

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



Jeanette Beaute
Mentor: Caitlin Rollins, MD
(Boston Children's Hospital)

**Fetal cerebral metabolic health and
long-term neurodevelopment**

Residency:
Massachusetts General Hospital



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**



Ruo Chen

**Mentor: Matthew Rebesco, MD
(Emergency Medicine)**

**Prehospital intubations are associated
with elevated cuff pressures: A cross-
sectional study characterizing ETT cuff
pressure at the UMMC University
Emergency Department**

**Residency:
University of Massachusetts**



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**



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



Jaclyn Daigneault
Mentor: Lawrence Rhein, MD
(Pediatrics/Neonatology)

**Supplemental oxygen support in
premature infants that fail initial
room air trial**

Residency:
Massachusetts General Hospital



Colleen Flanagan

**Mentor: Jessica Simons, MD, MPH
(Vascular Surgery)**

**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**



Saharsh Mehta

**Mentor: Eric Swart, MD
(Orthopedics and Rehabilitation Med)**

**Cost-effectiveness of screening for
adolescent idiopathic scoliosis**

**Residency:
University of Massachusetts**



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**



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