



Perinatal Society of Australia & New Zealand

Annual Scientific Congress 2018

Whenua ki Whānau
Nurturing the people of our land



ANZ Viaduct Events Centre
Auckland, New Zealand
25 - 28 March 2018

**PROGRAMME
AT A GLANCE**

1300-1700 Registration - Foyer of ANZ Viaduct Centre

1800-2000 Official opening and cocktail reception - Join us for the official opening of PSANZ 2018 - this is included in your registration

Venue: ANZ Viaduct Centre Exhibition Hall and Waiheke Room 1

0700-0800 Breakfast Sessions - see previous pages for details (Registration required for these sessions)

0700-0830 Registration - Foyer of ANZ Viaduct Centre

0815-0845 Plenary Session - On the Couch with JM - Get to know our Keynote Speakers

Jonathan Morris (PSANZ immediate Past President), Marcus Davey, Anna David and Sara Kenyon

0845-1045 Plenary Session - Preventing preterm birth and its consequences: Steps towards the Holy Grail of perinatal care

Preterm birth continues to be the leading cause of neonatal morbidity and mortality with ever-increasing evidence of life-long consequences. In this plenary session leading international researchers will consider different approaches for the future of prevention of preterm birth and its consequences including the impact of a multi-faceted state-wide pregnancy intervention programme; the early identification of those at most risk allowing potential for earlier therapeutic intervention and exciting insights into the potential of one of the very latest, most innovative ways to provide care for the premature infant in the future, 'a baby in a bag'? This session will open with a consumer's perspective on preterm birth followed by:

- **The Western Australian Preterm Birth Prevention Initiative** - Professor John Newnham
- **Early identification of infants with cerebral palsy and interventions to harness neuroplasticity** - Associate Professor Alicia Spittle
- **The Next Step in Preterm Birth Care - the Artificial Womb** - Associate Professor Marcus Davey

1045-1115 Morning Tea - Exhibition Area

1115-1230 Concurrent Abstract Session One - Free Papers (6 streams)

1230-1315 Lunch - Exhibition Area

1315-1515 Plenary Session - Best of the Best

This plenary session will include a President's selection of the six top submitted abstracts across all PSANZ disciplines and feature the two selected 'late breakers'. This session will provide you with the very latest new and exciting research findings across the field of maternal and perinatal health

1515-1545 Afternoon Tea - Exhibition Area

1. Best Evidence and Best Choices for Pregnancy Care hosted by the PSANZ Policy and PSANZ Equity Subcommittees

The PSANZ Policy Subcommittee have put together some of the very latest and best policy initiatives across Australia and New Zealand. This is an opportunity to hear about the work of our policy people and other exciting initiatives and guidelines that have just been released or soon to be launched.

- ***The Australian Antenatal Care Guidelines*** – Professor Jeremy Oats
- ***PSANZ Perspectives on the Implementation of Interventions to Modify Maternal and Perinatal Risk***
 - PSANZ Guidelines and Tools for the Care of Women with Decreased Fetal Movements, Perinatal Mortality and Smoking in Pregnancy - *Associate Professor Philippa Middleton*
 - Implementing a Bundle of Care for Stillbirth in Australia – *Professor Vicki Flenady*
 - Smoking in Pregnancy – *Associate Professor Gillian Gould*
- ***Other ANZ Perspectives on Implementation of Interventions to Modify Maternal and Perinatal Risk***
 - The Growth Assessment Protocol (GAP) - Introduction to New Zealand – *Joyce Cowan*
 - How Do We Do This? Guidelines and their Implementation in NZ Maternity Services – *Bronwen Pelvin*
- ***PSANZ's Vision for Equity in Perinatal Health*** – *Dr Alice Rumbold*

2. The First Thousand Days - the New Zealand launch of the PSANZ Early Life Nutrition (ELN) Subcommittee hosted by the PSANZ ELN Subcommittee

The newly launched PSANZ Early Life Nutrition Subcommittee is an affiliation of professional, academic, advocacy, corporate and healthcare groups working collaboratively to communicate and promote the importance of early life nutrition as a long-term preventative health measure. The group is driving awareness and action that supports empowerment and behavioural change for improved nutritional intake during the first 1,000 days of life – that being the period prior to conception, throughout pregnancy and into toddlerhood.

