The Singapore Bioimaging Consortium (SBIC)
presents a seminar

on

# "Nanoparticles for Multimodal Clinical and Preclinical *in-vivo* imaging"


**Speaker:** **Dr Mangala Srinivas**
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**Host :** **Dr Sendhil Velan**
**Date :** **Friday, 20 May 2016**
**Time :** **11.00am – 12noon**
**Venue :** **SBIC Seminar Room**
**11 Biopolis Way**
**Level 2, Helios Building, Singapore 138667**
**(Please enter via Level 1)**

## Abstract


Modern medicine is all about personalisation- whether in cell therapy, targeted delivery or even patient stratification. These require noninvasive techniques to monitor relevant issues in vivo. Imaging is a key player in this field. However, no imaging modality is ideal. Thus, my group is focusing on the development of *multi*modal imaging agents for a range of applications. In particular, we are working with nanoparticles designed for $^{19}$F MRI, fluorescence, ultrasound and optoacoustic imaging. These agents have been approved for clinical testing, where late-stage melanoma patients will receive therapeutic dendritic cells labeled with the nanoparticles in 2016. Furthermore, we are also working on understanding the physical structure of these unique nanoparticles, as well as exploring a range of relevant biological applications. In particular, it appears that the nanoparticles have a very unique structure which results in their (unexpected) multimodal imaging properties.


## About the Speaker

Dr Srinivas started her career in research at the National University of Singapore, before completing her PhD at Carnegie Mellon University (USA). Her work focuses on contrast agents for *in vivo* imaging. Dr Srinivas's early work helped established the field of $^{19}$F MRI for quantitative *in-vivo* cell tracking, including the first paper on the topic. More recently, her group works on customisable nanoparticles for imaging and advanced personalised medicine applications. Some of these nanoparticles will be

tested in a clinical cell tracking study using multimodal imaging in 2016, in melanoma patients. Her group works with fluorescence, MRI, PET, SPECT, ultrasound and photoacoustic imaging in various disease models. A spin-off to bring the nanoparticles patients on a larger scale is being set-up. This multidisciplinary work is supported by prestigious grants such as an ERC Starting Grant, among others.

***--- Admission is free and all are welcome ---***