Investigating Motorcycle Crashes in Rwanda

Elizabeth Krebs, MD, Assistant Professor of Emergency Medicine, first visited Rwanda in 2009 as a fourth year medical student at Jefferson. Despite nearly 100 percent helmet use compliance, motorcycle crashes are a predominant cause of brain injuries in Kigali, Rwanda. Dr. Krebs and some engineering colleagues wondered if these helmets could be optimized to more effectively prevent traumatic brain injuries. They began to investigate the possibility of a motorcycle helmet specifically tailored to conditions commonly encountered in the developing world.

Dr. Krebs, who returned to Jefferson last year as faculty, won a Dean’s Transformational Science Award in support of her research and Jefferson’s growing global health presence. With Dr. Miller as a co-investigator and support from JCIRP, the study aims to investigate motorcycle crash dynamics, resultant injuries and the damage sustained by the helmet. The goal: to help engineers understand the forces most commonly impacting the head that a helmet must be designed to mitigate.

Support of this research highlights Jefferson’s growing commitment to global health and “Medicine+” elements within our Jefferson curriculum, which encourages interdisciplinary collaboration and cross-fertilization of knowledge domains to enrich the education of healthcare providers. The coming year will bring new global initiatives, such as the Jefferson Consortium for African Partnerships (JCAP), bi-directional student and faculty international exchanges and collaborations with architecture and engineering colleagues on the Jefferson East Falls campus.

Eakins Writers’ Workshop

Dr. Miller says that in shaping JCIRP, he wanted it, at the core, to be a serious center for formal scientific research in injury science. Yet he also didn’t want it to lose its humanity. “In the end, we’re talking about people’s lives and the disability caused by and life lost from injury.”

The Eakins Writers’ Workshop, a medical humanities initiative within JCIRP and the Department of Surgery, provides a forum for capturing stories of injury. The workshops are being led by writing faculty from Jefferson – East Falls Campus, with initial sessions focused on telling stories from the perspectives of healthcare providers who care for the injured. Preliminary plans are taking shape for a publication called Evanscent, where these stories can be featured.

“Over time, we want to expand the workshop to patients, families and friends, as well.” Dr. Miller says. “We want to craft and publish stories from all perspectives. It’s about documenting people’s experiences – and helping them heal.”

If you have interest in research related to injury prevention and control, please contact Dr. Miller via email at stanton.miller@jefferson.edu or by phone 215-503-1016. Dr. Krebs can be reached via email at elizabeth.krebs@jefferson.edu for inquiries related to global health.