This symposium will consider the concept of the first 1000 days and the value of optimising early life nutrition. Questions will be answered; How can preclinical models be utilised to develop early life nutrition as an essential long-term preventative health measure, what is the role of sensory perception during the critical window of opportunity of newborn nutrition and how should weaning and toddler nutrition be approached. Finally the newly established PSANZ Early Life Nutrition Subcommittee will consider their role in the First Thousand Days.

- ***Early Life Nutrition a Long-term Preventative Health Measure*** – Professor Mark Viccars
- ***A Critical Window of Opportunity*** - Professor Frank Bloomfield
- ***The Best Possible Start in Life*** – Associate Professor Clare Wall
- ***Awareness and Action, Empowerment and Behavioural change*** – Professor Peter Davis

3. Ethics of Innovative Human Research

Embryos in a culture dish, unborn babies and newborn infants cannot give consent to treatment and there is no doubt that caution must be applied when trialling novel therapeutic approaches during pregnancy and early life. However, these factors need to be balanced with the real need for innovative advances in reproductive medicine. As a result, the development of such therapies has its own set of unique ethical, moral, practical and legislative challenges. This thought provoking session tackles some of these challenges by looking at cutting edge technologies and the ethical implications they have for the future of reproductive medicine and considering some ways to negotiate the challenges.

- ***Doing it for the First Time. Ever. Experiments in Humans*** – Professor Euan Wallace
- ***The Bioethics of Maternal Gene Therapy*** – Professor Anna David
- ***Changing the Script: Gene Editing and the Ethics of Preimplantation Embryo Research*** – Associate Professor Dean Morbeck
- ***Practical Ways to make Ethics a Friend to Innovative Medical Research*** – Professor Nik Zeps

(Symposium A continued over)

4. Perinatal Care of the Woman and Family in a Multicultural World hosted by the PSANZ Perinatal Palliative Care Subcommittee

Australia and New Zealand are becoming ever-more 'multicultural'. Caring for women, babies, families and whānau from different cultures and religions may at times challenge us and the way we provide care. Gaining knowledge and understanding of some of the principles around variations in cultural practice and some more specific examples will enhance our cultural competence and enlighten our future practice. This symposium, hosted by the PSANZ Perinatal Palliative Care Subcommittee will not just focus on the cultural aspects of end of life care but also more general perspectives on what is culturally important for women and their families in pregnancy and around the time of birth (and why).

- ***The Stories we Tell. An Overview of Culture and Religion in Perinatal Practice*** – Dr Andrew Watkins
- ***'Matua Rautia' - Reclaiming Māori Maternities and the Collective Spaces of Birth and Afterbirth*** – Dr Naomi Simmonds
- ***Sweet Child of Mine - a Muslim Perspective on Perinatal care***– Dr Zain Ali
- ***The Refugee Experience and Perinatal Care*** - Dr Annette Mortensen

1715-1845 Poster Session A and Networking Drinks Reception**1830-2000 Early Career Researcher Meeting (registration required for this event)**

This event is hosted by the PSANZ Early Career Research (ECR) Subcommittee. The subcommittee membership includes passionate new investigators and researchers in basic science, neonatology, neonatal nursing, midwifery, obstetrics and allied health professions. Anyone identifying themselves as a new investigator or researcher in the fields of maternal and perinatal health (regardless of your age or status) is welcome to attend this event. Participants will join together for networking and round table discussions with PSANZ mentors who have an experienced opinion about key themes such as: mentorship: what to look for in one and how to be a good one; funding: establishing and maintaining a research career with increasing funding limitations; grant writing; early-mid career fellowship review panels: what's the process and what are they looking for and juggling research/clinical/family life.

This event will include drinks and canapés.

1900 > 2200 Prolacta Sponsored Dinner - Viaduct Events Centre**Presentation: Human Milk Fortification: Benefits of an Exclusive Human Milk Diet for Premature Infants****Speakers:**

Melinda Elliott, M.D., F.A.A.P.

Neonatologist, Mednax Medical Group

Senior Director, Clinical Education and Professional Development, Prolacta Bioscience International, LLC

Baltimore, MD, USA

Alan Lucas, MD

Professor Chair in Paediatric Nutrition

Child Nutrition Research Centre

Institute of Child health

London, UK

Registration required for this event - [click here for details.](#)



0700-0800 Breakfast Sessions - see previous pages for details (Registration required for these sessions)

0815-1015 Plenary Session - The Hidden Morbidity of Childhood Outcomes in At-risk Babies and Novel Potential Perinatal Therapies

Being born too small and too early poses risk to life-long health and wellbeing but do we know what these risks are and how to assess them? Professor Harding, a world leading expert in longer term follow-up of the at-risk infant, will enlighten us. Currently we have no antenatal therapies to offer the at-risk growth restricted fetus but hope is on the horizon. In this session we will hear about two large international collaborations exploring potential new therapies.

