



Open Research Scientist Positions

On “Cerebro-Cardiovascular Health Engineering: Wearable and Flexible Sensing, Medical and Molecular Imaging, Nano-robotics and AI in Health”

Supported by the ITC-InnoHK Project

Hong Kong Centre for Cerebro-Cardiovascular Health Engineering (COCHE) is a newly established R&D center supported by the Innovation and Technology Commission (ITC). COCHE aims to build a unique environment to conduct world-class research and foster interdisciplinary collaborations as well as to educate and train future generations of leading scientists related to biomedical and health engineering. We are currently looking for highly motivated researchers with experience and knowledge on Wearable and Flexible Sensing, Biomedical Signal Processing, Medical and Molecular Imaging, Nano-robotics and AI in Health. The successful candidates will work at the COCHE located at Hong Kong Science and Technology Park. The qualified candidates can also be duly appointed with mutual agreements as a research or adjunct professor at the City University of Hong Kong to enhance the collaboration with the academics.

Over 25 research Scientist positions at all the levels ranging from Research Assistants to Chief Research Scientists including three Executive Programme Directors and 50 postdoctoral positions are immediately available in the emerging field of Cerebro-Cardiovascular Health Engineering. The goal is to develop the 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:

- Ph.D. or an equivalent degree in Electronic and Electrical Engineering, Computer Science and Engineering, Biomedical Engineering, 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 nano robotics, 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:

Salary is highly competitive of international standard and will be commensurate with qualifications and experience. 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 languages.
- 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 postdoctoral research positions in different areas described above are immediately available. Applications will be considered continuously until the positions are filled.

Additional Information/links:

For further information on the COCHE and Research Talent Hub, please visit the websites at: <https://www.hkcoche.org/> for the research center and <https://www.itf.gov.hk/en/funding-programmes/nurturing-talent/research-talent-hub/research-talent-hub-for-itf-projects-rth-itf-/index.html> for PostDoc Fellows.

To learn more about relocating to and living in Hong Kong, please visit: the web portal "Hong Kong Welcomes U" at www.hkwelcomesu.gov.hk

Application Procedures:

Please send your CV with a cover letter and other supporting materials by email with the subject of "Application for Research Positions" to HR at COCHE at the email address HR@hkcoche.org with ccing to Secretariat.COCHE@cityu.edu.hk.