The Chinese University of Hong Kong
Department of Psychiatry
Schedule for June, 2023

Date	Time	Activity	Speaker/Team
Jun1	14:30-15:30	Research Seminar * *The maturation of default mode network*	Ms. Raphael TANG Supervisor: Prof. Sandra CHAN Co-supervisors: Dr. Steven CHAU, Dr. Oscar WONG, Dr. Edward Hui
	15:30-16:30	Research Seminar * *The exploration of brain age matrices and association with neurocognitive disorders* Registration: https://bit.ly/3BEokzz	Ms. Jing LI Supervisor: Prof. Linda LAM Co-supervisors: Dr. Hanna LU, Prof. Lin SHI
Jun8	14:30-16:00	Psychotherapy Case Conference (SH)*# *An Interrupted Journey*	Dr. Brian OR Moderator: Dr. Irene KAM
	16:00-17:00	Psychotherapy Supervision (SH)*#	
Jun15	14:30-16:30	Quality Assurance Meeting (SH)# / (TPH)#	All Clinical Staff
Jun22		Public Holiday	
Jun29	14:30-16:00	Academic Lecture * *A clinician's perspective on the updated management of mild neurocognitive disorders*	Prof. Linda C.W. LAM Professor Department of Psychiatry The Chinese University of Hong Kong
	16:00-17:00	Research Seminar * *Investigating the Impact of Home Confinement on Mental Health during the COVID-19 Pandemic Using Google Location History* Registration: https://bit.ly/3pJXrYu	Mr. Owen LEUNG Supervisor: Prof. Linda LAM Co-supervisor: Dr. Arthur MAK

Venue:	*Live video	#Closed meeting	@Non-CME Event	MUL	TPH	SH	1AL
				Seminar Room, Multi-centre, Tai Po Hospital, Tai Po, N.T.	Conference Room 1 G/F, Wing D Tai Po Hospital Tai Po, N.T.	Dining Room Ward 7AB Dept. of Psychiatry 7/F, Shatin Hospital Shatin, N.T.	Rm. 1005, Dining Room Ward 1AL, 1/F Tai Po Hospital Tai Po, N.T.

Please contact 2607-6025 two days before hand to arrange presentation equipment.

http://www.psychiatry.cuhk.edu.hk

Department of Psychiatry
Research Seminar
DATE: 1 JUN 2022 (THU)
TIME: 14:30 - 16:30
VENUE: ZOOM LECTURE

Ms. Raphael TANG
Supervisor: Prof. Sandra CHAN
Co-supervisors: Dr. Steven CHAU, Dr. Oscar WONG & Dr. Edward Hui

Topic: The maturation of default mode network

Abstract:
The default mode network(DMN) is a set of brain regions that are active during rest or when individuals are not focused on the external environment. The DMN matures through childhood and adolescence, undergoing structural and functional changes that reflect the development of cognitive and socio-emotional processes. DMN contains three subnetworks: PCC/PCUN subnetwork, mPFC subnetwork and MTL subnetwork. Each subnetwork serves different function of DMN and the relationship among these subnetworks change constantly during the maturation of DMN. The rich hubs of DMN switch during the development and the functional role of subnetwork and rich hub evolves over time. The maturation process of DMN subnetwork and rich hub is still incompletely understood. To explore the maturation of DMN in a longitudinal manner, we have accessed the neuroimage database from Adolescent Brian Cognitive Development (ABCD) Study which is the largest study of brain development and child health in the United States designed to serially monitor the brain development of 11,500 children over 10 years. The ABCD data archive provides systematic records including MRI brain, cognitive tasks, as well as social, emotional, and physical development. The current study will explore the resting-state functional connectivity of healthy typically developing children who have undergone assessments at 9 years, 11 years and 13 years since the inception of the ABCD cohort. Graph theory—a powerful mathematical approach for modeling complex network systems—would be applied to model these connectome data to gain insights into the connectivity patterns and topological characteristics of DMN and its subnetworks. Partial least square would be used for defining the latent variables of the connection of DMN subnetwork and cognitive function, social environment and physical development in peri-pubertal age and early adolescence.

Ms. Jing LI
Supervisor: Prof. Linda LAM
Co-supervisors: Dr. Hanna LU, Prof. Lin SHI

Topic: The exploration of brain age matrices and association with neurocognitive disorders

Abstract:
By 2030, World Health Organization (WHO) estimated that about 5% of the world's older population (around 82 million people) will suffer from age-related neurodegenerative diseases. Using magnetic resonance imaging (MRI) to quantify individual's brain health and predict subsequent cognitive change is a main issue in neurodegenerative research. In recent decade, the brain age matrices, including brain age and brain-PAD (brain-predicted age difference), have been developed as MRI-based biomarkers and used to predict the trajectories of cognitive aging, the disease progress and mortality.

Based on structural brain MRI information, estimated brain age may differ from an individual's chronological age. The difference between the brain age and chronological age is defined as 'brain-PAD', presented as a metric to reflect the accelerated or attenuated aging.

