



Mercy Health
Care first



Mercy Health

Research and Development Report **2013**

Our vision is to build an
enduring capacity and passion to
serve those with special needs.

MERCY HEALTH GRATEFULLY ACKNOWLEDGES FUNDING SUPPORT FROM ALL CONTRIBUTING BODIES IN 2013

They include among many others:

Medical Research Foundation for Women and Babies

Mercy Health Foundation

Academic, Research & Development Committee Small Project Grants

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Austin Hospital Medical Research Foundation

Royal Australian and New Zealand College of Obstetricians and Gynaecologists

Stillbirth Foundation Australia

CASS Foundation

University of Melbourne

AVANT

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INNOVATION TRANSFORMS LIVES

We are proud to present this retrospective of Mercy Health's research activity in 2013.

Our research program plays a pivotal role in advancing Mercy Health's leadership of groundbreaking, evidence-based medical practice. As one of Australia's leading clinical teaching and training providers, we recognise that a culture of innovation through translational research is critical to fostering tomorrow's healthcare services.

Our scientists and clinician-scientists have again this year successfully integrated research, teaching and training into high-risk clinical care across women's health, neonatal care, maternal fetal medicine, perinatal mental health, mental health, palliative care and aged care services. The implications of their work are far reaching, with many outcomes already embraced globally to improve patient care.

Mercy Health's commitment to partnering with key researchers in universities and hospitals throughout Australia has been central to our achievements. Collaboration ensures a cohesive national response to long-term and emerging health issues is feasible, with obvious benefits to the community.

None of our work would be possible without the generous support of both federal and state governments, our project partners, sponsors, donors, funding bodies and support staff. We thank them for sharing our vision to deliver optimal, compassionate care to those who need it most.

On behalf of the Mercy Health Board and Executive Group, we commend our researchers for their passion, teamwork and stewardship in striving to improve the lives of those who need our care.



Stephen Cornelissen
Chief Executive Officer



Julien O'Connell
Chairman

Adj Prof Stephen Cornelissen
Chief Executive Officer

Mr Julien O'Connell AM
Chairman

Our mission is to follow Jesus Christ in His mission of mercy through the delivery of health, aged care and community services.

Our vision is to build an enduring capacity and passion to serve those with special needs.

Our values reflect the key behaviours that guide our interactions with each other and those we serve.

MESSAGE FROM ASSOC PROF DAVID ALLEN

It is a pleasure to present the 2013 Mercy Health Research and Development Report, the sixth annual report on our research activity.

Since the report's inception, Mercy Health's research output has steadily increased throughout the organisation, especially in the fields of obstetrics and gynaecology. The Board, the Chief Executive Officer and the Executive Directors have continued to actively support and promote research, which has resulted in increased funding and achievement.

We are grateful for the support we have received from the many funding bodies that make our research effort possible. Mercy Health has produced and attracted numerous excellent researchers, many of whom have achieved national and international acclaim. Our strong research culture does not happen by chance, and I acknowledge specifically the leadership provided by Prof Michael Permezel, Prof Susan Walker, Prof Stephen Tong, Prof Susan McDonald and Prof Fran McInerney. There are many other academic and research leaders in the organisation who also play pivotal roles, and we thank them all.

We also acknowledge Mercy Health Foundation's role in supporting research by funding the Chair of Maternal Fetal Medicine, Chair in Aged Care and Mercy Health Breastmilk Bank.

The Mercy Health Human Research Ethics Committee also plays an important role, and their input is acknowledged and appreciated. We also recognise and thank the Medical Research Foundation for Women and Babies for their enduring support and funding of Mercy Health projects over many years. I also thank the Academic Research and Development Committee, Mercy Health for their input, my executive assistant, Vicky Karitinos, for collecting and compiling the initial data from the many contributors to this report, and the publisher, Amber Kelly, who assisted me with editing the report.

Once again, we congratulate our many researchers, thank our generous funding bodies, and hope you enjoy reading the 2013 *Mercy Health Research and Development Report*.

Assoc Prof David Allen

Chairman, Academic Research and Development Committee, Mercy Health



A portrait of Dr Owen Stock, a man with dark hair and a slight smile, wearing a dark blue suit, white shirt, and a blue and white striped tie. He is wearing a blue lanyard with 'Mercy Health' printed on it. The background is a solid red color. A large yellow curved shape is on the left side of the image.

*“As a clinician–scientist
I hope I can help
translate the science
into its application”*

Dr Owen Stock

University of Melbourne Department
Mercy Hospital for Women

SIGNS OF HOPE FOR THE NEXT GENERATION

Supporting women and babies through gestation and birth gives Dr Owen Stock a ground level sense of how new technologies transform real world outcomes. As a clinician-scientist in Mercy Hospital for Women's University of Melbourne Department, Dr Stock sees daily the leaps forward made in maternal fetal medicine – and the distance we still have to run.

"Most of us who get into medicine want to improve outcomes and lives, and in obstetrics you get to do that day in day out," observes Dr Stock. "But there are also challenges that have been there for a very long time on which we haven't made an enormous amount of progress."

Dr Stock's current research is showing potential to solve two of childbirth's enduring challenges. The first focuses on fetal growth restriction due to hypoxia [lack of oxygen], a condition implicated in the tragedy of stillbirth. It builds on the groundbreaking work of the Translational Obstetrics Group's Dr Clare Whitehead in measuring levels of RNA, a messaging molecule from the placenta, in a mother's blood to gauge oxygen levels in their baby. This allows caregivers to make an informed decision on whether to deliver at-risk babies before their condition worsens.

"We're extending Clare's work into a larger project across seven other hospitals in Australia and New Zealand to validate the outcomes across a bigger cohort," says Dr Stock. "We recruit women who present preterm with a small baby at risk of stillbirth. On the day of delivery we take a blood sample from the mother and one from the cord and match them to see if there's a correlation."

"The end result of the study is 12–18 months away but we're very hopeful it will work out. It would be an incredibly promising development in non-invasive testing."

The second project also uses a non-invasive maternal blood test to combat another key area of risk for babies: prematurity and in-utero infection.

"We're investigating preterm, pre-labour rupture of the membranes and the often associated infection, which can go on to cause long-term problems for the baby including cerebral palsy," Dr Stock explains. "At the moment we make that diagnosis using clinical signs and blood tests that aren't very accurate or specific. So again we're looking for markers that might be better predictors of infection in the placenta and in the baby."

"It's early days but our initial results look promising."

The rewards of this study could resonate long into the future.

"These are babies who are at greatest risk of poor outcomes

in the long term. So if we've got a test that can tell us when is a better time to deliver or to administer antibiotics, it can potentially have a massive impact upon a child not only initially after birth, but a few years down the track or when they go to school. That's a fairly strong motivator."



This could have a massive impact on a child years down the track

Dr Stock credits his supervisor, Prof Stephen Tong, for firing his early interest in clinical research and the team at Mercy Hospital for Women for supporting it.

"I've known Stephen from when I was a resident in my first year at the Mercy in 2006. I later worked with him at Monash Medical Centre. So he deserves credit for stimulating and supporting my interest in research."

"The Translational Obstetrics Group as a whole is an amazing little powerhouse of research. We have some incredibly talented scientists in the group and we couldn't do this work without our fantastic research midwives who go the extra mile in approaching women and collecting samples. Then there are all the people at the coalface, the midwives and registrars, who keep an eye out for clinical cases that come through."

In working to solve obstetric riddles that have endangered mothers and babies for millennia, Dr Stock has turned to new technologies in which laboratory and clinical research intersect. It's an arena in which he is well placed to make a contribution.

"Some of the techniques we're just starting to explore, including next-generation sequencing, apply sophisticated molecular biology techniques that generate an enormous amount of data. But that also requires sophisticated computational biology. So the challenge is to enable the people who are good at the laboratory science, the bioinformatics and the clinicians to talk to each other. As a clinician-scientist I hope I can help translate the science into its application."

"The raison d'être of clinician-scientists is to be that facilitator and stimulate research at that interface."

Health Services, Women's and Children's Services Program

DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY

University of Melbourne/Mercy Hospital for Women

In 2013, research achievements in the University of Melbourne Department exceeded all expectations.

In addition the department received five National Health and Medical Research Council (NHMRC) grants with a total of more than \$2 million over the next three years.

We were also fortunate to receive funding for the inaugural Chair of Maternal Fetal Medicine through Mercy Health Foundation.

This has brought increased recognition of research at Mercy Hospital for Women. New and exciting collaborations are one of many likely benefits.

RESEARCH ACTIVITY

Professor Sue Walker research group

Sue Walker, Elizabeth McCarthy, Alexis Shub, Alison Fung, Lisa Hui, Nadia Barden, Dani Wilson

The Maternal Fetal Medicine (MFM) research group comprises maternal fetal medicine clinical researchers,

led by Prof Sue Walker. The vision of the MFM centre is to integrate the three professional domains — excellence in clinical care, education and research — to ensure the expectations of pregnant women today will continue to be met with delivery tomorrow.

We have close clinical and scientific collaborations with the Translational Obstetrics Group (TOG, led by Prof Stephen Tong), the other University of Melbourne Obstetric Research Groups (led by Prof Permezel, Assoc Prof Lappas and Dr Georgiou), Austin Health, LaTrobe University, Deakin University, Royal Women's Hospital and Monash Medical Centre. We also have a new link to Stellenbosch University, South Africa through Dr Cathy Cluver.

Major research themes

Sleep disordered breathing in pregnancy

This collaboration between the MFM group and the Institute for Breathing and Sleep, Austin Health explores how sleep disordered breathing may explain some of the adverse outcomes in pregnancy that are more common among obese women, such as hypertension, problems with fetal growth and stillbirth. This year, Dr Alison Fung and colleagues have published a major longitudinal study confirming an adverse effect of obstructive sleep apnoea on fetal growth. Studies continuing into 2014 include the role of sleep disordered breathing in women with pregnancy hypertension (the focus of Dani Wilson's PhD) and possible effects of sleep disordered breathing on the risk of stillbirth in growth-restricted fetuses.

Improved diagnosis of fetal growth restriction

Fetal growth restriction is the single biggest contributor to stillbirth, a tragedy affecting 1 in every 130 Australian families. Slowing of growth in late pregnancy may be an important measure of reduced placental reserve. Molecules released by the placenta into the maternal blood stream may also provide an alternative method to assess fetal growth and wellbeing. In 2013, we received NHMRC funding to pursue this research in 2014-2016.



Dr Nadia Barden, the Department of Obstetrics and Gynaecology

Improving pregnancy outcomes in obese women

The obesity epidemic brings with it substantial risks to both women during their pregnancy and their babies. In collaboration with Deakin University, the group is examining how we may inform and empower women around healthy gestational weight gain, diet and activity.

New opportunities

Dr Lisa Hui commenced as MFM consultant in April 2013 after training in Sydney and completing her PhD in the laboratory of Dr Diana Bianchi, Tufts University, Boston. Dr Hui brings a wealth of clinical and laboratory skills to our team and her publication record attests to her unequalled understanding of translating the new generation of genetic testing into clinical practice.

Dr Cathy Cluver made outstanding contributions to the department in 2013. With Dr Simon Meagher, she developed a fetal echocardiography teaching tool that has been taken up by the International Society of Ultrasound in Obstetrics and Gynaecology, ensuring wide global adoption. She returns to Stellenbosch University in Capetown to undertake a PhD with Prof Tong, Prof Walker and local collaborators in the first double blind randomised controlled trial of a new potential therapeutic for preeclampsia.

Dr Alexis Shub rejoins us in 2014 after completing 12 months in Timor Leste providing leadership and obstetric education to the Asia Pacific region. In addition to her clinical, research and education roles, Dr Shub implemented successful policy changes such as the rollout of HPV vaccination programs, which will make an enormous difference to the reproductive health of Timorese women.



Dr Alexis Shub, the Department of Obstetrics and Gynaecology



Improved diagnosis of fetal growth restriction is saving lives

Bringing research into clinical practice

Ensuring evidence is appropriately translated into clinical practice is an important role of the MFM research group. This year we have published on H1N1 vaccination in pregnancy; prevention of perinatal Hepatitis B transmission; the use of emerging genetic technologies, such as molecular karyotyping, in the prenatal setting; and, implementation of non-invasive prenatal testing into clinical practice.

The MFM has provided obstetric lead for the following national and international externally funded major obstetric trials: the Australian Placental Transfusion Study; the EPPI Trial – Enoxaparin for the prevention of preeclampsia and intrauterine growth restriction; and, the MAGENTA trial: Magnesium Sulphate at 30-34 weeks' gestational age: neuroprotection trial.

Translational Obstetrics Group (TOG)

Stephen Tong, Tu'uhevaha Kaitu'u-Lino, Natalie Hannan, Owen Stock, Fiona Brownfoot, Laura Touhey, Monika Skubisz, Clare Whitehead, Kirsten Palmer, Sally Beard

Prof Tong leads this team of dedicated clinician-scientists and scientists whose focus is to pursue scientific discoveries that directly impact bedside care, to improve outcomes for pregnant women.

Research themes

Medication-based treatments to replace surgery for ectopic pregnancies

Ectopic pregnancies are life-threatening since they can erode through major blood vessels, causing fatal bleeding. The team is developing novel ways to cure ectopic pregnancies with medication, allowing women to completely avoid operations.

Since 2009, the TOG has been developing a promising treatment approach that consists of a single injection



Dr Tu'uhevaha Kaitu'u-Lino

University of Melbourne Department

(methotrexate) and seven oral tablets (called 'gefitinib', an Epidermal Growth Factor Receptor Inhibitor) taken daily.

In 2013, the group published two companion papers in the journal *Obstetrics and Gynaecology*. The first paper described the laboratory preclinical work underpinning the use of a combination of gefitinib and methotrexate to treat ectopic pregnancy. The second paper described results from a Phase 1 trial of 12 women diagnosed with ectopic pregnancies and treated with these drugs. The trial, a collaboration with University of Edinburgh, showed this drug combination may be more effective than giving just methotrexate alone (the current clinical treatment for small ectopic pregnancies).

Treatments for severe preeclampsia

Severe preeclampsia is a pregnancy complication that can be very risky for both baby and mother. There are currently no treatments to slow or reverse the disease other than to deliver the fetus. This can mean making the very difficult decision to deliver the baby preterm in order to save the mother.

TOG is researching drugs to treat preeclampsia for which we have received significant NHMRC project grant funding. The funds will allow us to continue searching for potential treatments and new diagnostics to improve clinical care of women with preeclampsia.

Diagnostics to monitor wellbeing of the sick fetus in the womb

TOG has discovered molecules released from the placenta into the mother's bloodstream when the fetus is significantly starved of oxygen and in peril. Measuring these mRNA molecules could be a new way to identify these fetuses, allowing clinicians to better time delivery and decrease the numbers of babies lost to stillbirth. This work, headed by Dr Clare Whitehead and supervised by Prof Tong, was published in *BMC Medicine* to significant online and media attention.

The team had previously secured an NHMRC grant to conduct a large validation study on whether this finding can be developed into a clinical test. The resulting seven hospital international multicentre FOX Study run by Dr Owen Stock recruited throughout 2013.

Martha Lappas Research Group

Martha Lappas, Ratana Lim, Gillian Barker, Clyde Riley, Roxanne Hastie, Carrington Moorwood, Marin Poljak

Research themes

Understanding the cellular and molecular mechanisms that govern birth

Preterm birth is one of the most significant healthcare issues globally. To provide the best possible start to life and improve newborn healthcare delivery, we must better

understand what triggers labour and identify new ways to delay birth. This is the overall objective of this research project. Clarifying the mechanisms that regulate human labour and delivery may enable us to reduce the adverse consequences of being born too early.

