COCHE Job Advertisement for Research Positions – PhD, Postdoc, Research Scientists

**About the Research Centre**

In collaboration with the CityU, the University of Oxford, and the Karolinska Institutet, the Hong Kong Centre for Cerebro-cardiovascular Health Engineering (COCHE) was established with the support of the ITC-InnoHK Programme to develop new ways to tackle cardiovascular disease (CVD), which is the world’s leading cause of morbidity and mortality. To address the most pressing health challenges caused by CVD, COCHE focuses on developing innovative technologies such as flexible and wearable devices, biomedical and molecular imaging, nano-biosensing, micro-robotics, healthcare AI systems, and other groundbreaking methods to enable early prevention, diagnosis and intervention of the disease. These technologies can reduce human costs while alleviating the healthcare system's financial and social burdens. Please visit <https://www.hkcoche.org/> for more information about COCHE.

Over 50 research positions at all levels ranging from Research Assistants to Chief Research Scientists, including two executive Programme Directors and 35 Postdoctoral Fellows/ Research Scientistspositions, are immediately available in the emerging field of Cerebro-Cardiovascular Health Engineering. The goal is to develop innovative technologies focusing on unobtrusive and flexible sensing, biomarker detection, biomedical and molecular imaging, biomedical signal processing and modeling, nano-robotics, and AI in health for the early prediction and prevention of acute Cerebro-Cardiovascular Diseases (CVDs). The role of the open positioning is to lead and drive ongoing ITC research Centre projects involving both theoretical studies and hands-on experimental work as well as clinical applications.

**General Qualifications:**

* Degree in Electronic and Electrical Engineering, Computer Science, Engineering, Biomedical Engineering, Mathematics, Material Science or a closely related field.
* Expertise in any of the following areas: wearable and flexible electronics, signal and imaging processing, computational mathematics, machine learning, and AI and nanorobotics, MRI, and interests in CVD applications is a must.
* Excellent oral communication and written skills in English, with good organizational and analytical abilities.

**Preferred Hiring Qualifications:**

* Previous experience in any of the areas including wearable devices, flexible sensing, biomedical signal processing, optical imaging, physiological imaging, fast MRI, multimodal imaging, nano-micro robotics, ultrasound and/or photo-acoustic imaging, drug delivery devices, computational fluid dynamics, cardiovascular modeling, AI and mobile health is highly desirable
* Hands-on experience with prototyping of biomedical systems/medical devices and physiological modeling is a plus.

**Remuneration & Duration of Appointment:**

The remuneration package will be highly competitive, commensurate with qualifications and experience. Fringe benefits for full-time appointments include leave and medical insurance, etc.

Initial appointments will be made on a fixed-term contract of up to 1-3 years commencing immediately. Re-appointment thereafter will be subject to performance and mutual agreements.

**The Application Materials that Should be Included:**

* CV with a list of your publications.
* Cover letter with a brief summary of your relevant professional experience and knowledge, a brief description of what your academic interests are and how they relate to your previous studies and future goals (maximum 2 pages long)
* Copy of the degree certificate(s) and transcripts of records from your previously attended university-level institutions. Translations into English if the original documents are issued in any other language.
* 2 representative publications or technical reports. For longer documents, please provide a summary (abstract) and a web link to the full text.
* Contact information for two reference persons who know your research work well. We reserve the right to contact references only for shortlisted candidates.

**Application Closing Date:**

All the research positions in the different areas described above are immediately available. Applications will be considered continuously until the positions are filled.

Application Procedures: Please send your application materials and indicate your current and expected salary to HR@hkcoche.org