

Sunday 24th August 2014

SRB Grant Writing Workshop

10:00am - 1:00pm

Meeting Room 213

Robinson Institute Award

1:00pm - 1:40pm

Chair: Sarah Robertson



Meeting Room 213

1:00 PM

Rebecca Robker

A good quality egg at the right time *abs# 1*

SRB - Growing Healthy Embryos

1:45pm - 3:15pm

Meeting Room 213

Chair: Sarah Robertson

1:45 PM

David Gardner

Embryo Culture: Don't Stress It! *abs# 2*

2:15 PM

Chris O'Neill

Reanalysis of epigenetic reprogramming events in the early embryo *abs# 3*

2:45 PM

Deirdre Zander-Fox

What's new in the IVF clinic: The latest clinical technologies for selecting the best embryo for transfer *abs# 4*

Public Forum - Making Babies in the 21st Century: Fertility Preservation and Stem Cells

3:30pm - 5:30pm

Meeting Room 213

Moderator: Dr Rachel Nowak; principal at Rachel Nowak and Associates

Prof Gerald Schatten

Making eggs and sperm from stem cells

Prof Alan Trounson

Stem Cells Entering Clinical Trials: Opportunities for Much Needed Therapies

Prof Gab Kovacs

Fertility preservation- is it realistic and is it cost-effective?

Prof Warwick Anderson

How good are we at translating discoveries into policy and practice

Prof Moira O'Bryan

More than just babies

Welcome Function - AWE Travel Awards

5:30pm - 7:30pm

Main Foyer

Monday 25th August 2014

ESA-SRB Joint Welcome

8:30am - 8:45am

Plenary Hall 2

Eileen McLaughlin, SRB President & Peter Ebeling, ESA President

ESA Harrison Plenary

8:45am - 9:45am

Plenary Hall 2

Chair: Peter Ebeling

8:45 AM

Sundeep Khosla

Sex steroids, bones and fat in men: the key role of estrogen *abs# 5*

SRB - Meat and Livestock award finalists (Orals)

8:45am - 9:45am



Meeting Room 212

Chairs: Michael Bertoldo & Sara Edwards

8:45 AM

Melanie Sutton-McDowall

The heterogeneous nature of cow embryos: sorting out the mixed bag of blastomeres *abs# 6*

9:10 AM

Matthew Callaghan

Intensive feeding and management reduces semen quality of Santa Gertrudis bulls *abs# 7*

SRB - The placenta and pregnancy complications (Orals)

8:45am - 10:00am

Meeting Room 217

Chairs: Nicolette Hodyl & Stephen Tong

8:45 AM

Paul Dawson

Benefit of antenatal magnesium sulphate therapy for preterm infants: Is it the magnesium or is it the sulphate? *abs# 8*

9:00 AM

Claire Roberts

New algorithms to predict risk for major pregnancy complications *abs# 9*

9:15 AM

Guiying Nie

Functional importance of HtrA3 in placental development and long-term health *abs# 10*

9:30 AM

Kelly O'Sullivan

Effects of relaxin deficiency on the development of preeclampsia-like symptoms in pregnant mice *abs# 11*

9:45 AM

Hassendrini Peiris

Myostatin in the placentae of pregnancies complicated with intrauterine growth restriction and preeclampsia *abs# 12*

SRB - The immune system & reproduction (Orals)

8:45am - 10:00am

Meeting Room 218

Chairs: David de Kretser & John Schjenken

8:45 AM

Julia Young

Differential cytokine expression patterns and responses to Toll-like receptor (TLR) activation in murine Sertoli cells and spermatogenic cells. *abs# 13*

9:00 AM

Wendy Winnall

The pigtailed macaque testis: A site of immune privilege, and its response to infection with simian immunodeficiency virus. *abs# 14*

9:15 AM

Deborah Strickland

Immune stimulation of mucosal tissue as a potential strategy to protect against pregnancy complications *abs# 15*

9:30 AM

Bihong Zhang

Interleukin 10 deficiency alters the transcriptome of T regulatory cells in pregnant mice *abs# 16*

9:45 AM **Hanan Hamimi Binti Wahid**
Toll-like receptor 4 (TLR4) signalling is implicated in normal on-time labour in mice *abs# 17*

ESA Servier Award Lecture

9:45am - 10:00am

Chair: Peter Ebeling



Plenary Hall 2

9:45 AM **Anthony Bird**
Mesenchymal Glucocorticoid Receptor regulates the development of multiple cell layers of the mouse lung *abs# 18*

Morning Tea

10:00am - 10:30am



Exhibition Area

ESA Novartis Junior Scientist Award

10:30am - 12:00pm

Chairs: Peter Ebeling & Tao-Kwang Kevin Lee



Plenary Hall 2

10:30 AM **Yi Xian Chan**
A pro-inflammatory T cell phenotype in women with gestational diabetes *abs# 19*

10:45 AM **Jaesung Choi**
Glandular epithelial AR regulates androgen mediated androgen effects on the uterine growth *abs# 20*

11:00 AM **Sakda Hewagalamulage**
Differences in cortisol response to adrenocorticotropin (ACTH) reflect an innate alteration of the set-point of the hypothalamo-pituitary-adrenal (HPA) axis that is maternally inherited *abs# 21*

11:15 AM **Dilys Leung**
PPAR γ and XIAP as potential targets for combination treatment of ovarian granulosa cell tumours *abs# 22*

11:30 AM **Julia Prague**
Targeting androgen stimulation with abiraterone acetate: a novel therapeutic approach in adrenocortical cancer *abs# 23*

