



Brain and Mind Centre Postgraduate Program

2021



THE UNIVERSITY OF
SYDNEY



“In the 21st century, to progress scientific enquiry, clinical practice or public policy, those interested in the brain and mind sciences need a solid background in the new evidence that informs this field. Studying at the Brain and Mind Centre provides a unique opportunity for active interaction with those scientific and clinical leaders who are at the forefront of modern science, technology and clinical services.”

Professor Ian Hickie AM

Professor Ian Hickie is Co-Director, Health and Policy at The University of Sydney's Brain and Mind Centre. He is an NHMRC Senior Principal Research Fellow (2013-2017 and 2018-22), having previously been one of the inaugural NHMRC Australian Fellows (2008-12). He was an inaugural Commissioner on Australia's National Mental Health Commission (2012-18) overseeing enhanced accountability for mental health reform and suicide prevention. He is an internationally renowned researcher in clinical psychiatry, with particular reference to medical aspects of common mood disorders, depression and bipolar disorder. He is now focused on the development of real-time personalized and measurement-based care systems for use in partnership with young people and their families. These systems promote early intervention, use of new and emerging technologies and suicide prevention.

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Meet Some of Our Key Academics



Associate Professor Louise Nash, BA MBBS(Hons) FRANZCP PhD, is a psychiatrist with clinical, education and research expertise. She is the Associate Director of Teaching and Learning at the Brain and Mind Centre of the University of Sydney and consultant psychiatrist with Sydney Local Health District. She has diverse clinical experience in rural, remote and metropolitan Australia. Her research includes promoting doctors' health and wellbeing, improving the junior doctor experience of psychiatry terms and psychiatry training, promoting rural training, exploring innovative ways to change workplace culture, evaluating Peer Review Groups as a form of Continuing Professional Development and youth mental health. She was the Chair of the NSW Psychiatry State Training Council for 5 years, a member of the state registration subcommittee of AHPRA, she has been a member of the NSW RANZCP Branch Training Committee for the past 11 years (and ongoing) and is a member of the NSW Ministry of Health psychiatry workforce working party.

Associate Professor Caryl Barnes MBBS, FRANZCP, MD is a Senior Staff specialist in Consultation Liaison Psychiatry at Royal North Shore Hospital and Associate Professor and Course Coordinator for the Masters in Medicine (Psychiatry) degree course at University of Sydney. Caryl gained her medical degree at St Bartholomew's Hospital, University of London in 1993 but moved to Australia in 1997 where she completed her postgraduate training in Psychiatry and becoming a Fellow of the Royal Australian and New Zealand College of Psychiatrists in 2001. Caryl completed her Doctorate in Medicine from UNSW in 2010. The thesis topic was on the role of the Internet in the management of bipolar disorder. She was the subject matter expert for Workplace Mental Health and Wellbeing team at Black Dog Institute for over 10 years and has been a panel member for the NSW Medical board Impaired Registrants Program and an occasional member for NCAT. Her research areas of interest have included gender difference in treatment of bipolar disorder, e-mental health, bipolar disorder, mental health and wellbeing in workplace including psychiatric workforce. She was a NSLHD Innovation Award winner in 2019 with colleagues from RNSH for the development and implementation of an innovative TV Wellness Channel.



Associate Professor Loyola McLean is a Consultation-Liaison Psychiatrist and Psychotherapist in public, private and academic practice with clinical, research, education, supervision and professional service and leadership roles. At the Brain and Mind Centre she is a Co-Coordinator of Postgraduate Courses and is one of the creators of the University of Sydney Masters of Medicine (Psychiatry). In her role in the Westmead Psychotherapy Program for Complex Traumatic Disorders, she has developed with Dr Anthony Korner the innovative online Masters of Trauma-Informed Psychotherapy (TIP). She is a certified Adult Attachment Interview Coder and Trainer. Her interests are in integrated health, wellbeing and recovery from trauma are underpinned by a biopsychosociocultural model with a focus on bodymind and relational connections for health. This needs a collaborative approach with cross-talk between the psychophysiology of stress system disorders, attachment, trauma, psychotherapy and systems. She works in settings of acute, chronic and complex trauma across the continuum of care, grounding her work in integrative approaches such as Interpersonal Neurobiology and the Conversational Model.

Dr Eryn Werry is a Lecturer in the Faculty of Medicine and Health, and a Research Associate in the Drug Discovery Lab at the University of Sydney. She researches new therapeutics and detection methods for brain diseases like frontotemporal dementia, amyotrophic lateral sclerosis, Alzheimer's disease, autism spectrum disorder, substance abuse disorder and disorders involving neuroinflammation. Her work has been published in journals such as Nature Reviews Neurology, Journal of Medicinal Chemistry and Trends in Pharmaceutical Sciences. She holds 2 patents for new brain disorder treatments, and is a consultant for Kinaxis Therapeutics. Eryn also has a passion for education, and co-ordinates several units of the Master of Brain and Mind Sciences, as well as co-leading the University of Sydney Clinical Teaching Fellowship Program.





Adjunct Professor John Mendoza was appointed in May 2020 as Executive Director, Mental Health and Prison Health, Central Adelaide Local Health Network (CALHN) with a charter to transform mental health care in CALHN. In this role he is accountable for the delivery of around 40 per cent of South Australia's public mental health services and all general health care in SA prisons and a budget of \$170m. Previously, John was founding Director of ConNetica, a social enterprise established in early 2007. He presently holds academic appointments at the University of the Sunshine Coast and University of Sydney. John's previous executive roles include: CEO Mental Health Council of Australia; Chief Executive, Australian Sports Drug Agency; SA Minister's Representative, National Campaign Against Drug Abuse Steering Committee; and Chair, National Advisory Council on Mental Health.

Dr Raphael Chan is the coordinator of the unit of study "Brain and Mind Disorders (Child/Youth)". Raphael is a clinical psychiatrist who specialises in the mental health of children and young people, with many years' experience in public hospital, community mental health and private practice settings in Sydney and regional New South Wales. He is a graduate of the University of Sydney with qualifications in Medicine, Public Health and Law. He has coordinated and taught many courses in child and youth mental health at various institutions including the Brain and Mind Centre, Sydney Medical School, New York University and the New South Wales Institute of Psychiatry (now the Health Education and Training Institute). Raphael has a keen interest in sharing his knowledge and clinical experience with undergraduate students, trainee psychiatrists, and postgraduate students from different disciplines and backgrounds.



Carol Dobson-Stone, DPhil, is an NHMRC Boosting Dementia Research Leadership Fellow, based at the Brain and Mind Centre. Dr Dobson-Stone completed her PhD in human genetics at the University of Oxford, UK, in 2004. Shortly thereafter, she came to Sydney to work on brain function genetics at the Garvan Institute of Medical Research, moving to Neuroscience Research Australia in 2006. She was appointed as a Senior Research Fellow to the Brain and Mind Centre at the University of Sydney in 2017. Dr Dobson-Stone is a molecular geneticist interested in genes that are mutated in dementia and related neurodegeneration, particularly frontotemporal dementia and motor neuron disease/amyotrophic lateral sclerosis. Her research straddles multiple steps on the pathway from genetic disease to targeted therapy.



Dr Lisa Juckes completed her specialist training in 2005 through the Royal Australian and New Zealand College of Psychiatrists. She is a clinician, based in Sydney, working with people with mental health and drug and/or alcohol issues from teens to old age. Lisa has accumulated experience with group program facilitation as well as working with individuals, in a number of modalities. Lisa has worked in the public sector, NGO and private mental health / AOD settings in metropolitan as well as regional centres, and has been involved in advocacy and other work through the RANZCP college Committees of the Faculty of Addiction Psychiatry, and the Section of Youth Mental Health. Lisa is involved in course coordination and development for postgraduate psychiatry training, as well as teaching. She has been an invited speaker at workshops, symposia, conferences and other meetings over many years.



Professor Marina Kennerson heads the Gene Discovery and Translational Genomics Inherited Peripheral Neuropathies Program at the Northcott Neuroscience Laboratory, ANZAC Research Institute. Her internationally recognised team has discovered several neuropathy genes including ATP7A and PDK3 and is doing pioneering research to discover the role of structural variation mutations causing gene dysregulation as a new disease mechanism for the hereditary neuropathies CMTX3 and DHMN1. Her research program uses next generation sequencing technologies for gene discovery as well as induced pluripotent stem cell derived motor neurons and living organisms (*C. elegans* and mouse) for developing pre-clinical disease models. Marina enjoys teaching and has co-ordinated international linkage, bioinformatics and next generation sequencing courses at Sultan Qaboo University, Oman, Cold Spring Harbor Laboratories, USA and the University of Malaya, Malaysia and is the Genetics Unit of Study Co-ordinator for the Masters Postgraduate Program at the Brain and Mind Centre, Sydney. Marina is the Scientific Secretariat of the Asian Oceanic Inherited Neuropathy Consortium (AOINC) and a member of the International Charcot-Marie-Tooth and Related Neuropathies Consortium (CMTR) Board.



POSTGRADUATE PROGRAM in BRAIN and MIND SCIENCES

Program overview

The Brain and Mind Centre is a place for discovery, innovation, research, clinical delivery and translating research into improved treatment and disease prevention strategies.

The Postgraduate Program in Brain and Mind Sciences builds on existing undergraduate offerings of the University of Sydney with units of study that cut across boundaries between traditional subject areas.

