

Cancer Research

A Journal of the American Association for Cancer Research

Volume 68 • Number 19

October 1, 2008 • Pages 7693–8190

AACR Centennial Series

The History of Tumor Virology. Ronald T. Javier and Janet S. Butel7693

Review

Pancreatic Stellate Cells and Pancreatic Cancer Cells: An Unholy Alliance. Alain Vonlaufen, Phoebe A. Phillips, Zhihong Xu, David Goldstein, Romano C. Pirola, Jeremy S. Wilson, and Minoti V. Apte7707

Priority Reports

The Mammary Progenitor Marker CD61/ β 3 Integrin Identifies Cancer Stem Cells in Mouse Models of Mammary Tumorigenesis. François Vaillant, Marie-Liesse Asselin-Labat, Mark Shackleton, Natasha C. Forrest, Geoffrey J. Lindeman, and Jane E. Visvader7711

Mutations in the Focal Adhesion Targeting Region of Deleted in Liver Cancer-1 Attenuate Their Expression and Function. Yi-Chun Liao, Yi-Ping Shih, and Su Hao Lo7718

SCL/TAL1 Interrupting Locus Derepresses GLI1 from the Negative Control of Suppressor-of-Fused in Pancreatic Cancer Cell. Kenji Kasai, Shingo Inaguma, Akiko Yoneyama, Kazuhiro Yoshikawa, and Hiroshi Ikeda7723

Identification of Transformation-Related Pathways in a Breast Epithelial Cell Model Using a Ribonomics Approach. Krystyna Mazan-Mamczarz, Patrick R. Hagner, Bojie Dai, William H. Wood, Yongqing Zhang, Kevin G. Becker, Zhenqui Liu, and Ronald B. Gartenhaus7730

Activation of Signal Transducer and Activator of Transcription 3 through a Phosphomimetic Serine 727 Promotes Prostate Tumorigenesis Independent of Tyrosine 705 Phosphorylation. Haiyan R. Qin, Han-Jong Kim, Joon-Young Kim, Elaine M. Hurt, George J. Klarmann, Brian T. Kawasaki, Maria A. Duhagon Serrat, and William L. Farrar7736

Cell, Tumor, and Stem Cell Biology

The Polycomb Gene Product BMI1 Contributes to the Maintenance of Tumor-Initiating Side Population Cells in Hepatocellular Carcinoma. Tetsuhiro Chiba, Satoru Miyagi, Atsunori Saraya, Ryutarō Aoki, Atsuyoshi Seki, Yohei Morita, Yutaka Yonemitsu, Osamu Yokosuka, Hideki Taniguchi, Hiromitsu Nakauchi, and Atsushi Iwama7742

Prostaglandin E₂ Regulates Tumor Angiogenesis in Prostate Cancer. Shalini Jain, Goutam Chakraborty, Remya Raja, Smita Kale, and Gopal C. Kundu7750

Ectopic Expression of P-Cadherin Correlates with Promoter Hypomethylation Early in Colorectal Carcinogenesis and Enhanced Intestinal Crypt Fission *In vivo*. Anita Milicic, Lea-Anne Harrison, Robert A. Goodlad, Robert G. Hardy, Anna M. Nicholson, Michal Presz, Oliver Sieber, Sonia Santander, James H. Pringle, Nikki Mandir, Philip East, Jolanta Obszynska, Scott Sanders, Elena Piazzuelo, Jacqui Shaw, Rebecca Harrison, Ian P. Tomlinson, Stuart A.C. McDonald, Nicholas A. Wright, and Janusz A.Z. Jankowski7760

Prolyl Isomerase Cyclophilin A Regulation of Janus-Activated Kinase 2 and the Progression of Human Breast Cancer. Jiamao Zheng, Jennifer E. Koblinski, Laura V. Dutson, Yvonne B. Feeney, and Charles V. Clevenger7769

Breast Tumor Kinase Phosphorylates p190RhoGAP to Regulate Rho and Ras and Promote Breast Carcinoma Growth, Migration, and Invasion. Che-Hung Shen, Hsin-Yi Chen, Ming-Shien Lin, Fang-Yen Li, Cheng-Chi Chang, Min-Liang Kuo, Jeffrey Settleman, and Ruey-Hwa Chen7779

