



Cover: DUX4 underlies pathogenesis in facioscapulohumeral muscular dystrophy. Differentiating murine muscle satellite cells were transduced to express a truncated version of DUX4 (green). Co-immunostaining for myosin heavy chain (red) showed that truncated DUX4 suppresses fusion of satellite cells into multinucleated myotubes. Blue, nuclei. See article by P. Knopp et al. (pp. 3816–3831).

COMMENTARIES

3685 Autophagy in adhesion and migration
Kenific, C. M., Wittmann, T. and Debnath, J.

3695 The changing view of eukaryogenesis – fossils, cells, lineages and how they all come together
Dacks, J. B., Field, M. C., Buick, R., Eme, L., Gribaldo, S., Roger, A. J., Brochier-Armanet, C. and Devos, D. P.

RESEARCH ARTICLES

3705 Desmin and α B-crystallin interplay in the maintenance of mitochondrial homeostasis and cardiomyocyte survival
Diokmetzidou, A., Soumaka, E., Kloukina, I., Tsikitis, M., Makridakis, M., Varela, A., Davos, C. H., Georgopoulos, S., Anesti, V., Vlahou, A. and Capetanaki, Y.

3721 *C. elegans* midbodies are released, phagocytosed and undergo LC3-dependent degradation independent of macroautophagy
Fazeli, G., Trinkwalder, M., Irmisch, L. and Wehman, A. M.

3732 *Drosophila* sensory cilia lacking MKS proteins exhibit striking defects in development but only subtle defects in adults
Pratt, M. B., Titlow, J. S., Davis, I., Barker, A. R., Dawe, H. R., Raff, J. W. and Roque, H.

3744 Triadin and CLIMP-63 form a link between triads and microtubules in muscle cells
Osseni, A., Sébastien, M., Sarrault, O., Baudet, M., Couté, Y., Fauré, J., Fourest-Lieuvain, A. and Marty, I.

3756 Direct interaction between exocyst and Wave complexes promotes cell protrusions and motility
Biondini, M., Sadou-Dubourgoux, A., Paul-Gilloteaux, P., Zago, G., Arslanhan, M. D., Waharte, F., Formstecher, E., Hertzog, M., Yu, J., Guerois, R., Gautreau, A., Scita, G., Camonis, J. and Parrini, M. C.

3770 Cdc48 and Ubx1 participate in a pathway associated with the inner nuclear membrane that governs Asi1 degradation
Pantazopoulou, M., Boban, M., Foisner, R. and Ljungdahl, P. O.

3781 Atg9A trafficking through the recycling endosomes is required for autophagosome formation
Imai, K., Hao, F., Fujita, N., Tsuji, Y., Oe, Y., Araki, Y., Hamasaki, M., Noda, T. and Yoshimori, T.

3792 Prolyl endopeptidase is involved in the degradation of neural cell adhesion molecules *in vitro*
Jaako, K., Waniek, A., Parik, K., Klimaviciusa, L., Aonurm-Helm, A., Noortoots, A., Anier, K., Van Elzen, R., Gérard, M., Lambeir, A.-M., Roßner, S., Morawski, M. and Zharkovsky, A.

3803 Mature lipid droplets are accessible to ER luminal proteins
Mishra, S., Khaddaj, R., Cottier, S., Stradalova, V., Jacob, C. and Schneider, R.

3816 DUX4 induces a transcriptome more characteristic of a less-differentiated cell state and inhibits myogenesis
Knopp, P., Krom, Y. D., Banerji, C. R. S., Panamarova, M., Moyle, L. A., den Hamer, B., van der Maarel, S. M. and Zammit, P. S.

3832 Sortilin regulates sorting and secretion of Sonic hedgehog
Campbell, C., Beug, S., Nickerson, P. E. B., Peng, J., Mazerolle, C., Bassett, E. A., Ringuette, R., Jama, F. A., Morales, C., Christ, A. and Wallace, V. A.

3845 The role of ADP-ribosylation in regulating DNA interstrand crosslink repair
Gunn, A. R., Banos-Pinero, B., Paschke, P., Sanchez-Pulido, L., Ariza, A., Day, J., Emrich, M., Leys, D., Ponting, C. P., Ahel, I. and Lakin, N. D.

3859 Endo-lysosomal TRP mucolipin-1 channels trigger global ER Ca^{2+} release and Ca^{2+} influx
Kilpatrick, B. S., Yates, E., Grimm, C., Schapira, A. H. and Patel, S.

3868 Inhibition of cargo export at ER exit sites and the trans-Golgi network by the secretion inhibitor FLI-06
Yonemura, Y., Li, X., Müller, K., Krämer, A., Atigbire, P., Mentrup, T., Feuerhake, T., Kroll, T., Shomron, O., Nohl, R., Arndt, H.-D., Hoischen, C., Hemmerich, P., Hirschberg, K. and Kaether, C.

3878 Characterization of prion protein function by focal neurite stimulation
Amin, L., Nguyen, X. T. A., Rolle, I. G., D'Este, E., Giachin, G., Tran, T. H., Serbec, V. Č., Cojoc, D. and Legname, G.

3892 Essential role of the Dishevelled DEP domain in a Wnt-dependent human-cell-based complementation assay
Gammons, M. V., Rutherford, T. J., Steinhart, Z., Angers, S. and Bienz, M.

3903 Mutant IP₃ receptors attenuate store-operated Ca^{2+} entry by destabilizing STIM–Orai interactions in *Drosophila* neurons
Chakraborty, S., Deb, B. K., Chorna, T., Konieczny, V., Taylor, C. W. and Hasan, G.

3911 Neuropilin-1 modulates interferon- γ -stimulated signaling in brain microvascular endothelial cells
Wang, Y., Cao, Y., Mangalam, A. K., Guo, Y., LaFrance-Corey, R. G., Gamez, J. D., Atanga, P. A., Clarkson, B. D., Zhang, Y., Wang, E., Angom, R. S., Dutta, K., Ji, B., Pirkó, I., Lucchinetti, C. F., Howe, C. L. and Mukhopadhyay, D.

3922 A ternary complex comprising transportin1, Rab8 and the ciliary targeting signal directs proteins to ciliary membranes
Madugula, V. and Lu, L.

3935 Plant mitochondria contain the protein translocase subunits TatB and TatC
Carrie, C., Weißenberger, S. and Soll, J.

3948 Exosomes bind to autotaxin and act as a physiological delivery mechanism to stimulate LPA receptor signalling in cells
Jethwa, S. A., Leah, E. J., Zhang, Q., Bright, N. A., Oxley, D., Bootman, M. D., Rudge, S. A. and Wakelam, M. J. O.