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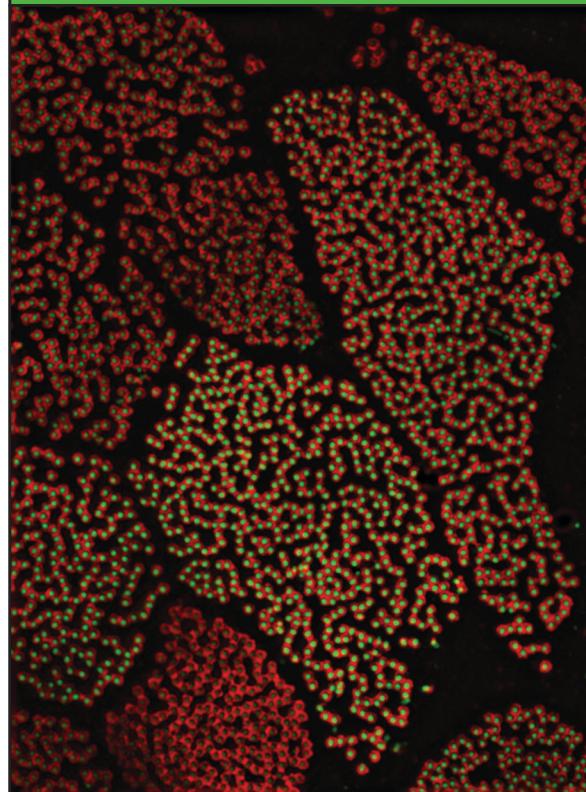
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On the cover

Structured illumination microscopy of multi-ciliated tracheal epithelial cells shows the presence of numerous centrioles (green, labeled with GFP-Centrin 2) surrounded by rings of the distal appendage protein CEP164 (red). Burke et al. reveal that CEP164 recruits a protein called Chibby that helps centrioles dock with the plasma membrane during ciliogenesis by promoting the formation of a membranous cap known as the ciliary vesicle.

Image © 2014 Burke et al.

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Isotropic actomyosin dynamics promote organization of the apical cell cortex in epithelial cells

Cristoph Klingner, Anoop V. Cherian, Johannes Fels, Philipp M. Diesinger, Roland Aufschnaiter, Nicola Maghelli, Thomas Keil, Gisela Beck, Iva M. Tolić-Nørrelykke, Mark Bathe, and Roland Wedlich-Soldner

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Chibby promotes ciliary vesicle formation and basal body docking during airway cell differentiation

Michael C. Burke, Feng-Qian Li, Benjamin Cyge, Takeshi Arashiro, Heather M. Brechbuhl, Xingwang Chen, Saul S. Siller, Matthew A. Weiss, Christopher B. O'Connell, Damon Love, Christopher J. Westlake, Susan D. Reynolds, Ryoko Kuriyama, and Ken-Ichi Takemaru

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Asynchronous remodeling is a driver of failed regeneration in Duchenne muscular dystrophy

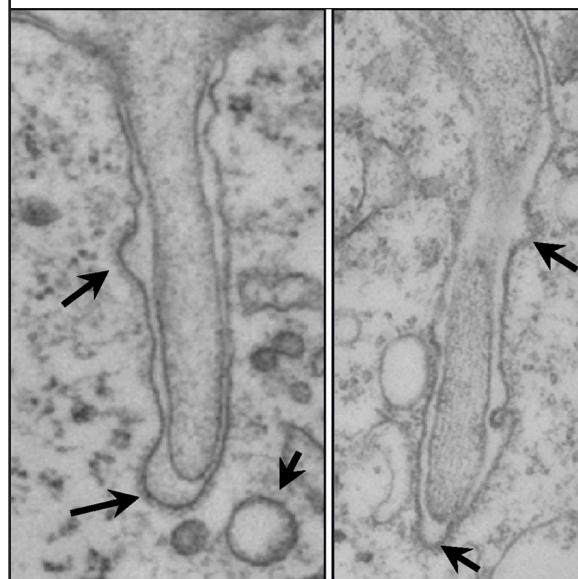
Sherry Dadgar, Zuyi Wang, Helen Johnston, Akanchha Kesari, Kanneboyina Nagaraju, Yi-Wen Chen, D. Ashley Hill, Terence A. Partridge, Mamta Giri, Robert J. Freishtat, Javad Nazarian, Jianhua Xuan, Yue Wang, and Eric P. Hoffman

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Casp8p41 generated by HIV protease kills CD4 T cells through direct Bak activation

Amy M. Sainski, Haiming Dai, Sekar Natesampillai, Yuan-Ping Pang, Gary D. Bren, Nathan W.V. Cummins, Cristina Correia, X. Wei Meng, James E. Tarara, Marina Ramirez-Alvarado, David J. Katzmann, Christina Ochsenbauer, John C. Kappes, Scott H. Kaufmann, and Andrew D. Badley



Shin et al. reveal that the dynamin GTPase promotes cell-cell fusion, in part through its regulation of clathrin-mediated endocytosis. Electron microscopy demonstrates that, during the fusion of osteoclast precursor cells, one cell forms actin-rich protrusions that invade into a neighboring cell. Clathrin-coated pits (arrows) frequently form around this protrusion within the invaded cell.

Image © 2014 Shin et al.

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