Brn-2 Represses Microphthalmia-Associated Transcription Factor Expression and Marks a Distinct Subpopulation of Microphthalmia-Associated Transcription Factor–Negative Melanoma Cells. Jane Goodall, Suzanne Carreira, Laurence Denat, Dominique Kobi, Irwin Davidson, Paolo Nuciforo, Richard A. Sturm, Lionel Larue, and Colin R. Goding7788

Runx2 Transcriptional Activation of Indian Hedgehog and a Downstream Bone Metastatic Pathway in Breast Cancer Cells. Jitesh Pratap, John J. Wixted, Tripti Gaur, Sayyed K. Zaidi, Jason Dobson, Karthiga Devi Gokul, Sadiq Hussain, Andre J. van Wijnen, Janet L. Stein, Gary S. Stein, and Jane B. Lian7795

Dietary Induction of Colonic Tumors in a Mouse Model of Sporadic Colon Cancer. Kan Yang, Naoto Kurihara, Kunhua Fan, Harold Newmark, Basil Rigas, Laura Bancroft, Georgia Corner, Elayne Livote, Martin Lesser, Winfried Edelmann, Anna Velcich, Martin Lipkin, and Leonard Augenlicht7803

Anterior Gradient 2 Is Expressed and Secreted during the Development of Pancreatic Cancer and Promotes Cancer Cell Survival. Vijaya Ramachandran, Thiruvengadam Arumugam, Huamin Wang, and Craig D. Logsdon7811

SLITs Suppress Tumor Growth *In vivo* by Silencing *Sdf1/Cxcr4* within Breast Epithelium. Rebecca Marlow, Phyllis Strickland, Ji Shin Lee, Xinyan Wu, Milana PeBenito, Mikhail Binnewies, Elizabeth K. Le, Angel Moran, Hector Macias, Robert D. Cardiff, Saraswati Sukumar, and Lindsay Hinck7819

Suppression of Prostate Cancer Nodal and Systemic Metastasis by Blockade of the Lymphangiogenic Axis. Jeremy B. Burton, Saul J. Priceman, James L. Sung, Ebba Brakenhielm, Dong Sung An, Bronislaw Pytowski, Kari Alitalo, and Lily Wu7828

Hepatocyte Growth Factor and Sonic Hedgehog Expression in Cerebellar Neural Progenitor Cells Costimulate Medulloblastoma Initiation and Growth. Mandy J. Binning, Toba Niazi, Carolyn A. Pedone, Bachchu Lal, Charles G. Eberhart, K. Jin Kim, John Laterra, and Daniel W. Fufts7838

A Double-Negative Feedback Loop between ZEB1-SIP1 and the microRNA-200 Family Regulates Epithelial-Mesenchymal Transition. Cameron P. Bracken, Philip A. Gregory, Natasha Kolesnikoff, Andrew G. Bert, Jun Wang, M. Frances Shannon, and Gregory J. Goodall7846

Regulation of Estrogenic Effects by Beclin 1 in Breast Cancer Cells. Shali John, Irina Nayvelt, Hui-Chen Hsu, PingAr Yang, Wensheng Liu, Gokul M. Das, Thresia Thomas, and T.J. Thomas7855

Senescence-Associated Exosome Release from Human Prostate Cancer Cells. Brian D. Lehmann, Matthew S. Paine, Adam M. Brooks, James A. McCubrey, Randall H. Renegar, Rong Wang, and David M. Terrian7864

Contents (Continued)

Tbx3 Represses E-Cadherin Expression and Enhances Melanoma Invasiveness. Mercedes Rodriguez, Ewa Aladowicz, Luisa Lanfrancone, and Colin R. Goding.....7872

Cell Cycle-Dependent Variation of a CD133 Epitope in Human Embryonic Stem Cell, Colon Cancer, and Melanoma Cell Lines. Marie Jaksch, Jorge Múnera, Ruchi Bajpai, Alexey Terskikh, and Robert G. Oshima7882

