Aug. 2, 2018

Zhen Qiu and Nelson Sepulveda team up in the fight against breast cancer

Experts in biomedical engineering and electrical and computer engineering at Michigan State University are collaborating on the limitations of wide-field tumor imaging in the fight against breast cancer.

Zhen Qui, assistant professor of biomedical engineering, and Nelson Sepulveda, associate professor of electrical and computer engineering, have been awarded a $360,000 grant from the National Science Foundation to further their research in miniaturized ultra-low power surface-enhanced Raman spectroscopy.

Their project is: “Implantable Ultra-low Power VO2 MEMS Scanner based Surface-enhanced Raman Spectroscope for Wide-field Tumor Imaging.”

The researchers will focus on developing an implantable microelectromechanical system for in-vivo monitoring, longitudinal study of tumor growth, and nanoparticles-based targeted drug delivery. Goals of the proposed implantable micro-scanner include higher sensitivity, scalable resolution, deeper penetration, and shorter integration time.

Read more on the research.

Related Website: Communications contact: Patricia Mroczek

Source URL: https://www.egr.msu.edu/news/2018/08/02/360000-nsf-grant