## Contents

### PERSPECTIVE

161 Get the Fat Out!  
Natalia A. Ignatenko and Eugene W. Gerner  
*See article, p. 177*

### REVIEWS

165 Promoting Changes in Diet and Physical Activity in Breast and Colorectal Cancer Screening Settings: An Unexplored Opportunity for Endorsing Healthy Behaviors  
Annie S. Anderson, Dionne Mackison, Callum Boath, and Robert Steele

173 Personalized Immune-Interception of Cancer and the Battle of Two Adaptive Systems—When Is the Time Right?  
Madhav V. Dhodapkar  
*See article, Cancer Prev Res 6(1):18–26*

### RESEARCH ARTICLES

177 Abdominal Obesity, Independent from Caloric Intake, Accounts for the Development of Intestinal Tumors in *Apc*¹⁶³⁸N/² Female Mice  
Derek M. Huffman, Leonard H. Augenlicht, Xueying Zhang, John J. Lofrese, Gil Atzmon, John P. Chamberland, and Christos S. Mantzoros  
*See commentary, p. 161*

188 Prediagnostic Leptin, Adiponectin, C-Reactive Protein, and the Risk of Postmenopausal Breast Cancer  
Nicholas J. Ollberding, Yeonju Kim, Yuri B. Shvetsov, Lynne R. Wilkens, Adrian A. Franke, Robert V. Cooney, Gertraud Maskarinec, Brenda Y. Hernandez, Brian E. Henderson, Loïc Le Marchand, Laurence N. Kolonel, and Marc T. Goodman

196 MicroRNA Expression Signatures during Malignant Progression from Barrett’s Esophagus to Esophageal Adenocarcinoma  
Xifeng Wu, Jaffer A. Ajani, Jian Gu, David W. Chang, Weiqi Tan, Michelle A.T. Hildebrandt, Maosheng Huang, Kenneth K. Wang, and Ernest Hawk

206 Cyclooxygenase-2 Generates the Endogenous Mutagen *trans*-4-Hydroxy-2-nonenal in *Enterococcus faecalis*-Infected Macrophages  
Xingmin Wang, Toby D. Allen, Yonghong Yang, Danny R. Moore, and Mark M. Huycke

217 Gene Expression Changes in Adipose Tissue with Diet- and/or Exercise-Induced Weight Loss  
Kristin L. Campbell, Karen E. Foster-Schubert, Karen W. Makar, Mario Kratz, Derek Hagman, Ellen A. Schur, Nina Habermann, Marc Horton, Clare Abbenhart, Ling-Yu Kuan, Liren Xiao, Jerry Davison, Martin Morgan, Ching-Yun Wang, Catherine Duggan, Anne McTieron, and Cornelia M. Ulrich

222 Suppression of Prostate Epithelial Proliferation and Intraprostatic Progrowth Signaling in Transgenic Mice by a New Energy Restriction-Mimetic Agent  
Lisa D. Berman-Booty, Po-Chen Chu, Jennifer M. Thomas-Ahner, Brad Bolon, Dasheng Wang, Tiffany Yang, Steven K. Clinton, Samuel K. Kulp, and Ching-Shih Chen

242 Bioactive Grape Proanthocyanidins Enhance Immune Reactivity in UV-Irradiated Skin through Functional Activation of Dendritic Cells in Mice  
Mudit Vaid, Tripti Singh, Ram Prasad, Craig A. Elmets, Hui Xu, and Santosh K. Katiyar
ABOUT THE COVER

Infection of macrophages by the human intestinal commensal
Enterococcus faecalis generates DNA damage and chromosomal instability
in mammalian cells and is mediated, in part, by trans-4-hydroxy-2-nonenal
(4-HNE). In this study, the role of cyclooxygenase (COX) and lipoxygenase
(LOX) in producing this reactive aldehyde was explored using E. faecalis-
infected macrophages and interleukin-10 knockout mice colonized with
this commensal. The cover micrograph shows immunofluorescence
staining of colon sections from II10^/- mice colonized with E. faecalis.
There is focal 4-HNE-protein adduct (green) staining in macrophages
(merged: yellow) and diffuse staining on colonic crypts (green). This was
associated with increased staining for COX-2 in macrophages when
compared to sham-colonized mice (not shown). DNA is counter-stained
using DAPI (blue). These data show that E. faecalis can trigger macrophages
to produce 4-HNE through COX-2 reinforcing the concept of COX-2 as a
procarcinogenic enzyme capable of damaging DNA in target cells through
bystander effects that contribute to colorectal carcinogenesis. See the article
by Wang et al. (beginning on page 206) for more information.