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Reg No 198703907Z

Job Title: Principal Investigator / Senior Principal Investigator (Singapore General Hospital)

Background:

Singapore General Hospital (SGH) is Singapore's flagship acute and tertiary/quaternary care hospital dedicated to excellence in patient-centred healthcare services in Singapore and the wider Southeast Asia region. We leverage our comprehensive, multidisciplinary campus expertise, advanced technologies and industry partners to deliver superior patient care and support ground-breaking research initiatives.

Position Overview:

We are seeking an innovative and dynamic MRI Physicist-Scientist to advance multidisciplinary MRI research for medical discovery and innovation, and lead in MRI technical developments and clinical applications. The incoming shall lead the incumbent team of junior MRI physicists to programme, optimise and implement new pulse sequences and develop novel image reconstruction methodologies so as to enable cutting-edge multidisciplinary clinical research. He plays a pivotal role in advancing our MRI capabilities and contributing to the hospital's mission of excellence in healthcare delivery.

Key Responsibilities:

- Secure national funding as independent PI and complementary co-PI to SGH's Clinician Scientists to elevate SGH's research to a higher level through multidisciplinary research for medical discovery and innovation, increasing grant competitiveness and providing key domain expertise
- Lead in pulse sequence, image reconstruction and efficient computational (e.g., deep learning) methods development to address clinical problems and research needs
- Collaborate with clinicians, radiologists, radiographers/technologists and other researchers to design and implement innovative MRI applications for clinical research studies, enable surgical navigation and precision, publish research outcomes in peer reviewed medical imaging journals and translate scientific discoveries into the clinic



- Keep abreast of emerging trends and developments in MRI technology, imaging analytics, and clinical applications
- Mentor junior faculty to foster a culture of continuous learning and professional development in the MRI department
- Guide and support the fraternity of Radiological Sciences in MRI medical physics education and safety

Qualifications:

- PhD in Magnetic Resonance Imaging, biomedical engineering, or related field with a specialisation in MRI physics.
- Domain expertise in principles of MRI physics, pulse sequence design, image reconstruction, and optimisation of imaging protocols.
- Significant and robust experience and evidence of leadership in clinical MRI research of rigor, preferably in a hospital or academic medical centre setting. Experience with industry, ultrahigh field and non-proton MRI are a plus.
- Proficiency in software tools and programming languages used in MRI research, such as MATLAB, Python, or C/C++.
- Excellent interpersonal and communication skills to facilitate effective collaboration with multidisciplinary teams, and convey complex concepts to diverse audiences.
- Commitment to highest standards of patient care, safety, and ethical conduct in all aspects of MRI clinical research.

How to Apply:

Please submit your resume/CV and a cover letter highlighting your qualifications and interest in the position to cheryl.lee.z.q@sgh.com.sg. Additionally, please include any relevant publications, presentations, or portfolio materials showcasing your contributions to MRI research and clinical practice.

We will be attending ISMRM 2024 Annual Meeting which will be held on 4-9 May in Singapore. We are happy to meet you during the meeting and please contact us at [tel +65 6576 2634; whatsapp +65 8226 9485; email above] to arrange a meeting at the ISMRM.

Singapore General Hospital is an equal opportunity employer and is committed to diversity in the workplace. We welcome applications from individuals of all backgrounds and experiences.