Annual Progress Report of Academic Output
Clinical Research Study Program
Duke Clinical Research Institute

Academic Year:  August 2015 – July 2016
Mentor: Dennis Frank-Ito, PhD

Program: Completed Clinical Research Study Program

Scholarship:
- National Institute on Deafness and Other Communications Disorders T32 Clinical Research Fellowship Scholarship
- Duke University Clinical and Translational Science Award recipient, 2016-2017 NIH Grant UL1TR001117

Project Title: Modeling hearing loss secondary to tympanic membrane perforation using computational modeling.

Publications:
Preparation:
Carpenter, D, Jang DW, Frank-Ito DO. Investigating the Effects of Nasal Morphology and Airflow on Chronic Rhinosinusitis Induced Olfactory Dysfunction.

Oral Presentations:


Poster Presentations:

Learner Confidence and Satisfaction Following the Implementation of a Clinical Skills Course.” David J. Carpenter, B.A., Adam J. Glener, B.S., Deborah L. Engle, Ed.D., Saumil M. Chudgar, M.D. Accepted for poster presentation at the AAMC Organization of Student Representatives National Professional Development Conference held June 23-26, 2016.


Investigating the Effects of Nasal Morphology and Airflow on Chronic Rhinosinusitis Induced Olfactory Dysfunction.” David J. Carpenter, B.A., David W. Jang, M.D., Dennis O. Frank-Ito, Ph.D. Accepted for poster presentation at the Combined Otolaryngology Spring Meeting held May 18-21, 2016.


Abstracts

Bora Chang – Duke Biostatistics and Bioinformatics

Mentor(s): Evan Myers, MD

Program: Completed Clinical Research Study Program


Adwards: Won 3rd Place in the ForgeHealth Innovation Challenge for the Data Visualization Application The Group Built.

Publications: Not yet completed.

Abstracts:
Triangulating Methodologies from Software, Medicine and Human Factors Industries to Measure Usability and Clinical Efficacy of data Visualization in an Electronic Health Record System. Submitted.

Precision Medicine at Point-of-Care Management of Surgical Complications. Duke University School of Medicine – Alpha Omega Alpha Day, August 2016, Durham, NC.
**Zachary Finn – Duke Cardiology**

*Mentor(s):* Albert Sun, MD  
*Program:*
Completed Clinical Research Study Program  
*Project Title:* Clinical Predictors for Out of Hospital Cardiac Arrest.  
*Publications:*
**Preparation:**  


Yen DC, **Finn ZS**, Venkataraman V, Noeth, D, Shah SH, Daubert JP, Campbell KB, Sun AY. Assessing Medication Use in Patients with Confirmed or Suspected Long QT Syndrome: A Substudy of the PICASSO Trial. American College of Cardiology, April 2016, Chicago, IL, USA.

**Abigail Fulp – Duke OB/GYN**

*Mentor(s):* Amy Murtha, MD and Jenn Gilner, MD, PhD  
*Program:*
Completed Clinical Research Study Program  
*Scholarship:*
*Project Title:* The role of regulatory T cells in the maternal/fetal rejection phenotype of preterm birth.  
*Presentations/Abstracts:*  
Differential Expression of T-cell Receptor CXCR3 in Preterm Birth Placentas. Submitted Abstract to SMFM Conference, have not heard back yet about acceptance.  

Stacey Guo – Duke Ophthalmology

Mentor(s): Heather Whitson, MD

Program: Completes Clinical Research Study Program October 7, 2016.

Scholarship: Duke NUS Research Scholarship

Project Title: Relationship Between Service Use Variability, Morbidity Burden and Self-Reported Confusion Among Older Adults: Implications for Medically Complex Patients.