The effect of maternal diabetes and obesity on placental function: implications for fetal growth and development

Maternal diabetes and obesity during pregnancy are associated with cellular and metabolic damage in the placenta. Placental damage is implicated in chronic diseases later in life including obesity, diabetes, cardiovascular disease and certain cancers. This project seeks to gain a better understanding of how maternal diabetes and obesity in pregnancy damage the placenta with a view to developing clinically useful interventions that improve fetal outcomes of critical importance for public health.



Ms Roxanne Hastie, University of Melbourne Department

Dr Harry Georgiou/Dr Megan di Quinzio research group

Harry Georgiou, Megan Di Quinzio, Stella Liong, Gabrielle Fleming, Connie Louizos, Debra Jinks, Jan Heng

Preterm birth is associated with significant perinatal morbidity and mortality. The ability to accurately predict when preterm birth might occur will greatly facilitate improved and targeted therapies for preventing this common condition.

With the support of research coordinator Ms Gabrielle Fleming and past and present PhD students Dr Jan Heng and Ms Stella Liong, the team has identified a number of predictive biomarkers associated with preterm labour and preterm rupture of fetal membranes. PhD student Ms Stella Liong submitted her thesis in 2013 and produced three principal author and two co-author publications. Team leaders Dr Harry Georgiou and Dr Megan Di Quinzio plan to conduct a comprehensive diagnostic trial to evaluate the predictive efficacy of these biomarkers in the general obstetric population.

Gestational Diabetes Follow-Up Project

Ms Connie Louizos, Ms Debra Jinks, Dr Harry Georgiou, Assoc Prof Martha Lappas

The Gestational Diabetes Follow-Up Project is an adjunct to the well-known Gestational Diabetes Follow-Up Program, Australia's longest running clinical service and epidemiological study into the development of Type 2 diabetes among women with a history of gestational diabetes mellitus. The project has been substantially funded over many years by the Medical Research Foundation for Women and Babies. It acknowledges the pioneering work of Emeritus Prof Norman Beischer, who made significant contributions to our understanding of the epidemiology of gestational diabetes and its immediate and long-term consequences.

Research coordinators Ms Connie Louizos and Ms Debra Jinks have continued to recruit and follow up thousands of women who previously experienced gestational diabetes. Assoc Prof Martha Lappas and Dr Harry Georgiou, assisted by Ms Gillian Barker, continue to evaluate blood-borne proteins and lipids that may indicate Type 2 diabetes onset. The early detection of Type 2 diabetes would allow early intervention strategies to be implemented, preventing or delaying complications of diabetes such as cardiovascular disease, kidney disease and blindness.

RESEARCH PROJECTS

'Gestational diabetes mellitus follow-up program: recruitment of participants'. Georgiou H.

'Validation of vitamin D binding protein in maternal serum to predict impending labour'. Liong S, Di Quinzio M, Permezel M, Georgiou H.

'Placental mitochondrial dysfunction leads to cellular and metabolic damage in diabetic pregnancies'. Lappas M (CIA).

'Dietary phytophenols: therapeutic treatment for preterm birth?'. Lappas M, Lim R.

'Understanding what triggers birth: new opportunities for prevention of early delivery'. Lappas M.

'Oxidative stress in pregnancies complicated by gestational diabetes'. Lappas M.

'The role of neuropeptides in the regulation of maternal mood and behaviour in both the antenatal and postpartum period'. Galbally M, Lewis A, Lappas M, Saffery R.

'Facts, figures and feelings about weight in pregnancy: a randomised controlled trial'. Shub A, McCarthy E, Lappas M.

'Prediction of preeclampsia in women with prepregnancy diabetes'. Shub A, McCarthy M, Lappas M.

'Sirtuin 1 (SIRT1) as a therapeutic target to prevent preterm birth'. Lim R, Lappas M.

'Sirtuin 1 (SIRT1) as a therapeutic target to prevent preterm birth'. Lim R.

'Dietary phytophenols: therapeutic treatments for preterm birth?'. Lim R.

'Developing a biomarker blood test at 28 weeks to identify pregnancies at high risk of fetal growth restriction and stillbirth'. Tong S.

'Investigation of soluble endoglin: the toxin responsible for severe preeclampsia'. Kaitu'u-Lino T.

'Developing molecular therapeutics and diagnostics for pregnancy complications'. Tong S.

'Measuring RNA in maternal blood to monitor the wellbeing of growth-restricted fetuses'. Tong S, Walker SP, Said J.

'Developing a biomarker at 28 weeks to identify pregnancies at high risk of fetal growth restriction and stillbirth'. Tong S, Walker S, Kaitu'u-Lino T, Palmer K.

'Understanding how sFlt-1, a toxin of preeclampsia is released'. Kaitu'u-Lino T, Palmer K and Tong S.

'Developing diagnostics and therapeutics for preeclampsia: targeting a novel placental specific sFlt-1 variant'. Tong S, Palmer K, Kaitu'u-Lino T.

'Improving the prediction and detection of contributors to term stillbirth'. Walker SP, Tong S, Whitehead C.

'The role of sirtuin (SIRT) proteins in the mechanisms that regulate infection induced preterm birth'. Lappas M, Permezel M, Tong S.

'Lansoprazole as a novel therapeutic for preeclampsia'. Hannan N.

'Targeted placental therapeutic delivery to treat preeclampsia'. Hannan N.

'Targeting the toxins of preeclampsia'. Kaitu'u-Lino T.

'Corin, a cardiac enzyme, is critical to pregnancy success'. Hannan N.

'Development of a novel animal model to examine preeclampsia therapeutics'. Hannan N.

'The GAP study: towards adequate national provision of genomic testing in pregnancy'. Halliday J, Walker SP et al.

'DAME: diabetes and milk expressing – an RCT'. Foster D, Walker SP et al.

'Biomarkers for prediction of chorioamnionitis in preterm prelabour rupture of membranes: the FIN study'. Walker SP, Stock O, Tong S.

'PIE: a double blind RCT for treatment of early onset preeclampsia'. Walker SP, Cluver C, Tong S.

'Improving consent for Caesarean Section'. Walker SP, Truong A.

'Improving detection of late onset fetal growth restriction'. Walker SP, Edwards L.

AWARDS

Prof Stephen Tong: NHMRC Achievement Award for the Top Ranked Clinical Career Development Fellowship nationally in the 2013 funding round.

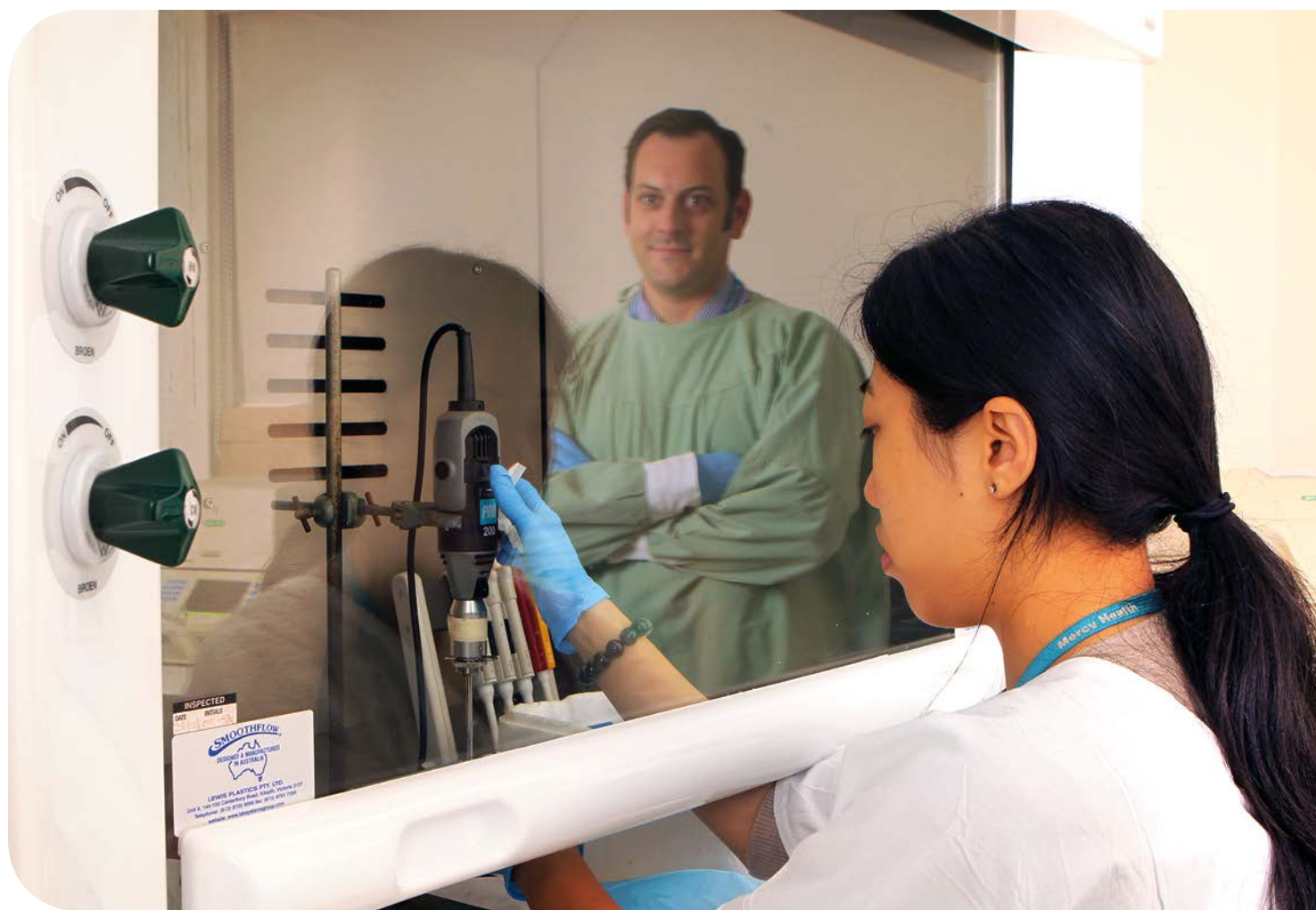
Drs Monika Skubisz, Kirsten Palmer and Clare Whitehead: awards at the Society for Gynaecological Investigation (SGI) meeting, Orlando, 2013.

Dr Tu'uhevaha Kaitu'u-Lino: Newcastle Reproduction Emerging Research Leader Award at The Society for Reproductive Biology, Sydney 2013.

Dr Kirsten Palmer: Society for Reproduction (SRB) award for best scientific poster.

Dr Fiona Brownfoot: Austin Medical Research Foundation Young Investigator Award.

Dr Clare Whitehead: Organon Award for the best oral presentation.



Ms Stella Liong, University of Melbourne Department with Dr Owen Stock

MIDWIFERY PROFESSORIAL & PROFESSIONAL DEVELOPMENT & RESEARCH UNITS (NURSING AND MIDWIFERY)

Mercy Hospital for Women

The Professorial and Professional Development & Research Unit continues to promote an environment of learning through clinical training and research, leading to a highly skilled and knowledgeable workforce.

The unit also supports and works closely with the Nursing & Midwifery Leadership Group (NMLG), developed initially at Mercy Hospital for Women in 2011 and broadened in 2013 under the new program structure to include Werribee Mercy Hospital. In 2013 a professional development program was founded to actively promote and support nursing and midwifery research and education.

RESEARCH PROJECTS

'Influenza vaccination uptake during pregnancy'. Pollock W, McCarthy E, Sommerville M, McDonald S.

'Provision of mechanical ventilation to pregnant and postpartum women with H1N1 influenza: a case-control study'. Pollock W, Bellomo R, Webb S, Seppelt I, Davies A, Sullivan E, Morrison S, Howe B.

'The Australasian Maternity Outcomes Surveillance System (AMOSS)'. Sullivan E, Peek M, Ellwood D, Knight M, Homer C, Jackson Pulver L, McLintock C, Elliott E, Ho T, McDonnell N, Pollock W, Zuryski Y.

'Pattern and rate of massive transfusion for obstetric haemorrhage'. Pollock W, Simmons S, Phillips L, McDonald S.

'Need for, and analysis of, a modular maternal critical care education program'. Pollock W, McDonald S.

'Development of a severity of preeclampsia score: an e-Delphi study'. Pollock W, Flood M, Dennis A, Lapinsky S, König K, Harley N, Shub A, McDonald S.

'Massive transfusion registry'. Zatta A, Pollock W, Wood E.

'Evaluation of a Student Midwife Fellowship program'. Sacco J, Pollock W, McDonald S.

'Information and support to women who experience a miscarriage at the Mercy Hospital for Women'. McCarthy M, McDonald S, Pollock W.

'Vaginal pessaries: can educational brochures help patients to better understand their care?'. Murray C, Thomas E, Pollock W.

'Outcomes of neonates receiving nasal CPAP in a level 2 hospital from 2010-2012: a clinical audit'. Patterson H, Anning J, Pollock W.

ACADEMIC ACHIEVEMENTS

A number of staff completed Masters degrees with La Trobe University or other universities in 2012-2013: Kym Harrison, Elizabeth Thomas, Debra Pidd, Mary McCarthy and Nadia Bardien.

Many of these staff are now presenting, publishing and sharing their skills with wider local, national and international audiences.



Ms Debra Pidd, Midwifery Professional & Professional Development & Research Units.

DEPARTMENT OF GYNAECOLOGICAL ONCOLOGY

Mercy Hospital for Women

The Gynaecological Oncology Unit has seen a marked increase in clinical workload over 2013.

The unit continues to provide multidisciplinary care to women with gynaecological cancer which includes complex surgery, chemotherapy and all aspects of supportive care. We provide a consultative service including case and pathology review to all of rural and regional Victoria and southern New South Wales.

Current certified gynaecological oncologists include Assoc Prof Peter Grant, Assoc Prof David Allen, Dr Simon Hyde and Dr Julie Lamont.

The unit also provides a colposcopy/dysplasia service to evaluate and treat pre-invasive abnormalities of the genital tract. It is also increasingly involved in complex surgery related to benign gynaecology and obstetrics.

Assoc Prof Peter Grant undertook a sabbatical leave to work within the Ontario Palliative Care program at Princess Margaret Hospital, Toronto.

RESEARCH PROJECTS

'Ovarian Cancer Prognosis and Lifestyle Study (OPAL)'. NHMRC funded national study. Webb P, Friedlander M, Grant P, Obermair A, deFazio A.

'PARAGON. Phase 2 study of aromatase inhibitors in women with potentially hormone responsive recurrent/metastatic gynaecological neoplasms'. ANZGOG 0903. Grant P.

'INCB 24360-210: Phase 2 Study of IDO inhibitor INCB24360 vs. Tamoxifen for recurrent platinum sensitive ovarian/tubal/peritoneal cancer'. Mileskin L, Grant P, Allen D, Hyde S, Lamont J, Rischin D, Foo S.

'SOLO 1. Phase 3 randomised trial of Olaparib vs. placebo as maintenance treatment in patients with BRCA mutated advanced ovarian cancer following primary chemotherapy'. 'SOLO 2. Phase 3 randomised trial of Olaparib vs. placebo in platinum sensitive relapsed BRCA mutated ovarian cancer'. Grant P, Allen D, Hyde S, Lamont J, Mileskin L, Rischin D, Foo S, AuYeung G.

'Risk factors associated with recurrences in patients with vulvar intraepithelial neoplasia III (VIN3)'. Donkers H, Allen D, Hyde S, Grant P, Lamont J. (Submitted for publication).

'Sentinel lymph node identification in early stage vulvar cancer: a literature review'. Grant P, Pendlebury A, Lamont J. (Submitted to Cancer Australia as National Guideline).

