Posters

**P02**
A retrospective review of outcomes following endometrial scratch procedure in IVF at Fertility Exeter
Louisa Manning1, Georgios Koussidis1, Lisa Joels1
1Fertility Exeter, Royal Devon & Exeter Hospital, UK

**P03**
Bi-directional regulation of miR-125a-3p expression by mural and cumulus granulosa cells of mice pre-ovulatory follicles
Efrat Har-Paz2, Hadas Grossman3, Ruth Shalgi1
2Department of Cell and Developmental Biology, Sackler Faculty of Medicine, Tel Aviv University, Israel

**P04**
The function of Histone Variants in female infertility
Chih-Jen Lin1
1MRC Centre for Reproductive Health, University of Edinburgh, UK

**P06**
Does Neuromedin B exert a local modulatory effect on ovarian steroidogenesis or cell proliferation?
Dareen Mattar4, Mhairi Laird1, Moafaq Samir1, Warakorn Cheewasopit1, Phil Knight1
1University of Reading, UK

**P07**
Alterations in the vasculature of placental but not endometrial tissue associated with small porcine foetuses compared to their normal-sized littermates
Claire Stenhouse1, Charis Hogg1, Xavier Donadeu1, Cheryl Ashworth1
1The Roslin Institute and R(D)SVS, University of Edinburgh, UK

**P08**
Generation of GFP transgenic cynomolgus monkeys
Yasunari Seita5, Tomonori Tsukiyama5, Chizuru Iwatani1, Hideaki Tsuchiya1, Jun Matsushita1, Masatsugu Ema1
5Shiga University of Medical Science, Japan

**P09**
Involvement of MyD88 in B-cell mediated immune response in a mouse model of LPS-induced fetal death
Susanne Plenagl1, Mandy Busse1, Desiree Nowak1, Anne Schumacher1, Ana Claudia Zenclussen1
1Department of Obstetrics and Gynecology, Medical Faculty, Otto-von-Guericke University, Magdeburg, Germany

**P10**
Role of micro-RNAs in Thrombospondin-1 Expression in Bovine Luteal Cells
Svetlana Farberov1, Rina Meidan1
1The Hebrew University of Jerusalem, Israel

**P11**
Effect of Lipopolysaccharide on steroidogenesis and cell migration in the bovine ovary
Moafaq Samir1, Dareen Mattar1, Phil Knight1
1University of Reading, UK

**P12**
Investigation of the relationship between HA binding and sperm function tests including sperm DNA damage and chromatin maturity
Forough Torabi1, David Miller1
1University of Leeds, UK

**P13**
Characterisation of extracellular vesicles produced by the Porcine oviductal epithelial cells using size exclusion chromatography
Nurul Akmal Jamaludin1, Shagayegheh Basatvat1, Wedad Aboussahoud1, Sarah Elliott1, Stuart Hunt1, Ben Peacock1, Steven Ebbens1, Alireza Fazeli1
1University of Sheffield, UK
**P14**
**PI3K/AKT signaling pathway involvement in motility loss associated with prohibitin downregulation in sperm from infertile men**
Hong Chen1, Ran Ran Chai1, Guo Wu Chen2, Wai Sum O1
1Department of Anatomy, Histology & Embryology, Shanghai Medical College, Fudan University, Shanghai, China
2Shanghai Ji Ai Genetics and IVF Institute, Hospital of Obstetrics & Gynecology, Shanghai Medical College, Fudan University, Shanghai, China
3School of Biomedical Sciences, The University of Hong Kong, China

**P15**
**Effect of atrazine on sperm mitochondrial function, acrosome reaction and fertilization competence - the bovine model**
Alisa Komsky-Elbaz1, Zvi Roth1
1Department of Animal Sciences, The Robert H. Smith Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem, Israel

**P16**
**Effect of pre-in vitro maturation using PACAP on nuclear and cytoplasmic maturation in porcine cumulus-oocyte complexes derived from small follicle**
Kyu-mi Park1, Sang Hwan Hyun1
1Institute for Stem Cell & Regenerative Medicine (ISCRM), Chungbuk National University & Laboratory of Veterinary Embryology and Biotechnology (VETEMBIO), College of Veterinary Medicine, Cheongju, South Korea

**P17**
**Treatment of GDF8 during in vitro Maturation Increased phosphorylated SMAD2/3 and improved in vitro Fertilized Embryo Developmental Competence**
Junchul David Yoon1, Sang-Hwan Hyun2
1Laboratory of Veterinary Embryology and Biotechnology (VETEMBIO), College of Veterinary Medicine, Chungbuk National University, Cheongju, South Korea
2Institute for Stem Cell & Regenerative Medicine (ISCRM), Chungbuk National University, Cheongju, South Korea

