

**Highlights of This Issue 1635****REVIEW**

- 1637** The MiTF/TFE Family of Transcription Factors: Master Regulators of Organelle Signaling, Metabolism, and Stress Adaptation  
Logan Slade and Thomas Pulinilkunnil

**CELL CYCLE AND SENESCENCE**

- 1644** Sympathetic Signaling Reactivates Quiescent Disseminated Prostate Cancer Cells in the Bone Marrow  
Ann M. Decker, Younghun Jung, Frank C. Cackowski, Kenji Yumoto, Jingchen Wang, and Russel S. Taichman

**CELL DEATH AND SURVIVAL**

- 1656** Apoptotic Bodies Elicit Gas6-Mediated Migration of AXL-Expressing Tumor Cells  
Annellen J.M. Zweemer, Cory B. French, Joshua Mesfin, Simon Gordonov, Aaron S. Meyer, and Douglas A. Lauffenburger
- 1667** Syngeneic Mouse Models of Oral Cancer Are Effectively Targeted by Anti-CD44-Based NIR-PIT  
Tadanobu Nagaya, Yuko Nakamura, Shuhei Okuyama, Fusa Ogata, Yasuhiro Maruoka, Peter L. Choyke, Clint Allen, and Hisataka Kobayashi

**CHROMATIN, EPIGENETICS, AND RNA REGULATION**

- 1678** FOXD3 Regulates CSC Marker, DCLK1-S, and Invasive Potential: Prognostic Implications in Colon Cancer  
Shubhashish Sarkar, Malaney R. O'Connell, Yoshinaga Okugawa, Brian S. Lee, Yuji Toiyama, Masato Kusunoki, Robert D. Daboval, Ajay Goel, and Pomila Singh

**METABOLISM**

- 1692** B-cell Receptor Signaling Regulates Metabolism in Chronic Lymphocytic Leukemia  
Hima V. Vangapandu, Ondrej Havranek, Mary L. Ayres, Benny Abraham Kaiparettu, Kumudha Balakrishnan, William G. Wierda, Michael J. Keating, R. Eric Davis, Christine M. Stellrecht, and Varsha Gandhi

- 1704** Adipocytes Sequester and Metabolize the Chemotherapeutic Daunorubicin  
Xia Sheng, Jean-Hugues Parmentier, Jonathan Tucci, Hua Pei, Omar Cortez-Toledo, Christina M. Dieli-Conwright, Matthew J. Oberley, Michael Neely, Etan Orgel, Stan G. Louie, and Steven D. Mittelman

- 1714** NAD Synthesis Pathway Interference Is a Viable Therapeutic Strategy for Chondrosarcoma  
Elisabeth F.P. Peterse, Brendy E.W.M. van den Akker, Bertine Niessen, Jan Oosting, Johnny Suijker, Yvonne de Jong, Erik H.J. Danen, Anne-Marie Cleton-Jansen, and Judith V.M.G. Bovée

**GENOMICS**

- 1722** Genomic Analysis of Nasopharyngeal Carcinoma Reveals TME-Based Subtypes  
Li Zhang, Kenzie D. MacIsaac, Ting Zhou, Pei-Yu Huang, Chunlin Xin, Jason R. Dobson, Kun Yu, Derek Y. Chiang, Yue Fan, Marc Pelletier, Yan Wang, Savina Jaeger, Viveksagar Krishnamurthy Radhakrishnan, Lellean JeBailey, Peter Skewes-Cox, Jing Zhang, Wenfeng Fang, Yan Huang, Hongyun Zhao, Yuanyuan Zhao, En Li, Bin Peng, Alan Huang, Glenn Dranoff, Peter S. Hammerman, Jeffrey Engelman, Hans Bitter, Yi-Xin Zeng, and Yao Yao

