Annual Progress Report of Academic Output
Medical Student
Clinical Research Study Program

Academic Year: August 2020 - July 2021

Duke Clinical Research Institute
Krunal Amin – Duke Cardiology

Mentor: Schuyler Jones, MD

Program: Clinical Research Study Program

Project Title: Development and Validation of a Natural Language Processing Model for Real-Time Identification and Risk Stratification of Pulmonary Embolism

Awards/Scholarships: Duke Institute for Health Innovation Clinical Research and Innovation Scholar

Publications:

In Progress:

Presentations/Abstracts:


Aderike “Ricky” Anjorin – Duke Population Health Sciences

Mentor: Hayden Bosworth, PhD

Program: Clinical Research Study Program

Project Title: Underutilization of Guideline-Based Abdominal Aortic Aneurysm Screening in an Academic Health System

Awards/Scholarships:
• Duke-Margolis Health Policy Scholar, 2020-2021
• Harvard Longwood T35 Short-Term Training in Vascular Surgery Program
• Society for Vascular Surgery Diversity Medical Student Travel Scholarship

Additional Course Work: Teaching Assistant for PUBPOL 862: Policy and Management for High-Value Health Care taught by Mark McClellan, MD, PhD and Corinna Sorenson, PhD

Publications:
Pending

Presentations/Abstracts:


Sandra Au – Duke Ophthalmology

Mentor: Heather Whitson, MD, MHS

Program: Clinical Research Study Program

Project Title:
• Preoperative EEG Biomarkers of Postoperative Cognitive Outcomes
• Physical Resilience: Indicators and Mechanisms in the Elderly Collaborative Phase 2 (PRIME-Knee)

Awards/Scholarships:
• Eugene A. Stead Jr. Research Scholarship
• Dean’s Merit Scholarship
• Presidential Poster Session selection at American Geriatrics Society Meeting 2021 (highest-ranked posters by abstract reviewers)

Medical School Contributions:
• Student Faculty Leader for Clinical Skills Foundation 2
• DukeMed Benefits Enrollment Center Fellow
• Executive Board for 2021 Scopes Medicine and Art Exhibition: A Multi-Media Reflection on Chronic Illness

Additional Course Work: Graduate Student Research Leader for Duke Bass Connections, Project Team: Closing the Gap on Health Disparity and Treatment Outcomes in Hypertension (2020-2021)

Publications:


Submitted:

In Progress:

Presentations/Abstracts:


Christine Chow – Duke Cardiology

Mentor: Robert Mentz, MD

Program: Clinical Research Study Program

Project Title: Differences in Mode of Death for Men and Women with Acute Heart Failure: Insights from ASCEND-HF

Awards/Scholarships: AHA Student Scholarship in Cardiovascular Disease

Publications:

In Press:

Presentations/Abstracts:


Jacquelyn Dillon – Study Away, Columbia University OB/GYN

Mentor: Jason Wright, MD

Program: Clinical Research Study Program

Project Title: Overuse of Cervical Cancer Screening Tests Among Average-Risk US Medicaid Beneficiaries from 2013-2016.

Awards/Scholarships:
- Duke University Chancellor’s Service Fellowship to fund ‘Period Packs Durham’ project

Additional Course Work: Quantitative Medicine and Decision Making I and II

Publications:


Submitted:


In Progress:

Dillon J, Drury KE. Perioperative considerations for the obstetrics or gynecology patient with anemia. Plan to submit to Obstetrical & Gynecological Survey, September 2021.
Presentations/Abstracts:


Submitted:


In Progress:
O’Shea M, Dillon J, Jelovsek JE. Models to predict infection after urogynecologic surgery: The MInUS Study. Plan to submit abstract to Society of Gynecologic surgeons (SGS) 48th Annual Scientific Meeting, San Antonio, TX, March 2022

Steven Doerstling – Duke Cancer Center

Mentor: Peter Ubel, MD

Program: Clinical Research Study Program

Project Title: Crowdfunding for Healthcare Support: The Impact of Medical Conditions on Fundraising Success

Awards/Scholarships:
- Margolis Scholarship
- Dean’s Merit Scholarship

Additional Course Work: Policy and Management for High-Value Health Care

Publications:
Submitted:
Doerstling SS, Akrobetu D, Engelhard MM, Chen F, Ubel PA. Validation of a disease identification algorithm on medical crowdfunding campaigns.

