

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
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NAME John D. Potter		POSITION TITLE Full Member	
eRA COMMONS USER NAME		Senior Vice President and Division Director	
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Queensland, Australia	MBBS (MD equiv.)	1971	Medicine
University of Queensland, Australia	PhD	1984	Epidemiology

A. Positions and Honors

- 1972-73 Resident Medical Officer (=Intern), Princess Alexandra Hospital, Brisbane, Australia
 1974-75 Registrar (=Resident) in Psychiatry, Christchurch Hospital Board, Christchurch, New Zealand
 1976-77 General Practice, Auckland, New Zealand and Queensland, Australia
 1977-82 Research Fellow in Epidemiology, CSIRO Division of Human Nutrition, Adelaide, Australia
 1983-84 Lecturer, Foundation for Multidisciplinary Education in Cmty Health, RA Hospital, Adelaide, Australia
 1984-86 Senior Research Scientist, CSIRO Division of Human Nutrition, Adelaide, Australia
 1986-92 Associate Professor and Director, Cancer Research, Division of Epidemiology, U of Minnesota, Minneapolis
 1988-94 Associate Director, Division of Epidemiology, University of Minnesota, Minneapolis
 1992-94 Professor and Director, Cancer Research, Division of Epidemiology, U of Minnesota, Minneapolis
 1993-94 Associate Director, Epidemiology, Biostatistics, and Prevention, University of Minnesota Cancer Center
 1994-02 Member and Head, Cancer Prevention Research Prog., Fred Hutchinson Cancer Research Center, Seattle, Washington
 1994- Professor, Department of Epidemiology, University of Washington, Seattle, Washington
 2002- Senior Vice President and Division Director, Division of Public Health Sciences, Fred Hutchinson Cancer Research Center, Seattle, Washington

Professional Activities

Cancer, Epidemiology, Biomarkers and Prevention, Co-Editor-in-Chief 2002-Present, Senior Editor, 1997-2002, Assoc. Ed., 1995-1997; EAB 1991-1995
 Member, National Cancer Policy Board, IOM/NAS, 2003-present
 US Representative, Scientific Council of the International Agency for Research on Cancer, 2001-present
 Co-Chair, AACR Annual Meeting Organizing Committee, 2001
 NCI Board of Scientific Counselors, Member, 1997-2001
 Cancer Research, Associate Editor, 2000-2002
 American Journal of Epidemiology, Editor, 1995-1998

B. Selected peer-reviewed publications (of a total of 332, in chronological order)

196. Potter JD, Bigler J, Fosdick L, Bostick R, Kampman E, Chen C, Louis T, Grambsch P. Colorectal adenomatous and hyperplastic polyps: smoking and N-Acetyltransferase 2 polymorphisms. *Cancer Epidemiol Biomarkers Prev.* 8:69-75, 1999.
 201. Potter JD. Colorectal cancer: molecules and populations. *J Natl Cancer Inst* 91:916-932, 1999.

