Highlights of This Issue 1

PERSPECTIVE

3 Lung-Enriched Mutations in the p53 Tumor Suppressor: A Paradigm for Tissue-Specific Gain of Oncogenic Function
Julie A. Barta and Steven B. McMahon

CELL CYCLE AND SENESCENCE

10 Phosphatase 1 Nuclear Targeting Subunit (PNUTS) Regulates Aurora Kinases and Mitotic Progression
Feifei Wang, Ling Wang, Laura A. Fisher, Chunling Li, Weidong Wang, and Aimin Peng

CELL DEATH AND SURVIVAL

20 Endothelial Cells Promote Colorectal Cancer Cell Survival by Activating the HER3-AKT Pathway in a Paracrine Fashion
Rui Wang, Rajat Bhattacharya, Xiangcang Ye, Fan Fan, Delphine R. Boulbes, and Lee M. Ellis

CHROMATIN, EPIGENETICS, AND RNA REGULATION

30 Reversal of Triple-Negative Breast Cancer EMT by miR-200c Decreases Tryptophan Catabolism and a Program of Immunosuppression

DNA DAMAGE AND REPAIR

42 Repurposing of mTOR Complex Inhibitors Attenuates MCL-1 and Sensitizes to PARP Inhibition
Abid R. Mattoo, Alex Joun, and J. Milburn Jessup

GENOMICS

54 Combining Homologous Recombination and Phosphopeptide-binding Data to Predict the Impact of BRCA1 BRCT Variants on Cancer Risk
Ambre Petitot, Elodie Dardillac, Eric Jacquet, Naima Nihri, Josée Guirouillu-Barbat, Patrick Julien, Ismail Bouazzouali, Dorine Bonne, Jean Feunteun, Jeff A. Schnell, Philippe Lafitte, Jean-Christophe Aude, Catherine Noguès, Etienne Rouleau, Rosette Liderreu, Bernard S. Lopez, Sophie Zinn-Justin, and Sandrine M. Caputo, on behalf of the UNICANCER Genetic Group BRCA network

70 Human Organoids Share Structural and Genetic Features with Primary Pancreatic Adenocarcinoma Tumors

84 Integrative Epigenetic and Gene Expression Analysis of Renal Tumor Progression to Metastasis
Hye-Young Nam, Darshan S. Chandrashekar, Anirban Kundu, Sandeep Shelat, Eun-Young Kho, Guru Sompavde, Gurudatta Naik, Pooja Ghatalia, Carolina B. Livi, Soonyanarayana Varambally, and Sunil Sudarshan

97 Genomic Alterations Associated with Recurrence and TNBC Subtype in High-Risk Early Breast Cancers
Timothy R. Wilson, Aksata R. Udyavar, Ching-Wei Chang, Jil M. Spierke, Juno Aimi, Heidi M. Savage, Anneleen Daemen, Joyce A. O’Shaughnessy, Richard Bourgon, and Mark R. Lackner

109 A Leukocyte Infiltration Score Defined by a Gene Signature Predicts Melanoma Patient Prognosis
Yanding Zhao, Evelien Schaelma, Ivan P. Gorlov, Eva Hernando, Nancy E. Thomas, Ronglai Shen, Mary Jo Turk, Marianne Berwick, Christopher I. Amos, and Chao Cheng

120 Establishment and Genetic Landscape of Precancer Cell Model Systems from the Head and Neck Mucosal Lining
D. Vicky de Boer, Arjen Brink, Marijke Buijze, Marijke Sigter-van Walsum, Keith D. Hunter, Bauke Ylstra, Elisabeth Bloemena, C. René Leemans, and Ruud H. Brakenhoff
METABOLISM

131 A Role for Tryptophan-2,3-dioxygenase in CD8 T-cell Suppression and Evidence of Tryptophan Catabolism in Breast Cancer Patient Plasma

140 De Novo Fatty Acid Synthesis-Driven Sphingolipid Metabolism Promotes Metastatic Potential of Colorectal Cancer
Naser Jafari, James Drury, Andrew J. Morris, Fredrick O. Onono, Payton D. Stevens, Tianyan Gao, Jinpeng Liu, Chi Wang, Eun Y. Lee, Heidi L. Weiss, B. Mark Evers, and Yekaterina Y. Zaytseva

ONCOGENES AND TUMOR SUPPRESSORS

153 p53–Pirh2 Complex Promotes Twist1 Degradation and Inhibits EMT
Yang Yang-Hartwich, Roslyn Tedja, Cai M. Roberts, Jamie Goodner-Bingham, Carlos Cardenas, Marta Curea, Natalia J. Sumi, Ayeshia B. Alvero, Carlotta A. Glackin, and Gil Mor

165 Increased Genetic Instability and Accelerated Progression of Colitis-Associated Colorectal Cancer through Intestinal Epithelium-specific Deletion of Klf4
Vincent W. Yang, Yang Liu, Julie Kim, Kenneth R. Shroyer, and Agnieszka B. Bialkowska

