

Research Fellow in preclinical brain MR

An exciting opportunity for a dynamic and innovative **Research Fellow** in preclinical brain MR (small animals) has arisen at the **Singapore Bioimaging Consortium (SBIC)**. The successful applicant will be expected to contribute to the *in vivo* MR neuroimaging (all modalities) program at SBIC by pushing the boundaries of high field MRI to understand brain function, metabolism and morphology and then contribute to the scientific mission of SBIC.

Job Description

General

The Research Fellow will hold a PhD in Physics or Biomedical Engineering or Biological Sciences with significant experience (3 years minimum) in applying high field *in vivo* brain MR to study preclinical models. The successful candidate will have demonstrated interest and excellence as evidenced by high impact peer-reviewed publications and productivity. Strong experience with MR fundamentals and techniques, familiarity with the development and implementation of new pulse sequences, together with a detailed knowledge of MR instruments are essential. A hands-on familiarity with high field Bruker MR instruments (software and hardware) is required. Competence in resting-state functional connectivity MRI and its preclinical applications is important. Proficiency in other imaging modalities such as US, CT and PET is an advantage but not a requirement.

Missions

The Research Fellow will work in close interaction with other SBIC neuroscientists to ensure the best outcome of research projects. He/She will be directly involved in the acquisition and processing of MR data to study structural, metabolic, physiological and functional responses in a number of animal models of neuropathologies and in projects on neuroadaptation and neuromodulation. He/She will have the opportunity to initiate new and collaborative protocols and projects in line with SBIC's research priorities.

The position requires flexibility, rapid adaptation to changing scientific environment and challenges, problem solving skills and a capacity to successfully interact and cooperate with SBIC scientists and partners in a multidisciplinary and multicultural environment. Ability to work collaboratively is then essential. Excellent communication and written skills in English (spoken and written) are a must.

The successful applicant will join SBIC's 120 scientists and technicians of 20 nationalities, who are working across all imaging modalities to interrogate clinical pathologies in endocrinology, cardiology, oncology, neurobiology, hepatology, developmental biology, and therapeutics. Opportunities for collaboration extend beyond SBIC/A*STAR with universities, hospitals and industrial partners across Singapore and worldwide.

Applications must be sent directly to patrick_cozzone@sbic.a-star.edu.sg. The initial contract is for 3 years and renewable. Compensation is competitive.

About SBIC

The Singapore Bioimaging Consortium (SBIC) is a research and development Institute under the Agency for Science, Technology and Research (A*STAR). The Consortium harnesses existing multimodal imaging expertise and capabilities to develop a focused national platform to support the growth of multi-disciplinary research activities and speed the development of biomedical research discoveries. SBIC has first class facilities and provides investigators from clinical and basic science backgrounds with the opportunity to pursue innovative translational research within the established clinical base in Singapore. It also works closely with industrial partners and operates 5 joint laboratories with leading manufacturers of imaging equipment.

SBIC is equipped with an extensive range of multinuclear MR systems, including an ultra-high field preclinical 11.75T MRI Biospec system (with a cryoprobe), an Agilent/Bruker 9.4T, a Bruker 9.4T Biospec, and a Bruker 7T ClinScan. The facility also houses two high-resolution NMR spectrometers (Bruker 400 and 600 MHz), two dynamic nuclear polarization systems (HyperSense and Spin Lab) and a 3T Skyra Siemens clinical whole-body MR scanner. In addition, SBIC operates an isotopic imaging platform with a Siemens PET-CT scanner, a Mediso SPECT-CT scanner, a Mediso PET-MR scanner and a Skyscan microCT. SBIC has a strong optical imaging laboratory with an iThera's MSOT Photoacoustic system, an Ithera RSOM system, a SERS suite and a Bruker Xtreme. SBIC has fully equipped Biology and Chemistry laboratories, including a facility for Radiochemistry.

For more information visit our website: www.sbic.a-star.edu.sg.