'The effect of unwanted adolescent sexual activity on risk of early-onset cervical cancer and precancer in women aged 25 years or less'. Jayasinghe YL, Sasongko V, Lim RW, Grover SR, Tabrizi SN, Moore EE, Donath S and Garland SM for the Early-onset Cervical Cancer (EOCC) study group (P Grant member).

REPRESENTATIVE BODIES

D Allen: NEMICS Governance Committee (Member, past Chairman), Australian Society of Colposcopy and Cervical Pathology (President), Safety Monitoring Committee for Cervical Cancer in Australia (DoHA, Member), Victorian Surgical Consultative Council (DoH, Member) (Ministerial appointment, representative for gynaecology in Victoria), Surgical Outcome Information Initiative Committee (DoH, Member), Gynaecological Oncology Examination Committee, RANZCOG.

P Grant: Cancer Australia (Chair, Clinical Expert Advisory Panel), Medical & Scientific Advisory Committee (MSAC Expert Sub Committee, Commonwealth Department of Health and Ageing).

S Hyde: RANZCOG Gyn Oncology Examination Committee, Gynaecological Oncology, Subspecialty Training Supervisor.

D Allen, P Grant, S Hyde: members of Australian Ovarian Cancer Study Group.



Assoc Prof Peter Grant and Ms Chris Smith, Department of Gynaecological Oncology.

DEPARTMENT OF UROGYNAECOLOGY

Mercy Hospital for Women

The Urogynaecology Department assesses and manages women with pelvic floor problems such as uterovaginal prolapse and urinary incontinence.

Research reviews and original articles were published in 2013 on not only prolapse and stress incontinence but also urinary tract infections, urinary vesicovaginal fistulae, sexual function before and after surgery, and potential complications of surgery and their management.

Dr Yik Lim has served on the Urogynaecological Society of Australasia for a number of years and will be convenor for the 2014 Scientific Meeting in Melbourne. Dr Joe Lee has organised numerous workshops for the International Urogynecology Association. Dr Alison De Souza, Ms Liz Thomas and Dr Lore Schierlitz have finalised their research on sexual function in pregnancy and the 12 months postpartum.

Prof Peter Dwyer continues in his fourth year as Editor in Chief of the *International Urogynecology Journal*, and was the invited guest lecturer for The Annual Scientific Meeting of the Israeli Urogynecology Association in Ramon, Israel in 2013.

DEPARTMENT OF ENDOSURGERY

Mercy Hospital for Women

The Department of Endosurgery provides expertise in minimal access surgery as it applies to gynaecology.

Endosurgery A led by Professor Peter Maher focuses on patients with symptoms of pelvic pain and endometriosis. Endosurgery B, headed by Dr Emma Readman, focuses on menstrual irregularities and heavy menstrual bleeding.

RESEARCH PROJECTS

'A pilot study to examine the presence of nerve fibres in eutopic endometrium and the usefulness of endometrial biopsy to diagnose endometriosis in women with pelvic pain.' Readman E, Ellett L, McIlwaine K, Jagasia N, Maher P.

'The effect of BMI on surgical difficulty in laparoscopic gynaecological surgery.' McIlwaine K, Manwaring J, Ellett L, Cameron M, Villegas R, Readman E, Maher P.

'Comparison between transvaginal sonography and magnetic resonance imaging for the diagnosis of deep infiltrating endometriosis and prediction of the need for colorectal team involvement.' Ellett L, Jagasia N, McIlwaine K, Cameron M, Manwaring J, Stone K, Maher P.

Collaborations

The Endosurgery Unit ran two laparoscopic hysterectomy training courses in February and November 2013. These were each attended by six visiting gynaecologists and faculty members Professor Peter Maher, Dr Emma Readman, Dr Janine Manwaring, Dr Melissa Cameron and Dr Lenore Ellett. The course, run over two days, included a look at the theory of laparoscopic hysterectomy, a skills workshop and participation in three laparoscopic hysterectomies.

Dr Emma Readman was part of the organising team of gynaecologists who travelled to Mongolia as part of the Australian-Mongolian Medical Project 2013. Dr Readman taught advanced laparoscopic surgery to the Mongolian Association of Gynecological Surgery and Endoscopy.

DEPARTMENT OF PAEDIATRICS

Mercy Hospital for Women

The Department aims to better understand the special needs of babies in the Neonatal Intensive Care Unit and Special Care Nursery and improve their care.

Research areas include respiratory management, prevention of chronic lung disease, detection and prevention of neurological injury, developmental care, optimisation of nutrition and growth, and ethical aspects of care and counselling.

RESEARCH PROJECTS

Dr Clare Collins has completed a randomised controlled trial demonstrating heated humidified high-flow prongs showed similar efficacy in providing respiratory support post extubation and caused less nasal trauma.

The cytokine study by Drs Kai König and Friederike Beker, run jointly with the Ritchie Centre, examines inflammatory mediators in the blood of premature infants in the first week of life which may lead to chronic lung injury. Data are likely to be analysed and reported in 2015.

The OPTIMIST study is a randomised controlled trial of the safety and efficacy of an alternative way to administer artificial surfactant without intubating premature infants. This study is being coordinated by Drs Jim Holberton and Ajit Aiyappan.

The diabetes and antenatal milk expressing (DAME) study is a multicentre randomised controlled trial to examine the safety and efficacy of antenatal breastmilk expression in mothers with gestational diabetes. Dr Gillian Opie is one of the chief investigators of this NHMRC funded study.

The Australian Placental Transfusion Study (APTS) is the first large multicentre randomised controlled trial examining the effect of delayed clamping of the umbilical cord to ensure the infant gets as much blood from the placenta as possible. Early studies have suggested a beneficial effect in reducing the severity of respiratory disease and neurological injury in preterm infants. Enrolment has been very successful.

The MIS-BAIR study coordinated by Dr Dan Casalez examines the effect of immunisation with BCG. There is now evidence this may also reduce mortality due to other infections and reduce risk of allergic disease. This study recruited throughout 2013.

The Growth and Development Clinic remains active in research, with ongoing follow up of infants involved in the

CAP trial. This is a trial of caffeine for apnoea of prematurity and also long-term developmental follow up of extremely low birthweight infants born in 2005.

We acknowledge our invaluable support staff, especially our research nurses, Geraldine Walsh, Chelsea Webster, Liz Noble and Heather Woods, without whose enthusiasm, dedication, patience and organisational skills this research work would not be possible.

Focus on newborn nutrition

Mercy Health Breastmilk Bank based at Mercy Hospital for Women remains active in sociological research. Activity in 2013 focused on clinician perceptions of safety and value of human donor milk (the LiquidGold study), together with an ongoing study of the attitudes and beliefs of bereaved mothers to the possibility of milk donation after neonatal death. Dr Gillian Opie and Mrs Kerri McEgan collaborated on the study with Dr Katherine Carroll of University of Technology, Sydney.

The N3RO study, coordinated on site by Dr Jim Holberton is a multicentre randomised controlled trial investigating whether including fish oil in feeds reduces the risk of chronic lung disease in premature infants. This study has been recruiting successfully throughout 2013.

The ProPrem Neuro trial examines the neurodevelopmental outcome for extremely preterm infants of including probiotics in feeds. Dr Gillian Opie is a chief investigator of this NHMRC funded multicentre Australian and New Zealand trial.



Work centers on understanding the special needs of babies in the Neonatal Intensive Care Unit and Special Care Nursery to improve their care



“I’ve always been passionate about fighting kids’ diseases and now I’m here working to save babies”

Assoc Prof Martha Lappas

University of Melbourne Department,
Mercy Hospital for Women

A PASSION FOR RESEARCH CONTINUES TO BEAR FRUIT

The last place most of us would expect to find protection against preterm birth related defects is their fruit bowl. But being open to new ideas and untapped resources is what has distinguished Assoc Prof Martha Lappas' research career for all of her 17 years with Mercy Health.

An integral part of the Obstetrics, Nutrition and Endocrinology Group research team in the University of Melbourne Department at Mercy Hospital for Women, Assoc Prof Lappas has used those years to explore a broad spectrum of factors implicated in preterm birth from both maternal and fetal perspectives. Her drive to combat this potentially catastrophic phenomenon has led to her current focus on new applications for dietary phytophenols in protecting the brains of babies born too early.

Found naturally in fruit and vegetables, phytophenols can stop the mechanisms that cause preterm birth due to infection. This is a major advance against the leading cause of morbidity and mortality in infants.

"A big issue with preterm birth is the children often have neurological defects and many end up with cerebral palsy or intellectual and developmental issues," says Assoc Prof Lappas. "What we've been able to show is that phytophenols can reduce the injury that occurs in the brain.

My goal is that all this research will make a difference to babies born too early

"So we now have evidence that the brains of pups that have been fed phytophenols, by injecting the synthesized form into the mother, have improved protection."

The findings are the latest in a long list of achievements dating back to 1998, when Assoc Prof Lappas began her PhD studies at Mercy Hospital for Women. "I then received a fellowship from the University of Melbourne, and two subsequent Career Development Fellowships from the National Health and Medical Research Council," Assoc Prof Lappas says.

The following years have been studded with honours and grants recognising her pioneering work in the pathogenesis of preterm labour, premature rupture of membranes and gestational diabetes mellitus. Her commitment to improving women's and babies' health can perhaps be traced to two trailblazing women who helped shape her early work.

"I did my honours degree with a woman scientist, Jennifer Rolland, who was one of the only female professors working at Monash University. She was inspirational as a woman working in a man's world.

"I also want to acknowledge Lynn Tuttle, one of the hospital's first research midwives when we started out 17 years ago. There was hardly anything set up, we didn't know what we were doing. She came on board and was just inspirational. She set up the way we still collect samples and approach women now.

"I've always been passionate about fighting kids' diseases and now I'm here working to save babies, which is exciting. My goal is simply that someday this research will make a difference to babies born too early. We hope we're taking tiny steps towards future developments."

A supportive research community has been fundamental to fostering Assoc Prof Lappas' work.

"Michael Permezel, Professor of Obstetrics and Gynaecology in the University Department, has been a mentor, so passionate about my research. Prof Sue Walker has been inspiring: she is gracious, knowledgeable, has time for everyone. More recently I've got to know Prof Norman Beischer who was the Department's founding professor. Even though he's retired he'll still ring and say 'I've found this great article you should read'. For someone who has done everything in this field to still be interested in my research is just incredible.

"The Mercy more broadly has been very supportive of our research, supplying midwives, the hospital infrastructure and access to the women who are about to deliver."

Assoc Prof Lappas is keenly aware her work depends on the contributions of this last group.

"I'm inspired by the women who, when they're having a baby really early, come here in distress but if we ask them for some tissue will say 'Yep, if that's for research, no worries.' They give so much for us.

"I love my work. I'm inspired by the people in the hospital who try to save women and babies. I'm inspired by my colleagues who do amazing work. I want to do good research and make the people who have supported me, like Prof Permezel, Prof Walker and Prof Beischer feel they're achieving something through me. I want them to be proud of the research we're doing."

University of Notre Dame Australia

Melbourne Clinical School

As part of the Notre Dame School of Medicine, Sydney, the Melbourne Clinical School (MCS) undertakes research to improve the health of people and communities by generating new knowledge to enhance clinical practice and inform health policy.

The School of Medicine has developed a research strategy with five key themes: social justice, translation and implementation, cultural awareness, partnerships and collaboration, and targeted innovation.

RESEARCH ACTIVITY

During 2013, research at the MCS focused on three key themes: primary care and prevention, rural and community, and medical education. Within the primary care and prevention theme the MCS is involved in a 20-year cohort study investigating respiratory disease aetiology and outcomes. Local community projects include studies to assess barriers to effective community care in the Wyndham region and to assess the intensive care needs of the local community. Medical education research is focused on assessing how useful current selection tools are in ensuring students selected into medical training make competent, caring and professional doctors.

RESEARCH PROJECTS

'Tasmanian Longitudinal Health Study-TAHS'.

Walters H and Kanjo E.

This asthma and respiratory health study aims to improve the understanding of the causes of chronic respiratory diseases (CRDs) in adults.

'Integrated Care Program-INCA'. Walters H, Joubert J and Kanjo E.

This pilot study of secondary risk factor modification for cardiovascular disease in patients in primary care identified a range of potential barriers to secondary prevention of vascular disease. These include important differences between GP and patient perspectives. The findings highlighted the importance of regular, ongoing communication and engagement between GP, allied health specialists and patients in delivering effective secondary programmes. This research was conducted in the city of Wyndham, Victoria.

Honours research projects completed 2014

Studies in areas of interest to participating honours students included community care of asthma, cardiac imaging in sarcoidosis, responses of neurons to antipsychotic medications, and comparison of patient outcomes associated with different types of hip arthroplasty.

ACADEMIC ACHIEVEMENTS

Assoc Prof Michael Dodson completed PhD. Deakin University

Dr Timothy Hewitt completed Honours in Medicine, University of Notre Dame Australia

Dr Damien Horton completed Honours in Medicine, University of Notre Dame Australia

Dr James Nadal completed Honours in Medicine, University of Notre Dame Australia

Dr Tess Maplestone completed Honours in Medicine, University of Notre Dame Australia

THESES

Hewitt T. *'Effect of Antipsychotic Drugs on Potassium in Rat Hippocampal CA1 Neurons'*, Honours Thesis, University of Notre Dame Australia 2013 (Supervised by Dr Christopher French, Royal Melbourne Hospital).

Horton D. *'Patient outcomes Using Anterior Minimally Invasive Surgery in Total Hip Arthroplasty: A Comparative Study'*, Honours Thesis, University of Notre Dame Australia 2013 (Supervised by Dr Malcolm Glase, Gosford Private Hospital).

Dodson M. *'The multiple mini-interview in medical student selection'*, PhD Thesis, Deakin University.

Maplestone T. *'The Frequency and Type of Care Received by Asthmatics in Primary Care and its Effect on Asthma Outcomes: An Exploratory Study'*, Honours Thesis, University of Notre Dame Australia 2013 (supervised by Prof Haydn Walters).

Nadal J. *'Cardiac MRI in the Assessment of Sarcoidosis'*, Honours Thesis, University of Notre Dame Australia 2013 (Supervised by Assoc Prof Andrew Taylor, Alfred Hospital).

Health Services, Surgical and Specialist Services Program

DEPARTMENT OF ANAESTHESIA

Health Services

The Department of Anaesthesia provides acute care for obstetrics, gynaecology-oncology and specialist gynaecology patients in anaesthesia, perioperative care and pain management.

Several original studies were completed and presented at scientific meetings or published in peer review journals in 2013 with similar expectations for ongoing work into 2014.

RESEARCH ACTIVITY

We published a major clinically focused project in the *International Journal of Obstetric Anaesthesia* on assessing a weight-based dosing schedule of the anticoagulant enoxaparin on anti-Xa activity. This project was conducted in collaboration with the Perinatal Medicine Centre. The results of this work will help refine the use of medications to prevent thromboembolic complications of pregnancy.

Our primary research interest in evaluating maternal cardiac output as assessed by transthoracic echocardiography led to an oral presentation of a completed study at an prestigious international meeting. Ethics approval has been obtained for a further similar study. We also presented the results of our first study at an international meeting in London on using early warning charts to aid detection of clinical deterioration in maternity patients.

Our association with the Cochrane Collaboration continued with a major systematic review, to be published in 2014, comparing combined-spinal epidural (CSE) with spinal anaesthesia for caesarean section. Important clinical audit studies were also ongoing in the use of general anaesthesia for caesareans and the anaesthetic implications of placenta praevia. A further study to evaluate the clinical accuracy of a new device for non-invasive haemoglobin measurement compared with standard methods was completed and submitted for publication.

RESEARCH PROJECTS

'Time to get comfortable with a labour epidural.'

Barker H, Simmons S, Hiscock R, Cyna A, McDonald S. (submitted for publication).

