

T H E
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ON THE COVER



In plants with large genomes such as maize, heterochromatin is interspersed with euchromatin rather than being concentrated near centromeres. This is illustrated in the cover image as regions of densely packed nucleosomes (represented by maize kernels) separated by short stretches of accessible nucleosomes. Three major forms of DNA methylation function in heterochromatin in plants, but the significance of each and the relationships between them have been difficult to determine. Fu et al. (pages 1617–1627) have discovered that one form of DNA methylation that marks the edges of heterochromatin, called RNA-directed DNA methylation, relies on the integrity of DNA methylation throughout the heterochromatin.

EDITOR PROFILE

Blake C. Meyers^[OPEN] 1375
Alex Harkess and Margaret Frank

IN BRIEF

Alternative Splicing Plays a Major Role in Plant Response to Cold Temperatures^[OPEN] 1378
Jenna Gallegos

Regulatory Divergence in the Stress Response of Tomato^[OPEN] 1380
Celine Caseys

The Dynamic Transcriptome: Using Clustered Time Points to Tease Apart Rice Tiller Angle Control^[OPEN] 1381
Nancy R. Hofmann

Nuclear Positioning Requires a Tug-of-War between Kinesin Motors^[OPEN] 1383
Robert C. Augustine

The Story Continues: Following the Fate of m⁶A Marks in the Eukaryotic Transcriptome^[OPEN] 1385
Jennifer Lockhart

LARGE-SCALE BIOLOGY ARTICLES

Disrupted Genome Methylation in Response to High Temperature Has Distinct Affects on Microspore Abortion and Anther Indehiscence^[OPEN] 1387
Yizan Ma, Ling Min, Maojun Wang, Chaozhi Wang, Yunlong Zhao, Yaoyao Li, Qidi Fang, Yuanlong Wu, Sai Xie, Yuanhao Ding, Xiaojun Su, Qin Hu, Qinghua Zhang, Xueyuan Li, and Xianlong Zhang

Genome-Wide Association Analyses Reveal the Importance of Alternative Splicing in Diversifying Gene Function and Regulating Phenotypic Variation in Maize^[OPEN] 1404
Qiuyue Chena, Yingjia Han, Haijun Liu, Xufeng Wang, Jiamin Sun, Binghao Zhao, Weiya Li, Jinge Tian, Yameng Liang, Jianbing Yan, Xiaohong Yang, and Feng Tian

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Rapid and Dynamic Alternative Splicing Impacts the Arabidopsis Cold Response Transcriptome^[CC-BY] 1424

Cristiane P.G. Calixto, Wenbin Guo, Allan B. James, Nikoleta A. Tzioutziou, Juan Carlos Entizne, Paige E. Panter, Heather Knight, Hugh G. Nimmo, Runxuan Zhang, and John W.S. Brown

Regulatory Divergence in Wound-Responsive Gene Expression between Domesticated and Wild Tomato^[OPEN] 1445

Ming-Jung Liu, Koichi Sugimoto, Sahra Uygun, Nicholas Panchy, Michael S. Campbell, Mark Yandell, Gregg A. Howe, and Shin-Han Shiu

RESEARCH ARTICLES

A Core Regulatory Pathway Controlling Rice Tiller Angle Mediated by the *LAZY1*-Dependent Asymmetric Distribution of Auxin^[OPEN] 1461

Ning Zhang, Hong Yu, Hao Yu, Yueyue Cai, Linzhou Huang, Cao Xu, Guosheng Xiong, Xiangbing Meng, Jiyao Wang, Haofeng Chen, Guifu Liu, Yanhui Jing, Yundong Yuan, Yan Liang, Shujia Li, Steven M. Smith, Jiayang Li, and Yonghong Wang

Thylakoid-Bound Polysomes and a Dynamin-Related Protein, FZL, Mediate Critical Stages of the Linear Chloroplast Biogenesis Program in Greening Arabidopsis Cotyledons^[OPEN] 1476