The Postgraduate Program is currently open to applications for the following coursework options:

- Graduate Certificate in Brain and Mind Sciences
- Graduate Diploma in Brain and Mind Sciences
- Master of Brain and Mind Sciences
- Graduate Certificate in Medicine (Psychiatry)
- Graduate Diploma in Medicine (Psychiatry)
- Master of Medicine (Psychiatry)
- Non degree Continuing Medical Education Psychiatry course

and the following research degrees:

- Master of Philosophy
- Doctor of Philosophy.

The courses provide focused education and training for the next generation of science, medical, nursing, psychiatry, psychology and allied health workforces to better meet the needs of those experiencing disorders of the brain and mind with both clinical and research applications.

Who should apply?

Brain and Mind Sciences Courses

- Psychologists, nurses, medical practitioners and allied health staff for postgraduate education and professional development.
- Graduate scientists, medical scientists and those who wish to update their neuroscience skills and knowledge before undertaking a higher research degree in the area of brain and mind sciences.

Psychiatry Courses

- Psychiatry trainees, for whom this will form the Formal Education Course (FEC) component of training under the Royal Australian and New Zealand College of Psychiatrists (RANZCP) Fellowship requirements, can undertake the Master of Medicine (Psychiatry) programme, as can psychiatrists and other doctors working in the field of psychiatry (eg Career Medical Officers). The FEC

Why choose the University of Sydney?

The University of Sydney was founded in 1850 and was the first university in Australia. For over 150 years we have maintained a national and international reputation for academic excellence. We strive constantly for

excellence in intellectual inquiry, academic freedom and integrity, and ethical practice in academic endeavours. At the heart of all of this is an exciting and stimulating student-centred learning and teaching environment.

Master of Brain and Mind Sciences – Coursework

Overview

This postgraduate program strongly promotes the philosophy of interdisciplinary research that underpins the Brain and Mind Centre. Diseases of mental health are explored from both the basic sciences and clinical research rather than as disparate scientific disciplines.

The **core units** of the program give students a foundation in fundamental neuroscience and its clinical applications. Critical appraisal of the biomedical literature is developed, as is the ability to use this to inform further research or clinical applications.

The **elective units** of the program approach disorders of the brain and mind from the perspective of clinical staging: how they emerge during development from early childhood, adolescence and into old age.

Other areas of focus at the Brain and Mind Centre and in the postgraduate program are genetic aetiology of brain and mind disorders, practice of therapeutic strategies from pharmacology to cognitive behaviour therapy, and principles of neuropsychological assessment. Workshops in mental health policy and leadership will give students an understanding of the broader provision of support in the mental health field.

Capstone units of study are designed to allow students to delve into an area of brain and mind sciences and produce an original work of scholarship. Those students accepted into the Research Activity unit will have an opportunity to work with a research group at the Brain and Mind Centre or other associated groups, culminating in a mini thesis.

The postgraduate program in brain and mind sciences brings together lecturers from the cutting edge of their respective fields. Students will emerge with an understanding of the very latest in interdisciplinary research and the skills to use this in professional settings in the laboratory, clinic or mental health care.

Coursework options

Graduate Certificate in Brain and Mind Sciences (24 credit points)

Students must complete 2 core subjects BMRI5002 and BMRI5004 and 2 electives. Students can complete requirements in a minimum of 1 semester and a maximum of 2 years from initial enrollment.

Graduate Diploma in Brain and Mind Sciences (36 credit points)

Students must complete 2 core subjects BMRI5002 and BMRI5004 and 4 electives. Students can complete requirements in a minimum of 1 year and a maximum of 4 years from initial enrollment.

Master of Brain and Mind Sciences (48 credit points)

Students must complete 3 core subjects BMRI5002, BMRI5004 and BMRI5020 and 5 electives, including at least 1 capstone unit of study. Students can complete requirements in a minimum of 1 year and a maximum of 6 years from initial enrolment.

Course outcomes

Graduates of the Master of Brain and Mind Sciences demonstrate:

- knowledge, principles and methods of brain and mind sciences
- training in the skills required to apply the basic knowledge, principles and methods to problems of professional practice (research and/or clinical)
- acquisition of specific skills in the use of relevant procedures, technologies and techniques in relation to research investigation, assessment, diagnosis and management of brain and mind disorders
- development of the skills and attitudes to exhibit initiative and self-reliance in critically evaluating and synthesizing ideas & information related to the units
- development of the skills and attitudes to work effectively and collaboratively within teams from different disciplinary, professional and cultural backgrounds.

Entry requirements

For Master of Brain and Mind Sciences and embedded degrees:

Bachelor degree in a relevant discipline. Examples of relevant degrees are Bachelor of Science, Medical Science, Nursing, Medicine, Psychology, Health Science and Pharmacy.

Students may be asked to attend an interview to discuss suitability for entry into the course. This will be determined after applications close.

Student pathway

The options of enrolment for a full-time Masters candidate are laid out below.

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| BMRI5002 | Fundamental Neuroscience | 7 |
| BMRI5004 | Translational and Clinical Neuroscience | 8 |
| BMRI5020 | Research Inquiry | 9 |
| Electives – choose from the following units of study | | |
| BMRI5010 | Brain and Mind Disorders (Child/Youth) | 10 |
| BMRI5013 | Neuropsychopharmacology | 11 |
| BMRI5027 | Leadership and Policy in Mental Health (<i>capstone</i>) | 12 |
| Semester 2 | | Page |
| BMRI5001 | Neuroethics (<i>capstone</i>) | 13 |
| BMRI5006 | Cognitive Behaviour Therapy | 14 |
| BMRI5007 | Neuropsychology | 15 |
| BMRI5012 | Brain Ageing | 16 |
| BMRI5017 | Genetics of Brain and Mind Disorders (<i>capstone</i>) | 17 |
| BMRI5023/5024 | Research Activity (<i>capstone</i>) | 18 |
| BMRI5027 | Leadership and Policy in Mental Health (<i>capstone</i>) | 12 |

- Part-time students should undertake core BMRI5002 and BMRI5004 before attempting electives.
- You can enrol as a non-award student for any of the units of study listed. You can count the credit obtained from the successful completion of these units of study towards one of our university degrees, as long as it is claimed within two years of completing the unit of study and you have approval from your degree coordinator.

Fundamental Neuroscience

BMRI5002 Semester 1 CORE

This core unit of study will introduce the main concepts of neurobiology including neural cell physiology, synaptic plasticity, neurodevelopment and neuroanatomy. The modularity of the brain and connective pathways will be examined with a focus on the functional anatomy of sensory processing, motor systems, learning, memory

and emotions. Immunology and neuropathology will also be studied with insights into how genetics and interaction with glial cells underlie these processes. Examples will be given of how brain disorders emerge from disruption to these fundamental processes.

| Week | Proposed topic |
|------|--|
| 1 | Neurotransmission I |
| 2 | Neurotransmission II |
| 3 | Synaptic plasticity and learning |
| 4 | Neural development and axonal guidance |
| 5 | Neuroanatomical pathways |
| 6 | Glia – neuronal interactions and pathology |
| 7 | Motor Systems Network |
| 8 | Visual System |
| 9 | Auditory and Vestibular Systems |
| 10 | Learning, Memory and Cognition |
| 11 | Limbic system and emotions |
| 12 | Neuroimmunology and auto-immune disorders |
| 13 | Genomic medicine and neurodegenerative disease |

* Assessments and timetables may change.

Credit points: 6

Teacher/Coordinator: Ms Annie Truong

Session: Semester 1

Classes:

1x 2-hr lecture/week

Assumed knowledge:

Cell biology up to 1st year level

*Assessment: Online modules (15%), Oral Presentation (30%), Production of MCQ's (15%), Online Test (40%)

Campus: Mallett Street

Delivery Mode: Normal (lecture/lab/tutorial) Evening

Learning outcomes

At the conclusion of this unit of study, students should be able to:

- Understand the basis of neuronal excitability and synaptic transmission.
- Understand the main stages of neural development and axonal wiring.
- Interpret neuropathological microimages and discuss the role of glia in neuronal development and support
- Describe how network behaviour underlies functional sensory, motor and emotional processing.
- Evaluate learning and memory from a behavioural and cellular perspective.
- Recognise the role of neuroimmunology and genomic epidemiology in brain and mind disorders.

Translational and Clinical Neuroscience

BMRI5004 Semester 1 CORE

This unit of study introduces the principal disorders of mental health and current methods for diagnosing and understanding them. Disorders of development, mood, personality and cognitive decline will be introduced in the context of diagnostic criteria. The unit will also describe fundamental principles of clinicopathology and provides an overview of the latest technologies and

techniques being utilised at the Brain and Mind Centre to identify early diagnostic biomarkers for disease. Through biomarker identification and development, windows for therapeutic intervention that can prevent or delay progression from earlier to later stages of a disorder can be defined, and the effectiveness of early intervention strategies can be evaluated.

| Week | Proposed Topic |
|------|---|
| 1 | Advantages-disadvantages of DSM/ICD/Clinical staging model & introduction to Imaging, EEG and biomarkers - why do we need them? |
| 2 | Structural neuroimaging and MRS – how these are used in clinic and research |
| 3 | Diffusion tensor imaging & Functional MRI |
| 4 | Introduction to electrophysiological biomarkers (EEG) in clinic and research |
| 5 | Biomarkers of Sleep |
| 6 | Molecular Biomarkers in Neuroscience (Genetics, Epigenetics, RNA and Protein) |
| 7 | Introduction to PET Imaging Cerebral PET in research and clinic |
| 8 | Developing, validating, using and evaluating clinical assessment tools |
| 9 | Brain and mind disorders emerging in childhood |
| 10 | Brain and mind disorders emerging in youth |
| 11 | Brain and mind disorders emerging in adulthood and ageing |
| 12 | Student Presentations |
| 13 | Introduction to therapeutic interventions (Medications, Lifestyle, Cognitive- CBR/ACT/Mindfulness |

* Assessments and timetables may change.

