First

World Congress on Reproductive Biology

Program

World Congress on Reproductive Biology
May 24-25, 2008
Sheraton Keauhou Bay Resort & Spa
Kailua-Kona, Hawaii
Meeting Program

Friday, May 23

15:00-18:00 Registration Lobby

Saturday, May 24

7:00-8:30 Continental Breakfast and Registration

8:45-10:00 Opening Ceremony and Plenary Lecture I

Malcom Parker, Imperial College, UK
“Ups and Downs of Nuclear Receptor Action in the Ovary”

10:00-10:30 Coffee Break

10:30-12:00 Concurrent Sessions 1-4

I. Epigenetics in the Gamete and Embryo – Helen Picton, Chair
   - Scott Coonrod, Epigenetic reprogramming in the murine egg and early embryo
   - Tomohiro Kono, Generation of viable bimetalic mice lacking a paternal genome
   - Yukiko Yamazaki, Autonomous regulation of sex differentiation in mouse fetal germ cells

II. Embryo-Maternal Interactions: Novel Insights and Critical Events for Pregnancy Success – Tom Spencer, Chair
   - Eckhard Wolf, Embryo-maternal interactions in bovine – lessons from holistic transcriptome and proteome studies
   - Henry Jabbour, Prokineticins: are they novel regulators of human implantation and placental functions?
   - Euan Wallace, Activin in pregnancy: conversations between mother and baby from conception to birth

III. Broadening and Rethinking Contraceptive Options for an Overpopulated World – Jock Findlay, Chair
• Michael Harper, Contraceptive Options for the 21st Century,
• Deborah O’Brien, Novel sperm glycolytic enzymes as contraceptive targets
• Lois Salamonsen, New approaches to female contraception

IV. Immunological Mediators in Reproductive Systems – Mark Hedger, Chair
• Andreas Meinhardt, Mechanism by which uropathogenic bacteria escape the testicular immune response
• Joy Pate, Signals that may regulate function of resident lymphocytes in the ovary
• Sarah Robertson, Role of immune cells in implantation and early pregnancy success

12:00-13:30 Lunch

13:30-15:00 Concurrent Sessions 5-8

V. Novel Aspects of Placental Development and Function
• Jay Cross, Comparative aspects of control of placental development
• Graham Burton, Placental stress, protein synthesis inhibition and growth restriction
• Guiying Nie, The critical role of a novel protease in normal and abnormal placentation

VI. Angiogenesis and Vascular Regulation of Reproductive Function – Eimei Sato, Chair
• Akio Miyamoto, Bovine corpus luteum as a heterogeneous endocrine organ: Vascular structure regulates site-dependent response to PGF2α
• Ray Rodgers, Fine control of follicle development and atresia regulated by angiogenesis and angiolysis
• Robert Koos, HIF-1’s role in estrogen-induced VEGF expression in the uterus

VII. Sperm-Oocyte Interactions during Fertilization – Eduardo Roldan, Chair
• Roy Jones, Molecular diffusion in sperm plasma membranes; rafts, fences and filters.
• Tadashi Baba, Current concept of sperm/egg fusion in mouse: From Fertilin to Izumo1
• Rafael Fissore, Phospholipase C zeta, Ca++ responses and fertility

VIII. Environmental Effects on Reproduction – Bill Thatcher, Chair
• Paolo Mocarelli, Dioxin and effects on human reproductive system: data from Seveso accident
• Peter Hansen, Survival vs death pathways in the thermally-stressed preimplantation embryo
• Charles Tyler, Estrogenic effects in fish after exposure to effluents from waste water treatment works

15:00-15:30 Afternoon Tea

15:30-16:30 Plenary Lecture II
Atsuo Ogura, RIKEN Tsukuba Institute, JP
“Microinsemination and nuclear transfer using male germ cells”

16:30-19:00 PM Free Time

19:00-22:00 PM Poster Session with Pupu Reception

**Sunday, May 25**

7:00-8:30 Continental Breakfast
8:45-10:00 Plenary Lecture III
Teresa Woodruff, Northwestern University, US
“Regulation of Follicle Development in vitro and in vivo”

10:00-10:30 Coffee Break

10:30-12:00 Concurrent Sessions 9-12

IX. Stem Cells, Reproductive Tissue and Regeneration – Hugh Taylor, Chair
   • Caroline Gargett, Endometrial stem/progenitor cells: How can they be identified?
   • Tetsuo Maruyama, Regeneration potential of stem cell systems in the human female reproductive tract
   • Jon Outley, Transcriptional profiling of mammalian spermatogonial stem cells: insights into mechanisms regulating their self-renewal

X. Signals Regulating Gonadal Function, John Davis, Chair
   • Peter Koopman, Sex-determining cascades in gonadal development
   • Mary Hunzicker-Dunn, LH-Dependent MAP2D Dephosphorylation in Ovarian Granulosa Cells Regulates Binding of MAP2D to Vimentin Intermediate Filaments
   • Douglas Stocco, The Role of A-Kinase Anchoring Protein 121 (AKAP121) in Steroidogenesis and Steroidogenic Acute Regulatory Protein (StAR) Expression

XI. Maximizing Oocyte Developmental Potential – Darryl Russell, Chair
   • George Smith, Novel oocyte and cumulus cell-derived markers of egg quality: Potential diagnostic and therapeutic implications
   • Robert Gilchrist, Actions of oocyte-secreted TGFb superfamily ligands
   • Takashi Miyano, Ex-vivo growth and maturation of oocytes in farm animals

XII. New Players in the GnRH System – Masugi Nishihara, Chair
   • Hiroko Tsukamura, Metastin/kisspeptin-GPR54 system regulating reproductive functions in mammals
   • George Bentley, Gonadotropin Inhibitory Hormone: Fact not fiction
   • Alan Herbison, Kisspeptin; a key player in the control of GnRH neurons and ovulation

12:00-13:30 Lunch

13:30-15:00 Concurrent Sessions 13-16

XIII. Novel Aspects of Transcript Regulation and Function – Mitch Eddy, Chair
   • Shinichiro Chuma, Protein and RNA assembly of germinal granule/nuage in the germline
   • Haifan Lin, PIWI proteins and piRNAs in germline stem cell self-renewal
   • Norman Hecht, The RNA-binding proteins, MSY2 and polypyrimidine-tract binding protein 2 (PTBP2) stabilize germ cell mRNAs

XIV. Structural and Genomic Aspects of Sperm Function – Steve Ward, Chair
   • Moira O’Bryan, The identification of critical male meiosis genes in mice and men
   • Stephen Krawetz, Mediation of Spermatogenesis by Chromatin Architecture
   • Makato Okuno, Local inhibition of flagellar activity that regulates sperm flagellar movement

XV. Diverse Patterns of Animal Reproduction – Martin Luck, Chair
   • Cassandra Extavour, Evolution of the bilaterian gonad, evolutionary origin of germ cells and gonads, genes controlling gonad development and differentiation
   • Frank Grutzner, Evolution and organization of monotreme sex chromosomes
   • Pierre Comizzoli, Diversity of endangered species reproduction as studied worldwide
XVI. New and Emerging Reproductive Technologies
   • Stuart Meyers – The use of vacuum-dried sperm to generate ICSI-derived rhesus monkey embryos
   • Goro Yoshizaki – Inter-species spermatogonia transplantation in fish: Can salmon make trout?

15:00-15:30 Afternoon Tea

15:30-16:30 Plenary Lecture II

Marilyn Renfree, University of Melbourne, AU
“Doing it Down Under: The Marsupial Mode”

16:30 Closing Remarks

19:00 Optional Social Event