Stephen Boppart & P. Scott Carney: Diagnostic Protonics

Diagnostic Photonics is developing an ultra-high resolution, in vivo, microscopic imaging platform for intra-operative use in several clinical settings. Based on the research of Drs. Stephen Boppart and P. Scott Carney, Electrical and Computer Engineering, the company’s initial focus on cancer diagnostics will enable in vivo and real time scanning of tumor margins and nearby lymph nodes, giving immediate feedback to optimize surgical efficacy. The result will be fewer repeat surgeries, improved prognoses, lower cost, and higher quality care.

Stephen Boppart is a pioneer and an internationally recognized leader in the field of optical coherence tomography (OCT), actively participating in the growth, application, and clinical adoption of this promising medical imaging technology. Recognized by MIT’s Technology Review Magazine as one of the Top 100 Young Innovators in the World for his work in medical imaging. He is the Director of Illinois Imaging Initiative, a cross-disciplinary research effort of over 200 faculty in the field of medical imaging.

Scott Carney is a physicist and expert in theoretical optics. His research interests include near-field optics, coherence theory, inverse scattering and other aspects of theoretical optics.

David Kranz: ImmuVen & BioDisplay

David Kranz’s research is focused on fundamental issues in immunology, and has resulted in the formation of 2 start-up companies, ImmuVen, founded in 2008, and Biodisplay, founded in 1999 and later acquired by Abbott Laboratories. David Kranz has demonstrated his entrepreneurial vision and capability over more than 22 years working with OTM. He has 21 invention disclosures and more than 20 issued patents. David Kranz was the winner of the 2012 Innovation Celebration Technology Transfer Award.

ImmuVen develops novel drugs that can be used to treat infectious diseases and cancer. The company harnesses a powerful, emerging life science technology, T cell receptors, which are a unique class of immune-targeting therapeutic and diagnostic agents. These agents have significant advantages over antibodies. The company was co-founded by David Kranz and Patrick Schlivert of the University of Minnesota.

- April 2012 - Awarded Phase II SBIR grant from NIH for continuing development of therapeutics for Staphylococcal aureus toxins.
- February 2011 - Awarded SBIR grant from NIH for development of therapeutic for Staphylococcal enterotoxin B (SEB).
- December 2010 - Executed license with University of Illinois, Urbana-Champaign.
- November 2010 - Executed license with Abbott Laboratories.
- September 2010 - Began operations at University of Illinois Research Park.
- August 2010 - Awarded NIH grant for development of therapeutic for Staphylococcal diseases.

BioDisplay Technologies, Inc., commercialized technology that dramatically shortens the time it takes to discover various drugs that can be tested for their potential therapeutic application. Acquired by Abbott Laboratories.