

BREAKING ADVANCES

- 3855 | **Highlights from Recent Cancer Literature**

REVIEWS

- 3857 | **Receptor Tyrosine Kinase Coactivation Networks in Cancer**
Alexander M. Xu and Paul H. Huang
- 3861 | **More Modifiers Move on DNA Damage**
Joanna R. Morris

MEETING REPORT

- 3864 | **Metabolism and Cancer in La Jolla**
Reuben J. Shaw, Ronald M. Evans, and M. Celeste Simon

PRIORITY REPORTS

- 3870 | **FOXC1 Is a Potential Prognostic Biomarker with Functional Significance in Basal-like Breast Cancer**
Partha S. Ray, Jinhua Wang, Ying Qu, Myung-Shin Sim, Jaime Shamonki, Sanjay P. Bagaria, Xing Ye, Bingya Liu, David Elashoff, Dave S. Hoon, Michael A. Walter, John W. Martens, Andrea L. Richardson, Armando E. Giuliano, and Xiaojiang Cui
- 3877 | **Loss of p130 Accelerates Tumor Development in a Mouse Model for Human Small-Cell Lung Carcinoma**
Bethany E. Schaffer, Kwon-Sik Park, Gloria Yiu, Jamie F. Conklin, Chenwei Lin, Deborah L. Burkhardt, Anthony N. Karnezis, E. Alejandro Sweet-Cordero, and Julien Sage
- 3884 | **Direct Activation of Emmprin and Associated Pathogenesis by an Oncogenic Herpesvirus**
Zhiqiang Qin, Lu Dai, Mark G. Slomiany, Bryan P. Toole, and Chris Parsons

- 3890 | **Identification of the ENT1 Antagonists Dipyridamole and Dilazep as Amplifiers of Oncolytic Herpes Simplex Virus-1 Replication**
Brent J. Passer, Tooba Cheema, Bingsen Zhou, Hiroaki Wakimoto, Cecile Zupa, Mani Razmjoo, Jason Sarte, Shulin Wu, Chin-lee Wu, James W. Noah, Qianjun Li, John K. Buolamwini, Yun Yen, Samuel D. Rabkin, and Robert L. Martuza

INTEGRATED SYSTEMS AND TECHNOLOGIES

- 3896 | **β -Lapachone Micellar Nanotherapeutics for Non-Small Cell Lung Cancer Therapy**
Elvin Blanco, Erik A. Bey, Chalermchai Khemtong, Su-Geun Yang, Jagadeesh Setti-Guthi, Huabing Chen, Chase W. Kessinger, Kevin A. Carnevale, William G. Bornmann, David A. Boothman, and Jinming Gao

MICROENVIRONMENT AND IMMUNOLOGY

- 3905 | ***In vivo* Dynamics and Distinct Functions of Hypoxia in Primary Tumor Growth and Organotropic Metastasis of Breast Cancer**
Xin Lu, Carol H. Yan, Min Yuan, Yong Wei, Guohong Hu, and Yibin Kang
- 3915 | **Combining CD19 Redirection and Alloantigenization to Generate Tumor-Specific Human T Cells for Allogeneic Cell Therapy of B-Cell Malignancies**
Jeff K. Davies, Harjeet Singh, Helen Huls, Dongin Yuk, Dean A. Lee, Partow Kebriaei, Richard E. Champlin, Lee M. Nadler, Eva C. Guinan, and Laurence J.N. Cooper
- 3925 | **Three-Dimensional Cell Growth Confers Radioresistance by Chromatin Density Modification**
Katja Storch, Iris Eke, Kerstin Borgmann, Mechthild Krause, Christian Richter, Kerstin Becker, Evelin Schröck, and Nils Cordes

3935 **Molecular Imaging of CXCR4 Receptor Expression in Human Cancer Xenografts with [⁶⁴Cu]AMD3100 Positron Emission Tomography**
Sridhar Nimmagadda, Mrudula Pullambhatla, Kristie Stone, Gilbert Green, Zaver M. Bhujwalla, and Martin G. Pomper

3945 **4-1BB Ligand as an Effective Multifunctional Immunomodulator and Antigen Delivery Vehicle for the Development of Therapeutic Cancer Vaccines**
Rajesh K. Sharma, Rich-Henry Schabowsky, Abhishek K. Srivastava, Kutlu G. Elpek, Shrahan Madireddi, Hong Zhao, Zhenping Zhong, Robert W. Miller, Kathryn J. MacLeod, Esma S. Yolcu, and Haval Shirwan

