World of Reproductive Biology

Charlotte Schubert

Demethylating the Male Brain

Biol Reprod July 2015 93 (1) 1, 1-1; published ahead of print April 1, 2015, doi:10.1095/biolreprod.115.130484

Full Text Full Text (PDF)

Charlotte Schubert

Sidelining a Side Effect of Long-Acting Contraceptives

Biol Reprod July 2015 93 (1) 2, 1-1; published ahead of print April 8, 2015, doi:10.1095/biolreprod.115.130633

Full Text Full Text (PDF)

Charlotte Schubert

Mom's Genes Affect Aneuploidy Rates in Embryos

Biol Reprod July 2015 93 (1) 3, 1-1; published ahead of print April 16, 2015, doi:10.1095/biolreprod.115.130906

Full Text Full Text (PDF)

Charlotte Schubert

Viruses from Within

Biol Reprod July 2015 93 (1) 4, 1-1; published ahead of print April 22, 2015, doi:10.1095/biolreprod.115.131060

Full Text Full Text (PDF)

Charlotte Schubert

Embryo Eats Mom

Biol Reprod July 2015 93 (1) 5, 1-1; published ahead of print April 29, 2015, doi:10.1095/biolreprod.115.131235

Full Text Full Text (PDF)

Minireview

Iurie Roatesi, Beatrice Mihaela Radu, Dragos Cretoiu, and Sanda Maria Cretoiu

Uterine Telocytes: A Review of Current Knowledge

Biol Reprod July 2015 93 (1) 10, 1-13; published ahead of printFebruary 18, 2015, doi:10.1095/biolreprod.114.125906

Abstract Full Text Full Text (PDF) Author Biosketches

OPEN ACCESS ARTICLE

Summary: We present here the most recent findings on uterine telocytes, including main features and locations and the principal hypotheses about their functions under normal and pathological conditions in the pregnant and nonpregnant uterus.

Shreya Patel, Changqing Zhou, Saniya Rattan, and Jodi A. Flaws

Effects of Endocrine-Disrupting Chemicals on the Ovary

Biol Reprod July 2015 93 (1) 20, 1-9; published ahead of print June 10, 2015, doi:10.1095/biolreprod.115.130336

Abstract Full Text Full Text (PDF) Author Biosketches

Summary: This review discusses the effects of selected endocrine disruptors on the adult mammalian ovary.

Clear Get All Checked Abstracts

Research Articles

Female Reproductive Tract

Lan Hai, Stacey R. McGee, Amanda C. Rabideau, Marilène Paquet, and Prema Narayan

Infertility in Female Mice with a Gain-of-Function Mutation in the Luteinizing Hormone Receptor Is Due to Irregular Estrous Cyclicity, Anovulation, Hormonal Alterations, and Polycystic **Ovaries**

Biol Reprod July 2015 93 (1) 16, 1-11; published ahead of print June 3, 2015, doi:10.1095/biolreprod.115.129072

Abstract Full Text Full Text (PDF) Supplemental Data

Summary: Constitutive activity of the luteinizing hormone receptor causes precocious puberty and infertility in female mice; a phenotype that is different from that seen in women.

Clear Get All Checked Abstracts

Gamete Biology

Chunmin Wang, Lu Zhang, Laurie A. Jaeger, and Zoltan Machaty

Store-Operated Ca²⁺ Entry Sustains the Fertilization Ca²⁺ Signal

Biol Reprod July 2015 93 (1) 25, 1-8; published ahead of print June 10, 2015, doi:10.1095/biolreprod.114.126151

Abstract Full Text Full Text (PDF)

Summary: The prolonged series of calcium oscillations in pig eggs during fertilization is sustained by calcium entry that is stimulated by depletion of the intracellular calcium stores.

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Male Reproductive Tract

Kevin R.P. Lyon, Emy Bosseboeuf, and A. Wayne Vogl

An Alternative Model of Tubulobulbar Complex Internalization During Junction Remodeling in the Seminiferous Epithelium of the Rat Testis

Biol Reprod July 2015 93 (1) 12, 1-11; published ahead of print June 3, 2015. doi:10.1095/biolreprod.115.128942

Abstract Full Text Full Text (PDF)

OPEN ACCESS ARTICLE

Summary: Cytochalasin D experiments suggest that actin disassembly allows the formation and expansion of tubulobulbar bulbs and that the structures are internalized by separation from the plasma membranes at one scission site.

