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Cover: Seam cells of the lateral epidermis of Caenorhabditis elegans quickly (within 2 hours) restore mutual adherens-junction contacts that had been interrupted by a fusion of their anterior daughters with the surrounding syncytium. A nuclear receptor NHR-25 is necessary for the contact renewal. Adherens junctions were stained with a DLG-1 antibody; seam cells are pseudocolored in green. See article by M. Šilhánková et al. (pp. 223-232).

## Commentaries

- 1 G2 damage checkpoints: what is the turn-on? O'Connell, M. J. and Cimprich, K. A.
- 7 The molecular machinery of autophagy: unanswered questions. Klionsky, D. J.
- 19 Cofilin takes the lead. DesMarais, V., Ghosh, M., Eddy, R. and Condeelis, J.

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## **Research Articles**

- Expression of connexins during differentiation and regeneration of skeletal muscle: functional relevance of connexin43. Araya, R., Eckardt, D., Maxeiner, S., Krüger, O., Theis, M., Willecke, K. and Sáez, J. C.
- 39 Interaction of 14-3-3 protein with Chk1 affects localization and checkpoint function. Dunaway, S., Liu, H.-Y. and Walworth, N. C.
- 51 Multiple rows of cells behind an epithelial wound edge extend cryptic lamellipodia to collectively drive cell-sheet movement. Farooqui, R. and Fenteany, G.
- 65 Ice2p is important for the distribution and structure of the cortical ER network in Saccharomyces cerevisiae. Estrada de Martin, P., Du, Y., Novick, P. and Ferro-Novick, S.
- 79 Cortactin regulates cell migration through activation of N-WASP. Kowalski, J. R., Egile, C., Gil, S., Snapper, S. B., Li, R. and Thomas, S. M.
- 89 Valproate protects cells from ER stress-induced lipid accumulation and apoptosis by inhibiting glycogen synthase kinase-3. Kim, A. J., Shi, Y., Austin, R. C. and Werstuck, G. H.
- 101 Ciz1 promotes mammalian DNA replication. Coverley, D., Marr, J. and Ainscough, J.
- 113 Interplay between paracrine signaling and gap junctional communication in ovarian follicles. Gittens, J. E. I., Barr, K. J., Vanderhyden, B. C. and Kidder, G. M.
- 123 Stroma is not a major target in DMBA-mediated tumorigenesis of mouse mammary preneoplasia. Medina, D. and Kittrell, F.
- 129 Localisation of human Y-family DNA polymerase κ: relationship to PCNA foci. Ogi, T., Kannouche, P. and Lehmann, A. R.
- 137 Absence of Dp71 in mdx<sup>3cv</sup> mouse spermatozoa alters flagellar morphology and the distribution of ion channels and nNOS. Hernández-González, E. O., Mornet, D., Rendon, A. and Martínez-Rojas, D.
- 147 The metalloproteinase MT1-MMP is required for normal development and maintenance of osteocyte processes in bone. Holmbeck, K., Bianco, P., Pidoux, I., Inoue, S., Billinghurst, R. C., Wu, W., Chrysovergis, K., Yamada, S., Birkedal-Hansen, H. and Poole, A. R.

- The novel fission yeast (1,3)β-D-glucan synthase catalytic subunit Bgs4p is essential during both cytokinesis and polarized growth. Cortés, J. C. G., Carnero, E., Ishiguro, J., Sánchez, Y., Durán, A. and Ribas, J. C.
- 175 Activity and subcellular compartmentalization of peroxisome proliferator-activated receptor α are altered by the centrosome-associated protein CAP350. Patel, H., Truant, R., Rachubinski, R. A. and Capone, J. P.
- 187 The Drosophila Bub3 protein is required for the mitotic checkpoint and for normal accumulation of cyclins during G2 and early stages of mitosis. Lopes, C. S., Sampaio, P., Williams, B., Goldberg, M. and Sunkel, C. E.
- 199 Nak1 interacts with Hob1 and Wsp1 to regulate cell growth and polarity in Schizosaccharomyces pombe. Huang, T. Y., Renaud-Young, M. and Young, D.
- 211 PARP-1 and PARP-2 interact with nucleophosmin/B23 and accumulate in tanscriptionally active nucleoli. Meder, V. S., Boeglin, M., de Murcia, G. and Schreiber, V.
- 223 Nuclear receptor NHR-25 is required for cell-shape dynamics during epidermal differentiation in *Caenorhabditis elegans*.
  Šilhánková, M., Jindra, M. and Asahina, M.
- 233 RNA association and nucleocytoplasmic shuttling by ataxin-1. Irwin, S., Vandelft, M., Pinchev, D., Howell, J. L., Graczyk, J., Orr, H. T. and Truant, R.
- 243 Oxidative stress inactivates VEGF survival signaling in retinal endothelial cells via PI 3-kinase tyrosine nitration. El-Remessy, A. B., Bartoli, M., Platt, D. H., Fulton, D. and Caldwell, R. B.
- 253 A synthetic glycosaminoglycan mimetic (RGTA) modifies natural glycosaminoglycan species during myogenesis. Barbosa, I.,
  Morin, C., Garcia, S., Duchesnay, A., Oudghir, M., Jenniskens, G.,
  Miao, H.-Q., Guimond, S., Carpentier, G., Cebrian, J., Caruelle, J.-P.,
  van Kuppevelt, T., Turnbull, J., Martelly, I. and Papy-Garcia, D.