

## NEWS

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- Endocytosis in its natural state
- Talin's invasive side

Ben Short

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### Articles

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- A selfish DNA element engages a meiosis-specific motor and telomeres for germ-line propagation  
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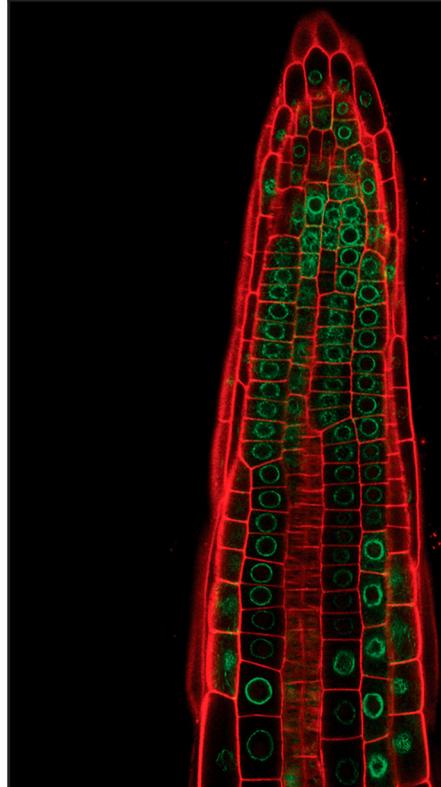
- BRCA1 establishes DNA damage signaling and pericentric heterochromatin of the X chromosome in male meiosis  
Tyler J. Broering, Kris G. Alavattam, Ruslan I. Sadreyev, Yosuke Ichijima, Yasuko Kata, Kazuteru Hasegawa, R. Daniel Camerini-Otero, Jeannie T. Lee, Paul R. Andreassen, and Satoshi H. Namekawa

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- Identification of unique SUN-interacting nuclear envelope proteins with diverse functions in plants  
Xiao Zhou, Katja Graumann, Lennart Wirthmueller, Jonathan D.G. Jones, and Iris Meier

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- Regulation of cargo recognition, commitment, and unloading drives cotranslational protein targeting  
Ishu Saraogi, David Akopian, and Shou Shan



### On the cover

An *Arabidopsis* root tip expresses GFP-tagged SINE1 (green), one of many new outer nuclear membrane KASH proteins that Zhou et al. identify in plants. The plant cell walls are labeled with propidium iodide (red).

Image © 2014 Zhou et al.

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**Rab18 and a Rab18 GEF complex are required for normal ER structure**

Andreas Gerondopoulos, Ricardo Nunes Bastos, Shin-ichiro Yoshimura, Rachel Anderson, Sarah Carpanini, Irene Aligianis, Mark T. Handley, and Francis A. Barr

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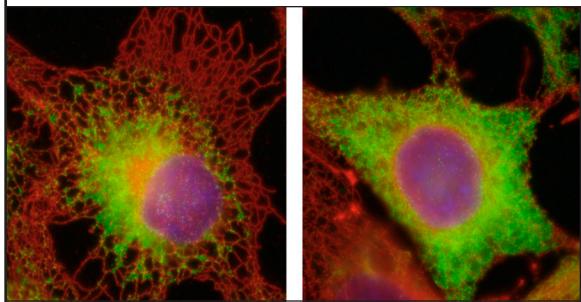
**Actin and dynamin2 dynamics and interplay during clathrin-mediated endocytosis**

Alexandre Grassart, Aaron T. Cheng, Sun Hae Hong, Fan Zhang, Nathan Zenzer, Yongmei Feng, David M. Briner, Gregory D. Davis, Dmitry Malkov, and David G. Drubin

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**Talin regulates moesin–NHE-1 recruitment to invadopodia and promotes mammary tumor metastasis**

Brian T. Beaty, Yarong Wang, Jose Javier Bravo-Cordero, Ved P. Sharma, Veronika Miskolci, Louis Hodgson, and John Condeelis



Gerondopoulos et al. reveal that the Rab3GAP complex, which is mutated in the neurological disorder Warburg Micro syndrome, is a guanine nucleotide exchange factor that activates the small GTPase Rab18 to control ER morphology. Compared to a control cell (left), cells lacking Rab18 (right) contain expanded regions of ER sheets (marked by CLIMP-63, green) and smaller networks of ER tubules (labeled by reticulon 4, red). Image © 2014 Gerondopoulos et al. See page 707.