Credit points: 6 **Teacher/Coordinator:** Dr Angela D'Rozario

Session: Semester 1

Classes: 1x 2-hr lecture/week

Assessment: Literature Review (40%), Groupwork (20%) and Group Presentation (10%), Case Study (30%).

Campus: Mallett Street **Delivery Mode:** Normal

Learning outcomes

At the conclusion of this unit of study students should be able to:

- Understand and investigate the relevance and importance of different diagnostic models and criteria for the identification and management of a variety of brain and mind disorders.
- Demonstrate a critical understanding of neuroimaging and electroencephalography techniques, and how these can be used to identify preclinical markers of brain and mind disorders.
- Identify a range of risk factors during a spectrum covering childhood, adolescence and old age that are associated with the manifestations of clinical symptoms of various brain and mind disorders.
- Evaluate a case study by interpreting various assessment techniques to develop a differential diagnosis or formulation considering diagnostic models (including the clinical staging model) and understand the range of suitable interventions.
- Critically evaluate assessment tools used in research and clinical practice and present outcomes to an audience of peers.

Research Inquiry

BMRI5020 Semester 1 CORE

Doctors and researchers depend on the latest scientific literature published week by week in countless different journals, but not every study can be trusted. Scientific studies are fraught with complications that can threaten their reliability, or the extent to which their results can be applied widely. This unit will help you develop the skills necessary to critically appraise the research literature and identify sources of bias and confounding. Students will learn how cross-sectional studies, case-control studies, cohort studies and clinical trials are more or less vulnerable to these problems.

Similarly, students will look at the basic design of laboratory research and the different types of questions that can be asked from studies on humans, rats or brain tissue. All classes will be based on published examples of research literature and students will learn how to navigate different methods and data types. This unit will give students the confidence to read widely across the mental health field, and judge which findings can be relied upon to inform future research or medical practice.

Credit points: 6 **Teacher/Coordinator:** Dr Eryn Werry

Session: Semester 1 **Classes:** 1 x 2-hr lecture/week, 2 tutorials

Assumed knowledge: Some basic statistical concepts essential, with 1st year university statistics desirable

Assessment: Journal Club & Adaptive Learning mModules (20%), Extended Response (35%), 2hr Exam (45%)

Campus: Mallett Street **Delivery Mode:** Normal (lecture/tutorial) Evening

| Week | Proposed Topic |
|------|---|
| 1 | Levels of evidence |
| 2 | Introductory biostatistics |
| 3 | Case control studies |
| 4 | Qualitative research |
| 5 | Cohort studies |
| 6 | Cross-sectional surveys |
| 7 | Clinical and Controlled trials |
| 8 | Systematic reviews and meta-analysis |
| 9 | Wet-Lab Research (Optional) |
| 10 | Lab publications: Animal behaviour |
| 11 | Lab publications: Human neurophysiology |
| 12 | Electrophysiology & pharmacology (MBMSc) Drugs of Abuse/Mechanism Neuroadaptation (MMed(Psychiatry)) |
| 13 | Lab publications: Localisation and genetic manipulation |

* Assessments and timetables may change.

Learning outcomes

- Evaluate the merit of different clinical study designs in the 'levels of evidence' hierarchy.
- Identify sources of selection bias and information bias in a research study and the potential effects on data.
- Assess the statistical design of a given study.
- Ascertain confounding variables in research and ways to address these.
- Recognise different levels of laboratory research and navigate papers presenting a range of complex data and experiments.
- Critically appraise and compare publications from clinical and basic research.

Brain and Mind Disorders (Child/Youth)

BMRI5010 Semester 1 ELECTIVE

This unit of study will address key neurobiological, psychological and environmental contributions and their interactions on child and adolescent brain development from a clinical perspective. Students will be introduced to neurodevelopmental disorders affecting infants, children and youth, including intellectual disability, autism spectrum disorders, attention deficit hyperactivity disorder, and a range of emergent mental disorders such as anxiety disorders, mood disorders,

psychotic disorders, sleep disorders and somatic symptom disorders. The aetiology, phenomenology and treatment of these mental disorders are considered in the context of developmental continuities and brain maturational processes throughout infancy, childhood and adolescence. Finally, students will understand the principles of pharmacological, psychological and family management of these disorders, including models of service delivery in child and youth mental health.

Credit points: 6 **Teacher/Coordinator:** Dr Raphael Chan **Session:** Semester 1 **Classes:** 1 x 2-hr lecture/week

Assessment: Extended response questions (30%) extended response questions (30%), essay (40%).

Campus: Mallett Street **Delivery Mode:** Normal (lecture/lab/tutorial) Evening

| Week | Proposed Topic |
|------|--|
| 1 | Introduction & Mental health assessment of children and youth |
| 2 | Principles of attachment in infancy and childhood |
| 3 | Language and cognitive development in childhood |
| 4 | Adolescent development and youth onset mental disorders |
| 5 | Anxiety Disorders in children and youth |
| 6 | Attention-deficit / hyperactivity disorder (ADHD) Disruptive behaviour disorder |
| 7 | Mood disorders in youth |
| 8 | Psychotic disorders in youth |
| 9 | Intellectual disability and autism spectrum disorder |
| 10 | Psychosomatic disorders in children and youth Chronobiology of sleep disorders in adolescents |
| 11 | Mental disorders in children and youth: Principles of treatment |
| 12 | Introduction to family therapy |
| 13 | Service delivery for youth mental health |

Learning outcomes

At the conclusion of this unit of study students should be able to:

- Characterise normal child development from infancy to adolescence.
- Assess the influence of genetics on child and youth development and learning.
- Evaluate how environmental and societal factors influence child and youth development.
- Compare and contrast common developmental, learning and cognitive disorders.
- Assess the effectiveness of different therapeutic and management options for children and youth with brain and mind disorders.

* Assessments and timetables may change.



Neuropsychopharmacology

BMRI5013 Semester 1 ELECTIVE

This elective unit will focus on neuropsychopharmacology as a tool for characterising brain pathways and as a treatment for brain disorders. Students will be introduced to basic principles of pharmacology governing drug binding and metabolism that underlie the rationale for drug design. Links between brain circuitry and phenomenology of various brain disorders including chronic pain, anxiety and dementia will be examined to

provide a rationale for chosen drug targets. Students will also examine the relationship between dosage, specificity and negative side effects of such drugs. There will be opportunity to critically examine current directions in neuropharmacology research, the role of the pharmaceutical industry and potential new pathways for future drug design.

Credit points: 6 **Teacher/Coordinator:** Dr Eryn Werry **Session:** Semester 1

Classes: 9am–5pm on a weekday in weeks 2, 6 and 11 (exact dates TBC)

Assessment: Online test (30%), report (40%), presentation (30%)

Campus: Mallett Street **Delivery Mode:** Block Mode

Learning outcomes

At the conclusion of this unit of study, students should be able to:

- Understand the breadth of drug targets, neurotransmitter systems and receptors in the nervous system
- Apply basic principles of pharmacokinetics and pharmacodynamics to commonly used agents targeting the central nervous system.
- Interpret side-effects in the context of non-specific targets of pharmacological agents
- Evaluate the advantages and limitations of cellular and animal models used in neuropharmacology
- Use knowledge of the molecular mechanisms of disorders such as anxiety, dementia and chronic pain to explain the mechanisms of action for common pharmaceutical treatments
- Discuss the neurobiology of addiction, mechanisms of common drugs of abuse and describe pharmacological interventions to combat addiction.
- Discuss current research developments in the area of drug design

| Workshop | Proposed Topic |
|---------------|---|
| 1 Full Day | Basic principles of pharmacology Neurotransmitter systems Drug absorption and metabolism Dosage and non-specific targets Principles of drug discovery |
| 2 Full Day | Modelling behaviour – cellular and animal laboratory and their use Lab Tour Anxiety and Dementia |
| 3 Full Day | Drugs of abuse – mechanisms Neuroadaptation and addiction 'Harnessing the power of drugs of addiction for good' Anti-glioblastoma data analysis |

* Assessments and timetables may change.



Foundations of Leadership and Policy in Mental Health

BMRI5027 Semester 1&2 CAPSTONE ELECTIVE

This unit is designed to provide participants with an introduction to the key constructs of leadership, leadership development and change management with specific reference to mental health reform in Australia. The unit will provide an overview of concepts and models of leadership and change management and an opportunity to apply these to a personal leadership development plan to embark on a service

level reform initiative. In this unit participants will gain an understanding of, their own leadership attributes and developmental needs and an insight into the development of strategy, organisational level policy and governance for achieving change. These elements will provide the foundations for self-development as a leader and the development of service level change and reform initiatives.

Credit points: 6 **Teacher/Coordinator:** Assoc Prof John Mendoza **Session:** Semester 1 and Semester 2

Classes: 9am–5pm Friday and 9am–1pm Saturday in weeks 2 and 6, 9am–5pm Friday in week 12 (exact dates TBC)

Assessment: Leadership and self development plan (30%), workplace scenario analysis (20%), change initiative and implementation plan (50%) **Campus:** Mallett Street **Delivery Mode:** Block Mode

| Workshop | Proposed Topic |
|---|--|
| 1 Full day Friday + half day Saturday | Introduction and analyses of key concepts and dimensions of the unit, and the importance of reform in the mental health sector. Topics will include: leadership, leadership development and change management; why leadership matters to mental health reform in Australia; the core of leadership – personal effectiveness, communication and influence. |
| 2 Full day Friday + half day Saturday | Major topics include: leading people. leading and strategic analysis and planning; policy deployment and leadership, organisational culture and change. |
| 3 Full Day Friday | Application of leadership theory and practice in meeting some of the challenge in mental health reform. Student presentations |

The workshops are part didactic, part interactive. The didactic sessions are short with opportunities to apply learning in workplaces and other contexts.