Our team examined the brain age matrices in populations with healthy aging and neurocognitive disorders. Compared with the normal aging subjects (Brain-PAD is around 0), the the score of Brain-PAD was +10 years in Alzheimer's disease (AD) patients and about +6.2 years in progressive mild cognitive impairment (pMCI) patients. With emerging models and algorithims, further research challenges include the accuracy of prediction models and translation into clinical application at individual levels, as well as the use of artificial intelligence in calculating pattern-driven brain atrophy.

Registration is required. For enquiries, please contact pci-event-app@cuhk.edu.hk or 26076025.
Please display the registration name for joining the Zoom.

For registration, please visit the following link:
https://bit.ly/3BEokzz

Department of Psychiatry, CUHK

ACADEMIC LECTURE

Prof. Linda C.W. LAM
Professor
Department of Psychiatry
The Chinese University of Hong Kong

Date: 29 Jun 2023 (THU)
Time: 14:30 - 16:00
Venue: To be held by Zoom

Topic: A clinician's perspective on the updated management of mild neurocognitive disorders

Abstract:

Mild Neurocognitive Disorder (NCD) refers to an at-risk state for progressive cognitive decline. As a transitional heterogeneous condition, it poses additional challenges for clinicians to offer simple advice on management. The current talk will, based on findings from recent epidemiological studies, randomized controlled trials on disease-modifying agents and non-pharmacological interventions, formulate a clinical framework on the management of mild NCD in the older community.

Biography:

Prof Linda Lam is Clinical Professor and Director of the Chen Wai Wai Vivien Foundation Therapeutic Physical Mental Exercise Centre, Dementia Research Unit at the Department of Psychiatry, the Chinese University of Hong Kong (CUHK).

Her research interests include early detection and intervention for neurocognitive disorders. She conducted the first territory-wide epidemiological surveys on mental disorders and dementia in Hong Kong, pioneered lifestyle cognitive and physical exercise, and non-invasive brain stimulation interventions for optimization of cognition and psychological symptoms.

In 2017, in recognition of her contribution in mental health in the community, Prof Lam was awarded Honorary Fellowship of the Royal College of Psychiatrists of the United Kingdom, and Honorary Membership of the World Psychiatric Association. In 2022, she was elected Honorary Fellow of the Hong Kong College of Psychiatrists.

Registration is required. For enquiries, please contact pci-event-app@cuhk.edu.hk or 26076025.
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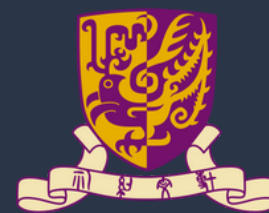
Please register the lecture via the link:
https://bit.ly/3pJXrYu

Mr. Owen LEUNG
Supervisor: Prof. Linda LAM
Co-supervisor: Dr. Arthur MAK

Topic:

Investigating the Impact of Home Confinement on Mental Health during the COVID-19 Pandemic Using Google Location History

Abstract:

The COVID-19 pandemic has led to a substantial increase in mental health issues, partly due to disease prevention strategies such as home confinement. A retrospective study reported a 44.9% increase in depressive symptoms when comparing mental health states before and after home confinement. However, retrospective reports of mental health are subject to biases and memory inaccuracies, limiting their reliability. Furthermore, home confinement fluctuates across pandemic phases and varies among individuals. By not considering fluctuations over time and differences among individuals, existing studies have limited sensitivity to the potential relationships between confinement levels and mental health. Thus, a novel approach to prospectively and accurately assess fluctuations in home confinement levels and mental health is needed.

Google Location History (GLH) is an optional background service in the Google Maps smartphone application that passively and continuously records geolocation data. By leveraging GLH, we obtain a continuous measure of changes in home confinement levels over time, while minimizing participant burden. This provides a more accurate and dynamic measure of home confinement. Six months of GLH data will be collected from a sub-sample of 100 participants in the CU-COVID19 study, a web-based cohort study examining the mental morbidity of COVID-19 survivors, healthcare workers, ex-quarantine confines, and the general Hong Kong population. Participants will also complete validated instruments (PHQ-9, GAD-7, PCL-5) at the start and end of the six-month duration. Data collection is currently underway, with 123 eligible and registered participants. Of these, 76 have submitted their GLH data (average duration of 9.7 months per participant, totalling 737 months of data).

In this presentation, preliminary analysis of the collected data will be presented, examining the relationship between home confinement and mental health. The analysis explores the relationship in terms of its association strength, heterogeneity, consistency, and predictive ability. The continuous measure of home confinement enables us to quantify its degree of association with mental health, and accounts for heterogeneity by addressing person-to-person variation in confinement levels. Assessing consistency and predictive ability captures the time sensitivity absent in retrospective studies, enabling us to understand how changes in confinement levels over time impact mental health and determine if observed patterns persist across timepoints. Through these new approaches enabled by GLH, we aim to enhance our understanding of the complex relationship between home confinement and mental health.

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