

POLYU Junior Researcher Mentoring Programme 2024



Code:	JRMP2024_01
School / Department:	Department of Management and Marketing
Name of Research Team Member(s):	Dr Robert Wright, Associate Professor
Research Topic:	Dealing with complexity: An investigation from clinical psychology and neuroscience
Short Description of the Research Project:	<p>Little is known about the structure and functional brain activity of neural networks during the important work of strategy-making, strategising and strategic management. Just as importantly, there is a need to capture how future strategists learn strategy in the classroom.</p> <p>This project will capture and document how learners' brains work as they deal with complex problems, issues and challenges. Using both clinical psychology and neuro-imaging technology (functional near-infrared spectroscopy [fNIRS], a non-invasive, safe and scientifically reliable wearable technology), we can scan learners' brain activity to see which parts of the brain are activated and the range of networks that are stimulated when learners are solving problems under different conditions. Grounding our work in the emerging field of neuro-strategy and neuro-education, we hope to advance knowledge by exploring connections between neuroscience and innovative teaching and learning (through play) and in the process guide better learning experiences that tap into areas of the brain associated with higher-order thinking, creativity, novelty, insight, exploration/exploitation and complex problem-solving. This will constitute a pilot study in preparation for future cross-disciplinary and cross-institutional work to be carried out within Hong Kong and internationally.</p> <p>The participating students will be guided through the research process and will learn how to conduct clinical</p>

	<p>psychology interviews while developing knowledge on neuroscience for (un)learning.</p> <p>Keywords: brain network activity, clinical psychology, complex problem-solving, functional near-infrared spectroscopy, neuro-education, neuro-strategy, teaching and learning, strategic management, (un)learning</p>
No. of Places Offered:	2
Frequency of Meetings:	Weekly
Special Requirement(s):	The participating students should be open-minded and willing to learn new things with a positive attitude.

** The information presented above is subject to change.*