This session will open with a consumer's perspective on the longer term outcomes of an at-risk baby.

- ***But What is the Outcome? The Long View of Perinatal Care*** - Distinguished Professor Jane Harding
- ***5PDE Inhibitors for Fetal Growth Restriction, the STRIDER Consortium and STRIDER NZAus*** - Dr Katie Groom
- ***Maternal Gene Therapy to Treat Fetal Growth Restriction and the EVERREST Project*** - Professor Anna David

1015-1045 Morning Tea - Exhibition Area

1045-1215 Concurrent Abstract Session Two - Free Papers (6 streams)

1215-1315 Lunch - Exhibition Area

1245-1400 Poster Session B and Networking - Exhibition Area

1400-1530 Concurrent Symposia Session B

1. Perinatal Public Health Initiatives; Reducing stillbirth, SUDI and other adverse outcomes

In recent years exciting developments in New Zealand and Australian led research have identified some key messages that if delivered appropriately at a population level have the potential to impact on rates of stillbirth and sudden unexpected infant death worldwide. Leaders of these research programmes will discuss the Safe Sleep Programme for infants and the soon to be launched maternal sleep position programme. Programmes to reduce smoking in pregnancy may be expected to have similar effects on adverse pregnancy and early childhood outcomes. Some of the challenges of public health initiatives in this area will be considered including proposals for a different approach.

- ***Going to sleep position - a public health intervention to modify risk of late stillbirth*** – Professor Lesley McCowan
- ***Using the wahakura and the Pēpi-Pod to change infant sleep practice in New Zealand: the potential of the Safe Sleep programme to reduce SUDI in other jurisdictions*** – Professor David Tipene-Leach
- ***Incentivising quitting while pregnant: getting past the stigma & supporting what works for each woman*** – Associate Professor Marewa Glover

2. Nutrient interventions - promoting health during pregnancy and beyond

Early life nutritional adversity has been identified as a major driving force in the predisposition to chronic adult onset conditions in offspring. It is now clear that intervention strategies during critical periods of developmental plasticity have the ability to reverse some of the negative consequences associated with early life programming. This session will explore the potential of nutritional strategies during pregnancy to reverse the detrimental effects associated with poor early life environments.

- ***Early life nutrition and the path to programmed obesity – can anti-inflammatory intervention make a difference?*** – Dr Clare Reynolds
- ***Amino acids, a link between placental function and development of the IUGR pancreatic islets*** – Associate Professor Paul Rozance
- ***The road from scientific discovery to clinical trial of maternal dietary creatine supplementation for fetal organ protection*** – Dr Stacey Ellery

(Symposium B continued over)

3. Showcasing World Class Clinical Trial Research from Australia and New Zealand hosted by the PSANZ IMPACT Network

The PSANZ IMPACT Network is a world class maternal and perinatal clinical trials network that has endeavoured to facilitate clinical trial research across Australasia for almost 25 years. This symposium features some of the large multi-centre trials that have been led and published by IMPACT members within the last few years. These international research leaders will also consider the implications of trial results for implementation into clinical practice.

- **Dexamethasone or betamethasone prior to preterm birth - The A*STEROID Trial - What we did, what we found, what next** - Professor Caroline Crowther
- **Wait a minute! The Australian Placental Transfusion Study** – Professor William Tarnow-Mordi
- **Vaginal progesterone for pregnant women with a previous preterm birth? PROGRESS and beyond** - Professor Caroline Crowther
- **Fish oil fatty acids and pregnancy duration** – Professor Maria Makrides

4. Implementing Early Diagnosis of Cerebral Palsy across Australasia hosted by the Cerebral Palsy Alliance and the Australasian Cerebral Palsy Clinical Trials Network CRE

Advances in neuroscience have driven the field to identify strategies for early detection of infants at high risk of cerebral palsy to enable timely access to neuroprotective and neuroregenerative agents and diagnostic-specific early intervention when the greatest neuroplasticity gains are possible. High quality evidence, in the form of an international Clinical Practice Guideline (CPG), has been published indicating that cerebral palsy can be diagnosed within the first six months. This symposium will provide an overview of the CPG and the tools that enable early diagnosis; demonstrate a variety of models of implementation; and discuss the barriers and enablers for education and implementation of the early detection CPG across Australasia.

