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In Brief

Movement by cable or capture. Gathering together unfolded proteins. Not all sarcoglycans are equal. Nuclear pore complexes and spindle pole bodies share a component. Early functions for desmosomes. A sex-specific homeodomain protein in algae.

W.A. Wells

Regular Articles

1763 INCENP centromere and spindle targeting: Identification of essential conserved motifs and involvement of heterochromatin protein HP1.

A.M. Ainsztein, S.E. Kandels-Lewis, A.M. Mackay, and W.C. Earnshaw

1775 Fission yeast Bub1 is a mitotic centromere protein essential for the spindle checkpoint and the preservation of correct ploidy through mitosis.

P. Bernard, K. Hardwick, and J.-P. Javerzat

1789 Saccharomyces cerevisiae Ndc1p is a shared component of nuclear pore complexes and spindle pole bodies.

H.J. Chial, M.P. Rout, T.H. Giddings, Jr., and M. Winey

1801 Functional analysis of Tpr: Identification of nuclear pore complex association and nuclear localization domains and a role in mRNA export.

P. Bangs, B. Burke, C. Powers, R. Craig, A. Purohit, and S. Doxsey

Specific binding of the karyopherin Kap121p to a subunit of the nuclear pore complex containing Nup53p, Nup59p, and Nup170p.

M. Marelli, J.D. Aitchison, and R.W. Wozniak

1831 Homotypic fusion of immature secretory granules during maturation in a cell-free assay.
S. Urbé, L.J. Page, and S.A. Tooze

1845 Biochemical and functional studies of cortical vesicle fusion: The SNARE complex and Ca²⁺ sensitivity.

J.R. Coorssen, P.S. Blank, M. Tahara, and J. Zimmerberg

1859 Pex18p and Pex21p, a novel pair of related peroxins essential for peroxisomal targeting by the PTS2 pathway.

P.E. Purdue, X. Yang, and P.B. Lazarow

1871 Redundant and distinct functions for dynamin-1 and dynamin-2 isoforms.

Y. Altschuler, S.M. Barbas, L.J. Terlecky, K. Tang, S. Hardy, K.E. Mostov, and S.L. Schmid

1883 Aggresomes: A cellular response to misfolded proteins.

J.A. Johnston, C.L. Ward, and R.R. Kopito

1899 Visualization of melanosome dynamics within wild-type and dilute melanocytes suggests a paradigm for myosin V function in vivo.

X. Wu, B. Bowers, K. Rao, Q. Wei, and J.A. Hammer III

1919 Visualization and molecular analysis of actin assembly in living cells.

D.A. Schafer, M.D. Welch, L.M. Machesky, P.C. Bridgman, S.M. Meyer, and J.A. Cooper

1931 Tropomyosin-containing actin cables direct the Myo2p-dependent polarized delivery of secretory vesicles in budding yeast.

D.W. Pruyne, D.H. Schott, and A. Bretscher

1947 Dual function of Cyk2, a cdc15/PSTPIP family protein, in regulating actomyosin ring dynamics and septin distribution.

J. Lippincott and R. Li

1961 Nonuniform microtubular polarity established by CHO1/MKLP1 motor protein is necessary for process formation of podocytes.

N. Kobayashi, J. Reiser, W. Kriz, R. Kuriyama, and P. Mundel

1971 A gamete-specific, sex-limited homeodomain protein in *Chlamydomonas*.

V. Kurvari, N.V. Grishin, and W.J. Snell

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Cover picture: An E5.0 day mouse embryo was labeled with E-cadherin (red), desmoplakin (green), and DAPI (blue) and viewed using confocal microscopy. Adherens junctions are located between cells of the extraembryonic tissues (ectoplacental cone and visceral endoderm) and embryonic tissue (primitive ectodermal), while desmosomes at this stage are located only between cells in the extraembryonic tissues. See related article in this issue by Gallicano et al., 2009–2022.

- 1981 ARF1 mediates paxillin recruitment to focal adhesions and potentiates Rho-stimulated stress fiber formation in intact and permeabilized Swiss 3T3 fibroblasts.
 - J.C. Norman, D. Jones, S.T. Barry, M.R. Holt, S. Cockcroft, and D.R. Critchley
- 1997 Regulation of the cell cycle by focal adhesion kinase.
 - J.-H. Zhao, H. Reiske, and J.-L. Guan
- 2009 Desmoplakin is required early in development for assembly of desmosomes and cytoskeletal linkage.
 - G.I. Gallicano, P. Kouklis, C. Bauer, M. Yin, V. Vasioukhin, L. Degenstein, and E. Fuchs
- 2023 Mutation of a major keratin phosphorylation site predisposes to hepatotoxic injury in transgenic mice.
 - N.-O. Ku, S.A. Michie, R.M. Soetikno, E.Z. Resurreccion, R.L. Broome, and M.B. Omary
- 2033 Molecular organization of sarcoglycan complex in mouse myotubes in culture.
 - Y.-m. Chan, C.G. Bönnemann, H.G.W. Lidov, and L.M. Kunkel

- 2045 Functional characteristics of ES cell-derived cardiac precursor cells identified by tissue-specific expression of the green fluorescent protein.
 - E. Kolossov, B.K. Fleischmann, Q. Liu, W. Bloch, S. Viatchenko-Karpinski, O. Manzke, G.J. Ji, H. Bohlen, K. Addicks, and J. Hescheler
- 2057 Autocrine tumor necrosis factor (TNF) and lymphotoxin (LT) α differentially modulate cellular sensitivity to TNF/LT- α cytotoxicity in L929 cells.
 - E. Decoster, S. Cornelis, B. Vanhaesebroeck, and W. Fiers
- 2067 The cell adhesion molecule L1 is developmentally regulated in the renal epithelium and is involved in kidney branching morphogenesis.
 - H. Debiec, E.I. Christensen, and P.M. Ronco
- 2081 Activation of $\alpha_V\beta_3$ on vascular cells controls recognition of prothrombin.
 - T.V. Byzova and E.F. Plow
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