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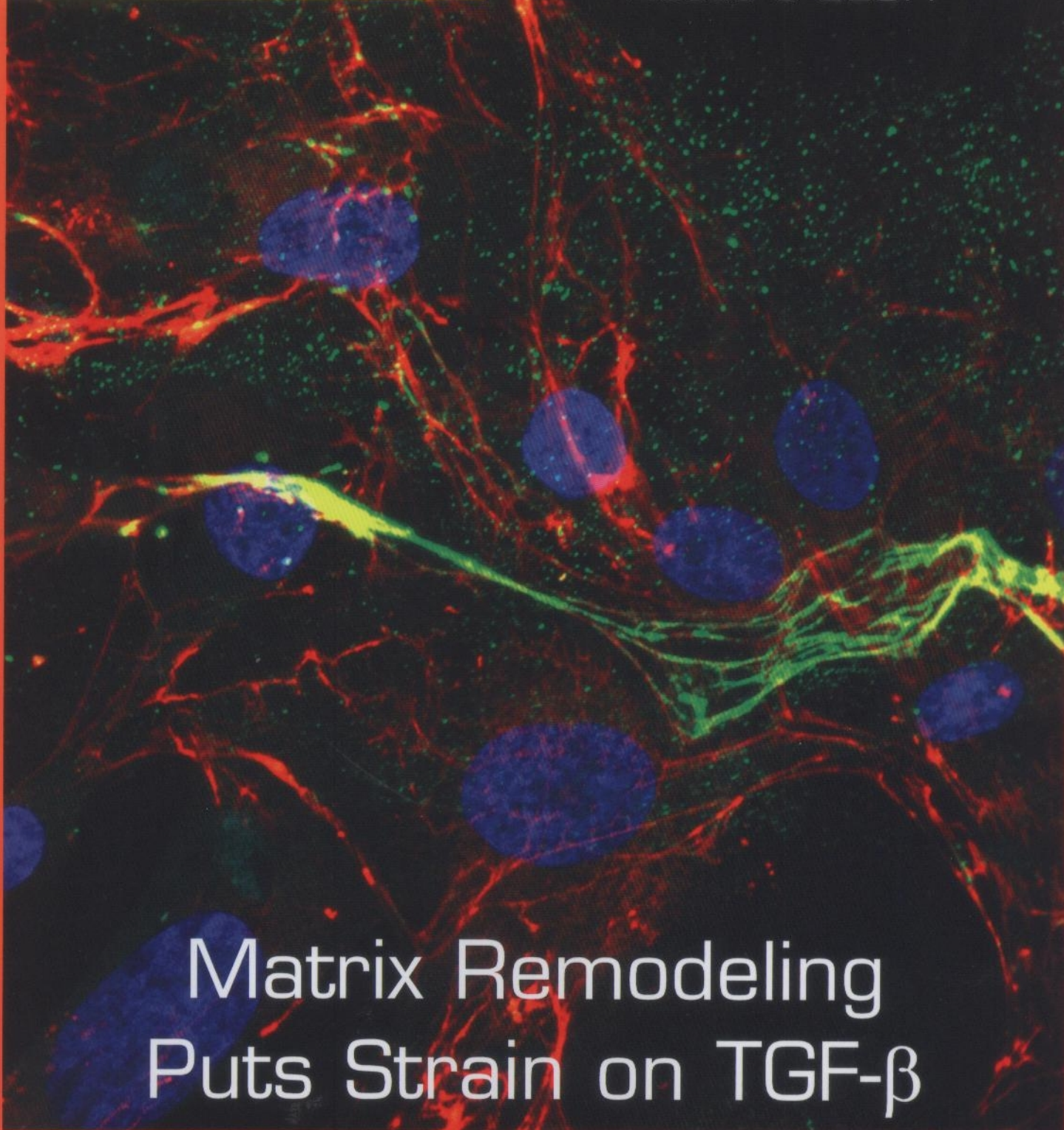
THE JOURNAL OF CELL BIOLOGY

VOL. 207, NO. 2, OCTOBER 27, 2014

Calibrating
Basal Autophagy

Septins Get
Epithelial Cells Moving

Mitochondrial Biogenesis
Needs a CLUH



Matrix Remodeling
Puts Strain on TGF- β

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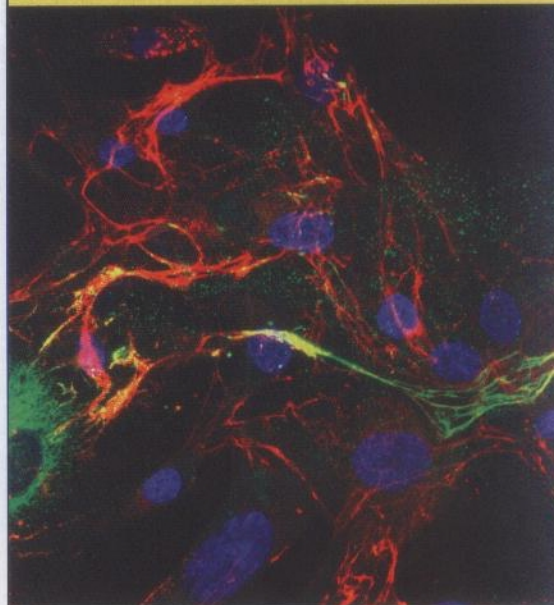
Neuronal BC RNAs cooperate with eIF4B to mediate activity-dependent translational control
Taesun Eom, Ilham A. Muslimov, Panayiotis Tsokas, Valerio Berardi, Jun Zhong, Todd C. Sacktor, and Henri Tiedge

Articles with related stories in the IN THIS ISSUE section have page numbers in **RED**; articles related to the IN FOCUS feature have page numbers in **BLUE**; articles with COMMENTS have page numbers in **GREEN**.

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On the cover

Human dermal fibroblasts secrete and incorporate a green fluorescent protein-tagged version of the latent TGF- β 1 binding protein into extracellular matrix fibrils containing the fibronectin splice variant ED-A FN (red). Klingberg et al. demonstrate that increased matrix organization and enhanced mechanical strain prime latent TGF- β 1 for cell contraction-mediated activation. Fibroblast nuclei are shown in blue.

Image © 2014 Klingberg et al.
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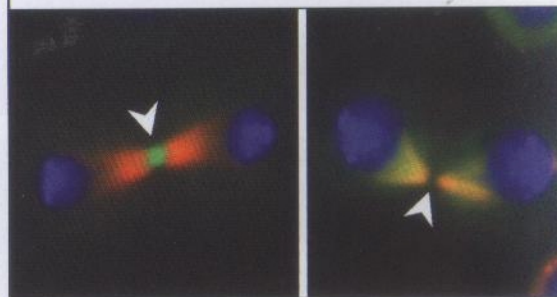
Prestress in the extracellular matrix sensitizes latent TGF- β 1 for activation

Franco Klingberg, Melissa L. Chow, Anne Koehler, Stellar Boo, Lara Buscemi, Thomas M. Quinn, Mercedes Costell, Benjamin A. Alman, Elisabeth Genot, and Boris Hinz

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LKB1 loss in melanoma disrupts directional migration toward extracellular matrix cues

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Polo kinase (green) concentrates at the midbody (arrowhead) of control cells undergoing cytokinesis (left) but broadly localizes on central spindle microtubules (red) in cells treated with an inhibitor of the mitotic kinase Aurora B (right). DNA is shown in blue. Kachaner et al. reveal that Aurora B regulates Polo's localization and function during cytokinesis by inhibiting the kinase's interaction with the microtubule-associated protein Map205. Image © 2014 Kachaner et al. See page 201.