

Researcher Profile: Resident Researchers

The [Accreditation Council for Graduate Medical Education \(ACGME\)](#) strongly encourages residents to engage in laboratory and/or clinical research, and the Department of Surgery is proud to be able to provide a number of one and two-year research fellowships to its residents. Research experiences during residency offer added value to surgical education through increased skills in critical reading, patient advocacy, and understanding of advances and keep abreast with advances in technology and clinical care. Further, research during residency provides a critical education in grantsmanship and collaboration for the many residents who will ultimately pursue academic careers. Starting July 1, 2013, six residents began their two-year research fellowships:



Meaghan Flanagan, MD, PGY4

Dr. Flanagan is a T32 trainee in Cancer Epidemiology under mentors **Dr. Thomas Vaughan**, Professor of Epidemiology, and **Dr. David Flum**, Professor of Surgery in Division of General Surgery. Her primary research goal is to further understand clinical research methodology and policy

formulation so as to design effective research studies that may answer surgical outcomes questions in areas where controlled clinical trials are largely absent. She is particularly interested in how diagnostic methods and genomic testing affect cancer related outcomes, and how quality and safety align with patient centered care. Dr. Flanagan ultimately wants to pursue a career in surgical oncology with a focus on breast and endocrine cancers. She is committed to an academic career involving research that will provide patients with evidenced based recommendations to provide optimal care.

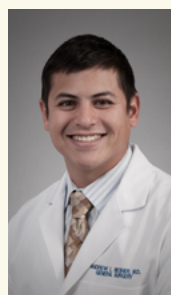


Katherine Flynn-O'Brien, MD, PGY3

Dr. Flynn-O'Brien will work as a T32 trainee in Pediatric Injury Research under faculty mentor Dr. Fred Rivara, Professor of Pediatrics at Seattle Children's Hospital. Pediatric trauma causes significant morbidity and mortality worldwide, and the goals of her research

are evaluation of the frequency and distribution of pediatric disease and injury, identification of their particular

determinants of health and risk, and determination of health services and quality care indicators related to outcomes in the pediatric trauma population. Dr. Flynn-O'Brien also seeks to obtain a solid foundation in research methodology and bio-statistical analysis, and to understand accurate and effective data collection methods. She plans to use this experience to pursue a research career focused on design and implementation of effective trauma programs.



Andrew Mesher, MD, PGY4

Dr. Mesher will spend his first research year as a clinical fellow in ExtraCorporeal Life Support (ECLS) at Seattle Children's Hospital under fellowship director **Dr. Michael McMullan**, Associate Professor of Surgery in the Division of Cardiothoracic Surgery. The field of pediatric surgery is

heavily influenced by emerging medical technology, and this program will help him learn the clinical application of ECLS and develop understanding regarding the transformation of clinical needs into devices that improve patient outcomes. In his second year, Dr. Mesher will undertake a fellowship in the Bidesign Surgical Innovation program at Stanford University, working with Dr. Thomas Krummel, Chairman of the Department of Surgery. There he will utilize his background in biomechanical engineering to further gain experience in the process of medical device innovation to address unmet clinical needs.



Morgan Richards, MD, PGY4

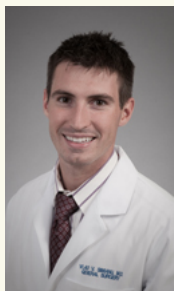
Dr. Richards will work with faculty mentor **Dr. Adam Goldin**, Associate Professor in the Department of Pediatric Surgery, to determine standardized treatment algorithms that optimize quality of life for pediatric patients. She will focus on outcomes research using various data

sources, including the Pediatric Health Information System and retrospective data from Seattle Children's Hospital. These data will assist in assessment of current clinical indications for operations as well as postoperative outcomes related to various surgical interventions. Specifically, she will examine preoperative risk factors correlated with postoperative complications after colectomy for ulcerative

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colitis. She will also work with providers across a variety of divisions at Seattle Children's to perform patient-centered process improvements for gastrostomy tube insertion.



Vlad Simianu, MD, PGY4

Dr. Simianu will work as a T32 trainee under mentor **Dr. David Flum**, Professor of Surgery in the Division of General Surgery. He plans to study surgical care for advanced-stage cancer patients across Washington State. Dr. Simianu will investigate best practices and stage-specific outcomes in the delivery of surgical care to these patients through evaluation of data provided by both the Surgical Care and Outcomes

Assessment Program and the program for Surveillance, Epidemiology and End Results. His goal is to identify modifiable barriers to care and describe value and appropriateness of surgery, chemotherapy, and radiation for these patients. Additionally, Dr. Simianu will use new methods in behavioral economics to better describe the processes of decision making by both surgeons and patients facing advanced cancer.



Ravi Sood, MD, PGY3

Hypertrophic scarring is a proliferative response to injury resulting in scar raised above the skin level. It occurs commonly following partial-thickness burns and other deep-dermal wounds, and is associated with pruritus, pain, functional impairment, cosmetic detriment, psychological morbidity, and decreased quality of life. Dr. Sood will work as a T32 trainee in Trauma and Burn Research under

mentor **Dr. Nicole Gibran**, Professor of Surgery and Director of the UW Burn Center. He plans to test the hypothesis that single-nucleotide polymorphisms in genes that regulate skin pigmentation, including MC1R, lead to hypertrophic scarring by influencing the inflammatory and fibroproliferative responses to cutaneous injury. As part of his T32 fellowship, he will also be pursuing his MS in Epidemiology through the University of Washington School of Public Health.

Chief Residents' & Fellows' Dinner — *Continued from page 13*

Dr. André Ilbawi — Surgical Oncology Fellowship at the

MD Anderson Cancer Center in Texas

Dr. Arjun Jayaraj — Vascular Surgery Fellowship at The Mayo Clinic in Rochester, MN

Dr. Jonathan Kohler — Pediatric Surgery Fellowship at the University of Chicago

Dr. Katherine Moreno — Minimally Invasive Surgery Fellowship at the University of Washington

Dr. Samantha Quade — Colorectal Fellowship at Washington University in St. Louis, MO

Fellows Finishing June 2013

Trauma and Surgical Critical Care:

Dr. Patricia Ayoung-Chee,

Dr. Vanessa Fawcett,

Dr. Catherine Lewis, Dr. Deborah Marquardt and Dr. Lisa Rae

Transplant Surgery:

Dr. Jared Brandenberger

Burn Surgery:

Dr. Sam Mandell

Craniofacial Surgery:

Dr. Faisal Al-Mufarrej, Dr. Alex Gougoutas (Microsurgery) and Dr. Adam Oppenheimer

Vascular Surgery:

Dr. Christian Hamlat

Cardiothoracic Surgery:

Dr. Josh Hermsen and Dr. Misho Hubka

Pediatric Surgery:

Dr. Matthew Harting

Center for

Video Endoscopic Surgery:

Dr. Elizabeth Warner

The Department of Surgery congratulates all of the graduating residents and fellows on this important milestone and wishes them well in their new endeavors.