204. Lampe J, Bigler J, Horner N, Potter J. UDP-Glucuronosyltransferase (UGT1A1*28 and UGT1A6*2) polymorphisms in Caucasians and Asians: relationships to serum bilirubin concentrations. *Pharmacogenetics*. 9:341-349, 1999.
205. Ulrich C, Kampman E, Bigler J, Schwartz S, Chen C, Bostick R, Fosdick L, Beresford S, Yasui Y, Potter J. Colorectal adenomas and the C677T MTHFR polymorphism: Evidence for gene-environment interaction? *Cancer Epidemiol Biomarkers Prev* 8: 659-668, 1999.
233. Slattery ML, Potter JD, Curtin K, Edwards S, Ma K-N, Anderson K, Schaffer D, Samowitz WS. Estrogens reduce and withdrawal of estrogens increases risk of MSI+ colon cancer. *Cancer Res* 61: 126-130, 2001.
234. Yasui Y, Potter JD, Stanford JL, Rossing M, Winget, MD, Bronner M, Daling J. Breast cancer risk and "delayed" primary Epstein-Barr virus infection. *Cancer Epidemiol Biomarkers Prev* 10: 9-16, 2001
235. Potter JD. At the interfaces of epidemiology, genetics, and genomics. *Nat Review Genet*. 2: 142-147, 2001.
237. Slattery ML, Samowitz W, Ballard L, Schaffer D, Leppert M, Potter JD. A molecular variant of the *APC* gene at codon 1822: Its association with diet, lifestyle, and risk of colon cancer. *Cancer Res* 61: 1000-1004, 2001
238. Potter JD. Morphostats – a missing concept in cancer biology. *Cancer Epidemiol Biomarkers Prev* 10: 161-170, 2001.
239. Bigler J, Whitton J, Lampe J, Fosdick L, Bostick RM, Potter JD. CYP2C9 and UGT1A6 genotypes modulate the protective effect of aspirin on colon adenoma risk. *Cancer Res*. 61: 3566-3569, 2001.
244. Ulrich CM, Bigler J, Whitton JA, Bostick R, Fosdick L, Potter JD. Epoxide hydrolase Tyr113His polymorphism is associated with elevated risk of colorectal polyps in the presence of smoking and high meat intake. *Cancer Epidemiol Biomarkers Prev* 10: 875-882, 2001.
257. Ulrich CM, Bigler J, Bostick R, Fosdick L, Potter JD. Thymidylate Synthase promoter polymorphism, interaction with folate intake, and risk of colorectal adenomas. *Cancer Res* 62: 3361-3364, 2002
258. Smith-Warner SA, Elmer PJ, Fosdick L, Randall B, Bostick RM, Grandits G, Grambsch P, Louis TA, Wood JR, Potter JD. Fruits, vegetables, and adenomatous polyps: The Minnesota Cancer Prevention Research Unit Case-Control Study. *Am J Epidemiol* 155: 1104-1113, 2002.
259. Terry MB, Neugut AI, Bostick RM, Sandler RS, Haile RW, Jacobson JS, Fenoglio-Preiser CM, Potter JD. Risk factors for advanced colorectal adenomas: a pooled analysis. *Cancer Epidemiol Biomarkers Prev* 11: 622-629, 2002.
266. O'Sullivan JN, Bronner MP, Brentnall TA, Finley JC, Shen W, Emerson S, Emond MJ, Gollahon KA, Moskovitz AH, Crispin DA, Potter JD, Rabinovitch PS. Chromosomal instability in ulcerative colitis is related to telomere shortening. *Nat Genet* 32: 280-284, 2002.
267. Ulrich CM, Bigler J, Sibert J, Greene EA, Sparks R, Carlson CS, Potter JD. Cyclooxygenase 1 (COX-1) polymorphisms in African-American and Caucasian populations. *Hum Mutat* #551(2002) Online
274. Morimoto LM, Newcomb PA, Ulrich CM, Bostick RM, Lais CJ, Potter JD. Risk Factors for Hyperplastic and Adenomatous Polyps: Evidence for Malignant Potential? *CEBP* 11: 1012-1018, 2002.
278. Goode EL, Ulrich CM, Potter JD. Polymorphisms in DNA repair genes and associations with cancer risk. *Cancer Epidemiol Biomarkers Prev*. 11: 1513-1530, 2002.
280. Fleming MA, Potter JD, Ramirez CJ, Ostrander GK, Ostrander EA. Understanding missense mutations in the *BRCA1* gene: An evolutionary approach. *Proc. Natl. Acad. Sci.* 100, 1151–1156, 2003.
282. Irwin ML, Yasui Y, Ulrich CM, Bowen D, Rudolph RE, Schwartz RS, Yukawa M, Aiello E, Potter JD, McTiernan A. Effect of - moderate and vigorous - exercise on total and intra-abdominal body fat in postmenopausal women: A one-year randomized controlled trial. *JAMA* 289: 323, 2003.
286. Qu Y, Adam BL, Thornquist M, Potter JD, Thompson ML, Yasui Y, Davis J, Schellhammer PF, Cazares L, Clements M, Wright GL Jr, Feng Z. Data reduction using a discrete wavelet transform in discriminant analysis of very high dimensionality data. *Biometrics* 59: 1, 143-51, 2003.
287. Newcomb PA, Storer BE, Morimoto LM, Templeton A, Potter JD. Long-term efficacy of sigmoidoscopy in the reduction of colorectal cancer incidence., *J Natl Cancer Inst* 95: 8, 622-5, 2003.
296. Potter JD. Epidemiology, Cancer Genetics, and Microarrays: Making correct inferences, using appropriate designs. *Trends Genet*. 690-695. 2003.
302. Sparks R, Bigler J, Sibert JG, Potter JD, Yasui Y, Ulrich CM. TGFβ1 polymorphism (L10P) and risk of colorectal adenomatous and hyperplastic polyps. *Int J Epidemiol*. 33: 2004.

305. Velicer CM, Heckbert SR, Lampe JW, Potter JD, Robertson CA, Taplin SH. Antibiotic Use in Relation to the Risk of Breast Cancer. *JAMA* 291: 827-835. 2004.
310. Potter JD. Toward the Last Cohort. *Cancer Epidemiol Biomarkers Prev.* 13(6): 895-897. 2004.
316. Goode EL, Potter JD, Bigler J, Ulrich CM. Methionine Synthase D919G Polymorphism, folate metabolism, and colorectal adenoma risk. *Cancer Epidemiol Biomarkers Prev.* 13: 157-162. 2004.
323. Ulrich C, Bigler J, Sparks R, Whitton J, Sibert J, Goode E, Yasui Y, Potter JD. Polymorphisms in PTGS1 (=COX-1) and risk of colorectal polyps. *Cancer Epidemiol Biomarkers Prev.* 13(5): 889-93. 2004.
- Rudolph RE, Dominitz JA, Lampe JW, Levy L, Qu P, Li SS, Lampe PD, Bronner MP, Potter JD. Risk factors for colorectal cancer in relation to number and size of aberrant crypt foci in humans. *Cancer Epidemiol Biomarkers Prev.* In Press, 2004.

