



**Cover:** Localisation of ARHGAP19, a GAP protein acting on RhoA, during mitosis of T lymphocyte. The GFP-tagged nuclear protein ARHGAP19 is released into the cytoplasm at mitosis entry and then relocalises to the polar region of the plasma membrane in anaphase. The still is from Movie 2 of the article by M. D. David et al. (pp. 400–410).

**CELL SCIENCE AT A GLANCE**

261 HSF1 at a glance  
Vihervaara, A. and Sistonen, L.

**COMMENTARY**

267 ERM proteins in cancer progression  
Clucas, J. and Valderrama, F.

**SHORT REPORTS**

277 A bacterial tubulovesicular network  
Acehan, D., Santarella-Mellwig, R. and Devos, D. P.

281 The conserved ciliary protein Bug22 controls planar beating of *Chlamydomonas* flagella  
Meng, D., Cao, M., Oda, T. and Pan, J.

288 Photobleaching imprinting microscopy: seeing clearer and deeper  
Gao, L., Garcia-Urbe, A., Liu, Y., Li, C. and Wang, L. V.

**RESEARCH ARTICLES**

295 The tumor suppressor Lgl1 forms discrete complexes with NMII-A and Par6 $\alpha$ -aPKC $\zeta$  that are affected by Lgl1 phosphorylation  
Dahan, I., Petrov, D., Cohen-Kfir, E. and Ravid, S.

305 Peroxisome proliferator-activated receptor- $\gamma$  interrupts angiogenic signal transduction by transrepression of platelet-derived growth factor- $\beta$  receptor in hepatic stellate cells  
Zhang, F., Kong, D., Chen, L., Zhang, X., Lian, N., Zhu, X., Lu, Y. and Zheng, S.

315 Phosphorylation of the E3 ubiquitin ligase RNF41 by the kinase Par-1b is required for epithelial cell polarity  
Lewandowski, K. T. and Piwnica-Worms, H.

328 Spire-1 contributes to the invadosome and its associated invasive properties  
Lagal, V., Abrivard, M., Gonzalez, V., Perazzi, A., Popli, S., Verzeroli, E. and Tardieux, I.

341 Oncogenic deletion mutants of gp130 signal from intracellular compartments  
Schmidt-Arras, D., Müller, M., Stevanovic, M., Horn, S., Schütt, A., Bergmann, J., Wilkens, R., Lickert, A. and Rose-John, S.

354 Arf activation at the Golgi is modulated by feed-forward stimulation of the exchange factor GBF1  
Quilty, D., Gray, F., Summerfeldt, N., Cassel, D. and Melançon, P.

365 PML isoforms in response to arsenic: high-resolution analysis of PML body structure and degradation  
Hands, K. J., Cuchet-Lourenco, D., Everett, R. D. and Hay, R. T.

376 Osh proteins regulate COPII-mediated vesicular transport of ceramide from the endoplasmic reticulum in budding yeast  
Kajiwara, K., Ikeda, A., Aguilera-Romero, A., Castillon, G. A., Kagiwada, S., Hanada, K., Riezman, H., Muñiz, M. and Funato, K.

388 Light-harvesting chlorophyll pigments enable mammalian mitochondria to capture photonic energy and produce ATP  
Xu, C., Zhang, J., Mihai, D. M. and Washington, I.

400 The RhoGAP ARHGAP19 controls cytokinesis and chromosome segregation in T lymphocytes  
David, M. D., Petit, D. and Bertoglio, J.

411 The Smad7-Skp2 complex orchestrates Myc stability, impacting on the cytostatic effect of TGF- $\beta$   
Kim, T.-A., Kang, J. M., Hyun, J.-S., Lee, B., Kim, S. J., Yang, E.-S., Hong, S., Lee, H.-J., Fujii, M., Niederhuber, J. E. and Kim, S.-J.

422 Rab8a and Rab8b are essential for several apical transport pathways but insufficient for ciliogenesis  
Sato, T., Iwano, T., Kunii, M., Matsuda, S., Mizuguchi, R., Jung, Y., Hagiwara, H., Yoshihara, Y., Yuzaki, M., Harada, R. and Harada, A.

432 Live-cell fluorescence imaging reveals high stoichiometry of Grb2 binding to the EGF receptor sustained during endocytosis  
Fortian, A. and Sorkin, A.

445 Sphingomyelin synthase-related protein SMSr is a suppressor of ceramide-induced mitochondrial apoptosis  
Tafesse, F. G., Vacaru, A. M., Bosma, E. F., Hermansson, M., Jain, A., Hilderink, A., Somerharju, P. and Holthuis, J. C. M.

455 Injury-triggered Akt phosphorylation of Cx43: a ZO-1-driven molecular switch that regulates gap junction size  
Dunn, C. A. and Lampe, P. D.

465 Specification of leading and trailing cell features during collective migration in the *Drosophila* trachea  
Lebreton, G. and Casanova, J.

**CORRECTION**

475 MicroRNA-141-3p plays a role in human mesenchymal stem cell aging by directly targeting ZMPSTE24  
Yu, K.-R., Lee, S., Jung, J.-W., Hong, I.-S., Kim, H.-S., Seo, Y., Shin, T.-h. and Kang, K.-S.