'Comparison of Massimo Pronto-7 and HemoCue Hb 201+ with laboratory haemoglobin estimation: a clinical study and meta-analysis.' Hiscock R, Simmons S, Carstensen B, Gurrin L. (submitted for publication).

'General anaesthesia for caesarean section at the Mercy Hospital for Women – a seven year audit.' Letson I, Geertsema, J, Simmons S. (completed).

'Anaesthesia for placenta praevia and accreta at Mercy Hospital for Women. A retrospective analysis of five years' experience' Simmons S. (completed).

'Transthoracic echocardiographic assessment of cardiac output in healthy women at elective caesarean section under spinal anaesthesia with ephedrine hypotension prophylaxis: an observational cohort study.' Investigators: Simmons S, Ilyas S, Casey E. (ethics approval obtained).



Dr Andrew Robinson, Department of Anaesthesia, Mercy Hospital for Women

Health Services, Medical, Sub-Acute and Palliative Care Services

EMERGENCY DEPARTMENT

Werribee Mercy Hospital

The Werribee Mercy Hospital Emergency Department (WMHED) serves the people of the south-western region of Melbourne.

Most of the patients are self-referred; a further number are referred by general practitioners while others are brought in by Ambulance Victoria.

RESEARCH PROJECTS

'Patient demand at the Emergency Department (ED) of Werribee Mercy Hospital (WMH)'. Adeleye L.

Lateef Adeleye (Registered Nurse) is undertaking an ongoing research project on patient ages and patient flows in the Emergency Department of Werribee Mercy Hospital. This will include the Australian Triage Scale (ATS) with numbers of admissions, transfers and discharges home.

The main aim of the project is to analyse the demographics, cases, severity, length of stay, did-not-wait cases and dispositions of patients who present to WMHED. The outcomes will assist the ED management to forecast staff skill needs and improve the services to the community while containing cost.

MERCY PALLIATIVE CARE

Mercy Palliative Care provides multi-disciplinary palliative care to patients through inpatient and community services across the western metropolitan region of Melbourne.

The Gabrielle Jennings Centre, an inpatient unit at Werribee Mercy Hospital currently has 12 beds in which specialist palliative care is provided. In addition a hospital-based service provides outreach across the hospital giving all patients access to specialist palliative care advice.

RESEARCH PROJECTS

'Parents' and music therapists' reflections on the experience of music and music therapy for paediatric palliative care patients and their families, who come

from diverse cultural backgrounds'. Forrest L. PhD at the University of Melbourne.

This study examines how families use music in their day-to-day lives and engage with music therapy in palliative care. It is a longitudinal, multisite study conducted across community palliative care services in Melbourne which provide music therapy services to children living with a life-threatening illness.

'In-hospital palliative and end-of-life care of people with diabetes mellitus at Werribee Mercy Hospital'. O'Neal D, Pisasale M, Walpole G.

This audit assessed the proportion of patients admitted to palliative care with diabetes, to: profile current practice in managing blood glucose levels and compare this with national guidelines; assess the adequacy of symptom management in patients with diabetes; and, delineate the under-recognised burden of hyperglycaemia in patients receiving corticosteroids in palliative care.



Providing care in the community

Specialist Palliative Care Nurse Kerry Merry
with patient John and his wife Jan

Health Services, Ambulatory Allied Health and Community Services Program

NUTRITION AND DIETETIC DEPARTMENT

Mercy Hospital for Women

The department specialises in nutrition to support women's health at all life stages.

We have introduced malnutrition screening in the gynaecological oncology and chemotherapy units, using a validated assessment tool which allows us to diagnose degrees of malnutrition. We can then devise appropriate Nutrition Care Plans and provide education as appropriate.

We have also run multiple education sessions for staff on the importance of early identification of patients at risk of malnutrition and use of the screening tool. Regular audits have also been conducted on compliance with the tool.

RESEARCH PROJECTS

'Consumer and health professional input into the development of an m-health program'. Campbell K (Deakin University), McCarthy E (Mercy Hospital for Women), Lappas M (Mercy Hospital for Women), Wilcox J (Deakin University).

Part 1 – 'Exploring IT usage and health information sources among pregnant women'.

A survey was completed by pregnant women recruited from antenatal clinics to assess the use of IT and access to electronic health information among pregnant women.

Part 2 – 'Development and testing of m-health intervention model (current phase)'.

This is a feasibility study, using focus groups with women and interviews with health professionals to assess the desirability of components in the intervention and evaluate the design and feasibility of a clinical trial and broad reach delivery.

Part 3 – 'Pilot of m-health intervention model promoting healthy gestational weight gain'.

This collaborative research project was conducted jointly by Mercy Hospital for Women and Deakin University.

OUTPATIENTS DEPARTMENT

Mercy Hospital for Women

The Outpatients Department (OPD) at Mercy Hospital for Women provides specialist clinics for antenatal gynaecology and paediatric care.

Physician, physiotherapy and perinatal mental health clinicians work collaboratively to provide specialist consultancy for our women and babies.

As a tertiary hospital we provide antenatal care across a range of conditions, seeing approximately 750 women per week. We also provide specialist gynaecological care for up to 550 women per week.

The OPD clinics provide a rich opportunity for recruiting, especially of maternity patients, for the many research projects undertaken at Mercy Hospital for Women. Our staff work collaboratively with the research teams embracing the culture of continuous improvement and evidenced-based practice.

MEDICAL IMAGING DEPARTMENT

Mercy Hospital for Women

The Medical Imaging Department offers general radiology services.

RESEARCH PROJECTS

'Variance in adult bone size originates before birth.'

Ho Y, Saxton V.

In 2013 the department concluded its contribution to this study, which surveyed more than 300 patients. Each patient had two scans and two analyses of each 3D data set of the femur, giving around 1200 computations.

'Comparison of (pathological) hyperfiltration of diabetes with (physiological) hyperfiltration of pregnancy'. Ho Y, Saxton V.

This study gives 60 participants three-dimensional ultrasound examinations of their kidneys to estimate renal volume. Each patient is scanned before, during and after pregnancy. This study is nearly complete and the analysis is ongoing.

An audit looking for complications of Umbilical Vein Catheter (UVC) insertion was performed by scanning 106 patients in NICU who had a UVC inserted in the past year. Scanning was done at days 3, 14 and 42. This has shown that a liver haematoma was present in 19% of patients and calcification of the ligamentum venosum in 22%. As a result our clinical practice will now change to include regular abdominal scans to check for hematomas in patients who have had a UVC inserted.

A follow up audit of the position of the nasal gastric (NG) tube on neonatal chest x-rays was performed using the formula developed from the first audit to help get accurate NG tube positioning. This showed that there has been improvement in the NG tube position following use of the formula that was developed.

Investigators: Ho Y, Saxton V.



Dr Virginia Saxton, Medical Imaging Department.



The Multicultural Services FGM/C team

(clockwise from top left) Ms Natalija Nesvadba, Ms Suleeqa Hussein, Ms Magdalena Pliszka and Ms Wemi Oyekanmi.

MULTICULTURAL SERVICES UNIT

Mercy Hospital for Women

The Multicultural Services Unit at Mercy Hospital for Women aims to provide effective language services which help patients overcome barriers to accessing services at the hospital, and assist our staff to provide highest quality, equitable services.

The unit also aims to:

- develop and strengthen the provision of culturally responsive healthcare to our diverse constituency
- develop good working relationships with local ethnic communities and their representative organisations, and
- promote health literacy in our diverse community.

During 2013 we have also worked to establish multicultural services at Werribee Mercy Hospital.

RESEARCH PROJECTS

‘Supporting young women who have experienced female genital mutilation/cutting’ (FGM/C).

Mercy Public Hospitals Inc. (MPHI) has been funded by the Australian Government Department of Health and Ageing to undertake a qualitative review of the experiences of young women (18-25 years old) from FGM/C affected communities. The review aims to determine ways to develop, improve and deliver support services that are culturally and age appropriate while increasing understanding of FGM/C and its consequences.

Our recent experience suggests that younger migrant women who are growing up in Australia require a different approach to that for the older generation. We will consult with young women who have experienced FGM/C and other key stakeholders who are working in this area. Data collected will attempt to identify features of culturally and age appropriate support services for young women who have experienced FGM/C.

Ethics approval was obtained in September 2013.

This study is based at Mercy Hospital for Women and participants are recruited from within the hospital and the community. Interviews with participants are currently underway and transcribing and data analysis will follow by June 2014.

RESEARCH GRANTS

FGM Support Grant received from the Australian Government Department of Health and Ageing (R13/35) for *‘Supporting young women who have experienced female genital mutilation/cutting (FGM/C)’*.

PHYSIOTHERAPY SERVICES

Werribee Mercy Hospital

Werribee Mercy Hospital provides inpatient and outpatient physiotherapy services.

Mercy Public Hospitals Inc. (MPHI) participated in the Victorian Department of Health, Allied Health Assistant Implementation Project during 2013. Ms Penelope Sanderson and Ms Anne Harrison were seconded from their usual roles to lead the project.

The project aimed to identify and quantify Allied Health Professionals' (AHPs) tasks which, in accordance with the Supervision and Delegation Framework for Allied Health Assistants (AHAs) (State of Victoria, Department of Health, 2012), could be performed safely by an AHA.

The outcomes will inform strategic allied health workforce planning at MPHI to address growing demand for allied health services.

The study has been presented at various Department of Health forums throughout the year.

MERCY HEALTH LYMPHOEDEMA SERVICES (MHLS)

MHLS provides outpatient services to men, women and children who are at risk of lymphoedema or are diagnosed with primary or secondary lymphoedema.

A multidisciplinary team consisting of medical practitioners, lymphoedema therapists, social workers, dieticians and allied health assistants provides services at clinics in East Melbourne and Heidelberg. The clinics offer assessment, education, treatment and management for patients, including a collaborative paediatric clinic which operates in conjunction with the Royal Children's Hospital.

Staff members are strongly connected to the professional body, Australasian Lymphology Association and the Mercy Health Lymphoedema Service is well recognised nationally and internationally.

RESEARCH ACTIVITY

Ms Jane Phillips is enrolled in a Graduate Certificate in Research Methods through James Cook University and has begun collecting data for a reliability study for objective measurement of lymphoedema.

RESEARCH PROJECTS

'Establishing the reliability of circumferential measurements and the digital tonometer/ Electronic Indurometer in assessment of lower limb primary lymphoedema.' Phillips, J.



MHLS offers assessment, education, treatment and management for lymphoedema patients.

MERCY HEALTH O'CONNELL FAMILY CENTRE

Mercy Health O'Connell Family Centre (OFC) is focused on the needs of vulnerable families and young children.

We continue to improve access for vulnerable families within the DHS eastern region, and where appropriate throughout Victoria as a state-wide service provider.

Currently OFC has a strong focus on the role of fathers in the family unit and presented a paper at the Marcé Society conference held in Melbourne 10-12 October. The Marcé Society is a multidisciplinary forum for exchanging information and ideas between professionals concerned with the welfare of women and their families around the time of childbirth.

This year we introduced a mental health screening measure for all admitted fathers, the Depression Anxiety and Stress Scale (DASS). Data to date from 84 fathers has showed scores of 'moderate' or above for 8.3% of fathers for depression, 14.3% for anxiety and 19.0% for stress. This highlights the need for support and interventions for fathers, as well as mothers, in their roles as parents.



Fathers as well as mothers need support in their roles as parents

Health Services, Mental Health Services Program

PERINATAL MENTAL HEALTH UNIT

Mercy Hospital for Women

Perinatal Mental Health continues to provide clinical services to Mercy Hospital for Women and undertake research through clinical affiliations in the hospital.

Of particular note is the joint clinic with perinatal medicine for the antenatal care of women with schizophrenia and bipolar disorder, and with paediatrics for women with borderline personality disorder in the antenatal clinics. Planning has also begun for the new Centre for Maternal and Early Family Mental Health. This groundbreaking service will deliver innovative and collaborative mental healthcare to women experiencing severe mental illness in the antenatal period and their families. Specific research into depression across pregnancy and the safety of antidepressants is ongoing through the department. The unit collaborates nationally and internationally on research with MCRI, University of Melbourne, Deakin University, University of Sydney and Leiden University in the Netherlands. This year Assoc Prof Megan Galbally was President of the Australasian Marcé Society.

RESEARCH ACTIVITY

Assoc Prof Megan Galbally and collaborators from Deakin University, MCRI and University of Melbourne have continued the Mercy Pregnancy and Emotional Wellbeing Study funded by a National Priority Research Grant from Beyond Blue. This study has been made possible through coordination by Dr Nicole Brooks and Tina Viano and significant assistance from a number of postgraduate psychology students from Deakin University.

Assoc Prof Galbally and Dr Gaynor Blankley co-convened the recent Australasian Marcé Conference in Melbourne and hosted two delegates, internationally renowned researchers Professor Doug Teti and Professor Tim Oberlander. Dr Martien Snellen continues clinical care for pregnant women with schizophrenia

and bipolar and collection of data to review the care model. This data was presented by Dr Snellen and Dr Jo Power as a workshop at the conference.

The perinatal mental health department has continued to contribute book chapters, journal publications and presentations at national and international conferences. Dr Gaynor Blankley continues to develop collaborative research into pregnancy and borderline personality disorder, completing a book chapter on this topic. Dr Snellen has also completed a book chapter on bipolar disorder in pregnancy. Assoc Prof Galbally, Dr Snellen and Assoc Prof Andrew Lewis have completed an edited book from Springer on psychopharmacology in pregnancy with chapters contributed by eminent authors from Australia, USA, UK, Canada, Italy and Austria.

RESEARCH PROJECTS

'Pregnancy and Borderline Personality Disorder'. Blankley G, Galbally M, Snellen M, Power J, Lewis A.

'Antenatal Care of Women with Schizophrenia and Bipolar Disorder'. Snellen M, Galbally M, Blankley G, Power J, Lewis A.

'Mercy Pregnancy and Emotional Wellbeing Study (MPEWS)'. Galbally M, Lewis A, Permezel M, Lappas M, IJzendoorn M, Saffery R, Ryan J, Brooks N, Reynolds J, Buist A, Watkins A, Blankley G, Power J.

'Early intervention to ensure the optimal developmental environment for the children of bipolar mothers'. Galbally M, Snellen M, Boyce P, Power J.

ACADEMIC ACHIEVEMENTS

Reviewer *British Medical Journal (BMJ)*, *Psychoneuroendocrinology*, *Archives of General Psychiatry*, *Peptides*, *Early Human Development* and the *Australian and New Zealand College of Psychiatry Journal*.

External grant reviewer for NHMRC and Wellbeing of Women Grant (RCOG).



Perinatal Mental Health team

Dr Martien Snellen and Assoc Prof Megan Galbally

Mercy Health Human Research Ethics Committee (HREC)

The Mercy Health HREC and the Expedited Review Working Party reviewed 73 new research projects in 2013, as well as 139 progress reports.

The Mercy Health Board appointed three new members to the Mercy Health HREC in June 2013, increasing the HREC to 17 members. These are:

- Prof Stephen Tong, University of Melbourne Department
- Assoc Prof David O'Neal, Clinical Services Director Medical, Subacute and Palliative Care Services
- Ms Wendy Brooks, layperson.

Prof John Ozolins continues as Chair of Mercy Health HREC.

Mr Paul Drinkwater retired from Mercy Health and Mercy Health HREC in December 2013.

