

School of Public Health - PhD Student Project

Title: Aetiology of the development of obesity, diabetes and metabolic syndrome

Supervisor: Associate Professor Abdullah Al Mamun
(<http://researchers.uq.edu.au/researcher/1318>)

Funding: Student Scholarship required, top-up funding may be available to suitable candidate

Student Objectives:

- Advance understanding of life course epidemiology in cardiovascular health
- Learn and apply a variety of statistical techniques in longitudinal cohort study
- Provide regular research updates through oral and written presentations
- Interact with an interdisciplinary team of researchers in order to optimise research outcomes

Project Outline:

The link between obesity, metabolic syndrome (MetS) and diabetes are well characterized in adult populations. The growing evidence suggests that precursors of these health problems are driven by the growing obesity epidemic in young population. However, the early origins, progression and causal pathways to these poor health outcomes are relatively unknown. The Mater University of Queensland Study of Pregnancy (MUSP) and its offspring is the only Australian birth cohort study with the capacity to investigate this scientific query, since the study has taken place at the same time as the emerging population obesity epidemic in Australia. MUSP has prospectively collected all relevant data at pregnancy, childhood, adolescence and in young adulthood. This research project aims to use the MUSP unique existing data up to 30 year follow-up to investigate the early origins, progression and causal pathways to young adults' obesity, MetS and diabetes.

The candidate:

We are seeking a candidate who has an excellent academic record and a particular interest in the topic. A strong (bio)statistical, epidemiological or clinical background is essential as is a commitment to conduct high quality research.

Achievable Outcomes:

- A PhD in Public Health
- Multiple scientific papers in high impact research journals
- Experience with oral/written presentations at national/international conferences