

Preclinical Imaging Facility

VBCF Seminar Room

June 26/6 2018

Wednesday 11.00 – 12.30

June Matthew Smith, Ph.D.

26 Vice President

Magnetic Insight

„Changing the field: An Introduction to Magnetic Particle Imaging“

Magnetic Particle Imaging (MPI) is an emerging non-invasive tomographic technique that directly detects superparamagnetic nanoparticle tracers. It is ideal for non-invasive cell tracking. The technology has potential applications in diagnostic imaging and material science. Currently, it is used in medical research to measure the 3D location and concentration of nanoparticles. Imaging does not use ionizing radiation and can produce a signal at any depth within the body. MPI was first conceptualized in 2001 by scientist working at the Royal Phillips Research lab in Hamburg. The first system was established and reported in 2005. Since then, the technology has been advanced by academic researchers at several universities around the world. The first commercial MPI scanners have recently become available from Magnetic Insight and Bruker Biospin.

