

# JCB

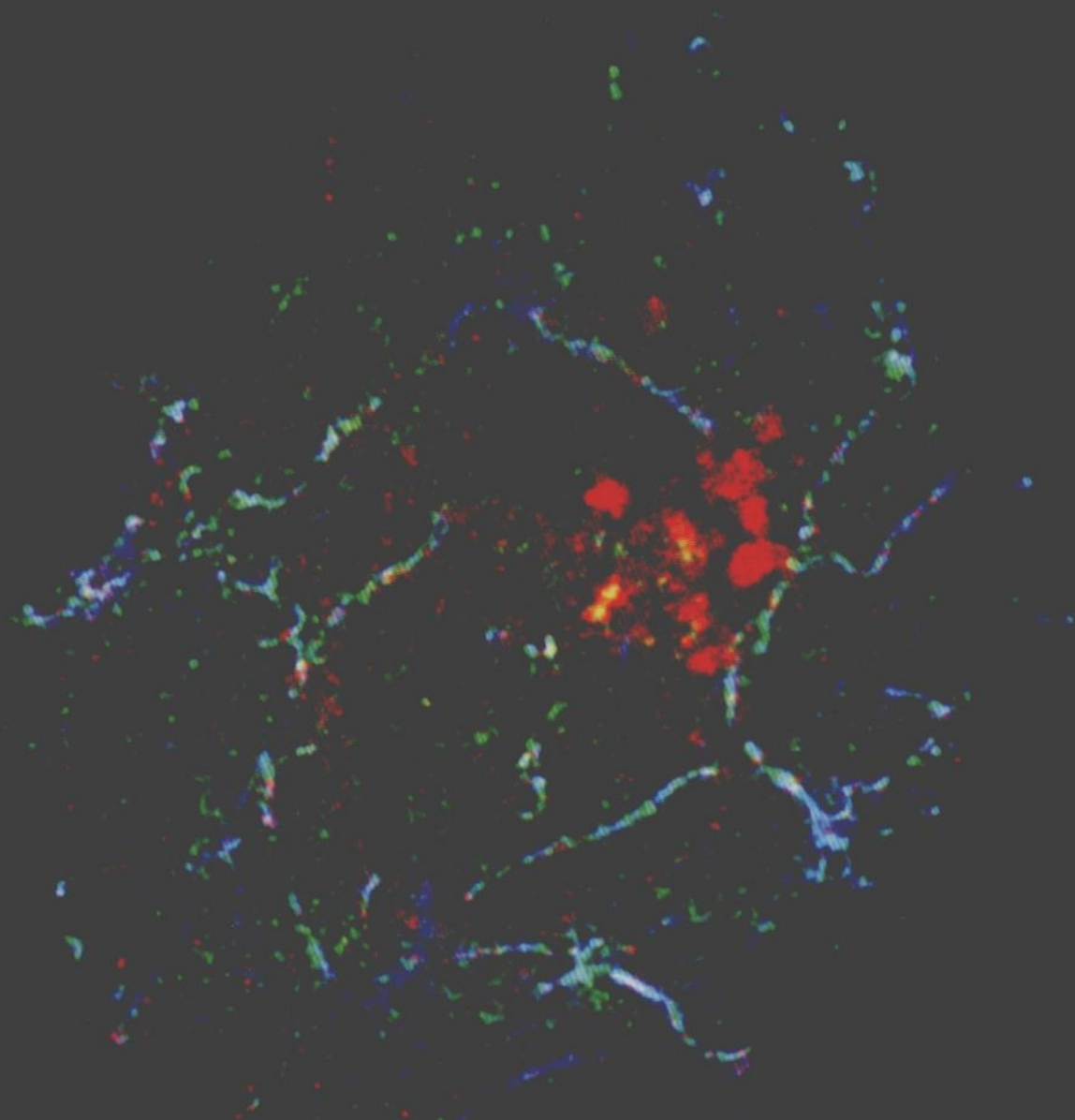
THE JOURNAL OF CELL BIOLOGY

VOL. 207, NO. 4, NOVEMBER 24, 2014

Remodeling Ribosomes

Synaptic  
Vesicle-Associated  
Protein Turnover

Invading Cells Ride a  
Calcium Wave



DDR1 Sets  
Invadosomes Straight

## NEWS

### In This Issue

434

- Wait! Don't throw away those proteins!
- DDR1 key for cancer cell escape
- Melanoma cells travel on calcium cycles

Mitch Leslie

### In Focus

435

A molecular chain gang at work in maturing ribosomes

Mitch Leslie

### People & Ideas

436

Valentina Greco: Got hair?

