

# BIOLOGY OF REPRODUCTION

VOLUME 97, NUMBER 4  
OCTOBER 2017

## Contents

### Interview

- An interview with Dr John Kerr (Jock) Findlay  
*Jodi A. Flaws* ..... 515

### Highlights

- Regression of the male reproductive tract in the female embryo is regulated by the orphan nuclear receptor COUP-TFII  
*Romana A. Nowak* ..... 517

- Actin brings chromosomes up to speed during oocyte maturation  
*Hugh J. Clarke* ..... 519

### Review

- Formation and function of sperm tail structures in association with sperm motility defects  
*Mari S. Lehti and Anu Sironen* ..... 522

- Significance of epidermal growth factor receptor signaling for acquisition of meiotic and developmental competence in mammalian oocytes  
*Radek Prochazka, Milan Blaha and Lucie Němcová* ..... 537

### Female Reproductive Tract

- Effects of propylene glycol or elevated luteinizing hormone during follicle development on ovulation, fertilization, and early embryo development  
*Katherine S. Hackbart, Robb W. Bender, Paulo D. Carvalho, Lais M. Vieira, Ana R. Dresch, Jerry N. Guenther, Hidir Gencoglu, Anibal B. Nascimento, Randy D. Shaver and Milo C. Wiltbank* ..... 550

- Effects of noncavity-distorting fibroids on endometrial gene expression and function  
*Lusine Aghajanova, Sahar Houshdaran, Juan C. Irwin and Linda C. Giudice* ..... 564

### Gamete Biology

- Reactive oxygen species and protein modifications in spermatozoa  
*Cristian O'Flaherty and David Matsushita-Fournier* ..... 577

- Sperm function, protein phosphorylation, and metabolism differ in mice lacking successive sperm-specific glycolytic enzymes  
*Zaohua Huang, Polina V. Danshina, Kathleen Mohr, Weidong Qu, Summer G. Goodson, Thomas M. O'Connell and Deborah A. O'Brien* ..... 586

- NQO2 inhibition relieves reactive oxygen species effects on mouse oocyte meiotic maturation and embryo development  
*Dandan Chen, Xin Li, Xiaoyun Liu, Xiaoyu Liu, Xiuying Jiang, Juan Du, Qian Wang, Yuanjing Liang and Wei Ma* ..... 598

- The developmental origin and compartmentalization of glutathione-s-transferase omega 2 isoforms in the perinuclear theca of eutherian spermatozoa  
*Lauren E Hamilton, Genevieve Acteau, Wei Xu, Peter Sutovsky and Richard Oko* ..... 612

### Pituitary

- Extra-pituitary expressed follicle-stimulating hormone: Is it physiologically important?  
*Anushka Jayaraman and T. Rajendra Kumar* ..... 622

**Pregnancy**

Decreased insulin secretion in pregnant rats fed a low protein diet  
*Haijun Gao, Eric Ho, Meena Balakrishnan, Vijay Yechoor and Chandra Yallampalli* ..... 627

Maternal melatonin or agomelatine therapy prevents programmed hypertension in male offspring of mother exposed to continuous light  
*You-Lin Tain, Yu-Ju Lin, Julie Y.H. Chan, Chien-Te Lee and Chien-Ning Hsu* ..... 636

**Ovary**

Stage-specific follicular extracellular vesicle uptake and regulation of bovine granulosa cell proliferation  
*Wei-Ting Hung, Raphatphorn Navakanitworakul, Tarique Khan, Pan Zhang, John S. Davis, Lynda K. McGinnis and Lane K. Christenson* ..... 644