

CLRS90017 Neuroimaging for Clinical Research

Credit Points:	12.5						
Level:	9 (Graduate/Postgraduate)						
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: June, Parkville - Taught on campus. July, Parkville - Taught on campus.						
Time Commitment:	Contact Hours: 36 hours (4 day intensive block) Total Time Commitment: 170 hours per 12.5 credit point subject						
Prerequisites:	To enrol in this subject, you must be admitted in either N05NS, N28AA, N12AA, N34AA or N01AA. This subject is not available for students admitted in any other courses. <table border="1" data-bbox="387 629 1485 779"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>CLRS90016 Clinical Neuroscience Research</td> <td>June</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	CLRS90016 Clinical Neuroscience Research	June	12.50
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CLRS90016 Clinical Neuroscience Research	June	12.50					
Corequisites:	nil						
Recommended Background Knowledge:	nil						
Non Allowed Subjects:	nil						
Core Participation Requirements:	For the purposes of considering requests for Reasonable Adjustments under the Disability Standards for Education (Commonwealth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this course are articulated in the Course Overview, Objectives and Generic Skills sections of this entry. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this course are encouraged to discuss this matter with the Student Equity and Disability Support Team: http://www.services.unimelb.edu.au/disability/						
Coordinator:	Prof Sam Berkovic						
Contact:	School of Melbourne Custom Programs Currently enrolled and future students: # General information: http://www.commercial.unimelb.edu.au/crn/ (http://www.commercial.unimelb.edu.au/crn/) # Email: TL-ClinicalResearch@unimelb.edu.au (mailto:TL-ClinicalResearch@unimelb.edu.au)						
Subject Overview:	Topics covered include: <ul style="list-style-type: none"> # Expert briefings on the current research questions in dementias, movement disorders, schizophrenia and bipolar disorders. # Major emphasis on cutting-edge human imaging techniques # Cognitive functioning # Research techniques in clinical neurophysiology # Introduction to neuroimaging techniques # Principles of magnetic resonance imaging (MRI) # Practical demonstration of language functional MRI # Structural MR imaging and clinical research applications # Functional MR imaging and clinical research applications 						

	<ul style="list-style-type: none"> # Analysis of MR imaging # Magnetic resonance spectroscopy and research applications # New frontiers in multi-disciplinary clinical neuroscience research
Learning Outcomes:	<p>Students who successfully complete this subject will;</p> <ul style="list-style-type: none"> # Demonstrate a high level of understanding of various advanced clinical research techniques that have broad application to many areas of neuroscience # Understand clinical research applications of brain imaging techniques # Understand the need for multi-disciplinary integration in clinical research and be able to establish appropriate collaborations across disciplines # Have gained insights into current research applications of these techniques across the various neuroscience disciplines # Be able to develop innovative strategies to investigate clinical neuroscience research questions to pursue in response to particular neurological problems # Have achieved a level of competency enabling them to create and conduct high quality clinical neuroscience research projects from the original concept through to submission of competitive research proposals
Assessment:	A short oral presentation of a proposed research plan (30 percent), a comprehensive clinical neuroscience project proposal formatted as a grant submission, including potential multi-disciplinary collaborations and drawing on the course contents (and previous professional experience if relevant) (3000 words) (70 percent).
Prescribed Texts:	Students will be provided with articles and references that support the teaching program as part of their course materials
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Links to further information:	http://www.commercial.unimelb.edu.au/courses
Related Course(s):	Graduate Diploma in Clinical Research Master of Clinical Research Specialist Certificate in Clinical Research (Neuroscience)