

MPHS PROGRAM NEWS BULLETIN

Master of Population Health Sciences



MPHS Leadership

Dr. Graham Colditz, Program Director
 Drs. Adetunji Toriola and Anke Winter, Deputy Directors
 Dr. Allison King, Associate Director for Medical Students
www.mphs.wustl.edu

Congratulations to MPHS Professors Ross Brownson and Kathleen Bucholz!



Ross Brownson, PhD, the Bernard Becker Professor at the Brown School and director of the Prevention Research Center, received the American Public Health Association (APHA)

Award for Excellence for his work as a scholar, leader, and public health practitioner. Dr. Brownson received his award Nov. 1, 2016 at the APHA National Meeting. He has been a professor with the MPHS program since 2012.

Kathleen Bucholz, PhD, professor of psychiatry, received the 2017

Distinguished Educator Award for Postdoctoral Research Mentoring.

Dr. Bucholz was nominated by her peers and received

her award in a ceremony Feb. 15 at EPNEC.

The award is part of the Distinguished Faculty Awards, and is given annually to WUSM faculty members. Dr. Bucholz has been a professor with the MPHS program since 2013.



Congratulations to our 2017 Graduates!

The following MPHS students will receive diplomas this spring:

Porpong Boonmak, MD - McDonnell International Scholars Academy Fellow

Cecelia Calhoun, MD - Pediatrics Fellow

Jyotirmoy Das - Medical Student (deferred to 2017)

Rafael Garcia-Cortes, MD - Cardiology Fellow

Cynthia Herrick, MD - Instructor of Medicine

Jessica Hudson, MD - Surgery Fellow

Nickolas Karlow - Medical Student (2019)

Ryan Kronen - Medical Student (2018)

Angela Lin - Medical Student (2018)

Aalok Patel - Medical Student

Elizabeth Odom, MD - Plastic Surgery Resident

Aref Qureini, MD

David Raymer, MD - Cardiology Fellow

Tara Semenkovich, MD - Surgery Resident

Christopher Sparrow, MD - Cardiology Fellow

Stephanie Stewart, MD - Research Fellow (Dec. 2016 graduate)

Theodore Thomas, MD - Internal Medicine Fellow

Lulu Yu - Medical Student (2017)

MPHS PROGRAM NEWS BULLETIN

Master of Population Health Sciences

Focus on Faculty **Methodius Tuuli, MD, MPH**



Teaches Systematic Reviews and Meta-Analysis
Offered spring semesters, Friday 9 a.m. - 12 p.m.

Dr. Methodius Tuuli is an associate professor at Washington University School of Medicine in St. Louis, and chief of the Division of Clinical Research in the Department of Obstetrics and Gynecology. Dr. Tuuli received tenure in fall 2016, and has been a faculty instructor with the MPHS program since 2012. He is a clinician-scientist with board certification in Obstetrics and Gynecology and Maternal-Fetal Medicine.

Dr. Tuuli's research interests lie in maternal and fetal medicine, specifically evidence-based labor and delivery management, medical complications of pregnancy, and preterm birth. He has special interest in the use of randomized controlled trials for comparative effectiveness research in obstetrics. He has completed six clinical trials including a recent trial comparing chlorhexidine-alcohol to iodine-alcohol for preventing surgical site infections after cesarean delivery published in the *New England Journal of Medicine*.

Dr. Tuuli holds research grants from the National Institutes of Health and the March of Dimes, including an \$8 million grant (multiple PI plan with Dr. Alison Cahill) for an ongoing multicenter trial comparing immediate to delayed pushing in the second stage of labor. This past fall, he received a \$2.9 million R01 grant to conduct a multicenter randomized clinical trial designed to evaluate the effectiveness, safety, and cost-effectiveness of prophylactic negative pressure wound therapy for preventing surgical site infections in obese women undergoing cesarean delivery. Dr. Tuuli is also a site-PI of a multicenter trial investigating the benefit of treating mild chronic hypertension in pregnancy, and co-investigator of a multinational randomized controlled trial testing the effectiveness of clean burning cookstoves during pregnancy for reducing household air pollution-associated disease in women and their children.

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.

The MPHS program gives you the opportunity to learn at a top-ranked medical institution, Washington University School of Medicine, known for patient care and population health excellence, in classes customized for clinicians and medical students. Applications for fall 2017 are still being accepted.

MPHS PROGRAM NEWS BULLETIN

Master of Population Health Sciences

Elective Class Highlight

Global Burden of Disease: Methods & Applications



Course Master: Rumi Price, PhD, MPE (pricerk@wustl.edu)
Professor of Psychiatry
Department of Psychiatry, Washington University School of Medicine
Course offered August - December 2017 · Thursdays 1pm to 4pm
Prerequisites: Introduction to Biostatistics or permission from course master

This transdisciplinary course provides an overview of the quantitative and qualitative methods, and their applications for studying the global burden of diseases as part of the MPHS degree program. The application topics cover infectious diseases, non-communicable chronic medical illness, and psychiatric and behavioral disorders. The transdisciplinary knowledge and hands-on skills learned from this course will assist students with an interest in international research to select a disease or underlying condition with a significant burden on the population of diverse nations or regions. Students will acquire practical skills that can be used in the health professions in the medicine and public health fields.

Research Updates



Richard Griffey, MD, MPH, associate professor of emergency medicine, received a three-year, \$1 million grant from the Agency for Healthcare Research and Quality to study a trigger tool he helped develop for the emergency department setting. In a number of studies, trigger tools have outperformed traditional approaches to identifying adverse events. Rather than reviewing all cases meeting specific screening criteria, trigger tools review random samples of records for a set of pre-defined triggers. Presence of a trigger increases the likelihood that an adverse event occurred and flags a record for further review. This project aims to test, refine and automate this process for use in patient safety and quality improvement efforts.



Mary Politi, PhD, associate professor of surgery, and Terence Myckatyn, MD, professor of surgery, received a two-year, \$400,000 Multi-PI Pre-R01 grant through the Siteman Investment Program. **Margaret Olsen, PhD, MPH**, professor of medicine and surgery, is a co-investigator. The grant, Optimizing Decision-Making about Breast Reconstruction after Mastectomy: A Patient-Centered Approach, will develop a clinical decision support tool that will enable physicians and patients to make high-quality breast reconstruction decisions consistent with clinical evidence and patient preferences.



Allison King, MD, MPH, PhD, received a \$4.3 million grant from the National Institutes of Health (NIH) to address and improve sickle cell disease outcomes in teenagers and adults. **Aimee James, PhD, MPH**, is a co-investigator. This six-year research grant is part of an eight-site National Heart, Lung, and Blood Institute, part of the NIH, project to address living with sickle cell disease after pediatric care. The grant is the first of its kind examining the transition of care and long term survival rates for those affected by sickle cell disease.

MPHS PROGRAM NEWS BULLETIN

Master of Population Health Sciences

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 improvement.

Required Electives

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

Psychiatric & Behavioral Health Sciences

Provides students with strong 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
- Addiction & Addictive Behaviors
- Global Burden of Disease
- Plus six additional electives

Interested in the MPHS program?

Applications for the 2017-2018 academic year are still being accepted on a rolling basis.

Stay Connected



facebook.com/wusmmphs
 www.mphs.wustl.edu

Questions?

Joyce Linn, program coordinator
 email: linnj@wustl.edu
 phone: (314) 362-5501