

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 Anne McTiernan, M.D., Ph.D.		POSITION TITLE Full Member	
eRA COMMONS USER NAME amctiern			
EDUCATION/TRAINING (<i>Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.</i>)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Boston University, Boston, Massachusetts	BA	1974	Sociology
State University of New York at Buffalo, New York	MA	1976	Medical Sociology
University of Washington, Seattle, Washington	PhD	1982	Epidemiology
New York Medical College, Valhalla, New York	MD	1989	Medicine

A. Positions and Honors**Positions and Employment**

1983-1985 Staff Scientist, Fred Hutchinson Cancer Research Center (FHCRC), Seattle, WA
 1989-1992 Internship & Residency Primary Care Internal Medicine, U. of Washington (UW), Seattle, WA
 1992-1995 Senior Staff Scientist, Associate in, FHCRC, Seattle, WA
 1992-1995 Clinical Instructor, Epidemiology and Medicine, UW, Seattle
 1995 Assistant Member, FHCRC, Seattle, WA
 1996-1999 Research Assistant Professor, Epidemiology, UW School of Public Health
 1997- 2001 Associate Member, FHCRC, Seattle, WA
 1999- 2003 Research Associate Professor, Epidemiology and Medicine, UW, Seattle, WA
 2001- Full Member, FHCRC, Seattle, WA
 2003- Research Professor, Epidemiology and Medicine, UW, Seattle, WA
 2003- Director, FHCRC Prevention Center

Selected Honors and International Committees

NIH EDC-2 Special Study Section, Member, 1997

Fellow: American College of Sports Medicine; Member, Research Review Committee

Fellow: North American Association for Study of Obesity

Chair, Mechanisms, IARC Handbooks of Cancer Prevention Vol 6: Weight Control & Physical Activity, 2002

Chair, NIH Special Study Section "Mechanisms of Physical Activity Change" March 2004

Certification & Licensure

Board Certified, Am Board of Internal Medicine, 1992; Physician & Surgeon License, State of WA, 7/21/91

B. Selected peer-reviewed publications (in chronological order)

- McTiernan A, Ulrich N, Slate S, Potter J. Physical activity and cancer etiology: associations and mechanisms. Cancer Causes and Control 1998;9(5):487-509.
- McTiernan A. The associations of energy balance and body mass index with breast cancer risk in United States women from diverse racial and ethnic backgrounds. Cancer 2000;88:1248-1255.
- Chlebowski RT, Aiello E, McTiernan A. Weight Loss in Breast Cancer Patient Management. J. Clinical Oncology 2002;20(4):1128-1143.
- Irwin M, Yasui Y, Ulrich CM, Bowen D, Rudolph RE, Schwartz RS, Yukawa M, Potter JD, McTiernan A. Effect of exercise on total and intra-abdominal body fat in postmenopausal women: A randomized controlled trial. JAMA 289:323-330, 2003.
- Irwin M, Crumley D, McTiernan A, Berstein L, Baumgartner R, Gilliland F, Kriska A, Ballard Barbash R. Physical activity levels before and after a diagnosis of breast cancer: The Health, Eating, Activity, and Lifestyle (HEAL) Study. Cancer 2003;97:1746-57.
- Chlebowski R, Cyr M, Gass M, Gilligan M, Hendrix S, Handek CJ, Lane D, Langer RD, Petrovich H, Stefanick M, Thomson C, McTiernan A. Estrogen Plus Progestin Influence on Breast Cancer and

