

# American Journal of Physiology- Cell Physiology

JULY 2009/Volume 66, Number 1

## EDITORIAL FOCUS

- Novel epigenetic regulation of skeletal muscle myosin heavy chain genes.* Focus on “Differential epigenetic modifications of histones at the myosin heavy chain genes in fast and slow skeletal muscle fibers and in response to muscle unloading”  
*K. A. Zwetsloot, M. J. Laye, and F. W. Booth* C1
- Multifunctional angiogenic factors: add GnRH to the list.* Focus on “Gonadotropin-releasing hormone-regulated chemokine expression in human placentation”  
*W. J. Pearce* C4

---

## MEMBRANE TRANSPORTERS, ION CHANNELS, AND PUMPS

- Pharmacological properties of a pore induced by raising intracellular  $Ca^{2+}$   
*R. X. Faria, R. A. M. Reis, C. M. Casabulho, A. V. P. Alberto, F. P. de Farias, A. Henriques-Pons, and L. A. Alves* C28
- MAGI-1 interacts with Slo1 channel proteins and suppresses Slo1 expression on the cell surface  
*L. D. Ridgway, E. Y. Kim, and S. E. Dryer* C55
- Role of the glutamate 185 residue in proton translocation mediated by the proton-coupled folate transporter SLC46A1  
*E. S. Unal, R. Zhao, and I. D. Goldman* C66
- Tamoxifen inhibits BK channels in chick cochlea without alterations in voltage-dependent activation  
*M. Tong (童明杰) and R. K. Duncan* C75
- Endofacial competitive inhibition of the glucose transporter 1 activity by gossypol  
*A. Pérez, P. Ojeda, X. Valenzuela, M. Ortega, C. Sánchez, L. Ojeda, M. Castro, J. G. Cárcamo, M. C. Rauch, I. I. Concha, C. I. Rivas, J. C. Vera, and A. M. Reyes* C86
- AMP-activated protein kinase phosphorylation of the R domain inhibits PKA stimulation of CFTR  
*J. D. King, Jr., A. C. Fitch, J. K. Lee, J. E. McCane, D.-O. D. Mak, J. K. Foskett, and K. R. Hallows* C94
- Histamine hyperpolarizes human glioblastoma cells by activating the intermediate-conductance  $Ca^{2+}$ -activated  $K^{+}$  channel  
*B. Fioretti, L. Catacuzzeno, L. Sforna, F. Aiello, F. Pagani, D. Ragozzino, E. Castigli, and F. Franciolini* C102
- Elevated hydrostatic pressure activates sodium/hydrogen exchanger-1 in rat optic nerve head astrocytes  
*A. Mandal, M. Shahidullah, N. A. Delamere, and M. A. Terán* C111
- Identification of the large-conductance background  $K^{+}$  channel in mouse B cells as TREK-2  
*H. Zheng, J. H. Nam, B. Pang, D. H. Shin, J. S. Kim, Y.-S. Chun, J.-W. Park, H. Bang, W. K. Kim, Y. E. Earm, and S. J. Kim* C188
- ROS activate KCl cotransport in nonadherent Ehrlich ascites cells but  $K^{+}$  and  $Cl^{-}$  channels in adherent Ehrlich Lettré and NIH3T3 cells  
*I. H. Lambert, T. K. Klausen, A. Bergdahl, C. Hougaard, and E. K. Hoffmann* C198

(Continued)

Cover: Rhodamine-phalloidin staining of F-actin stress fibers in EA.hy926 endothelial cells treated with 300 mM ascorbate for 1 h. May JM, Qu ZC, Qiao H. “Transfer of ascorbic acid across the vascular endothelium: mechanism and self-regulation.” *Am J Physiol Cell Physiol* 297: C169–C178, 2009.

This Journal is printed on “acid-free” paper.

