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Cover: A Drosophila S2 cell undergoing an abnormal mitosis. The cell was treated with a low dose of the microtubule poison taxol and the spindle has collapsed to form a monopolar aster. Microtubules (red) irradiating from the aster bind mitotic chromosomes (blue) through the kinetochores. In this monopolar configuration there is no tension exerted by microtubules across kinetochore pairs and the spindle checkpoint protein BubR1 (green) accumulates strongly at kinetochores. The localization of BubR1 to kinetochores is thought to be involved in providing a 'wait anaphase' signal so that the spindle checkpoint remains active and prevents cells from exiting mitosis. See article by Logarinho et al. (pp. 1757-1771).

### Sticky Wicket

1615 Eves on the prize. Mole

#### Women in Cell Science

- 1617 Janet Heasman, Watt. F. M.
- 1618 Bias against women in higher scientific positions? Thompson, H. Response. Taylor-Papadimitriou, J.

#### Commentaries

- 1619 The arithmetic of centrosome biogenesis. Delattre, M. and Gönczy, P.
- 1631 Cellular mechanisms of direct-current electric field effects: galvanotaxis and metastatic disease. Mycielska, M. E. and Djamgoz, M. B. A.

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## **Research Articles**

- 1641 The flagella connector of *Trypanosoma brucei*: an unusual mobile transmembrane junction. Briggs, L. J., McKean, P. G., Baines, A., Moreira-Leite, F., Davidge, J., Vaughan, S. and Gull, K.
- 1653 Role of tau phosphorylation by glycogen synthase kinase-3β in the regulation of organelle transport. Tatebayashi, Y., Haque, N.,Tung, Y.-C., Iqbal, K. and Grundke-Iqbal, I.
- 1665 Active and specific recruitment of a soluble cargo protein for endoplasmic reticulum exit in the absence of functional COPII component Sec24p. Fatal, N., Karhinen, L., Jokitalo, E. and Makarow, M.
- 1675 The transcription factor Snail downregulates the tight junction components independently of E-cadherin downregulation.

  Ohkubo, T. and Ozawa, M.
- 1687 Induction of nitric oxide synthase-2 proceeds with the concomitant downregulation of the endogenous caveolin levels. Navarro-Lérida, I., Portolés, M. T., Álvarez Barrientos, A., Gavilanes, F., Boscá, L. and Rodríguez-Crespo, I.
- 1699 ATPase-deficient hVPS4 impairs formation of internal endosomal vesicles and stabilizes bilayered clathrin coats on endosomal vacuoles. Sachse, M., Strous, G. J. and Klumperman, J.
- 1709 Organ-specific stress induces mouse pancreatic keratin overexpression in association with NF-κB activation. Zhong, B., Zhou, Q., Toivola, D. M., Tao, G.-Z., Resurreccion, E. Z. and Omary, M. B.
- 1719 αB-Crystallin-coated MAP microtubule resists nocodazole and calcium-induced disassembly. Fujita, Y., Ohto, E., Katayama, E. and Atomi, Y.
- 1727 Unconventional protein secretion: membrane translocation of FGF-2 does not require protein unfolding. Backhaus, R., Zehe, C., Wegehingel, S., Kehlenbach, A., Schwappach, B. and Nickel, W.
- 1737 Partitioning of IGFBP-5 actions in myogensis: IGF-indepedent anti-apoptotic function. Cobb, L. J., Salih, D. A. M., Gonzalez, I., Tripathi, G., Carter, E. J., Lovett, F., Holding, C. and Pell, J. M.
- 1747 IIGP, a member of the IFN inducible and microbial defense mediating 47 kDa GTPase family, interacts with the microtubule binding protein hook3. Kaiser, F., Kaufmann, S. H. E. and Zerrahn, J.

- 1757 Different spindle checkpoint proteins monitor microtubule attachment and tension at kinetochores in *Drosophila* cells.
- Logarinho, E., Bousbaa, H., Dias, J. M., Lopes, C., Amorim, I., Antunes-Martins, A. and Sunkel, C. E.
- 1773 MEK5 and ERK5 are localized in the nuclei of resting as well as stimulated cells, while MEKK2 translocates from the cytosol to the nucleus upon stimulation. Raviv, Z., Kalie, E. and Seger, R.
- 1785 Oxygen-regulated expression of the RNA-binding proteins RBM3 and CIRP by a HIF-1-independent mechanism.
  Wellmann, S., Bührer, C., Moderegger, E., Zelmer, A., Kirschner, R., Koehne, P., Fujita, J. and Seeger, K.
- 1795 Troponin I is required for myofibrillogenesis and sarcomere formation in *Drosophila* flight muscle. Nongthomba, U., Clark, S., Cummins, M., Ansari, M., Stark, M. and Sparrow, J. C.
- 1807 Deletion mutant of FGFR4 induces onion-like membrane structures in the nucleus. Sørensen, V., Brech, A., Khnykin, D., Kolpakova, E., Citores, L. and Olsnes, S.
- 1821 Both mitogen activated protein kinase and the mammalian target of rapamycin modulate the development of functional renal proximal tubules in matrigel. Han, H. J., Sigurdson, W. J., Nickerson, P. A. and Taub, M.
- 1835 Smad7 is required for TGF-β-induced activation of the small GTPase Cdc42. Edlund, S., Landström, M., Heldin, C.-H. and Aspenström, P.
- 1847 Secreted MMP9 promotes angiogenesis more efficiently than constitutive active MMP9 bound to the tumor cell surface. Mira, E., Lacalle, R. A., Buesa, J. M., González de Buitrago, G.,
- Jiménez-Baranda, S., Gómez-Moutón, C., Martínez-A, C. and Mañes, S.
- Nuclear import and activity of histone deacetylase in *Xenopus* oocytes is regulated by phosphorylation. Smillie, D. A., Llinas, A. J., Ryan, J. T. P., Kemp, G. D. and Sommerville, J.



