IN BRIEF

CYTOSKELETON

Integrin-dependent actomyosin contraction regulates epithelial cell scattering.

De Rooij, J. *et al. J. Cell Biol.* 10 Oct 2005 (doi:10.1083/jcb.200506152)

This study reveals that different extracellular-matrix conditions influence epithelial-cell scattering by modulating cytoskeletal organization and the contractility of actomyosin. De Rooij and colleagues show that integrin-dependent actomyosin tension mediates the disruption of cell–cell adhesion during epithelial-cell scattering, and propose that actomyosin promotes the cross talk between integrins and cadherins in epithelial cells.

MICROSCOPY

Correlated light and electron microscopic imaging of multiple endogenous proteins using quantum dots.

Giepmans, B.N.G. *et al. Nature Methods* **2**, 743–749 (2005)

Light microscopy has been extensively used for mapping protein localization, but many studies require the extra resolution of electron microscopy. Giepmans *et al.* now report the use of small semiconductor nanocrystals (Quantum dots) to perform pre-embedding multiprotein labelling for correlated light and electron microscopy. They demonstrate successful staining using several different antigens in cultured cells and tissues. This is a valuable addition to existing tools for specific and easy-to-use determination of multiple-protein localization.

DEVELOPMENT

Wnt11 functions in gastrulation by controlling cell cohesion through Rab5c and E-cadherin.

Ulrich, F. *et al. Dev. Cell* **4**, 555–564 (2005)

Wnt11 has a crucial role in zebrafish gastrulation, but the molecular mechanisms that affect this process are still unclear. Ulrich and colleagues now shed light on these mechanisms by showing that Wnt11 regulates the cohesion of mesodermal and endodermal progenitor cells. The authors found that Wnt11 and the GTPase Rab5c control the endocytosis — and therefore the localization — of E-cadherin, and are both required for E-cadherin-mediated cohesion of mesendodermal cells. Whether this mechanism for tissue morphogenesis is evolutionarily conserved remains to be seen.

CELL CYCLE

A novel motif governs APC-dependent degradation of *Drosophila* ORC1 *in vivo*.

Araki, M. *et al. Genes Dev.* 29 Sept 2005 (doi:10.1101/gad.1361905)

The anaphase-promoting complex (APC) regulates cell-cycle progression by targeting proteins for degradation. Four different APC-targeting motifs in substrates have been identified, and Araki *et al.* now report a fifth one. The origin recognition complex protein-1 (ORC1) — which is degraded at the end of M phase — has a novel motif, the O-box, which is necessary and sufficient to direct APC-dependent polyubiquitylation *in vitro* and degradation *in vivo*. Further analysis indicated that this motif might be responsible for the degradation of several cell-cycle proteins.