SURGICAL OUTCOMES RESEARCH CENTER

SORCE

Dr. David Flum, Professor, General Surgery and Associate Chair for Research, received $376,798 from the National Institutes of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) for his project “Topical Antibiotic Treatment for Spine Surgical Site Infections.” Surgical site infection (SSI) after spine surgery is a devastating complication, now classified as a “never event” by payers because it is presumed to be the result of a lapse in quality. Still, spine SSIs occur in as many as 40,000 people each year, resulting in considerable disability and costs to the system. A mainstay of SSI prevention is antibiotic treatment, but because antibiotic concentrations are lower in bone tissue than blood levels, there has been increasing interest in the use of in-wound antibiotics (IWA), placed directly on the spine at the completion of surgery to advent spine SSI, but because of the relative infrequency of SSI and variation in IWA techniques its effectiveness has not been clearly demonstrated. Dr. Flum’s study will examine the incidence of SSI, compare knowledge and beliefs about IWA, and assess willingness to take part in a future randomized, controlled trial on IWA. Ultimately, this study should determine the effectiveness of adding IWA to standard infection prevention regimens to avoid SSI after spine surgery, and potentially result in a major shift in the practice of spine surgery. Dr. Flum’s co-investigators include Danielle Lavallee, PharmD, PhD, Assistant Research Professor in the Division of General Surgery.

Dr. Flum and co-investigator Dr. Lavallee were also awarded $301,776 for a study titled “Understanding Non response in Spine Fusion Surgery,” also from NIAMS. This project will investigate the effectiveness of one of the more commonly performed procedures - spine fusion - for the treatment of degenerative disc disease-related neurological symptoms, pain and functional limitations. Several randomized controlled trials (RCTs) and case series from centers of excellence highlight the potential benefits of these procedures, but other RCTs and assessments of patient reported outcomes after spine surgery from broader populations, such as the Swedish Spine registry, indicate significant heterogeneity of treatment effect. While many clinicians have opinions about who is likely to succeed after surgery based on a patient’s personality traits or circumstance, there are no evidence-based selection criteria for such parameters. Addressing these critical gaps in evidence should help inform decision making about spine surgery and improve outcomes.

Dr. Nahush Mokadam, Associate Professor in the Division of Cardiothoracic Surgery, received a $60,000 unrestricted educational grant (continued on page 12)
from HeartWare, Inc (Framingham, MA) to purchase a Ramphal Simulator for use by the Cardiothoracic Residency Program. For the last several years, trainees in Cardiothoracic Surgery have been involved in weekly simulation training under the guidance of Dr. Mokadam. The Cardiac Surgery Simulation Curriculum, which was written as a collaboration between eight other centers, is based upon well-established simulation principles – deliberate practice, progressive simulation complexity, formative feedback and others. As part of this effort, the high fidelity Ramphal Simulator provided the trainees an actual beating (porcine) heart. This year, the Ramphal Simulator received a significant upgrade, allowing for better reliability, improved flexibility, and easier maintenance. The grant from HeartWare, Inc will assist with the costs of purchasing the upgraded simulator.

Dr. Edward Verrier, Professor, Division of Cardiothoracic Surgery, has been selected by his peers to receive the Bruce C. Gilliland, MD Excellence in Graduate Medical Education Teaching Award for 2015. This award recognizes educators who excel in teaching residents and fellows at UW School of Medicine.

The Bruce C. Gilliland, MD Excellence in Graduate Medical Education Teaching Award was created in 2007 as a tribute to rheumatologist and academic leader Bruce C. Gilliland, MD. He was a resident in UW Medicine’s Division of Rheumatology in 1963 and had a thriving medical career at UW Medicine that spanned 45 years. Dr. Gilliland, who died after a long battle with cancer in 2007, will long be remembered for his dedication to the UW School of Medicine and for his dedication as a mentor and as a physician. This award is made possible by the generous donors who have contributed to this fund in honor of Dr. Gilliland, in particular his wife Maren Gilliland.

Residents & Fellows

Dr. Brian George, Surgical Critical Care Fellow at Harborview Medical Center, has been named the 2015 recipient of the prestigious Resident Award for Exemplary Teaching from the American College of Surgeons. This highly competitive award is given to one resident per year among applicants from all surgical specialties and is chosen by the Committee on Resident Education. Dr. George has demonstrated a commitment to education not only through his teaching but also through his research on learning in the operating room, research that is the basis for an ongoing multi-institutional trial that also includes the University of Washington. Dr. George was nominated for this award by Massachusetts General Hospital where he completed his residency training this past June.

Dr. Brodie Parent was awarded first place and $1,000 in the scientific paper competition at the 46th World Congress of Surgery, a joint meeting of the American Association for the Surgery of Trauma (AAST) and the International Association for Trauma Surgery and Intensive Care (IATSIC). Dr. Parent’s paper, “A novel diagnostic and prognostic tool in critically-injured patients: metabolomics reveals pervasive changes” was one of just six abstracts selected for presentation in a session on Trauma, Burns and Acute Care Surgery/Emergency Surgery. Department of Surgery co-authors on the paper included Dr. Grant O’Keefe and Vascular Surgery Fellow Dr. Shahram Aarabi.