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- Natural killer cells commute death sentence

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- Four faces of cellular senescence

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- Sphingosine kinases and their metabolites modulate endolysosomal trafficking in photoreceptors

Ikuko Yonamine, Takeshi Bamba, Niraj K. Nirala, Nahid Jesmin, Teresa Kosakowska-Cholody, Kunio Nagashima, Eiichiro Fukusaki, Jairaj K. Acharya, and Usha Acharya

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- Xenopus* HJURP and condensin II are required for CENP-A assembly

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- The yeast Cbk1 kinase regulates mRNA localization via the mRNA-binding protein Ssd1

Cornelia Kurischko, Hong Kyung Kim, Venkata K. Kuravi, Juliane Pratzka, and Francis C. Luca

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- Tem1 localization to the spindle pole bodies is essential for mitotic exit and impairs spindle checkpoint function

Mauricio Valerio-Santiago and Fernando Monje-Casas

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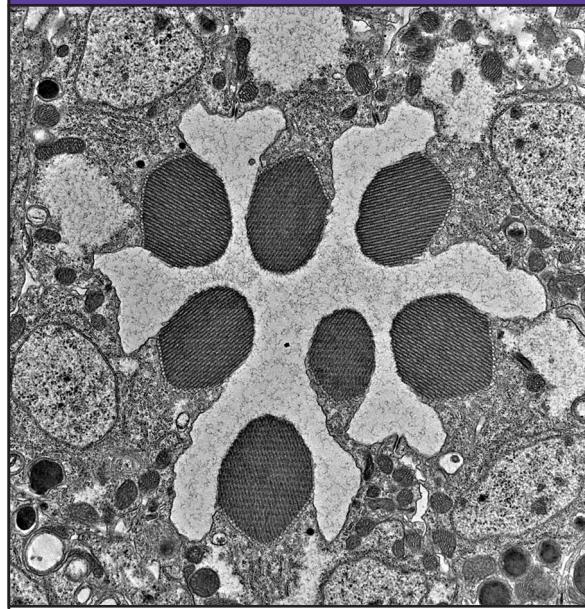
- Spermidine and resveratrol induce autophagy by distinct pathways converging on the acetylproteome

Eugenio Morselli, Guillermo Mariño, Martin V. Bennetzen, Tobias Eisenberg, Evgenia Megalou, Sabrina Schroeder, Sandra Cabrera, Paule Bénit, Pierre Rustin, Alfredo Criollo, Oliver Kepp, Lorenzo Galluzzi, Shensi Shen, Shoaib Ahmad Malik, Maria Chiara Maiuri, Yoshiyuki Horio, Carlos López-Otín, Jens S. Andersen, Nektarios Tavernarakis, Frank Madeo, and Guido Kroemer

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- Polycystin-2 takes different routes to the somatic and ciliary plasma membrane

Helen Hoffmeister, Karin Babinger, Sonja Gürster, Anna Cedzich, Christine Meese, Karin Schadendorf, Larissa Osten, Uwe de Vries, Anne Rasche, and Ralph Witzgall



On the cover

Electron micrograph of wild-type *Drosophila* photoreceptors. Yonamine et al. demonstrate that overexpressing sphingosine kinase 2 causes photoreceptor degeneration and boosts the lysosomal degradation of light-sensing proteins such as Rhodopsin by increasing the levels of dihydrosphingosine 1 phosphate compared to sphingosine 1 phosphate. Image courtesy of Kunio Nagashima, Jairaj Acharya, and Usha Acharya.

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The frontotemporal dementia mutation R406W blocks tau's interaction with the membrane in an annexin A2-dependent manner
Anne Gauthier-Kemper, Carina Weissmann, Nataliya Golovyashkina, Zsofia Sebő-Lemke, Gerard Drewes, Volker Gerke, Jürgen J. Heinisch, and Roland Brandt

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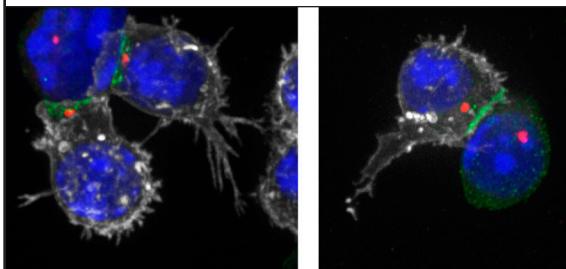
Centrosome docking at the immunological synapse is controlled by Lck signaling
Andy Tsun, Ihjaaz Qureshi, Jane C. Stinchcombe, Misty R. Jenkins, Maike de la Roche, Joanna Kleczkowska, Rose Zamyska, and Gillian M. Griffiths

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Inhibitory signaling blocks activating receptor clustering and induces cytoskeletal retraction in natural killer cells
Thushara P. Abeyweera, Ernesto Merino, and Morgan Huse

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Glypican-5 stimulates rhabdomyosarcoma cell proliferation by activating Hedgehog signaling
Fuchuan Li, Wen Shi, Mariana Capurro, and Jorge Filmus



Tsun et al. show that, unlike wild-type cells (left), cytotoxic T lymphocytes lacking the tyrosine kinase Lck (right) are unable to dock their centrosomes (red) at the immunological synapse (bright green) formed where the lymphocyte (white) contacts its target cell.

Image © 2011 Tsun et al.

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