* Assessments and timetables may change.

Learning outcomes

At the conclusion of this unit of study students should be able to:

- Compare and contrast different models of leadership and change management strategies.
- Evaluate their own leadership strengths and learning priorities.
- Assess how policy and strategy are critical to the implementation of leadership vision.
- Evaluate effective personal influence strategies.
- Develop strategies to improve team performance, including recognising staff strengths and improving staff engagement.
- Analyse key strategies for successful organisational change initiatives.
- Apply leadership theory and practice and a change management framework to develop reform within a service setting.

Neuroethics

BMRI5001 Semester 2 CAPSTONE ELECTIVE

This unit of study synthesizes and critically scrutinizes our models and concepts of brain and mind through a neuroethics lens. Neuroethics is sub-field of bioethics that is concerned with the ethical, legal and social impact of the neurosciences. Beginning with a series of lectures on the historical development of modern neuroscience, students will learn about (1) the beliefs, experiments and discoveries that have led us to recognise how the brain contributes to the human experience in unique ways and (2) the philosophical and ethical debates that have arisen as a result of progress in neuroscience. Throughout this

unit, students will examine how advances in neuroscience have shaped how we conduct research, treat clinical conditions, make individual and collective decisions, and live together as a society. During the class discussions and assessments students will grapple with the ethical impact of intervening in the brain through the concepts of health, illness, identity and morality. The scope of these issues is enormous and speaks to the importance of students developing a clear framework to contextualize developments in neuroscience within the scientific, ethical, cultural, social and legal environments in which they arise

Credit points: 6 **Teacher/Coordinator:** Dr Adam Piovarchy **Session:** Semester 2

Classes: 9am-5pm on a weekday in weeks 1, 6 and 10 (exact dates TBC)

Assessment: In-class discussion (5%), open peer commentary (10%), position paper I (45%), position paper II (40%)

Campus: Mallett Street

Delivery Mode: Block Mode

| Workshop | Proposed Topic |
|---------------|---|
| 1 Full Day | Welcome and background: An overview of the unit Introduction to Ethics History of neuroscience I: Aristotle, the soul, Ventricular doctrine Introduction to Neuroethics: Definitions, goals and underlying principles of neuroethics scholarship and practice |
| 2 Full Day | <i>Neuro-concepts, neuro-assumptions, neuro-explanations</i> <i>Neurolaw</i> <i>Sociological and Ethical concerns presented by neuroscience</i> History of neuroscience in Australia Neuroscience and Philosophy |
| 3 Full Day | Ethical and social issues of improving the cognitive performance Personality change and advanced directives Addiction and Responsibility Public understanding of neuroscience: Representation of neuroscience in the media and examples of hyped neurotechnology |

* Assessments and timetables may change.

Learning outcomes

At the conclusion of this unit of study, students should be able to:

- Discuss brain and mind function within an historical, philosophical and ethical context.
- Explain the impacts of key neuroscience innovations of the last century on concepts of brain and mind function.
- Critique claims regarding the benefits and harms of neuroscience for understanding brain and mind function, and psychological capacities.
- Examine how society and culture influence central concepts in brain and mind sciences.
- Determine ethical issues that arise from the use of neurotechnology in research and clinical contexts.
- Analyze broader implications of neuroscience in social and legal contexts.
- Debate appropriate uses of neurotechnology in clinical, social and legal contexts.

Cognitive Behaviour Therapy

BMRI5006 Semester 2 ELECTIVE

Cognitive Behaviour Therapy (CBT) is an evidence-based psychotherapy for a range of psychological disorders, with strong foundations in cognitive science and now increasingly in neuroscience. This unit provides a solid foundation in the theoretical and clinical underpinnings of the therapy, with a specific focus on the

neuroscience of CBT as applied to various conditions. It demonstrates techniques of CBT, including case assessment, formulation, and therapy components. Students will develop a neurobiological understanding of CBT interventions and examine practice through case examination and group exercises.

Credit points: 6 **Teacher/Coordinator:** Prof Adam Guastella **Session:** Semester 2

Classes: 3pm- 5pm in week 2, 9am-5pm on a weekday in weeks 3, 7 and 10

Assessment: Case study analysis (40%), online test (20%), extended response questions (40%)

Campus: Mallett Street **Delivery Mode:** Block Mode

| Workshop | Proposed Topic |
|---------------------------|--|
| Introduction (2 hours) | Overview of themes and introduction to themes for Workshop 1 |
| 1 Full day | <i>CBT, family therapy, and exploring the neuroscience of externalising problems</i> - Theoretical models and pathways for externalising disorders - Assessment of individuals and treatment formulation - Evidence-based practice of externalising problems |
| 2 Full day | <i>Novel cognitive approaches to the assessment and treatment of fear circuitry</i> - The neurobiological underpinnings of CBT intervention - Causal and maintenance processes according to dominant CBT models of anxiety - Identifying critical targets for change in therapy for anxiety |
| 3 Full day | <i>Understanding and Treating Mood Disorders</i> - Pathways to the development of mood disorders - Assessment and formulation of mood disorders - Evidence-based intervention for mood disorders |

* Assessments and timetables may change.

Learning outcomes

At the conclusion of this unit of study students should be able to:

- Explain the theoretical and neurobiological underpinnings of CBT.
- Assess recent advances in the understanding CBT that may improve methods of assessment and intervention.
- Examine case scenarios of anxiety, depression and externalising problems and identify critical targets for change in therapy.
- Discuss the process of assessment and case formulation and evaluate best practice CBT skills.



Neuropsychology

BMRI5007 Semester 2 ELECTIVE

This unit of study will enable students to understand the basic principles of brain behaviour that underpin assessment of brain disorders across the age span. A wide range of neuropsychological syndromes and neuropsychiatric and neurological disorders will be examined. The unit of study of study will enable you to

develop skills in integrating medical, psychological and social information into neuropsychological assessment through case based learning. At the end of the unit of study, students will have an awareness of the 'state of the art' in neuropsychological intervention/rehabilitation strategies for people with acquired brain impairment.

| Week | Proposed Topic |
|------|---|
| 1 | Introduction to neuropsychology and the unit |
| 2 | Neuropsychological profiles: Traumatic Brain Injury |
| 3 | Neuropsychological assessment (Effort/Personality/Forensic) |
| 4 | Neuropsychological profiles: MCI, Alzheimer's Disease and Vascular Dementia |
| 5 | Neuropsychological profiles: stroke, brain tumours and epilepsy |
| 6 | Neuropsychological profiles in schizophrenia and affective disorders |
| 7 | Paediatric Neuropsychology |
| 8 | Cognitive rehabilitation |
| 9 | Neuropsychological profiles: Fronto-temporal dementia |
| 10 | Behavioural neurology |
| 11 | Neuropsychological profiles: multiple sclerosis |
| 12 | Student case presentations |
| 13 | Student case presentations |

* Assessments and timetables may change.

Credit points: 6

Teacher/Coordinator: Dr Haley La Monica

Session: Semester 2

Classes: 1x 2-hr lecture/week

Assessment: Essay (40%), clinic visit and case presentation (15%), client report (45%)

Campus: Mallett Street

Delivery Mode: Normal (lecture/lab/tutorial) Evening

Learning outcomes

At the conclusion of this unit of study students should:

- Analyse the theoretical frameworks underpinning the study of brain behaviour relationships.
- Understand and differentiate core neuropsychological syndromes arising from brain disorders.
- Apply knowledge and skills to the interpretation of neuropsychological tests and questionnaires used in the assessment of brain disorders.
- Examine the pathological changes that occur in brain disorders across the age spectrum.
- Compare and contrast social, psychological, medical, neurological and rehabilitation factors associated with neuropsychological syndromes.

Brain Ageing

BMRI5012 Semester 2 ELECTIVE

This unit of study provides an introduction to two important aspects of brain and mind ageing science – neurodegenerative disorders and opportunities for neuroplasticity and human flourishing. Students will learn about the clinical presentation and pathophysiology of neurodegenerative disorders such as Alzheimer's disease, Parkinson's disease, vascular dementia and frontotemporal dementia. Psychogeriatrics and late-life depression will also be covered, and counterbalanced

with new insights about what determines successful ageing and how we can use lifestyle interventions to keep people's brains and minds fit and well throughout late life.

This unit will use case studies to reinforce learning, focusing on common neuropsychological assessment methods and research methods. Students will also be introduced to the social and ethical aspects of brain and mind ageing.

| Week | Proposed Topic | |
|------|---|---|
| | Masters of Brain and Mind Sciences | Masters of Medicine (Psychiatry) and CME |
| 1 | Mild cognitive impairment, dementia and Alzheimer's disease | |
| 2 | Alzheimer's disease controversies | Introduction to Clinical Psychogeriatrics: Interviewing and assessment of older adults. Behavioural and psychological symptoms of dementia |
| 3 | Parkinson's disease and Lewy body dementia | |
| 4 | Frontotemporal dementia | |
| 5 | Vascular dementia | |
| 6 | Prevention and lifestyle modifications for Healthy Brain Ageing | Brain imaging across neurodegenerative diseases |
| 7 | Successful Ageing | Neuropsychological testing and Rating Scales |
| 8 | Cellular theories of ageing | General psychopharmacology in older adults |
| 9 | Neurodegeneration and Stem Cell Models | |
| 10 | Late-life depression/Mood disorders in older adults | |
| 11 | Psychological interventions for Depression and Dementia (inc CCT) | |
| 12 | Elder abuse, capacity and neuroethics of dementia | Psychosis and personality disorders in older adults |
| 13 | Case Discussion Conference | Ethics, guardianship, testamentary capacity, informed consent |

* Assessments and timetables may change.