RESEARCH PROJECTS

PROJECT	LEADER
<i>'NEST': A randomised controlled trial comparing the treatment of electrographic and clinical seizures to the treatment of clinical seizures alone, in term or near term encephalopathic infants and measuring the impact on death and neurodevelopment at two years.</i>	Dr Rod Hunt, Royal Children's Hospital
<i>'Outbreak Investigation using high throughput genome sequencing within the diagnostic microbiology laboratory'.</i>	Assoc Professor Benjamin Howden, Director of Microbiology, Austin Health
<i>'Cancer supportive care screening - patient survey.'</i>	Dr Catherine Corrick, Mercy Hospital for Women/North Eastern Melbourne Integrated Cancer Service
<i>'Cancer supportive care screening - staff survey.'</i>	Dr Catherine Corrick, Mercy Hospital for Women/North Eastern Melbourne Integrated Cancer Service
<i>'Chronic lung disease in the preterm neonate: Cytokine profile analysis.'</i>	Dr Friederike Beker, Mercy Hospital for Women
<i>'Coping strategies of nursing and medical staff in NNICU in response to death of neonates and correlation between this and perceptions of stress levels as well as experiences in close relationships.'</i>	Dr Josephine Topp, Mercy Perinatal Mental Health
<i>'Lymphoedema as predictor of metastatic spread patients diagnosed with breast cancer.'</i>	Mr Damien Grinsell, Royal Australasian College of surgeons

PROJECT	LEADER
<i>'Release of patient information as part of an evaluation of immunohistochemistry (IHC) as a screening test for Lynch syndrome in women with uterine cancer diagnosed at or before age 70.'</i>	Dr Marsali Newman, Austin Health
<i>'Telehealth for optimising asthma management during pregnancy.'</i>	Dr Johnson George, Centre for Medicine Use and Safety, Monash University
<i>'Audit of prophylactic bilateral salpingo-oophorectomy specimens in a high-risk patient population.'</i>	Dr Marsali Newman, Austin Health
<i>'Understanding interstitial cajal-like cells in the uterus and their correlation with gynaecological symptoms. A retrospective study.'</i>	Assoc Prof Sonia Grover
<i>'Failed regional blocks in a tertiary maternity service: a 12-month audit.'</i>	Clinical Assoc Prof Scott Simmons, Mercy Hospital for Women
<i>'Analysis of sodium levels in the neonatal intensive care unit.'</i>	Dr James Holberton, NICU, Mercy Hospital for Women
<i>'The Australian and New Zealand Stillbirth Alliance (ANZSA) Research Consortium for the investigation of stillbirths.'</i>	Assoc Prof Vicki Flenady, Mater Medical Research Institute, South Brisbane
<i>'Measuring the impact of infant care at sleep transition. (Monitoring effects on infant stress regulations when exposed to response based settling interventions at the O'Connell Family Centre).'</i>	Assoc Prof Wendy Middlemiss, University of North Texas
<i>'Text message reminder to increase influenza vaccination during pregnancy in women booked for pregnancy and birth care at Mercy Hospital for Women.'</i>	Dr Elizabeth McCarthy, Mercy Hospital for Women
<i>'Treating early onset severe preeclampsia with Pravastatin. An early phase clinical trial.'</i>	Prof Stephen Tong, Mercy Hospital for Women
<i>'Milk donation after neonatal death.'</i>	Ms Katherine Carroll, University of Technology, Sydney
<i>'Evaluation of Pregnancy Associated Plasma Protein -A (PAPPA) as a regulator of IGF activity in melanoma progression.'</i>	Prof Jonathan Cebon, Austin Health
<i>'A retrospective review of undiagnosed breech at the Mercy Hospital for Women.'</i>	Dr Laurel Bennett, Mercy Hospital for Women
<i>'Laboratory project investigating preeclampsia and ectopic pregnancy using samples obtained under Tissue Bank ethics. (Research R11/34).'</i>	Prof Stephen Tong, Mercy Hospital for Women
<i>'Establishing the reliability of circumferential measurements and the digital tonometer in assessment of lower limb primary lymphoedema.'</i>	Ms Jane Phillips, Mercy Health Lymphoedema Clinic
<i>'Investigation of MSD toolkit and hazard measures in relation to claim rates and other indicators.'</i>	Dr Jodi Oakman, Centre for Ergonomics and Human Factors, La Trobe University

Mercy Health HRES Research Projects cont'd

PROJECT	LEADER
<i>'Beaded Beginnings – creating memories as keepsakes to help parents acknowledge and celebrate milestones of their baby's journey through the NICU.'</i>	Ms Nicole Harwood, Mercy Hospital for Women
<i>'Randomised controlled trial to compare TVT and Monarc suburethral sling procedure in women with urodynamic stress incontinence and intrinsic sphincter deficiency. A five-year follow-up. (Related to R04/04).'</i>	Dr Lore Scierlitz, Mercy Hospital for Women
<i>'Exploratory study of breast milk expression, storage and transport by women whose infants are inpatients in the neonatal unit of Mercy Hospital for Women. (Bringing in milk from home: An exploratory study).'</i>	Dr Ranmali Rodrigo, Mercy Hospital for Women
<i>'Surgical management of recurrent pelvic organ prolapse: Comparing Native Tissue Repair to Mesh Augmented Repair.'</i>	Dr Lin Li Ow, Medical Trainee, Sunshine Hospital
<i>'Working Smarter with Allied Health Assistants: The identification of Allied Health Professionals tasks which could be safely undertaken by Allied Health Assistants.'</i>	Ms Anne Harrison, Werribee Mercy Hospital
<i>'Staging, Adjuvant treatment and tumour recurrences of uterine papillary serous carcinomas. A single institution review of 62 women.'</i>	Dr Fraukje Pol, Mercy Hospital for Women
<i>'Effects of pregnancy and lactation on bone structure (follow-up of R07-46).'</i>	Prof Ego Seeman, Austin Health
<i>'The use of intra-transport phototherapy in neonates with unconjugated hyperbilirubinaemia transported by the Newborn Emergency Transport Service (NETS), Victoria.'</i>	Dr Michelle Waterham, NETS, Royal Children's Hospital
<i>'Unpacking advocacy in contemporary nursing.'</i>	Prof Sally Welland, Ballarat University
<i>'Consumer and health professional input into the development of an m-health program targeting health gestational weight gain (txt4two).'</i>	Assoc Prof Karen Campbell/ Ms Jane Willcox, Deakin University
<i>'A prospective evaluation of the impact of the nurse practitioner role on emergency department service and outcomes (EDPRAC) at Mercy Hospital for Women and Werribee Mercy Hospital.'</i>	Prof Glenn Gardner, Queensland University of Technology
<i>'Outcomes of neonates receiving nasal CPAP in a level 2 hospital from 2010 to 2012. A clinical audit.'</i>	Ms Helen Patterson, Werribee Mercy Hospital
<i>'Evaluation of factors associated with medical inpatient stay duration of diabetic patients admitted to a community hospital (Werribee Mercy Hospital).'</i>	Assoc Prof David O'Neal, Werribee Mercy Hospital
<i>'High-flow cannulae as primary support in the treatment of early respiratory distress (The HIPSTER Trial).'</i>	Dr Calum T. Roberts, Royal Women's Hospital
<i>'Supporting young women who have experienced female genital mutilation /cutting (FGM/C).'</i>	Ms Natalijia Nesvadba, Mercy Hospital for Women
<i>'The effect of test positions on the assessment of pelvic floor muscle activity in symptomatic and post-surgical women.'</i>	Dr Cristine Homsí Jorge Ferreira/ Dr Helena Frawley Mercy Hospital for Women

PROJECT	LEADER
<i>'Nurses' survey of women's experience who have had laser or LLETZ treatment.'</i>	Denise Heys, Mercy Hospital for Women
<i>'Massive Transfusion Registry (MTR).'</i>	Dr Amanda Zatta, Massive Transfusion Registry, Monash University/Alfred Hospital
<i>'INCB 24360-10. A randomised, open-label, Phase 2 study of the IDO inhibitor INCB024360 versus Tamoxifen for subjects with biochemical-recurrent-only epithelial ovarian cancer, primary peritoneal carcinoma or fallopian tube cancer following remission.'</i>	Dr Linda Mileschkin, Mercy Hospital for Women
<i>'Use of a multimedia module in antenatal education for epidural anaesthesia in labour.'</i>	Dr Jacinta Carty, Mercy Hospital for Women
<i>'The use of a multimedia module to aid the informed consent process in patients undergoing elective caesarean section. A pilot study.'</i>	Dr Alice Trong, Obstetric HMO
<i>'First time mothers in Victoria – a pilot cohort study.'</i>	Dr Mary-Ann Davey, La Trobe University
<i>'The epidemiology and genetics of the infantile epileptic encephalopathies.'</i>	Dr Katherine Howell, Royal Children's Hospital
<i>'End-of-Life Care Pathways Project.'</i>	Ms Kirsten Mitchener, Project Officer, Mercy Health Aged Care
<i>'Current guidelines for thrombophilia and bleeding disorder testing in women: Are the right women being tested? An audit of MHW experience.'</i>	Assoc Prof Sonia Grover
<i>'Transthoracic echocardiographic assessment of cardiac output in healthy women at elective caesarean section under spinal anaesthesia with ephedrine hypotension prophylaxis: an observational cohort study.'</i>	Clinical Assoc Prof Scott Simmons, Mercy Hospital for Women
<i>'The ROC Study: Comparing the effectiveness of an innovative and comprehensive new eye care model with usual care for individuals in Residential Care Facilities. Multicentred, prospective and randomised controlled clinical trial.'</i>	Assoc Prof Ecosse Lamoureux, Centre for Eye Research Australia
<i>'Using the smell and taste of milk to improve milk tolerance and the growth of preterm infants.'</i>	Dr Friederike Beker, Mercy Hospital for Women
<i>'Non-invasive prenatal testing for fetal aneuploidy in Australia and New Zealand - a survey of obstetric sonologists.'</i>	Dr Lisa Hui, Department of Perinatal Medicine Mercy Hospital for Women
<i>'In-hospital palliative and end-of-life care of people with diabetes mellitus at Werribee Mercy Hospital.'</i>	Assoc Prof David O'Neal, Werribee Mercy Hospital
<i>'Evaluation of pre-admission consultations at Mercy Health O'Connell Family Centre'</i>	Assoc Prof John D Whyte, RMIT
<i>'The Australian Cervical Cancer Typing Study (ACCTS).'</i>	Dr Marsali Newman, Austin Health

In Print and Online

DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY

University of Melbourne/Mercy Hospital for Women

Whitehead CL, Walker SP, Ye L, Mendis S, Kaitu'u-Lino T, Lappas M, Tong S. Placental specific mRNA in the maternal circulation are globally dysregulated in pregnancies complicated by fetal growth restriction. *Journal of Clinical Endocrinology and Metabolism* 2013; 98(3): E429-436.

Kaitu'u-Lino T, Pattison S, Ye L, Tuohey L, Sluka P, MacDiarmid J, Brahmabhatt H, Johns T, Horne A, Brown J, Tong S. Targeted nanoparticle delivery of doxorubicin into placental tissues to treat ectopic pregnancies. *Endocrinology* 2013; 154(2): 911-919.

Kaitu'u-Lino T, Tuohey L, Ye L, Palmer KR, Skubisz M, Tong S. MT-MMPs in preeclamptic placenta: relationship to soluble endoglin production. *Placenta* 2013; 34(2):168-173.

Tuohey L, Macintire K, Ye L, Palmer KR, Tong S, Kaitu'u-Lino T. PLAC4 is upregulated in severe early onset preeclampsia and upregulated with syncytialisation but not hypoxia. *Placenta* 2013; 34(3): 256-260.

Whitehead C, Walker SP, Lappas M, Tong S. Circulating RNA coding genes regulating apoptosis in maternal blood in severe early onset fetal growth restriction and preeclampsia. *Journal of Perinatology* 2013; 33(8): 600-604.

Kaitu'u-Lino T, Ye L, Tuohey L, Dimitriadis E, Bulmer J, Rogers P, Menkhorst E, Van Sinderen M, Girling J, Hannan N, Tong S. Corin, an enzyme with a putative role in spiral artery remodelling, is unregulated in late secretory endometrium and 1st trimester decidua. *Human Reproduction* 2013; 28(5): 1172-1180.

Skubisz M, Dutton P, Duncan C, Horne AW, Tong S. Using a decline in serum hCG between days 0-4 to predict ectopic pregnancy treatment success after single-dose methotrexate: a retrospective cohort study. *BMC Pregnancy and Childbirth* 2013; 13:30.

Whitehead C, Walker SP, Mendis S, Lappas M, Tong S. Quantifying mRNA coding growth genes in the maternal circulation to detect fetal growth restriction. *American Journal of Obstetrics and Gynecology* 2013; 209(2):133.e1-9.

Wu D, Hu T, Tong S, Williams BRG, Smyth GK, Gantier MP. The use of miRNA microarrays for the analysis of cancer samples with global miRNA decrease. *RNA* 2013; 19(7):876-888.

Skubisz M, Brown JK, Tong S, Kaitu'u-Lino T, Horne AW. Maternal serum macrophage inhibitory cytokine-1 as a biomarker for ectopic pregnancy in women with a pregnancy of unknown location. *PLOS One* 2013; 8(6): e66339.

Fung A, Wilson D, Lappas M, Howard M, Barnes M, O'Donoghue F, Tong S, Esdale H, Fleming G, Walker SP. Effects of maternal obstructive sleep apnoea on fetal growth: a prospective cohort study. *PLOS One* 2013; 8(7): e68057.

Grossmann M, Hoermann R, Francis C, Hamilton EJ, Tint A, Kaitu'u-Lino T, Kuswanto K, Lappas M, Sikaris K, Zajac JD, Permezel M, Tong S. Measuring thyroid peroxidase antibodies on the day nulliparous women present for management of miscarriage: a descriptive cohort study. *Reproductive Biology and Endocrinology* 2013;11:40.

Horne AW, Skubisz M, Doust A, Duncan WC, Wallace EM, Critchley HOD, Johns T, Norman JE, Bhattacharya S, Mollison J, Rasmussen M, Tong S. Phase II single arm open label multicentre clinical trial to evaluate the efficacy and side effects of combination gefitinib and methotrexate to treat tubal ectopic pregnancies (GEM II): study protocol. *BMJ Open* 2013; 3(7): e002902.

Kaitu'u-Lino T, Bambang K, Onwude J, Hiscock R, Konje J, Tong S. Plasma MIC-1 and PAPP-A levels are decreased among women presenting to an Early Pregnancy Assessment Unit, have fetal viability confirmed but later miscarry. *PLOS One* 2013; 8(9): e72437.

Krishnan T, Winship A, Sonderegger S, Menkhorst E, Horne AW, Brown J, Zhang JG, Nicola N, Tong S, Dimitriadis E. The role of leukemia inhibitory factor in tubal ectopic pregnancy. *Placenta* 2013; 34(11):1014-1019.

Skubisz MM, Horne AW, Johns TG, Nilsson UW, Duncan WC, Wallace EM, Critchley HO, Tong S. Combination gefitinib and methotrexate compared to methotrexate alone to treat ectopic pregnancy. *Obstetrics and Gynecology* 2013; 122(4): 745-751.

Nilsson UW, Johns TG, Wilmann T, Kaitu'u-Lino T, Whitehead C, Dimitriadis E, Menkhorst E, Saglam B, Gao Y, Greenall SA, Horne AW, Tong S. Effects of gefitinib, an epidermal growth factor receptor inhibitor, on human placental cell growth. *Obstetrics and Gynecology* 2013; 122(4):737-744.

Norman JE, Tong S. MHR welcomes high-quality basic reproductive research around pregnancy. Editorial: *Molecular Human Reproduction* 2013; 19(11): 709-710.

Whitehead CL, Teh WT, Walker SP, Leung C, Larmour L, Tong S. Circulating MicroRNAs as potential biomarkers for fetal hypoxia in utero. *PLoS One* 2013; 8(11): e78487.