3955 **Expression of LIGHT/TNFSF14 Combined with Vaccination against Human Papillomavirus Type 16 E7 Induces Significant Tumor Regression**
Shreya Kanodia, Diane M. Da Silva, Tigran Karamanukyan, Lies Bogaert, Yang-Xin Fu, and W. Martin Kast

MOLECULAR AND CELLULAR PATHOBIOLOGY

3965 **Deregulated Estrogen Receptor α and p53 Heterozygosity Collaborate in the Development of Mammary Hyperplasia**
Edgar S. Díaz-Cruz and Priscilla A. Furth

3975 **Identification of ASF/SF2 as a Critical, Allele-Specific Effector of the Cyclin D1b Oncogene**
Nicholas A. Olshavsky, Clay E.S. Comstock, Matthew J. Schiewer, Michael A. Augello, Terry Hyslop, Claudio Sette, Jinsong Zhang, Linda M. Parysek, and Karen E. Knudsen

3985 **AML1/ETO Proteins Control POU4F1/BRN3A Expression and Function in t(8;21) Acute Myeloid Leukemia**
Jenny Dunne, Duncan M. Gascoyne, T. Andrew Lister, Hugh J.M. Brady, Olaf Heidenreich, and Bryan D. Young

3996 **Disulfiram Treatment Facilitates Phosphoinositide 3-Kinase Inhibition in Human Breast Cancer Cells *In vitro* and *In vivo***
Haijun Zhang, Di Chen, Jonathan Ringler, Wei Chen, Qiuzhi Cindy Cui, Stephen P. Ethier, Q. Ping Dou, and Guojun Wu

4005 **Activation of NF- κ B Signaling by Inhibitor of NF- κ B Kinase β Increases Aggressiveness of Ovarian Cancer**
Lidia Hernandez, Sarah C. Hsu, Ben Davidson, Michael J. Birrer, Elise C. Kohn, and Christina M. Annunziata

4015 **Hypoxia Modulates EWS-FLI1 Transcriptional Signature and Enhances the Malignant Properties of Ewing's Sarcoma Cells *In vitro***
Dave N.T. Aryee, Stephan Niedan, Maximilian Kauer, Raphaela Schwentner, Idriss M. Bennani-Baiti, Jozef Ban, Karin Muehlbacher, Michael Kreppel, Robert L. Walker, Paul Meltzer, Christopher Poremba, Reinhard Kofler, and Heinrich Kovar

4024 **Involvement of the Tubulin Tyrosine Ligase-Like Family Member 4 Polyglutamylase in PELP1 Polyglutamylation and Chromatin Remodeling in Pancreatic Cancer Cells**
Kotoe Kashiwaya, Hidewaki Nakagawa, Masayo Hosokawa, Yasuo Mochizuki, Koji Ueda, Lianhua Piao, Suyoun Chung, Ryuji Hamamoto, Hidetoshi Eguchi, Hiroaki Ohigashi, Osamu Ishikawa, Carsten Janke, Yasuhisa Shinomura, and Yusuke Nakamura

4034 **Δ Np63 α Repression of the *Notch1* Gene Supports the Proliferative Capacity of Normal Human Keratinocytes and Cervical Cancer Cells**
Takashi Yugawa, Mako Narisawa-Saito, Yuki Yoshimatsu, Kei Haga, Shin-ichi Ohno, Nagayasu Egawa, Masatoshi Fujita, and Tohru Kiyono

THERAPEUTICS, TARGETS, AND CHEMICAL BIOLOGY

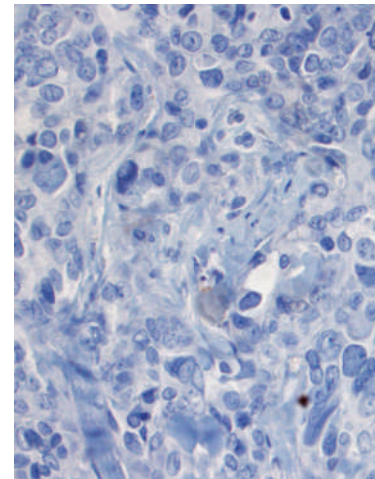
4045 **Preclinical Evaluation of an ¹³¹I-Labeled Benzamide for Targeted Radiotherapy of Metastatic Melanoma**
John L. Joyal, John A. Barrett, John C. Marquis, Jianqing Chen, Shawn M. Hillier, Kevin P. Maresca, Marie Boyd, Kenneth Gage, Sridhar Nimmagadda, James F. Kronauge, Matthias Friebe, Ludger Dinkelborg, James B. Stubbs, Michael G. Stabin, Rob Mairs, Martin G. Pomper, and John W. Babich

