## HIGHLIGHTS

359  Selected Articles from This Issue

## REVIEWS

361  The MEK/ERK Network as a Therapeutic Target in Human Cancer  
Renee Barbosa, Lucila A. Acevedo, and Ronen Marmorstein

375  Y-Box Binding Protein-1: A Neglected Target in Pediatric Brain Tumors?  
Louisa Taylor, Ian D. Kerr, and Beth Coyle

388  Protein Arginine Methyltransferase 5 (PRMT5) and the ERK1/2 & PI3K Pathways: A Case for PRMT5 Inhibition and Combination Therapies in Cancer  
Tzuriel Sapir, David Shifteh, Moshe Pahmer, Sanjay Goel, and Radhashree Maitra

## MCR Rapid Impact

395  Molecular Profiling of Metastatic Bladder Cancer Early-Phase Clinical Trial Participants Predicts Patient Outcomes  

## CANCER GENES AND NETWORKS

403  Differential Effects of Clinically Relevant N- versus C-Terminal Truncating CDKN1A Mutations on Cisplatin Sensitivity in Bladder Cancer  

414  MYC Activity Inference Captures Diverse Mechanisms of Aberrant MYC Pathway Activation in Human Cancers  
Evelien Schaafsma, Yanding Zhao, Lanjing Zhang, Yong Li, and Chao Cheng

429  G9a Promotes Invasion and Metastasis of Non-Small Cell Lung Cancer through Enhancing Focal Adhesion Kinase Activation via NF-κB Signaling Pathway  
Ting Sun, Keqiang Zhang, Rajendra P. Pangeni, Jun Wu, Wendong Li, Yong Du, Yuming Guo, Shyambabu Chaurasiya, Leonidas Arvanitis, and Dan J. Raz

441  N-Acetyl-L-cysteine Promotes Ex Vivo Growth and Expansion of Single Circulating Tumor Cells by Mitigating Cellular Stress Responses  
Teng Teng, Mohamed Kamal, Oihana Iriondo, Yonatan Amzaleg, Chunqiao Luo, Amal Thomas, Grace Lee, Ching-Ju Hsu, John D. Nguyen, Irene Kang, James Hicks, Andrew Smith, Richard Spoto, and Min Yu

## CANCER “-OMICS”

451  5-Azacytidine Transiently Restores Dysregulated Erythroid Differentiation Gene Expression in TET2-Deficient Erythroleukemia Cells  
Brian M. Reilly, Timothy Luger, Soo Park, Chan-Wang Jang, Eddah Gonzalez-Avalos, Emily C. Wheeler, Minjung Lee, Laura Williamson, Tiffany Tanaka, Dinh Diep, Kun Zhang, Yun Huang, Anjana Rao, and Rafael Bejar

465  Characterization of Clonal Evolution in Microsatellite Unstable Metastatic Cancers through Multiregional Tumor Sequencing  
Russell Bonneville, Anoosha Paruchuri, Michele R. Wing, Melanie A. Krook, Julie W. Reeser, Hui-Zi Chen, Thuy Dao, Eric Samorodnitsky, Amy M. Smith, Lianbo Yu, Nicholas Nowacki, Wei Chen, and Sameek Roychowdhury
ABOUT THE COVER

DNA methylation is commonly dysregulated in a wide array of cancers, and numerous therapeutics have been developed to target this pathway. 5-Azacytidine is a DNA hypomethylating agent that can be particularly effective treatment in TET2-mutated myelodysplastic syndrome patients. The cover depicts hexagonal bins representing the density of CpG loci in a differential analysis of DNA methylation comparing targeted bisulfite sequencing data from TET2 wild-type and TET2 knockout human erythroleukemia cell lines (density gradient from red to blue, with red indicating larger number of CpG loci falling within the hexagonal bin and blue indicating a lesser number). The authors found that TET2 is essential for maintaining low levels of DNA methylation at erythroid-specific transcriptional enhancers, and that 5-Azacytidine can counteract aberrant hypermethylation of these enhancers when TET2 is mutated. For more information, see the article on page 451.
Molecular Cancer Research

19 (3)


Updated version
Access the most recent version of this article at:
http://mcr.aacrjournals.org/content/19/3

E-mail alerts
Sign up to receive free email-alerts related to this article or journal.

Reprints and Subscriptions
To order reprints of this article or to subscribe to the journal, contact the AACR Publications Department at pubs@aacr.org.

Permissions
To request permission to re-use all or part of this article, use this link:
http://mcr.aacrjournals.org/content/19/3.
Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.