11:45 AM **Marianna Volpert**
CRISP3 regulates progression from *in situ* to invasive prostatic adenocarcinoma *abs# 24*

SRB -ANZPRA Award Finalists

10:30am - 12:00pm

Chair: Natalie Hannan



Meeting Room 211

10:30 AM **Natalie Binder**
Fetal growth restriction is associated with paternal diet induced obesity *abs# 25*

10:45 AM **Owen Stock**
Pyrosequencing of bacterial 16S ribosomal RNA demonstrates distinct microbiome profiles of placenta and maternal blood in women with preterm ruptured membranes who develop chorioamnionitis, compared to those who do not become infected. *abs# 26*

11:00 AM **James Cuffe**
Maternal corticosterone exposure has sex specific effects on the renal stress response. *abs# 27*

11:15 AM **Sevvandi Senadheera**
Relaxin deficiency enhances vascular contractile reactivity in the late-pregnant mouse. *abs# 28*

11:30 AM **Sophea Heng**
Post-translational regulation of dystroglycan in the human endometrium for embryo implantation *abs# 29*

11:45 AM **Soo Yee Sonia Teoh**
Serum levels of HtrA1 significantly differ between normal and preeclamptic pregnancies.
abs# 30

SRB - Oozoa award finalists

10:30am - 12:00pm

Chairs: Duangporn Jamsai & Mark Green



Meeting Room 212

10:30 AM **Lexie Prokopuk**
Profiling Polycomb Repressive Complex 2 during germ-line development *abs# 31*

10:45 AM **Yan Yun**
Reduced ability to recover from spindle disruption and loss of kinetochore spindle assembly checkpoint proteins in oocytes from aged mice *abs# 32*

11:00 AM **Nicole Camlin**
Maternal and grand-maternal exposure to cigarette smoke: The long term effects on female fertility. *abs# 33*

11:15 AM **Ryan Rose**
C-Type natriuretic peptide stimulates the resumption of meiosis in porcine COCs via cGMP-dependant but PKG-independent mechanism. *abs# 34*

11:30 AM **Sarah Dalati**
Calcium activated chloride channel activity induces changes in membrane potential at fertilisation in the mouse oocyte *abs# 35*

11:45 AM **Justine Olcorn**
Meiotic and post-meiotic germ cells up-regulate blood-testis barrier function *abs# 36*

ESA and ENSA Lunch

12:00pm - 1:00pm

Exhibition Area

SRB Founders Lecture

12:00pm - 1:00pm

Chair: Eileen McLaughlin

Reproduction, Fertility and Development

Plenary Hall 2

Rob Norman

The end is where we start from – lessons from periconception medicine *abs# 37*

ESA Meet the Professor (clinical)

12:15pm - 1:00pm

Chair: David Torpy

Meeting Room 217

12:15 PM **Henrik Falhammer**
Congenital adrenal hyperplasia

SRB Lunch

1:00pm - 2:00pm

Exhibition Area

ESA - Insights in ageing and disease states on bone biology (Clinical/Basic)

1:00pm - 2:30pm

Chairs: Mathis Grossmann & Roderick Clifton-Bligh

Plenary Hall 2

1:00 PM **Sundeep Khosla**
How aging and diabetes affect bone quality *abs# 38*

1:30 PM **Stan Gronthos**
Mesenchymal stem cells and tissue regeneration *abs# 39*

2:00 PM **Gustavo Duque**
Increasing Marrow Fat with Age and Bone Metabolism *abs# 40*

ESA Orals - Adrenal steroids, androgens and their receptors (Basic)

1:00pm - 2:30pm

Meeting Room 211

Chairs: Peter Stanton & Mark Cooper

- 1:00 PM **Timothy Cole**
Characterisation of a novel primate-specific 11 β -hydroxysteroid dehydrogenase called 11 β HSD1L in the ovary *abs# 41*
- 1:15 PM **Janko Sattler**
The role of 11 β -HSD1 in the regulation of the HPA axis in chronic inflammatory arthritis *abs# 42*
- 1:30 PM **Jun Yang**
The identification of novel mineralocorticoid receptor coregulators *abs# 43*
- 1:45 PM **Francia Garces Suarez**
The role of androgens in cutaneous wound healing: impact of local drug delivery *abs# 44*
- 2:00 PM **Kesha Rana**
Neuronal androgen receptor regulation of muscle mass *abs# 45*
- 2:15 PM **Ruili Li**
Postnatal germ cell development during minipuberty in the mouse does not require androgen: implications for managing cryptorchidism *abs# 46*

ESA Orals - Endocrine tumours and their genetics (Clinical)

1:00pm - 2:30pm

Meeting Room 217

Chairs: Paul Lee & Ken Ho

- 1:00 PM **Emma Duncan**
A new pheochromocytoma syndrome: extending the phenotype associated with MAX mutations *abs# 47*
- 1:15 PM **Sunita De Sousa**
Next generation sequencing in suspected familial pituitary tumour syndromes: pilot study results and clinical translation *abs# 48*
- 1:30 PM **Nele Lenders**
The natural history of non-functioning pituitary adenomas: a longitudinal volumetric evaluation *abs# 49*
- 1:45 PM **Michael Mond**
Somatic mutations of FOXE1 in papillary thyroid cancer *abs# 50*
- 2:00 PM **Christopher Rowe**
Accuracy of pre-operative localisation of parathyroid adenoma with ultrasound and sestamibi scintigraphy in primary hyperparathyroidism – review of single centre experience. *abs# 51*
- 2:15 PM **John Katzenellenbogen**
Positron-Emission Tomographic (PET) imaging of progesterone receptors in breast cancer: developing a predictive biomarker for tumor responsiveness to endocrine therapies *abs# 52*

