PERSPECTIVES

617 Grape Seeds: Ripe for Cancer Chemoprevention
Santosh K. Katiyar and Mohammad Athar
See article, p. 625

622 Targeting Epigenetics for Cancer Prevention By Dietary Cancer Preventive Compounds—The Case of miRNA
Ah-Ng Tony Kong, Chengyue Zhang, and Zheng-Yuan Su
See article, p. 625

RESEARCH ARTICLES

625 Grape Seed Extract Efficacy against Azoxymethane-Induced Colon Tumorigenesis in A/J Mice: Interlinking miRNA with Cytokine Signaling and Inflammation
Molly M. Derry, Komal Raina, Velmurugan Balaiya, Anil K. Jain, Sangeeta Shrotriya, Kendra M. Huber, Natalie J. Serkova, Rajesh Agarwal, and Chapla Agarwal
See commentaries, pp. 617 and 622

634 Chronic Social Isolation Is Associated with Metabolic Gene Expression Changes Specific to Mammary Adipose Tissue
Paul A. Volden, Erin L. Wonder, Maxwell N. Skor, Christopher M. Carmean, Feenalie N. Patel, Honggang Ye, Masha Kocherginsky, Martha K. McClintock, Matthew J. Brady, and Suzanne D. Conzen

646 Effect of Zileuton and Celecoxib on Urinary LTE4 and PGE-M Levels in Smokers

DNA Methylation Biomarkers for Noninvasive Diagnosis of Colorectal Cancer
F. Javier Carmona, Daniel Azuara, Antonio Berenguer-Llergo, Agustin F. Fernandez, Sebastianio Biondo, Javier de Oca, Francisco Rodriguez-Moranta, Ramon Salazar, Alberto Villaueva, Mario F. Fraga, Jordi Guardiola, Gabriella Capellà, Manel Esteller, and Victor Moreno

Identification of Putative Immunologic Targets for Colon Cancer Prevention Based on Conserved Gene Upregulation from Preinvasive to Malignant Lesions
Elizabeth K. Broussard, Rachel Kim, Jesse C. Wiley, Juan Pablo Marquez, James E. Anni, David Pritchard, and Mary L. Disis

The Chemopreventive Efficacies of Nonsteroidal Anti-inflammatory Drugs: The Relationship of Short-term Biomarkers to Long-term Skin Tumor Outcome
Carol D. Mikulec, Joyce E. Rundhaug, Melissa S. Simper, Ronald A. Lubet, and Susan M. Fischer

Lactobacillus Salivarius REN Inhibits Rat Oral Cancer Induced by 4-Nitroquinoline 1-Oxide
Ming Zhang, Fang Wang, Lu Jiang, Ruihai Liu, Lian Zhang, Xingen Lei, Jiyou Li, Jingli Jiang, Huixuan Guo, Bing Fang, Liang Zhao, and Fazheng Ren

How Long Will It Take to Reduce Gastric Cancer Incidence by Eradicating Helicobacter Pylori Infection?
John F. Osborn, Maria S. Cattaruzza, Anna M. Ferri, Flora De Angelis, Davide Renzi, Alessandra Marani, and Dino Vaira

Metabolic Syndrome and Mammographic Density in Mexican Women
Megan S. Rice, Carine Biessy, Martin Lajous, Kimberly A. Bertrand, Rulla M. Tamimi, Gabriela Torres-Mejia, Ruy Lopez-Ridaura, and Isabelle Romieu
Raw Garlic Consumption as a Protective Factor for Lung Cancer, a Population-Based Case–Control Study in a Chinese Population
Zi-Yi Jin, Ming Wu, Ren-Qiang Han, Xiao-Feng Zhang, Xu-Shan Wang, Ai-Ming Liu, Jin-Yi Zhou, Qing-Yi Lu, Zuo-Feng Zhang, and Jin-Kou Zhao

Characterization of Raloxifene Glucuronidation: Potential Role of UGT1A8 Genotype on Raloxifene Metabolism In Vivo
Dongxiao Sun, Nathan R Jones, Andrea Manni, and Philip Lazarus

Progesterone Enhances Calcitriol Antitumor Activity by Upregulating Vitamin D Receptor Expression and Promoting Apoptosis in Endometrial Cancer Cells

Folic Acid Prevents the Initial Occurrence of Sporadic Colorectal Adenoma in Chinese Older than 50 Years of Age: A Randomized Clinical Trial
Qin-Yan Gao, Hui-Min Chen, Ying-Xuan Chen, Ying-Chao Wang, Zheng-Hua Wang, Jie-Ting Tang, Zhi-Zheng Ge, Xiao-Yu Chen, Jian-Qiu Sheng, Dian-Chun Fang, Cheng-Gong Yu, Ping Zheng, and Jing-Yuan Fang

LETTERS TO THE EDITOR

Genome-Wide Hypomethylation and Cancer Risk—Letter
Adam R. Karpf

Genome-Wide Hypomethylation and Cancer Risk—Response
Kevin Brennan and James M. Flanagan

ABOUT THE COVER
Chronic social isolation is linked to increased mammmary tumor growth in rodent models of breast cancer. In the SV40-T antigen mouse model of “triple-negative” breast cancer, the heightened stress response elicited by social isolation has been associated with increased expression of metabolic genes in the mammary gland before invasive tumors develop (i.e., during the carcinoma in situ stage). To further understand the mechanisms underlying how accelerated mammary tumor growth is associated with social isolation, mammary gland adipose tissue was separated from adjacent ductal epithelial cells and individual cell types were analyzed for changes in metabolic gene expression. The cover micrograph depicts representative nonadipocytes (epithelial/stromal cells) and mammary adipocytes (not shown) following collagenase treatment/centrifugation. Increased metabolic gene expression specific to the mammary adipocytes of socially isolated mice coincided with increased adipocyte glucose metabolism, lipid synthesis, and leptin secretion. Results from this study suggest that exposure to a chronic stressor (social isolation) results in specific metabolic reprogramming in mammary gland adipocytes that, in turn, contributes to increased proliferation of adjacent preinvasive malignant epithelial cells. Metabolites and/or tumor growth-promoting proteins secreted from adipose tissue could identify biomarkers and/or targets for breast cancer prevention. See article by Volden and colleagues (beginning on page 634) for more information.

For more information please visit www.aacrjournals.org