



Frank Alexander

Frank Alexander, Jr. Receives Whitaker Award

TAMPA, Fla. (April 15, 2014) Frank Alexander, Jr., a doctoral candidate in the Department of Electrical Engineering, has been awarded a prestigious Whitaker International Program Scholarship grant. He will conduct postdoctoral research at cellasys GmbH a biomedical engineering company in Munich, Germany. Frank will work on the development of several organ-on-a-chip models for *in vitro* drug testing and analysis. He is the first USF student to be supported by the Whitaker International Fellows and Scholars Program.

Beginning in 1975, the Whitaker Foundation supported the development and enhancement of biomedical engineering in the United States, contributing nearly \$700 million to universities. When the foundation closed in 2006, it committed its remaining funds to the Institute of International Education to create the Whitaker International Fellows and Scholars Program. Its goal is to enhance international collaborative ties between U.S. emerging leaders in biomedical engineering (bioengineering) or related fields and their counterparts abroad. Since its inception in 2006, the Whitaker International program has supported over 200 grantees (postdocs, graduate students, and undergraduates) in the field of biomedical engineering.

Frank is a recipient of the NSF Graduate Research Fellowship Program (GRFP) and the NSF Florida-Georgia LSAMP Bridge to the Doctorate fellowship program. During his doctoral program, he participated in NSF supported summer biomedical engineering internships with Optofluidics, Inc. (2013) in Philadelphia, PA, and Time Medical (2010) in Shanghai, China. Frank's dissertation research seeks to combine bioimpedance spectroscopy measurements of three dimensional (3D) tumor cell models with simultaneous pH measurements to correlate morphological changes with environmental changes for a more accurate drug screening platform.

Frank has been advised by Shekhar Bhansali, professor and chair in the Department of Electrical and Computer Engineering at Florida International University, and Andrew Hoff, professor in the Department of Electrical Engineering at USF.

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Whitaker International Program

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The University of South Florida is a high-impact, global research university dedicated to student success. USF is a Top 50 research university among both public and private institutions nationwide in total research expenditures, according to the National Science Foundation. Serving nearly 48,000 students, the USF System has an annual budget of \$1.5 billion and an annual economic impact of \$4.4 billion. USF is a member of the American Athletic Conference.

The College of Engineering at the University of South Florida is ranked at #72 among public institutions by U.S. News & World Report's 2015 engineering graduate school rankings. The college serves 4,600 students offering ABET-accredited undergraduate degrees in seven programs, as well as eleven master's and nine doctoral degrees. The College is actively engaged in local and global research activities with foci on sustainability, biomedical engineering, computing technology and transportation and for the fiscal year 2013-14 had \$30.5 million in research expenditures. There are 124 tenured / tenure track faculty and 80 instructors and research faculty.

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