(Contents continued)

## MUSCLE CELL BIOLOGY AND CELL MOTILITY

- Differential epigenetic modifications of histones at the myosin heavy chain genes in fast and slow skeletal muscle fibers and in response to muscle unloading  
*C. E. Pandorf, F. Haddad, C. Wright, P. W. Bodell, and K. M. Baldwin* C6

## RECEPTORS AND SIGNAL TRANSDUCTION

- Gonadotropin-releasing hormone-regulated chemokine expression in human placentation  
*P. C. Cavanagh, C. Dunk, M. Pampillo, J. M. Szereszewski, J. E. Taylor, C. Kahiri, V. Han, S. Lye, M. Bhattacharya, and A. V. Babwah* C17
- Green tea (–)-epigallocatechin gallate inhibits insulin stimulation of 3T3-L1 preadipocyte mitogenesis via the 67-kDa laminin receptor pathway  
*H.-C. Ku, H.-H. Chang, H.-C. Liu, C.-H. Hsiao, M.-J. Lee, Y.-J. Hu, P.-F. Hung, C.-W. Liu, and Y.-H. Kao* C121
- Protein tyrosine phosphatase- $\alpha$  complexes with the IGF-I receptor and undergoes IGF-I-stimulated tyrosine phosphorylation that mediates cell migration  
*S. C. Chen, R. S. Khanna, D. C. Bessette, L. A. Samayawardhena, and C. J. Pallen* C133
- Downregulation of cilia-localized II-6R $\alpha$  by 17 $\beta$ -estradiol in mouse and human fallopian tubes  
*R. Shao, M. Nutu, L. Karlsson-Lindahl, A. Benrick, B. Weijdegård, S. Lager, E. Egecioglu, J. Fernandez-Rodriguez, K. Gemzell-Danielsson, C. Ohlsson, J.-O. Jansson, and H. Billig* C140

## GROWTH, DIFFERENTIATION, AND APOPTOSIS

- Simultaneous overexpression of *Oct4* and *Nanog* abrogates terminal myogenesis  
*K. C. Lang, I. H. Lin, H. F. Teng, Y. C. Huang, C. L. Li, K. T. Tang, and S. L. Chen* C43
- Facilitated maturation of Ca<sup>2+</sup> handling properties of human embryonic stem cell-derived cardiomyocytes by calsequestrin expression  
*J. Liu, D. K. Lieu, C. W. Siu, J.-D. Fu, H.-F. Tse, and R. A. Li* C152
- Arachidonic acid potentiates hypoxia-induced VEGF expression in mouse embryonic stem cells: involvement of Notch, Wnt, and HIF-1 $\alpha$   
*S. H. Lee, M. H. Kim, and H. J. Han* C207

## PROTEIN AND VESICLE TRAFFICKING, CYTOSKELETON

- The dyslexia-associated protein KIAA0319 interacts with adaptor protein 2 and follows the classical clathrin-mediated endocytosis pathway  
*C. Levecque, A. Velayos-Baeza, Z. G. Holloway, and A. P. Monaco* C160

## EXTRACELLULAR MATRIX, CELL INTERACTIONS

- Transfer of ascorbic acid across the vascular endothelium: mechanism and self-regulation  
*J. M. May, Z.-C. Qu, and H. Qiao* C169
- Endothelial cell traction and ECM density influence both capillary morphogenesis and maintenance in 3-D  
*E. Kniazeva and A. J. Putnam* C179

## CELLULAR AND MITOCHONDRIAL METABOLISM

- The role of PGC-1 $\alpha$  on mitochondrial function and apoptotic susceptibility in muscle  
*P. J. Adhihetty, G. Uguccioni, L. Leick, J. Hidalgo, H. Pilegaard, and D. A. Hood* C217

---

## CORRIGENDUM

- Corrigendum for Zhao et al., Volume 295/64, November 2008, pp. C1376–C1384 C226

Information for Authors is freely available online at [http://www.the-aps.org/publications/journals/pub\\_quick.htm](http://www.the-aps.org/publications/journals/pub_quick.htm) and is printed in the June and December issues of the Journal.