Credit points: 6

Teacher/Coordinator:

Dr Eryn Werry and Dr Millie Ho Session: Semester 2

Classes: 1 x 2-hr lecture/week Assessment:

Extended response questions (40%), Case study analysis/pamphlet (30%), presentation (30%) Campus: Mallett Street

Delivery Mode: Normal Evening

Learning outcomes

At the conclusion of this unit of study students should be able to:

- Analyse the contribution of environment and pathophysiology to various neurodegenerative disorders.
- Compare assessment and imaging techniques used in differentiating diagnoses.
- Explain how risk factors for brain and mind disorders are related to ageing and psychiatric symptoms such as late-life depression.
- Describe some of the determinants of successful ageing.
- Understand capacity in a medico-legal sense and discuss issues associated with informed consent.
- Critically evaluate strategies for healthy brain ageing.

Genetics of Brain and Mind Disorders

BMRI5017 Semester 2 CAPSTONE ELECTIVE

This unit of study provides a comprehensive introduction to the research methods used in identification and characterisation of genetic variants underlying neuropsychiatric and neurodegenerative diseases. Understanding genetic variants in the context of genomic medicine is essential for patient management and predicting disease outcomes. Students will be taught

skills to identify causative and susceptibility gene variants from next generation sequencing data and shown bioinformatics tools to analyse these variants. This is a capstone unit of study that will require students to develop over the semester a scholarly piece of work using advanced bioinformatic skills.

Credit points: 6 **Teacher/Coordinator:** A/Prof Marina Kennerson **Session:** Semester 2

Classes: 9am-4pm a weekday in Week 1, 9am-5pm a weekday in Weeks 4, 9 and 11 (exact dates TBC)

Assessment: Pseudo-journal article (40%), brief report and extended response (60%)

Campus: Mallett Street **Delivery Mode:** Block Mode

| Workshop | Proposed Topic |
|---------------|--|
| Introduction | Introduction to the Unit |
| Optional | <i>Genetics 101 Workshop</i> |
| 1 Full Day | Understanding genetic contributions to complex traits |
| 2 Full Day | Clinical application of pedigree analysis and next generation sequencing (NGS) variant filtering for Mendelian disease |
| 3 Full Day | Bioinformatics to explore the genome and DNA variants Genetic Counselling: clinical and psychosocial implications of genomic medicine |

* Assessments and timetables may change.

Learning outcomes

At the conclusion of this unit of study students should be able to:

- Interpret measures for genetic association in brain and mind disorders.
- Demonstrate a practical understanding of genome-wide association studies (GWAS) & their limitations.
- Demonstrate a practical understanding of family disease histories represented in pedigrees and extended haplotype analysis.
- Demonstrate a practical understanding of next generation sequencing (NGS) variant filtering for identifying causative alleles in Mendelian disease.
- Use bioinformatics tools to assess properties of candidate variants for determining population frequency and pathogenicity prediction.
- Use bioinformatics resources to investigate a gene's function, expression pattern, protein outcomes and evolutionary history.
- Demonstrate interpretation of susceptibility versus causative variants and the role of genetic counselling in translating information to patients who have undergone genetic testing.
- Demonstrate an understanding of the role of genetic counselling in genomic education and healthcare.
- Interpret the psychosocial and clinical implications of genomic results on patient and family

Research Activity

BMRI5023/24 Semester 2 CAPSTONE ELECTIVE

This unit of study requires students to develop over the semester an original piece of research and provides a capstone experience for those wishing to go on to further postgraduate research. This practical project is based in a research group at the Brain and Mind Centre or affiliates which deal variously in areas of clinical, epidemiological and fundamental neuroscience research. The 12 credit points combined of BMRI5023/ BMRI5024 carry the expectation of around 3 days per week availability towards the given research project. Students will learn a variety of skills for acquisition,

analysis and presentation of data. This is a capstone unit of study requiring a great deal of independence and the production of an original piece of research scholarship. Students can expect support and guidance from their supervisors and research team and are expected to integrate into their research team's environment.

NB: These units require departmental permission prior to enrolment.

Credit points: 6 **Teacher/Coordinator:** Dr Carol Dobson-Stone and A/Prof Louise Nash

Sessions: Semester 2 **Classes:** 3 days per week

Corequisites: BMRI5023/5024 **Assumed knowledge:** At discretion of particular supervisor

Assessment: Introductory presentation (10%), thesis (40%), supervisor evaluation (40%) final presentation (10%)

Campus: Mallett Street **Delivery Mode:** Field Experience

| Week | Topic |
|---------------------|--|
| 3 days per week | Research topic to be discussed with supervisor |
| Throughout semester | Statistics Workshops |

* Assessments and timetables may change.

Learning outcomes

At the conclusion of this unit of study students should be able to:

- Formulate a broad scientific question and define specific research objectives.
- Employ standard research techniques in order to address specific research aims and explain the strengths and limitations of different approaches.
- Assess and carry out protocols for data acquisition within the project.
- Present data using appropriate figures and written language.
- Apply statistical tests to examine trends in the data.
- Interpret the project's research findings in the context of the broader field and discuss implications and limitations of the project.
- Produce a written summary of the research project in the form of a mini thesis or journal publication.

Note: Department permission is required prior to enrolment. Students will be accepted based on availability of places and suitability of academic background. Departmental permission is arranged in the semester prior to enrolment.



Master of Medicine (Psychiatry) – Coursework

Overview

The Master of Medicine (Psychiatry) and associated non-degree Continuing Medical Education programme is an accredited Formal Education Course with the Royal Australian and New Zealand College of Psychiatrists (RANZCP) for stage 1 and stage 2 psychiatry trainees. The course can also be undertaken more broadly choosing units of study from the Master of Brain and Mind Sciences for those doctors who do not need to cover the RANZCP Formal Education course requirements.

Capstone units of study require students to produce a work of scholarship that builds on learning throughout the course. The Research Project capstone provides an opportunity to work in the student's own clinical setting or with a research group at the Brain and Mind Centre. The other capstone options are Neuroethics and Leadership and Policy in Mental Health. The latter may be used (with approval from their Director of Training) for psychiatry trainees in stage 3 leadership training for RANZCP requirements.

The postgraduate program in Medicine (Psychiatry) brings together academics and experts from the cutting edge of their respective fields. Students will emerge with an understanding of the latest in interdisciplinary research and develop critical appraisal skills to utilise the findings in clinical or research settings. The MMed (Psychiatry) offers a number of shared units with the Master of Brain and Mind Sciences, which will provide the opportunity for interdisciplinary collaboration in mental health research and clinical practice.

Course outcomes

Graduates of the Master of Medicine (Psychiatry) will:

- Acquire the knowledge, skills and attitudes of the Learning Outcomes for Stage 1 and 2 trainees as outlined in the Royal Australian and New Zealand College of Psychiatrists Competency-Based Fellowship Program.
- Demonstrate the relevant competencies at the level of entry into advanced training in psychiatry in the seven key CanMeds roles of Medical Expert (ME), Communicator (Com), Collaborator (Coll), Health Advocate (HA), Manager (Man), Scholar (Sch) and Professional (Prof).
- Understand and apply the biopsychosociocultural model in psychiatry.
- Understand and apply relevant procedures, models, technologies and techniques in relation to clinical assessment, diagnosis, management and research of brain, mind and related general medical disorders.
- Critically evaluate the literature and make evidence-based decisions in clinical practice and research.
- Be aware of the consumer context of health delivery and have an understanding and application of recovery and trauma-informed models of care.
- Possess the University of Sydney graduate attributes including scholarship, lifelong learning and global citizenship.



Coursework options

Graduate Certificate in Medicine (Psychiatry)

requires the successful completion of 24 credit points of stream specific units of study.

Graduate Diploma in Medicine (Psychiatry)

requires the successful completion of 36 credit points of units of study comprising:

- 6 credit points of compulsory units of study (BMRI5020 Research Inquiry or equivalent)
- 30 credit points of stream specific units of study

Master of Medicine (Psychiatry)

requires the successful completion of 48 credit points of units of study comprising:

12 credit points of compulsory units of study made up of BMRI5020 Research Inquiry or online equivalent AND a capstone unit of study chosen from:

- BMRI5055 Research Project in Psychiatry
- BMRI5001 Neuroethics
- BMRI5027 Leadership & Policy in Mental Health

AND 24-36 credit points of psychiatry stream units of study and 0-12 credit points of electives.

Continuing Medical Education (Short course option)

A Continuing Medical Education (CME) option is available for psychiatry trainees who wish to complete the Formal Education Course but who do not wish to progress towards a degree. Students undertaking this option will be required to attend teaching sessions and participate in online learning activities, but will not be required to submit assignments or examinations. Students in locations outside Sydney will be able to participate in classes online. All units required for completion of the FEC will be available as CME units. Please email psychiatry.bmc@sydney.edu.au for general information or FMH.peh-events@sydney.edu.au for further information on CME pathway.

Units of study

Compulsory for the Master degree

- BMRI5020 Research Inquiry (or Introduction to Clinical Epidemiology (online unit))
- Capstone (choice listed below)

Brain and Mind Centre capstone electives (only required for Masters Degree students. Not FEC required).

