

SPOTLIGHTS

- e202009042 **Nesprin-2G tension fine-tunes Wnt/β-catenin signaling**

Cara J. Gottardi and G.W. Gant Luxton

- e202008069 **Hands and feet: Closer than you think in epithelial migration**

Shafali Gupta and Alpha S. Yap

- e2020081301 **Inflammasomes: Exosomal miRNAs loaded for action**

Sampsaa Matikainen, Tuula A. Nyman, and Wojciech Cypryk

PERSPECTIVE

- e202006159 **Crippling life support for SARS-CoV-2 and other viruses through synthetic lethality**

Fred D. Mast, Arti T. Navare, Almer M. van der Sloot, Jasmin Coulombe-Huntington, Michael P. Rout, Nitin S. Baliga, Alexis Kaushansky, Brian T. Chait, Alan Aderem, Charles M. Rice, Andrej Sali, Mike Tyers, and John D. Aitchison

REVIEW

- e202005099 **Stable inheritance of CENP-A chromatin: Inner strength versus dynamic control**

Sreyoshi Mitra, Bharath Srinivasan, and Lars E.T. Jansen

REPORTS

- e201906021 **The Pex3-Inp1 complex tethers yeast peroxisomes to the plasma membrane**

Georgia E. Hulmes, John D. Hutchinson, Noa Dahan, James M. Nuttall, Ellen G. Allwood, Kathryn R. Ayscough, and Ewald H. Hettema

- e201906023 **Peroxisome retention involves Inp1-dependent peroxisome-plasma membrane contact sites in yeast**

Arjen M. Krikken, Huala Wu, Rinse de Boer, Damien P. Devos, Tim P. Levine, and Ida J. van der Klei

- e201912071 **Wnts regulate planar cell polarity via heterotrimeric G protein and PI3K signaling**

Andre Landin Malt, Arielle K. Hogan, Connor D. Smith, Maxwell S. Madani, and Xiaowei Lu

- e201910215 **The LTB₄-BLT1 axis regulates actomyosin and β₂-integrin dynamics during neutrophil extravasation**

Bhagawat C. Subramanian, Nicolas Melis, Desu Chen, Weiyi Wang, Devorah Gallardo, Roberto Weigert, and Carole A. Parent

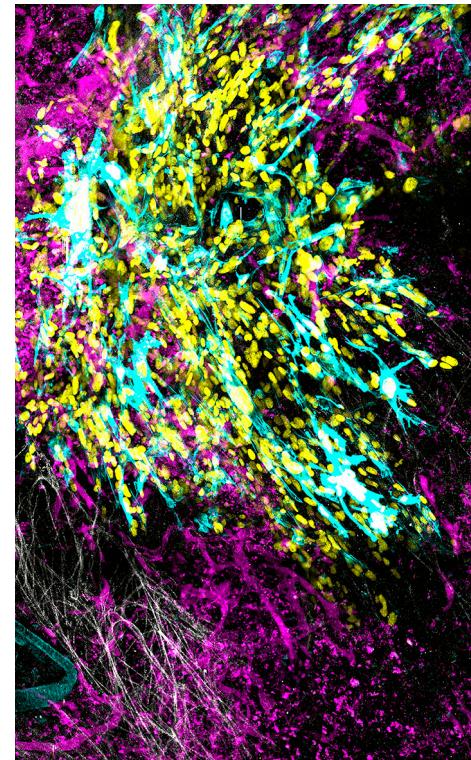
- e202005093 **Notch2 complements Notch1 to mediate inductive signaling that initiates early T cell development**

Maile Romero-Wolf, Boyoung Shin, Wen Zhou, Maria Koizumi, Ellen V. Rothenberg, and Hiroyuki Hosokawa

ARTICLES

- e201911049 **NUCKS1 promotes RAD54 activity in homologous recombination DNA repair**

