



Cover: Cross section of the developing eye of a *Xenopus laevis* tadpole expressing a green fluorescent reporter transgene to reveal endogenous caspase-3 and -7 activity. The reporter is activated in individual cells of all the layers of the central retina, including the photoreceptor layer, the bipolar cells and the ganglion cell layer. Additional reporter activity is observed in the periphery of the developing lens. Caspase activity might be associated with cell death or the cell differentiation processes. See article by Hong Thi Tran et al. (pp. 2371–2381).

STICKY WICKET

- 2223 Peerless II
Mole

CELL SCIENTISTS TO WATCH

- 2225 Cell scientist to watch – Kevin Corbett

MEETING REPORT

- 2229 Meeting report – Emerging Concepts in Cell Organization
Teis, D. and Kukulski, W.

CELL SCIENCE AT A GLANCE

- 2235 Cellular functions of WASP family proteins at a glance
Alekhina, O., Burstein, E. and Billadeau, D. D.

REVIEW

- 2243 Emerging roles of mechanical forces in chromatin regulation
Miroshnikova, Y. A., Nava, M. M. and Wickström, S. A.

RESEARCH ARTICLES

- 2251 TRAPP/C13 modulates autophagy and the response to Golgi stress
Ramírez-Peinado, S., Ignashkova, T. I., van Raam, B. J., Baumann, J., Sennott, E. L., Gendarme, M., Lindemann, R. K., Starnbach, M. N. and Reiling, J. H.

- 2266 Mechanisms mitigating problems associated with multiple kinetochores on one microtubule in early mitosis
Yue, Z., Komoto, S., Gierlinski, M., Pasquali, D., Kitamura, E. and Tanaka, T. U.

- 2277 Low-intensity pulsed ultrasound promotes cell motility through vinculin-controlled Rac1 GTPase activity
Atherton, P., Lausecker, F., Harrison, A. and Ballestrem, C.

- 2292 TRPC1 is a differential regulator of hypoxia-mediated events and Akt signalling in PTEN-deficient breast cancer cells
Azimi, I., Milevskiy, M. J. G., Kaemmerer, E., Turner, D., Yapa, K. T. D. S., Brown, M. A., Thompson, E. W., Roberts-Thomson, S. J. and Monteith, G. R.

- 2306 Localisation of Nup153 and SENP1 to nuclear pore complexes is required for 53BP1-mediated DNA double-strand break repair
Duheron, V., Nilles, N., Pecenko, S., Martinelli, V. and Fahrenkrog, B.

- 2317 Redox regulation of the yeast voltage-gated Ca²⁺ channel homolog Cch1p by glutathionylation of specific cysteine residues
Chandel, A. and Bachhawat, A. K.

- 2329 Loss of β-PIX inhibits focal adhesion disassembly and promotes keratinocyte motility via myosin light chain activation
Hiroyasu, S., Stimac, G. P., Hopkinson, S. B. and Jones, J. C. R.

- 2344 Secreted tissue inhibitor of matrix metalloproteinase restricts *trans*-synaptic signaling to coordinate synaptogenesis
Shilts, J. and Broadie, K.

- 2359 Control of mitochondrial homeostasis by endocytic regulatory proteins
Farmer, T., Reinecke, J. B., Xie, S., Bahl, K., Naslavsky, N. and Caplan, S.

- 2371 Caspase-9 has a nonapoptotic function in *Xenopus* embryonic primitive blood formation
Tran, H. T., Fransen, M., Dimitrakopoulou, D., Van Imschoot, G., Willemarck, N. and Vleminckx, K.

- 2382 ARHGAP42 is activated by Src-mediated tyrosine phosphorylation to promote cell motility
Luo, W., Janoštiak, R., Tolde, O., Ryzhova, L. M., Koudelková, L., Dibus, M., Brábek, J., Hanks, S. K. and Rosel, D.

- 2394 Extracellular polyphosphate signals through Ras and Akt to prime *Dictyostelium discoideum* cells for development
Suess, P. M., Watson, J., Chen, W. and Gomer, R. H.

- 2405 Arf6 and Rab22 mediate T cell conjugate formation by regulating clathrin-independent endosomal membrane trafficking
Johnson, D. L., Wayt, J., Wilson, J. M. and Donaldson, J. G.

- 2416 Reconstitution of the oocyte nucleolus in mice through a single nucleolar protein, NPM2
Ogushi, S., Yamagata, K., Obuse, C., Furuta, K., Wakayama, T., Matzuk, M. M. and Saitou, M.