**ONCOGENES AND TUMOR SUPPRESSORS**

- 1733** The Influential Role of BCL2 Family Members in Synovial Sarcomagenesis  
Jared J. Barrott, Ju-Fen Zhu, Kyllie Smith-Fry, Asia M. Susko, Dakota Nollner, Lance D. Burrell, Amir Pozner, Mario R. Capecchi, Jeffrey T. Yap, Lisa A. Cannon-Albright, Xingming Deng, and Kevin B. Jones
- 1741** Alternative Polyadenylation of *PRELID1* Regulates Mitochondrial ROS Signaling and Cancer Outcomes  
Austin E. Gillen, Heather M. Brechbuhl, Tomomi M. Yamamoto, Enos Kline, Manoj M. Pillai, Jay R. Hesselberth, and Peter Kabos
- 1752** YAP Expression and Activity Are Suppressed by S100A7 via p65/NFκB-mediated Repression of ΔNp63  
Yunguang Li, Fei Kong, Qirui Shao, Rui Wang, Enze Hu, Jin Liu, Chang Jin, Dacheng He, and Xueyuan Xiao

# Table of Contents

**1764** **A First-in-Class TWIST1 Inhibitor with Activity in Oncogene-Driven Lung Cancer**



Zachary A. Yochum, Jessica Cades, Lucia Mazzacurati, Neil M. Neumann, Susheel K. Khetarpal, Suman Chatterjee, Hailun Wang, Myriam A. Attar, Eric H.-B. Huang, Sarah N. Chatley, Katriana Nugent, Ashwin Somasundaram, Johnathan A. Engh, Andrew J. Ewald, Yoon-Jae Cho, Charles M. Rudin, Phuoc T. Tran, and Timothy F. Burns

**1792** **EPAC–RAP1 Axis-Mediated Switch in the Response of Primary and Metastatic Melanoma to Cyclic AMP**



Carlos I. Rodríguez, Edgardo Castro-Pérez, Kirithana Prabhakar, Laura Block, B. Jack Longley, Jaclyn A. Wisinski, Michelle E. Kimple, and Vijayasaradhi Setaluri

## SIGNAL TRANSDUCTION

**1777** **A Novel Notch–YAP Circuit Drives Stemness and Tumorigenesis in Embryonal Rhabdomyosarcoma**

Katherine K. Slemmons, Lisa E.S. Crose, Stefan Riedel, Manuela Sushnitha, Brian Belyea, and Corinne M. Linardic

## CORRECTION

**1803** **Correction: A Transcriptional Program for Detecting TGF $\beta$ -Induced EMT in Cancer**

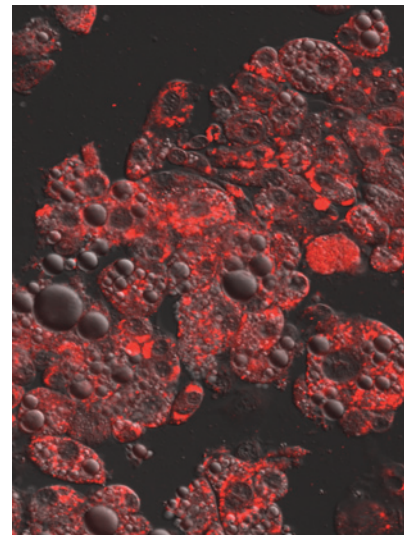
**1804** **Acknowledgment to Reviewers**

AC icon indicates AuthorChoice

For more information please visit [www.aacrjournals.org](http://www.aacrjournals.org)

## ABOUT THE COVER

In this issue, Sheng and colleagues (beginning on page 1704) demonstrate that adipocytes rapidly absorb daunorubicin and other anthracyclines. Daunorubicin, which is naturally fluorescent, as shown in the cover image, accumulates in 3T3-L1 adipocytes after 4 hours in culture at 60 nM initial concentration (image obtained by G.E. Fernandez in the CHLA Cellular Imaging Core). In addition, adipocytes express high levels of aldo-keto reductase and carbonyl reductase enzymes, which metabolize daunorubicin to the largely inactive form, daunorubicinol. Together, this sequestration and inactivation reduces active anthracycline concentrations in the microenvironment and may impair treatment outcome of childhood leukemia and other cancers that reside near adipocytes. These findings may help explain why obese patients with certain cancers have a poorer treatment outcome.



# Molecular Cancer Research

15 (12)

*Mol Cancer Res* 2017;15:1635-1804.

**Updated version** Access the most recent version of this article at:  
<http://mcr.aacrjournals.org/content/15/12>

**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](mailto:pubs@aacr.org).

**Permissions** To request permission to re-use all or part of this article, use this link <http://mcr.aacrjournals.org/content/15/12>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.