Senior Scholars Program
May, 2020

Sponsored by
Senior Scholars Program Committee
Office of Undergraduate Medical Education
Academic Year 2019-2020
Senior Scholars Program

The fundamental goal of this program is to increase the student’s understanding of scientific methods that can be applied directly to problem-solving skills development and critical thinking.

Specific goals of the program include:
   1) providing a structured research experience;
   2) developing students’ hypothesis-generating skills;
   3) providing an opportunity for students considering academic careers; and
   4) fostering student-mentor relationships.

The 23 students highlighted on the following slides represent those who completed their project in AY20. For 6 of these students, this work also completes their participation in the 4-year Clinical and Translational Research Pathway (CTRP). An additional 3 students were Senior Scholars in AY20 but will present their work in the Spring of AY21.
Syed Ali  
Mentor: Amna Diwan, MD  
(Orthopedic Surgery)  

Localized antibiotics for reduction of surgical site infections following open tibia fracture: A randomized controlled trial in Tanzania  

Residency: UC San Francisco  

Clinical and Translational Research Pathway (CTRP) Student
Jeanette Beaute
Mentor: Caitlin Rollins, MD
(Boston Children’s Hospital)

Fetal cerebral metabolic health and long-term neurodevelopment

Residency:
Massachusetts General Hospital

Clinical and Translational Research Pathway (CTRP) Student
Regina Brown
Mentor: Riley McLean, MD
(Dermatology)

Investigating factors that impact wound healing outcomes in lower extremity wounds created by Mohs surgery

Residency: University of Connecticut
Casandra Chen  
Mentor: Christopher Hemond, MD  
(Neurology)  

The role of Memory B cells in Multiple Sclerosis pathology and disease monitoring  

Residency:  
Rhode Island Hospital / Brown Univ
Prehospital intubations are associated with elevated cuff pressures: A cross-sectional study characterizing ETT cuff pressure at the UMMC University Emergency Department
Lauren Colwell
Mentor: Shlomit Schaal, MD, PhD (Ophthalmology)

Post-partum retinal and choroidal vascular changes using optical coherence tomography angiography in pre-eclampsia

Residency:
University of Massachusetts

Clinical and Translational Research Pathway (CTRP) Student
Lauren Cournoyer  
Mentor: Jennifer LaFemina, MD  
(General Surgery)

Impact of interpectoral nerve block on perioperative analgesia use after mastectomy

Residency:  
Rhode Island Hospital / Brown Univ
Supplemental oxygen support in premature infants that fail initial room air trial

Residency: Massachusetts General Hospital
Preoperative functional status predicts 2-year mortality in patients undergoing fenestrated/branched endovascular aneurysm repair

Residency: UC San Francisco
Colleen Gabel
Mentor: Daniela Kroshinsky, MD
(Massachusetts General Hospital)

Penile calciphylaxis: A retrospective case-control study

Residency:
Class of 2021
Alanna Hickey and Nicholas Cormier
Mentor: Kathryn Wynne, MD
(Pediatrics/Hospital Medicine)

Comparison of a modeled resuscitation video versus a narrated lecture in enhancing pediatric simulation education: A double blind randomized study

Residency:
University of Massachusetts (Alanna)
Yale New Haven Hospital (Nicholas)
Akshay Kapoor
Mentor: Jill Morrow-Gorton, MD (FMCH/Commonwealth Medicine – Office of Clinical Affairs)

Implementing a patient encounter medical notification (PING) system in Massachusetts

Residency: Yale New Haven Hospital
Hannah Lederhausen
Mentor: Julie Levison, MD
(Massachusetts General Hospital)

HIV literacy among Latino immigrants: Perspectives on intervention in retention in care and intervention development

Residency: BI Deaconess
Vinay Maliakal
Mentor: Suzanne Cashman, ScD
(Family Medicine & Community Health)

Reflections from alumni of an inter-professional hot-spotting project

Residency: CA Pacific Medical Center
Samantha Martin
Mentor: Jessica Atwell, PhD, MPH
(John Hopkins School of Public Health)

Motavizumab follow-up study:
Impact of RSV prevention in infancy on prevalence of persistent asthma after age 9 children in Navajo and White Mountain Apache communities in the southwestern United States

Residency:
Massachusetts General Hospital
Emma Materne  
Mentor: Matthew Shields, MD  
(Pediatrics/Gastroenterology)  

Transition readiness assessment in adolescents and young adults with inflammatory bowel disease  

Residency:  
Massachusetts General Hospital  

Clinical and Translational Research Pathway (CTRP) Student
Saharsh Mehta
Mentor: Eric Swart, MD
(Orthopedics and Rehabilitation Med)

Cost-effectiveness of screening for adolescent idiopathic scoliosis

Residency:
University of Massachusetts

Clinical and Translational Research Pathway (CTRP) Student
Angeline Ngo
Mentor: Kara Smith, MD
(Neurology)

Patient and clinician perspectives of cognitive impairments in Parkinson’s Disease

Residency: UC San Diego
Hoang Yen Nguyen
Mentor: Manisha Desai, MD
(Anesthesiology)

The rise and fall of heterologous transfusion

Residency:
Loma Linda University / CA
SeungJu (Jackie) Oh
Mentor: Janice Lalikos, MD
(Plastic Surgery)

The use of smartphone camera recording for objective surgical skill assessment in the setting of peer teaching model in microsurgical education

Residency:
Class of 2021
Michelle Ouellette
Mentor: Adarsha Bajracharya, MD
(Internal Medicine/Hospital Medicine)

Gerry’s Life: An investigation into the effects of human companionship on the geriatric inpatient experience and loneliness

Residency:
U of South Florida Morsani / Tampa
Young Suh  
Mentors: Edwin Boudreaux, PhD and Celine Larkin, MD (Emergency Medicine)

Knowledge, attitudes, and practices of ambulatory providers in suicide-related care of patients

Residency:  
Icahn School of Medicine  
St. Lukes – Roosevelt / NY

Clinical and Translational Research Pathway (CTRP) Student
Rebecca Ukaegbu
Mentor: Michael Hirsh, MD
(Pediatric Surgery)

Worcester Barbershop Health Network: Impact of free health screening clinics on healthcare access and health outcomes in underserved communities

Residency:
Massachusetts General Hospital