Whitehead CL, Teh WT, Walker SP, Leung C, Mendis S, Lamour L, Tong S. Quantifying circulating hypoxia-induced RNA transcripts in maternal blood to determine in utero fetal hypoxic status. *BMC Medicine* 2013; 11:256.

Liong S, Di Quinzio MKW, Heng YJ, Fleming G, Permezel M, Rice GE, Georgiou HM. Proteomic analysis of human cervicovaginal fluid collected prior to preterm premature rupture of the fetal membranes. *Reproduction* 2013; 145 (2):137-147.

Liong S, Di Quinzio MKW, Fleming G, Permezel M, Rice GE, Georgiou HM. Prediction of spontaneous preterm labour in at-risk pregnant women. *Reproduction* 2013; 146 (4): 335-345.

Liong S, Di Quinzio MKW, Fleming G, Permezel M, Georgiou HM. Is vitamin D binding protein a novel predictor of labour? *PLOS One* 2013; 8(10): e76490.

Boyle KE, Newsom SA, Janssen RC, Lappas M, and Friedman JE. Skeletal muscle MnSOD, mitochondrial complex II, and SIRT3 enzyme activities are decreased in maternal obesity during human pregnancy and gestational diabetes mellitus. *The Journal of Clinical Endocrinology and Metabolism* 2013; 98: E1601-9.

Chai M, Walker SP, Riley C, Rice GE, Permezel M, and Lappas M. Effect of supracervical apposition and spontaneous labour on apoptosis and matrix metalloproteinases in human fetal membranes. *BioMed Research International* 2013; 316146.

Chan HW, Lappas M, Yee SW, Vaswani K, Mitchell MD, and Rice GE. The expression of the let-7 miRNAs and Lin28 signalling pathway in human term gestational tissues. *Placenta* 2013; 34:443-448.

Lappas M. Forkhead box O1 (FOXO1) in pregnant human myometrial cells: a role as a pro-inflammatory mediator in human parturition. *Journal of Reproductive Immunology* 2013; 99:24-32.

Department of Obstetrics and Gynaecology cont'd

Lappas M. NOD1 and NOD2 regulate pro-inflammatory and prolabor mediators in human fetal membranes and myometrium via nuclear factor-kappa B. *Biology of Reproduction* 2013; 89:14.

Lim R, Barker G, Lappas M. SLIT3 is increased in supracervical human foetal membranes and in labouring myometrium and regulates pro-inflammatory mediators. *American Journal of Reproductive Immunology* 2013; 71 (4): 297-311.

Lim R, Barker G, Lappas M. TREM-1 expression is increased in human placentas from severe early-onset preeclamptic pregnancies where it may be involved in syncytialization. *Reproductive Sciences* 2013; 21(5): 562-572.

Lim R, Barker G, Lappas M. FOXM1 is lower in human fetal membranes after spontaneous preterm labour and delivery. *Reproduction, Fertility and Development* 2013; RD13140.

Lim R, Barker G, Lappas M. A novel role for FOXO3 in human labour: increased expression in labouring myometrium, and regulation of proinflammatory and prolabor mediators in pregnant human myometrial cells. *Biology of Reproduction* 2013; 88:156.

Lim R, Barker G, Lappas M. SIRT6 is decreased with preterm labour and regulates key terminal effector pathways of human labour in fetal membranes. *Biology of Reproduction* 2013; 88:17.

Lim R, Barker G, Riley C, Lappas M. Apelin is decreased with human preterm and term labour and regulates pro-labour mediators in human primary amnion cells. *Reproductive Sciences* 2013; 20: 957-967.

Lim R, Barker G, Wall CA, Lappas M. Dietary phytophenols curcumin, naringenin and apigenin reduce infection-induced inflammatory and contractile pathways in human placenta, foetal membranes and myometrium. *Molecular Human Reproduction* 2013; 19:451-462.

Lim R, Lappas M, Riley C, Borregaard N, Moller HJ, Ahmed N, Rice GE. Investigation of human cationic antimicrobial protein-18 (hCAP-18), lactoferrin and CD163 as potential biomarkers for ovarian cancer. *Journal of Ovarian Research* 2013; 6:5.

Oliva K, Barker G, Rice GE, Bailey MJ, Lappas M. 2D-DIGE to identify proteins associated with gestational diabetes in omental adipose tissue. *Journal of Endocrinological Investigation* 2013; 218:165-178.

Walker SP, Ugoni AM, Lim R, Lappas M. Inverse relationship between gestational weight gain and glucose uptake in human placenta from female foetuses. *Pediatric Obesity* 2013.

Wall C, Lim R, Poljak M, Lappas M. Dietary flavonoids as therapeutics for preterm birth: luteolin and kaempferol suppress inflammation in human gestational tissues in vitro. *Oxidative Medicine and Cellular Longevity* 2013; 485201.

de Costa CM, Permezel M, Farrell LM, Coffey AE, Rane A. Integrating parental leave into specialist training: experience of trainees and recently graduated RANZCOG Fellows. *Medical Journal of Australia* 2013; 199(5): 359-362.

Hiscock RJ, Casey E, Simmons SW, Walker SP, Newell PA. Peak plasma anti-Xa levels after first and third doses of enoxaparin in women receiving weight-based thromboprophylaxis following caesarean section: a prospective cohort study. *International Journal of Obstetric Anesthesia* 2013; 22(4): 280-288.

McCarthy EA, Walker SP, Shub A. Umbilical artery Doppler flow: an examination of current and best practice. *Australian and New Zealand Journal of Obstetrics and Gynaecology* 2013; 53(4): 403-407.

Giles ML, Grace R, Tai A, Michalak K, Walker SP. Prevention of mother-to-child transmission of hepatitis B virus (HBV) during pregnancy and the puerperium: current standards of care. *Australian and New Zealand Journal of Obstetrics and Gynaecology* 2013; 53(3): 231-235.

McCarthy EA, Shub A, Walker SP. Is that femur really short? A survey of current and best practice in fetal biometry. *Australian and New Zealand Journal of Obstetrics and Gynaecology* 2013;53(2): 203-206.

- Teoh M, Walker SP, Cole S, Edwards A. 'A problem shared is a problem halved': success of a statewide collaborative approach to fetal therapy. Outcomes of fetoscopic laser photocoagulation for twin-twin transfusion syndrome in Victoria. *Australian and New Zealand Journal of Obstetrics and Gynaecology* 2013; 53(2):108-13.
- Walker SP, Palma-Dias R, Wood EM, Shekleton P, Giles ML. Cytomegalovirus in pregnancy: to screen or not to screen. *BMC Pregnancy Childbirth* 2013;13:96.
- Wilson DL, Walker SP, Fung AM, O'Donoghue F, Barnes M, Howard M. Can we predict sleep-disordered breathing in pregnancy? The clinical utility of symptoms. *Journal of Sleep Research* 2013; 22(6): 670-678
- Ganesamoorthy D, Bruno D, McGillivray G, Norris F, White S, Adroub S, Amor D, Yeung A, Oertel R, Pertile M, Ngo C, Arvaj A, Walker S, Charan P, Palma-Dias R, Woodrow N, Slater H. Meeting the challenge of interpreting high-resolution single nucleotide polymorphism array data in prenatal diagnosis: does increased diagnostic power outweigh the dilemma of rare variants? *BJOG* 2013; 120 (10): 1296.
- Stark Z, Gillam L, Walker SP, McGillivray G. Ethical controversies in prenatal microarray. *Current Opinion in Obstetrics and Gynecology* 2013; 25(2):133-137.
- Wilson DL, Fung A, Walker SP, Barnes M. Subjective reports versus objective measurement of sleep latency and sleep duration in pregnancy. *Behavioural Sleep Medicine* 2013;11(3): 207-221.
- Charan P, Walker SP, Woodrow N, MacGillivray G, Palma-Dias R. Molecular Karyotyping: A Revolutionary Concept in Prenatal Diagnosis *Ultrasound* 2013; 21(2): 49.
- Hui L and Hyett J. Non Invasive Prenatal Testing for Trisomy 21: Challenges for Implementation in Australia. *Australian and New Zealand Journal of Obstetrics and Gynaecology* 2013 Oct; 53(5): 416-424.
- Hui L, Wick HC, Moise, Jr. KJ, Johnson A, Luks F, Haeri S, Johnson KL, Bianchi DW. Global gene expression analysis of amniotic fluid cell-free RNA from recipient twins with twin-twin transfusion syndrome. *Prenatal Diagnosis* 2013;33(9): 873-883.
- Hui L, Wick HC, Edlow A, Cowan J, Bianchi DW. Global gene expression analysis of term amniotic fluid cell-free fetal RNA. *Obstetric Gynecology* 2013;121(6): 1248-1254.
- Hui L. Non-invasive prenatal testing for fetal aneuploidy: charting the course from clinical validity to clinical utility. *Ultrasound in Obstetrics & Gynecology* 2013; 41(1): 2-6.
- Hui L and Bianchi DW. Recent advances in the prenatal interrogation of the human fetal genome. *Trends in Genetics* 2013; 29(2): 84-91.
- Shub A, Huning EY, Campbell KJ, McCarthy EA. Pregnant women's knowledge of weight, weight gain, complications of obesity and weight management strategies in pregnancy. *BMC Research Notes* 2013; 6: 278.

MIDWIFERY PROFESSORIAL & PROFESSIONAL DEVELOPMENT & RESEARCH UNITS (NURSING AND MIDWIFERY)

Mercy Hospital for Women

- Barker HM, Simmons SW, Hiscock, RJ, Cyna AM, McDonald SJ. Time to achieve comfort from labour epidural analgesia. *Anaesthesia and Intensive Care* (accepted Nov 2013).
- Taylor J, McDonald SJ, Tan K. A survey of central venous catheter practices in Australian and New Zealand tertiary neonatal units. *Australian Critical Care* (accepted Oct 2013).
- Jeston S, McDonald SJ, Pollock W. A survey of inotrope and vasopressor line change practices in Australian and New Zealand Neonatal Intensive Care Units. *Journal of Neonatal Nursing* 2013; 20(2): 69-76.

Midwifery Professional & Professional Development & Research Units (Nursing and Midwifery) cont'd

- McCarthy M, McDonald S, Pollock W. Triage of pregnant women in the emergency department: evaluation of a triage decision aid. *Emergency Medicine Journal* 2013; 30:117-122.
- McDonald SJ, Middleton P, Dowswell T, Morris PS. Effect of timing of umbilical cord clamping of term infants on maternal and neonatal outcomes. *Cochrane Database of Systematic Reviews* 2013; CD004074.
- Flood M, Pollock W, Davey MA, McDonald S. Challenges of monitoring postpartum haemorrhage. *Journal of Paediatrics and Child Health* 2013; 49(S2): A170.
- Pidd D, McDonald SJ, Pollock W, Walker S. Comprehensive initial antenatal assessment and physical examination by midwives: A pilot mentor supported education program and evaluation. *Journal of Paediatrics and Child Health* 2013; 49 (S2): A242.
- Taylor JE, McDonald S; Tan K. Prevention of infection in central venous catheters in neonates. *Journal of Paediatrics and Child Health* 2013; 49(S2): A231.
- Taylor JE, Tan K, McDonald SJ. Management of central Venous catheter practices in tertiary neonatal units across Australia and New Zealand. *Journal of Paediatrics and Child Health* 2013; 49 (Supplement 2): P373.
- Pollock W, Morse K. Chapter 5 'Nursing and midwifery considerations in the ICU setting.' In Van de Velde M, Scholefield H, Plante L [eds]. *Maternal Critical Care: a multidisciplinary approach*. Cambridge University Press 2013; 43-63.
- WE Pollock, R Bellomo, S Webb, I Seppelt, A Davies, E Sullivan, S Morrison, B Howe. Provision of mechanical ventilation to pregnant/postpartum women with H1N1 influenza: a case-control study. *Critical Care* 2013;17 (Supplement 2): S44.
- WE Pollock, S Simmons, L Phillips, S McDonald. Massive blood transfusion for obstetric haemorrhage. *Critical Care* 2013;17 (Supplement 2): S139.

DEPARTMENT OF GYNAECOLOGICAL ONCOLOGY

Mercy Hospital for Women

- Blinman P, Gainford C, Donoghoe M, Martyn J, Blomfield P, Grant P, Kichenadasse G, Vaughan M, Brand A, Shannon C, GebSKI V, Stockler M, Friedlander M. Feasibility, acceptability and preferences for intraperitoneal chemotherapy with paclitaxel and cisplatin after optimal debulking surgery for ovarian and related cancers: an ANZGOG study. *Journal of Gynaecologic Oncology* 2013; 24(4): 359-66.
- Handolias D, Quinn M, Foo S, Mileschkin L, Grant P, Dutu G, Rischin D. Oral cyclophosphamide in recurrent ovarian cancer. *Asia Pacific Journal of Clinical Oncology* 2013.
- Pendlebury A, Ireland-Jenkins K, Toner G, Rischin D, Grant P. Ovarian Growing Teratoma syndrome with spuriously elevated Alpha Fetoprotein. *Journal of Clinical Oncology* 2013. Accepted for publication.
- George J, Alsop K, Etemadmoghadam D, Hondow H, Mikeska T, Dobrovic A, deFazio A; Australian Ovarian Cancer Study Group, Smyth GK, Levine DA, Mitchell G, Bowtell DD. Nonequivalent gene expression and copy number alterations in high-grade serous ovarian cancers with BRCA1 and BRCA2 mutations. *Clinical Cancer Research*. 2013; 19(13):3474-3484.
- Shen H, Fridley BL, Song H, Australian Ovarian Cancer Study Group et al; Epigenetic analysis leads to identification of HNF1B as a subtype-specific susceptibility gene for ovarian cancer. *Nature Communications* 2013; 4:1628.
- Permuth-Wey J, Lawrenson K, Shen HC, Australian Ovarian Cancer Study, et al. Identification and molecular characterization of a new ovarian cancer susceptibility locus at 17q21.31. *Nature Communications* 2013; 4: 1627.
- Olsen CM, Nagle CM, Whiteman DC, Ness R, Australian Ovarian Cancer Study et al. Obesity and risk of ovarian cancer subtypes: evidence from the Ovarian Cancer Association Consortium. Group. *Endocrine-Related Cancer* 2013; 20(2): 251-262.
- Jordan S, Steer C, DeFazio A, Australian Ovarian Cancer Study Group, Webb P, et al. Patterns of chemotherapy treatment for women with invasive epithelial ovarian cancer – a population-based study. *Gynecologic Oncology* 2013; 129(2): 310-317.
- Baumbusch LO, Helland Å, Wang Y, Australian Ovarian Cancer Study Group, et al. High levels of genomic aberrations in serous ovarian cancers are associated with better survival. *PLoS One* 2013; 8(1): e54356.

Terry KL, Karageorgi S, Shvetsov YB, Australian Ovarian Cancer Study Group, et al; Ovarian Cancer Association Consortium. Genital powder use and risk of ovarian cancer: a pooled analysis of 8,525 cases and 9,859 controls. *Cancer Prevention Research (Phila)* 2013; 6(8): 811-821.

Pharoah PD, Tsai YY, Ramus SJ, Phelan CM, Australian Ovarian Cancer Study Group, et al. GWAS meta-analysis and replication identifies three new susceptibility loci for ovarian cancer. *Nature Genetics* 2013; 45(4): 362-370.

Bojesen SE, Pooley KA, Johnatty SE, Beesley J, Michailidou K, Tyrer JP, Edwards SL, Australian Ovarian Cancer Study, et al. Multiple independent variants at the TERT locus are associated with telomere length and risks of breast and ovarian cancer. *Nature Genetics* 2013; 45(4): 371-384.

DEPARTMENT OF ENDOSURGERY

Mercy Hospital for Women

Ellett L, Maher P. Forgotten surgical items: lessons for all to learn. *Gynecological Surgery* 2013;10(4): 295-297.