Jose M. Garcia, Ji-an Chen, Bobby Guillory, Lawrence A. Donehower, Roy G. Smith, and Dolores J. Lamb

Ghrelin Prevents Cisplatin-Induced Testicular Damage by Facilitating Repair of DNA Double Strand Breaks Through Activation of p53 in Mice

Biol Reprod July 2015 93 (1) 24, 1-8; published ahead of print May 27, 2015, doi:10.1095/biolreprod.115.129759

Abstract Full Text Full Text (PDF) Supplemental Data

Summary: Cisplatin induces germ cell damage through inhibition of p53-dependent DNA repair mechanisms, and ghrelin administration prevents these sequelae by restoring the normal expression of these p53-dependent pathways.

Clear Get All Checked Abstracts

Ovary

🗎 Elizabeth C. Bowdridge, Madhusudan P. Goravanahally,E. Keith Inskeep, and Jorge A. Flores

Activation of Adenosine Monophosphate-Activated Protein Kinase Is an Additional Mechanism That Participates in Mediating Inhibitory Actions of Prostaglandin F_{2Alpha} in Mature, but Not Developing, Bovine Corpora Lutea

Biol Reprod July 2015 93 (1) 7, 1-7; published ahead of print May 13, 2015, doi:10.1095/biolreprod.115.129411

Abstract Full Text Full Text (PDF)

OPEN ACCESS ARTICLE

Summary: AMPK, which appears to be part of the signal transduction mechanism when FP is activated, affected progesterone production in mature, but not developing, bovine CL.

Keqin Yan, Lijing Cheng, Peng Liu, Zhenghui Liu, Shutao Zhao, Weiwei Zhu, Qing Wang, Han Wu, and Daishu Han

Polyinosinic-Polycytidylic Acid Perturbs Ovarian Functions Through Toll-Like Receptor 3-Mediated Tumor Necrosis Factor A Production in Female Mice

Biol Reprod July 2015 93 (1) 11, 1-9; published ahead of print June 3, 2015, doi:10.1095/biolreprod.115.128348

Abstract Full Text Full Text (PDF)

Summary: This study provides novel insights into mechanisms underlying ovarian dysfunctions due to viral infection.

Titaree Laoharatchatathanin, Ryota Terashima, Tomohiro Yonezawa,Shiro Kurusu, and Mitsumori Kawaminami

Augmentation of Metastin/Kisspeptin mRNA Expression by the Proestrous Luteinizing Hormone Surge in Granulosa Cells of Rats: Implications for Luteinization

Biol Reprod July 2015 93 (1) 15, 1-9; published ahead of print May 20, 2015, doi:10.1095/biolreprod.115.127902

Abstract Full Text Full Text (PDF)

Summary: Ovarian expression of kisspeptin in granulosa cells is regulated by the LH surge and may be involved in luteinization.

Kouji Komatsu, Tomoko Koya, Jingwen Wang, Mamoru Yamashita,Fumitaka Kikkawa, and Akira Iwase

Analysis of the Effect of Leukemia Inhibitory Factor on Follicular Growth in Cultured Murine Ovarian Tissue

Biol Reprod July 2015 93 (1) 18, 1-8; published ahead of print June 3, 2015, doi:10.1095/biolreprod.115.128421

Abstract Full Text Full Text (PDF) Supplemental Data

Summary: A new culture method reveals that LIF suppresses follicular growth by controlling granulosa cell proliferation.

Tianyanxin Sun, Melissa E. Pepling, and Francisco J. Diaz

Lats 1 Deletion Causes Increased Germ Cell Apoptosis and Follicular Cysts in Mouse Ovaries

Biol Reprod July 2015 93 (1) 22, 1-11; published ahead of print June 3, 2015, doi:10.1095/biolreprod.114.118604

Abstract Full Text Full Text (PDF) Supplemental Data

Summary: Hippo signaling is active in the ovary and deletion of *Lats1*, a core component of the pathway, causes an increase in germ cell apoptosis, primordial follicle depletion, and ovarian cysts.

Clear Get All Checked Abstracts

Pituitary

Ivana Bjelobaba, Marija M. Janjic, Marek Kucka, and Stanko S. Stojilkovic

Cell Type-Specific Sexual Dimorphism in Rat Pituitary Gene Expression During Maturation

Biol Reprod July 2015 93 (1) 21, 1-9; published ahead of print June 10, 2015, doi:10.1095/biolreprod.115.129320

Abstract Full Text Full Text (PDF)

Summary: Comparison of expression profiles of genes coding for rat pituitary hormones during rat development reveals the lineage-specific sexual differences.

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Pregnancy

Qin Xue, Daliao Xiao, and Lubo Zhang

Estrogen Regulates Angiotensin II Receptor Expression Patterns and Protects the Heart from Ischemic Injury in Female Rats

Biol Reprod July 2015 93 (1) 6, 1-9; published ahead of print May 13, 2015, doi:10.1095/biolreprod.115.129619

Abstract Full Text Full Text (PDF)

Summary: Despite the lack of effect of ovarian hormones on the sex dimorphism in fetal programming of heart ischemic vulnerability, a novel mechanism of estrogen in regulating cardiac Agtr1/Agtr2 expression patterns and protecting female hearts against ischemia and reperfusion injury is suggested.

