CANBERRA HOSPITAL
PRIVATE PRACTICE FUND
VACATION SCHOLARSHIPS
2010/2011
PROJECT SUMMARY

Title: Has the incidence of caesarean section for extreme premature birth increased over the last 15 years and does caesarean delivery increase survival outcome?

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Outline of the project:
With improving survival of the extremely premature neonate the mode of delivery may have subsequently altered, with a lower threshold for caesarean section (CS). The mode of delivery for the extremely premature infant is controversial but in a recent study CS did appear to reduce neonatal mortality in those infants with a birthweight of 1000-1499 grams. A cost-effect analysis was performed which indicated that although probability of survival may be increased a non-aggressive management strategy was more cost-effective. However, it is important to know accurate information about neonatal outcomes as this strongly influences physician counselling to parents and parental decision making.

Using Australian data from the Australian and New Zealand Network, we aim to determine:
- The incidence of CS in neonates born extremely premature (< 29 weeks gestation)
- If CS is associated with improved survival in neonates born extremely premature

The specific hypotheses will be:
- The incidence of CS for neonates born extremely premature has not changed over the last 15 years
- Delivery by CS is associated with improved survival in neonates born extremely premature

Preferred study discipline being undertaken by the student:
Neonatal Medicine

Potential benefits to the student and to the department:
To Student:
1. opportunity to experience clinical research based activities in Neonatal Medicine under the guidance of clinician and researcher in the field
2. opportunity to observe the daily work of NICU (student will be introduced to NICU to understand the study and its relevance to daily clinical practice)

To the Department:
1. audit of outcome of neonates across Australia and New Zealand
2. result of the study will be shared with other NICU's through publication in medical media

Department within Canberra Hospital where the student will be based:
Department of Neonatology, Centre for Newborn Care