- **The International Clinical Practice Guideline for Early Detection of CP** – Professor Iona Novak
- **Implementation in a Neonatal Network model across NSW, Australia** – Dr Cathy Morgan
- **Implementation by a state-wide early detection model using Telehealth across Queensland** – Professor Roslyn Boyd
- **Implementation in a low-middle income country as part of an early intervention trial** - Professor Roslyn Boyd
- **Australia-wide implementation via national CME for RACP** – Lynda McNamara

1530-1600 Afternoon Tea - Exhibition Area

1600-1730 Concurrent Abstract Session Three- Free Papers (5 streams)

1900 > PSANZ Spiegeldome (tickets required for this - can be booked during registration process)



Join us for our PSANZ 2018 “Gala Event with a difference”.

The PSANZ Spiegeldome will be a night of exciting food experiences, amazing entertainment experiences and great networking experiences... We have broken the PSANZ tradition and this will not be a formal sit-down dinner but a great party atmosphere with more opportunity to mingle (and of course some dancing...).

If your partner or others are in town with you, bring them along for a fun, friendly and relaxed evening. You will be taken on a journey to excite your senses... Based around the European Spiegeltent, this will be a night to remember! And “Frank’s Front Room” will be ready for those wanting a quiet space....

0700-0800 Breakfast Sessions - see previous pages for details (Registration required for these sessions)

0815-1015 Plenary Session - Clinician's Engagement and Communication; Too Touchy Feely or Time to Take it Seriously?

Many clinicians dread workshops encouraging us to 'share' and 'engage', and jokes about 'elf and safety are legion, but is it time that we all woke up to the fact that if we really want to improve outcomes for our mothers and babies it's time to take communication and quality seriously?

This session will open considering the consumer's perspective clinician behaviour:

- **Quality and Safety in Healthcare. Who is Driving the Bus?** - Professor Euan Wallace
- **When Communication and Collaboration affects Quality of Care** - Associate Professor Judith McAra-Couper
- **Lessons Learnt from the MBRRACE-UK Confidential Enquiry into Intrapartum related death** - Professor Sara Kenyon

1015-1045 Morning Tea - Exhibition Area

1045-1215 Concurrent Abstract Session Four - Free Papers (6 streams)

1215-1315 Lunch - Exhibition Area

1315-1415 Expert Sessions

1. Treating Genetic Disease Before Birth Using In-utero Stem Cell Transplantation – Professor Anna David

In-utero stem cell transplantation (IUSCT) represents a new therapeutic strategy for congenital disease. In this expert session one of our keynote speakers, Professor David, will focus on its potential for the treatment of skeletal dysplasias such as osteogenesis imperfecta with insights from a current clinical trial. She will also explore why IUSCT does not appear to work for blood disorders like sickle cell anaemia and what the alternatives may be.

2. Neonatal Care During Physiological Transition at Birth – Dr Jennifer Dawson and Elizabeth Nevill

Some infants do not breathe spontaneously after birth and require respiratory support. One of the hot topics in neonatology is whether this support is given whilst the umbilical cord remains intact. In this session we will present emerging physiological based knowledge that suggest, resuscitation with the cord intact is possible and has the potential to affect neonatal outcomes. In addition, we will discuss practical aspects of supportive care and the provision of breathing support with an intact umbilical cord.

3. Trial Statistics: What You Really Need to Know – Dr Chris McKinlay

Our resident PSANZ expert clinical trailist/statistician/clinician Dr Chris McKinlay will provide this one hour special for the third year in a row. Always over-subscribed and always highly rated this session will provide you with all-you-need-to-know on trial statistics and may make you think a little differently next time you are reviewing trial results!

4. PREMO Toolbox: Early Biomarkers to Predict Motor Outcomes in Infants Born Preterm – Professor Roslyn Boyd, Jo George, Dr Kerstin Pannek

This multidisciplinary group will present the PPREMO toolbox; a clinically accessible valid and reliable scale for assessment of brain structure and growth at early and term equivalent age in infants born <31 weeks that predicts motor and cognitive outcome at 12 months. This will include consideration of the relationships between a variety of clinical assessments, early structural MRI and clinical biomarkers to predict outcome and advanced brain imaging in preterm infants.