Hui He, Shuangbo Kong, Fei Liu, Shuang Zhang, Yaling Jiang, Yixin Liao, Yufei Jiang, Qian Li, Bingyan Wang, Zuomin Zhou, Haibin Wang, and Ran Huo

Rbbp7 Is Required for Uterine Stromal Decidualization in MiceBiol Reprod July 2015 93 (1) 13, 1-11; published ahead of print June

3, 2015, doi:10.1095/biolreprod.115.129015

Abstract Full Text Full Text (PDF) Supplemental Data

Summary: Rbbp7 is a potentially functional player regulating normal histone acetylation modification and cyclin D3 expression in stromal cells during postimplantation decidual development.

🔲 Aneta Dobierzewska, Macarena Palominos, Carlos E. Irarrazabal,Marianela Sanchez, Mauricio Lozano, Alejandra Perez-Sepulveda,Lara J. Monteiro, Yara Bun

NFAT5 Is Up-Regulated by Hypoxia: Possible Implications in Preeclampsia and Intrauterine Growth Restriction

Biol Reprod July 2015 93 (1) 14, 1-11; published ahead of print May 20, 2015, doi:10.1095/biolreprod.114.124644

Abstract Full Text Full Text (PDF)

Summary: Hypoxia-dependent activation of NFAT5 in PE and IUGR placentas and trophoblast cells is due to its increased nuclear accumulation/phosphorylation and serves as a separate function to NFAT5 tonicity-dependent pathway.

Clear Get All Checked Abstracts

Reproductive Technology

Bart Leemans, Bart M. Gadella, Tom A.E. Stout, Sonia Heras, Katrien Smits, Minerva Ferrer-Buitrago, Eline Claes, Björn Heindryckx, Winnok H. De Vos, Hilde

Procaine Induces Cytokinesis in Horse Oocytes via a pH-Dependent Mechanism

Biol Reprod July 2015 93 (1) 23, 1-17; published ahead of print June 17, 2015, doi:10.1095/biolreprod.114.127423

Abstract Full Text Full Text (PDF)

Summary: Procaine does not induce penetration of equine oocytes by activating stallion sperm but instead stimulates cytokinesis of the oocytes via a pH-mediated depolymerization of cortical F-actin.

Clear Get All Checked Abstracts

Testis

Joshua P. Welborn, Matthew G. Davis, Steven D. Ebers, Genna R. Stodden, Kanako Hayashi, Joseph L. Cheatwood, Manjeet K. Rao, and James A. MacLean I. Rhox8 Ablation in the Sertoli Cells Using a Tissue-Specific RNAi Approach Results in Impaired Male Fertility in Mice

Biol Reprod July 2015 93 (1) 8, 1-14; published ahead of print May 13, 2015, doi:10.1095/biolreprod.114.124834

Abstract Full Text Full Text (PDF) Supplemental Data

Summary: Sertoli-specific ablation of RHOX8 resulted in male

subfertility characterized by increased male germ cell death.

Mickaël Di-Luoffo, Caroline Daems, Francis Bergeron, and Jacques J. Tremblay

Novel Targets for the Transcription Factors MEF2 in MA-10 Leydig Cells

Biol Reprod July 2015 93 (1) 9, 1-12; published ahead of print May 27, 2015, doi:10.1095/biolreprod.114.127761

Abstract Full Text Full Text (PDF)

Summary: A high throughput transcriptomic analysis of MEF2-depleted Leydig cells reveals a complex gene network regulated by this sexually dimorphic transcription factor.

Cathryn A. Hogarth, Elizabeth Evans, Jennifer Onken, Travis Kent, Debra Mitchell, Martin Petkovich, and Michael D. Griswold

CYP26 Enzymes Are Necessary Within the Postnatal Seminiferous Epithelium for Normal Murine Spermatogenesis

Biol Reprod July 2015 93 (1) 19, 1-10; published ahead of print June 3, 2015, doi:10.1095/biolreprod.115.129718

Abstract Full Text Full Text (PDF) Supplemental Data

Summary: Eliminating both CYP26A1 and CYP26B1 activity in either germ or Sertoli cells induces minor defects in the progression of spermatogenesis.

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In Memoriam

John P Verstegen, III and Bruce D Murphy

In Memoriam Patrick W. Concannon, Ph.D. 1941–2015

Biol Reprod July 2015 93 (1) 17, 1-1; published ahead of print June 17, 2015, doi:10.1095/biolreprod.115.132688

Full Text Full Text (PDF)

Summary: Memorial for Dr. Patrick Concannon.