

1. "Fat-Intra Body Communication" by Prof. Robin Augustine – Uppsala University



Bio : Prof. Robin Augustine is the Head of the Microwaves in Medical Engineering Group, Div. of Solid State Electronics, Dept. of Electrical Engineering, Uppsala University, and the coordinator of the B-CRATOS project. He has strong track record in point of care sensing, Fat-intra body communication and Robotics. He collaborates closely with experts from the field of technology and medicine to develop and deliver innovative solutions for medical monitoring and diagnosis.

Topics: Fat-Intra Body communication is a novel technology developed to address the requirements, such as reliability, security, data rate and bandwidth, posed in/on body area networks. This talk touches upon the technology and its applications.

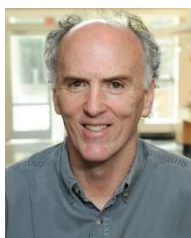
2. " Microwave Phantoms " by Dr. Mauricio Perez- Uppsala University



Bio : M. D. Pérez was born in Buenos Aires, Argentina, on 25 July 1980. He received the engineering degree in Electronics from the National Technological University (UTN) in Argentina in 2007. He obtained the PhD in Electrical Engineering at University of Bologna (UNIBO) in Italy in 2012. Currently, he is a researcher at the Microwaves in Medical Engineering Group at Engineering Sciences Department of Uppsala University (UU) in Sweden. His research interests are microwave passive technologies and advanced applied mathematics for biomedical applications.

Topics: Emulatory models are imperative for validating a technology before bringing it to the animal or clinical trials. Phantoms are representative models of human body and this talk will provide you a birds view of the phantom characteristics and their role in the field of medical engineering with focus on in body communication.

3. "Microwaves in Medicine" by Prof. Paul Meaney – Dartmouth College



Bio : Prof. Paul M. Meaney has extensive industrial experience from working with millimeter-wave technology at both Millitech Corporation, South Deerfield, MA, USA, and Alpha Industries, Woburn, MA. He has been a Professor with Dartmouth College since 1997, with Chalmers University of Technology, Sweden, and is also the President and Co-Founder of Microwave Imaging System Technologies, Hanover. He has co-authored over 80 peer-reviewed journal papers and holds 13 patents. His current research interests include microwave tomography, which exploits the many facets of dielectric properties in tissue and other media, and in particular, for breast cancer imaging, where his group was the first to translate an actual system into the clinic.

Topics: Microwave is a non-hazardous radiation unlike ionizing X-Ray and Gamma radiations. Therefore it finds a great potential in the field of imaging, sensing and communication for body centric applications. This talk is aimed at discussing the compatibility of microwaves in general for medical applications.