

ARCH in 2013



Australian Research Centre for Health of Women and Babies

HIGHLIGHTS FOR 2013

- **Evidence Synthesis:** 20 high quality systematic reviews relevant to women and babies' health prepared and published.
- **Randomised Trials:** multicentre A*STEROID Trial (betamethasone or dexamethasone for preventing neonatal morbidity) successfully completed recruitment through ARCH's strong national and international trials network.
- **New Grants:** CIs on stillbirth prevention RCT funded by NHMRC, funding for WISH Follow-Up Project (implementation of antenatal magnesium sulphate) from the Cerebral Palsy Alliance and ongoing funding from NHMRC to support Australian Cochrane and Pregnancy and Childbirth review authors.
- **Health Advice and Guidelines:** appointed to the NHMRC Panel of 'Providers with expertise relevant to the development and presentation of health advice'.
- **'Born too soon' Research Priority:** leading and developing one of the Robinson Research Institute's key priorities.

Achievements and Contributions



Staff and students

Research Leaders and Fellows:

Caroline Crowther, Philippa Middleton, Emily Bain, Tanya Bubner.

Research Coordination:

Pat Ashwood, Daniela Gagliardi, Michaela Jarrett, Ellen Lyrtzis.

Research Support:

Claire Binnion, Mary Paleologos, Elen Shute, Melissa Ewens, Sophie Trenowden.

Data Management:

Vincent Ball, Sasha Zhang, Tran son Thach, Lisa Yelland, Kaye Robinson, Carol Holst.

Postgraduate Students:

Allan Cyna, Emer Heatley, Shanshan Han, Zohra Lassi, Laura Spencer, Zhixian Sui, Angela Brown.



- **Ongoing major trials** – evaluating care during pregnancy and childbirth, for gestational diabetes and surrounding preterm birth (A*STEROID, IDEAL, MAGENTA, DIAMIND, PROGRESS, BAC).
http://www.adelaide.edu.au/arch/research/clinical_trials/
- **New studies** – Philippa Middleton and Caroline Crowther are CIs on the new NHMRC cluster trial for preventing stillbirth ‘**My baby’s movements**’ headed by Vicki Flenady at the Mater Medical Research Institute; and funding from the Cerebral Palsy Alliance for **WISH Follow-up Project** (Working to Improve Survival and Health for babies born very preterm).
http://www.adelaide.edu.au/arch/research/translational_health/wish/
- **Nearing completion** - two international individual participant data (IPD) meta-analysis collaborations on treatments prior to preterm birth:
 - AMICABLE (Antenatal Magnesium IPD International Collaboration: Assessing the Benefits for Babies using the Best Level of Evidence);
 - PRECISE (Prenatal REpeat Corticosteroid International IPD Study Group).
<http://www.adelaide.edu.au/arch/research/IPDProgress/>
- **Preterm birth** – Philippa Middleton leads the ‘Born too soon’ Robinson Research Institute research priority. An enthusiastic interdisciplinary team is working on a number of innovative research proposals to unravel the mechanisms of preterm birth and ultimately to find therapies for prevention.
- **Aboriginal health** – as part of our evaluation of the SA Aboriginal Family Birthing Program, we have interviewed over one hundred individuals and will present our findings in the first half of 2014.
- **Guidelines** – ARCH continues to be very active in teams developing clinical practice guidelines, including NHMRC antenatal care, Australian and New Zealand guidelines on antenatal corticosteroids prior to preterm birth and New Zealand guidelines on gestational diabetes.
- **NHMRC Evidence Panel** – ARCH’s bid for a further appointment to the NHMRC Evidence Panel (panel of ‘Providers with expertise relevant to the development and presentation of health advice’) was successful.
- **Cochrane Collaboration** – our Cochrane Pregnancy and Childbirth satellite (recently refunded by NHMRC) supports over 200 Australian and New Zealand review authors who contribute to a third of Cochrane and Pregnancy Childbirth reviews published in the Cochrane Library (www.thecochranelibrary.com.) We received UK NIHR funding to complete a priority review on ‘Asthma in pregnancy’. 2013 was a special year for the Cochrane Collaboration being its 20th anniversary. ARCH members were able to attend the 21st Cochrane Colloquium in Quebec City, Canada and the Australasian Cochrane Centre Symposium on the future of Cochrane reviews during this anniversary year.
- **Australian and New Zealand Maternal and Perinatal trials** – we have revamped our database of randomised trials with the help of the Perinatal Society of Australia and New Zealand, with entries for 400 active or recently active trials. Over 100 trials are currently recruiting or about to recruit; indicating the high level of clinical trial activity in this priority area.

