Flagship Program presented by

The Hopkins Centre

Research for Rehabilitation and Resilience



BEEHIVE

Brain and Enriched Environments Lab: A Hopkins initiative for advanced cognitive_ rehabilitation and recovery.

BEEHIVE is an applied neurotrauma research lab focused on the human brain and environment interface after trauma.

BEEHIVE aims to develop and trial novel neurodiagnostic and therapy methods to contribute to the field of advanced cognitive rehabilitation and environmental enrichment. The Flagship Program focuses on exploring, developing and testing software, systems and hardware in the rehabilitation setting, providing neurotrauma patients with enriched sensory experiences, and opportunities to practice cognitive skills in revolutionary ways, with an objective and naturalistic means of promoting and assessing recovery.

The BEEHIVE utilises multi-method, co-design techniques, incorporating patient experience with clinical knowledge and research evidence. The Lab has a trans-disciplinary focus, with contributions from cognitive neuroscientists, neuropsychologists, engineers, professional video gamers, medical specialists, nursing professionals, allied health professionals, architecture, design and physical therapy disciplines.

Using state-of-the-art digital systems, our team at BEEHIVE are focused on how brain function, body schema, sensory profiles and human behaviour can inform and improve cognitive capacity after neurotrauma, and how this evidence can translate to inform specialised built and virtual environment design.



Advances in technology and neuro-feedback mechanisms to build neuroscientific research evidence and new knowledge in rehabilitation.



Optimising recovery, rehabilitation and personalising neurodiagnostics.



Developing, testing, and delivering novel innovative immersive enriched environment solutions.



Exploring the interface between built and natural environments with the human brain.

Flagship project team



PROF. HEIDI ZEEMAN Menzies Health Institute Queensland









Director Rehabilitation Unit Gold Coast University Hospital **MS SUSAN JONES**

Nurse Director Gold Coast University Hospital

Funders

Project partnership and infrastructure grant from Griffith University and Motor Accident Insurance Commission (MAIC)



Eh.zeeman@griffith.edu.au

⊕ Wwww.hopkinscentre.edu.au