

Master of Population Health Sciences News Bulletin



MPHS Leadership

Dr. Graham Colditz, Program Director
Drs. Adetunji Toriola and Yikyung Park, Deputy Directors
Dr. Allison King, Associate Director for Medical Students

The Master of Population Health Sciences (MPHS), offered by the School of Medicine, is a one-year full-time degree program for clinicians seeking training in clinical research methods. Its quantitative curriculum emphasizes the role of epidemiology and biostatistics in clinical effectiveness and outcomes research.

Congratulations to Students Completing the MPHS Program in 2019!

The following MPHS students will earn their MPHS this spring:

Christina Herbosa - Medical Student
Adam LaBore, MD - Associate Professor of
Orthopaedic Surgery & Neurology
William Padovan - Medical Student
Patrick Phelan - Medical Student
Derek Schloemann - Medical Student
Maria Schwabe - Medical Student

Melanie Subramanian, MD - General
Surgery Resident
Robert Thomas - Medical Student
Daniel Willis, MD - Pediatrics Hematology/
Oncology Fellow
Abigail Zamorano-Smith, MD - OB/GYN
Oncology Fellow

**Save the date for
our recognition
Ceremony:**

05 . 16 . 19

SCHOOL OF MEDICINE
ERIC P. NEWMAN EDUCATION
CENTER
4:00pm – 6:00pm

New MPHS Faculty **Rachel Tabak, PhD**



Teaches Dissemination and Implementation Science
Offered spring semesters, Wednesdays 1:00 - 4:00 p.m.

Rachel Tabak, PhD, is part of the Prevention Research Center and the Center for Diabetes Translation Research. She works in obesity prevention and community-based physical activity and nutrition strategies. With a strong background in nutrition, Tabak is involved in research studies examining interventions to promote healthy nutrition and active behaviors in families, particularly in the home. She also evaluates the effect of worksite policies and environments on worker health behaviors. Tabak’s work includes translation and evaluation of evidence-based obesity prevention methods that allow for broad reach. She examines how key stakeholders, including researchers, advocates, and policymakers, affect how research evidence is transformed into programs and policies.

MPHS ALUMNI SPOTLIGHT



William C. Chapman, Jr., MD, MPHS '18, wanted a career that positively impacted others. After spending several years in politics, he decided that medicine would be a better route to that goal. Currently a research fellow in the WUSM surgery department, he plans to develop a strong clinical practice with an academic focus on clinical outcomes research, particularly in colorectal surgery. His MPHS experience has him well on his way toward that goal: “Without a doubt, the MPHS has jumpstarted my research career. Multiple projects have grown directly from the courses, and I now have the skills to take a project from the idea to publication. It has provided me an advantage that I cannot overstate.”

Ana S. Salazar, MD, MPHS '18, WUSM postdoctoral research associate in the Division of Public Health Sciences, knew from a young age that she wanted to be a doctor: “As a young girl, my mother was diagnosed with a fatal brain tumor for which no treatment could be offered in Guatemala. In hope of a better outcome, she made a tremendous effort to travel to the United States, where she was given more treatment options. The lack of resources in our home country made me aware of the desperate need for improvement in Guatemala’s health care system and ultimately inspired me to study medicine.” She realized that in order to succeed in her endeavors towards identifying the causes of, risk factors for, and methods of preventing cancer, an advanced degree in research was an essential addition to her medical training. “I had no doubt that I would acquire the skills needed to develop sustainable health policies that would eventually transform and improve our current health system. The MPHS program has taught me the core epidemiology, leadership, and advocacy skills needed to conduct impactful research that will ultimately improve the care of patients beyond my own practice.”



Ana (left) at AACR Early-career Hill Day



Susan C. Pitt, MD, MPHS '14, assistant professor of surgery at the University of Wisconsin, became a physician to make a difference in the world. More specifically, she aims to improve the lives and experiences of patients with thyroid cancer and adrenal disease through patient care and research. She joined the MPHS program as a Fellow in Abdominal Organ Transplant and Hepatopancreatobiliary in 2013 to broaden her research skillset and gain experiential knowledge in population health. She credits the program with helping her become a better clinician, too: “The knowledge I gained with respect to shared decision-making has made me more adept at helping my patients make treatment decisions that align with their goals and values.” Her current research is funded by a five-year NCI grant and looks at the impact of emotions on treatment decisions about low-risk thyroid cancer.

Roheena Panni, MD, MPHS '18, general surgery resident in the WUSM, has a clinical interest in surgical oncology with a focus on hepatobiliary malignancies. She joined the MPHS program to hone her skills in clinical research and help her better understand population health sciences, and now she plans to continue her work in translational and clinical outcomes research with the goal of bringing novel therapeutic options to patients with pancreatic and liver cancers. The projects that she developed in her MPHS classes led to numerous presentations and awards at national and international meetings and several publications. Of her experience with the program she said, “this degree has provided me with a skill set that I can use to answer clinical questions, design projects, understand the strengths and limitations of data and publish clinically relevant and meaningful results. I am much more confident in my ability to write grants, including early career awards and clinical trials after completing the MPHS program.”



