

Distinguished BME Department Seminar Series at SUNY Binghamton University Presents: Michael Finkelstein

"You are What You Wear" Backward Deconstruction of the challenges behind the first FDA-approved medical textile that closes the loop between diagnostics and interventions.

17 November 2023

Abstract-The interactive seminar will explore the various considerations that entrepreneurs and engineers faced together, and the real-world challenges of achieving "competitive" milestones that ultimately created disruption within the neuromuscular rehabilitation field. Together, we will look at both pain points and solutions through one of the most turbulent and uncertain global events in modern history. We will examine the importance of Agility- and how fast paced, divergent thinking, based on varied organizational frames, strength foci, and a 360-degree leadership view, merged to build highly effective teams with a "Get to Yes" culture.

To do this we will take a backwards approach, to reach "Understanding by Design." We will examine a model of Diffusion of Technology and the effect it had on engineering and business decisions, even in all the way back to the initial ideation phase. For context, we must have a shared schema, so we will discuss a brief history of electrical medicine, its cross pollination with textile and military science. We will end with a demo of the present technology and discuss the future of the field- What does the phrase "You are What You Wear" mean for medical device advancement and how are Binghamton University students and faculty shaping this conversation with companies for years to come?

Bio- Michael Finkelstein-SUNY Binghamton Class of 96' BA Acting/Directing, MA Ed. Touro University, MS Ed. Leadership Bank St. College of Education, Graduate Certificate New School of Social Research Parsons School of Design. Following a 19 years career in Education/Educational Administration, Michael spent the last 8+ years in medical device R&D and Business Development. In 2015, he cofounded, a medical distribution company. In 2020, the company leadership team shifted focus to manufacturing and founded Neuro20 Technologies, a Tampa based medical device manufacturer, with a current market cap of (\$35M). To help build the company, Michael used his knowledge of public institutional leadership to communicate with engineering teams on medical device production from ideation, manufacturing, FDA compliance, through patient adoption. Today he is leading efforts innovation along with building corporate structures to support wide spread market adoption.