- BMRI5055 Research Project in Psychiatry
- BMRI5001 Neuroethics
- BMRI5027 Leadership and Policy in Mental Health

Psychiatry stream units

- BMRI5003 Clinical Psychiatry I
- BMRI5050 Clinical Psychiatry II
- BMRI5053 Bodies, Brains and Minds in Connection
- BMRI5052 Child and Youth Mental Health
- BMRI5012 Brain Ageing
- BMRI5054 Psychotherapy and Psychosocial Care

Other electives

Students are also able to choose other electives from the Master of Brain and Mind Sciences degree and other medical disciplines, including public health, paediatrics, critical care and trauma informed psychotherapy.

RANZCP Formal Education Course requirements

Psychiatry trainees who wish to meet the RANZCP requirements need to complete all of the following units of study over the 3 year program:

- BMRI5003 Clinical Psychiatry I
- BMRI5050 Clinical Psychiatry II
- BMRI5020 Research Enquiry
- BMRI5053 Bodies, Brains and Minds in Connection
- BMRI5052 Child and Youth Mental Health
- BMRI5012 Brain Ageing
- BMRI5054 Psychotherapy and Psychosocial Care

Non degree subjects also required for FEC

- Forensic Psychiatry which is a 2-4 week programme run every 2nd year.

Entry requirements

- Admission to the Master of Medicine (Psychiatry) or embedded degrees requires current employment in a RANZCP-accredited psychiatry training position or similar. Psychiatrists, both local and internationally trained, Career Medical Officers and GPs working within psychiatry are also eligible to apply.

Schedule of Units offered

The Master of Medicine (Psychiatry) can be completed on a part-time basis. The Formal Education Course units of study approved by the RANZCP are available over a three year pathway, some units you can choose to do at a time that aligns with the appropriate rotation. Please ensure you have completed all FEC required units in the timeframe, Master's students can leave the capstone till the following year if desired.

| Stage 1 (Same units every year) | | Page |
|---------------------------------|--|----------|
| Semester 1 | | |
| BMRI5003 | Clinical Psychiatry I | 22 |
| Semester 2 | | |
| BMRI5050 | Clinical Psychiatry II | 23 |
| Stage 2 | | |
| Semester 1 | | |
| BMRI5052 | Child and Adolescent Mental Health (online) | 25 |
| BMRI5054 | Psychotherapy and Psychosocial Care | 24 |
| BMRI5020 | Research Inquiry | 9 |
| | Capstone unit (BMRI5027- Leadership and Policy in Mental Health or BMRI5055-Research Project in Psychiatry) | 12,27 |
| Semester 2 | | |
| BMRI5053 | Bodies, Brains and Minds in Connection | 26 |
| BMRI5052 | Child and Adolescent Mental Health (online) | 25 |
| BMRI5012 | Brain Ageing | 15 |
| | Capstone unit (BMRI5001- Neuroethics, BMRI5027- Leadership and Policy in Mental Health or BMRI5055-Research Project in Psychiatry) | 13,12,27 |

Clinical Psychiatry I

BMRI5003 Semester 1

This unit of study provides psychiatry trainees with an opportunity to develop effective clinical skills including the psychiatric interview, mental state examination and biopsychosocial formulation. The management of psychiatric emergencies, risk assessment and the use of mental health legislation, as well as the relevance of diagnostic neuroimaging, are explored. This unit of study is designed to provide students with a deeper understanding of how genetic and environmental risk factors affect the developing individual to generate the clinical symptoms of psychiatric disorders. Students will examine psychotic and mood disorders along with alcohol and substance

use disorders. The course covers all aspects including

Credit points: 6 **Coordinator:** A/Prof Caryl Barnes **Session:** Semester 1 **Classes:** Tuesday afternoons

Assessment: Case history and diagnostic formulation (20%), neuroscience modules and quizzes (10%), case history (40%), oral presentation (30%).

Campus: Mallett Street **Delivery Mode:** Normal (seminar)

aetiology, phenomenology and epidemiology as well as the complexities around diagnosis and diagnostic classification systems. This will provide students with the framework on which to develop management plans for these disorders according to a biopsychosocial framework with an emphasis on psychosocial care and recovery principles. The principles of neuropsychopharmacology with a focus on antipsychotic medication, mood stabilisers, antidepressants and their potential adverse consequences are covered in depth. Students will learn from lecturers who are experts in their field and hear about exciting areas of psychiatric research in suicide prevention, e-mental health and nutrition.

| Week | Proposed Topic |
|------|---|
| 0 | Orientation Day - Psychiatric Emergencies, Mental Health Act, Acute Sedation guidelines, ECT, meet the Directors of Training. |
| 1 | Psychiatric assessment, MSE, Formulation Interview and assessment in substance use disorder setting |
| 2 | Interpersonal neurobiology, Interpersonal skills & de-escalation |
| 3 | Psychosis and schizophrenia |
| 4 | Antipsychotics |
| 5 | Recovery model and psychosocial management; Adverse Effects and Medication Monitoring |
| 6 | Neurobiology of depression; Psychosocial management of mood disorders; Early intervention in mood disorders |
| 7 | Diagnosis and classification of mood disorders; Pharmacology and Treatment of Acute mania/ Genetic Epidemiology |
| 8 | Bipolar Disorders; Food & mood |
| 9 | Alcohol; Opioids |
| 10 | Amphetamines and other stimulants; Cannabis |
| 11 | Prescription drug abuse and dependence |
| 12 | Introduction to Delirium & Dementia Mental health tribunals / Capacity and Guardianship |
| 13 | e-mental Health; Suicide Prevention |

* Assessments and timetables may change.

Learning outcomes

At the conclusion of this unit of study students should be able to:

- Understand the components of a comprehensive psychiatric and substance use assessment in order to assist them in their clinical role.
- Critically discuss the literature regarding the epidemiology, aetiology and clinical characteristics of psychotic, mood and substance use disorders.
- Identify and summarise biological, psychological, cultural and social contributors to the patient's illness and recovery in order to be able to present these in a formulation and differential diagnosis for patients presenting with psychotic, mood and substance use disorders.
- Construct comprehensive management plans under supervision using evidence-based biological and psychosocial approaches which can be applied in a recovery orientated, multidisciplinary team setting.
- Describe the principles and practical applications of involuntary and coercive treatment options in order to work within the relevant mental health and drug and alcohol legislation in their professional clinical role.

Clinical Psychiatry II

BMRI5050 Semester 2

This unit of study provides an overview of normal development, the formation of relational attachments, and psychological sequelae of trauma and loss. Students will examine anxiety disorders, trauma, ADHD, personality disorders, including the epidemiology, aetiology, phenomenology, management of these disorders and medicolegal considerations. In addition, there will be a focus on developing trainees' clinical skills towards a broader, wellrounded approach that involves psychosocial techniques, and working collaboratively with consumers and families in multidisciplinary and

community settings. The unit will provide psychiatry trainees with foundational knowledge and skills in psychotherapeutic techniques including psychodynamic theory, supportive psychotherapy, building a therapeutic alliance and cognitive behavioural therapy. Principles of recoveryoriented practice and traumainformed care, psychiatric ethics, history of psychiatry, rural and indigenous mental health will be studied as well as an introduction to leadership and medical management with workshops on professionalism and RANZCP MCQ practice.

Credit points: 6 **Coordinator:** A/Prof Caryl Barnes **Session:** Semester 2 **Classes:** Tuesday afternoons

Assessment: Attachment formulation (40%), reflective journal essay (25%), presentation (35%).

Campus: Mallett Street **Delivery Mode:** Normal (seminar)

| Week | Proposed Topic |
|------|---|
| 1 | Attachment theory and normal development |
| 2 | Trauma: Normal Responses, Complex trauma, Other Trauma Disorders and Trauma Informed Care |
| 3 | Introduction to Psychodynamic therapy & introducing PIT |
| 4 | Personality disorders |
| 5 | Anxiety disorders |
| 6 | Introduction to Cognitive Behavioural Therapy |
| 7 | Motivational Interviewing and brief Interventions |
| 8 | Introduction to Family therapy and family centred care |
| 9 | History of Psychiatry Ethics |
| 10 | Leadership and medical management |
| 11 | Aboriginal and Torres Strait Islander mental health Inhalant Use and Abuse |
| 12 | Rural Psychiatry Cultural Diversity |
| 13 | Complex case facilitated session |
| 14 | Addictions (online) |

* Assessments and timetables may change.

Learning outcomes

At the conclusion of this unit of study students should be able to:

- Discuss the epidemiology, aetiology and clinical characteristics of anxiety, trauma-related disorders and personality, with reference to key academic sources.
- Construct an attachment-based formulation and comprehensive biopsychosocial management plan for patients with these disorders.
- Understand and apply psychodynamic principles to the development of therapeutic relationships with patients, carers and relevant others.
- Identify the major principles of supportive psychotherapy and cognitive-behaviour therapy and develop skills to apply these therapies in routine clinical practice.
- Demonstrate an understanding of the needs and characteristics of special populations within psychiatry (including Indigenous, victims of trauma, culturally diverse and rural populations) and adapt clinical approaches accordingly.
- Demonstrate an awareness of the principles of personal recovery, trauma informed care, professionalism and psychiatric ethics and apply these to clinical professional practice.

Psychotherapy and Psychosocial Care

BMRI5054 Semester 1

This unit of study will foster the development of knowledge, skills and attitudes necessary to understand, evaluate and apply a wide range of evidencebased psychotherapeutic and psychosocial interventions, including integrated service delivery systems, for individuals with mental health disorders and their families. This unit will build on the psychosocial foundations and concepts of integrated formulation and care established in the first year courses to support trainees to understand the role of the major modalities of psychotherapy and psychosocial interventions which have been shown to significantly contribute to recovery and improved outcomes in mental health.