DEPARTMENT OF PAEDIATRICS

Mercy Hospital for Women

Sherry N, Porter J, Seemann T, Watkins A, Stinear T, Howden B. Outbreak investigation using high-throughput genome sequencing within a diagnostic microbiology laboratory. *Journal of Clinical Microbiology* 2013; 51(5): 1396-1401.

Watkins A. Perinatal Palliative Care: religious and cultural aspects of decision making. Melbourne University Master's Course: Palliative Care July 2013.

Watkins A. The place of perinatal palliative care PSANZ Perinatal Palliative Care Special Interest Group, Royal Children's Hospital July 2013.

Amanda Gwee, Ranmali Rodrigo, Dan Casalaz, Nicole Ritz, Nigel Curtis. Infants born in Australia to mothers from countries with a high prevalence of tuberculosis: to BCG or not to BCG? *Medical Journal of Australia* 2013; 199(5): 324-326.

Jacobs SE, Tobin JM, Opie GF, Donath S, Tabrizi SN, Pirotta M, Morley CJ, Garland SM. Probiotic effects on late onset sepsis in very preterm infants: a randomized controlled trial. *Pediatrics* 2013; 132(6): 1055-1062.

Roberts G, Cheong J, Opie G, Carse E, Davis N, Duff J, Lee KJ, Doyle L: Victorian Infants Collaborative Study Group. Growth of extremely preterm survivors from birth to 18 years of age compared with term controls. *Pediatrics* 2013; 131(2): e439-445.

DEPARTMENT OF ANAESTHESIA

Mercy Hospital for Women

Hiscock R, Casey E, Simmons S, Walker S, Newell P. Peak plasma anti-Xa levels after first and third doses of enoxaparin in women receiving weight-based thromboprophylaxis following caesarean section: a prospective cohort study. *International Journal of Obstetric Anesthesia* 2013; 22(4): 280-288.

Bereznicki BJ, Peterson G, Jackson S, Walters EH, George J, Stewart K, March GJ. Uptake and effectiveness of a community pharmacy intervention programme to improve asthma management. *Journal of Clinical Pharmacy and Therapeutics* 2013; 38(3): 212-218.

Bønnelykke K, Matheson MC, Pers TH, et al. Early Genetics and Lifecourse Epidemiology (EAGLE) Consortium, including Walters EH. Meta-analysis of genome-wide association studies identifies ten loci influencing allergic sensitization. *Nature Genetics* 2013; 45(8): 902-906.

Bui D, Burgess J, Matheson M, Erbas B, Perret J, Morrison S, Giles G, Hopper J, Thomas P, Markos J, Abramson M, Walters EH, Dharmage S. Ambient wood smoke, traffic pollution and adult asthma prevalence and severity. *Respirology* 2013.

Hoy RF, Burgess JA, Benke G, Matheson M, Morrison S, Gurrin L, Walters EH, Dharmage SC, Abramson MJ. Occupational exposures and the development of new-onset asthma: a population-based cohort study from the ages of 13 to 44 years. *Journal of Occupational and Environmental Medicine* 2013; 55(3): 235-239.

Kandane-Rathnayake RK, Tang ML, Simpson JA, Burgess JA, Mészáros D, Feather I, Southey MC, Schroen CJ, Hopper J, Morrison SC, Giles GG, Walters EH, Dharmage SC, Matheson MC. Adult serum cytokine concentrations and the persistence of asthma. *International Archives of Allergy and Immunology* 2013;161(4): 342-50.

Normansell R, Walker S, Milan SJ, Walters EH, Nair P. Omalizumab for asthma in adults and children. *Cochrane Database of Systematic Reviews* 2014;1:CD003559.

Oktaria V, Dharmage SC, Burgess JA, Simpson JA, Morrison S, Giles GG, Abramson MJ, Walters EH, Matheson MC. Association between latitude and allergic diseases: a longitudinal study from childhood to middle-age. *Annals of Allergy, Asthma & Immunology* 2013;110(2): 80-85.

Perrett JL, Dharmage SC, Matheson MC, Johns DP, Gurrin LC, Burgess JA, Marrone J, Markos J, Morrison S, Feather I, Thomas PS, McDonald CF, Giles GG, Hopper JL, Wood-Baker R, Abramson MJ, Walters EH. The interplay between the effects of lifetime asthma, smoking, and atopy on fixed airflow obstruction in middle age. *American Journal of Respiratory and Critical Care Medicine* 2013;187(1): 42-48.

Roehrer E, Cummings E, Turner P, Hauser J, Cameron-Tucker H, Beggs SA, Micallef NA, Wainwright C, Cheney J, Jessup M, Saddington H, Ellis L, Walters EH, Reid DW. Supporting cystic fibrosis with ICT. *Studies in Health Technology and Informatics* 2013; 183: 137-141.

Sohal SS, Ward C, Danial W, Wood-Baker R, Walters EH. Recent advances in understanding inflammation and remodeling in the airways in chronic obstructive pulmonary disease. *Expert Review of Respiratory Medicine* 2013; 7(3): 275-88.

Sohal SS, Reid D, Soltani A, Weston S, Muller HK, Wood-Baker R, Walters EH. Changes in airway histone deacetylase2 in smokers and COPD with inhaled corticosteroids: a randomized controlled trial. *PLoS One* 2013;8(5):e64833.

Sohal SS, Walters EH. Epithelial mesenchymal transition (EMT) in small airways of COPD patients. *Thorax* 2013; 68(8): 783-784.

Toelle BG, Xuan W, Bird TE, Abramson MJ, Atkinson DN, Burton DL, James AL, Jenkins CR, Johns DP, Maguire GP, Musk AW, Walters EH, Wood-Baker R, Hunter ML, Graham BJ, Southwell PJ, Vollmer WM, Buist AS, Marks GB. Respiratory symptoms and illness in older Australians: the Burden of Obstructive Lung Disease (BOLD) study. *Medical Journal of Australia* 2013;198(3):144-148.

Walters J, Cameron-Tucker H, Wills K, Schüz N, Scott J, Robinson A, Nelson M, Turner P, Wood-Baker R, Walters EH. Effects of telephone health mentoring in community-recruited COPD on self-management capacity, quality of life and psychological morbidity: a randomized controlled trial. *BMJ Open* 2013; 3(9): e003097.

DEPARTMENT OF SURGERY

Werribee Mercy Hospital

Wichmann MW, Beukes E, Esufali ST, Plaumann L, Maddern G. Special Article. Five year results of colorectal cancer treatment in rural Australia. *ANZ Journal of Surgery* 2013; 83:112-113.

MERCY PALLIATIVE CARE

O'Callaghan, C., Forrest, L., Wen, Y. (pending). Music therapy at the end of Life. In B.Wheeler (Ed.), *Music Therapy Handbook*. New York: Guilford Publications.

MEDICAL IMAGING DEPARTMENT

Mercy Hospital for Women

Bethune M, Alibrahim E, Davies B, Yong E. A Pictorial guide for the Second Trimester Ultrasound. *Australian Journal of Ultrasound in Medicine* 2013.

PERINATAL MENTAL HEALTH UNIT

Mercy Hospital for Women

Galbally M. Teratology: more than malformations. *Australian and New Zealand Journal of Psychiatry* 2013; 47(11): 1082-1084.

Galbally M, Lewis A. Prenatal exposure is associated with small but significant differences in pregnancy and delivery outcomes (commentary). *Evidence Based Mental Health* 2013; 16(3): 89.

Galbally M. Pregnancy, Mental Illness, Interventions and Outcome: Implications for Clinical Practice. *Archives of Women's Mental Health* 2013; 16 (Supplement 1): s51-53.

Galbally, M, Blankley, G, Power, J, Snellen M. Perinatal Mental Health Services: what are they and what do they do? *Australasian Psychiatry* 2013; 21(2): 165-170.

UROGYNAECOLOGY DEPARTMENT

Mercy Hospital for Women

Dwyer PL, Kaplan F, Alvarez J. Transvaginal repair of vesicovaginal fistula: surgical techniques to improve access and successful vaginal closure. *International Urogynecology Journal* 2013; 24(4): 531-532.

Chao FL, Dwyer PL, Rosamilia A. Does pre-operative traction of the cervix approximate intra-operative uterine traction? *i2013*; 23:1813-1814.

Van Geelen JM, Dwyer PL. Where to for pelvic organ prolapse treatment after the FDA pronouncements? A systematic review of the recent literature. *International Urogynecology Journal* 2013; 24(11): 1991.

Dwyer PL, Riss P. Editors' Choice *International Urogynecology Journal* 2013; 24(3): 359.

Alvarez J, Cvach K, Dwyer PL. Complications in pelvic floor surgery. *Minerva Ginecologica* 2013; 65(1): 53-67.

Dwyer PL, Riss P. A new section in International Urogynaecology Journal: IUJ Video. *International Urogynecology Journal* 2013.

Dwyer PL. Nothing lasts forever? Long-term outcomes of stress urinary incontinence surgery. *International Urogynecology Journal* 2013; 24(8):1241-1242.

Schierlitz L, Dwyer PL, Rosamilia A, De Souza A, Murray C, Thomas E, Hiscock R, Ahtari C. Pelvic organ prolapse surgery with and without tension-free vaginal tape in women with occult or asymptomatic urodynamic stress incontinence: a randomised controlled trial. *International Urogynecology Journal* 2013 (epub).

Urogynaecology Department cont'd

Riss P, Dwyer PL. The 2012 IUJ impact factor: another step forward? *International Urogynecology Journal* 2013; 24(10):1591-1592.

Van Geelen JM, Dwyer PL. Where to for pelvic organ prolapse treatment after the FDA pronouncements? Reply to Pelikan. *International Urogynecology Journal* 2013; 24 (11):1991.

Agnew G, Dwyer PL, Rosamilia A, Lim Y, Edwards G, Lee JK. Functional outcomes following surgical management of pain, exposure or extrusion following a suburethral tape insertion for urinary stress incontinence. *International Urogynecology Journal* 2013 (epub).

Riss P, Dwyer PL. Surgical management of pelvic organ prolapse: articles from the ICUD book. *International Urogynecology Journal* 2013; 24(11):1779.

Manning J, Dwyer P, Rosamilia A, Colyvas K, Murray C, Fitzgerald E. A multicentre, prospective, randomised, double-blind study to measure the treatment effectiveness of abobotulinum A (AboBTXA) among women with refractory interstitial cystitis/bladder pain syndrome. *International Urogynecology Journal* 2013 (epub).

Ulrich D, Dwyer P, Rosamilia A, Lim Y, Lee J. The Effect of Vaginal Pelvic Organ Prolapse Surgery on Sexual Function. *Neurourology and Urodynamics* 9999:1-6.

Ahn KH, Alvarez J, Dwyer PL. Recent Developments in the Surgical Management of Urinary Stress Incontinence. *Current Obstetrics and Gynecology Reports* 2013; 2: 147-158

Dwyer JP and Dwyer PL. Lactobacillus probiotics may prevent recurrent UTIs in postmenopausal women. *Evidence Based Medicine* 2013; 18(4): 141-142.

Le Touzey V, Lee J, Rosamilia A. Highlights of IUGA 37th Annual Meeting in Brisbane 2012. *International Urogynecology Journal* 2013; 24: 703-705.

Conferences and Presentations

DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY

University of Melbourne/Mercy Hospital for Women

60th Annual Meeting of the Society of Gynecologic Investigation, Orlando, March 2013

'Dietary phytochemicals as potential therapeutics in preventing infection/inflammation-induced preterm birth.' Lim R, Wall C, Barker G, Lappas M.

'Nucleotide oligomerization domain 1 (NOD1) and NOD2 regulate mediators of fetal membrane rupture: Implications for preterm birth.' Lim R, Lappas M.

'Differential expression of Lin28 and Let-7 in term gestational tissue.' Chan H-W, Lappas M, Yee SWY, Vaswani K, Mitchell MD, Rice GE.

'Measuring circulating RNA transcripts coding growth factors to detect fetal growth restriction.' Whitehead C, Walker SP, Mendis S, Tong S.

'Combination gefitinib and methotrexate to treat ectopic pregnancy.' Skubisz MM, Horne A, Duncan C, Critchley H, Wallace E, Neil P, Tong S.

'The production of sFlt-1 splice variants is regulated by Jumonji domain containing protein 6 (Jmjd6) in the placenta.' Palmer K, Kaitu'u-Lino TJ, Ye L, Tuohy L, Tong S.

'RNASeq and Microarray Analyses Highlight Different Aspects of the Fetal Transcriptome'. Zwemer LM, Hui L, Wick HC, Bianchi DW.

'Decreased Sirt3 activity contributes to oxidative stress and impaired mitochondrial function in skeletal muscle of obese pregnant women.' Boyle KE, Newsom SA, Janssen RC, Lappas M, Friedman JE.

The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) 2013 Annual Scientific Meeting, Sydney, September 2013

'Serial self-weighing integrated into routine pregnancy care is welcomed by overweight and obese women but is insufficient to prevent obstetric complications or excess gestational weight gain: a randomised controlled trial.' E McCarthy, M Lappas, SP Walker, A Shub.

'Antenatal origins of metabolic syndrome in fetuses of obese women'. Edlow A, Vora N, Hui L, Wick HC, Cowan J, Bianchi DW.

'Decreased apoptosis in fetuses of obese women: implications for neurodevelopment.' Edlow A, Vora N, Hui L, Wick HC, Cowan J, Bianchi DW.

'Pregnancy outcomes before and after institution of specialised Twins Clinic care.' Henry A, Lees N, Bein K, Hall B, Lim V, Chen K, Welsh A, Hui L, Shand AW.

The Australian and New Zealand Obesity Society (ANZOS), Melbourne, October 2013

'Gestational weight gain: Women's views, knowledge and information seeking.' Willcox J, Campbell K, McCarthy E, Lappas M, Ball K, Crawford D, Shub A, Wilkinson S.

9th Annual Conference of US HUPO: from genes to function, Baltimore, Maryland, March 2013

'Biomarkers in human cervicovaginal fluid to predict labour.' Heng J, Liong S, Permezel M, Rice GE, Di Quinzio MKW, Georgiou HM.

SOMANZ (Society of Obstetric Medicine Australia and New Zealand), October 2013

'Emergence of new generation therapies for severe preeclampsia.' Tong S.

Monash Health Translational Precinct, September 2013

'Translating molecular diagnostics and therapeutics for major pregnancy complications.' Tong S.

Sunshine Hospital, Sunshine, Victoria, April 2013

'Diagnostic test to identify fetuses critically hypoxic: the FOX study.' Tong S.

33rd Annual Meeting of the Society for Maternal-Fetal Medicine, San Francisco, February 2013

'Functional transcriptomic analysis of term amniotic fluid (AF) cell-free RNA: a window into fetal maturation.' Hui L, Wick HC, Edlow A, Cowan J, Bianchi DW.

University of Sydney Discipline of Obstetrics, Gynaecology and Neonatology symposium, Sydney, July 2013

'Global gene expression analysis of amniotic fluid cell-free RNA from recipient twins with severe twin-twin transfusion syndrome.' Hui L, Wick HC, Moise K, Johnson A, Luks F, Haeri S, Johnson K, Bianchi DW.

Department Obstetrics and Gynaecology cont'd

'Amniotic fluid cell-free RNA: a novel source of information about human development.' Hui L.

RANZCOG Membership revision course, Melbourne, August 2013

'Non-invasive prenatal testing for fetal aneuploidy.' Hui L.

Victorian Obstetric Sonologists meeting, Melbourne, March 2013

'Advances in non-invasive assessment of the fetal genome.' Hui L.

RANZCOG ASM, Sydney, September 2013

Ella MacKnight Memorial Lecture 'Amniotic fluid cell-free RNA: a novel source of information about human development.' Hui L.

