

Leading Edge

Cell Volume 145 Number 7, June 24, 2011

IN THIS ISSUE

SELECT

- 999 Cardiac Damage and Its Repair

PREVIEWS

- | | |
|---------------------------------------------------------------------------|---------------------------|
| 1003 p63 and Epithelial Metaplasia:
A Gutsy Choice | K. Lefort and G.P. Dotto |
| 1005 Stress Signaling Etches
Heritable Marks on Chromatin | H. Siomi and M.C. Siomi |
| 1007 Stuck in the Middle: Drugging
the Ubiquitin System at the E2 Step | J.W. Harper and R.W. King |
| 1009 The Pessimist's and Optimist's
Views of Adult Neurogenesis | G. Kempermann |

REVIEW

- 1012 Life at the Leading Edge A.J. Ridley

SNAPSHOT

- 1158 Mitochondrial Dynamics Y. Tamura, K. Itoh, and H. Sesaki

Articles

Cell Volume 145 Number 7, June 24, 2011

- 1023 Residual Embryonic Cells as Precursors of a Barrett's-like Metaplasia
X. Wang, H. Ouyang, Y. Yamamoto, P.A. Kumar, T.S. Wei, R. Dagher, M. Vincent, X. Lu, A.M. Bellizzi, K.Y. Ho, C.P. Crum, W. Xian, and F. McKeon
- 1036 Exome Sequencing of Ion Channel Genes Reveals Complex Profiles Confounding Personal Risk Assessment in Epilepsy
T. Klassen, C. Davis, A. Goldman, D. Burgess, T. Chen, D. Wheeler, J. McPherson, T. Bourquin, L. Lewis, D. Villasana, M. Morgan, D. Muzny, R. Gibbs, and J. Noebels
- 1049 Inheritance of Stress-Induced, ATF-2-Dependent Epigenetic Change
K.-H. Seong, D. Li, H. Shimizu, R. Nakamura, and S. Ishii
- 1062 Insights into the Micromechanical Properties of the Metaphase Spindle
Y. Shimamoto, Y.T. Maeda, S. Ishiwata, A.J. Libchaber, and T.M. Kapoor
- 1075 An Allosteric Inhibitor of the Human Cdc34 Ubiquitin-Conjugating Enzyme
D.F. Ceccarelli, X. Tang, B. Pelletier, S. Orlicky, W. Xie, V. Plantevin, D. Neculai, Y.-C. Chou, A. Ogunjimi, A. Al-Hakim, X. Varelas, J. Koszela, G.A. Wasney, M. Vedadi, S. Dhe-Paganon, S. Cox, S. Xu, A. Lopez-Girona, F. Mercurio, J. Wrana, D. Durocher, S. Meloche, D.R. Webb, M. Tyers, and F. Sicheri
- 1088 The INAD Scaffold Is a Dynamic, Redox-Regulated Modulator of Signaling in the *Drosophila* Eye
W. Liu, W. Wen, Z. Wei, J. Yu, F. Ye, C.-H. Liu, R.C. Hardie, and M. Zhang
- 1102 Golgi Export of the Kir2.1 Channel Is Driven by a Trafficking Signal Located within Its Tertiary Structure
D. Ma, T.K. Taneja, B.M. Hagen, B.-Y. Kim, B. Ortega, W.J. Lederer, and P.A. Welling
- 1116 A Phosphorylation Cycle Shapes Gradients of the DYRK Family Kinase Pom1 at the Plasma Membrane
O. Hachet, M. Berthelot-Grosjean, K. Kokkoris, V. Vincenzetti, J. Moosbrugger, and S.G. Martin
- 1129 A Role for the Primary Cilium in Notch Signaling and Epidermal Differentiation during Skin Development
E.J. Ezratty, N. Stokes, S. Chai, A.S. Shah, S.E. Williams, and E. Fuchs

(continued)

- 1142 In Vivo Clonal Analysis Reveals Self-Renewing and Multipotent Adult Neural Stem Cell Characteristics

M.A. Bonaguidi, M.A. Wheeler, J.S. Shapiro, R.P. Stadel, G.J. Sun, G.-I. Ming, and H. Song

ERRATUM

- 1156 A Rapid, Extensive, and Transient Transcriptional Response to Estrogen Signaling in Breast Cancer Cells

N. Hah, C.G. Danko, L. Core, J.J. Waterfall, A. Siepel, J.T. Lis, and W.L. Kraus

POSITIONS AVAILABLE

On the cover: Multidomain scaffold proteins organize and regulate signal transduction complexes. Liu et al. (pp. 1088–1101) demonstrate that, in *Drosophila* eyes, the PDZ domain scaffold protein INAD cycles between two conformational states in a light-dependent manner. Upon exposure to light, the protein shifts from a reduced, target-binding competent state to an oxidized, target-binding defective form. This conformational switch is due to a very large redox potential change of a pair of disulfide bonds in the PDZ5 domain. The images on the cover show reduced PDZ5 (white ribbons) associating with the neighboring PDZ4 domain (green ribbons) when flies are in dark; exposure of flies to light leads to oxidation of PDZ5 disulfide and subsequent uncoupling of the PDZ45 association. The background of the image shows NMR spectra used to measure the redox potentials of INAD PDZ5 under different conditions.

