

UCL-HKU Strategic Partnership Fund

To develop a solid partnership between The University of Hong Kong (HKU) and University College London (UCL) in leading innovations in non-pharmacological interventions for dementia

*Interim Project Progress Report
(1st July – 31st December 2017)*

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Background

A one-year Strategic Partnership Fund was granted on 8 May 2017 to develop a solid partnership between The University of Hong Kong (HKU) and University College London (UCL) in leading innovations in non-pharmacological interventions for dementia. The aims are to support research and service development, funding applications for an international multicentre research projects, teaching exchange activities, research publications, professional training with clinical field visits, and research postgraduate (RPg) student attachment. These activities were designed to enhance a growing interdisciplinary partnership among HKU and UCL researchers in dementia care. It is expected that the partnership will generate a set of pilot international multicentre research data that can lead to at least two international peer-reviewed journal papers and one successful joint institute research grant proposal to support long-term partnership. Evidence generated from the research will be translated into guidelines and policy briefs to inform and lobby policymakers around the globe in implementing best practice in dementia care.

Interim Project Progress Report

Key Development

A number of innovative research works, including grant applications, publications, and research collaboration, have started between 1 July 2017 and 31 December 2017.

1. Research grant award on tele-medicine platform in delivery of non-pharmacological interventions for dementia

This is an externally competitive research grant awarded by the Innovation and Technology Fund, Hong Kong SAR Government for HK\$3,119,287.6 (approximately £303,488). The 3-year study (2018-2020), entitled “Innovative IT platform to enable remote group cognitive stimulation therapy for better cognition and well-being in older dementia patients and their caregivers: The FaceCog Project,” is led by Dr Joseph Kwan (Department of Medicine, HKU) with Dr Gloria Wong, Prof Terry Lum, and Dr Aimee Spector as co-investigators. This is an international (Hong Kong, UK, and US) interdisciplinary study involving researchers from geriatric medicine, computer science, psychology, social work, radiology, neurology, anaesthesiology, and radiology departments from HKU, UCL, The University of California, San Francisco, The Chinese University of Hong Kong, and City University of Hong Kong. The first researchers meeting was held on 28 November 2017. The research preparation work is ongoing.

2. Research grant application on positive psychology outcomes for non-pharmacological interventions for dementia

This is an externally competitive research grant submitted to the Joint Programme for Neurodegenerative Diseases (JPND) of the European Union, total requested €1,483,252 (approximately £1,298,913 or HK\$14,435,359). The proposed 3-year study (2019-2021), entitled “**POS**itive Psychology **I**n **D**ementia **O**utcomes and **i**Nterventions (POSIDON),” will be led by Dr Aimee Spector with Dr Gloria Wong as collaborator. This is an international (UK, Hong Kong, Denmark, Italy, and Germany) interdisciplinary research involving researchers from psychology, social work, neurology, psychiatry, and computer science departments from UCL, HKU, Humboldt-Universität zu Berlin, Alzheimer Europe, VIA University College in Denmark, University of Hull, and IRCCS Santa Lucia Foundation in Rome. We will hear whether this project has been shortlisted for full application in May 2018.

3. Private foundation donation to support development of non-pharmacological interventions for older persons

A non-restrictive donation by the family of Dr Tin Ka-ping, GBM, MBE, to support the development of non-pharmacological interventions for older persons of the HKU Department of Social Work and Social Administration is currently being arranged. We plan to lead the eldercare service field in the next 5 years with the support of this grant to significantly enhance accessibility of locally relevant evidence-based non-pharmacological interventions to improve health and quality of life of older persons. This will be achieved through implementation science research that leverages on partnership between academic research and practice. Building on our existing knowledge and network in eldercare, we will conduct training for the social services sectors to support their delivery of non-pharmacological interventions, which will feed back to academic development through implementation and outcome measurements on effectiveness and cost-effectiveness. The ballpark estimation of the donation will be HK\$3 million plus a 2:1 matching fund provided by the Hong Kong SAR Government. The final donation including the matching fund is thus expected to be HK\$4,500,000 (approximately £405,062). We expect the arrangement be finalised by July 2018.

4. International research network on cognitive stimulation therapy (CST) for dementia

An international research network on cognitive stimulation therapy (CST) for dementia was formed on 1 December 2017 at the 2nd International Cognitive Stimulation Therapy Conference held in Hong Kong. Network members include 28 international delegates from UK, US, New Zealand, Singapore, Brazil, Beijing, Taiwan, Malaysia, Thailand, and Indonesia. Three subgroups: (1) cultural adaptation research; (2) implementation science; and (3) mechanisms of action exchanged research ideas and formulated initial plans on multi-country multi-centre feasibility and efficacy studies. A collaborative neuroimaging study on the potential mechanisms of CST between Hong Kong, New Zealand, and Brazil is being planned.

5. Other research proposals, publications, and planned collaborative work

A research proposal to investigate the application of CST in post-stroke dementia, entitled “Efficacy of a structured cognitive stimulation therapy on cognitive functions, mood,

behavioral disturbance and quality of life in post-stroke dementia: a hospital-based, rater-blind RCT”, is being prepared for the 2018 Health and Medical Research Fund of the Food and Health Bureau, Hong Kong SAR Government. The proposed research will be led by Dr Adrian Wong from The Chinese University of Hong Kong, with Dr Gloria Wong and Dr Aimee Spector as co-applicants.