The unit offers an overview of assessment and the historical context of the development of theories and evidence, moving to frameworks of human development across the life span, expanding applied knowledge of attachment and exploring theories of learning and personality. Participants will then examine a range of specific psychological interventions aimed at different aspects of individual and systemic functioning including psychodynamic approaches, DBT, structured brief therapies, more advanced applications of CBT and group, couples, family and systems of care interventions. Teaching methods will focus on researchenhanced and casebased learning with an integrative approach, supplemented by elearning and audiovisual resources.

Credit points: 6 **Coordinator:** A/Prof Loyola McLean **Session:** Semester 2 **Classes:** Thursday afternoons

Assessment: Discussion Board (10%), Case Study (20%), presentation (30%), Case Study (40%).

Campus: Mallett Street **Delivery Mode:** Normal (seminar)

| Week | Proposed Topic |
|------|---|
| 1 | Overview of contemporary psychotherapy practice, evidence and process |
| 2 | Psychology theories: history and overview; Assessment: principles and overview |
| 3 | CBT advanced skills and applications |
| 4 | Structured brief therapies: ACT and Schema therapy |
| 5 | Psychodynamic theory, formulation and approaches Psychodynamic approaches- object relations |
| 6 | Psychodynamic approaches- Self-psychology & Intersubjectivity Conversational model |
| 7 | DBT overview |
| 8 | Open Dialogue |
| 9 | Group Theory, dynamics and therapy |
| 10 | Couples therapy |
| 11 | Family therapy |
| 12 | Journal Club Session: Learning Theory, Personality Theory, Systems Theory and Outcome research |
| 13 | Integrating care across time and systems: staged and multimodal approaches and cultural awareness |

* Assessments and timetables may change.

Learning outcomes

At the conclusion of this unit of study, students should be able to:

- Understand, evaluate and apply a wide range of evidence-based psychotherapeutic and psychosocial interventions to individuals and systems.
- Understand the historical context of the development of theories, basic principles and evidence in psychotherapy and psychosocial care.
- Conduct comprehensive biopsychosocio-cultural assessments and develop related formulations and tailored management plans including relevant psychosocial interventions for individuals and systems.
- Apply a nuanced, self-reflective understanding of the personal contribution to the therapeutic relationship and consider personal and professional development and self-care.
- Develop deeper understanding of the frameworks of human development across the life span and apply this to biopsychosocial formulation, management and reflective practice.
- Understand and apply theories of learning and personality to psychiatric assessment and treatment.
- Understand and participate in integrated service delivery systems with an awareness of concepts of prevention, early and assertive intervention, recovery, and trauma-informed care.

Child and Adolescent Mental Health

BMRI5052 Semester 1 & 2

This unit of study is designed for psychiatrists in training, doctors working in paediatrics and general practice and other health professionals working with children and adolescents with mental health and with their families and carers. The unit will draw on the clinical and research experience of child and adolescent psychiatrists, including those with subspecialty interest (addiction, forensic, consultation-liaison and perinatal included) from a group of professionals who work with children and young people (including paediatricians, psychologists, nurse practitioners and those working in health advocacy). This unit provides an overview of child development and mental health from conception through adolescence, looking at key genetic and environmental factors that contribute to clinical disorder. Major psychopathologies such as mood and

anxiety disorders, psychosis and neurodevelopmental disorders will be examined. Particular attention will be given to presentation across contexts, from community care to specialist inpatient and consultation settings. A key objective of this unit is to provide students with the fundamental knowledge required to assess and formulate child, adolescent and youth psychopathology. Students will be provided with an opportunity to develop skills in the assessment of young people and their families and carers and will learn about management options for common psychiatric presentations including psychological and pharmacological treatments as well as approaches to working with families, carers and wider systems including multidisciplinary teams, education and welfare sectors.

Credit points: 6 **Coordinator:** Dr Benjamin Hoadley **Session:** Semester 1 & 2 **Classes:** Online plus face to face component

Assessment: Discussion board (10%) essay (20%), critical essay (40%), oral presentation (20%)

Campus: Mallett Street **Delivery Mode:** Online (with face to face component)

| Week | Proposed Topic |
|------|---|
| 1 | Introduction and families, systems and carers |
| 2 | Overview of Childhood Development Diagnosis, classification and associated ethical issues in child and adolescent psychiatry |
| 3 | Attachment, Infant and early childhood mental health |
| 4 | Internalising disorders Somatic symptom disorder, pain & physical illness |
| 5 | <u>Assessment and interview of children and adolescents:</u> Pharmacological treatment |
| 6 | Intellectual disability; Neurodevelopmental disorders and Autism spectrum disorder; ADHD |
| 7 | Externalizing disorders (disorders of conduct) Alcohol and other drug disorders, and addiction MH and related legislation |
| 8 | <u>Subspecialty practice (forensic, addiction, family): Reflective practice</u> |
| 9 | Overview of adolescent development Overview of youth onset mental disorders Gender issues |
| 10 | Mood disorders, Eating disorders |
| 11 | Psychotic Disorders; OCD |
| 12 | Perinatal Psychiatry & Children of parents with mental illness, Childhood trauma and the impact of colonization/invasion |
| 13 | Child and parent-focused psychosocial treatments |

* Assessments and timetables may change.

*Underlined topics are taught face-to-face, all other topics taught online.

Learning outcomes

At the conclusion of this unit of study, students should be able to:

- Understand the importance of child and adolescent mental health, child development, and the evolution of child and adolescent psychiatry.
- Develop an approach to a comprehensive psychiatric assessment of a child or young person as informed by child development and by key principles for engaging and working with children and adolescents.
- Demonstrate the application of systemic and attachment theories to better inform biopsychosocial formulation.
- Utilize diagnostic systems in child and adolescent psychiatry to develop and support diagnostic prioritisation and differential diagnoses.
- Discuss specific issues of assessment, diagnosis and management for child and adolescent psychiatric presentations, including for neurodevelopmental disorders and those disorders subsumed by the constructs of internalising and externalising disorders.
- Develop working knowledge of specific issues of assessment, diagnosis and management across a range of contexts, including from parent and early childhood (perinatal), forensic, consultation and addiction subspecialties, whilst adhering to the relevant legislative framework.
- Synthesise the evidence base for psychopharmacology and psychological interventions to construct a comprehensive management plan in children and young people.
- Understand the impact of trauma, including colonisation on indigenous people today.
- Develop an awareness of reflective practice as a means of integrating knowledge, skill and clinical experience to produce and effectively communicate synthesised information.

Bodies, Brains and Minds in Connection

BMRI5053 Semester 2

This unit of study provides Stage 2 psychiatry trainees and other select clinicians with an opportunity to develop knowledge, skills and attitudes in biopsychosociocultural approaches, Consultation-Liaison (C-L) Psychiatry and integrative medicine, by exploring psychiatry at the interface with medicine and society. The unit's approach will emphasise the interconnectedness of body, brain and mind in individuals and surrounding systems. What's different about C-L will be explored in this unit, grounded in an understanding of the normal and dysregulated responses to stress, trauma and medical illness, including pain, expanding Stage 1 concepts of formulation, multimodal and tailor-made management. Principles of containment, stigma and models of care in medical settings will be

studied as will disorders of basic regulation: sleep, eating and sexual disorders. We will examine psychiatry in particular settings: the Perinatal period; Intellectual and Developmental Disability; Pain; Oncology; Spinal; Burns; Neuropsychiatry. This unit will also deepen knowledge of ECT and introduce the newer biological treatments such as TMS. This unit aims to enrich the trainee psychiatrist's approaches to working collaboratively with consumers, families, treatment teams and care systems in multidisciplinary hospital and community settings. Seminars will emphasise an enquiring approach, based on evidence and engagement with the background medical and general communities.

Credit points: 6 **Coordinator:** A/Prof Loyola McLean **Session:** Semester 2 **Classes:** Thursday afternoons
Assessment: Delirium discussion board (10%), draft essay (10%), professional presentation (40%), essay (40%)
Campus: Mallett Street **Delivery Mode:** Normal (seminar)

| Week | Seminar topic |
|------|--|
| 1 | How is consultation-liaison different? -The HIV case study |
| 2 | Stress and its satellites Adjustment to illness and illness behaviour |
| 3 | Psychiatric sequelae of medical conditions and vice versa C-L in action: delirium |
| 4 | The body talks: somatic symptoms and related disorders |
| 5 | Collaborative care and integrative care models CL in the ED |
| 6 | C-L settings case studies - Renal C-L settings case studies - Oncology |
| 7 | C-L settings case studies - FND C-L settings case studies -Sleep disorders |
| 8 | Antenatal and perinatal |
| 9 | Eating disorders |
| 10 | Sexual Disorders |
| 11 | Pain TBI |
| 12 | Epilepsy and Psychogenic non-epileptic seizures |
| 13 | Intellectual & developmental disabilities Setting up a service |

* Assessments and timetables may change.