Jacqueline (Jackie) Henson – Duke Gastroenterology

Mentor(s): Andrew Muir, MD

Program: Completed Clinical Research Study Program

Project Title: Primary Sclerosing Cholangitis

Publications:

In Press:

Submitted:

Presentations/Abstracts:


Awards:
- Presidential Poster of Distinction, American Association for the Study of Liver Diseases Liver Meeting, November 2016: top 10% of all posters

Alexandra Horne – Duke Ophthalmology

Mentor(s): Heather Whitson, MD

Program: Completed Clinical Research Study Program

Coursework:
Completed the Effective Clinical Teaching and Evidence Based Medicine Electives through the School of Medicine

Scholarship: Medical Student Training in Aging Research (MSTAR) Scholarship (administered by NIA and AFAR)

Project Title: Cognitive Decline in Patients with Age-related Macular Degeneration.

Publications:
Submitted:
Things That Make People Happy: The role of Sensory Health, Cognitive, and Neural Factors in Older Adults’ Perceptions about Subjective Well-Being. Journal of Gerontology.

Presentations/Abstracts:
I will be attending the Gerontological Society of America national meeting in November 2016 where I will be presenting my research in poster form

Things That Make People Happy: The role of Sensory Health, Cognitive, and Neural Factors in Older Adults’ Perceptions about Subjective Well-Being. Duke University School of Medicine Alpha Omega Alpha Day, Durham, North Carolina, August 5, 2016.
Kathryn Hutchins – Duke Psychiatry

**Mentor(s):** Geraldine Dawson, MD

**Program:** Completed Clinical Research Study Program

**Scholarship:**
- Robert M. Califf Clinical Research Grant Awardee
- Nancy Andrew Travel Award.

**Project Title:** Factors related to the home language environments of preschoolers with autism spectrum disorders.

**Publications:**
*Submitted:*
Hamlyn GS, **Hutchins KE**, Johnston AL, Thomas RT, Tian J, Kamal AH. Accessibility and Barriers to Oncology Appointments at 40 NCI-Designated Comprehensive Cancer Centers: Results of a Mystery Shopper Project. J Clin Oncol 2016;34; Suppl 7S:283.

**Presentations/Abstracts:**


Abigail Johnston – DCRI

**Mentor(s):** Adrian Hernandez, MD

**Program:** Completed Clinical Research Study Program

**Project Title:** Optimal Dose of Aspirin in Secondary Prevention of Cardiovascular Disease.

**Publications:**
*Submitted:*
Hamlyn GS, Hutchins KE, Johnston AL, Thomas RT, Tian J, Kamal AH. Accessibility and Barriers to Oncology Appointments at 40 NCI-Designated Comprehensive Cancer Centers: Results of a Mystery Shopper Project. J Clin Oncol 2016;34; Suppl 7S:283.

Abstracts:


Peter Liu - DCRI

Mentor(s): Jonathan Piccini, MD

Program: Completed Clinical Research Study Program

Project Title: High density mapping and focal impulse rotor modulation in ablative treatment of atrial fibrillation.

Michael Maranzano – DCRI

Mentor(s): Kristen Newby, MD

Program: Completed Clinical Research Training Program

Scholarship:
- Duke Translational Medicine Institute Scholarship
- 2016 Student Scholarship in Cardiovascular Disease from the American Heart Association.

Project Title: Using Big Data to Characterize Cardiovascular Disease Changes.

Publications:
He has three publications in the works, none of which have been submitted at this time. Two are research articles, and one is a review article.
Presentations/Abstracts:

Divya Natesan – Duke Radiation Oncology

Mentor(s): Junzo Chino, MD

Program: Completed Clinical Research Training Program

Coursework: Academic Core in Clinical Research

Scholarship:
- 2015-2016 DTMI Scholarship
- 2016-2017 Dean Nancy Andrews Conference Travel Fund Award

Project Title: The Use of PET CT in Vulvar Cancer.

Publications:
Submitted:


Accepted:

Presentations/Abstracts:

Oral Presentation:

Lauren Pontius – Duke Endocrine Surgery

Mentor(s): Julie Sosa, MD
Program: Completed Clinical Research Study Program
Project Title: Lymphovascular Invasion is Associated with Compromised Survival for Papillary Thyroid Cancer.
Presentations/Abstracts: Lymphovascular Invasion in Papillary Thyroid Cancer, Presented at the Academic Surgical Congress (ASC), February 2016, Jacksonville, Florida.