177 Mutational Landscape of Ovarian Adult Granulosa Cell Tumors from Whole Exome and Targeted TERT Promoter Sequencing
Maria Alexiadis, Simone M. Rowley, Simon Chu, Dilya T.H. Leung, Colin J.R. Stewart, Kaushalya C. Amarasinghe, Ian G. Campbell, and Peter J. Fuller

186 p53 Function Is Compromised by Inhibitor 2 of Phosphatase 2A in Sonic Hedgehog Medulloblastoma
Yun Wei, Victor Maximov, Sorana A. Morrissy, Michael D. Taylor, David C. Pallas, and Anna Marie Kenney

199 Hyperactivation of MAPK Signaling Is Deleterious to RAS/RAF-mutant Melanoma
Grace P. Leung, Tianhuo Feng, Frederic D. Sigoillot, Felipe C. Geyer, Matthew D. Shirley, David A. Ruddy, Daniel P. Rakier, Alyson K. Freeman, Jeffrey A. Engelman, Mariela Jaskelioff, and Darrin D. Stuart

SIGNAL TRANSDUCTION

212 Alectinib Resistance in ALK-Rearranged Lung Cancer by Dual Salvage Signaling in a Clinically Paired Resistance Model
Takahiro Tsui, Hiroaki Ozasa, Wataru Aoki, Shunsuke Aburaya, Tomoko Funazo, Koh Furugaki, Yasushi Yoshimura, Hitomi Ajimizu, Ryoko Okutani, Yuto Yasuda, Takashi Nomizo, Kiyoshi Uematsu, Koichi Hasegawa, Hiroonori Yoshida, Yoshihata Yagi, Hiroki Nagai, Yuichi Sakamoto, Mitsuyoshi Ueda, Toyohiro Hirai, and Young Hak Kim

225 The Role of Alcohol-Induced Golgi Fragmentation for Androgen Receptor Signaling in Prostate Cancer
Sonia Manca, Cole P. Frisbie, Chad A. LaGrange, Carol A. Casey, Jean-Jack M. Riethoven, and Armen Petrosyan

238 SOX9/FXYD3/Src Axis Is Critical for ERα Breast Cancer Stem Cell Function
Yue Xue, Lihua Lai, Wenwen Lian, Xintao Tu, Jiaojiao Zhou, Ping Dong, Dan Su, Xiaojia Wang, Xuetao Cao, Yiding Chen, and Qingqing Wang

250 Targeting TAZ-Driven Human Breast Cancer by Inhibiting a SKP2-p27 Signaling Axis
He Shen, Nuo Yang, Alexander Truskinovskiy, Yammin Chen, Ashley L. Mussell, Norma J. Nowak, Lester Koblizk, Costa Frangou, and Jianmin Zhang

263 Targeting the MIF/CXCR7/AKT Signaling Pathway in Castration-Resistant Prostate Cancer
Shahrzad Rafiei, Bin Gui, Jiaxin Wu, X. Shirley Liu, Adam S. Kibel, and Li Jia

277 TGFβ1 Cell Cycle Arrest Is Mediated by Inhibition of MCM Assembly in Rb-Deficient Conditions
Brook S. Nepon-Sixt and Mark G. Alexandrow

289 Targeting of SGK1 by miR-576-3p Inhibits Lung Adenocarcinoma Migration and Invasion
Evan J. Greenawalt, Mick D. Edmonds, Neha Jain, Clare M. Adams, Ramkrishna Mitra, and Christine M. Eischen

299 miR-122-5p Expression and Secretion in Melanoma Cells Is Amplified by the LPAR3 SH3–Binding Domain to Regulate Wnt1
Chanel C. Byrnes, Wei Jia, Ali A. Alshamrani, Sudeep S. Kuppa, and Mandi M. Murph
TUMOR MICROENVIRONMENT

310 A Novel Approach for Image-Guided 131I Therapy of Pancreatic Ductal Adenocarcinoma Using Mesenchymal Stem Cell-Mediated NIS Gene Delivery

321 The Aged Microenvironment Influences the Tumorigenic Potential of Malignant Prostate Epithelial Cells

332 Acknowledgment to Reviewers

ABOUT THE COVER

In this issue, Manca and colleagues (beginning on page 225) demonstrate for the first time the molecular link between alcohol consumption and the progression of prostate cancer. Using both human tissue, from non-alcoholic or alcoholic patients, and ethanol-fed animals, the authors demonstrate that ethanol is able to enhance the proliferation of prostate cancer cells and their metastatic potential. Specifically, they found that ethanol-induced Golgi fragmentation is associated with the relocation of glycogen synthase kinase β (GSK3β) from Golgi to the cytoplasm, thus activating the HDAC6-HSP90-AR pathway. The cover image shows that the fluorescence signal of GSK3β (red) segregated from Golgi membranes (stained by giantin, green) in the tissue section from a patient with prostate adenocarcinoma (Gleason 10).
Molecular Cancer Research

17 (1)


| Updated version | Access the most recent version of this article at: http://mcr.aacrjournals.org/content/17/1 |

| 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/17/1. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site. |