

MOLECULAR CANCER RESEARCH

TABLE OF CONTENTS

HIGHLIGHTS

- 165 Selected Articles from This Issue

REVIEWS

- 167 **Cellular Functions of HPV16 E5 Oncoprotein during Oncogenic Transformation**
 Lourdes Gutierrez-Xicotencatl, Adolfo Pedroza-Saavedra, Lilia Chihu-Amparan, Azucena Salazar-Piña, Minerva Maldonado-Gama, and Fernando Esquivel-Guadarrama
- 180 **The Paradoxical Roles of Orphan Nuclear Receptor 4A (NR4A) in Cancer**
 Stephen Safe and Keshav Karki
- 192 **Exploiting Replication Stress as a Novel Therapeutic Intervention**
 Jeffrey C. Martin, Tamara J. Hoegel, Miranda L. Lynch, Anna Woloszyńska, Thomas Melendy, and Joyce E. Ohm

*MCR*RapidIMPACT

- 207 **Combined Targeting of PARG and Wee1 Causes Decreased Cell Survival and DNA Damage in an S-Phase-Dependent Manner**
 Lebaron C. Agostini, Aditi Jain, Alison Shupp, Avinoam Nevler, Grace McCarthy, Karen M. Bussard, Charles J. Yeo, and Jonathan R. Brody

CANCER GENES AND NETWORKS

- 215 **Dual Screen for Efficacy and Toxicity Identifies HDAC Inhibitor with Distinctive Activity Spectrum for BAP1-Mutant Uveal Melanoma**
 Jeffim N. Kuznetsoff, Dawn A. Owens, Andy Lopez, Daniel A. Rodriguez, Nancy T. Chee, Stefan Kurtenbach, Daniel Bilbao, Evan R. Roberts, Claude-Henry Volmar, Claes Wahlestedt, Shaun P. Brothers, and J. William Harbour

- 223 **Transcriptomic Analysis of Diffuse Intrinsic Pontine Glioma (DIPG) Identifies a Targetable ALDH-Positive Subset of Highly Tumorigenic Cancer Stem-like Cells**

Rachel K. Surowiec, Sarah F. Ferris, April Apfelbaum, Carlos Espinoza, Ranjit K. Mehta, Karamoja Monchamp, Veerini R. Sirihorachai, Karan Bedi, Mats Ljungman, and Stefanie Galban

- 240 **Palmitate-Induced IRE1-XBP1-ZEB Signaling Represses Desmoplakin Expression and Promotes Cancer Cell Migration**

Aritro Nath, Amrita Oak, Kevin Y. Chen, Irene Li, R. Chauncey Splichal, Jason Portis, Sean Foster, S. Patrick Walton, and Christina Chan

- 249 **Aggressive B-cell Lymphoma with MYC/TP53 Dual Alterations Displays Distinct Clinicopathobiological Features and Response to Novel Targeted Agents**

Manman Deng, Zijun Y. Xu-Monette, Lan V. Pham, Xudong Wang, Alexandar Tzankov, Xiaosheng Fang, Feng Zhu, Carlo Visco, Govind Bhagat, Karen Dybkaer, April Chiu, Wayne Tam, Youli Zu, Eric D. Hsi, Hua You, Jooryung Huh, Maurilio Ponzoni, Andrés J.M. Ferreri, Michael B. Möller, Benjamin M. Parsons, Fredrick Hagemeister, J. Han van Krieken, Miguel A. Piris, Jane N. Winter, Yong Li, Bing Xu, Phillip Liu, and Ken H. Young

- 261 **FBW7 Inhibits Myeloid Differentiation in Acute Myeloid Leukemia via GSK3-Dependent Ubiquitination of PU.1**

Mukul Mishra, Gatha Thacker, Akshay Sharma, Anil Kumar Singh, Vishal Upadhyay, Sabyasachi Sanyal, Shailendra Prasad Verma, Anil Kumar Tripathi, Madan Lal Brahma Bhatt, and Arun Kumar Trivedi

CELL FATE DECISIONS

- 274 **A Role for the Autophagic Receptor, SQSTM1/p62, in Trafficking NF- κ B/RelA to Nucleolar Aggregates**

Ian T. Lobb, Pierre Morin, Kirsty Martin, Hazel C. Thoms, Jimi C. Wills, Xhordi Lleshi, Karl C.F. Olsen, Rory R. Duncan, and Lesley A. Stark

TABLE OF CONTENTS

- 288 Intraperitoneal Oil Application Causes Local Inflammation with Depletion of Resident Peritoneal Macrophages**
Elisenda Alsina-Sanchis, Ronja Mülfarth, Iris Moll, Carolin Mogler, Juan Rodriguez-Vita, and Andreas Fischer

GENOME MAINTENANCE

- 301 SLX4IP Promotes Telomere Maintenance in Androgen Receptor-Independent Castration-Resistant Prostate Cancer through ALT-like Telomeric PML Localization**
Tawna L. Mangosh, Wisam N. Awadallah, Magdalena M. Grabowska, and Derek J. Taylor

SIGNAL TRANSDUCTION AND FUNCTIONAL IMAGING

- 317 SHOC2 Is a Critical Modulator of Sensitivity to EGFR-TKIs in Non-Small Cell Lung Cancer Cells**
Hideki Terai, Junko Hamamoto, Katsura Emoto, Takeshi Masuda, Tadashi Manabe, Satoshi Kuronuma, Keigo Kobayashi, Keita Masuzawa, Shinnosuke Ikemura, Sohei Nakayama, Ichiro Kawada, Yusuke Suzuki, Osamu Takeuchi, Yukio Suzuki, Sumio Ohtsuki, Hiroyuki Yasuda, Kenzo Soejima, and Koichi Fukunaga

- 329 Breast Tumor Kinase (Brk/PTK6) Mediates Advanced Cancer Phenotypes via SH2-Domain Dependent Activation of RhoA and Aryl Hydrocarbon Receptor (AhR) Signaling**
Amy R. Dwyer, Carlos Perez Kerkvliet, Raisa I. Krutilina, Hilaire C. Playa, Deanna N. Parke, Warner A. Thomas, Branden A. Smeester, Branden S. Moriarity, Tiffany N. Seagroves, and Carol A. Lange

TUMOR MICROENVIRONMENT AND IMMUNOBIOLOGY

- 346 Studying Immunotherapy Resistance in a Melanoma Autologous Humanized Mouse Xenograft**
J. Jason Morton, Nathaniel Alzofon, Stephen B. Keysar, Tugs-Saikhan Chimed, Julie Reisinger, Loni Perrenoud, Phuong N. Le, Cera Nieto, Karina Gomez, Bettina Miller, Randi Yeager, Dexiang Gao, Aik-Choon Tan, Hilary Somerset, Theresa Medina, Xiao-Jing Wang, Jing H. Wang, William Robinson, Dennis R. Roop, Rene Gonzalez, and Antonio Jimeno

ABOUT THE COVER

The use of oils as a carrier for lipophilic drugs during intraperitoneal injection is a common practice in biomedical research, but their differential effects on the microenvironment of the injection site has not been studied. The cover depicts macrophages incubated with vegetal oil, which induces cell death by either apoptosis or pyroptosis depending on the oil used (blue, live cells; green, apoptotic cells; red, necrotic cells). The authors conclude that careful selection of carrier oils based on experimental context is critical to the proper interpretation of data derived from intraperitoneal injection models. For more information, see the Highlight on page 165 and the article on page 288.

