STATEGIC PLAN 2020-2025

Frank Reidy Research Center for Bioelectrics

Mission
• To build an interdisciplinary research community that uses fundamental research to innovate, develop and deploy ultra-short high voltage pulse stimulation, plasma and bioelectronic technologies.
• To educate students in bioelectrics in collaboration with biomedical engineering, translational health and biological sciences.
• To tackle global challenges in human and environmental health.

We use applied and fundamental bioelectrics research to develop devices and techniques to deliver therapeutics and improve diagnostic tools that benefit human and environmental health.

Vision
• To be a leader in Hampton Roads entrepreneurial and innovation ecosystem, where our fundamental and ground-breaking discoveries contribute to ODU’s research, start-ups and a roadmap for success.

Goal 1: Strengthening our leadership position in bioelectrics, while embracing bioelectronics

Objective 1: Raise our national and international research profile

Actions
1. Disseminate research results through journal publications and conference presentations.
2. Showcase bioelectrics research and faculty through strategic communication of our scholarly achievements using promotional materials and applicable media outlets.
3. Build a diverse world class faculty by embracing inclusive excellence.
4. Maintain active memberships in professional societies.
5. Increase faculty participation on editorial boards, technical committees and conference organizing committees.
6. Sustain the Center’s high-profile publication and CBE outreach.

Objective 2: Integrate bioelectronics into existing research programs

Actions
1. Provide funding opportunities to incentivize interdisciplinary collaborative research at the interface of bioelectrics and bioelectronics.
2. Increase number of appointments/joint appointments in academic departments to promote collaboration and leverage our expertise.
3. Create affiliate faculty position in Bioelectrics.

Objective 3: Enhance interdisciplinary research collaborations with external partners

Actions
1. Direct close collaboration with surrounding medical institutions (EVMS, Sentara, CHKD, etc).
2. Acquire a membership in biomedical research-based organizations in the Commonwealth.

Objective 4: Expand high-impact research and training programs for trainees

Actions
1. Obtain more externally funded undergraduate, graduate, and post-doctoral scholarships/fellowships.
2. Increase post-doctoral fellow participation as instructors for short courses and collaboration with the Faculty Development of Office to support teacher training program.
Goal 2: To become a leader in interdisciplinary education

Objectives 1: Increase educational competitiveness

Actions
1. Educate students in Biomedical Science and Biomedical Engineering.
2. Provide research training in bioelectrics and bioelectronics.
3. Establish a research experience for undergraduate students.
4. Promote student success through excellence in research & academic programs.

Objectives 2: Enhance diversity in STEM pipeline

Actions
1. Invest in the STEM pipeline by enhancing our strategic partnerships with K-14 programs through the Bioelectrics Summer Institute Program.
2. Sponsor and participate in student activities to garner interest in STEM education.
3. Foster diversity and a culture of inclusive excellence.
4. Work with the Development Office to enhance industry, alumni, individual and corporate giving.

Goal 3: Enhance entrepreneurial culture

Objectives 1: Create and translate practical solutions to health care and environmental needs

Actions
1. Partner with Strome Entrepreneurial Center, Institute for Innovation & Entrepreneurship to develop workshop on research translation.
2. Work with Development Office and Institute for Innovation & Entrepreneurship to explore new ideas and encourage intrapreneurship among faculty and students.