The Singapore Bioimaging Consortium (SBIC)
presents a seminar on

"Harnessing the Power of Molecular Imaging for Precision Medicine"

Speaker: **Associate Professor Cai Weibo**
Vilas Distinguished Achievement Professor
Departments of Radiology, Medical Physics, Biomedical Engineering, Materials Science & Engineering, Pharmaceutical Sciences (Drug Delivery Core)
University of Wisconsin - Madison, USA

Host : **Dr Han Weiping**
Date : **Tuesday, 13 March 2018**
Time : **3.00pm – 4.00pm**
Venue : **SBIC Seminar Room**
11 Biopolis Way
Level 2, Helios Building, Singapore 138667
(Please enter via Level 1)

Abstract

The Molecular Imaging and Nanotechnology Laboratory at the University of Wisconsin - Madison (http://mi.wisc.edu/) is mainly focused on three areas: 1) development of multimodality molecular imaging agents; 2) nanotechnology and its biomedical applications; and 3) molecular therapy of cancer. In this talk, Dr Cai will present his recent work on molecular imaging and image-guided drug delivery of cancer and other diseases with peptides, proteins, and a variety of nanomaterials. The primary imaging techniques used in these studies are positron emission tomography (PET), photoacoustic tomography (PAT), optical imaging, and magnetic resonance imaging (MRI). Some of the major molecular targets that they are investigating are CD105 (*i.e.* endoglin), PD-1/PD-L1, CTLA-4, VEGFR, CD146, integrin $\alpha_v\beta_3$, among others. The nanomaterials that will be discussed in this presentation may include silica-based nanoparticles, nano-graphene oxide, micelles, iron oxide nanoparticles, 2-D nanomaterials, hybrid nanomaterials, among many others.

About the Speaker

Weibo Cai is an Associate Professor (*Vilas Distinguished Achievement Professor*) of Radiology, Medical Physics, Biomedical Engineering, Materials Science & Engineering, and Pharmaceutical Sciences at the University of Wisconsin - Madison, USA. Dr Cai received a BS degree in Chemistry from Nanjing University, China (1995) and a PhD degree in Chemistry from the University of California, San Diego (2004). Between 2005 and 2008, Dr Cai did his post-doctoral research at the Molecular Imaging Program at Stanford (MIPS). In February 2008, Dr Cai joined the University of Wisconsin - Madison as a Biomedical Engineering Cluster Hire, and was promoted to

Associate Professor with Tenure in 2014. Dr Cai's research at UW-Madison (http://mi.wisc.edu) is primarily focused on molecular imaging and nanotechnology. Dr Cai has authored >240 peer-reviewed articles, >20 book chapters, and >260 conference abstracts. His publications have been cited >12,000 times with an H-index of >65. He has edited 3 books, guest-edited many special topic issues for various scientific journals, and given >200 talks. Dr Cai has received many awards, including the Society of Nuclear Medicine and Molecular Imaging (SNMMI) Young Professionals Committee Best Basic Science Award (2007), the European Association of Nuclear Medicine (EANM) Springer Prize (2011 & 2013), American Cancer Society Research Scholar (2013-2017), EANM Annual Congress Plenary Lecturer (2016), UW-Madison Vilas Distinguished Achievement Professor Award (2017), NIH R01, among many others. Dr Cai has served on the Editorial Board of >20 scientific journals (*e.g. Theranostics, Journal of Nuclear Medicine, European Journal of Nuclear Medicine and Molecular Imaging, Molecular Pharmaceutics, Scientific Reports, American Journal of Cancer Research, American Journal of Translational Research*, etc.), performed peer review for >130 journals, and participated in many grant review panels (NIH, DOD, NSF, Cancer Prevention and Research Institute of Texas [CPRIT], Susan G. Komen, European Research Council, Canadian Cancer Society, Prostate Cancer Canada, many European countries, etc.). He is currently the Co-Editor-in-Chief of the *American Journal of Nuclear Medicine and Molecular Imaging* (http://www.ajnmmi.us), a journal that was launched in 2011 and fully indexed in PubMed and Emerging Sources Citation Index (ESCI).

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