In Progress:

Presentations/Abstracts:

Daniel Evans – Duke Orthopedic Oncology

Mentor: William Eward, MD, DVM

Program: Clinical Research Study Program

Project Title: Identifying Modifiable and Non-modifiable Risk Factors of Readmission and Short-Term Mortality in Chondrosarcoma; a National Cancer Database study.

Publications:


Submitted:


Presentations/Abstracts:


Nicholas Frisco – Duke Cancer Center

Mentor: Randall Scheri, MD

Program: Clinical Research Study Program

Project Title:
- Adherence to Guidelines and Practice Patterns in the Management of Local and Advanced Medullary Thyroid Cancer
- Oncologic Outcomes After Surgery for MEN Patients with V804M RET Mutation.
- Patient-Reported Outcomes of Patients with Graves’ Disease Who Underwent Total Thyroidectomy.
- Treatment of Chronic Rhinosinusitis With Nasal Polyps: A Population-Based Analysis.
• Perioperative Nutrition and Head and Neck Cancer: a Single Institution Retrospective Review.

**Medical School Contribution:** Durham Health Career Collaborative Organizer

**Publications:**

**Submitted:**

**Frisco NA**, Gunn AH, Wang F, Stang MT, Kazaure HS, Scheri RP. Adherence to guidelines and practice patterns in the management of local and advanced medullary thyroid cancer. (Submitted June 2021)

Gunn AH, **Frisco NA**, Thomas SM, Stang MT, Scheri RP, Kazaure HS. Patient-reported outcomes of patients with Graves’ disease who underwent total thyroidectomy. Submitted June 2021

**In Progress:**


Reed W, **Frisco NA**, Osazuwa-Peters N, Osazuwa-Peters O. Perioperative nutrition and head and neck cancer: A single institution retrospective review.

**Presentations/Abstracts:**

**Frisco NA**, Lee HJ, Jang DW. Treatment of chronic rhinosinusitis with nasal polyps: A population-based analysis. Accepted for poster presentation at American Academy of Otolaryngology-Head and Neck Surgery (AAO-HNSF) Annual Meeting, Los Angeles, CA, October 2021

Reed W, **Frisco NA**, Osazuwa-Peters N, Osazuwa-Peters O. Perioperative nutrition in head and neck cancer patients. Accepted for poster presentation at American Head & Neck Society (AHNS) 10th International Conference, July 2021

Gunn AH, **Frisco NA**, Thomas SM, Stang MT, Scheri RP, Kazaure HS. Patient-reported outcomes in patients with Graves’ disease treated with thyroidectomy, radioactive iodine (RAI) or thionamides. Submitted for poster presentation at the American Thyroid Association (ATA) 90th Annual Meeting, October 2021

**Frisco NA**, Gunn AH, Wang F, Stang MT, Kazaure HS, Scheri RP. Adherence to guidelines and practice patterns in the management of local and advanced medullary thyroid cancer. Duke University School of Medicine Alpha Omega Alpha Society Student Research Day, Durham, NC, August 2021

---

**Emily Goins – Duke OB/GYN**

**Mentor:** Laura Havrilesky, MD

**Program:** Clinical Research Study Program

**Project Title:** Malnutrition as a Predictor of Morbidity After Gynecologic Oncology Surgery

**Awards/Scholarships:**

- Gynecologic Cancer Research Award, Dept of OB/Gyn, Duke University
- Robert C. Knapp Medical Student Award, Hearing the Ovarian Cancer Whisper
- IDSOG Scholar, Infectious Disease Society of Obstetrics and Gynecology (IDSOG)
- Grad Engage Fellowship, Awarded this $2000 grant to start a virtual format of the Fremont People’s Free Health Clinic in Fremont, NC in the setting of being unable to provide in-person care during the COVID-19 pandemic
- Robert M. Califf Clinical Research Travel Grant
Publications:

