



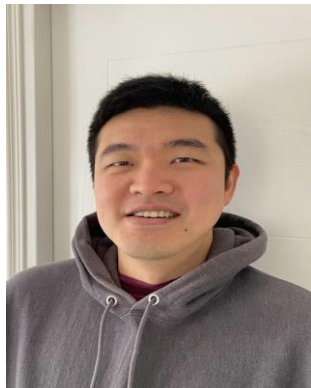
Department of Psychology
The University of Hong Kong

香港大學心理學系

Brown Bag Lunchtime Seminar (Via Zoom) **(Theme: Social and Health Psychology)**

Investigating the Role of Inter-hemispheric Connections on Stroke Outcomes

12:30 p.m. – 1:30 p.m. | June 17, 2022 (Friday)



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Abstract

Long-term outcomes after an ischaemic stroke are related to a multitude of factors. One such factor is the formation of alternate circuits, replacing those damaged by stroke. Contralesional hemispheres and inter-hemispheric connections have been demonstrated to predict long-term outcomes. Our study is interested in understanding how the inter-hemispheric connections are related to and support the compensatory circuits. We identified vulnerable regions using a collection of graph-theoretic measures capturing inter-hemispheric and whole-brain interactions. The inter-hemispheric graph-theoretic measures are validated against several external measures to ensure the correct capture of these interactions. We then simulated the functional connectivity after applying a continuous lesion centered on these vulnerable regions. In addition, the resulting structural connectivity topology is evaluated in relation to degeneracy. Lastly, an indirect estimate of stroke outcome is created using meta-analytic methods and compared to the inter-hemispheric connections across the brain. Our findings suggest that the topology of regions important for inter-hemispheric communication possess greater potential for modification during recovery.

About the speaker

Seong is a final year Ph.D. student working with Dr. Hakwan Lau and Dr. Sing-Hang Cheung.

Zoom

<https://hku.zoom.us/j/3951550048?pwd=SncvL3RYakEycUtpL29vdDJEEdlEwdz09>

Meeting ID: 395 155 0048 | Password: psyc



~All are Welcome~

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