David G. Maranon, Neelam Sharma, Yuxin Huang, Platon Selemenakis, Meiling Wang, Noelia Altina, Weixing Zhao, and Claudia Wiese

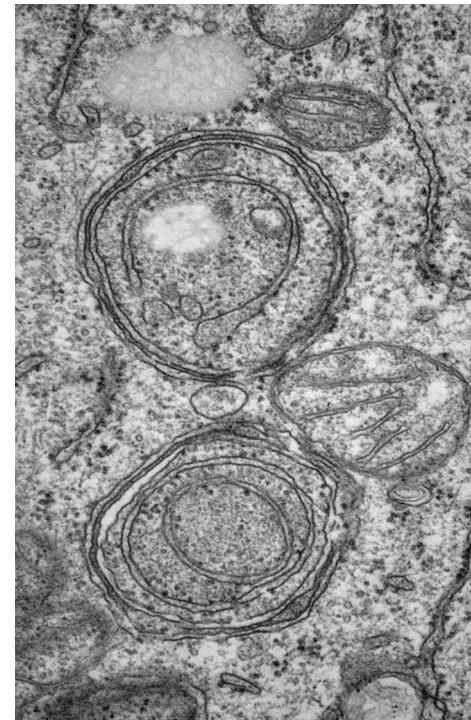


ON THE COVER

This image depicts collective breast cancer cell invasion by a 4T1 mammary tumor 4 d after implantation into the mouse mammary fat pad. All breast cancer cells express H2B-mCherry (yellow), and 30% of the cells express LifeAct-eGFP (cyan) for visualizing the actin cytoskeleton. Blood vessels and phagocytes are visualized by dextran-Alexa Fluor 750 (magenta) and collagen fibrils by second harmonic generation (gray).

Image © Khalil et al., 2020
<https://doi.org/10.1083/jcb.201911120>

- e202002120 **Telomerase treatment prevents lung profibrotic pathologies associated with physiological aging**
Sergio Piñeiro-Hermida, Chiara Autilio, Paula Martínez, Fátima Bosch, Jesús Pérez-Gil, and María A. Blasco
- e201908036 **Nesprins are mechanotransducers that discriminate epithelial-mesenchymal transition programs**
Théophile Déjardin, Pietro Salvatore Carollo, François Sipieter, Patricia M. Davidson, Cynthia Seiler, Damien Cuvelier, Bruno Cadot, Cecile Sykes, Edgar R. Gomes, and Nicolas Borghi
- e202006111 **FIT2 is an acyl-coenzyme A diphosphatase crucial for endoplasmic reticulum homeostasis**
Michel Becuwe, Laura M. Bond, Antonio F.M. Pinto, Sebastian Boland, Niklas Mejert, Shane D. Elliott, Marcelo Cicconet, Morven M. Graham, Xinran N. Liu, Olga Ilkayeva, Alan Saghatelian, Tobias C. Walther, and Robert V. Farese Jr.
- e202001071 **An antibody toolbox to track complex I assembly defines AIF's mitochondrial function**
Anjaneyulu Murari, Shauna-Kay Rhooms, Naga Sri Goparaju, Maximino Villanueva, and Edward Owusu-Ansah
- e202001003 **Mitotic phosphorylation of Pex14p regulates peroxisomal import machinery**
Koichiro Yamashita, Shigehiko Tamura, Masanori Honsho, Hiroto Yada, Yuichi Yagita, Hidetaka Kosako, and Yukio Fujiki
- e201912045 **Sensing of nutrients by CPT1C controls SAC1 activity to regulate AMPA receptor trafficking**
Maria Casas, Rut Fadó, José Luis Domínguez, Aina Roig, Moena Kaku, Shigeru Chohnan, Montse Solé, Mercedes Unzeta, Alfredo Jesús Miñano-Molina, José Rodríguez-Álvarez, Eamonn James Dickson, and Núria Casals
- e201908040 **Microtubules and motor proteins support zebrafish neuronal migration by directing cargo**
Ulrike Theisen, Alexander U. Ernst, Ronja L.S. Heyne, Tobias P. Ring, Oliver Thorn-Seshold, and Reinhard W. Köster
- e201911120 **Collective invasion induced by an autocrine purinergic loop through connexin-43 hemichannels**
Antoine A. Khalil, Olga Ilina, Angela Vasaturo, Jan-Hendrik Venhuizen, Manon Vullings, Victor Venhuizen, Ab Bilos, Carl G. Figdor, Paul N. Span, and Peter Friedl
- e202006196 **Adherens junction regulates cryptic lamellipodia formation for epithelial cell migration**
Masayuki Ozawa, Sylvain Hiver, Takaki Yamamoto, Tatsuo Shibata, Srivikul Upadhyayula, Yuko Mimori-Kiyosue, and Masatoshi Takeichi
- e201912074 **The RNA binding protein FMR1 controls selective exosomal miRNA cargo loading during inflammation**
Ann L. Wozniak, Abby Adams, Kayla E. King, Winston Dunn, Lane K. Christenson, Wei-Ting Hung, and Steven A. Weinman
- TOOLS**
- e201912107 **Genetically encoded live-cell sensor for tyrosinated microtubules**
Shubham Kesarwani, Prakash Lama, Anchal Chandra, P. Purushotam Reddy, A.S. Jijumon, Satish Bodakuntla, Balaji M. Rao, Carsten Janke, Ranabir Das, and Minhajuddin Sirajuddin
- e201903166 **Object detection networks and augmented reality for cellular detection in fluorescence microscopy**
Dominic Waithe, Jill M. Brown, Katharina Reglinski, Isabel Diez-Sevilla, David Roberts, and Christian Eggeling



