NEWS
In This Issue
340 • The APC/C gets Trim’d down for apoptosis
• Prion puts yeast cells under arrest
• Ubiquitin isn’t ubiquitous in receptor trafficking
  B. Short
In Focus
341 • Trichoplein keeps primary cilia silent
  B. Short
People & Ideas
342 • Coleen Murphy: How to stay young at heart, body, and mind
  C. Sedwick

REVIEWS
Editorials
345 Minimizing the “Re” in Review
Elizabeth H. Williams, Pamela A. Carpenter, and Tom Misteli

Comments
347 Cell migration: Fibroblasts find a new way to get ahead
Michael Sixt

Reviews
351 Matrix nanotopography as a regulator of cell function
Deok-Ho Kim, Paolo P. Provenzano, Chris L. Smith, and Andre Levchenko

RESEARCH ARTICLES
Reports
361 The Trim39 ubiquitin ligase inhibits APC/C^{Cyclin I}-mediated degradation of the Bax activator MOAP-1
Nai-Jia Huang, Liguo Zhang, Wanli Tang, Chen Chen, Chih-Sheng Yang, and Sally Kornbluth
369 An intrinsically disordered yeast prion arrests the cell cycle by sequestering a spindle pole body component
Sebastian Treusch and Susan Lindquist
381 A wound-induced keratin inhibits Src activity during keratinocyte migration and tissue repair
Jeremy D. Rotty and Pierre A. Coulombe

Articles
391 Trichoplein and Aurora A block aberrant primary cilia assembly in proliferating cells
Akihito Inoko, Makoto Matsuyama, Hidemasa Goto, Yuki Okamura-Matsuyama, Yuko Hayashi, Masato Enomoto, Miho Ibi, Takeshi Utano, Shigenobu Yonemura, Tohru Kiyono, Ichiro Izawa, and Masaki Inagaki
407 ALIX binds a YPXI L motif of the GPCR PAR1 and mediates ubiquitin-independent ESCRT-III/MVB sorting
Michael R. Dores, Buxin Chen, Huilan Lin, Unice J. K. Soh, May M. Paing, William A. Montagne, Timo Meerloo, and JoAnn Trejo

On the cover
Inoko et al. reveal that the centriolar protein trichoplein activates Aurora A kinase to suppress the assembly of primary cilia in proliferating cells. Proliferating RPE1 cells (with nuclei labeled in blue) lacking trichoplein aberrantly form primary cilia (which are stained for acetylated tubulin, green) and undergo cell cycle arrest. Image courtesy of Akihito Inoko. See page 391.
Hic-5 promotes invadopodia formation and invasion during TGF-β–induced epithelial–mesenchymal transition
Jeanine Pignatelli, David A. Tumbarello, Ronald P. Schmidt, and Christopher E. Turner

Nonpolarized signaling reveals two distinct modes of 3D cell migration
Ryan J. Petrie, Núria Gavara, Richard S. Chadwick, and Kenneth M. Yamada

Localized topological changes of the plasma membrane upon exocytosis visualized by polarized TIRFM
Arun Anantharam, Bibiana Onoa, Robert H. Edwards, Ronald W. Holz, and Daniel Axelrod

Compared to control cells (left), epithelial cells treated with TGF-β (right) form invadopodia, protrusive structures rich in F-actin (red) that degrade the underlying gelatin matrix (green). Pignatelli et al. demonstrate that invadopodia formation and cell invasion are promoted by the TGF-β–induced focal adhesion protein Hic-5. Image © 2012 Pignatelli et al. See page 421.