

Singapore Bioimaging Consortium (SBIC)

Laboratory of Bio-optical Imaging

Name	Project	Degree By
Prof Malini Olivo Adjunct Professor, Lee Kong Chian School of Medicine NTU malini_olivo@sbic.a-star.edu.sg	1. A portable photoacoustic imaging system for medical implant monitoring. 2. Ultrasensitive biosensing by surface-enhanced infrared absorption spectroscopy. 3. Spatially offset Raman spectroscopy for non-invasive deep tissue biochemical characterization. 4. All Optical Photoacoustic Microscopy. 5. Advanced SERS/Raman spectroscopic sensing and imaging for food monitoring and contaminant screening with the help of machine learning concepts. 6. Amplified Nanoparticles-based Optical Sensing for Liquid Biopsy.	NUS/NTU/SUTD

Brain Plasticity Group

Name	Project	Degree By
Dr Fu Yu Adjunct Associate Professor with NUS and NTU fu_yu@sbic.a-star.edu.sg	Neural mechanisms of feeding regulation	NUS/NTU

Signal & Imaging Processing Group

Name	Project	Degree By
Dr Bhanu Prakash bhanu_prakash@sbic.a-star.edu.sg	Deep Learning Algorithms/Framework for development of Stroke Computer aided diagnostics system. The projects aims at localization/segmentation/quantification of Stroke regions (Ischemic, Haemorrhagic) in Unenhanced CT scans as well develop a Probabilistic atlas to correlate the vital parameters including blood parameters, risk factors, ethnicity etc.	NUS/NTU/SUTD

Methods Development Group

Name	Project	Degree By
Dr Lee Kuan Jin lee_kuan_jin@sbic.a-star.edu.sg	High field pre-clinical MR methods development	NUS/NTU/SUTD

Metabolic Medicine

Name	Project	Degree By
Dr Weiping Han Joint appt at YLLSOM weiping_han@sbic.a-star.edu.sg	Obesity and diabetics	NUS/NTU/SUTD

Magnetic Resonance Spectroscopy/Metabolic Imaging Group

Name	Project	Degree By
Dr Sendhil Velan Adjunct Faculty, YLL SOM, NUS Adjunct Faculty, Physiology, NUS Adjunct Faculty, NUS Graduate School for integrative Sciences and Engineering sendhil_velan@sbic.a-star.edu.sg	Bioimaging / Biological and Biomedical Sciences Advanced Imaging and Metabolic Characterization of Fat Partitioning during Obesity and Weight Loss In Rodents Multimodal Imaging Development for BAT, WAT and Browning Adipose Tissues Advanced Imaging of Skeletal Muscle Metabolism in Obesity and Aging Translational Imaging of Metabolic Diseases	NUS/NTU/SUTD