**P18**
**Establish of a transgenic neural cell line with an astrocyte-specific inducible CreERT2 system**
Seon-ung Hwang1, 2, Junchul David Yoon1, 2, Yongquian Han1, 2, Kiyoung Eun3, Hyunggee Kim3, Sang-Hwan Hyun1, 2
1Laboratory of Veterinary Embryology and Biotechnology, College of Veterinary Medicine, Chungbuk National University, Cheongju, South Korea
2Institute of Stem Cell & Regenerative Medicine, Chungbuk National University, Cheongju, South Korea
3Department of Biotechnology, School of Life Sciences and Biotechnology, Korea University, Seoul, South Korea

**P19**
**Effect of Lysophosphatidic acid (LPA) on In Vitro Maturation of Porcine Oocytes and Subsequent Embryonic Development after Parthenogenesis and in vitro Fertilization**
Kyu-Jun Kim1, Minghui Jin1, Sang-Hwan Hyun1
1Institute for Stem Cell & Regenerative Medicine (ISCRM), Chungbuk National University & Laboratory of Veterinary Embryology and Biotechnology (VETEMBIO), College of Veterinary Medicine, Chungbuk National University, Cheongju, South Korea

**P20**
**Effects of the chemotherapy drugs cisplatin and doxorubicin on the follicles of the human ovary**
Jin Liu1, Federica Lopes1, Stephanie Morgan1, Lucy Nevin1, Evelyn Telfer1, Richard A Anderson1, Norah Spears1
1University of Edinburgh, UK

**P21**
**Impact of a contrasted metabolism on endometrial and peripheral signalling pathways at implantation in dairy cattle**
Audrey Lesage-Padilla1, Vincent Mauffre1, Niamh Forde2, Melanie Poirée1, Corinne Giraud-Delville1, Caroline Eozenu1, Fabienne Constant1, Pat Lonergan2, Gilles Charpigny1, Olivier Sandra1
1UMR BDR, INRA, ENVA, Université Paris Saclay, France
2School of Agriculture and Food Science, University College Dublin, Ireland

**P23**
**Analysis of follicle development in a mouse model with increased fertility**
Miranda Stoddart1, Panayiota Ploutarchou1, Suzannah Williams1
1Nuffield Department of Obstetrics & Gynaecology, University of Oxford, UK

**P24**
**Therapeutic Doses of Phosphoramide Mustard Cause Germ Cell Death in the Prepubertal Mouse Testis**
Siobhan Rice1, Ellie Smart1, Federica Lopes1, Rod Mitchell1, Norah Spears1
1University of Edinburgh, UK

**P27**
**Targeting lactate metabolism can be a novel therapeutic for the treatment of endometriosis**
Syed Furqan Ahmad1, Erin Greaves1, Philippa Saunders1, Andrew Horne1
1University of Edinburgh, UK
P29 Membrane potential contributes to generation of high amplitude [Ca2+]i oscillations and sperm behaviour in human spermatozoa
Elis Nitaø1, Stephen Publicover1
1University of Birmingham, UK

P30 Investigating the role of the membrane receptor ADGRD1 in female fertility
Enrica Bianchi1, Gavin James Wright1
1Wellcome Trust Sanger Institute, Hinxton, Cambridge, UK

P31 Effect of pHi on regulation of hyperactivated motility in human spermatozoa
Cosmas Achikangu1, Stephen Publicover1
1University of Birmingham, UK

P32 Gonadotropins induce expression of versican in porcine oocyte-cumulus extracellular matrix and mural granulosa cells
Eva Nagyova1, Antonietta Salustri2, Jaroslav Kalous1, Michal Kubelka1, Antonella Camaioni2
1Institute of Animal Physiology and Genetics, Academy of Sciences of the Czech Republic, Libechov, Czech Republic
2Department of Biomedicine and Prevention, University of Rome Tor Vergata, Rome, Italy

P33 Determining the effect of extra-villous trophoblast cells on spiral artery remodelling: what is the role of MMP10?
Ben Sayer1, Sandra Asstoni, Judith E Cartwright1 and Guy Whitley1
1St George's University of London, UK

P34 Geographical variation in canine testicular environmental chemicals: A possible link with altered reproductive development
Rebecca Sumner1, Phoebe O'Sullivan1, Natasha Coley1, Andrew Byers1, Rachel Moxon2, Gary England1, Zulin Zhang3, Richard Lea1
1The University of Nottingham, UK
2National Breeding Center, Guide Dogs for the Blind Association, Bishop's Tachbrook, UK
3James Hutton Institute, Aberdeen, UK

