ON THE COVER

Stromules are tentacle-like protrusions of plastids that have been hypothesized to connect individual plastids and shuttle molecules between them. Schattat et al. (pages 1465–1477) re-examine this hypothesis using a photoconvertible fluorescent protein, which enabled differential coloring of the plastids in a cell, and directly monitoring the putative transfer of fluorescent proteins between plastids. Using this technique, the authors show that stromules extended by independent plastids do not fuse or allow exchange of fluorescent proteins between plastids. The cover image shows the differential coloring of plastids and their stromules in leaf epidermal cells. Chlorophyll autofluorescence is rendered in blue.

IN BRIEF

Plastids Do Not Form Interconnected Networks
Kathleen L. Farquharson 1303

Augmin’s Role in Microtubule Generation in Plants
Nancy R. Hofmann 1304

Oxylipins and Plant Palatability
Gregory Bertoni 1305

COMMENTARY

The Gatsby Plant Science Summer School: Inspiring the Next Generation of Plant Science Researchers
Aurora Levesley, Juliet Jopson, and Celia Knight 1306

PERSPECTIVE

Secretory Pathway Research: The More Experimental Systems the Better
Jurgen Denecke, Fernando Aniento, Lorenzo Frigerio, Chris Hawes, Inhwan Hwang, Jaideep Mathur, Jean-Marc Neuhaus, and David G. Robinson 1316

REVIEW

Mitogen-Activated Protein Kinase Signaling in Plant-Interacting Fungi: Distinct Messages from Conserved Messengers
Louis-Philippe Hamel, Marie-Claude Nicole, Sébastien Duplessis, and Brian E. Ellis 1327

LARGE-SCALE BIOLOGY ARTICLES

CellSeT: Novel Software to Extract and Analyze Structured Networks of Plant Cells from Confocal Images
Michael P. Pound, Andrew P. French, Darren M. Wells, Malcolm J. Bennett, and Tony P. Pridmore 1353
Gene-Sharing Networks Reveal Organizing Principles of Transcriptomes in *Arabidopsis* and Other Multicellular Organisms

Song Li, Sona Pandey, Timothy E. Gookin, Zhixin Zhao, Liza Wilson, and Sarah M. Assmann

**RESEARCH ARTICLES**

Patterns and Evolution of Nucleotide Landscapes in Seed Plants

Laurana Serres-Giardi, Khalid Belkhir, Jacques David, and Sylvain Glémin

Dynamic Antagonism between Phytochromes and PIF Family Basic Helix-Loop-Helix Factors Induces Selective Reciprocal Responses to Light and Shade in a Rapidly Responsive Transcriptional Network in *Arabidopsis*

Pablo Leivar, James M. Tepperman, Megan M. Cohn, Elena Monte, Bassem Al-Sady, Erika Erickson, and Peter H. Quail

Disruption of *OPR7* and *OPR8* Reveals the Versatile Functions of Jasmonic Acid in Maize Development and Defense

Yuanxin Yan, Shawn Christensen, Tom Isakeit, Jürgen Engelberth, Robert Meeley, Allison Hayward, R.J. Neil Emery, and Michael V. Kolomiets

*NAP1* Family Histone Chaperones Are Required for Somatic Homologous Recombination in *Arabidopsis*

Juan Gao, Yan Zhu, Wangbin Zhou, Jean Molinier, Aiwu Dong, and Wen-Hui Shen

The Fanconi Anemia Ortholog FANCM Ensures Ordered Homologous Recombination in Both Somatic and Meiotic Cells in *Arabidopsis*

Alexander Knoll, James D. Higgins, Katharina Seeliger, Sarah J. Reha, Natalie J. Dangel, Markus Bauknecht, Susan Schröpfer, F. Christopher H. Franklin, and Holger Puchta

Differential Coloring Reveals That Plastids Do Not Form Networks for Exchanging Macromolecules

Martin H. Schattat, Sarah Griffiths, Neeta Mathur, Kiah Barton, Michael R. Wozny, Natalie Dunn, John S. Greenwood, and Jaideep Mathur

An Inducible RNA Interference System in *Physcomitrella patens* Reveals a Dominant Role of Augmin in Phragmoplast Microtubule Generation

