



AIMBE Scholars at FDA - 2015-2016

Robert A. Allen, Ph.D.

Dr. Allen is an AIMBE Scholar at the U.S. Food and Drug Administration in the Center for Devices and Radiologic Health, Office of the Center Director. Robert completed his Ph.D. in Bioengineering at the University of Pittsburgh. His research focused on developing resorbable vascular grafts for arterial bypass, injury repair, and hemodialysis. Specifically, he studied the effects of graft resorption kinetics, pore structure, and mechanical properties on tissue ingrowth in small and large animal preclinical models. Beyond the laboratory, Robert served as the president of the Biomedical Innovation and Commercialization Program, a student-run organization dedicated to enhancing the professional development of industry-bound life science trainees. Using the lean startup method, Robert grew the small organization into Pittsburgh's premier platform for student-to-industry networking in the life sciences, earning him the Leadership and Service Award from the University of Pittsburgh's Graduate and Professional Student Government. Concurrently, Robert served as an Entrepreneurial Associate at the University of Pittsburgh's Office of Enterprise Development, where he advised commercialization strategy for university intellectual property through market research and customer discovery. As an AIMBE Scholar, Robert plans to use his knowledge of life science startups and translational academic research to advise policy toward promoting innovation while ensuring patient safety. In the long term, Robert plans to combine regulatory strategy with his technical expertise to translate new technologies into impactful medical products.

Allen L. Chen, Ph.D.

Dr. Chen is an AIMBE Scholar at the U.S. Food and Drug Administration in the Center for Devices and Radiological Health, Office of the Center Director. Allen completed his PhD in Bioengineering at Rice University in May 2015. His research focused on developing spectral approaches to characterizing how the properties of plasmonic nanoparticles utilized in biomedical applications change in cellular environments in order to inform safe and effective nanoparticle design. In addition to research, Allen was actively involved in university affairs, engaging in several projects which included: developing graduate student programming in the bioengineering department and graduate student housing, leading development of a campus bike share program for environmental sustainability, training undergraduate students in technical presentation skills, and serving as a representative on the university's advisory council. Ultimately, Allen is interested in fostering safe and efficient translation of medical technologies to the clinic in a regulatory or product development role. As an AIMBE Scholar, Allen is excited to work with stakeholders to develop and implement sustainable innovations that improve the overall device review and monitoring process, construct sound policies for regulating emerging technologies, and develop programs that help strengthen relationships between the FDA, industry, and academia so that medical innovations can more efficiently be translated to the clinic while ensuring safety along the way.

Douglas Manning Dumont, Ph.D.

Dr. Dumont is an AIMBE Scholar at the U.S. Food and Drug Administration in the Center for Devices and Radiological Health. Douglas completed his Ph.D. in Biomedical Engineering at Duke University. His doctoral research concentrated on developing techniques to simultaneously image blood flow and tissue-elasticity using ultrasound. Specifically, he worked on studying the response of arterial tissue to acoustic radiation force, and investigated its use as a potential imaging modality for characterizing cardiovascular tissue and identifying disease. His postdoctoral research at Vanderbilt University focused on improving ultrasound-based, motion estimation using Bayesian modeling. In addition to his scientific work, Douglas served as an Americorps VISTA, where he created curricula and an afterschool program for digital literacy training. Dr. Dumont plans to use his medical imaging and modeling background to advise regulatory policy, and develop new regulatory tools to safely guide drug and device innovation.