Biography

Dr. Iwanicki trained with Dr. Tom Parsons (graduate studies) at the University of Virginia and Dr. Joan Brugge (postgraduate studies) at Harvard Medical School. During graduate training, he developed a strong foundation in the application of live-cell microscopy techniques to cell biology-driven problems. After graduation, he transitioned to a cancer biology laboratory focused on three-dimensional models of cancer. There, Dr. Iwanicki combined live-cell microscopy with the development of new ovarian and cervical cancer models of metastasis. Through collaborations at Harvard and elsewhere with physician-scientists who studied ovarian cancer problems, he established a record in ovarian cancer research focused on understanding fundamental mechanisms of peritoneal dissemination. Dr. Iwanicki currently has three graduate students, three undergraduate students, and one research assistant. In addition to research activities, he teaches cell biology and cancer biology courses to undergraduate and graduate students entering chemical biology or bioengineering curriculum.

Complete List of Published Reports:

Abstract

“Organotypic Models of Ovarian Cancer Dissemination”

The Iwanicki laboratory research efforts center on women cancers, particularly ovarian, fallopian tube and cervical malignancies. The lab discovered that disseminating ovarian cancer cells self-deposit extracellular matrix and maintain low adhesion state to survive and clear the mesothelial layer that covers abdominal organs. In the current projects, the lab continues to investigate events that lead to the formation of a low adhesion cell state that supports metastasis to abdominal organs and develop fluorescent probes and microscopy-based approaches to detect early transformation of ovarian cancer precursor using organoid cultures. The Iwanicki Lab research is supported by Kaleidoscope of Hope Ovarian Cancer Foundation and Olipass INC.