- Mammography in Healthy Postmenopausal Women: Results from the Women's Health Initiative Randomized Trial. *JAMA* 2003, 289: 3243-53.
7. McTiernan A, Rajan B, Tworoger S, et al. Adiposity and Sex Hormones in Postmenopausal Breast Cancer Patients. *J Clinical Oncology*. 2003;21(10):1961-1966.
 8. McTiernan A. Intervention Studies in Exercise and Cancer Prevention. (American College of Sports Medicine Symposium paper). *Medicine and Science in Sports and Exercise*. 2003, 35(11):1841-45.
 9. Tworoger S, Yasui Y, Ulrich CM, Vitiello M, Bowen D, Irwin M, Aiello EJ, Schwartz RS, Potter J, McTiernan A. Effect of a yearlong moderate to vigorous intensity exercise or low intensity stretching intervention on self-reported sleep quality measures in postmenopausal women. *Sleep* 2003, 26(7): 830-6.
 10. McTiernan A. Behavioral Strategies for Breast Cancer Prevention. *The Oncologist* 2003,8(4): 326-34.
 11. McTiernan A, Kooperberg C, White E, Wilcox S, Coates R, Adams-Campbell L, Woods N, Ockene J. Recreational Physical Activity and the Risk of Breast Cancer in Postmenopausal Women. The Women's Health Initiative Cohort Study. *JAMA* 2003; 290: 1331-36.
 12. McTiernan A, Kooperberg C, White E, Wilcox S, Coates R, Adams-Campbell LL, Woods N, Ockene J. A prospective study of recreational physical activity and the risk of breast cancer in women aged 50 – 79 years: the Women's Health Initiative cohort study. *JAMA* 2003;290:1331-1336.
 13. Brown JK, Byers T, Doyle C, Courneya KS, Demark-Wahnefried W, Kushi LH, McTiernan A, et al, Nutrition and Physical Activity During and After Cancer Treatment: An American Cancer Society Guide for Informed Choices. *CA Cancer J Clin*. 2003 Sep-Oct;53(5):268-91.
 14. McTiernan A, Tworoger S, Schwartz RS, Ulrich CM, Yasui Y, Irwin M, Rajan B, Rudolph R, Bowen D, Stanczyk F, Potter JD. Effect of Exercise on Serum Estrogen in Postmenopausal Women: a 12-Month Randomized Controlled Trial. *Cancer Research* 2004;64:2923-2928.
 15. Tworoger SS, Chubak J, Aiello EJ, Yasui Y, Ulrich CM, Farin FM, Stapleton PL, Irwin ML, Potter JD, Schwartz RS, McTiernan A. The effect of CYP19 and COMT polymorphisms on exercise-induced fat loss in postmenopausal women. *Obesity Research* 2004;12(6):972-81.
 16. Prentice R, Willett W, Greenwald P, Alberts D, Bernstein L, Boyd N, Byers T, Clinton S, Fraser G, Freedman L, Hunter D, Kipnis V, Kolonel L, Kristal B, Kristal A, Lampe J, McTiernan A, Milner J, Patterson R, Potter J, Riboli E, Schatzkin A, Yates A. Nutrition, Physical Activity and Chronic Disease Prevention: Research Strategies and Recommendations. *JNCI* 2004; 96(17):1276-87.
 17. Shade ED, McTiernan A, Wener MH, Wood B, Yasui Y, LaCroix K, Potter JD, Ulrich CM. Frequent intentional weight loss, duration of weight stability, and possible long-term effects on immune function. *J American Dietetic Association* June 2004; 104(6): 903-12.
 18. Irwin M, McTiernan A, Bernstein L, Baumgartner R, Gilliland FD, Ballard-Barbash R. Physical activity levels across the breast cancer experience: The Health, Eating, Activity, and Lifestyle (HEAL) Study. *Medicine and Science in Sports and Exercise* 2004; 36(9): 1484-1491.
 19. Tworoger SS, Chubak J, Aiello EJ, Yasui Y, Ulrich CM, Farin FM, Stapleton PL, Irwin ML, Potter JD, Schwartz RS, McTiernan A. The effect of CYP19 and COMT polymorphisms on exercise-induced fat loss in postmenopausal women. *Obesity Research* 2004;12(6):972-81.
 20. Irwin ML, McTiernan A, Baumgartner R, Baumgartner K, Bernstein L, Gilliland FD, Ballard-Barbash R. Changes in body fat and weight after a breast cancer diagnosis: Influence of demographic, prognostic and lifestyle factors. *J Clin Oncol* 2005;23(4):774-782.
 21. McTiernan A, Martin C, Peck JD, Aragaki A, Chlebowski R, Pisano E, Wang CY, Brunner R, Johnson KC, Manson JE, Lewis CE, Kotchen JM, Hulka B, for the Women's Health Initiative Mammogram Density Study Investigators. Estrogen Plus Progestin Influence on Mammogram Density in Healthy Postmenopausal Women in the Women's Health Initiative Randomized Trial. *JNCI* 2005;97: 1366-1376.
 22. Rosenberg C, Khandekar J, Greenberg P, Rodabough RJ, McTiernan A. Cutaneous melanoma in postmenopausal women after nonmelanoma skin carcinoma: the Women's Health Initiative Observational Study. *Cancer* 2006;106(3):654-663.
 23. Chubak J, Ulrich CM, Tworoger SS, Sorensen B, Yasui Y, Irwin ML, Stanczyk FZ, Potter JD, McTiernan A. Effect of exercise on bone density and lean mass in postmenopausal women. *Medicine and Science in Sports and Exercise*. 2006;38(7):1236-1244.
 24. McTiernan A, Yasui Y, Sorensen B, Irwin ML, Morgan A, Rudolph RE, Surawicz C, Lampe JW, Ayub K, Potter J, Lampe P. Effect of a 12-month exercise intervention on patterns of cellular proliferation in colonic crypts: a randomized controlled trial. *CEBP* 2006; 15: 1588-1597.

