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, Freenaie N. Patel, Honggang Ye, Mashka Korchginisky, 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

655 DNA Methylation Biomarkers for Noninvasive Diagnosis of Colorectal Cancer
F. Javier Carmona, Daniel Azuara, Antonio Berenguer-Llergo, Agustín F. Fernández, Sebastián Biondo, Javier de Oca, Francisco Rodríguez-Moranta, Ramón Salazar, Alberto Villanueva, Mario F. Fraga, Jordi Guardiola, Gabriel Capellá, Manel Esteller, and Victor Moreno

665 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. Annis, David Pritchard, and Mary L. Disis

665 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. Rudnhaug, Melissa S. Simper, Ronald A. Lubet, and Susan M. Fischer

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

695 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

701 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 López-Ridaura, and Isabelle Romieu
About the cover

Chronic social isolation is linked to increased mammary 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.