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# TcSUH Bi-Weekly Seminar

**Bringing Together the Academic, Clinical and Enterprise Elements to Solve Challenges in Cancer Care Through the Application of Nanotechnology and Magnetic Sensing**



## **PROF. AUDRIUS BRAZDEIKIS**

Research Professor, Department of Physics; TcUH PI

**Thursday, May 30, 2019**

Room 102, Houston Science Center

12:00 p.m. – 1:00 p.m.

**RSVP** by 5/29 for sandwiches  
to [bderndo@central.uh.edu](mailto:bderndo@central.uh.edu)

**ABSTRACT:** Innovation is at the core of our public service mission. Our university is increasingly investing in new programs that support innovation and entrepreneurship as part of broader efforts to achieve demonstrable benefits to the wider economy and society. The focus is not only about financial return through licensing fees and royalties, but more generally it is about exciting and attracting talented students, postdocs and faculty, and adding the element of knowledge transfer to conventional academic outputs.

In this seminar, I present a case study examining a TcSUH-funded project recently undertaken to commercialize a novel surgical guidance instrument (SentiMag) from early research stages through product development to successful market introduction. I reflect on the successes and challenges encountered during the project, new research activities and various lessons learned.

The Sentimag technology is now available in more than 30 countries and more than 30,000 patients have undergone surgery guided by our technology. Today it assists surgeons in locating and removing cancerous lesions, predominantly in breast cancer surgery, in many US hospitals including MD Anderson Cancer Center eliminating the use radioactive tracers, radioactive seeds or surgical needle wires and improving the standard of cancer patient care.

**BIO:** Dr. Audrius Brazdeikis is a Research Professor (Physics) and the principal investigator of the Nanomedicine Physics Laboratory at the Texas Center for Superconductivity at University of Houston (TcSUH). Research is concentrated on developing, evaluating, and optimizing biomedical technologies for magnetic sensing, heating, characterization and manipulation on a nano scale aimed at reducing the invasiveness and cost of clinical interventions, and improving patient access to novel medical technologies. Dr. Brazdeikis received his Ph.D. from The Royal Institute of Technology, Stockholm, Sweden (1997); Licentiate of Engineering, The Royal Institute of Technology, Stockholm, Sweden (1995); and the M.S. in Solid State Physics, Vilnius University, Vilnius, Lithuania (1989). He has authored over 60 original scientific publications in leading scientific journals and has 8 issued patents. He has served as an independent technology consultant to Baylor College of Medicine, UT Health and Texas Heart Institute. He has co-founded two technology startups seeking to commercialize his latest research innovations.

**Persons with disabilities who need special accommodations to attend this lecture should call (713) 743-8213.**

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