**Showcase of Good Practice in Undergraduate Research and Inquiry**

**Who should attend:** All welcome

**Date:** Friday 21st September 2012

**Time:** 11.30am to 13.00pm and continued at 1.30pm to 3.15pm

**Convenor:** Professor Angela Brew

**Venue:** Y3A 211

The Showcase aims to demonstrate examples of good practice in how to actively engage undergraduate students in research. Macquarie academics from different departments have been invited to share their experience of engaging students in research. Presentations will also provide guidance in Ethics protocol and Ethical practice in involving students in research.

Professor Mike Neary, Dean of Teaching and Learning at the University of Lincoln, will open the Showcase with a presentation on Student as Producer - Reinventing the Undergraduate Curriculum.

**Presentations**

11.30am to 13.00pm

Prof Mike Neary, Teaching and Learning, University of Lincoln, UK:

***Student as Producer*- Reinventing the Undergraduate Curriculum** [ 90 mins]

Student as Producer is the organising principle for all student education at the University of Lincoln. The key features of Student as Producer are research-engaged teaching and including students in the design and delivery of teaching and learning events.  The aim of this session is provide and overview of Student as Producer, including some of the ideas that have underpinned its development and the way in which these ideas have been brought to life across the University of Lincoln. This will be an interactive session with lots of opportunity for debate and discussion.

Continued 1.30pm to 3.15pm

Aron Downie, Department of Chiropractics, Macquarie University:

**Using social media to stimulate undergraduate interest in research** [20 min]

This project describes the creation and operation of a Facebook group with the purpose of stimulating debate on research related to evidence based practice within Chiropractic. The group has nearly 800 members and consists of present and past students, academics and has drawn international interest. The group has existed for 8 months and evolved from a Blackboard unit forum based upon a “community of enquiry”.

Dr Matt Bower, Department of Education, Macquarie University:

**Using a technology mediated approach to develop Education Students' Research Capabilities** [20 min]

This examines the impact of a LAMS activity designed to develop the research-based thinking capabilities of pre-service teachers. The technology requires students to formalise how they would design a lesson to investigate an educational research question. The approach resulted in small but significant shifts in students’ perceptions of the importance of research in learning and teaching, as well as improvements in their understanding of research issues.

Dr Michaela Baker, Alison Beale, Laura Hammersley, Dr Kate Lloyd, Dr Anne-Louise Semple and Dr Karolyn White, PACE Units, Macquarie University:

**The PACE Ethical Practice Module and the PACE Ethics Protocol** [20 min]

This presentation discusses the development of the PACE Ethical Practice Module, highlighting the module's innovative and trans-disciplinary nature. It examines the module's content and structure, as well as potential modes of delivery. It explains the connection between the module and the PACE Ethics Protocol and accompanying resources. Preliminary data from a pilot evaluation of the module will also be presented.

Dr Ayse Bilgin, A/Prof Peter Petocz and Students: Alexander Cantori, Daniele Capraro, James Freer, Gayle Frez, Hyun Ha Kim, Sen Lu; Department of Statistics, Macquarie University:

**Students’ perspective and experience of being a researcher** [20 min]

Traditional statistics education at universities across the world involves teaching students different techniques to apply to different problems. There seems to be a limited amount of time educators have with the students filled with formulae; proof of formulae; calculations and interpretation of the results. It is highly unlikely that students will have access to any real data, and any real client. They usually work on simple data set(s) to demonstrate the application of a certain statistical technique that they just learnt. Our Capstone unit for the Statistics Major is different from many statistical units. It integrates the core concepts of first-, second- and third-year statistics units in the practical context of solving real research problems by the application of statistical ideas and methods. In particular, the unit aims to give students exposure to the statistical and non-statistical issues that arise in statistical problem solving, and to provide an experiential background in statistical consulting. Students develop the ability to appreciate the nature of statistical problems and discuss the statistical problem solving cycle; listen to a client's statement of a problem and ask appropriate questions for clarification; recognise appropriate statistical techniques for use in a variety of problems, and apply these techniques competently; recognise situations in which familiar techniques do not apply and search the literature for appropriate alternative techniques; write reports at an appropriate statistical level for the client; give a verbal summary of a statistical investigation at a level appropriate for the audience; and discuss the ethical aspects and implications of professional statistical work. In this talk, we will present students’ perspectives and experiences of being a researcher.