In Progress:


Presentations/Abstracts:


Alexander Gunn – Duke Hematology-Oncology

Mentor(s): Yousuf Zafar, MD, Rachel Greenup, MD and Randall Scheri, MD

Program: Clinical Research Study Program

Project Titles:
- COVID-19 and Cancer Patients Seeking Assistance from Government & Non-Government Programs (Gunn; Greenup)
- Use of Low-value Oncology Care Following the Release of Choosing Wisely: A Systematic Review (Gunn; Greenup)
- Tumor marker response to SARS-CoV-2 infection among patients with cancer (Gunn; Zafar)
- American Society of Plastic Surgery Choosing Wisely Survey (Gunn/Sarver; Greenup)
- Navigating the High Costs of Cancer Care: Opportunities for Patient Engagement (Gunn, Greenup, Sorenson)
- Assessment of Patient-Reported Outcomes Before and After Thyroidectomy in Patients with Graves’ Disease (Gunn; Scheri, Kazaure)
- Surgical Management Compared to Non-Surgical Management of Graves’ Disease Using Patient-Reported Outcomes (Gunn; Scheri, Kazaure)
• Health Insurance and Duration of Symptoms Prior to Emergency Department Visit: An Analysis of 19,850 Patients with Suspected COVID-19 (Gunn; Limkakeng, Purakal)

Awards/Scholarships:
• Margolis Scholarship for Health Policy, Duke University
• GradEngage Fellowship, Duke University
• Chancellor’s Science Fellowship, Duke University School of Medicine
• Alice S. Hersh Student Scholarship, AcademyHealth
• Robert M. Califf Clinical Research Travel Grant

Medical School Contributions:
• Head of Marketing, Duke-Margolis Conference: “Then & Now: The Importance of Historically Informed Approaches to Addressing Racial Health Inequity”
• COVID-19 Vaccinator, Duke University Karsh Community Clinic
• Co-President, Planting Change & Trees Durham Environmental Justice Project

Additional Course Work:
• INTERDIS 407C – Duke Design Health Fellows Program (Richardson) Performed design ethnography to identify solutions to improve care of mechanically ventilated patients.
• PUBPOL 862 - Policy and Management for High-Value Health Care (Sorenson/McClellan) Presented opportunities to expand multi-cancer early detection into value-based models to GRAIL’s Strategic Alliances Executive Team.

Publications:

Submitted


In Progress:
Gunn AH, Frisco NA, Thomas SM, et al. Total thyroidectomy compared to radiiodine ablation and medical management of Graves’ disease using patient-reported outcomes.


Gunn AH, Sarver MS, Kaplan, SJ, Zafar Y, Greenup RA. Assessing the use of low value oncology care following the release of choosing Wisely guidelines.


Presentations/Abstracts:
Gunn AH, Sarver MS, Kaplan SJ, Zafar Y, Greenup RA. Assessing the use of low value oncology care following the release of choosing Wisely guidelines. American Society of Clinical Oncology Annual Meeting, June 2021
**Gunn AH, Frisco N, Thomas SM, et al.** Total thyroidectomy compared to radioiodine ablation and medical management of Graves’ disease using patient-reported outcomes. American Thyroid Association Annual Meeting, September 2021


**Gunn AH, Frisco NA, Thomas SM, et al.** Patient-reported outcomes in Graves’ disease treated with thyroidectomy. Duke University School of Medicine Alpha Omega Alpha Society Student Research Day, Durham, NC, August 2021


---

**Namita Kansal – Duke OB/GYN**

*Mentor:* Brenna Hughes, MD

*Program:* Clinical Research Study Program

*Project Title:* Beliefs and Attitudes of Pregnant women Regarding the Influenza Vaccination during Pregnancy.