Dual Roles for Coactivator Activator and its Counterbalancing Isoform Coactivator Modulator in Human Kidney Cell Tumorigenesis. Yun Kyoung Kang, Rachel Schiff, Lan Ko, Tao Wang, Sophia Y. Tsai, Ming-Jer Tsai, and Bert W. O'Malley.....7887

Endocrinology

Glucagon-like Peptide-2 Does Not Modify the Growth or Survival of Murine or Human Intestinal Tumor Cells. Jacqueline A. Koehler, Will Harper, Maja Barnard, Bernardo Yusta, and Daniel J. Drucker.....7897

Experimental Therapeutics, Molecular Targets, and Chemical Biology

Lapatinib (Tykerb, GW572016) Reverses Multidrug Resistance in Cancer Cells by Inhibiting the Activity of ATP-Binding Cassette Subfamily B Member 1 and G Member 2. Chun-ling Dai, Amit K. Tiwari, Chung-Pu Wu, Xiao-dong Su, Si-Rong Wang, Dong-geng Liu, Charles R. Ashby, Jr., Yan Huang, Robert W. Robey, Yong-ju Liang, Li-ming Chen, Cheng-Jun Shi, Suresh V. Ambudkar, Zhe-Sheng Chen, and Li-wu Fu7905

Disruption of NAD(P)H:Quinone Oxidoreductase 1 Gene in Mice Leads to Radiation-Induced Myeloproliferative Disease. Karim Iskander, Roberto J. Barrios, and Anil K. Jaiswal7915

Nuclear Survivin Abrogates Multiple Cell Cycle Checkpoints and Enhances Viral Oncolysis. Claire M. Connell, Sally P. Wheatley, and Iain A. McNeish.....7923

Validation of the p21-Activated Kinases as Targets for Inhibition in Neurofibromatosis Type 2. Chunling Yi, Erik W. Wilker, Michael B. Yaffe, Anat Stemmer-Rachamimov, and Joseph L. Kissil7932

The RNA Helicase p68 Is a Novel Androgen Receptor Coactivator Involved in Splicing and Is Overexpressed in Prostate Cancer. Emma L. Clark, Anne Coulson, Caroline Dalgliesh, Prabhakar Rajan, Samantha M. Nicol, Stewart Fleming, Rakesh Heer, Luke Gaughan, Hing Y. Leung, David J. Elliott, Frances V. Fuller-Pace, and Craig N. Robson7938

ATM and the Mre11-Rad50-Nbs1 Complex Respond to Nucleoside Analogue-Induced Stalled Replication Forks and Contribute to Drug Resistance. Brett Ewald, Deepa Sampath, and William Plunkett7947

Targeting XIAP Bypasses Bcl-2-Mediated Resistance to TRAIL and Cooperates with TRAIL to Suppress Pancreatic Cancer Growth *In vitro* and *In vivo*. Meike Vogler, Henning Walczak, Dominic Stadel, Tobias L. Haas, Felicitas Genze, Marjana Jovanovic, Jürgen E. Gschwend, Thomas Simmet, Klaus-Michael Debatin, and Simone Fulda7956

Autophagy: A Novel Mechanism of Synergistic Cytotoxicity between Doxorubicin and Roscovitine in a Sarcoma Model. Laura A. Lambert, Na Qiao, Kelly K. Hunt, Donald H. Lambert, Gordon B. Mills, Laurent Meijer, and Khandan Keyomarsi.....7966

RNAi-Mediated Silencing of Nuclear Factor Erythroid-2-Related Factor 2 Gene Expression in Non-Small Cell Lung Cancer Inhibits Tumor Growth and Increases Efficacy of Chemotherapy. Anju Singh, Svetlana Boldin-Adamsky, Rajesh K. Thimmulappa, Srikanta K. Rath, Hagit Ashush, Jonathan Coulter, Amanda Blackford, Steven N. Goodman, Fred Bunz, Walter H. Watson, Edward Gabrielson, Elena Feinstein, and Shyam Biswal7975

Alteration of the Mitochondrial Apoptotic Pathway Is Key to Acquired Paclitaxel Resistance and Can Be Reversed by ABT-737. Ozgur Kutuk and Anthony Letai7985

