MSEC SEMINAR AND COMMERCIALIZATION FORUM

INVITED SPEAKER:

DR. PIERRE FLORIANO
“NEOTHERMA ONCOLOGY: CANCER TREATMENT REIMAGINED”

October 30th, 2020
1:30 – 3:00 PM

To attend contact MSEC Staff for Zoom link/passcode

Abstract:

Hyperthermia (HT) is a cancer thermal treatment modality used worldwide, but principally in Europe and Asia. Clinical evidence in numerous phase III randomized clinical trials demonstrate HT improves clinical outcome when added to chemo-, and radio-therapies. NeoTherma Oncology (NTO) aims for clinical adoption globally but intends to satisfy the rigorous need of the US to improve overall adoption. To that end, NTO has designed and developed VectRx™, an FDA-designated “breakthrough device” intended to safely deliver RF thermal energy targeted to a solid tumor situated deep in the body. The device is designed to work inside a Magnetic Resonance Imaging (MRI) scanner to allow 3D monitoring of the tumor temperature during treatment. NTO is preparing for an early feasibility study for adjunctive treatment of pancreatic cancer. I will discuss the biological rationale for hyperthermia, the reasons behind the lack of adoption in the US, present the pre-clinical data that served as a basis for our breakthrough designation, and our clinical plan. I will share my experience with development in a start-up, as well as my previous experience with technology transfer in academic settings.
Biography:

Dr. Pierre Floriano earned a master’s in physical chemistry from the Faculté des Sciences et Techniques de Besançon, France. He had the privilege of working in Louisiana State University’s synchrotron radiation facility (Center for Advanced Microstructures and Devices in Baton Rouge) for his PhD in Analytical/Physical Chemistry and graduated in 2001. He gradually transitioned away from molecular electronics to the design and development of diagnostic sensors and devices as a post-doctoral fellow, and as Senior Scientist at the University of Texas at Austin, and Rice University. The biosensors and bioengineering work led to his interest in clinical translational research. Pierre joined the University of Texas MD Anderson Cancer to develop a biomarker panel for the early detection of lung cancer in the Lung Moon Shots program. He has published more than 30 peer-reviewed journal articles, edited a book on microchip-based assays, and is an inventor in a large portfolio of patents dedicated to medical devices and methods across multiple diseases, which translated to corporate partners. As Director of Therapeutic Development at NeoTherma Oncology, he designs and directs pre-clinical and clinical studies to demonstrate the therapeutic safety and efficacy of NTO’s novel FDA-designated “breakthrough” thermal treatment device and serves as a liaison to academic research sites, CRO, regulatory consultants, and the FDA.