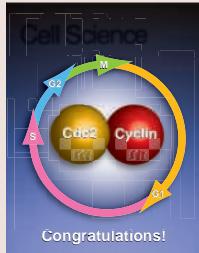


# Journal of Cell Science

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**Cover:** On the centenary of the Nobel awards, the Nobel Prize for Physiology or Medicine is to be awarded to two members of the *J. Cell Sci.* Editorial Board, Paul Nurse and Tim Hunt, together with Leland Hartwell, for their pioneering work on the cell cycle. On p. 3953, David Glover congratulates the new Nobel laureates and reflects on groundbreaking work that culminated in the recognition that the same molecular engine - a Cdc2-cyclin complex - drives cells into mitosis in yeasts, frogs, flies and man.

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## RESEARCH ARTICLES

- 3979 **Calcium puffs are generic InsP<sub>3</sub>-activated elementary calcium signals and are downregulated by prolonged hormonal stimulation to inhibit cellular calcium responses.** Tovey, S. C., de Smet, P., Lipp, P., Thomas, D., Young, K. W., Missiaen, L., De Smedt, H., Parys, J. B., Berridge, M. J., Thuring, J., Holmes, A. and Bootman, M. D.
- 3991 **FENS-1 and DFCP1 are FYVE domain-containing proteins with distinct functions in the endosomal and Golgi compartments.** Ridley, S. H., Ktistakis, N., Davidson, K., Anderson, K. E., Manifava, M., Ellson, C. D., Lipp, P., Bootman, M., Coadwell, J., Nazarian, A., Erdjument-Bromage, H., Tempst, P., Cooper, M. A., Thuring, J. W. J. F., Lim, Z.-Y., Holmes, A. B., Stephens, L. R. and Hawkins, P. T.
- 4001 **Distinct changes in intranuclear lamin A/C organization during myoblast differentiation.** Muralikrishna, Bh., Dhawan, J., Rangaraj, N. and Parnaik, V. K.
- 4013 **Multimeric connexin interactions prior to the trans-Golgi network.** Das Sarma, J., Meyer, R. A., Wang, F., Abraham, V., Lo, C. W. and Koval, M.
- 4025 **Role of lipid rafts in Shiga toxin 1 interaction with the apical surface of Caco-2 cells.** Kovbasnjuk, O., Edidin, M. and Donowitz, M.
- 4033 **Potential role for laminin 5 in hypoxia-mediated apoptosis of human corneal epithelial cells.** Esco, M. A., Wang, Z., McDermott, M. L. and Kurpakus-Wheater, M.
- 4041 **Rab22a affects the morphology and function of the endocytic pathway.** Mesa, R., Salomón, C., Roggero, M., Stahl, P. D. and Mayorga, L. S.
- 4051 **A new HIF-1 alpha variant induced by zinc ion suppresses HIF-1-mediated hypoxic responses.** Chun, Y.-S., Choi, E., Yeo, E.-J., Lee, J. H., Kim, M.-S. and Park, J.-W.
- 4063 **Cell fusion experiments reveal distinctly different association characteristics of cell-surface receptors.** Nagy, P., Mátyus, L., Jenei, A., Panyi, G., Varga, S., Matko, J., Szöllősi, J., Gáspár, R., Jovin, T. M. and Damjanovich, S.
- 4073 **Correction of delF508-CFTR activity with benzo(c)quinolizinium compounds through facilitation of its processing in cystic fibrosis airway cells.** Dormer, R. L., Dérand, R., McNeilly, C. M., Mettey, Y., Bulteau-Pignoux, L., Métayé, T., Vierfond, J.-M., Gray, M. A., Galietta, L. J. V., Morris, M. R., Pereira, M. M. C., Doull, I. J. M., Becq, F. and McPherson, M. A.
- 4083 **Rapid and reversible changes in dendrite morphology and synaptic efficacy following NMDA receptor activation: implication for a cellular defense against excitotoxicity.** Ikegaya, Y., Kim, J.-A., Baba, M., Iwatsubo, T., Nishiyama, N. and Matsuki, N.
- 4095 **Uroplakin Ia is the urothelial receptor for uropathogenic *Escherichia coli*: evidence from *in vitro* FimH binding.** Zhou, G., Mo, W.-J., Sebbel, P., Min, G., Neubert, T. A., Glockshuber, R., Wu, X.-R., Sun, T.-T. and Kong, X.-P.
- 4105 **Direct targeting of cis-Golgi matrix proteins to the Golgi apparatus.** Yoshimura, S., Nakamura, N., Barr, F. A., Misumi, Y., Ikebara, Y., Ohno, H., Sakaguchi, M. and Mihara, K.
- 4117 **The peroxisome proliferator-activated receptor  $\gamma$  is an inhibitor of ErbBs activity in human breast cancer cells.** Pignatelli, M., Cortés-Canteli, M., Lai, C., Santos, A. and Perez-Castillo, A.
- 4127 **Interactions between mouse ZP2 glycoprotein and proacrosin; a mechanism for secondary binding of sperm to the zona pellucida during fertilization.** Howes, E., Pascall, J. C., Engel, W. and Jones, R.

## EDITORIAL

- 3953 ...still cycling.  
Glover, D.

## STICKY WICKET

- 3955 Early birds and night owls. Caveman

## COMMENTARIES

- 3957 The role of lipid rafts in signalling and membrane trafficking in T lymphocytes. Alonso, M. A. and Millán, J.
- 3967 The Ste5p scaffold. Elion, E. A.