Optimized *Clostridium*-Directed Enzyme Prodrug Therapy Improves the Antitumor Activity of the Novel DNA Cross-Linking Agent PR-104. Shie-Chau Liu, G-One Ahn, Mitomu Kioi, Mary-Jo Dorie, Adam V. Patterson, and J. Martin Brown7995

Heterogeneity of Receptor Function in Colon Carcinoma Cells Determined by Cross-talk between Type I Insulin-like Growth Factor Receptor and Epidermal Growth Factor Receptor. Yi Peter Hu, Sandip B. Patil, Michelle Panasiewicz, Wenhui Li, Jennie Hauser, Lisa E. Humphrey, and Michael G. Brattain8004

Evaluation of Cancer Tests of 1,3-Butadiene Using Internal Dose, Genotoxic Potency, and a Multiplicative Risk Model. Charlotta Fred, Margareta Törnqvist, and Fredrik Granath8014

NVP-BEZ235, a Dual PI3K/mTOR Inhibitor, Prevents PI3K Signaling and Inhibits the Growth of Cancer Cells with Activating PI3K Mutations. Violeta Serra, Ben Markman, Maurizio Scaltriti, Pieter J.A. Eichhorn, Vanesa Valero, Marta Guzman, Maria Luisa Botero, Elisabeth Llonch, Francesco Atzori, Serena Di Cosimo, Michel Maira, Carlos Garcia-Echeverria, Josep Lluís Parra, Joaquin Arribas, and José Baselga8022

Vitamin C Antagonizes the Cytotoxic Effects of Antineoplastic Drugs. Mark L. Heaney, Jeffrey R. Gardner, Nicos Karasavvas, David W. Golde, David A. Scheinberg, Emily A. Smith, and Owen A. O'Connor8031

Addiction to Elevated Insulin-like Growth Factor I Receptor and Initial Modulation of the AKT Pathway Define the Responsiveness of Rhabdomyosarcoma to the Targeting Antibody. Liang Cao, Yunkai Yu, Isaac Darko, Duane Currier, Linnia H. Mayeenuddin, Xiaolin Wan, Chand Khanna, and Lee J. Helman8039

Potent *In vitro* and *In vivo* Activity of an Fc-Engineered Anti-CD19 Monoclonal Antibody against Lymphoma and Leukemia. Holly M. Horton, Matthew J. Bernett, Erik Pong, Matthias Peipp, Sher Karki, Seung Y. Chu, John O. Richards, Igor Vostiar, Patrick F. Joyce, Roland Repp, John R. Desjarlais, and Eugene A. Zhukovsky8049

Immunology

Development of Cellular Immune Responses against PAX5, a Novel Target for Cancer Immunotherapy. Mengyong Yan, Nourredine Himoudi, Martin Pule, Neil Sebire, Edmund Poon, Allison Blair, Owen Williams, and John Anderson8058

Cancer Immunotherapy Targeting the High Molecular Weight Melanoma-Associated Antigen Protein Results in a Broad Antitumor Response and Reduction of Pericytes in the Tumor Vasculature. Paulo Cesar Maciag, Matthew M. Seavey, Zhen-Kun Pan, Soldano Ferrone, and Yvonne Paterson8066

CD8⁺ T-Cell Responses against Hemoglobin-β Prevent Solid Tumor Growth. Hideo Komita, Xi Zhao, Jennifer L. Taylor, Louis J. Sparvero, Andrew A. Amoscato, Sean Alber, Simon C. Watkins, Angela D. Pardee, Amy K. Wesa, and Walter J. Storkus8076

Presentation of Telomerase Reverse Transcriptase, a Self-Tumor Antigen, is Down-regulated by Histone Deacetylase Inhibition. Ilenia Pellicciotta, Xochitl Cortez-Gonzalez, Roman Sasik, Yoram Reiter, Gary Hardiman, Pierre Langlade-Demoyen, and Maurizio Zanetti8085

Molecular Biology, Pathobiology, and Genetics

Abnormal DNA Methylation of *CD133* in Colorectal and Glioblastoma Tumors. Joo Mi Yi, Hsing-Chen Tsai, Sabine C. Glöckner, Steven Lin, Joyce E. Ohm, Hari Easwaran, C. David James, Joseph F. Costello, Gregory Riggins, Charles G. Eberhart, John Laterza, Angelo L. Vescovi, Nita Ahuja, James G. Herman, Kornel E. Schuebel, and Stephen B. Baylin8094