- 4054 **Human Enhancer of Filamentation 1 Is a Mediator of Hypoxia-Inducible Factor-1 α -Mediated Migration in Colorectal Carcinoma Cells**
Sun-Hee Kim, Dianren Xia, Sang-Wook Kim, Vijaykumar Holla, David G. Menter, and Raymond N. DuBois
- 4064 **Epigenetic Silencing of the Sulfate Transporter Gene *DTDST* Induces Sialyl Lewis^x Expression and Accelerates Proliferation of Colon Cancer Cells**
Akiko Yusa, Keiko Miyazaki, Naoko Kimura, Mineko Izawa, and Reiji Kannagi
- 4074 **Oncogene-Induced Sensitization to Chemotherapy-Induced Death Requires Induction as well as Deregulation of E2F1**
G. Vignir Helgason, Jim O'Prey, and Kevin M. Ryan
- 4081 ***In vitro* Progression of Human Papillomavirus 16 Episome-Associated Cervical Neoplasia Displays Fundamental Similarities to Integrant-Associated Carcinogenesis**
Elizabeth Gray, Mark R. Pett, Dawn Ward, David M. Winder, Margaret A. Stanley, Ian Roberts, Cinzia G. Scarpini, and Nicholas Coleman
- 4092 **Extranuclear Functions of ER Impact Invasive Migration and Metastasis by Breast Cancer Cells**
Dimple Chakravarty, Sujit S. Nair, Bindu Santhamma, Binoj C. Nair, Long Wang, Abhik Bandyopadhyay, Joseph K. Agyin, Darrell Brann, Lu-Zhe Sun, I-Tien Yeh, Francis Y. Lee, Rajeshwar Rao Tekmal, Rakesh Kumar, and Ratna K. Vadlamudi
- 4102 **Estrogen-Dependent and Estrogen-Independent Mechanisms Contribute to AIB1-Mediated Tumor Formation**
Maria I. Torres-Arzayus, Jin Zhao, Roderick Bronson, and Myles Brown
- 4112 **Wip1 Directly Dephosphorylates γ -H2AX and Attenuates the DNA Damage Response**
Hyukjin Cha, Julie M. Lowe, Henghong Li, Ji-Seon Lee, Galina I. Belova, Dmitry V. Bulavin, and Albert J. Fornace, Jr.
- 4123 **Role of H₂O₂ in *RET/PTC1* Chromosomal Rearrangement Produced by Ionizing Radiation in Human Thyroid Cells**
Rabii Ameziane-El-Hassani, Myriem Boufraqueh, Odile Lagente-Chevallier, Urbain Weyemi, Monique Talbot, Didier M  tievier, Fran  oise Courtin, Jean-Michel Bidart, Mohammed El Mzibri, Martin Schlumberger, and Corinne Dupuy
- 4133 **Heterogeneity of Regional Redox Status and Relation of the Redox Status to Oxygenation in a Tumor Model, Evaluated Using Electron Paramagnetic Resonance Imaging**
Keizo Takeshita, Kumiko Kawaguchi, Kaori Fujii-Aikawa, Megumi Ueno, Shoko Okazaki, Mitsuhiro Ono, Murali C. Krishna, Periannan Kuppusamy, Toshihiko Ozawa, and Nobuo Ikota
- 4141 **Matrix Metalloproteinase-14 (MT1-MMP)-Mediated Endoglin Shedding Inhibits Tumor Angiogenesis**
Lukas J.A.C. Hawinkels, Patricia Kuiper, Eliza Wiercinska, Hein W. Verspaget, Zhen Liu, Evangelia Pardali, Cornelis F.M. Sier, and Peter ten Dijke
- 4151 **Targeting Fibroblast Growth Factor Receptors Blocks PI3K/AKT Signaling, Induces Apoptosis, and Impairs Mammary Tumor Outgrowth and Metastasis**
Julien H. Dey, Fabrizio Bianchi, Johannes Voshol, Debora Bonenfant, Edward J. Oakeley, and Nancy E. Hynes
- 4163 **Signatures of MicroRNAs and Selected MicroRNA Target Genes in Human Melanoma**
Demetra Philippidou, Martina Schmitt, Dirk Moser, Christiane Margue, Petr V. Nazarov, Arnaud Muller, Laurent Vallar, Dorothee Nashan, Iris Behrmann, and Stephanie Kreis
- 4174 **Epidermal Growth Factor Receptor and Mutant p53 Expand an Esophageal Cellular Subpopulation Capable of Epithelial-to-Mesenchymal Transition through ZEB Transcription Factors**
Shinya Ohashi, Mitsuteru Natsuizaka, Gabrielle S. Wong, Carmen Z. Michaylira, Katharine D. Grugan, Douglas B. Stairs, Jiri Kalabis, Maria E. Vega, Ross A. Kalman, Momo Nakagawa, Andres J. Klein-Szanto, Meenhard Herlyn, J. Alan Diehl, Anil K. Rustgi, and Hiroshi Nakagawa