Maya Schueller - DCRI

Mentor(s): Christoph Hornik
Program: Completed Clinical Research Study Program
Scholarship:
Project Title: ECMO Use Optimization in NICU
Publications: Submitted:
Outcomes in Extracorporeal Membrane Oxygenation submitted to Journal of Early Human Development.
**Stephen Smiley - DCRI**

*Mentor(s):* Richard “Chad” Mather III, MD  

*Program:* Completed Clinical Research Study Program  

*Project Title:* Randomized Controlled Trial of Our New Decision Tool.

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**Lonnie Sullivan - DCRI**

*Mentor(s):* Kevin Thomas, MD  

*Program:* Completed Clinical Research Study Program  

*Project Title:* Cath PCI Registry Data Analysis

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**Vicki Tan – Duke Community Health**

*Mentor(s):* Mina Silberberg, MD  

*Program:* Completed Clinical Research Study Program  

*Scholarship:* Duke NUS Research Scholarship  

*Project Title:* The Prevalence and Effectiveness of Screening in Detecting Mental Health Issues in Adolescents at Southern High School Wellness Center.

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**Vinayak Venkataraman – Duke Cardiology**

*Mentor(s):* James Daubert, MD  

*Program:* Completed Clinical Research Study Program  

*Scholarship:* Eugene A Stead Jr Research Scholarship
**Project Title:** Systematic evaluation and development of algorithms for detecting atrial fibrillation with novel technology.

**Publications:**

**Preparation:**


**Presentations/Abstracts:**


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**Zachary Walker – Duke Cardiac MRI**

**Mentor(s):** Raymond Kim, MD

**Program:** Completed Clinical Research Study Program

**Project Title:** Evaluating Myocardial Scar Patterns on Cardiac MRI as a Diagnostic and Prognostic Tool for Patients with Troponin-Positive Myocardial Necrosis.
Laura Wang – DCRI

*Mentor(s):* P. Brian Smith, MD

**Program:** Completed Clinical Research Study Program

**Scholarship:** Robert M. Califf Clinical Research Grant Awardee

**Project Title:** Ontogeny and Genotype-phenotype Discordance of Metronidazole Metabolism.

**Publications:**

**Published:**

**Accepted:**

**Preparation:**

**Presentations/Abstracts:**


Timothy Wang – Duke Neurosurgery

*Mentor(s):* Robert Isaacs, MD

**Program:** Completed Clinical Research Study Program

**Project Title:** Failure of Indirect Decompression with the Extreme Lateral Inter Body (XLIF) Approach: A Study of Radiographic Factors.
**Publications:**

**Submitted:**
Rate of Posterior Lumbar Fusion Following Initial Extreme Lateral Interbody Fusion (XLIP) with Posterior Instrumentation: A Single Institution Analysis of 141 Consecutive Patients.

**Presentations/Abstracts:**

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**William Wang - DCRI**

**Mentor(s):** Tracy Wang, MD

**Program:** Completed Clinical Research Study Program

**Scholarship:**
- Robert M. Califf Clinical Research Grant Awardee
- 2016 Duke Quality & Innovation Scholars Program
- 2015 American Heart Association Student Scholarship in Cardiovascular Disease
- 2015-2016 Goh Foundation Scholarship (from Duke-NUS)

**Project Title:** Exploring strengths and weaknesses in the delivery of cardiac care across different health systems in the United States and Singapore.

**Publications:**


**Preparation:**


Mathews R, **Wang WT**, et al. Hospital Variation in Adherence to Secondary Prevention Medications after Acute Myocardial Infarction


**Presentations/Abstracts:**


**Arthurine Zakama – Duke OB/GYN**

*Mentor(s):* Evan Myers, MD

*Program:* Completed Clinical Research Study Program

*Project Title:* Infertility Comparative Effectiveness Research

**Xintong Zuo – Duke Geriatrics**

*Mentor(s):* Harvey Cohen, MD

*Program:* Completed Clinical Research Study Program

*Scholarship:* Duke-NUS Research Scholarship (from Duke-NUS)