*Awards/Scholarships:* DIGI Scholarship

*Presentations/Abstracts:* Factors increasing COVID-19 and influenza vaccine hesitancy in pregnancy during a global pandemic. Duke University School of Medicine Alpha Omega Alpha Society Student Research Day, Durham, NC, August 2021

---

**Kostantinios Morris – Duke Gastroenterology**

*Mentor:* Andrew Muir, MD

*Program:* Clinical Research Study Program

*Project Title:*
- Understanding the Financial Experience of Care for Patients with Cirrhosis
- Longitudinal Outcomes of the Duke Prostate Cancer Screening Project
- Prostate Cancer Risk Stratification
- Prostate Health Index: utilization and modification

*Publications:*  

*Accepted:*  
**Morris K, Muir A.** Care after cure: Long-term follow-up in Hepatitis C. Current Hepatology Reports

*Submitted:*  
**Morris K, Pappas T.** Creating a curriculum to teach empathy. Submitted to Annals of Surgery Open
Presentations/Abstracts:


Evan Murray – Duke Cardiology

Mentor: Robert Mentz, MD

Program: Clinical Research Study Program

Project Title: Physical Rehabilitation in Older Patients Hospitalized with Acute Heart Failure and Comorbid Diabetes: Insights from REHAB-HF

Awards/Scholarships: Eugene A Stead Student Research Scholarship

Medical School Contributions: Clinical Skills Foundation 2 Instructor, Feagin Leadership Scholar

Publications:
Submitted:

In Progress:


Presentations/Abstracts:


Onyinyechukwu Ohamedike – Duke Population and Health Sciences

**Mentor:** Tomi Akinyemiju, MD, Laura Svetkey, MD and Kimberly Johnson, MD

**Program:** Clinical Research Study Program

**Project Title:** Associations of healthcare affordability with utilization of supportive care medication among White, Black, and Hispanic ovarian cancer patients

**Awards/Scholarships:**
- Gynecologic Oncology Student Research Scholarship
- Duke REACH Equity Student Scholarship

**Additional Course Work:** Health Disparities Research Curriculum (HDRC)

**Publications:**

*Accepted:*

*Submitted:*


*In progress:*

**Presentations/Abstracts:**

Mentor: Devdutta Sangvai, MD

Program: Clinical Research Study Program

Project Title:
- Implementation of a Hospital at Home Program in Wake County
- Acute Hospital Care at Home: A Retrospective Financial Analysis for Hospital Systems
- Retrospective Validation and Implementation of a Dermatological Complexity Tool
- Retrospective Cohort Review for the Efficacy of Hedgehog Inhibitors With and Without Adjunctive Therapy in the Treatment of Locally Advanced Basal Cell Carcinomas
- Trends in Tele-Dermatology Utilization at Duke University
- Trends in Tele-Dermatology Utilization in the United States
- Literature Review for Pediatric Calcified Subepidermal Nodules
- Demographic Disparities in Telehealth Utilization at an Academic Health Center
- Sex Differences in Second ACL Injury Incidence and Rate Following ACL Reconstruction in Athletes

Awards/Scholarships: Duke Institute for Health Innovation

Publications:


Submitted:
Patel AD, Blanchard S, Nunez M, Al-Rohil R, Shearer S. 38-year-old female with three-month history of clustered nodules. JAAD Case Reports.


Presentations/Abstracts:


**Tulsi Patel – Duke Dermatology**

*Mentor:* Adela Cardones, MD  

*Program:* Clinical Research Study Program  

*Project Title:* Characterizing Skin Fibrosis Using a Novel Ultrasound Technology

*Presentations/Abstracts:* Feasibility of constructive shear wave interference ultrasound technology in evaluating skin stiffness. Poster presentation. Duke University School of Medicine Alpha Omega Alpha Society Student Research Day, Durham, NC, August 2021

**Leland Pung – Duke Gastroenterology**

*Mentor:* Andrew Muir, MD  

*Program:* Clinical Research Study Program  

*Project Title:* A Population Health Strategy for NAFLD using an EConsult Platform and Natural Language Processing

