

Light therapy and knee replacement surgery

Research Project Overview

Project title:	Light therapy and knee replacement surgery
Project duration:	Four weeks
Description:	<p>Osteoarthritis (OA) is the leading cause of pain and disability among older Australians and the third leading cause of life years lost to disability. Up to 20,000 knee replacements (knee arthroplasty; KA) are performed in Australia annually. Although KA restores knee alignment and relieves the pain of osteoarthritis, significant post-surgical pain and longer-term complications can be associated with this procedure. Therapeutic interventions to aid recovery after KA include physical exercise but this can be hindered by persistent post-operative pain and swelling. At a time when the “opioid crisis” has reached Australia alternative methods of pain relief need to be explored.</p> <p>A promising therapeutic alternative called photobiomodulation therapy (PBMT) may be feasible for reducing post-operative pain and swelling and aiding recovery of older patients. The primary aim of this feasibility study (case control series) is to understand whether PBMT may have a role before and after KA surgery in reducing pain and improving recovery, and to understand factors that need clarification and verification prior to proceeding to a randomised controlled trial.</p> <p>The scholar will assist the investigators in assessing the outcome measures before and after the surgery. The measures will include (but are not limited to) pain scores, limb function, measures of activities of daily living, and of quality of life (QOL).</p>
Expected outcomes and deliverables:	Scholars may gain skills in applying outcome measures and with data collection in a clinical cohort of participants. Students may also be asked to undertake literature searches in related topic areas and/or conduct an audit of medical records.

Suitable for:	This project is open to applications from students in year 3 or 4 of physiotherapy or equivalent entry-level degree.
Primary Supervisor:	Prof Liisa Laakso Mater Research
Further info:	Prior to applying, contact Liisa.Laakso@mater.uq.edu.au to discuss requirements.