Burn injuries are painful, disfiguring, and life-altering. The depth of irreversibly burned tissue is associated with the likelihood of requiring surgery. Visual evaluation is the current standard of care to identify irreversibly burned tissue, and thus informs whether to perform surgery and how much tissue to remove. This imprecise method of determining burn depth can lead to unnecessary surgery, decreased regenerative capacity, and inferior outcomes, such as increased pain and scarring. Thus, there is a critical need for an accurate method of pre- and intraoperative necrosis detection to maximize the regenerative capacity of a patient’s wounds and minimize unneeded or excessive surgery that leads to poor quality of life. In this presentation, we will explore a novel method of fluorescence guided surgery using multiple models with a focus on rapid translation to clinical utility.

ABOUT the SPEAKER

Dr. Gibson graduated from the Medical Scientist Training Program in 2009 from the University of Wisconsin School of Medicine and Public Health, where she also completed her surgical residency in 2014. Subsequently, she completed a visiting Burn Surgery fellowship at the University of California, Davis, and a fellowship in Surgical Critical Care at the University of Wisconsin.

Certified by the American Board of Surgery in General Surgery and Surgical Critical Care, Dr. Gibson specializes in burn, trauma, emergency surgery and surgical critical care and treats complex wounds. She is the Medical Director of Wound Healing Services at UW Health – a program that she developed. Her research interests focus on epithelial regeneration in burn injury, evaluation of advanced tissue products, human skin model development for wound healing, and understanding the burn wound microenvironment. Dr. Gibson leads a basic and translational science laboratory studying wound healing and clinical trials involving her burn patients.

Monday, February 28 at noon
1003 Engineering Centers (Tong Auditorium)