# Molecular Cancer Research

## Table of Contents

### Highlights of This Issue 1415

#### REVIEW

1417  Malignant Peripheral Nerve Sheath Tumors: From Epigenome to Bedside
Justin Korfhage and David B. Lombard

1429  Evaluation of Tumor Cell–Tumor Microenvironment Component Interactions as Potential Predictors of Patient Response to Napabucasin
An-Yun Chang, Eric Hsu, Jaimin Patel, Yiqun Li, Minjie Zhang, Haruhisa Iguchi, and Harry A. Rogoff

### CANCER GENES AND NETWORKS

1435  Somatic Hypermutation of the YAP Oncogene in a Human Cutaneous Melanoma
Xiaomeng Zhang, Jian Zhong Tang, Ismael A. Vergara, Youfang Zhang, Pacman Szeto, Lie Yang, Christopher Mintoff, Andrew Colebatch, Lachlan McIntosh, Katrina A. Mitchell, Evangeline Shaw, Helen Rizos, Georgina V. Long, Nicholas Hayward, Grant A. McArthur, Anthony T. Papenfuss, Kieran F. Harvey, and Mark Shackleton

1440  The PKR-Like Endoplasmic Reticulum Kinase Promotes the Dissemination of Myc-Induced Leukemic Cells
Jun Gui, Kanstantsin V. Katlinski, Constantinos Koumenis, J. Alan Diehl, and Serge Y. Fuchs

1459  TP53 Mutation by CRISPR System Enhances the Malignant Potential of Colon Cancer
Sho Watanabe, Kiihiro Tachiya, Ryu Nishimura, Tomoaki Shirasaki, Nobuhiko Katsukura, Shuji Hibiya, Ryuchi Okamoto, Tetsuya Nakamura, and Mamoru Watanabe

1468  The Pluripotency Regulator PRDM14 Requires Hematopoietic Regulator CBFA2T3 to Initiate Leukemia in Mice
Lauren J. Tracey, Travis Brooke-Bisschop, Pascal W.T.C. Jansen, Eric I. Campos, Michiel Vermeulen, and Monica J. Justice

### CANCER "-OMICS"

1480  Paracrine Interaction of Cancer Stem Cell Populations Is Regulated by the Senescence-Associated Secretory Phenotype (SASP)
Angelica M. Lagunas, Marybeth Francis, Nisha B. Maniar, Gergana Nikolova, Jianchun Wu, and David L. Crowe

### CELL FATE DECISIONS

1503  GSK2801, a BAZ2/BRD9 Bromodomain Inhibitor, Synergizes with BET Inhibitors to Induce Apoptosis in Triple-Negative Breast Cancer

1519  Hyperphosphorylation of CDH1 in Glioblastoma Cancer Stem Cells Attenuates APC/CCDH1 Activity and Pharmacologic Inhibition of APC/CCDH1/CDC20 Compromises Viability
Kuntal De, Treg M. Grubb, Abigail A. Zalenski, Kayla E. Pfaff, Debjani Pal, Shubhra Majumder, Matthew K. Summers, and Monica Venere

### METABOLISM

1531  Adaptation to HIF1α Deletion in Hypoxic Cancer Cells by Upregulation of GLUT14 and Creatine Metabolism
Alessandro Valli, Matteo Morotti, Christos E. Zois, Patrick K. Albers, Tomoyoshi Soga, Katharina Feldinger, Roman Fischer, Martin Frejno, Alan McIntyre, Esther Bridges, Syed Haider, Francesca M. Buffa, Dilair Baban, Miguel Rodriguez, Oscar Yanes, Hannah J. Whittington, Hannah A. Lake, Sevasti Zervou, Craig A. Lygate, Benedikt M. Kessler, and Adrian L. Harris
1545 Optical Imaging of Glucose Uptake and Mitochondrial Membrane Potential to Characterize Her2 Breast Tumor Metabolic Phenotypes
Megan C. Madonna, Douglas B. Fox, Brian T. Crouch, Jihong Lee, Caigang Zhu, Amy F. Martinez, James V. Alvarez, and Nirmala Ramanujam

NEW HORIZONS IN CANCER BIOLOGY

1556 Dual TGFβ/BMP Pathway Inhibition Enables Expansion and Characterization of Multiple Epithelial Cell Types of the Normal and Cancerous Breast
Mayuri Prasad, Brijesh Kumar, Poornima Bhat-Nakshatri, Manjushree Anjanappa, George Sandusky, Kathy D. Miller, Anna Maria Storniolo, and Harikrishna Nakshatri

ABOUT THE COVER
Hippo pathway signaling through hyperactivated YAP has been shown to promote aggressive phenotypes in uveal melanoma, but its role in cutaneous melanoma is poorly understood. In this issue, Zhang and colleagues demonstrate that YAP is upregulated and hyperactivated in most premalignant melanocytic nevi and malignant melanoma lesions, and it presents a potential therapeutic target in a subset of melanoma patients. Moreover, the authors provide clinical evidence for the first known activating YAP mutations in human cancer. See the article beginning on page 1435 for more information.

The cover depicts co-immunofluorescence staining of a clinical case of cutaneous melanoma (red, Melan-A; green, YAP1; blue, nuclei stained with DAPI).