P35 Female Reproductive Ageing: When during oogenesis do chromosomes begin to fall apart?
Randy Ballesteros Mejia1, Lisa Lister1, Daniel Cooney1, Mary Herbert1
1Newcastle Fertility Centre, Institute of Genetic Medicine, Newcastle University, UK

P36 Cellular modeling of citrin deficiency using human induced pluripotent stem cell-derived hepatocytes
Yong-Mahn Han1, Yeji Kim1, Beom-Hee Lee2, Han-Wook Yoo2
1Korea Advanced Institute of Science & Technology (KAIST), Daejeon, South Korea
2Asan Medical Center, University of Ulsan College of Medicine, Seoul, South Korea

P37 Disease takes its Toll on reproduction: Toll-like receptors and the bovine corpus luteum
Annemiek Nicholls1, Loren Payne1, Robert Robinson1, Tracey Coffey1, Katie Woad1
1School of Veterinary Medicine and Science, University of Nottingham, Loughborough, UK

P38 The impact of the selective progesterone receptor modulator (SPRM), Ulipristal Acetate (UPA) administration upon cell proliferation markers within the human endometrium
Rebecca Matthews1, Alison Murray1, Lucy Whitaker1, Michael Millar1, Moira Nicol1, Alistair Williams1, Hilary Critchley1
2MRC Centre for Reproductive Health, University of Edinburgh, UK

P39 Mouse follicles have a smaller follicular antrum in the absence of oocyte core 1-derived O-glycans at two weeks of age
Amelia Shard1, Suzannah Williams1, Panayiota Ploutarchou1
1Nuffield Department of Obstetrics and Gynaecology, University of Oxford, UK

P40 SIRT1 regulates low oxygen induced bovine granulosa cell proliferation through interaction with VEGF-AKT-mTOR pathway
Shogo Shiratsuki1, Tomotaka Hara1, Koumei Shirasuna1, Takehito Kuwayama1, Hisataka Iwata1
1Tokyo University of Agriculture, Atsugi, Japan
P42
Comparative investigation of lipid peroxidation and antioxidant enzymes in relation to semen quality
Muhammad Riaz1, Zahed Mahmood2, Muhammad Usman Qamar Saeed1, Muhammad Shahid1
1. Department of Biochemistry, University of Agriculture, Faisalabad, Pakistan. 2. Department of Applied Chemistry and Biochemistry, Government College University Faisalabad, Pakistan.

P43
Pup sex and body mass of rats raised in different lactation litter sizes affect ghrelin and peptide-YY concentrations
Michelle L. Johnson1,2, M. Jill Saffrey1, Victoria J. Taylor1
1. The Open University, UK. 2. The University of Leeds, UK.

P44
Effect of aflatoxin B1, on sperm vitality, mitochondrial function and acrosome reaction - the bovine model
Moty Saktser1, Alisa Komsy-Elbaz1, Zvi Roth1
1. Robert H. Smith Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem, Israel.

P45
A Bayesian view of rodent seminal cytokine networks
Michelle L. Johnson1, Tathagata Dasgupta2, Nadia Gopichandran3, Sarah L. Field2, Nicolas M. Orsi2
1. The University of Leeds, UK. 2. Harvard Medical School, Boston, USA. 3. Ostara Biomedical, Liverpool, UK.

P46
Dynamic changes in expression and DNA methylation of the astrocyte-specific genes Slc1a2 and Lrg1 during development: implications for preterm birth?
Caroline Allen1, Jessy Cartier2, Amanda Drake2
1. Centre for Reproductive Health, Queens Medical Research Institute, University of Edinburgh, UK. 2. Centre for Cardiovascular Science, Queens Medical Research Institute, University of Edinburgh, UK.

P47
Germ cells, from a mouse model of Premature Ovarian Failure, retain the potential to support follicle development when reaggregated with wildtype somatic cells
Sairah Sheikh1, Heidy Kaune1,2, Anna Deleva1, Suzannah Williams1

P48
Effect of temperature on bovine granulosa cells cultured under low oxygen in the presence or absence of melatonin
Bayar Zeebaree1, Wing Yee Kwong1, George Mann1, Carlos Gutierrez1, Kevin Sinclair1
1. University of Nottingham, UK.

P49
PGF2alpha regulates the expression of genes involved in embryo-maternal interactions in the porcine endometrium and conceptus cells
Piotr Kaczyński1, Monika Baryła1, Agnieszka Waclawik1
1. Institute of Animal Reproduction and Food Research of Polish Academy of Sciences, Olsztyn, Poland.