Caitlin Sedwick

### Editorials

439

New editorial board members

## REVIEWS

### Reviews

441

Shaping the intestinal brush border

Scott W. Crawley, Mark S. Mooseker, and Matthew J. Tyska

## RESEARCH ARTICLES

### Reports

453

Reduced synaptic vesicle protein degradation at lysosomes curbs *TBC1D24*/sky-induced neurodegeneration

Ana Clara Fernandes, Valerie Uytterhoeven, Sabine Kuenen, Yu-Chun Wang, Jan R. Slabbaert, Jef Swerts, Jaroslaw Kasprzewicz, Stein Aerts, and Patrik Verstreken

### Articles

463

Proteomic and 3D structure analyses highlight the C/D box snoRNP assembly mechanism and its control

Jonathan Bizarro, Christophe Charron, Séverine Boulon, Belinda Westman, Bérengère Pradet-Balade, Franck Vandermoere, Marie-Eve Chagot, Marie Hallais, Yasmeen Ahmad, Heinrich Leonhardt, Angus Lamond, Xavier Manival, Christiane Branlant, Bruno Charpentier, Céline Verheggen, and Edouard Bertrand

481

A network of assembly factors is involved in remodeling rRNA elements during preribosome maturation

Jochen Baßler, Helge Paternoga, Iris Holdermann, Matthias Thoms, Sander Granneman, Clara Barrio-Garcia, Afua Nyarko, Gunter Stier, Sarah A. Clark, Daniel Schraivogel, Martina Kallas, Roland Beckmann, David Tollervey, Elisar Barbar, Irmi Sinning, and Ed Hurt

499

Dynein light intermediate chains maintain spindle bipolarity by functioning in centriole cohesion

Laura A. Jones, Cécile Villemant, Toby Starborg, Anna Salter, Georgina Goddard, Peter Ruane, Philip G. Woodman, Nancy Papalopulu, Sarah Woolner, and Victoria J. Allan

517

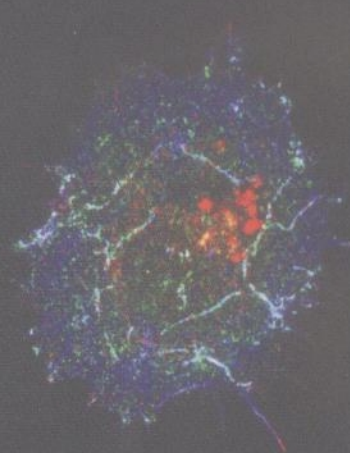
Discoidin domain receptor 1 controls linear invadosome formation via a Cdc42–Tuba pathway

Amélie Juin, Julie Di Martino, Birgit Leitinger, Elodie Henriët, Anne-Sophie Gary, Lisa Paysan, Jeremy Bomo, Georges Baffet, Cécile Gauthier-Rouvière, Jean Rosenbaum, Violaine Moreau, and Frédéric Saltel

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### On the cover

A breast cancer cell expressing the collagen receptor DDR1 (red) and constitutively-active Cdc42 (green) forms linear invadosomes, extracellular matrix-degrading structures that contain F-actin (blue). Juin et al. reveal that DDR1 induces the formation of linear invadosomes by activating Cdc42 through the guanine nucleotide exchange factor Tuba.

Image © 2014 Juin et al.

See page 517



# STIM1- and Orai1-mediated $\text{Ca}^{2+}$ oscillation orchestrates invadopodium formation and melanoma invasion

Jianwei Sun, Fujian Lu, Hui Fang He, Junling Shen, Jane Messina, Rahel Mathew, Dapeng Wang, Amod A. Sarnaik, Wei-Chiao Chang, Minjung Kim, Heping Cheng, and Shengyu Yang

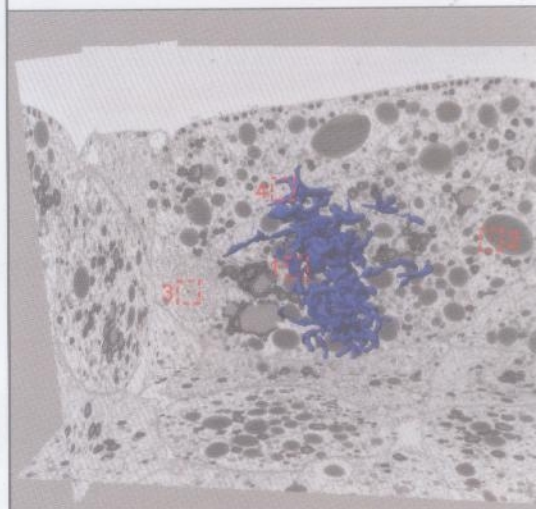
# MicroRNA-214 controls skin and hair follicle development by modulating the activity of the Wnt pathway

Mohammed I. Ahmed, Majid Alam, Vladimir U. Emelyanov, Krzysztof Poterlowicz, Ankit Patel, Andrey A. Sharov, Andrei N. Mardaryev, and Natalia V. Botchkareva

## Corrections

# ADP ribosylation adapts an ER chaperone response to short-term fluctuations in unfolded protein load

Joseph E. Chambers, Kseniya Petrova, Giulia Tomba, Michele Vendruscolo, and David Ron



Jones et al. demonstrate that knocking down dynein light intermediate chains 1 and 2 compromises centrosome integrity and induces the formation of multipolar mitotic spindles. 3View electron microscopy of a *Xenopus* embryo lacking both dynein light intermediate chains shows that each spindle pole contains a single centriole (red). Chromosomes are labeled blue. Image © 2014 Jones et al.  
See page 499.