Research Fellow Position

The Centre for Lifelong Learning and Individualised Cognition (CLIC), funded by the National Research Foundation (NRF) in Singapore and coordinated through the Cambridge Centre for Advanced Research and Education in Singapore (CARES), is a collaboration between Nanyang Technological University (NTU) and the University of Cambridge. CLIC is a flagship programme in the Science of Learning to harness advancements in neuroscience to develop cognitive training programmes for the improvement of lifelong flexible learning, focusing initially on adolescents and young adults, but also envisaging work with infants and older adults. This is a strategic global initiative for the Universities of Cambridge and NTU that brings together multidisciplinary expertise from over 30 investigators in the areas of Neuroscience, Psychology, Linguistics and Education across the two universities.

Nanyang Technological University is a research intensive university currently ranked 13th globally and placed 1st amongst the world’s best young universities. The University has Colleges of Engineering, Business, Science, Humanities, Arts, & Social Sciences, and an Interdisciplinary Graduate School. Further, the new Lee Kong Chian School of Medicine benefits from a dual campus located at Novena, in close proximity to the Singapore city centre. The Cognitive Neuroimaging Centre (CoNiC) houses state-of-the-art neuroimaging facilities including a newly installed 3T MRI scanner and MEG, as well as new EEG, NIRS, TMS and tDCS equipment.

The first phase of the CLIC program will initially be housed at Nanyang Technological University, Singapore. As the programme progresses, other sites will be developed to meet the needs of the experimental programme. The new CLIC research centre will provide a vibrant, fast-paced, international and interdisciplinary environment with excellent opportunities for skills development and knowledge exchange between partner Principal Investigator labs in Singapore and Cambridge.

The Principal Investigators involved in the first phase of the research programme include:

From Cambridge: Director Professor Zoe Kourtzi (Psychology), Senior Scientific Advisor Professor Trevor Robbins (Psychology), Deputy Directors Professor Henriette Hendriks (Linguistics), Professor Anna Vignoles (Education), and Imaging Lead - Professor John Suckling (Psychiatry); supported by co-investigators Prof Barbara Sahakian (Psychiatry) and Dr Michelle Ellefson (Education).

From NTU: Director Professor Annabel Chen (Psychology), Deputy Director Asst Prof Victoria Leong (Psychology), Imaging Lead - Professor Balázs Gulyas (LKCMedicine), and Principal Investigators Professor David Hung (NIE), Asst Prof Bobby Cheon (Psychology) and Assoc Prof Georgios Christopoulos (Nanyang Business School); supported by co-investigator Dr Teo Chew Lee (NIE).

The CLIC program is seeking two full-time Research Fellows to support research activities focusing on social and societal factors that influence cognitive flexibility and learning among adults and adolescents. Given the highly inter-disciplinary nature of the project, the research fellow may also be exposed to opportunities for involvement in research activities related to human neuroimaging, language, infant cognition/learning and pedagogy. Adolescent Study: In the first phase of the adolescent component of the study, the two-year project will involve mapping the construct of cognitive flexibility among adolescents in Singapore schools. The work will involve both a systematic evaluation of the cognitive
constructs through standardized measures as well as classroom observations and interviews examining cognitive flexibility constructs in ecologically valid classroom conditions.

The responsibilities of the position include:
- Lead and manage research process
- Oversee participant recruitment, including liaising with school personnel
- Conducting literature review
- Conducting interviews
- Develop survey construction, evaluation, and administration
- Conduct quantitative and qualitative processing and analysis
- Conduct analysis of data and findings
- Project and data management
- Academic publication and report preparation
- Disseminating the outcomes of research in peer-reviewed publications of international standing
- Other research related tasks as assigned by the Principal Investigator

Essential requirements:
- PhD in psychology or related field with a background in education, cognition, or emotion, neuroscience, social science.
- Experience in conducting, collecting data for and analysing surveys, psychological testing (computerised), behavioural testing and cognitive experiments
- Expertise in both frequentist and Bayesian statistics performing descriptive and multivariate statistical analysis techniques such as SEM using SPSS and/or R language.
- Excellent ICT skills
- Expertise in managing large datasets and performing the requisite pre-processing before data analysis
- Excellent communication skills and other interpersonal skills
- Excellent organizational skills and able to work effectively within deadlines
- Contributes to in-depth analysis relevant to the research study
- Interest in research at the intersection of neuroscience, social science, education, and cognition

Preferred requirements:
- Publications in peer-reviewed journals in psychology and/or related fields
- Prior experience with interdisciplinary research and teams
- Background in factor analytics methods
- Experience with academic publication processes and reports
- A basic background in cognitive neuroscience
- Training in experimental, cognitive and developmental psychology
- Prior experience in working with adolescents in Singapore educational setting
- Experience in EEG or fMRI analysis

To apply, please send your Curriculum Vitae, a letter of application with research interests, and three letters of recommendation to CLIC@ntu.edu.sg. Please indicate the reference number for this position: CLIC_RF3-4 in all application documents and correspondence.

Contact information: Centre for Research and Development in Learning, Nanyang Technological University, Academic Building North, 61 Nanyang Drive, ABN-01b-10, Singapore 637335, phone +65 6908 1458