Learning outcomes

At the conclusion of this unit of study, students should be able to:

- Understand the similarities and differences of working in Consultation and Liaison psychiatry and illustrate this through a closer knowledge of one or more C-L contexts.
- Demonstrate a developing knowledge of systems in healthcare settings
- Demonstrate an understanding of the particular medication needs of the medically ill or frail.
- Understand and apply concepts of stress, coping and stress dysregulation in individuals and systems including grief, loss, trauma and pain.
- Develop biopsychosocial formulations for C-L problems and develop a relevant integrated multimodal management plans.
- Demonstrate and apply an understanding of stigma, cultural competence and the role of containment and conflict resolution in C-L contexts.
- Understand and evaluate adjustment to illness and the sick role and the potential impact on normal development, comorbidity and health care presentations.
- Understand the impact of psychiatric illness on medical health and wellbeing.
- Critically appraise the use of ECT and novel neuropsychiatric treatments

Research Project in Psychiatry

BMRI5055 Semester 1 and/or 2 CAPSTONE ELECTIVE

This practically based elective unit of study aims to provide a capstone experience for those psychiatry trainees wishing to gain experience in empirical research (quantitative or qualitative). This unit is to be taken over one semester, 7 hours per week, or may be extended over two semesters, 3½ hours per week. Students will learn a variety of skills for acquisition, analysis and presentation of data particular to their field of interest and will write up their project as a draft research publication. Potential projects can be reviewed by students in the semester prior to commencement so that they can familiarise themselves with the research conducted at the Brain and Mind Centre, including placements

in clinical research groups and basic neuroscience laboratories, depending on student skills and supervisor availability. Alternatively, students may consult their local training networks and propose a supervised project well prior to the commencement of the unit. Projects may contribute to the Scholarly Project for the RANZCP CBFP if approved by the RANZCP Branch Training Committee. Acceptance to a given project will be selective, requiring departmental permission.

NB: This is a capstone unit of study.

Credit points: 6 **Teacher/Coordinator:** A/Prof Loyola McLean **Sessions:** Semester 1 and 2 **Classes:** 1 day per week
Assessment: Introductory presentation (10%), thesis (40%), supervisor evaluation (40%) final presentation (10%)
Campus: Mallett Street **Delivery Mode:** Field Experience

| Proposed topic | |
|------------------|--|
| 7 hours per week | Research topic to be discussed with supervisor |

* Assessments and timetables may change.

Learning outcomes

At the conclusion of this unit of study students should be able to:

- Analyse a broad scientific question and define specific research objectives.
- Explain how the techniques being employed in the project address specific research aims and the strengths and limitations of different approaches.
- Assess and carry out protocols for data acquisition within the project.
- Present data using appropriate figures and written language.
- Apply statistical tests, qualitative analysis or integrative approaches to examine trends in the data.
- Interpret the project's research findings in the context of the broader field and the discuss implications and limitations of the project.
- Produce a written summary of the research project in a thesis format appropriate for academic publication.

Note:

Department permission required for enrolment. Students will be accepted based on availability of places and suitability of academic background.

Postgraduate Research Degrees in Brain and Mind Sciences

What is a research degree?

Research degrees are quite different from coursework degrees in that the majority of work is self-directed study with supervision by a group of academics, working on a project that aims to make an original contribution to knowledge. Some degrees require a limited amount of coursework, but at least two thirds of the degree must be by research for the degree to be considered a higher degree by research.

Apart from any required coursework, the assessment of a research degree is through the examination of a thesis written by the student. The thesis is sent to a group of examiners and their recommendations form the basis for the outcome of the examination.

Postgraduate research degrees appeal to different people for different reasons. You may want to:

- investigate and explore in depth a specialised area of interest;
- demonstrate your capability to apply sustained effort and intellectual rigor to a complex problem;
- differentiate yourself from the masses and receive professional parity with clinical peers; and/or
- advance your career – a postgraduate research degree can help progress your career and obtain roles in government and industrial research and developmental organisations.

Master of Philosophy

1–2 years full-time

2–4 years part-time

The Master of Philosophy (MPhil) is aimed at those who intend to pursue careers in medical or health research or who wish to upgrade their qualifications to give them a competitive edge in their employment by demonstrating superior ability and research experience. It may also be used as a stepping stone to commencing a Doctor of Philosophy (PhD).

The MPhil is a research degree in which students undertake supervised research leading to the production of a thesis. Admission normally requires a bachelor's degree with first or second class honours from the University of Sydney or another approved institution, or equivalent qualification. The faculty may admit an applicant who has obtained at least a credit in the highest course available in the subject or subjects relevant to the proposed course of advanced study and research. Full-time MPhil students have a minimum of 1 year and maximum of 2 years to submit a thesis for examination. Part-time students have a minimum of 2 years and a maximum of 4 years to submit. MPhil students are required to complete one 6-credit-point unit of study, MEDF5005 Research Methods and Ethics, early in their candidature to provide them with guidance on areas relating to research such as writing papers and theses, reading and critiquing technical papers and writing literature reviews. Otherwise, MPhil students are not normally required to attend classes or undertake coursework units of study, with the thesis being the major examinable assessment requirement for the degree.

Doctor of Philosophy

3½ years full-time

7 years part-time

The Doctor of Philosophy (PhD) allows you to pursue research from a wide range of areas in which the faculty has expertise. The degree has two purposes: to prepare a substantial piece of work representing a significant contribution in a particular field of study, and to train candidates in general research methodology and equip them with transferable research skills.

The PhD is aimed at those who intend to pursue careers in medical or health research or who wish to gain a competitive edge by demonstrating superior ability and research experience. It takes a minimum of 3½ years' full-time or 7 years' part-time study to complete. Applicants of the Doctor of Philosophy should normally hold a relevant master's degree or a bachelor's degree with first or second class honours. In addition to these academic requirements the Associate Dean (HDR) must certify that your proposed research is appropriate and acceptable and that in addition to the academic qualifications you have the necessary training and ability to pursue the proposed research; and that there are sufficient supervisory and other resources and facilities available to enable your candidature to be completed successfully.

Initial Steps to become a postgraduate research student at the Brain and Mind Centre

Are you academically qualified to apply for a higher degree by research?

In general, to be eligible for admission to a higher degree by research, you need to have undertaken a significant research project or thesis in your previous university level studies. For example, the equivalent of an Australian Honours degree or a Masters by research or a Masters by coursework with a thesis component.

Choose a project

Browse the Brain and Mind Centre's research pages

<http://sydney.edu.au/brain-mind/our-research.html>

Once you have identified an area of interest, contact the listed supervisor, provide your resume and arrange for a visit to discuss with them the possibility of studying with them at the Brain and Mind Centre.

Seek approval with a potential supervisor

Discuss the project details with your potential supervisor and provide them with a draft project proposal. (You will need to upload the proposal with your application.)

You may be able to apply for a scholarship

Apply for a scholarship with the University of Sydney or other funding body.

Proceed to applying for enrolment



How to apply

Postgraduate coursework applicants

Domestic applicants

If you are:

- an Australian or New Zealand citizen; OR
- you hold dual citizenship with Australia or New Zealand and another country; OR
- you are an Australian permanent resident

then you are a “domestic applicant”.

For detailed information about application, admission and enrolment procedures, go to: <http://sydney.edu.au/study/admissions/apply/how-to-apply.html> All applications need to be completed and submitted online.

Closing dates for domestic applications

Brain and Mind Sciences degrees

30 November 2020* for Semester 1

(commencement in Feb/March 2021)

Master of Medicine (Psychiatry)

31 January 2021 for semester 1 commencement

30 June 2021 for semester 2 commencement

* Note that application closing dates for some scholarships may vary and therefore students should refer to the website: <http://sydney.edu.au/scholarships/> for specific application closing dates.

International applicants

If you do not meet the criteria listed above to be considered a domestic applicant, then you are an “international applicant”.

For detailed information about application, admission and enrolment procedures for international students, visit <http://sydney.edu.au/study/admissions/international-students-why-choose-sydney.html>

All applications need to be completed and submitted online.

Closing dates for international applications

31 October 2020 for Semester 1

(commencement in Feb/March 2021)

Postgraduate research applicants

In postgraduate research courses, students undertake a supervised research project leading to the production of a thesis. For information on the research application process, refer to the website <http://sydney.edu.au/study/find-a-course/postgraduate-study/postgraduate-research.html>

Fees and scholarships

For detailed information about fees and scholarships for domestic students, <http://sydney.edu.au/scholarships/research/>

English language requirements

If English is not your first language, you must demonstrate English language proficiency by one of the following means before admission can be confirmed:

- Provide evidence of satisfactory achievement in tertiary studies in which the exclusive language of the institution and the exclusive language of instruction, examination and assessment was English. These studies must have been undertaken no more than five years before you submit your application.
- Achieve the required grades in “English for Academic Purposes” at the University’s Centre for English Teaching. The course must have been completed no more than two years before you submit your application.
- Achieve the required grades on an International English Language Testing System (IELTS) or Test of English as a Foreign Language (TOEFL) test.

For more information on these tests, visit the IELTS website: <http://www.ielts.org> or the TOEFL website: www.ets.org/toefl

Please refer to: <http://sydney.edu.au/study/admissions/apply/entry-requirements/english-language-requirements.html> for full details.

Dr John Hayman

Consultant Psychiatrist and Graduate of Master of Brain and Mind Sciences, 2013:

"The course has greatly enriched my clinical practice, adding huge depth of additional understanding and perspective to my previous clinical knowledge and experience.

"To me, the Masters course felt like doing medicine and psychiatry all over again, informed by the latest research in neuroscience, and exposed to teachers of a high calibre.

My clinical work now has a greater authority in its delivery and my patients are often fascinated by explanations that describe

the working of the brain in relation to their clinical problem.

*"I had been waiting many years for a course like that presented at the BMRI.**

"The course over-delivered in abundance. The scope of its content and clinical enrichment far exceeded what I had anticipated and hoped for. I am happy to personally recommend it to anyone considering further study whether they are contemplating a clinical or research career."

* The Brain and Mind Centre was formerly known as the BMRI until mid-2015.

For additional information, contact:

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