



UNSW
THE UNIVERSITY OF NEW SOUTH WALES
SYDNEY • AUSTRALIA



PhD SCHOLARSHIPS – Up to 10 positions

FACULTY OF MEDICINE

Australian Institute of Health Innovation

The Australian Institute of Health Innovation (AIHI) brings together three successful research centres working in clinical governance, health services research and health informatics. The Director of AIHI, [Professor Jeffrey Braithwaite](#) and his co-investigators Professors Johanna Westbrook, Enrico Coiera, William Runciman and Richard Day have been awarded an \$8.4 million NHMRC Program Grant over five years. The Chief Investigators have appointments representing the universities of New South Wales, Sydney and South Australia. There are several opportunities for career defining post graduate research degrees. Depending on area of interest the candidates may choose enrolment with one of the investigators as PhD supervisor.

Improving quality and safety in healthcare has proved intractable despite large investments indicating a new approach is warranted. The NH&MRC Patient Safety Program will provide new research evidence to inform the design of better and safer systems of care. Four linked research programs will elucidate: 1: Which plans are being used to treat Australian patients, and why are they chosen? 2: What system problems perpetuate flawed plans and failures of their execution? 3: Which information technology interventions are most likely to enhance the selection of the right plan, and its effective execution? 4: Can a theoretical synthesis of this knowledge build a safety model that predicts the dynamic and complex interactions of health services?

Candidates are invited from a variety of academic backgrounds such as but not limited to: sociology, psychology, medicine, informatics, science, public health, computing or pharmacy. Examples of research questions are given below:

1. Title: Optimising the use of after-hours medical care. Chief Investigator Professor Enrico Coiera
2. Title: Analysis of quality of care in the obese. Chief Investigator Professor Enrico Coiera
3. Title: Network effects in the provision of recommended care: from the policy-maker to the coal-face. Chief Investigator Professor Enrico Coiera
4. Title: Causes and implications of variations in laboratory testing. Chief Investigator Professor Enrico Coiera
5. Title: Supporting patient involvement in their health care. Chief Investigator Professor William Runciman

6. Title: Behaviour and choices of healthcare professionals. Chief Investigator Professor William Runciman
7. Title: Monitoring compliance with recommended care. Chief Investigator Professor William Runciman
8. Title: The effectiveness of interruption vests to reduce interruptions and medication errors in hospitals. Chief Investigators Professors Johanna Westbrook and Ric Day
9. Title: Failed execution of care plans assigned during ward rounds in hospital. Chief Investigators Professors Johanna Westbrook and Ric Day
10. Title: Why patients with X condition fail to receive recommended care in hospital. Chief Investigators Professors Johanna Westbrook and Ric Day
11. Title: Computer device use in hospitals and infection rates. Chief Investigators Professors Johanna Westbrook and Ric Day
12. Title: Why are nurses interrupted during medication administration and when does it matter? Chief Investigators Professors Johanna Westbrook, Ric Day
13. Title: Content for electronic Decision Support Tools to individualise dosing of critical medicines e.g. metformin and allopurinol. Chief Investigator Professor Ric Day
14. Title: Implementation of electronic decision support tools for safer treatment of individual patients. Chief Investigators Professors Johanna Westbrook, Ric Day and Enrico Coiera
15. Title: Enhance outcomes in hospitals that adopt Medical Emergency Teams (MET). Chief Investigators: Professors Ken Hillman and Jeffrey Braithwaite
16. Title: International medical graduates: pitfalls and barriers to enabling inter-professional practice and quality and safety in the delivery of health care. Chief Investigators Professors Jeffrey Braithwaite, Bill Runciman and Ken Hillman

The scholarship provides an annual tax-exempt stipend of \$26,669 for three years full time with the possibility of a six month extension and will be awarded on a competitive basis. The scholarships will commence in 2010 or 2011

MAIN DUTIES

1. Conduct innovative research to support the goals of the NH&MRC Patient Safety Program.
2. Report and document research methodology, statistical analyses and findings appropriately.
3. Conduct comprehensive literature reviews
4. Prepare submissions to human research ethics committees, including applications, any amendments and annual reports
5. Present research findings and write manuscripts for publication in relevant journals.
6. prepare a first rate thesis for submission to the examiners

SELECTION CRITERIA

1. Undergraduate degree, preferably with honours
2. Excellent organisational skills and demonstrated capacity to meet milestones.
3. Demonstrable excellent communication and interpersonal skills.
4. Advanced computer skills in spreadsheets, database applications, email protocols and internet interfaces.
5. Ability to understand and comply with the statutory privacy and ethical requirements for research.
6. Knowledge of OHS responsibilities and commitment to attending relevant OHS training.
7. Knowledge of equal opportunity principles.
8. Prior research experience leading to publications in peer reviewed journals.
9. Eligible for admission into a PhD program at UNSW, USyd or Uni South Australia (successful enrolment will be essential prior to commencing research) (<http://www.grs.unsw.edu.au/futurestudents/futurehome.html>).

APPLICATIONS

Applications must include the following:

- curriculum vitae
- a certified copy of academic transcripts
- proof of citizenship or permanent residency
- the names and contact details of at least two referees
- the names of preferred PhD supervisor and co-supervisor.

Please contact Professor Jeffrey Braithwaite j.braithwaite@unsw.edu.au in the first instance for further information.

After discussion, preferred applicants will submit an application for admission to a higher degree research program.

<http://www.grs.unsw.edu.au/futurestudents/apply.html>

http://www.usyd.edu.au/ro/training/postgraduate_awards.shtml

<http://www.unisa.edu.au/resdegrees/programs/programs.asp>

Relationship between the NH&MRC Patient Safety Program CI's and collaborating institutions:

University of NSW, University of Sydney and the University of South Australia

