Position Title: Research Fellow (MRI)

About the Agency for Science, Technology and Research (A*STAR)
The Agency for Science, Technology and Research (A*STAR) is Singapore’s lead government agency for
economic-oriented Research and Development (R&D). We advance science and develop innovative technology
to further economic growth and improve lives. For more information about A*STAR, please visit: www.a-
star.edu.sg

About the Singapore Bioimaging Consortium (SBIC)
The Singapore Bioimaging Consortium (SBIC) is a research consortium of the Agency for Science, Technology
and Research (A*STAR) in Singapore. SBIC aims to build a coordinated national programme for imaging
research, bringing together substantial strengths in the physical sciences and engineering and those in the
biomedical sciences. It seeks to identify and consolidate the various bioimaging capabilities across local research
institutes, universities and hospitals, in order to speed the development of biomedical research discoveries.

SBIC has built up an extensive network of partners, through collaborations and joint appointments with research
institutes, university and clinical departments, and the industry. Its partners include the Singapore Institute for
Clinical Sciences, the NUS Chemistry Department, the National Cancer Centre, Duke-NUS, Agilent, Bruker,
Bayer, GlaxoSmithKline, Takeda, and Merck.

For more information about SBIC, please visit www.sbic.a-star.edu.sg

Job Description
SBIC performs research using advanced bioimaging tools into human diseases of major public health
significance such as diabetes, obesity, and cardiovascular disease. SBIC has cutting-edge MRI equipment: a 3T
Siemens Skyra based in an animal facility, a 7T preclinical scanner, two 9.4T preclinical scanners, a 11.75T
Bruker Biospec with cryoprobe, and a Mediso 3T MR/PET preclinical scanner (soon to be upgraded to 7T).

The MR Methods Development group (Dr Kuan J. Lee) is looking for a Research Fellow (MRI) to join as soon as
possible.

Responsibilities:
• Support research projects by providing and sharing MRI expertise with other researchers
• Protocol optimization, sequence design and implementation, data acquisition, image reconstruction,
  image processing and analysis
• Disseminating results through publications and presentations

Job Requirements:
• PhD in MRI or a field closely related to MRI
• Experience of in-vivo MR imaging/spectroscopy in human or pre-clinical setting
• Ability to optimize protocol parameters for scan quality
• Excellent knowledge of MRI physical principles and sequence design
• Ability to reconstruct images from raw data using Matlab and/or other scientific programming language
• Excellent verbal and written communication skills

First-hand experience of some or all of the following is an advantage:
• Pulse sequence programming in clinical and/or pre-clinical MR scanners
• Advanced methods eg accelerated imaging/non-cartesian MRI/fat-water separation etc
• RF pulse design
• RF coil design

We welcome interested applicants to submit a full CV including a list of publications, a cover letter addressing the
above criteria, and contact details of two referees

Candidates should apply through the A*STAR career portal at https://app.a-
star.edu.sg/AstarCareerPortal/JobDetails.aspx?extlink=17/SBIC/0001