Board Member Spotlight:

Michael J. Goodheart, MD

Dr. Michael Goodheart, Assistant Professor of Obstetrics and Gynecology in the Division of Gynecologic Oncology at the University of Iowa, joins us as a guest editor for this issue of *Proceedings in Obstetrics and Gynecology*, which is focused on topics related to gynecologic oncology. Here we provide a profile of Dr. Goodheart's background that guided the path for his current clinical and research endeavors.

A Louisiana native, Dr. Goodheart received a B.A. in Chemistry from North Carolina State University in 1990 and an M.D. from East Carolina University School of Medicine in 1995. It was during his second year of medical school that Dr. Goodheart made the pivotal decision to become a surgeon. According to Dr. Goodheart, on his way home one night he took his usual shortcut through the ER and happened to see a fellow medical student preparing a patient with a large pelvic mass for surgery. Dr. Goodheart stayed and observed the surgery from the initial administration of anesthesia to removing the mass and observing her wake up. In particular, Dr. Goodheart was in awe of the ability to see how one’s actions have immediate results, and soon after this experience he made the decision to pursue surgery. His interest in gynecologic oncology developed as an extension of his passion for surgery. In particular, he chose this field because of the opportunities to treat patients with complex medical problems that require surgery. Dr. Goodheart remained in the south for his residency in obstetrics and gynecology at Louisiana State University School of Medicine. He then made a transition to the Midwest in 2000 as a Fellow in the Gynecologic Oncology Division at the
University of Iowa, where he has remained and advanced in the ranks to Assistant Professor.

As a fellow, Dr. Goodheart quickly realized that most treatments for gynecologic cancers (surgery, chemotherapy, radiation) are not 100% effective in eradicating the disease. “No matter how great a surgeon you are, there are things that can't be fixed with a scalpel,” explained Dr. Goodheart. This realization guided the second major step in his career path: to conduct translational research that will identify new treatment modalities for patients with gynecologic cancers. This drive to improve patient outcomes spurred his collaboration with Dr. John Engelhardt, Professor and Head of Anatomy & Cell Biology at the University of Iowa, who has studied gland growth in the trachea. Most endometrial cancers are gland-forming cancers, and Dr. Goodheart used this link to reach out to Dr. Engelhardt for mentorship. According to Dr. Goodheart, his relationship with Dr. Engelhardt was a major deciding factor in staying at the University of Iowa as faculty after his fellowship. In their ongoing collaboration, Dr. Engelhardt serves as a role model for Dr. Goodheart about how to be an excellent scientist and how to navigate his career through academic medicine.

The research focus of Dr. Goodheart’s group is to unravel the role of the Wnt pathway in endometrial cancer. About 20-40% of endometrial tumors exhibit dysregulation of this pathway. Dr. Goodheart’s group focuses on how Wnt pathway activation of lymphoid enhancer factor-1 (LEF-1) transcription contributes to the development of disease. The hope is that understanding the factors controlling LEF-1 transcription will reveal new therapeutic options for patients whose endometrial tumors rely on this pathway. For this and other research projects, Dr. Goodheart maintains an active relationship with Dr. Englehardt and has forged a new working relationship with Dr. Adam Dupuy, Assistant Professor of Anatomy & Cell Biology, to study ovarian cancer, which is another major research focus of his laboratory.

Dr. Goodheart’s initial studies with Dr. Engelhardt enabled him to apply for a physician-scientist grant. In 2007, he was awarded a Research Scientist Development Program Grant (K12) that provided him five years of research support. In addition to the financial benefits of receiving such a competitive source of funding, Dr. Goodheart cites this award as a particularly valuable achievement in his career. For him, receiving this grant from his peers validated that his ideas are worth pursuing.

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