David Leiman

Persistent liver enzyme elevation after HCV virologic cure in HIV/HCV co-infection

Helen Zhang, PGY-3 – Mentor: Susanna Naggie



Department of Medicine

Duke University School of Medicine

The Robert M. Califf, MD, Medicine Resident Research Award recognizes and honors Internal Medicine residents for excellence in research.

The Joseph C. Greenfield Jr., MD, Research Mentorship Award recognizes and honors Internal Medicine faculty who have devoted their time and talents to mentor house staff in clinical research and scholarship.

The Stead Resident Research Grants and Faculty Resident Research Grants provide funding for Internal Medicine residents to develop their skills in clinical or laboratory-based research, to carry out research projects, to present their research findings at scientific meetings, and to publish their work.

The Department of Medicine is grateful to the donors who make these awards and grants possible. To learn more or make a gift, visit medicine.duke.edu/giving.