

Contents

Perspectives

- Transcriptional competence in pluripotency** 2793
Edupuganti V.S. Raghu Ram and Eran Meshorer
- Overcoming inhibition in the spindle checkpoint** 2799
Vincent Vanoosthuysse and Kevin G. Hardwick



Research Communications

- Genetic dissection of the *miR-17-92* cluster of microRNAs in Myc-induced B-cell lymphomas** 2806
Ping Mu, Yoon-Chi Han, Doron Betel, Evelyn Yao, Massimo Squatrito, Paul Ogradowski, Elisa de Stanchina, Aleco D'Andrea, Chris Sander, and Andrea Ventura
- Neuronal SIRT1 regulates endocrine and behavioral responses to calorie restriction** 2812
Dena E. Cohen, Andrea M. Supinski, Michael S. Bonkowski, Gizem Donmez, and Leonard P. Guarente
- A novel histone fold domain-containing protein that replaces TAF6 in *Drosophila* SAGA is required for SAGA-dependent gene expression** 2818
Vikki M. Weake, Selene K. Swanson, Arcady Mushegian, Laurence Florens, Michael P. Washburn, Susan M. Abmayr, and Jerry L. Workman

Research papers

- Transcriptional competence and the active marking of tissue-specific enhancers by defined transcription factors in embryonic and induced pluripotent stem cells** 2824
Jian Xu, Jason A. Watts, Scott D. Pope, Paul Gadue, Mark Kamps, Kathrin Plath, Kenneth S. Zaret, and Stephen T. Smale
- miR-19* is a key oncogenic component of *mir-17-92*** 2839
Virginie Olive, Margaux J. Bennett, James C. Walker, Cong Ma, Iris Jiang, Carlos Cordon-Cardo, Qi-Jing Li, Scott W. Lowe, Gregory J. Hannon, and Lin He
- Intergenic transcription by RNA Polymerase II coordinates Pol IV and Pol V in siRNA-directed transcriptional gene silencing in *Arabidopsis*** 2850
Binglian Zheng, Zhengming Wang, Shengben Li, Bin Yu, Jin-Yuan Liu, and Xuemei Chen
- Fusion of nearby inverted repeats by a replication-based mechanism leads to formation of dicentric and acentric chromosomes that cause genome instability in budding yeast** 2861
Andrew L. Paek, Salma Kaochar, Hope Jones, Aly Elezaby, Lisa Shanks, and Ted Weinert

(continued)

Nearby inverted repeats fuse to generate acentric and dicentric palindromic chromosomes by a replication template exchange mechanism	2876
Ken'Ichi Mizuno, Sarah Lambert, Giuseppe Baldacci, Johanne M. Murray, and Antony M. Carr	
Quantitative proteomic analysis of purified yeast kinetochores identifies a PP1 regulatory subunit	2887
Bungo Akiyoshi, Christian R. Nelson, Jeffrey A. Ranish, and Sue Biggins	
Stn1-Ten1 is an Rpa2-Rpa3-like complex at telomeres	2900
Jia Sun, Eun Young Yu, Yuting Yang, Laura A. Confer, Steven H. Sun, Ke Wan, Neal F. Lue, and Ming Lei	
Human POT1 is required for efficient telomere C-rich strand replication in the absence of WRN	2915
Nausica Arnoult, Carole Saintome, Isabelle Ourliac-Garnier, Jean-François Riou, and Arturo Londoño-Vallejo	
Reviewers	2925
Author Index	2929

Cover *miR-19a* and *miR-19b* are the key components of the oncogenic microRNA cluster *miR-17-92*. Shown here in the foreground are the six mature mRNAs that the polycistronic *mir-17-92* cluster encodes (*left to right*, respectively): *miR-17*, *miR-18*, *miR-19a*, *miR-20*, *miR-19b*, and *miR-92*. *miR-19a* and *miR-19b* (highlighted with pink) are both necessary and sufficient to promote *c-myc*-induced B-cell lymphomagenesis. Shown in the background are NIH 3T3 cells infected with retrovirus overexpressing *miR-19b*. All infected cells carry a GFP transgene, allowing for in vitro visualization. (For details, see Olive et al., p. 2839.)