Building on the Strategic Partnership Fund to further consolidate the collaboration, Dr Gloria Wong has also submitted in December 2017 a proposal for the HKU Overseas Fellowship Awards 2018-19 (Proposal Title: Advancing International Inter-disciplinary Collaborative Research on Non-pharmacological Interventions in Dementia to Enhance Cognition and Quality of Life). Initial connection has also been made with Dr Daniel Davis from MRC Unit for Lifelong Health and Ageing at UCL and Geriatric Medicine at the University College Hospital to investigate the effect of non-pharmacological interventions on dementia and its relationship with delirium.

In a new title *Cognitive Stimulation Therapy for Dementia: History, Evolution and Internationalism* edited by Dr Aimee Spector and others from UCL and the University of Nottingham, to be published in early 2018 by Routledge, innovative research work on CST led by Dr Gloria Wong will be featured in a chapter entitled “Neuropsychological understanding of CST”.

Manuscripts on the application of non-pharmacological intervention for dementia are being drafted by RPg students under the supervision of Dr Aimee Spector and Dr Gloria Wong. These include a paper entitled “The effectiveness of mindfulness-based interventions for people with acquired cognitive impairment: A systematic review” targeted for journal submission in early 2018.

Progress on Other Pledged Activities

Apart from the above key developments, the following progress has been made on the pledged activities between 1 July 2017 and 31 December 2018.

(1) Interdisciplinary multicentre pilot research study on CST

This is a study using big data collected through services units to inform dementia service development across cultures and service systems, co-led by HKU and UCL. A meeting on CST training institute was held on 28 November 2017, to align training and service data collection in Hong Kong, US, and UK. Dr Hao Luo from HKU Department of Computer Science and Department of Social Work and Social Administration has been involved in specifying data requirement for big data analysis. Dr Gloria Wong is coordinating services partners in Hong Kong and Asian countries to align services data structure. These include NGOs and Hospital Authority departments. A funding application entitled “Promoting Cognitive & Psychosocial Well-being of Demented Elders by Cognitive Stimulation Therapy Hong Kong Version (CST-HK)” has been submitted to the Health Care and Promotion Scheme, to be led by a Hong Kong NGO (Hong Kong Young Women Christian’s Association) with Dr Gloria Wong as PI of the evaluation study of their service.

(2) RPg student attachment and exchange

Two UCL doctoral students (Anna Volkmer and Luke Gibbor) attended the 2nd International Cognitive Stimulation Therapy Conference held in Hong Kong and presented their work (papers entitled “Speech and Language Therapy Services for Primary Progressive Aphasia (PPA) in the UK: Referral Patterns, Barriers to Access and Treatment Practices” and “A

Biopsychosocial Vignette for Case Conceptualization in Dementia (VIG-Dem): Development and Pilot Study”, respectively).

We have developed a new collaborative research idea involving the translation and cultural adaptation of two outcome measures of positive psychology for Hong Kong Chinese. These were recently developed and published by Aimee Spector and her team at UCL. This work will be jointly led by Tiffany Lau (UCL) and Dara Leung (HKU). To begin and plan this work, Dara Leung will be visiting UCL for two weeks in June 2018. This will also enable her to work on other projects with Aimee Spector and bring some of these ideas back to Hong Kong.

(3) Research seminars

A research seminar was arranged on 29 November 2017 at HKU specifically for UCL and HKU students, where six doctoral students (four UCL, two HKU) attended and presented their current research ideas. This enabled people to provide feedback to each other’s projects and the students were encouraged to keep in communication, considering future collaboration. Topics presented include individual CST research in the UK, intervention research for primary progressive aphasia, non-pharmacological interventions for anxiety in dementia, and the role of engagement in CST. A research seminar is being arranged in June 2017 at UCL. Dr Gloria Wong will share her work on cognitive reserve and CST.

(4) Professional training workshops

Two professional training workshops on CST took place on 30 November 2017. The workshops were led by Dr Aimee Spector and Helen Donovan (East London Foundation NHS Trust, UK), Janice Lundy and Deborah Hayden (St Louis University, US) and attended by 121 participants from a wide range of professional background, including social work, psychology, occupational therapy, nursing, speech therapy, physiotherapy, neurology, psychiatry and geriatric medicine coming from NGOs, public hospitals, and universities. Due to the great demand and overwhelmingly positive response, an extra professional training workshop for occupational therapists from the Hospital Authority, Hong Kong is being planned in March 2018. A cross-cultural “train-the-trainer” initiative for non-pharmacological interventions in dementia is in planning for 2018-2019.

(5) International conference on CST

The 2nd International CST Conference co-chaired by Dr Aimee Spector and Dr Gloria Wong was held on 1-2 December 2017 at HKU. The conference attracted 200 international delegates from UK, US, Denmark, New Zealand, Singapore, Italy, Brazil, Beijing, Taiwan, Macau, Malaysia, Thailand, and Indonesia to share the current science and practice in CST. Presentations covered the latest practice and science in CST for dementia, including the principles, evidence, and implementation experience of key programmes in the UK, US, China, Italy, Brazil, and Hong Kong, with overwhelmingly positive feedback and new research networks formed. Conference proceedings and photos can be found in the Appendix.

(6) Teaching exchange activities

Dr Gloria Wong will be coming to UCL in June 2018 and providing a one day teaching session for the Clinical Psychology doctorate students on Neuropsychology in dementia.