ESA/AWE symposium - Programming and Protection in Pregnancy

1:00pm - 2:30pm

Meeting Room 218

Chairs: Belinda Henry & Renea Taylor

- 1:00 PM **Nicolette Hodyl**
Glucocorticoid exposure and perinatal outcomes *abs# 53*
- 1:30 PM **Tracey Quinn**
The effects of antenatal stress in the Spiny Mouse: a new animal model in which to study programming and protection? *abs# 54*
- 2:00 PM **Caitlin Wyrwoll**
Manipulating placental vasculature to improve fetal health outcomes *abs# 55*

SRB AGM

1:30pm - 2:30pm

Meeting Room 212

Afternoon Tea

2:30pm - 3:00pm

Exhibition Area

ESA/Neuroendocrinology Australasia Symposium - Neuromodulatory control of brain and behaviour - focus on Relaxin-3 (basic)

3:00pm - 5:00pm

Plenary Hall 2

Chairs: Andrew Gundlach & Iain Clarke

- 3:00 PM **Sherie Ma**
Relaxin-3/RXFP3 systems in the rat: Modulation of arousal and stress *abs# 56*
- 3:30 PM **Daniel Scott**
Engineering stabilised neuropeptide receptors to enable structure-based drug design: Studies of neurotensin and relaxin-3 receptors *abs# 57*
- 4:00 PM **Anna Blasiak**
Regulation of *nucleus incertus* (relaxin-3) neurons by peptide and hormone inputs and impact of relaxin-3 receptor activation on characterized hypothalamic neurons *abs# 58*
- 4:30 PM **Craig Smith**
Relaxin-3/RXFP3 signalling promotes motivational drive and stress resilience in mice *abs# 59*

ESA Orals - Obesity, diabetes and metabolism (clinical)

3:00pm - 5:00pm

Meeting Room 211

Chairs: Helena Teede & Andrea Cussons

- 3:00 PM **Roisin Worsley**
Metformin for the prevention of insulin resistance in obese women at midlife. *abs# 60*
- 3:15 PM **Samantha Cassar**
Insulin sensitivity in women with Polycystic Ovary Syndrome: A systematic review and meta-analysis *abs# 61*
- 3:30 PM **Nigel Stepto**
Early insulin signalling events in skeletal muscle from women with PCOS: impact of exercise *abs# 62*
- 3:45 PM **Moe Thuzar**
Standardised cooling improves the detection of Brown Adipose Tissue by 18FDG-PET without significant seasonal variation *abs# 63*
- 4:00 PM **Morton Burt**
A prospective cohort study investigating relative hyperglycaemia as a determinant of mortality or Intensive Care Unit admission: Introducing the *stress hyperglycaemia ratio abs# 64*
- 4:15 PM **Susan Davis**
Obesity is associated with poorer survival in Australian women with hormone receptor positive breast cancer. *abs# 65*
- 4:30 PM **Lucy Gagliardi**
Continuous subcutaneous hydrocortisone infusion therapy in Addison's disease: a randomised, placebo-controlled clinical trial *abs# 66*
- 4:45 PM **Viral Chikani**
Effects of GH on anaerobic capacity in adults with growth hormone deficiency: a double blind placebo controlled trial *abs# 67*

Joint SRB-ANZPRA Symposium - Detecting and treating disorders of pregnancy

3:00pm - 5:00pm

Chairs: Claire Roberts & Demelza Ireland



Meeting Room 212

- 3:00 PM **Andrew Horne**
Novel biomarkers for ectopic pregnancy *abs# 68*
- 3:30 PM **Laura Parry**
Treatment of vascular dysfunction in preeclampsia *abs# 69*
- 4:00 PM **Clare Whitehead**
Placental mRNA in the maternal blood predict adverse pregnancy outcomes *abs# 70*
- 4:30 PM **Katie Groom**
Sildenafil – a first ever therapy of IUGR? *abs# 71*

ESA Symposium - Endocrinology of cancer (basic)

3:00pm - 5:00pm

Chairs: Gail Risbridger & Christopher Ormandy

Meeting Room 217

- 3:00 PM **Simon Chu**
Ovarian sex cord stromal tumours *abs# 72*
- 3:30 PM **Heidi Hilton**
Steroid hormone action in the normal human breast and in breast cancer *abs# 73*
- 4:00 PM **Kristy Brown**
Ghrelin as a novel regulator of aromatase: implications for the treatment of hormone receptor-positive breast cancer. *abs# 74*
- 4:30 PM **Lisa Butler**
Co-targeting of the androgen receptor and Hsp90 in prostate cancer *abs# 75*

SRB Symposium - Gamete Development and Maturation

3:00pm - 5:00pm

Chairs: Dagmar Wilhelm & John Carroll

Meeting Room 218

- 3:00 PM **Patrick Western**
Epigenetic modifiers in germline development and inherited disease *abs# 76*
- 3:40 PM **Hayden Homer**
Kinetochores regulation of mammalian oocyte maturation *abs# 77*
- 4:20 PM **Liza O'Donnell**
A family of microtubule-severing proteins required for male fertility *abs# 78*
- 5:00 PM **Peter Koopman**
Retinoid regulation of gonadal and germ cell development in mice *abs# 79*

ESA-SRB Joint Poster Viewing with Drinks & Nibbles

- See listings at end of program

5:00pm - 7:00pm



Exhibition Area

Student Social Evening (offsite) - 'Meeting of the Minds'

