Happy Birthday to The Plant Cell

Cathie Martin

The Plant Cell: 20 Years Young

Robert B. Goldberg

The original promotional brochure announcing the debut of The Plant Cell

Nancy A. Eckardt

A Plastidial Pathway for Protein Isoprenylation in Tobacco Cells

Jennifer Mach

Alternative Splicing Produces a JAZ Protein That Is Not Broken Down in Response to Jasmonic Acid

Pack-MULEs Carry Functionality

Nancy R. Hofmann

Breaking Up Is Hard to Do: Cell Separation Events Involve Multiple Polyalacturonases and Multiple Hormones

Chloroplast RNA Editing by Pentatricopeptide Repeat Proteins

Elisabet Gas, Ursula Flores-Pérez, Susanna Sauret-Güeto, and Manuel Rodríguez-Concepción

Hunting for Plant Nitric Oxide Synthase Provides New Evidence of a Central Role for Plastids in Nitric Oxide Metabolism

Kousuke Hanada, Veronica Vallejo, Kan Nobuta, R. Keith Slotkin, Damon Lisch, Blake C. Meyers, Shin-Han Shiu, and Ning Jiang

Regulation of Carotenoid Composition and Shoot Branching in Arabidopsis by a Chromatin Modifying Histone Methyltransferase, SDG8

Christopher I. Cazzonelli, Abby J. Cuttriss, Susan B. Cossetto, William Pye, Peter Crisp, Jim Whelan, E. Jean Finnegan, Colin Turnbull, and Barry J. Pogson
Repression of Seed Maturation Genes by a Trihelix Transcriptional Repressor in Arabidopsis Seedlings

Ming-Jun Gao, Derek J. Lydiate, Xiang Li, Helen Lui, Branimir Gjetvaj, Dwayne D. Hegedus, and Kevin Rozwadowski

The Arabidopsis MYB5 Transcription Factor Regulates Mucilage Synthesis, Seed Coat Development, and Trichome Morphogenesis

Song Feng Li, Olga Nicolaou Milliken, Hanh Pham, Reg Seyit, Ross Napoli, Jeremy Preston, Anna M. Koltunow, and Roger W. Parish

ENDOSPERM DEFECTIVE1 Is a Novel Microtubule-Associated Protein Essential for Seed Development in Arabidopsis

Cristina Pignocchi, Gregory E. Minns, Nathalie Nesi, Rachil Koumproglou, Georgios Kitsios, Christoph Benning, Clive W. Lloyd, John H. Doonan, and Matthew J Hills

FORMATION OF NUCLEAR BODIES OF ARABIDOPSIS CRY2 IN RESPONSE TO BLUE LIGHT IS ASSOCIATED WITH ITS BLUE LIGHT–DEPENDENT DEGRADATION

Xuhong Yu, Ricardo Sayegh, Maskit Maymon, Katherine Warpeha, John Klejnot, Hongyun Yang, Jie Huang, Janet Lee, Lon Kaufman, and Chentao Lin

A Critical Role for the TIFY Motif in Repression of Jasmonate Signaling by a Stabilized Splice Variant of the JASMONEATE ZIM-Domain Protein JAZ10 in Arabidopsis

Hoo Sun Chung and Gregg A. Howe

Pentatricopeptide Repeat Proteins with the DYW Motif Have Distinct Molecular Functions in RNA Editing and RNA Cleavage in Arabidopsis Chloroplasts


Participation of Leaky Ribosome Scanning in Protein Dual Targeting by Alternative Translation Initiation in Higher Plants

Yashitola Wamboldt, Saleem Mohammed, Christian Elowsky, Chris Wittgren, Wilson B.M. de Paula, and Sally A. Mackenzie

Multiple Repeats of a Promoter Segment Causes Transcription Factor Autoregulation in Red Apples

Richard V. Espley, Cyril Brendolise, David Chagne, Sumathi Kutty-Amma, Sol Green, Richard Volz, Jo Putterill, Henk J. Schouten, Susan E. Gardiner, Roger P. Hellens, and Andrew C. Allan

Epidermal Cell Death in Rice Is Confined to Cells with a Distinct Molecular Identity and Is Mediated by Ethylene and H₂O₂ through an Autoamplified Signal Pathway