C. Research Support**Ongoing Research Support**

P30 CA015704 (Hartwell)

01/01/03 – 12/31/07

NIH/NCI

Cancer Center Support Grant (Comprehensive) – Prevention Research Shared Resource

The Cancer Center Support Grant (CCSG) provides support for activities and resources critical to the promotion of interdisciplinary research in the FHCRC/UW Cancer Consortium.

R01 CA105204 (McTiernan)

09/01/04 – 08/31/09

NIH/NCI

Exercise, Diet, and Sex Hormones in Postmenopausal Women

This study will test and compare the effects on circulating sex hormones over one year of dietary weight loss and exercise, alone and together vs. control, in 503 postmenopausal women.

NCIC CTG Trial Map 3 (McTiernan)

09/16/04 – 09/15/09

NCIC (National Cancer Institute of Canada)

A Phase III Randomized Trial of Exemestane Plus Placebo Versus Exemestane Plus Celecoxib Versus Placebo in Postmenopausal Women at Risk of Developing Breast Cancer

This multi-center placebo-controlled clinical trial is testing the effects of Exemestane with and without Celecoxib on breast cancer incidence in high-risk postmenopausal women.

R01 CA098858 (Malone)

09/15/04 – 08/31/09

NIH/NCI

Breast Cancer Prognostic Factors/Pathobiology by Age

This population-based molecular-epidemiologic cohort study will examine factors that predict mortality in women diagnosed with invasive breast cancer at ages 45-79. The overall goal of the study is to evaluate patient and tumor characteristics for their relationship with the risk of breast cancer mortality.

P50 CA83636-AV-57 (Urban/Rossing)

09/30/04 – 06/30/07

NIH

Effect of Aspirin on Mammographic Density

The proposed study will test and compare the effects over six months of 325 mg/day aspirin and placebo on mammogram density area and % density in 144 pre- and postmenopausal women.

R01 CA105007 (Pisano)

03/28/04 – 0/28/07

Univ North Carolina/NIH

Mammographic Density and Invasive Breast Cancer

This study will examine the role of estrogen plus progestin increase in mammogram density in breast cancer patients and controls, within the WHI estrogen plus progestin clinical trial.

P20 CA103728 (Rabinovitch)

09/01/03 – 08/31/08

NIH/NIA

Seattle Cancer & Aging Program – Pilot: Effect of Exercise on Prostate Cancer Biomarkers: An Ancillary Study to a Randomized Controlled Clinical Trial

This pilot project will measure the effects of a one-year moderate/vigorous intensity exercise program vs. a delayed-exercise control program in men on hormones that are potential modulators or markers of prostate cancer risk: serum testosterone, free testosterone, estradiol, free estradiol, SHBG, DHT, and 3?-androstenediol glucuronide concentrations.

R01 HL079491 (Beresford)

9/30/04 – 06/30/08

NIH

Reducing Obesity at the Workplace: A Randomized Trial

This study tests an intervention of messages that will integrate changes in dietary intake with changes in energy expenditure, while simultaneously modifying structural and environmental factors to promote social

support and opportunities for behavioral change. The primary aim is to evaluate the effectiveness of the intervention in reducing or maintaining body mass index in a randomized controlled trial of worksites.

U54 CA116847-01 (McTiernan)

09/23/05 – 08/31/10

NIH

Mechanisms of Energy Balance and Cancer Prevention

The Seattle TREC Center proposes to elucidate the pathways linking components of energy balance to the cancer process using several different study designs, with the transdisciplinary contributions of scientists from medicine, cell biology, animal models, immunology, biostatistics, mathematics, exercise physiology, and behavioral science. The overarching theme of the Seattle TREC Center will be determining the mechanisms by which energy balance modifies and influences the process of carcinogenesis.

N01-PC-35142 (McTiernan)

09/30/06-09/29/08

NIH/NCI

SEER – Special Study #9: Weight, Physical Activity, Diet and Breast Cancer Prognosis (HEAL)10-Year Follow-Up Study: The purpose of the HEAL Follow-up Study is to examine the correlation between diet, physical activity, weight, endogenous hormones and tumor characteristics, and breast cancer recurrence and survival.

1 K12 RR023265-03 (Deyo)

09/23/04 – 07/31/09

NIH

UW Multidisciplinary Clinical Research Training Program

The goal of this grant is to support and train young investigators in clinical research.

R21 CA104123-01A2 (Friedman)

09/06/05 – 8/31/07

Children's Hospital (NIH)

Social & Physical Activity of Childhood Cancer Survivors

The objective of this pilot research is to further refine and evaluate a newly devised intervention to alter young cancer patient's capacity for, and level of involvement in, physical and social activity, and to begin to examine the extent to which this intervention will favorably affect long-term adjustment to cancer and its treatment.