Yuki Nakaoka, Tomohiro Miki, Ryuta Fujikyo, Ryota Uehara, Akiko Tomioka, Chikashi Obuse, Minoru Kubo, Yuji Hiwatashi, and Gohta Goshima

Characterization of the *Arabidopsis* Augmin Complex Uncovers Its Critical Function in the Assembly of the Acentrosomal Spindle and Phragmoplast Microtubule Arrays

Takashi Hotta, Zhaoosheng Kong, Chin-Min Kimmy Ho, Cui Jing Tracy Zeng, Tetsuya Horio, Sophia Fong, Trang Vuong, Yuh-Ru Julie Lee, and Bo Liu

Fern and Lycophyte Guard Cells Do Not Respond to Endogenous Abscisic Acid

Scott A.M. McAdam and Timothy J. Brodribb

*Arabidopsis* Annexin1 Mediates the Radical-Activated Plasma Membrane Ca²⁺- and K⁻-Permeable Conductance in Root Cells

NADPH Thioredoxin Reductase C Is Localized in Plastids of Photosynthetic and Nonphotosynthetic Tissues and Is Involved in Lateral Root Formation in Arabidopsis
Kerstin Kirchsteiger, Julia Ferrández, María Belén Pascual, Maricruz González, and Francisco Javier Cejudo

De Novo Pyrimidine Nucleotide Synthesis Mainly Occurs outside of Plastids, but a Previously Undiscovered Nucleobase Importer Provides Substrates for the Essential Salvage Pathway in Arabidopsis
Sandra Witz, Benjamin Jung, Sarah Fürst, and Torsten Möhlmann

A Transit Peptide–Like Sorting Signal at the C Terminus Directs the Bienertia sinuspersici Preprotein Receptor Toc159 to the Chloroplast Outer Membrane
Shiu-Cheung Lung and Simon D.X. Chuong

Alternative Oxidases (AOX1a and AOX2) Can Functionally Substitute for Plastid Terminal Oxidase in Arabidopsis Chloroplasts
Aigen Fu, Huiying Liu, Fei Yu, Sekhar Kambakam, Sheng Luan, and Steve Rodermel

Emergent Decarboxylase Activity and Attenuation of α/β-Hydrolase Activity during the Evolution of Methylketone Biosynthesis in Tomato
 Michele E. Auldridge, Yongxia Guo, Michael B. Austin, Justin Ramsey, Eyal Fridman, Eran Pichersky, and Joseph P. Noel

Biochemical and Structural Characterization of the Arabidopsis Bifunctional Enzyme Dethiobiotin Synthetase–Diaminopelargonic Acid Aminotransferase: Evidence for Substrate Channeling in Biotin Synthesis
David Cobessi, Renaud Dumas, Virginie Pautre, Céline Meinguet, Jean-Luc Ferrer, and Claude Alban

CDKF;1 and CDKD Protein Kinases Regulate Phosphorylation of Serine Residues in the C-Terminal Domain of Arabidopsis RNA Polymerase II
Mohsen Hajheidari, Sara Farrona, Bruno Huettel, Zsuzsa Koncz, and Csaba Koncz

Root-Derived Oxylipins Promote Green Peach Aphid Performance on Arabidopsis Foliage
Vamsi J. Nalam, Jantana Keeretaweep, Sujon Sarowar, and Jyoti Shah

Oleic Acid–Dependent Modulation of NITRIC OXIDE ASSOCIATED1 Protein Levels Regulates Nitric Oxide–Mediated Defense Signaling in Arabidopsis
Mihir Kumar Mandal, A.C. Chandra-Shekara, Rae-Dong Jeong, Keshun Yu, Shifeng Zhu, Bidisha Chanda, Duroy Navarre, Aardra Kachroo, and Pradeep Kachroo

Requirement of the Cytosolic Interaction between PATHOGENESIS-RELATED PROTEIN10 and LEUCINE-RICH REPEAT PROTEIN1 for Cell Death and Defense Signaling in Pepper
Du Seok Choi, In Sun Hwang, and Byung Kook Hwang
Lotus japonicus E3 Ligase SEVEN IN ABSENTIA4 Destabilizes the Symbiosis Receptor-Like Kinase SYMRK and Negatively Regulates RhizobialInfection

Griet Den Herder, Satoko Yoshida, Meritxell Antolíñ-Llovera, Martina K. Ried, and Martin Parniske

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