

PEOPLE & IDEAS

- e202012016 **Moving a research lab during the COVID-19 pandemic**
Melina Casadio and Dan Simon

SPOTLIGHTS

- e202011166 **Seipin regulates the formation of nuclear lipid droplets from a distance**
Ximing Du and Hongyuan Yang
- e202012041 **Chaperoning transmembrane helices in the lipid bilayer**
Qi Zhang and Yihong Ye
- e202011093 **Sis1 delivers the State of the Union**
Danish Khan and Onn Brandman
- e202011052 **SNAP to attention: A SNARE complex regulates neuronal progenitor polarity**
Victor Tarabykin

REVIEWS

- e202006101 **Regulation of membrane NMDA receptors by dynamics and protein interactions**
Mar Petit-Pedrol and Laurent Groc

REPORTS

- e202005026 **Nuclear lipid droplets form in the inner nuclear membrane in a seipin-independent manner**
Kamil Sołtysik, Yuki Ohsaki, Tsuyako Tatematsu, Jinglei Cheng, Asami Maeda, Shin-ya Morita, and Toyoshi Fujimoto
- e202006022 **Twinfilin bypasses assembly conditions and actin filament aging to drive barbed end depolymerization**
Shashank Shekhar, Gregory J. Hoeprich, Jeff Gelles, and Bruce L. Goode
- e202001160 **CEP164C regulates flagellum length in stable flagella**
Madison Atkins, Jiří Týč, Shahaan Shafiq, Manu Ahmed, Eloïse Bertiaux, Artur Leonel De Castro Neto, Jack Sunter, Philippe Bastin, Samuel Dale Dean, and Sue Vaughan
- e202002026 **Sterol and oxysterol synthases near the ciliary base activate the Hedgehog pathway**
Sarah Findakly, Vikas Daggubati, Galo Garcia III, Sydney A. LaStella, Abrar Choudhury, Cecilia Tran, Amy Li, Pakteema Tong, Jason Q. Garcia, Natasha Puri, Jeremy F. Reiter, Libin Xu, and David R. Raleigh

ARTICLES

- e202003148 **SLX4-XPF mediates DNA damage responses to replication stress induced by DNA-protein interactions**
Riko Ishimoto, Yota Tsuzuki, Tomoki Matsumura, Seiichiro Kurashige, Kouki Enokitani, Koki Narimatsu, Mitsunori Higa, Nozomi Sugimoto, Kazumasa Yoshida, and Masatoshi Fujita
- e202001016 **The mitotic exit network regulates the spatiotemporal activity of Cdc42 to maintain cell size**
Gabriel M. Gihana, Arthur A. Cross-Najafi, and Soni Lacefield



ON THE COVER

Image shows an array of interconnected microtubules in the sensory cilium of campaniform mechanoreceptors at the base of *Drosophila melanogaster* haltere. The image is a single-slice micrograph from electron tomographic reconstruction, and the tissue section is stained with uranyl acetate and lead citrate. Image © Sun et al., 2020 <https://doi.org/10.1083/jcb.202004184>

e202002151 **PLK4-phosphorylated NEDD1 facilitates cartwheel assembly and centriole biogenesis initiations**

Wangfei Chi, Gang Wang, Guangwei Xin, Qing Jiang, and Chuanmao Zhang

e202001116 **A selective transmembrane recognition mechanism by a membrane-anchored ubiquitin ligase adaptor**

Felichi Mae Arines, Aaron Jeremy Hamlin, Xi Yang, Yun-Yu Jennifer Liu, and Ming Li

e202002150 **The ER cholesterol sensor SCAP promotes CARTS biogenesis at ER-Golgi membrane contact sites**

Yuichi Wakana, Kaito Hayashi, Takumi Nemoto, Chiaki Watanabe, Masato Taoka, Jessica Angulo-Capel, Maria F. Garcia-Parajo, Hidetoshi Kumata, Tomonari Umemura, Hiroki Inoue, Kohei Arasaki, Felix Campelo, and Mitsuo Tagaya

e202007052 **Rapid degradation of GRASP55 and GRASP65 reveals their immediate impact on the Golgi structure**

Yijun Zhang and Joachim Seemann

e202005165 **Subcellular localization of the J-protein Sis1 regulates the heat shock response**

Zoë A. Feder, Asif Ali, Abhyudai Singh, Joanna Krakowiak, Xu Zheng, Vytas P. Bindokas, Donald Wolfgeher, Stephen J. Kron, and David Pincus

e202004184 **Katanin p60-like 1 sculpts the cytoskeleton in mechanosensory cilia**

Landi Sun, Lihong Cui, Zhen Liu, Qixuan Wang, Zhaoyu Xue, Menghua Wu, Tianhui Sun, Decai Mao, Jianquan Ni, José Carlos Pastor-Pareja, and Xin Liang

e202004179 **A non-canonical Hedgehog pathway initiates ciliogenesis and autophagy**

Tara Akhshi and William S. Trimble

e202005051 **Binding and transport of SFPQ-RNA granules by KIF5A/KLC1 motors promotes axon survival**

Yusuke Fukuda, Maria F. Pazyra-Murphy, Elizabeth S. Silagi, Ozge E. Tasdemir-Yilmaz, Yihang Li, Lillian Rose, Zoe C. Yeoh, Nicholas E. Vangos, Ezekiel A. Geffken, Hyuk-Soo Seo, Guillaume Adelmant, Gregory H. Bird, Loren D. Walensky, Jarrod A. Marto, Sirano Dhe-Paganon, and Rosalind A. Segal

e201910080 **SNAP23 deficiency causes severe brain dysplasia through the loss of radial glial cell polarity**

Masataka Kunii, Yuria Noguchi, Shin-ichiro Yoshimura, Satoshi Kanda, Tomohiko Iwano, Erda Avriyanti, Nur Atik, Takashi Sato, Ken Sato, Masaharu Ogawa, and Akihiro Harada

TOOLS

e202002129 **An APEX2 proximity ligation method for mapping interactions with the nuclear lamina**

Joseph R. Tran, Danielle I. Paulson, James J. Moresco, Stephen A. Adam, John R. Yates III, Robert D. Goldman, and Yixian Zheng

CORRECTIONS

Correction: αv-Class integrin binding to fibronectin is solely mediated by RGD and unaffected by an RGE mutation

María Benito-Jardón, Nico Strohmeyer, Sheila Ortega-Sanchís, Mitasha Bharadwaj, Markus Moser, Daniel J. Müller, Reinhard Fässler, and Mercedes Costell



Cartoon depicting the recognition of the yeast vacuolar lysine transporter Ypq1 (magenta). Under normal conditions, Ypq1 pumps lysine into the vacuole lumen. When cells are starved of lysine, Ypq1 likely acquires a conformation that is selectively recognized by the transmembrane ubiquitin ligase adaptor Ssh4 (gold), leading to Ypq1 ubiquitination, internalization into the vacuole lumen, and degradation.

Image © Felichi Mae Arines, 2020
<https://doi.org/10.1083/jcb.202001116>