For more on these and other alumni, visit <https://mphs.wustl.edu/students>

ALUMNI NEWS

William C. Chapman, Jr., MD, MPHS '18, published “First, Do No Harm: Rethinking Routine Diversion in Sphincter-Preserving Rectal Cancer Resection” in the *Journal of the American College of Surgeons*. The article is based on his work in Dr. Olsen’s class, M19-5254: Using Administrative Data for Health Services Research. He also received the 2018 Samuel Wells Resident Research Competition for a project based on work in Dr. Chang’s class, M19-540: Decision Analysis for Clinical Investigation and Economic Evaluation.

Michael Lane, MD, MSc, MPHS '14, assistant professor of medicine in the infectious diseases division at WUSM and the physician leader for the patient safety program at BJC, recently published “Supporting Clinicians after Adverse Events: Development of a Clinician Peer Support Program” in the *Journal of Patient Safety* and “Development of an Antimicrobial Stewardship Program in an Integrated Healthcare System” in the *American Journal of Health-System Pharmacy*, among many other articles that utilize his MPHS training.



Charlene Ong, MD, MPHS '16, accepted a position as assistant professor in the department of neurology at Boston University School of Medicine. In the past year she has won the Boston University Peter Paul Young Investigator Award and the MIT Phillips-MIT Clinical Investigator Award.

Ana S. Salazar MD, MPHS '18, was part of a group of 16 early-career scientists participating at this year’s AACR Early-career Hill Day, which sent them to Washington, DC to advocate for robust, sustained and predictable funding for cancer research and biomedical science through the NIH and the NCI.

Tara Semenkovich, MD, MPHS '13, cardiothoracic research fellow at WUSM, published “Comparative Effectiveness of Upfront Esophagectomy vs Induction Chemoradiation in Clinical Stage T2N0 Esophageal Cancer” in the *Journal of Thoracic Cardiovascular Surgery* and three articles in the *Annals of Thoracic Surgery* in the past six months, including “Postoperative Pneumonia Prevention in Pulmonary Resections.” Tara also won the President’s Award at the Society of Thoracic Surgeons Annual Meeting for her presentation of “Adjuvant Treatment for Node Positive Esophageal Cancer after Induction Therapy and Surgery Improves Survival.”



Daniel Willis, MD, MPHS '19 recently accepted a position in the WUSM division of pediatric hematology/oncology. He also received a two-year grant through the Children’s Discovery Institute for his project “The Gut Microbiome and C. difficile Colonization in Pediatric Oncology Patients.”



Emily Walling, MD, MPHS '16, assistant professor of pediatrics at the University of Michigan, recently published “Implementation of Strategies to Improve Human Papillomavirus Vaccine Coverage: A Provider Survey” in the *American Journal of Preventive Medicine* and “Challenges Associated with Living Remotely from a Pediatric Cancer Center: A Qualitative Study” in the *Journal of Oncology Practice*.

David Brauer, MD, MPHS '16, surgery resident at WUSM, published “Simplified risk prediction indices do not accurately predict 30-day death or readmission after discharge following colorectal surgery” in *Surgery* with MPHS faculty co-authors Graham Colditz, MD, DrPH and Margie Olsen, PhD, MPH.

Are you alumni with news to share? We’d love to hear it! Send it to Kelly Oman at KLOman@wustl.edu.

Why Choose the Master of Population Health Sciences Degree Program?

The MPHS degree program accelerates clinical research expertise and gives physicians, residents, fellows, clinical doctorates, and medical students the foundation to excel in leading, designing, conducting and moving research to applications in clinical settings. The curriculum emphasizes the role of clinical epidemiology and biostatistics in clinical effectiveness and outcomes research. Population health sciences training brings together passion for patient care and uses research to improve health outcomes for patients.

A Guide to the MPHS Concentration Tracks

MPHS students must take seven core courses, plus electives in a chosen concentration. 33 credits are required for graduation.

Introduction to SAS

Ethical and Legal Issues in Clinical Research

Biostatistics I and II

Introduction to Epidemiology

Intermediate Epidemiology

Applied Epidemiology

Clinical Epidemiology

Focuses on rigorous clinical research study designs, the role of epidemiology in disease prevention, and clinical health outcomes including analysis of prevention and screening programs, evaluation of treatment and disease management programs, and the application of prediction rules.

Required Electives

- Randomized Controlled Trials
- Systematic Reviews and Meta-Analysis
- Plus nine additional electives

Health Services

Provides advanced methods training to evaluate and identify the most appropriate and effective approaches to clinical care, including prevention, early detection, and disease management. Research interests include cost-effectiveness analysis, decision analysis, health services research and quality

Required Electives

- Comparative Effectiveness Research
- Patient Safety, Quality Management and Improvement
- Decision Analysis and Economic Analysis
- Plus six additional electives

Psychiatric & Behavioral Health Sciences

Gives students conceptual and methodological skills required for the design, advanced analysis, and interpretation of epidemiological, treatment-effectiveness studies and policy studies. Emphasizes a clinical and evidence-based approach to psychiatric and addiction health science research.

Required Electives

- Epidemiology of Psychiatric Behaviors Across the Lifespan (Note: Not offered Fall 2019)
- Addiction & Addictive Behaviors
- Global Burden of Disease
- Plus six additional electives

Interested in the MPHS program?

Applications for the 2019-2020 academic year are still being accepted on a rolling basis.

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Questions?

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