4185	<p>Deficiency in p53 but not Retinoblastoma Induces the Transformation of Mesenchymal Stem Cells <i>In vitro</i> and Initiates Leiomyosarcoma <i>In vivo</i> Ruth Rubio, Javier García-Castro, Iván Gutiérrez-Aranda, Jesús Paramio, Mirentxu Santos, Purificación Catalina, Paola E. Leone, Pablo Menendez, and René Rodríguez</p>	4214	<p>Hypoxia Induces Trimethylated H3 Lysine 4 by Inhibition of JARID1A Demethylase Xue Zhou, Hong Sun, Haobin Chen, Jiri Zavadil, Thomas Kluz, Adriana Arita, and Max Costa</p>
4195	<p>The α-Receptor for Platelet-Derived Growth Factor Confers Bone-Metastatic Potential to Prostate Cancer Cells by Ligand- and Dimerization-Independent Mechanisms Mike R. Russell, Qingxin Liu, Hetian Lei, Andrius Kazlauskas, and Alessandro Fatatis</p>	4222	<p>The Tumor-Suppressive Function of Connexin43 in Keratinocytes Is Mediated in Part via Interaction with Caveolin-1 Stéphanie Langlois, Kyle N. Cowan, Qing Shao, Bryce J. Cowan, and Dale W. Laird</p>
4204	<p>Transforming Growth Factor-β Regulator SnoN Modulates Mammary Gland Branching Morphogenesis, Postlactational Involution, and Mammary Tumorigenesis Nadine S. Jahchan, Young-Hyun You, William J. Muller, and Kunxin Luo</p>	4233	<p>Phospholipase D1 Drives a Positive Feedback Loop to Reinforce the Wnt/β-Catenin/TCF Signaling Axis Dong Woo Kang, Soung-Hoon Lee, Jeong Whan Yoon, Won-Sang Park, Kang-Yell Choi, and Do Sik Min</p>
		4243	<p>Role of RUNX3 in Bone Morphogenetic Protein Signaling in Colorectal Cancer Cecilia Wei Lin Lee, Kosei Ito, and Yoshiaki Ito</p>

ABOUT THE COVER

The poor prognosis of basal-like breast cancer (BLBC) reflects its uncertain molecular basis. In the present study, Ray and colleagues show that forkhead box (FOX) transcription factor C1 regulates the growth, migration, and invasion of BLBC cells. Microarray analyses revealed consistent and exclusive expression of FOXC1 in BLBC versus other molecular types of breast cancer. Significantly, FOXC1 expression in BLBC was inversely correlated with overall survival and with brain metastasis-free survival. In this figure, immunohistochemical staining demonstrates the nuclear localization of FOXC1 in estrogen receptor-negative breast cancer. For details, see the article by Ray and colleagues on page 3870 of this issue.



Cancer Research

The Journal of Cancer Research (1916–1930) | The American Journal of Cancer (1931–1940)

70 (10)

Cancer Res 2010;70:3855-4252.

Updated version Access the most recent version of this article at:
<http://cancerres.aacrjournals.org/content/70/10>

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://cancerres.aacrjournals.org/content/70/10>.
Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.