Blanka Steffens and Margret Sauter

A Polypyrimidine Tract Binding Protein, Pumpkin RBP50, Forms the Basis of a Phloem-Mobile Ribonucleoprotein Complex

Byung-Kook Ham, Jeri L. Brandon, Beatriz Xoconostle-Cázares, Vanessa Ringgold, Tony J. Lough, and William J. Lucas

ARABIDOPSIS DEHISCENCE ZONE POLYGALACTURONASE1 (ADPG1), ADPG2, and QUARTET2 Are Polygalacturonases Required for Cell Separation during Reproductive Development in Arabidopsis

Mikihiro Ogawa, Pippa Kay, Sarah Wilson, and Stephen M. Swain

discordia1 and alternative discordia1 Function Redundantly at the Cortical Division Site to Promote Preprophase Band Formation and Orient Division Planes in Maize

Amanda J. Wright, Kimberly Gallagher, and Laurie G. Smith

MYB58 and MYB63 Are Transcriptional Activators of the Lignin Biosynthetic Pathway during Secondary Cell Wall Formation in Arabidopsis

Jianli Zhou, Chanhuie Lee, Ruiqin Zhong, and Zheng-Hua Ye
Rearrangement of Actin Cytoskeleton Mediates Invasion of *Lotus japonicus* Roots by *Mesorhizobium loti* C267

Keisuke Yokota, Eigo Fukai, Lene H. Madsen, Anna Jurkiewicz, Paloma Rueda, Simona Radutoiu, Mark Held, Md Shakhawat Hossain, Krzysztof Szczypkowski, Giulia Morieri, Giles E.D. Oldroyd, J. Allan Downie, Mette W. Nielsen, Anna Maria Rusek, Shusei Sato, Satoshi Tabata, Euan K. James, Hiroshi Oyaizu, Niels Sandal, and Jens Stougaard

The Plastidial 2-C-Methyl-D-Erythritol 4-Phosphate Pathway Provides the Isoprenyl Moiety for Protein Geranylation in Tobacco BY-2 Cells C285

Esther Gerber, Andrea Hemmerlin, Michael Hartmann, Dimitri Heintz, Marie-Andrée Hartmann, Jérôme Mutterer, Manuel Rodriguez-Concepción, Albert Boronat, Alain Van Dorsselaer, Michel Rohmer, Dring N. Crowell, and Thomas J. Bach

A Novel Pathway for Sesquiterpene Biosynthesis from *Z,Z*-Farnesyl Pyrophosphate in the Wild Tomato *Solanum habrochaites* C301

Christophe Sallaud, Denis Rontein, Sandrine Onillon, Françoise Jabès, Philippe Duffé, Cécile Giacalone, Samuel Thoraval, Camille Escouffier, Gaëtan Herbette, Nathalie Leonhardt, Mathilde Causse, and Alain Tissier

A Novel Polyamine Acyltransferase Responsible for the Accumulation of Spermidine Conjugates in *Arabidopsis* Seed C318

Jie Luo, Christine Fuell, Adrian Parr, Lionel Hill, Paul Bailey, Katherine Elliott, Shirley A. Fairhurst, Cathie Martin, and Anthony J. Michael

STARCH-EXCESS4 Is a Laforin-Like Phosphoglucan Phosphatase Required for Starch Degradation in *Arabidopsis thaliana* C334

Oliver Kötting, Diana Santelia, Christoph Edner, Simona Eicke, Tina Marthaler, Matthew S. Gentry, Sylviane Compart-Moss, Jychian Chen, Alison M. Smith, Martin Steup, Gerhard Ritte, and Samuel C. Zeeman

*SQUAMOSA* Promoter Binding Protein–Like 7 Is a Central Regulator for Copper Homeostasis in *Arabidopsis* C347

Hiroaki Yamasaki, Makoto Hayashi, Mitsue Fukazawa, Yoshichika Kobayashi, and Toshiharu Shikanai

Some figures in this article are displayed in color online but in black and white in the print edition.

Online version contains Web-only data.

Open Access articles can be viewed online without a subscription.