*Awards/Scholarships:*  
- Duke Institute for Health Innovation

**Sarika Sachdeva – Duke Pediatrics**

*Mentor:* Dmitry Tchapyjnikov, MD  

*Program:* Clinical Research Study Program  

*Project Title:* Diagnostic Yield of Lumbar Punctures in Children with Status Epilepticus

*Awards/Scholarships:*  
- Robert M. Califf Clinical Research Travel Grant  

*Medical School Contributions:*  
- Worked as a tutor for the Duke Academic Office  
-Volunteered as a vaccinator and administered Covid-19 vaccines to healthcare professionals

*Publications:*  


Krischak MK, Rosett HA, Sachdeva S, Weaver KE, Heine RP, Denoble AE, Dotters-Katz SK.

Submitted:


In Progress:

Presentations/Abstracts:


Sachdeva S, Grinspan Z, Feinstein L, Tchapyjnikov D. Diagnostic yield of lumbar punctures in children with status epilepticus. Poster presentation, Duke University School of Medicine Alpha Omega Alpha Society Student Research Day, Durham, NC, August 2021

Melissa Sarver – Duke OB/GYN

Mentor: Georgia Beasley, MD

Program: Clinical Research Study Program

Project Title: Improving Communications about the Costs and Burden of Breast Cancer Care

Publications:

Submitted:


Sarver MM, Chen S. Investigating the realationship between work relative value units, net payments, and health disparities in Dermatology, a comment for the article: Differences in outpatient dermatology encounter work relative value unites and net payment by patient race, sex and age. JAMA Dermatology 2021. Accepted as a comment.

Gunn RA, Sarver MM, Greenup RA. Assessing the use of low value oncology care following the
release of choosing wisely guidelines. American Society of Clinical Oncology (abstract accepted February 2021)

Presentations/Abstracts:


Sarver MM, Rames JD, Beasley G, Chen SC. Survival and tumor characteristics of patients presenting with single primary vs second primary melanoma lesions. North Carolina Dermatology Association (NCDA), Asheville, NC, July 2021

Patel AD, Saver MM, Chen SC. Methodology for an automated dermatologic complexity tool. North Carolina Dermatology Association (NCDA), Asheville, NC, July 2021


Lee Schmidt – Study Away, Weill Cornell Department of Emergency Medicine

Mentor: Kaushal Shah, MD

Program: Clinical Research Study Program

Project Title: Prehospital Hypertension as a Marker of Morbidity and Mortality in Emergency Department Patients

Medical School Contributions:
- DukeMed Student Faculty Show, Fundraising Chair and Executive Board
- Coordinated fundraising efforts and raised over $18,000 for El Futuro, a nonprofit clinic that provides free mental health services to the Latinx community in the Durham area

Professional Society Memberships
Communications Committee, Association of Women Surgeons Member, October 2020-present Peer Reviewer, American Journal of Surgery

American Journal of Surgery's Association of Women Surgeons, Invited Peer Reviewer

Publications:

Pending:

**Presentations/Abstracts:**


---

**Michael Wang – Study Away, Prima Health, SC**

*Mentor:* Jonathan Markowitz, MD

*Program:* Clinical Research Study Program

*Project Title:* Evaluation of the Use of Gastric and Duodenal biopsies at Routine Follow-up Endoscopies in Eosinophilic Esophagitis

Michael will be completing his research during his 2nd year with CRSP.

**Samantha Wong – Duke Dermatology**

*Mentor:* Meenal Kheterpal, MD

*Program:* Clinical Research Study Program

*Project Title:* Dermatology Clinical Decision Support in Primary Care

*Awards/Scholarships:* Duke Institute for Health Innovation

*Publications:*


*Presentations/Abstracts:*


Wong SC, Park C, Xia M, Ratliff W, Henao R, Kheterpal MK. Use of convolutional neural networks...
in skin lesion analysis using real world image and non-image data. Duke University School of Medicine Alpha Omega Alpha Society Student Research Day, Durham, NC, August 2021