7:30pm - 10:30pm

PJ O'briens

Tuesday 26th August 2014

ESA Taft Plenary

8:15am - 9:30am

Plenary Hall 2

Chair: Helena Teede

8:30 AM

John Wass

Informing clinical practice: translational and clinical science in the optimum management of pituitary tumours *abs# 80*

SRB SRF Exchange Lecture

9:00am - 9:30am

Meeting Room 212

Chair: Eileen McLaughlin

9:00 AM

Alison Wallace

Investigating decidual natural killer cells in pregnancies with impaired spiral artery remodelling *abs# 81*

Morning Tea

9:30am - 10:00am

Exhibition Area

ESA Symposium - Advances in pituitary tumour management (clinical)

10:00am - 11:30am

Plenary Hall 2

Chairs: Ann McCormack & Ee Mun Lim

10:00 AM

Ken Ho

Modern approaches to the management of acromegaly *abs# 82*

10:30 AM

Warrick Inder

Pituitary apoplexy – diagnosis and management *abs# 83*

11:00 AM

David Torpy

Modern approaches to the management of Cushing's disease *abs# 84*

SRB - Newcastle Award for emerging research leaders

10:00am - 11:30am

Chairs: John Aitken & Brett Nixon



Meeting Room 211

10:00 AM

Duangporn Jamsai

When splicing goes wrong: a mechanism for spermatid differentiation and lung tumourigenesis *abs# 85*

10:20 AM

Kirsty Walters

Androgen receptor-mediated actions and ovarian function *abs# 86*

10:40 AM

Natalie Hannan

Proton Pump Inhibitors as a novel candidate therapeutic to treat severe preeclampsia. *abs# 87*

11:00 AM

Jonathan McGuane

Is TGF β 1 a potential therapeutic target in endometriosis? *abs# 88*

ESA orals - Endocrine-related cancer (basic)

10:00am - 11:30am

Meeting Room 212

Chairs: Heidi Hilton & Chris Ormandy

- 10:00 AM **Mitchell Lawrence**
Estrogen receptor alpha drives proliferation in PTEN-deficient prostate carcinoma by stimulating survival signalling *abs# 89*
- 10:15 AM **Judith Clements**
The Kallikrein-related serine peptidase, KLK4, regulates the TGF β 1 pathway in the tumour-stroma microenvironment in prostate cancer. *abs# 90*
- 10:30 AM **Kohei Hashimoto**
Fibroblast and mast cell interactions in the human prostate cancer microenvironment *abs# 91*
- 10:45 AM **Renea Taylor**
Patient-derived xenografts reveal that intraductal carcinoma of the prostate is a prominent pathology in BRCA2 mutation carriers with prostate cancer and correlates with poor prognosis *abs# 92*
- 11:00 AM **Richard Rebello**
Co-targeting RNA Pol I and PIM kinase activity suppresses MYC-driven tumorigenesis in the prostate. *abs# 93*
- 11:15 AM **Dinny Graham**
Characterisation of isoform-specific progesterone receptor DNA binding patterns in normal and malignant breast *abs# 94*

ESA Symposium - The fat spectrum (basic/clinical)

10:00am - 11:30am

Meeting Room 213

Chairs: Sue Lynn Lau & Shane Hamblin

- 10:00 AM **Paul Lee**
The changing colour of fat *abs# 95*
- 10:30 AM **Michael Swarbrick**
Location, location, location: how fat distribution influences metabolic disease *abs# 96*
- 11:00 AM **Peter Meikle**
Lipid profiling: Applications in diagnosis and disease risk stratification *abs# 97*

ESA Plenary Lecture

11:30am - 12:30pm

Plenary Hall 2

Chair: Timothy Cole

- 11:30 AM **Benita Katzenellenbogen**
Estrogen receptor integrative genomics and signalling networks in breast cancer and endocrine resistance *abs# 98*

SRB - Molecular determinants of gonad development and fertility (Orals)

11:30am - 12:30pm

Meeting Room 211

Chairs: Patrick Western & Mai Sarraj

- 11:30 AM **Vincent Harley**
Genotype-phenotype correlations in 46,XY disorders of sex development with *SF1* mutations *abs# 99*
- 11:45 AM **Andrew Pask**
NR0B1 / DAX1 had a conserved role in gonadal development and spermatogenesis before it was recruited to the eutherian X-chromosome *abs# 100*
- 12:00 PM **Kate Loveland**
The *Serine/Theonine Kinase 35 (Stk35)* allele locus is required for normal fertility *abs# 101*
- 12:15 PM **Mark Baker**
Quantitative analysis of male infertility: understanding the molecular basis of infertile men *abs# 102*

SRB - Regulators of Gamete Function (Orals)

11:30am - 12:30pm

Meeting Room 212

Chairs: Karla Hutt & Robert Gilchrist

- 11:30 AM **Janet Holt**
Dynamin 2 is essential for mammalian oocyte growth and function *abs# 103*
- 11:45 AM **Shadma Fatima**
The BRCA1-binding protein 2 as a negative regulator of nuclear import in the testis *abs# 104*
- 12:00 PM **Elizabeth Bromfield**
The impact of oxidative stress on chaperone-mediated human sperm-egg interaction *abs# 105*
- 12:15 PM **Lisa Akison**
A potential role for semaphorins in mediating the adhesive and invasive phenotype of the cumulus oocyte complex at ovulation. *abs# 106*

SRB Endocrine disruptor and toxicant effects (Orals)

