Expanding Epigenomics to Archived FFPE Tissues: An Evaluation of DNA Repair Methodologies
Erin M. Siegel, Anders E. Berglund, Bridget M. Riggs, Steven A. Eschrich, Ryan M. Putney, Abidemi O. Ajidahun, Domenico Coppola, and David Shibata

Suitability of Circulating miRNAs as Potential Prognostic Markers in Colorectal Cancer
Jonas Ristau, Jurgen Staffa, Petra Schrotz-King, Biljana Gigic, Karen W. Makar, Michael Hoffmeister, Herrmann Brenner, Alexis Ulrich, Martin Schneider, Cornelia M. Ulrich, and Nina Habermann

Quantification of Circulating miRNAs by Droplet Digital PCR: Comparison of EvaGreen- and TaqMan-Based Chemistries
Elena Miotto, Elena Saccenti, Laura Lupini, Elisa Callegari, Massimo Negrini, and Manuela Ferracin

Effects of Preanalytic Variables on Circulating MicroRNAs in Whole Blood
Hua Zhao, Jie Shen, Qiang Hu, Warren Davis, Leonardo Medico, Dan Wang, Li Yan, Yuqing Guo, Biao Liu, Maochun Qiu, Mary Nesline, Qianqian Zhu, Song Yao, Christine B. Ambrosone, and Song Liu

Assay Reproducibility and Interindividual Variation for 15 Serum Estrogens and Estrogen Metabolites Measured by Liquid Chromatography–Tandem Mass Spectrometry
Barbara J. Fuhrman, Xia Xu, Roni T. Falk, Cher M. Dallal, Timothy D. Veenstra, Larry K. Keefer, Barry I. Graubard, Louise A. Brinton, Regina G. Ziegler, and Gretchen L. Gierach

Improving Power to Detect Changes in Blood miRNA Expression by Accounting for Sources of Variability in Experimental Designs
Sarah I. Daniels, Fenna C.M. Sillé, Audrey Goldbaum, Brenda Yee, Ellen F. Key, Luoping Zhang, Martyn T. Smith, and Reuben Thomas

Measurement of Telomere Length: A New Assay Using QuantiGene Chemistry on a Luminex Platform
Muhammad G. Kibriya, Farzana Jasmine, Shantantu Roy, Habibul Ahsan, and Brandon Pierce

Usefulness of Saliva Samples for Biomarker Studies in Radiation Research
Eileen Pernot, Elisabeth Cardis, and Christophe Badie

SEER Cancer Registry Biospecimen Research: Yesterday and Tomorrow

Methods for Sample Acquisition and Processing of Serial Blood and Tumor Biopsies for Multicenter Diffuse Large B-cell Lymphoma Clinical Trials

Establishment of the Cancer Prevention Study II Nutrition Cohort Colorectal Tissue Repository
Peter T. Campbell, Anusila Deka, Peter Briggs, Mine Cicek, Alton B. Farris, Mia M. Gaudet, Eric J. Jacobs, Christina C. Newton, Alpa V. Patel, Lauren R. Teras, Stephen N. Thibodeau, Lori Tillmans, and Susan M. Gapstur
# Table of Contents

## EDITORIAL

- **2713** Precision Prevention of Cancer  
  Timothy R. Rebbeck

## REVIEWS

- **2716** Childhood Brain Tumor Epidemiology: A Brain Tumor Epidemiology Consortium Review  
  Kimberly J. Johnson, Jennifer Cullen, Jill S. Barnholtz-Sloan, Quinn T. Ostrom, Chelsea E. Langer, Michelle C. Turner, Roberta McKeown-Cowdin, James L. Fisher, Philip J. Lupo, Sonia Partap, Judith A. Schwartzbaum, and Michael E. Scheurer

- **2737** Genetic Associations in Classical Hodgkin Lymphoma: A Systematic Review and Insights into Susceptibility Mechanisms  
  Kushi Kushekhar, Anke van den Berg, Ilja Nolte, Bouke Hepkema, Lydia Visser, and Arjan Diepstra

## RESEARCH ARTICLES

- **2748** An Epidemiologic Investigation of Physical Activity and Breast Cancer Risk in Africa  
  Ningqi Hou, Paul Ndom, Johashaphat Jombwe, Temidayo Ogundiran, Adeyinka Ademola, Imran Morhason-Bello, Oladosu Ojengbede, Antony Gakwaya, and Dezheg Huo

- **2757** Change in Population Prevalences of Human Papillomavirus after Initiation of Vaccination: The High-Throughput HPV Monitoring Study  
  Anna Soderlund-Strand, Ingrid Uhnno, and Joakim Dillner

- **2765** Circulating Sex Hormones and Terminal Duct Lobular Unit Involution of the Normal Breast  
  Zeina G. Khodr, Mark E. Sherman, Ruth M. Pfeiffer, Gretchen L. Gierach, Louise A. Brinton, Roni T. Falk, Deesha A. Patel, Laura M. Linville, Daphne Paphatham, Susan E. Clare, Daniel W. Visscher, Carolyn Mies, Stephen M. Hewitt, Anna Maria V. Storniolo, Adrian Rosebrock, Jesus J. Caban, and Jonine D. Figueroa

- **2774** Intake of Toxic and Carcinogenic Volatile Organic Compounds from Secondhand Smoke in Motor Vehicles  
  Gideon St.Helen, Peyton Jacob III, Margaret Peng, Delia A. Dempsy, S. Katharine Hammond, and Neal L. Benowitz