Contents (Continued)

The Melanoma-Associated Antigen A3 Mediates Fibronectin-Controlled Cancer Progression and Metastasis. Wei Liu, Sonia Cheng, Sylvia L. Asa, and Shereen Ezzat.....8104

A Bicistronic *CYCLIN D1-TROP2* mRNA Chimera Demonstrates a Novel Oncogenic Mechanism in Human Cancer. Emanuela Guerra, Marco Trerotola, Roberta Dell' Arciprete, Veronica Bonasera, Barbara Palombo, Tarek El-Sewedy, Tommaso Ciccimarra, Carlo Crescenzi, Franco Lorenzini, Cosmo Rossi, Giovanna Vacca, Rossano Lattanzio, Mauro Piantelli, and Saverio Alberti8113

Chromosomal Instability in Unirradiated Hemopoietic Cells Induced by Macrophages Exposed *In vivo* to Ionizing Radiation. Sally A. Lorimore, Jennifer A. Chrystal, Joanne I. Robinson, Philip J. Coates, and Eric G. Wright.....8122

PIK3CA Cooperates with Other Phosphatidylinositol 3'-Kinase Pathway Mutations to Effect Oncogenic Transformation. Katsutoshi Oda, Jennifer Okada, Luika Timmerman, Pablo Rodriguez-Viciana, David Stokoe, Keiko Shoji, Yuji Taketani, Hiroyuki Kuramoto, Zachary A. Knight, Kevan M. Shokat, and Frank McCormick.....8127

Functional Analysis of a Cell Cycle-Associated, Tumor-Suppressive Gene, *Protein Tyrosine Phosphatase Receptor Type G*, in Nasopharyngeal Carcinoma. Arthur Kwok Leung Cheung, Hong Lok Lung, Siu Chun Hung, Evan Wai Lok Law, Yue Cheng, Wing Lung Yau, Dhinoth Kumar Bangarusamy, Lance D. Miller, Edison Tak-Bun Liu, Jian-yong Shao, Chang-Wei Kou, Daniel Chua, Eugene R. Zabarovsky, Sai Wah Tsao, Eric J. Stanbridge, and Maria Li Lung8137

Pericentromeric Instability and Spontaneous Emergence of Human Neoacrocentric and Minute Chromosomes in the Alternative Pathway of Telomere Lengthening. Sarantis Gagos, Maria Chiourea, Agni Christodoulidou, Eftichia Apostolou, Christina Raftopoulou, Samuel Deustch, Charles-Edward Jefford, Irmgard Irminger-Finger, Jerry W. Shay, and Stylianos E. Antonarakis.....8146

Maintenance of Constitutive I κ B Kinase Activity by Glycogen Synthase Kinase-3 α / β in Pancreatic Cancer. Willie Wilson III and Albert S. Baldwin8156

MicroRNA-21 Targets a Network of Key Tumor-Suppressive Pathways in Glioblastoma Cells. Thales Papagiannakopoulos, Alice Shapiro, and Kenneth S. Kosik8164

Androgenic Control of Transforming Growth Factor- β Signaling in Prostate Epithelial Cells through Transcriptional Suppression of Transforming Growth Factor- β Receptor II. Kyung Song, Hui Wang, Tracy L. Krebs, Seong-Jin Kim, and David Danielpour8173

Tumor Microenvironment

Endothelial p70 S6 Kinase 1 in Regulating Tumor Angiogenesis. Ling-Zhi Liu, Jenny Z. Zheng, Xin-Ru Wang, and Bing-Hua Jiang8183

Corrections

Correction: Bmx Signaling in Irradiated Vascular Endothelium8189

Correction: GSK-3 β in Radiation Injury to Hippocampal Neurons8189

Cancer Research

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

68 (19)

Cancer Res 2008;68:7693-8189.

Updated version Access the most recent version of this article at:
<http://cancerres.aacrjournals.org/content/68/19>

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/68/19>.
Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.