23rd World Congress on Ultrasound in Obstetrics and Gynaecology, Sydney, October 2013

Pre-congress: 'Prenatal Screening and Diagnosis of Aneuploidy course ISUOG: sequencing for non-invasive prenatal testing – techniques, technologies, applications and limitations.' Hui L.

RANZCOG Victorian Regional Committee annual symposium, Melbourne, October 2013

'Noninvasive prenatal diagnosis for fetal aneuploidy.' Hui L.

MFM Colloquium, Sydney, 5 October 2013

'Prenatal screening debate: first trimester screening is dead – long live first trimester screening.' Hui L.

Health Roundtable Innovation Awards Conference, Brisbane, November 2013

'Improving delivery and care in high risk pregnancies.' McDowell R.

'Presentation Ultrasound: a learning package for midwives.' Barden N.

Walker SP: **World Congress Fetal Medicine**, Malaga, June 2013 ; **PSANZ Perinatal Palliative Care Conference**, Melbourne, July 2013; **Catholic Health Australia Conference**, August 2013; **Philanthropy in Medicine**, Melbourne, August 2013; **MRANZCOG Refresher Course**, Melbourne, August 2013; **RANZCOG Annual Scientific Meeting**, Sydney, September 2013 ; **International Society of Obstetric and Gynaecological Ultrasound**, October 2013; **Sleep Downunder: Annual Scientific Meeting**, October 2013; **University of Melbourne Strategic Leadership Symposium**, October 2013; **Ritchie Centre Monash University Sleep Symposium**, Melbourne, November 2013.

MIDWIFERY PROFESSORIAL & PROFESSIONAL DEVELOPMENT & RESEARCH UNITS (NURSING AND MIDWIFERY)

Australian College of Critical Care Nurses 14th Institute of Continuing Education Critical Care Nursing, Brisbane, June 2013

'Obstetric haemorrhage.' Pollock W, invited speaker.

33rd International Symposium on Intensive Care and Emergency Medicine, Brussels, March 2013

'Massive blood transfusion for obstetric haemorrhage.' Simmons S, Pollock WE; Phillips L; McDonald S.

17th Annual Congress, Australian and New Zealand Perinatal Society (PSANZ) Adelaide, April 2013

McDonald SJ, Pollock W.

IMPACT Conference, Adelaide, April, 2013

McDonald SJ.

Australian New Zealand Stillbirth Alliance Meeting and Workshop, Adelaide, April 2013

McDonald SJ.

Health Roundtable Innovation Awards Conference, Brisbane, November 2013

'Improving delivery and care in high risk pregnancies.' McDowell R.

'Presentation Ultrasound: a learning package for midwives.' Barden N.

ISUOG conference, Sydney, October 2013

'Fetal growth trajectory and cerebral autoregulation during third trimester.' Barden N (presented by Walker SP).

Midwifery Seminar 'Caring for mothers and babies with risk factors', Melbourne, March 2013

'Antenatal screening.' Pidd D.

'Obesity in pregnancy.' McDowell R.

'Late onset IUGR.' Barden N.

International Urogynecology Association, Dublin, May 2013

'Conservative management of incontinence.' Thomas E.

Christine Murray Continence Foundation of Australasia, Perth, October 2013

'Evaluation of a perineal clinic: a survey of women's experiences.' Thomas E.

Health Round Table and Women's Hospitals Australasia, April 2013

'Project PPH', 'The Joint Maternity meeting.' Williamson A and Sloggett D.

Catholic Health Australia Nursing Symposium, Sydney, October 2013

'Graduate Pool: a workforce solution.' Capron S.

'Triage of pregnant women in Emergency Departments.' McCarthy M.

'Health Information Services Results.' Pidd D.

'Nursing & Midwifery Professional Development program: cost benefit.' Patrick A.

**National Infection Control Conference,
Queensland, October 2013**

'Turning the tide increasing influenza immunisation uptake.'
Somerville M.

**33rd International Symposium on Intensive Care
and Emergency Medicine, Brussels, March 2013.**

'Massive blood transfusion for obstetric haemorrhage.'
Simmons S, Pollock W, Phillips L, McDonald S.

DEPARTMENT OF GYNAECOLOGICAL ONCOLOGY

Mercy Hospital for Women

**GP Update seminar Mercy Hospital for Women,
April 2013**

'Genetics and gynaecological Cancer.' Grant P.

RANZCOG Diploma Update course, February 2013

'Overview of gynaecological oncology.' Grant P.

**Division of Palliative Care University of Toronto,
Princess Margaret Hospital, Toronto Sept 2013**

'Corticosteroids and conservative management of
malignant small bowel obstruction.' Grant P.

**2013 ASCCP Colposcopy Course,
Gold Coast, August 2013**

Allen D, invited speaker and chair of sessions.

**2013 ASCCP Laser and LLETZ Treatment Workshop,
Melbourne, October 2013**

Allen D, speaker and facilitator.

ASCCP Scientific Meeting, Wellington, May 2013

Allen D, facilitator and session chair.

**GP Update Seminar Mercy Hospital for Women,
Melbourne, April 2013**

'Obesity and cancer.' Lamont J.

GP update meeting, Melbourne, October 2013

'Endometrial hyperplasia in young women.' Lamont J.

ASGO Annual Scientific meeting, Darwin, June 2013

'Incisional hernia following a laparotomy through a
Pfannenstiel incision.' Pendlebury A.

**Women's Healthcare Australasia Conference,
Brisbane, May 2013**

'Enhancing quality and safety in women's health – the Well
Women's Clinic, Mercy Hospital for Women.' Murray B.

**Australian Society of Cytology, Annual Scientific
Meeting, Sydney, October 2013**

'Comparison of conventional cervical cytology with ThinPrep
liquid-based cytology (LBC) in a dysplasia clinic setting.' S-L
Kuo C, Jones ST, Pendlebury A, Ireland-Jenkin K.

**World Congress of Paediatric & Adolescent
Gynaecology, Hong Kong, March 2013**

'The effect of unwanted adolescent sexual activity on risk of
early-onset cervical cancer and precancer in women aged
25 years or less.' Jayasinghe YL, Sasongko V, Lim RW,
Grover SR, Tabrizi SN, Moore EE, Donath S and Garland SM
for the Early-onset Cervical Cancer (EOCC) study group.

DEPARTMENT OF UROGYNAECOLOGY

Mercy Hospital for Women

**International Urogynecological Association Annual
Scientific Meeting, Dublin 2012**

'MiniArc and Monarc suburethral sling in women with stress
urinary incontinence: a randomised controlled trial – 12m
follow up.' Lee J, Rosamilia A, Lim YN, Thomas E, Murray
C, Fitzgerald E, Leitch A, Polyakov A, Schierlitz L, Dwyer P.

'A prospective study of sexual wellbeing at 12 months
post partum. Does mode of delivery matter?' De Souza A,
Dwyer PL, Thomas E, Charity M, Schierlitz L.

'A prospective study of sexual wellbeing and the effects
of breastfeeding, depression and maternal BMI 12 months
postpartum.' De Souza A, Dwyer PL, Thomas E, Charity M,
Schierlitz L.

'Outcomes of patients who declined randomization to
Miniarc versus Monarc: a retrospective study.' Young N,
Rosamilia A, Lee J.

**UGSA Annual Scientific and General Meeting,
Sydney, March 2013**

'A prospective study of sexual wellbeing at 12 months
postpartum: does mode of delivery matter?' De Souza A,
Dwyer PL, Thomas E, Charity M, Schierlitz L.

'A prospective study of sexual wellbeing and the effects of
breastfeeding, depression and maternal BMI 12 months
postpartum.' De Souza A, Dwyer PL, Thomas E, Charity M,
Schierlitz L.

**22nd National Conference on Incontinence,
Perth, October 2013**

'Evaluation of a perineal clinic: a survey of women's
experiences.' Thomas E, McDonald S, Pollock W.

AGES Pelvic Floor Sydney, August 2013

'MiniArc and Monarc suburethral sling in women with stress
urinary incontinence – a randomised controlled trial – 12m
follow up.' Lee J, Rosamilia A, Lim YN, Thomas E, Murray
C, Fitzgerald E, Leitch A, Polyakov A, Schierlitz L, Dwyer P.

DEPARTMENT OF ENDOSURGERY

Mercy Hospital for Women

9th AAGL International Congress on Minimally Invasive Surgery, Cape Town, April 2013

'Surgical preparation for definitive surgery in severe endometriosis.' Maher P, invited speaker.

7th.China-Australia-Asia Forum on Minimally Invasive Surgery, Shanghai, December 2013

'Advances in surgical management of severe endometriosis.' Maher P, invited faculty.

Beijing Obstetrics and Gynecological Hospital, Beijing

Maher P, Visiting Professor.

International Live Workshop and Conference on Fibroids and Hysterectomy, Cochin, September 2013

'Past, present and future of hysterectomy.' Maher P, Invited faculty-demonstration surgery and Keynote lecture.

AAGL 42nd Global Congress on Minimally Invasive Gynecology, Washington DC, November 2013

'How extensive and radical should we be in the treatment of endometriosis?' Maher P, invited faculty.

AGES XXIII Annual Scientific Meeting: The pelvis in pain, Brisbane, March 2013

'The first cut is the deepest.'; 'Surgeons should retire at 50' – against. (presidential debate). Maher P, invited faculty; Chairperson Dan O'Connor Lecture.

AGES XXIII Annual Scientific Meeting and AAGL 42nd Global Congress on Minimally Invasive Gynecology, Washington DC November 2013

'The use of a multimedia module to aid the informed consent process for operative laparoscopy: a randomized Control Trial.' Ellett L, Villegas R, Jagasia N, Ong N, Beischer A, Cameron M, Manwaring J, Readman E, Maher P. Free Communication.

'The effect of patient body mass index on surgical difficulty in gynaecological laparoscopy.' McIlwaine K, Ellett L, Manwaring J, Villegas R, Cameron M, Jagasia N, Readman E, Maher P. Free Communication.

UNIVERSITY OF NOTRE DAME AUSTRALIA

Melbourne Clinical School

AMEE, Prague, Czech Republic, August 2013

'The validity of the multiple mini-interview.' Dodson M.

Research Development Workshop, Auburn Clinical School, 2013

'Medical Education Research', Dodson M.

'Developing a Research Protocol-population, intervention, comparator, outcomes, setting, timing and feasibility.' Walters H.

DEPARTMENT OF ANAESTHESIA

Mercy Hospital for Women

Annual Scientific Meeting of Association of Anaesthetists of Great Britain and Ireland, Dublin, September 2013

'Transthoracic echocardiographic assessment of cardiac output in healthy women at elective caesarean section under spinal anaesthesia: An observational cohort study.' Gough T, Casey E, Hiscock R, Simmons S.

Annual Scientific Meeting of Australian and New Zealand College of Anaesthetists, Melbourne, May 2013

'Failed regional blocks in a tertiary maternity service: a 12-month audit.' Liesegang, H, Simmons S.

Maternity and Newborn Clinical Network Victoria, Melbourne, February 2013

'Early warning scores in maternity settings.' Simmons S.

Annual Scientific Meeting of Australian and New Zealand College of Anaesthetists, Melbourne, May 2013

'Classifying caesarean section urgency – evolution or revolution?' Simmons S.

33rd International Symposium on Intensive Care and Emergency Medicine, Brussels, March 2013

'Massive blood transfusion for obstetric haemorrhage.' Simmons S, Pollock W, Phillips L, McDonald.

8th International Rapid Response Conference, Royal College of Physicians, London, May 2013

'Evaluation of a new multi-tier early warning chart for acute maternal deterioration.' Turkington C, Simmons S.

MERCY PALLIATIVE CARE

12th Australian Palliative Care Conference, Canberra, September 2013

'Parents' and music therapists' reflections on the experience of music and music therapy for paediatric palliative care patients and their families, who come from diverse cultural backgrounds.' Forrest L.

'Music therapy to support families through multiple child losses: considerations and challenges.' Forrest L.

"Too many to even think about". Health Promoting Palliative Care – Christmas Tree of Remembrance in a Multicultural Community.' Lee S.

New Zealand School of Music Biennial Conference, Linking cultures: Collaborative partnerships in music therapy & related disciplines. Te Ara Hihiko, Massey University, Wellington, November 2013

'Music therapy to support families caring for a child in palliative care: considerations and challenges.' Forrest L.

'Linking culture, music and palliative care: Reflections on the experience of music and music therapy for paediatric palliative care patients and their families, who come from diverse cultural backgrounds.' Forrest L.

O'CONNELL FAMILY CENTRE

Australasian Association of Parenting & Child Health (the Association) 2013 Forum, Perth, November 2013

The Association is made up of the early parenting services throughout each state of Australia and Plunkett in New Zealand. The two-and-a-half day forum provided an opportunity for senior clinicians and management staff from all member organisations to share current practices, initiatives and projects and develop the Business Plan for the Association for the next two years.

Health Round Table, Brisbane, November 2013

'Improving the Paediatric Patient Journey: Supporting Parents'. Angerer S.

MERCY HEALTH LYMPHOEDEMA SERVICES (MHLS)

14th National Breast Care Nurses Conference, Melbourne, March 2013

'Managing breast lymphoedema – variation in presentation.' Grabsch S.

International Congress of Lymphology, Rome, September 2013

'Conservative Management of Lymphoedema in Children – A Systematic Review.' Phillips J.

OUTPATIENTS DEPARTMENT

Mercy Hospital for Women

Perinatal Society of Australia and New Zealand 17th Annual Congress, Adelaide Convention Centre, Adelaide, April 2013

'Comprehensive initial antenatal assessment and physical examination by midwives: a pilot mentor supported education program and evaluation.' Pidd D.

Catholic Health Australia Nursing Symposium, Crowne Plaza, Sydney, October 2013

'We all want results: a collaborative redesign project expediting the filing of results.' Pidd D.

NUTRITION AND DIETETIC DEPARTMENT

Mercy Hospital for Women

**Annual Dietitians' Association of Australia
National Conference, Canberra, May 2013**

**Australasian Diabetes in Pregnancy Association
Conference, Sydney, August 2013**

'To weigh or not to weigh? Obesity and consequences in pregnancy'. Moshonas N. and McCarthy E.

MULTICULTURAL SERVICES UNIT

Mercy Hospital for Women

**Social Determinants of Health Conference, Sydney,
December 2013**

'Addressing the complexities of multicultural health.'
Nesvadba N, invited speaker.

MEDICAL IMAGING DEPARTMENT

Mercy Hospital for Women

**International Society for Ultrasound in Obstetric and
Gynecology World congress in Sydney, 2013**

'Midtrimester diagnosis of unilateral cerebellar hypoplasia due to antenatal venous sinus thrombosis.' Davies B, Stone K, Hennington L, Hiew C, Walker SP, Fung AM.

**2013 Australian Sonographers Association
annual congress**

'Ultrasound of the fetal brain: a guide to the 18-22 week Morphology scan.' Stewart E.

Annual combined ASUM and ASA case study night
'Faulty fetal family jewels.' Stewart E.

PERINATAL MENTAL HEALTH UNIT

Mercy Hospital for Women

**Australasian Marcé Conference, Melbourne,
October 2013**

'Management of Schizophrenia and Bipolar Disorder in Pregnancy: Pilot Data and Recommendations for Care.'
Galbally M, Blankley G, Power J, Snellen M.

'Informed Consent in Pregnancy.' Snellen M.

Indian Psychiatric Society, Bangalore, January 2013
Snellen M.

HUMAN RESEARCH ETHICS COMMITTEE (HREC)

**Australian Ethics Network Conference, Perth,
November 2013**

Prof Ozolins attended the conference on behalf of
Mercy Health HREC.