11:30am - 12:30pm

Meeting Room 213

Chairs: Catherine Itman & Darryl Russell

- 11:30 AM **Bom le Choi**
Brief exposure to physiological concentrations of Bisphenol A (BPA) affects early embryo metabolism and quality *abs# 107*
- 11:45 AM **Aimee Katen**
The role of glycidamide and oxidative adducts in acrylamide induced DNA damage in male germ cells *abs# 108*
- 12:00 PM **Kirsty Pringle**
Effects of cigarette smoke and maternal inflammation in pregnancy on birth weight and gestational age at delivery in an Indigenous Australian population *abs# 109*
- 12:15 PM **Haluk Kelestimur**
Paroxetine, a selective serotonin uptake inhibitor and bupropion, a norepinephrine and dopamine uptake inhibitor and agomelatine, a 5HT_{2C} receptor antagonist and melatonergic receptor agonist affect pubertal maturation differently in rats *abs# 110*

ESA and SRB Lunch

12:30pm - 1:30pm

Exhibition Area

ESA Meet the Professor (clinical)

12:45pm - 1:30pm

Plenary Hall 2

Chair: Duncan Topliss

- 12:45 PM **Shaun McGrath**
Thyroid ultrasound in my clinical practice

SRB Meet the Professors

12:45pm - 1:30pm

Meeting Room 211

Laura Parry, Andrew Horne, Gerry Schatten & Stella Clarke

ESA Meet the Professor (basic)

12:45pm - 1:30pm

Meeting Room 213

Chair: Richard Tohill

12:45 PM **David Evans**

The data mining boom: where did the lab go? *abs# 111*

ESA Bryan Hudson Clinical Awards

1:30pm - 2:30pm

Plenary Hall 2

Chairs: Bu Yeap & Emily Gianatti

1:30 PM **Don McLeod**

Autoimmune thyroid disease incidence varies by race/ethnicity *abs# 112*

1:45 PM

Marni Nenke

Depletion of high affinity corticosteroid-binding globulin (CBG) corresponds to illness severity in sepsis and septic shock; clinical implications. *abs# 113*

2:00 PM

Anjana Radhakutty

Effect of therapeutic glucocorticoids on insulin sensitivity, cardiovascular risk and energy metabolism in patients with inflammatory arthritis *abs# 114*

2:15 PM

Phillip Wong

Novel insights into the renal-bone axis in thalassemia major *abs# 115*

ESA Orals – clinical cases and studies (clinical)

2:30pm - 3:30pm

Plenary Hall 2

Chairs: Bu Yeap & Emily Gianatti

2:30 PM

Yvonne Chow

Hyperostosis – a new phenotypic feature of renal cysts and diabetes syndrome (RCAD) *abs# 116*

2:45 PM

Teresa Lam

Thyroiditis related to cancer biological therapy: CTLA-4 and PD-1 blockade *abs# 117*

3:00 PM

Jasna Aleksova

Denosumab for control of hypercalcaemia in Primary hyperparathyroidism *abs# 118*

3:15 PM

Kathryn Hackman

Prevalence and predictors of diabetes after lung transplantation; A prospective, longitudinal study *abs# 119*

SRB Symposium - Finding Novel Targets for Contraception

1:30pm - 3:30pm

Meeting Room 211

Chairs: Lois Salamonsen & Jock Findlay

1:30 PM

Darryl Russell

New targets for non-hormonal contraceptive drugs preventing ovulation *abs# 123*

2:00 PM

Evdokia Dimitriadis

Dual role contraceptives: targeting the endometrium and blocking sexually transmitted infections. How far have we progressed? *abs# 120*

2:30 PM

Larry Chamley

SPRASA a contraceptive vaccine target with a difference? *abs# 121*

3:00 PM

John Aitken

Novel approaches to contraception targeting the male germ line *abs# 122*

Joint ESA-SRB Symposium - Reproductive Cancers

1:30pm - 3:30pm

Meeting Room 212

Chairs: Colin Clyne & Kaye Stenvers

- 1:30 PM **Wendy Ingman**
Hormonal regulation of the immune microenvironment in the mammary gland: implications for breast cancer susceptibility *abs# 124*
- 2:00 PM **Pradeep Tanwar**
Targeting mTOR signaling in human ovarian cancer *abs# 125*
- 2:30 PM **Gail Risbridger**
Adaption of the Tumour microenvironment in prostate cancer *abs# 126*
- 3:00 PM **Laura Edgington-Mitchell**
Functional studies of cysteine cathepsin activity in breast cancer metastasis *abs# 127*

ESA Symposium - Neuroendocrinology and Reproduction (basic)

1:30pm - 3:30pm

Meeting Room 213

Chairs: Kathryn Gatford & Paul Baldock

- 1:30 PM **Iain Clarke**
Neuroendocrine switches for either food or sex *abs# 128*
- 2:00 PM **Tamara Varcoe**
Circadian regulation of reproduction: from gamete to offspring *abs# 129*
- 2:30 PM **Eglantine Balland**
Mechanisms of leptin resistance in obesity *abs# 130*
- 3:00 PM **Chen Chen**
Luteinizing Hormone (LH) and Growth hormone (GH) pulsatile profiles in female and male mice across reproductive stages: advanced incorporation of transgenic mouse lines *abs# 131*

Afternoon Tea

3:30pm - 4:00pm

Exhibition Area

ESA Plenary Mid-Career Award

4:00pm - 4:30pm

Plenary Hall 2

Chair: Warrick Inder

- 4:00 PM **Kevin Pflieger**
Enlightening insights into receptor complexity *abs# 132*