- **2783** Diagnostic and Prognostic Value of microRNA-21 in Colorectal Cancer: An Original Study and Individual Participant Data Meta-analysis  
  Hongbe Zhang, Peiwei Li, Haixing Ju, Martin Pesta, Vlastimil Kulda, Wenjun Jin, Mao Cai, Changbao Liu, Han Wu, Jinming Xu, Yao Ye, Guanglin Zhang, Enping Xu, Jianting Cai, Maode Lai, Dajing Xia, Jun Yang, and Yihua Wu

- **2793** Benzene Uptake in Hookah Smokers and Non-smokers Attending Hookah Social Events: Regulatory Implications  

- **2810** Benign Breast Tissue Composition in Breast Cancer Patients: Association with Risk Factors, Clinical Variables, and Gene Expression  
  Xuezhe Sun, Rupinder Sandhu, Jonine D. Figueroa, Gretchen L. Gierach, Mark E. Sherman, and Melissa A. Troester

- **2819** Neighborhood Factors Associated with Time to Resolution Following an Abnormal Breast or Cervical Cancer Screening Test  
  Jesse J. Plascak, Adana A. Llanos, Michael L. Pennell, Rory C. Weier, and Electra D. Paskett
Table of Contents

2829 Interactions between Ultraviolet Light and MC1R and OCA2 Variants Are Determinants of Childhood Nevus and Freckle Phenotypes
Anna E. Baron, Nancy L. Asdigian, Victoria Gonzalez, Jenny Aalborg, Tamara Terzian, Regan A. Stiegmann, Enrique C. Torchia, Marianne Berwick, Robert P. Delavalle, Joseph G. Morelli, Stefan T. Mokrohisky, Lori A. Crane, and Neil F. Box

2840 Body Mass Index, Physical Activity, and Serum Markers of Inflammation, Immunity, and Insulin Resistance
Cari M. Kitahara, Britton Trabert, Hormuzd A. Katki, Anil K. Chaturvedi, Troy J. Kemp, Ligia A. Pinto, Steven C. Moore, Mark P. Purdue, Nicolas Wentzensen, Allan Hildesheim, and Meredith S. Shields

2850 Breast Cancer Prognostic Biomarker Using Attractor Metagenes and the FGD3–SUSD3 Metagene
Tai-Hsien Ou Yang, Wei-Yi Cheng, Tian Zheng, Matthew A. Maurer, and Dimitris Anastassiou

2857 Prevalence, Incidence, Clearance, and Associated Factors of Genital Human Papillomavirus Infection among Men: A Population-Based Cohort Study in Rural China
Mengfei Liu, Zhonghu He, Chanyuan Zhang, Fangfang Liu, Ying Liu, Jinging Li, Zhongyao Xu, Qiyao Wang, Dong Hang, Na Shen, Yaqi Pan, Chuanhai Guo, Hong Cai, and Yang Ke

2866 Urinary Prostaglandin E2 Metabolite and Breast Cancer Risk
Yong Cui, Xiao-Ou Shu, Yu-Tang Gao, Qiuyin Cai, Bu-Tian Ji, Hong-Lan Li, Nathaniel Rothman, Jie Wu, Gong Yang, Yong-Bing Xiang, and Wei Zheng

2874 Use of a Urinary Sugars Biomarker to Assess Measurement Error in Self-Reported Sugars Intake in the Nutrition and Physical Activity Assessment Study (NPAAS)

2884 The Expression of Four Genes as a Prognostic Classifier for Stage I Lung Adenocarcinoma in 12 Independent Cohorts
Hirokazu Okayama, Aaron J. Schetter, Teruhide Ishigame, Ana I. Robles, Takashi Kohno, Jun Yokota, Seiichi Takenoshita, and Curtis C. Harris

2895 Retention of Black and White Participants in the Selenium and Vitamin E Cancer Prevention Trial (SWOG-Coordinated Intergroup Study S0000)
Kathryn B. Arnold, John A. Hermus, Karen B. Anderson, Lori Minasian, Catherine M. Tangen, Jeffrey F. Probstfield, and Elise D. Cook

Jiping Chen, Anna Kettermann, Brian L. Rostron, and Hannah R. Day

2916 Individual Differences in Aversion to Ambiguity Regarding Medical Tests and Treatments: Association with Cancer Screening Cognitions
Paul K.J. Han, Andrew E. Williams, Amy Haskins, Caitlin Gutheil, F. Lee Lucas, William M.P. Klein, and Kathleen M. Mazor

2924 Cancer Incidence and Mortality during the Intervention and Postintervention Periods of the Women’s Health Initiative Dietary Modification Trial

2936 Obesity Increases the Risk for High-Grade Prostate Cancer: Results from the REDUCE Study
Adriana C. Vidal, Lauren E. Howard, Daniel M. Moreira, Ramiro Castro-Santamaria, Gerald L. Andriole Jr, and Stephen J. Freedland

2943 Alcohol Consumption in Relation to Plasma Sex Hormones, Prolactin, and Sex Hormone–Binding Globulin in Premenopausal Women
Kelly A. Hirko, Donna Spiegelman, Walter C. Willett, Susan E. Hankinson, and A. Heather Elissian

SHORT COMMUNICATIONS

2954 Prevalence of Human Papillomavirus in Cancer of the Oropharynx by Gender
Jean-Damien Combes, Alyce A. Chen, and Silvia Franceschi