(Expert Sessions continued over)

5. Bringing a Product to Market - Insights from a R&D Team – Mike Ronayne

Take a peek behind the product development curtain to see how the newly released Optiflow Junior 2 nasal cannula range was developed, and learn how new ideas and innovations get turned into medical products.

6. Clinical Translation of the Artificial Womb – Associate Professor Marcus Davey

Prematurity is a leading cause of neonatal morbidity and mortality. Mimicking an intrauterine environment has improved survival of extremely premature lambs but overcoming species differences represents a challenge for translation to human infants. During this session one of our keynote speakers, Associate Professor Davey, will discuss the clinical potential and challenges of this pioneering artificial womb technology.

1415 - 1430 Afternoon Tea - Exhibition Area

1430-1600 Concurrent Symposia Session C

1. Optimising Care in Low Risk Pregnancy

The topic of homebirth often invites lively and controversial debate at PSANZ Congresses. This symposium aims to be a little different and will consider the wider picture of pregnancy care, as well as place of birth, with a particular focus on the 'low risk' woman. How can we safely provide the pregnancy and birth experience that women want?

We will hear from leaders of the New Zealand College of Midwives and personal experience of the first-ever alongside birthing unit in New Zealand opened in 2016. New research from state-wide Victorian data will contrast and compare pregnancy outcome by place of birth. One of our keynote speakers, Professor Kenyon, will close describing her experiences with Better Birth 2016; aiming to change the way maternity care is provided in the UK; seeking single point access to maternity care, keeping low risk women out of hospital and promoting the use of birthing units.

- ***The Who and the Where for Low Risk Women; Reviewing the Evidence*** – Dr Lesley Dixon, Alison Eddy
- ***Great Expectations – Establishing the first NZ alongside Primary Birthing Centre*** – Julie Arthur
- ***Planned Place of Birth for “Low Risk Women” – Insights from Victoria, Australia*** – Dr Miranda Davies-Tuck
- ***Transforming Maternity Services in the UK*** – Professor Sara Kenyon

2. The placenta: translating messages between mother and fetus

During pregnancy the placenta mediates a complex conversation between mother and fetus in order to adapt the maternal physiology and facilitate healthy fetal growth. This session examines this conversation in both directions in order to understand how maternal physiology can affect fetal development via the placental epigenome, and how the placenta can send fetal messages to maternal cells and organs to either adapt the maternal cardiovascular system to support healthy pregnancy, or contribute to pregnancy pathologies.

- ***The placental epigenome and pregnancy outcomes*** – Dr Erin Macaulay
- ***Placental exosomes in gestational diabetes*** – Dr Carlos Solomon
- ***Placental extracellular vesicles & feto-maternal communication*** – Professor Larry Chamley

3. Management Dilemmas in Fetal Growth Restriction

Fetal growth restriction remains difficult to diagnose (both antenatally and postnatally) and therapeutic options are still experimental. Obtaining international consensus on definitions and developing clear guidelines for management should help improve outcomes in this very vulnerable group of babies.

- ***MCA Doppler in Term SGA - Indicator of FGR and an Indication for Delivery?*** - Dr Wessel Ganzevoort
- ***The Future of Guidelines for Late Onset SGA in New Zealand and Australia*** – Professor Lesley McCowan
- ***Consensus Definitions and Core Outcomes for FGR*** – Dr Sanne Gordijn
- ***Dilemmas in Feeding the Growth-restricted Newborn*** – Professor Frank Bloomfield

4. What's hot in neonatal respiratory care

Acute Respiratory Distress Syndrome is well defined in adults and children and although many neonatal respiratory conditions have biological and pathophysiological similarities to date no definitions have included newborns. Consensus in the form of the Montreux definition has been proposed to overcome this problem enhancing clinical practice and the link between NICU and PICU and future clinical research in newborn acute respiratory disease. Nasal high flow therapy is becoming standard practice across many NICUs. We will hear the most up-to-date evidence to support this practice and a more practical approach to using nasal high flow in your unit.

- ***Acute Respiratory Distress Syndrome: towards diagnostic criteria for a new 'old' entity in neonates*** – Associate Professor David Tingay
- ***Hot, humid and windy: Wondering weather to use nasal high-flow in the nursery?*** – Dr Brett Manley
- ***What's the reality out there – tips and tricks for Nasal high flow use in your unit.***

1600-1630 Awards and Closing Ceremony

1630- 1730 Farewell Drinks