SRB David Healy New Investigator Award Finalists

4:00pm - 5:30pm

Meeting Room 211

Chairs: James Deane & Kjjana Schwab

- 4:00 PM **Nicole McPherson**
Impact of combined maternal and paternal obesity on embryo development and fetal growth
abs# 133
- 4:15 PM **Rachael Crew**
Dietary-induced obesity suppresses clock gene expression in maternal metabolic tissues
during rat gestation *abs# 134*
- 4:30 PM **Aimee Caldwell**
Granulosa cell targeted androgen receptor inactivation fails to rescue Polycystic Ovary
Syndrome (PCOS) features in a mouse model *abs# 135*
- 4:45 PM **James O'Connor**
Chlamydia infects the ovary, inducing an acute inflammatory response, and reduces both
steroidogenesis and folliculogenesis. *abs# 136*
- 5:00 PM **Shu Ly Lim**
HENMT1 is involved in the stabilization of pachytene piRNAs, retrotransposon silencing and
regulating the spermiogenic program *abs# 137*
- 5:15 PM **Jessie Sutherland**
The RNA-binding protein Musashi-2 (MSI2) via interactions with SFPQ and PIWIL1 controls
mRNA processing and translational regulation during mammalian spermatogenesis. *abs#
138*

ESA Plenary

4:30pm - 5:00pm

Plenary Hall 2

Chair: Jeffrey Zajac

- 4:30 PM **Kevin Grove**
Programming metabolic and psychiatric diseases: Effects of poor maternal diet and Health
abs# 139

ESA AGM

5:00pm - 6:00pm

Plenary Hall 2

SRB ECR Meeting

5:30pm - 6:00pm

Meeting Room 212

- 5:30 PM **Sam Buckberry**
Using RNA sequencing to comprehensively profile the transcriptomes of reproductive tissues
abs# 140
- 5:40 PM **Sarah Marshall**
Wire Myography- assessing the response of the vasculature to pharmacological agents *abs#
141*
- 5:50 PM **Rebecca Wilson**
Radiotelemetry to accurately measure blood pressure and heart rate in mice. *abs# 142*

SRB Travel Grant Meeting

5:30pm - 6:00pm

Meeting Room 213

Joint ESA-SRB Conference Dinner

7:00pm - 10:30pm

Meeting Room 203-204

Wednesday 27th August 2014



Novo Nordisk Breakfast Session - Committed to advances in basic research; Introducing A/Prof Salis' Lab - Hormonal regulation of weight and body composition

7:00am - 8:30am

Meeting Room 217

ADS-ADEA Welcome

8:30am - 8:45am

Plenary Hall 2

ESA-ADS Plenary

8:45am - 9:30am

Plenary Hall 2

Chair: Morton Burt

8:45 AM

Adrian Clark

Dissecting the genetic basis of inherited adrenocortical failure *abs# 143*

SRB - Developmental competence and implantation (Orals)

9:00am - 10:00am

Meeting Room 212

Chairs: Ellen Menkhorst & Janet Holt

9:00 AM

Siew Leng Wong

Cholesterol in oocytes is required for embryogenesis and membrane functional domains in blastocysts *abs# 144*

9:15 AM

Yan Li

Formation of the trophectodermal layer in the mouse blastocyst requires increased global CpG methylation of the genome. *abs# 145*

9:30 AM

Florine Cynthia Martin

MALDI Imaging Mass spectrometry of diapause and reactivated endometrium of *Macropus eugenii* (tammar wallaby) *abs# 146*

9:45 AM

Tesha Tsai

Relationship between mitochondrial DNA haplotype and litter size in pigs *abs# 147*

SRB - Diet, obesity, and fertility (Orals)

9:00am - 10:00am

Meeting Room 219

Chairs: Linda Wu & Michelle Van Sinderen

9:00 AM

Bethany Finger

Combined parental obesity negatively affects mouse preimplantation embryo kinetics and quality *abs# 148*

9:15 AM

Tod Fullston

A male offspring sub-fertility phenotype induced by a mouse model of paternal obesity is exacerbated by the same obesogenic diet *abs# 149*

9:30 AM

Samantha Solon-Biet

Macronutrient balance, reproductive potential and lifespan in ageing mice *abs# 150*

9:45 AM

Hannah Brown

Diabetes alters the epigenetic landscape of the oocyte and early embryo. *abs# 151*

SRB - Testis Biology (Orals)

9:00am - 10:00am

Meeting Room 216

Chairs: Peter Stanton & Moira O'Bryan

9:00 AM

Catherine Itman

Chronically reduced inhibin production is associated with age-related decline in Sertoli and Leydig cell function in mice. *abs# 152*

- 9:15 AM **Julia Young**
TGF β , RA, WNT and Hedgehog signalling pathways: potential for crosstalk in driving testicular germ cell tumour cell fate decisions *abs# 153*
- 9:30 AM **Charles Allan**
Optimal expression of the Sertoli cell androgen receptor is critical for male fertility *abs# 154*
- 9:45 AM **Penny Whiley**
The *Serine/Theonine Kinase 35 (Stk35)* allele locus encodes both a coding mRNA and a long non-coding RNA *abs# 155*

ESA/ADS Joint Symposium

9:30am - 10:30am Meeting Room 203-204
Chairs: Peter Fuller & Greg Cooney

- 9:30 AM **Morag Young**
Mineralocorticoid receptors: cardiac fibrosis, metabolism and inflammation. *abs# 157*
- 9:50 AM **Patrick Sexton**
New insights into signaling at the glucagon-like peptide-1 receptor *abs# 156*
- 10:10 AM **Adrian Clark**
The melanocortin 2 receptor accessory proteins *abs# 370*

ESA Symposium - Update in Neuroendocrine Tumours (clinical)