Congratulations to our dedicated staff and students who are making a positive impact on the health of women and babies in Australia and beyond.

Professor Caroline Crowther, Clinical Director ARCH

Completions and Awards

Awards:

- Norbert Freinkel Lecture Award to Professor Caroline Crowther by the American Diabetes Association in June 2013. Recognising a researcher who has made an outstanding contribution to the understanding and treatment of diabetes in pregnancy.
- Ian McDonald Memorial Oration, RANZCOG 2013 Annual Scientific Meeting given by Professor Caroline Crowther on “Evidently, Evidence in Obstetrics is Essential”.

PhD Completions:

- Allan Cyna – PhD – Hypnosis antenatal training for childbirth 2004-2013.
- Zhixian Sui – PhD – Effect of exercise on limiting weight gain for women who are overweight or obese in pregnancy 2010-2013.

Travel Grants:

- Emily Bain – from Ian Potter Foundation and The Robinson Research Institute to present “The antenatal magnesium sulphate for fetal neuroprotection research cycle: beyond the meta-analysis”. 21st Cochrane Colloquium, Quebec City, Canada.



Event Participation

ARCH had a high profile at the Perinatal Society of Australia and New Zealand conference held in Adelaide, April 2013:

- Caroline Crowther presented results from the multicentre PROGRESS Trial (progesterone after previous preterm birth);
- On behalf of the WISH Project Team, Philippa Middleton presented on the implementation progress of the clinical practice guideline for antenatal magnesium sulphate for neuroprotection in Australia and New Zealand;
- ARCH personnel organised a plenary session on Aboriginal health which received excellent feedback.

Emily Bain gave an oral presentation on the antenatal magnesium ‘story’ at the international Cochrane Colloquium in September in Quebec, Canada.

Philippa Middleton presented “Getting glucose right – pregnancy, inter-pregnancy and inter-generational benefits” at the “Food for Thought: How Nutrition in Early Life Determines Lifelong Metabolic Fate” seminar, University of Auckland, New Zealand.

Caroline Crowther gave an invited presentation on the “Impact of evidence from the Cochrane Collaboration on care for women and babies” at the 35th anniversary of the National Perinatal Epidemiology Unit in the UK.

ARCH hosted the “Corticosteroids and Preterm Birth Conference”, prior to our PRECISE IPD Collaborators’ meeting, where National and International collaborators and ARCH staff networked on current knowledge and new initiatives.

At the November Robinson Institute Research Symposium, Honours student, Laura Spencer described her experiences as the mother of a preterm baby and how these influenced her decision to embark on a career in mothers’ and babies’ health.

Thach son Tran participated in the WHO technical consultation meeting in Geneva, Switzerland for the WHO recommendations on Postpartum Hemorrhage.

Caroline Crowther was invited onto the panel for WHO Priorities for Preterm Birth and WHO Development of Research Priorities in Maternal and Perinatal Health meetings in Geneva, Switzerland.

Making a meaningful difference for women and babies



Publications

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ARCH The Robinson Research Institute,

Discipline of Obstetrics and Gynaecology, The University of Adelaide,
Women's and Children's Hospital,

72 King William Road, North Adelaide, SA 5006, Australia

arch@adelaide.edu.au

Phone: +61 8 8161 7619

Fax: +61 8 8161 7652