Zizhen Liang, Ning Zhu, Keith K. Mai, Zhongyuna Liu, David Tzeng, Katherine W. Osteryoung, Silin Zhong, L. Andrew Staehelin, and Byung-Ho Kang

The KCH Kinesin Drives Nuclear Transport and Cytoskeletal Coalescence to Promote Tip Cell Growth in *Physcomitrella patens*^[OPEN] 1496

Moé Yamada and Gohta Goshima

m⁶A RNA Degradation Products Are Catabolized by an Evolutionarily Conserved N⁶-Methyl-AMP Deaminase in Plant and Mammalian Cells 1511

Mingjia Chen, Mounashree J. Urs, Ismael Sánchez-González, Monilola A. Olayioye, Marco Herde, and Claus-Peter Witte

Two Plastidial Coiled-Coil Proteins Are Essential for Normal Starch Granule Initiation in Arabidopsis^[OPEN] 1523

David Seung, Tina B. Schreier, Léo Bürgy, Simona Eicke, and Samuel C. Zeeman

Receptor-Like Cytoplasmic Kinases Directly Link Diverse Pattern Recognition Receptors to the Activation of Mitogen-Activated Protein Kinase Cascades in Arabidopsis^[OPEN] 1543

Guozhi Bi, Zhaoyang Zhou, Weibing Wang, Lin Li, Shaofei Rao, Ying Wu, Xiaojuan Zhang, Frank L.H. Menke, She Chen, and Jian-Min Zhou

Sorbitol Modulates Resistance to *Alternaria alternata* by Regulating the Expression of an *NLR* Resistance Gene in Apple^[OPEN] 1562

Dong Meng, Chunlong Li, Hee-Jin Park, Jonathan González, Jingying Wang, Abhaya M. Dandekar, B. Gillian Turgeon, and Lailiang Cheng

***Barley stripe mosaic virus* γ b Protein Subverts Autophagy to Promote Viral Infection by Disrupting the ATG7-ATG8 Interaction** 1582

Meng Yang, Yongliang Zhang, Xialin Xie, Ning Yue, Jinlin Li, Xian-Bing Wang, Chenggui Han, Jialin Yu, Yule Liu, and Dawei Li

***INCURVATA11* and *CUPULIFORMIS2* Are Redundant Genes That Encode Epigenetic Machinery Components in Arabidopsis** 1596

Eduardo Mateo-Bonmati, David Esteve-Bruna, Lucía Juan-Vicente, Riad Nadi, Héctor Candela, Francisca María Lozano, María Rosa Ponce, José Manuel Pérez-Pérez, and José Luis Micol

Loss of RNA-Directed DNA Methylation in Maize Chromomethylase and DDM1-Type Nucleosome Remodeler Mutants^[OPEN] 1617

Fang-Fang Fu, R. Kelly Dawe, and Jonathan I. Gent

Redistribution of CHH Methylation and Small Interfering RNAs across the Genome of Tomato *ddm1* Mutants

1628

Shira Corem, Adi Doron-Faigenboim, Ophélie Jouffroy,
Florian Maumus, Tzahi Arazi, and Nicolas Bouché

A 5-Enolpyruvylshikimate 3-Phosphate Synthase Functions as a Transcriptional Repressor in *Populus*^[OPEN]

1645

Meng Xie, Wellington Muchero, Anthony C. Bryan, Kelsey Yee, Hao-Bo Guo, Jin Zhang, Timothy J. Tschaplinski, Vasanth R. Singan, Erika Lindquist, Raja S. Payyavula, Jaime Barros-Rios, Richard Dixon, Nancy Engle, Robert W. Sykes, Mark Davis, Sara S. Jawdy, Lee E. Gunter, Olivia Thompson, Stephen P. DiFazio, Luke M. Evans, Kim Winkler, Cassandra Collins, Jeremy Schmutz, Hong Guo, Udaya Kalluri, Miguel Rodriguez, Kai Feng, Jin-Gui Chen, and Gerald A. Tuskan

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