9:30am - 11:00am Meeting Room 213
Chairs: Mark McLean & Katherine Benson

- 9:30 AM **Richard Tothill**
The genomic landscape of pheochromocytoma *abs# 158*
- 10:00 AM **David Pattison**
Molecular imaging of neuroendocrine tumours *abs# 159*
- 10:30 AM **Nick Pavlakis**
New management paradigms *abs# 160*

SRB Presidents Lecture

10:00am - 11:00am **Reproduction, Fertility and Development** Meeting Room 212
Chair: Eileen McLaughlin

- Gerald Schatten**
Manufacturing oocytes and sperm from human stem cells: just how promiscuous are cells in vitro? *abs# 161*

Morning Tea

11:00am - 11:30am Exhibition Area

SRB Symposium - Reproductive Actions of TGF-BETA Superfamily Members

11:30am - 1:00pm Meeting Room 212
Chairs: Yogeshwar Makanji & Kate Loveland

- 11:30 AM **Mark Hedger**
Regulation and actions of the activins in adult testicular function *abs# 162*
- 12:00 PM **Robert Gilchrist**
Peculiar features of GDF9 and BMP15 regulation of oocyte quality *abs# 163*
- 12:30 PM **Ian McLennan**
Does anti-Müllerian hormone retard and shape the development of the male brain? *abs# 164*

ESA Symposium - vitamin D: tissue specific actions (basic/clinical)

11:30am - 1:00pm

Chairs: Mark Cooper & Christian Girgis



Meeting Room 219

- 11:30 AM **Jenny Gunton**
Vitamin D in muscle *abs# 165*
- 12:00 PM **Paul Anderson**
The implications of vitamin d metabolism and activity in bone *abs# 166*
- 12:30 PM **Shelley Gorman**
Vitamin D and immunoregulation: Are there tissue-specific effects with physiologically-relevant vitamin D? *abs# 167*

ESA Orals - Cancer and metabolism (basic)

11:30am - 1:00pm

Chairs: Kristy Brown & Simon Chu

Meeting Room 217

- 11:30 AM **Kuan Minn Cha**
Low Vitamin D diet and the outcome in male C57Bl/6 mice *abs# 168*
- 11:45 AM **Vincent Harley**
Identification of SOX9 enhancers disrupted in isolated disorders of sex development *abs# 169*
- 12:00 PM **Kathy Gatford**
Circulating IGF1 and IGF2 and SNP genotypes in pregnant and non-pregnant women and men. *abs# 170*
- 12:15 PM **Deanne Hryciw**
Growth restriction reduces offspring plasma leptin concentrations in the absence of changes to amniotic fluid and maternal plasma leptin *abs# 171*
- 12:30 PM **Leon Bach**
Differential effects of insulin-like growth factor binding protein-6 (IGFBP-6) on migration of two ovarian cancer cell lines *abs# 172*
- 12:45 PM **Kaye Stenvers**
Assessment of ovarian cancer spheroid invasion of mesothelial cells in real time: profiling the molecular signature of the invasive interface. *abs# 173*

ESA Symposium - Endocrine Casualty from Cancer Treatments (Clinical)

11:30am - 1:00pm

Chairs: Morton Burt & Katherine Tonks

Meeting Room 216

- 11:30 AM **David Chipps**
Collateral damage: endocrine casualties from cancer treatments *abs# 174*
- 12:00 PM **Mathis Grossmann**
Bone effects of endocrine cancer treatment *abs# 175*
- 12:30 PM **Kate Stern**
Protection and preservation of fertility for young women with cancer or other conditions which threaten female fertility *abs# 176*

ESA-SRB-ADS-ADEA Lunch

1:00pm - 2:00pm

Exhibition Area

ESA Meet the Professor (Basic)

1:15pm - 2:00pm

Meeting Room 217

Chair: Christopher Ormandy

1:15 PM **Daniel Hesselson**
Rapid Genomic modelling using Zebrafish – TALENs and CRISPRs *abs# 177*

ESA/SRB orals - Hormone action in reproduction (basic)

2:00pm - 3:30pm

Meeting Room 211

Chairs: Charles Allan & Kirsty Pringle

2:00 PM **James McFarlane**
Ovarian sensitivity to gonadotrophins is increased by passive immunization against leptin *abs# 178*

2:15 PM **Stephanie Eid**
The role of in-utero hyperandrogenism and the androgen receptor in Polycystic Ovary Syndrome *abs# 179*

2:30 PM **Jemma Evans**
Understanding the mechanisms underlying breakthrough bleeding in progestin only contraceptive users *abs# 180*

2:45 PM **Julie-Ann De Bond**
Investigating the contribution of altered metabolic gene expression in obese Kiss1r KO mice *abs# 181*

3:00 PM **Sarah Marshall**
Relaxin-deficiency results in increased angiogenic gene expression in the uterus of early pregnant mice. *abs# 182*

3:15 PM **Ann Drummond**
The Mineralocorticoid Receptor plays a role in Mammary Tissue Development *abs# 183*

ESA - Bioscientifica Symposium: Practical Publishing Advice

2:00pm - 3:30pm

Meeting Room 212

2:00 PM **Sof Andrikopoulos**
Introduction

2:05 PM **Peter Ebeling**
The art of scientific writing

2:20 PM **D Wilhelm**
The peer review process

2:35 PM **Jerry Greenfield**
Responding to reviewer comments

2:50 PM **Adrian Clark**
Publishing ethics: Fabrication, Falsification and Plagiarism

3:05 PM **Questions and discussions**

ESA/SRB Orals - Developmental origins of disease (basic)

2:00pm - 3:30pm

Meeting Room 219

Chairs: Peter Mark & Tod Fullston

2:00 PM **Mary Wlodek**
Paternal transmission of metabolic and cardio-renal dysfunction to offspring born to a growth restricted father *abs# 184*