C. Research Support

ACTIVE

FHCRC Institutional Support Ongoing
Center Support for Senior Leadership
This support is for the leadership and administrative functions of the Fred Hutchinson Cancer Research Center, as well as a number of shared resources.

P30 CA15704 (Hartwell) 1/1/03 - 12/31/07
NIH/National Cancer Institute
Cancer Center Support Grant
This grant provides support for activities and resources critical to the promotion of interdisciplinary research at the FHCRC. This grant provides support for Dr. Potter's effort in scientific leadership of the Cancer Center.

U01 CA74794 (Potter) 7/1/97 - 6/30/07
NIH/NCI
Seattle Familial Colorectal Cancer Registry
The major goal of this study is to create a population-based resource for studies of colorectal cancer genetics. Cases will be identified by the Washington SEER program and will include men and women ages 20-74 years with a new diagnosis of large bowel cancer.

R01 CA74846 (White) 7/23/99 - 4/30/05
NIH/NCI
Cohort Study of Dietary Supplements and Cancer Risk
The aim of this proposal is to investigate the association of intake of supplemental vitamin C, vitamin E, calcium and multivitamins with total cancer incidence. To meet this aim a cohort will be recruited within the 13 counties of western Washington State, and followed for a mean of 2 ¼ years.

R01 CA59045 (Potter) 9/20/00 - 8/31/05
NIH/NCI
Genetic Epidemiologic Studies of Colon Polyps and Cancer
The goal of this study is to investigate the risk of colon cancer, colorectal adenoma, and colorectal hyperplastic polyps associated with 1) polymorphisms in DNA repair enzymes (e.g., *hMLH1*, *hMSH2*, *hMSH6*, *hOGG1*) 2) polymorphisms related to alcohol metabolism, (e.g., alcohol dehydrogenases) and 3) polymorphisms in enzymes in folate metabolism, (e.g., *MTHFR*). Two completed case-control studies of colorectal polyps and colon cancer provide the basis for this study.

R01 CA89445 (Ulrich) 6/5/01 - 5/31/05

NIH/NCI

Polymorphisms in PG/COX Pathway and Colorectal Polyps

The goal of this study is to evaluate the association between genetic polymorphisms in enzymes linked to PG metabolism and cyclooxygenase (COX) activity and colorectal polyps by integrating epidemiology and new genomic approaches.

R01 CA94954 (Potter) 5/13/02 - 3/31/06

NIH

Aspirin, UGT1A6 Genotype, and Colon Gene Expression

This application addresses how genetic polymorphisms modify, and aspirin modulates, colonic epithelial gene expression in humans. These relationships will be tested using both observational and intervention studies. The hypothesis of this project is that expression of growth-promoting genes will be reduced, and apoptotic genes increased, during aspirin use and that this reduction may be stronger in slow metabolizers than fast metabolizers.

R01 CA102765 (Potter) 7/15/04 – 6/30/10

NIH/NCI

Multi-Center Research Center Study of Pancreatic Cancer Etiology

The long-term goal of this project is to investigate a wide range of environmental and genetic factors in order to improve our understanding of pancreas cancer etiology, beginning with a large, case-control study based on direct participant interview, electronic medical record review, and blood sampling. A total of 745 cases and 745 controls in two health maintenance organizations will serve as the defined population.

R01 CA105204 (McTiernan) 09/01/04 – 8/31/09

NIH/NCI

Exercise, Diet, and Sex Hormones in Postmenopausal Women

The proposed study will test and compare the effects over one year of two lifestyle interventions in 503 postmenopausal women: 1) a moderate-intensity aerobic exercise intervention, and 2) a reduced-calorie diet plus moderate-intensity aerobic exercise intervention.

R01 CA104667 (Potter) 09/20/04 – 08/31/09

NIH/NCI

Genetic Linkage in Colorectal Cancer Families

The aim of this study is to identify novel colorectal cancer susceptibility loci using families collected via the Colon Cancer Cooperative Family Registry (Colon CFR). The Colon CFR is an NCI-supported consortium initiated in 1997 that has established a comprehensive collaborative infrastructure for interdisciplinary studies in CRC genetic epidemiology.

RECENTLY COMPLETED

P01 CA74184 (Potter) 6/1/98 - 5/31/04

NIH/NCI

Seattle Gastrointestinal Program Project

The primary purpose of this project is to evaluate a biologically based screening approach that will incorporate a variety of cellular and molecular pathways to neoplasia. The focus is on oxidative damage and apoptosis. Additionally, several pathways that are unique to colorectal carcinogenesis will be evaluated as possible targets for early detection efforts.