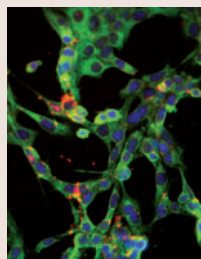


# Journal of Cell Science

Volume 118 (3) 2005



**Cover:** Premalignant SCP2 mouse mammary epithelial cells are cytokeratin positive, vimentin negative and form alveolar structures when cultured in three dimensions in reconstituted basement membrane. They do not form tumors in mice when injected alone or together with presenescent fibroblasts, but form malignant tumors when injected with senescent fibroblasts. Cells from these tumors are cytokeratin (red) deficient and vimentin (green) positive (nuclei are stained blue). Moreover, as shown, they fail to form alveolar structures in 3D basement membrane. These results suggest that senescent stromal cells derange epithelial cell differentiation, thereby promoting both cancer and aging phenotypes. See article by Parrinello et al. (pp. 485-496).

[jcs.biologists.org](http://jcs.biologists.org)

## Research Articles

- 485 **Stromal-epithelial interactions in aging and cancer: senescent fibroblasts alter epithelial cell differentiation.** Parrinello, S., Coppe, J.-P., Krtolica, A. and Campisi, J.
- 497 **Induction of apoptosis by TNF receptor 2 in a T-cell hybridoma is FADD dependent and blocked by caspase-8 inhibitors.** Depuydt, B., Van Loo, G., Vandenebeele, P. and Declercq, W.
- 505 **Downregulation of Par3 and aPKC function directs cells towards the ICM in the preimplantation mouse embryo.** Plusa, B., Frankenberg, S., Chalmers, A., Hadjantonakis, A.-K., Moore, C. A., Papalopulu, N., Papaioannou, V. E., Glover, D. M. and Zernicka-Goetz, M.
- 517 **Direct transport across the plasma membrane of mammalian cells of *Leishmania* HASPB as revealed by a CHO export mutant.** Stegmayer, C., Kehlenbach, A., Tournaviti, S., Wegehngel, S., Zehe, C., Denny, P., Smith, D. F., Schwappach, B. and Nickel, W.
- 529 **Phototactic activity in *Chlamydomonas* 'non-phototactic' mutants deficient in Ca<sup>2+</sup>-dependent control of flagellar dominance or in inner-arm dynein.** Okita, N., Isogai, N., Hirono, M., Kamiya, R. and Yoshimura, K.
- 539 **A role for Mer tyrosine kinase in  $\alpha v\beta 5$  integrin-mediated phagocytosis of apoptotic cells.** Wu, Y., Singh, S., Georgescu, M.-M. and Birge, R. B.
- 555 **TRIP6 is a RIP2-associated common signaling component of multiple NF- $\kappa$ B activation pathways.** Li, L., Bin, L.-H., Li, F., Liu, Y., Chen, D., Zhai, Z. and Shu, H.-B.
- 565 **Dissection of brefeldin A-sensitive and -insensitive steps in apicoplast protein targeting.** DeRocher, A., Gilbert, B., Feagin, J. E. and Parsons, M.
- 575 **Endofin recruits clathrin to early endosomes via TOM1.** Seet, L.-F. and Hong, W.
- 589 **Mechanism of early biphasic activation of poly(ADP-ribose) polymerase-1 in response to ultraviolet B radiation.** Vodenicharov, M. D., Ghodgaonkar, M. M., Halappanavar, S. S., Shah, R. G. and Shah, G. M.

## Commentaries

- 463 **Cortical capture of microtubules and spindle polarity in budding yeast - where's the catch?** Huisman, S. M. and Segal, M.
- 473 **Newcomers in the process of mitochondrial permeabilization.** Lucken-Ardjomande, S. and Martinou, J.-C.