2:15 PM **Kristina Anevskva**
Influence of maternal stress during pregnancy in low birth weight females on F2 male bone outcomes *abs# 185*

2:30 PM **Minglan Li**

Pre-weaning growth hormone treatment reverses programming effects in offspring following maternal undernutrition *abs# 186*

2:45 PM

Sarah Glastras

GLP-1 receptor agonist Exendin-4 ameliorates oxidative stress and inflammation in offspring's kidneys induced by maternal obesity *abs# 187*

3:00 PM

Jean Cheong

Influence of uteroplacental insufficiency on blood pressure and arterial wall stiffness in first and second generation aged male rats. *abs# 188*

3:15 PM

Alison Care

Growth restriction and increased susceptibility to cardiovascular disease in offspring born from dams of advanced maternal age *abs# 189*

ESA - Local fauna: the influence of gut microbiome on health, obesity and diabetes (Clinical)

2:00pm - 3:30pm

Meeting Room 213

Chair: Sue Mei Lau & Jenny Gunton

2:00 PM

John Jorgensen

Microbiome actions in the response to bariatric surgery *abs# 190*

2:30 PM

Charles Mackay

Diet, metabolites, and 'western lifestyle' inflammatory diseases *abs# 191*

3:00 PM

Andrew Holmes

Food, microbes and you – what you can learn from your poo *abs# 192*



ESA Orals - Clocks and central regulation (basic)

2:00pm - 3:30pm

Meeting Room 217

Chairs: Amy Nguyen & Amanda Salis

2:00 PM

Stephanie Simonds

How the central melanocortin neurons control peripheral blood glucose. *abs# 193*

2:15 PM

Michael Boden

Acute inhibition of casein kinase 1 δ/ϵ rapidly resets central and peripheral clock gene rhythms *abs# 194*

2:30 PM

Weiyi Chen

Differential roles of central and peripheral α -melanocyte stimulating hormone in transient hyperglycemic mice *abs# 195*

2:45 PM

Elizabeth Fletcher

Loss of the peripheral molecular clock blunts the cardiac response to mineralocorticoid induced cardiovascular disease *abs# 196*

3:00 PM

Vita Birzniece

Central stimulation of GH secretion by testosterone in men is mediated by aromatisation to oestrogen *abs# 197*

3:15 PM

Jack Pryor

Electrophysiological and pharmacological profile of Gonadotropin Inhibitory Hormone-expressing neurons in the rat. *abs# 198*

ESA Orals - New frontiers in endocrinology (clinical)

2:00pm - 3:30pm

Meeting Room 218

Chairs: David Handelsman & Emily Mackenzie

2:00 PM

Mathis Grossmann

Sex steroid levels in chronic kidney disease, dialysis and kidney transplant recipients *abs# 199*

2:15 PM

Bu Yeap

Higher bone remodelling rates are associated with reduced diabetes risk and lower estradiol concentrations in older men. *abs# 200*

2:30 PM

David de Kretser

Serum Activin A, B and follistatin levels provide novel markers of Chronic Fatigue Syndrome (CFS) patients. *abs# 201*

- 2:45 PM **Arianne Sweeting**
Ipilimumab-induced hypophysitis in patients with metastatic melanoma: A novel form of autoimmune pituitary disease *abs# 202*
- 3:00 PM **Shalini Mohan**
Serum testosterone and dihydrotestosterone concentrations are associated with lung function in men from the Busselton Health Study. *abs# 203*
- 3:15 PM **Alexander Rodriguez**
Metreleptin improves metabolic and hepatic endpoints in the treatment of non-HAART associated lipodystrophy syndromes: a meta-analysis into the effects of leptin replacement therapy. *abs# 204*

SRB TGFb workshop

2:00pm - 5:30pm

Meeting Room 216

- 2:00 PM **Kelly Walton**
Generating specific TGF-b superfamily antagonists
- 2:15 PM **Paul Gregorevic**
Exploring Bone Morphogenetic Protein signalling as a positive regulator of skeletal muscle in health and disease
- 2:30 PM **Frank Lovicu**
Regulation of TGF-b for maintenance of lens and prevention of cataract.
- 2:45 PM **Ray Rodgers**
"TGF-b and polycystic ovary syndrome
- 3:00 PM **Phillip Kantharidis**
"TGF-b regulated microRNA in diabetic nephropathy
- 3:15 PM **Alistair Cole**
The Role of BMP Signalling in Oligodendrocyte Differentiation and Myelin Repair
- 5 min break*
- 3:35 PM **Peter Koopman**
Nodal signalling in male germ cell development and testicular cancer
- 3:50 PM **Kate Loveland**
Hanging drop cultures reveal activin regulation of a key signalling molecule in human testicular germ cell tumours
- 4:00 PM **Kaye Stenvers**
TGFBR3 in reproductive development and cancer
- 4:15 PM **Hitesh Peshvariya**
Transforming growth factor- β 1 requires NADPH oxidase-derived redox signalling for neovascularization
- 4:30 PM **Hong-Jian Zhu**
Double edged sword: TGF-b signalling in breast cancer metastasis and implication in targeted therapy
- 4:30 PM **David de Kretser**
The potential uses of follistatin in organ transplantation
- 4:45 PM **Vicky Tsai**
MIC-1/GDF15, role in physiological and pathological regulation of appetite and body weight

ESA Senior Plenary

3:30pm - 4:30pm

Meeting Room 212

Chair: Belinda Henry

- 3:30 PM **Iain Clarke**
"Reproduction - it's all inside your Head" *abs# 205*