

# **Departmental Seminar**

# Deciphering the Influence of Fetal Programming on Child Mental Health: Insights from Neuroimaging and Genetics

11:00 a.m. – 12:00 n.n. | April 17, 2024 (Wednesday) Rm 813, 8/F, The Jockey Club Tower | Centennial Campus | The University of Hong Kong



# **Prof. Anqi QIU**

Professor

Department of Health Technology and Informatics The Hong Kong Polytechnic University

#### Abstract

Venture into the captivating realm of fetal programming, where in-utero experiences can cast a long shadow over an individual's health. This talk will illuminate how stressful or hostile conditions during pregnancy can set the stage for compromised development and lifelong susceptibility to adverse health outcomes. Drawing from our comprehensive longitudinal cohort study, we will reveal the profound link between maternal mental health and child brain development. We will further delve into how the early life environment can shape brain development and psychopathology during the critical period of adolescence. Furthermore, the intriguing role of genetics will be explored, particularly its part in modulating the influence of the early life environment on child brain development and psychopathology. As we conclude, we will discuss promising intervention programs, shining a light of hope on the potential for improving child mental health.

#### About the Speaker

Prof. Qiu is a global STEM scholar and Professor at the Department of Health Technology and Informatics at the Hong Kong Polytechnic University. She is also an Adjunct Professor at the Department of Biomedical Engineering at Johns Hopkins University. Her past roles include Deputy Head for Research & Enterprises at the Department of Biomedical Engineering and Director for the BME Innovation Center at the NUS Suzhou Research Institute, Master of Eusoff Hall, National University of Singapore.

Prof. Qiu commenced her academic journey with a BS in Biomedical Engineering from Tsinghua University. She then earned two MS degrees - one in Biomedical Engineering from the University of Connecticut, and another in Applied Mathematics and Statistics from Johns Hopkins University. Her continued dedication to academia led her to earn a PhD from Johns Hopkins.

After the PhD study, Prof. Qiu joined the National University of Singapore as an Assistant Professor, where she founded the Laboratory for Medical Image Data Sciences. Her remarkable contributions to the field have earned her multiple accolades, including the Faculty Young Research Award and the 2016 Young Researcher Award of NUS. In a recent recognition of her outstanding research achievements, she was bestowed with the prestigious "Dean's Chair" Associate Professorship.

Specializing in computational analyses, Prof. Qiu is deeply committed to understanding the origin of individual health differences throughout a lifespan. She leverages complex and informative datasets that include disease phenotypes, neuroimaging, and genetics to further her research. Her team has high-impact publications in Nature, Nature Neuroscience, Nature, Mental Health, American Journal of Psychiatry, Biological Psychiatry, IEEE Transactions in Medical Imaging, Medical Image Analysis.

Zoom Meeting (For participants who couldn't attend the Seminar in person) https://hku.zoom.us/j/3951550048?pwd=SncvL3RYakEycUtpL29vdDJEdlEwdz09 Meeting ID: 395 155 0048 | Password: psyc



~All are Welcome~

Enquiry: bbecker@hku.hk