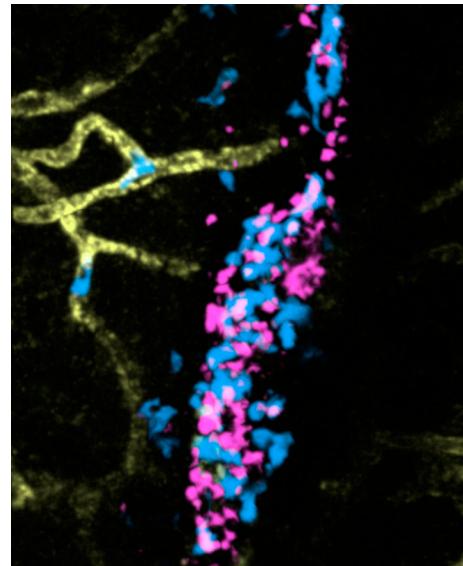
This transmission electron micrograph highlights the perturbation of ER shape in SUM159 cells lacking the acyl CoA diphosphatase enzyme, FIT2. Two membrane whorls are shown.

Image © Becuwe et al., 2020
<https://doi.org/10.1083/jcb.202006111>

CORRECTION

Correction: ERdj8 governs the size of autophagosomes during the formation process

Yo-hei Yamamoto, Ayano Kasai, Hiroko Omori, Tomoe Takino, Munechika Sugihara, Tetsuo Umemoto, Maho Hamasaki, Tomohisa Hatta, Tohru Natsume, Richard I. Morimoto, Ritsuko Arai, Satoshi Waguri, Miyuki Sato, Ken Sato, Shoshana Bar-Nun, Tamotsu Yoshimori, Takeshi Noda, and Kazuhiro Nagata



Neutrophils (blue) leaving the vasculature (yellow) to directionally migrate and engage with bacterial bioparticles (magenta) introduced into the hind footpad of a live mouse. Images were acquired using intravital two-photon microscopy. Neutrophils utilize an extracellular vesicle-based autocrine/paracrine Leukotriene B₄ signaling to undergo arrest and subsequently extravasate from the vascular lumen.

Image © Subramanian et al., 2020
<https://doi.org/10.1083/jcb.201910215>