P50
Regulation of mitochondrial energetics mediated by ER calcium leak in mouse oocyte maturation
Banyoon Cheon1, Zhong-Wei Wang1, Michael Duchen1, Gyorgy Szabadkai1, John Carroll2

P51
The effect of macrophage colony-stimulating factor (CSF1) on piglet gonad development
Cheyli Ashworth1, Billie Avey1, Claire Stenhouse1, Kristin Sauter1, Lindsey Waddell1, Charis Hogg1, Zofia Lisowski1, David Hume1
1. The Roslin Institute, University of Edinburgh, UK.

P52
Histological categorization of equine ovarian follicles from healthy and diseased mares
Abdulqader Al Ibrahim1, Su Wei Tay1, Patrick Pollock1, Timothy Parkin1, Monika Mihm Carmichael1
1. School of Veterinary Medicine, University of Glasgow, UK.

P53
The effect of dietary protein level on bovine follicular dynamics in beef heifers
Jennifer Edwards1, Nigel Mongan1, Catrin Rutland1, Viv Perry1, Robert Robinson1
1. University of Nottingham, Loughborough, UK.
P54
Inhibition of macrophage colony-stimulating factor-1 (CSF-1) receptor signalling: a novel therapeutic target for tubal ectopic pregnancy
Robyn Beaty1, S Furquan Ahmad1, Lisa Campbell1, Andrew Horne1
1MRC Centre of Reproductive Health, Queen’s Medical Research Institute, The University of Edinburgh, UK

P55
Putative role for progesterone in Monodelphis domestica Embryogenesis and Pregnancy
Yolanda Cruz1, Karin Yoshida1, Kobi Griffith1, Joanna Johnson1
1Oberlin College, USA

P56
Male infertility-linked point mutation dramatically reduces the Ca2+ oscillation-inducing activity of sperm PLCζeta without affecting its ability to hydrolyse PIP2
Michail Nomikos1, Panagiotis Stamatiadis1, Jessica Sanders1, Brian Lewis Calver1, Morgan Lofty1, Luke Buntwal1, Karl Swann1, Francis Anthony Lai1
1Cardiff University, UK

P57
Antigen unmasking improves visualisation efficacy of phospholipase C zeta (PLCζ) in mammalian sperm to enable diagnostic applicability for evaluating PLCζ-dependent human oocyte activation deficiency
Dr Junaid Kashir1, 2, 3, Luke Buntwal1, Michail Nomikos2, Brian Calver1, Panagiotis Stamatiadis1, Peter Ashley4, David Sanders2, Paul Knaggs4, Adnan Bunkheila4, Karl Swann1, Francis Anthony Lai1
1Cardiff University, UK 2Alfaisal University, Riyadh, Saudi Arabia 3King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia 4Wales Fertility Institute, University Hospital Wales, UK

P58
The effect of transforming growth factor B on luteal angiogenesis and function in vitro
Robert Thompson1, Kathryn Woad1, Robert Robinson1
1University of Nottingham, Loughborough, UK

P59
Insight into the molecular mechanisms underlying enhanced gonadotropin hormone receptor activity in polycystic ovarian syndrome
Lisa Owens1, Avi Lerner1, George Christopoulos1, Maneshka Liyanage1, Rumana Islam1, Stuart Lavery1, Vicky Tsui1, Kate Hardy1, Stephen Franks1, Aylin Hanyaloglu1

P60
Effect of In Vitro Fertilization (IVF) and Embryo Culture Duration on mouse development and postnatal health
Ms Anan Aljahdali1, Ilı Raja Khalifl, Miguel A. Velazquez2, Bhav Sheth1, Neil R. Smyth1, Tom Fleming1
1University of Southampton, UK 2Newcastle University, UK

P61
Altered expression of genes affecting oestrogen metabolism and action in granulosa-lutein cells of women with PCOS
Melanie Coates1, Avigdor Lerner1, Georgios Christopoulos1, Maneshka Liyanage1, Stuart Lavery1, Victoria Tsui1, Kate Hardy1, Stephen Franks1, Kate Hardy1
1Imperial College London, UK

P63
Preantral follicle development in cultured reaggregated neonatal ovaries
Belinda Lo1, Ms Sairah Sheikh1, Suzannah Williams1
1University of Oxford, UK

P64
First evidence of a menstruating rodent: the spiny mouse (Acomys cahirinus)
Nadia Bellofiore1, Stacey Ellery1, 2, Jared Mamrot1, 2, David Walker1, Peter Temple-Smith1, 2, Hayley Dickinson1, 2
1The Ritchie Centre, Hudson Institute of Medical Research, Melbourne, Australia 2Obstetrics and Gynaecology, Monash University, Melbourne, Australia

Please note that the following posters were withdrawn from the Programme. P01, P05, P22, P25 P26, P28, P62.