

an active lifestyle

REDUCES RISK FOR  
BREAST CANCER.

JOIN THE STUDY



ACE will investigate how a 45-minute bout of moderate exercise can affect the biology of the human body. This could help explain how exercise reduces breast cancer risk.

LEARN MORE

You may be able to join the  
ACE Study if:

You are female, and between 18 and 75 years old

You can visit our exercise center for two clinic visits at the Fred Hutchinson Cancer Research Center's Prevention Center at South Lake Union.

ELIGIBILITY



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CURES START HERE®

**Fred Hutch**

1100 Fairview Ave. N., PO Box 19024, Seattle, WA 98109

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The ACE Study is funded by the Breast Cancer Research Foundation.

## about

### THE STUDY

You will be asked to fill out a survey either online or over the telephone to see if you are suitable for the study. If you qualify and are interested in participating, you will be scheduled for two study visits.



**On the first visit,** you will answer questions about your medical history and general health habits, have a brief physical exam, and an exercise test to see if you can tolerate moderate exercise and how fit you are. If you are eligible based on your test results, and would still like to participate, a computer program will assign you by chance to one of the following groups:

➔ **EXERCISE GROUP:** Participants in this group will have a 45-minute bout of exercise on a stationary bike in the Fred Hutch exercise facility.

➔ **RESTING CONTROL GROUP:** Participants in this group will sit for 45 minutes.

**At the second visit,** you will be asked to provide blood samples before and after the exercise bout or resting control period. We will also ask participants if they are willing to join an optional add-on study which involves a muscle biopsy before and after the exercise bout or resting control period.

### BENEFITS

#### How will I benefit?

All study participants will receive information about their study tests results, such as measures of blood pressure, glucose level and tests of fitness. At the end of the study, every participant will receive a 30 minute long session with an exercise physiologist who will take them through a sample aerobic + resistance training workout.

### INCENTIVES

Participants who give blood samples before and after the exercise bout or resting control period will receive \$25. Participants who give both blood samples and a muscle biopsy before and after the exercise bout or resting control period will receive \$125.



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# eligibility

## INCLUSION CRITERIA

- Female
- Resident in greater Seattle metropolitan area (King Country), Pierce or Snohomish Counties
- Aged 18–75 years
- Healthy
- Able to perform all study requirements, including attendance at clinic visits and capable of responding to questionnaires and clinic and exercise facility instructions in English
- Willing to be assigned by chance by a computer program to either the exercise or control group
- Capable of providing informed consent



## EXCLUSION CRITERIA

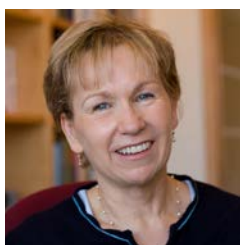
- Pregnant in past 3 months
- Currently breast feeding
- **Premenopausal women:**
  - irregular periods for the past 6 months;
  - use of oral contraceptives for the previous 3 months,
  - use of hormone implants or IUD with hormones (e.g. Mirena) in the previous year,
  - use of estrogens, progesterone, testosterone or other androgens for the previous 3 months
- **Postmenopausal women**
  - use of estrogen, progesterone, testosterone, or other androgens in the previous 3 months, of any type including oral, creams, vaginal creams or inserts, patches, or implants
- Current use of any tobacco products including smoking, vaping, chew, nicotine patches
- History of diabetes mellitus or high blood sugar that could indicate diabetes
- Taking any medications to treat high blood sugar such as metformin
- History of any cancer (other than non-melanoma skin cancer)
- Drinking more than 2 alcoholic drinks/day
- Ever told by a doctor that you should NOT exercise
- Findings on the physical exam that could make exercise unsafe
- History of heart attack, stroke, heart failure, heart valve disease, heart rhythm problems, serious lung disease, blood clot in the lungs, uncontrolled high blood pressure
- Frequent marijuana use (more than once per month)
- Alcohol or drug dependence or abuse, or uncontrolled mental illness

## FOR THE MUSCLE-BIOPSY SUB STUDY:

- History of clotting disorders
- Unable or unwilling to stop aspirin, ibuprofen, naproxen, or similar drugs for 48 hours before and after the procedure
- Allergy to anesthetics including local anesthetics



# meet the team



**Dr. Anne McTiernan MD PhD**  
*Principal Investigator of the ACE study*

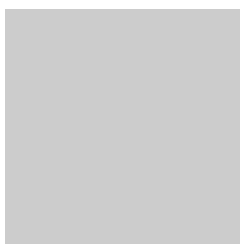
Dr. McTiernan's research focuses on identifying ways to prevent new or recurrent cancer with a particular focus on weight control, physical activity, and chemoprevention. She has led several NCI-funded grants to test weight loss and exercise effects on biomarkers of breast cancer, colon cancer, and other cancers and diseases. She currently is funded by the Breast Cancer Research Foundation to study long-term effects of weight loss and exercise on breast cancer biomarkers.

Dr. McTiernan is an elected Fellow in the American College of Sports Medicine, the Obesity Society, and the American College of Epidemiology. She has served on national and international health advisory boards and working groups including the International Agency for Research on Cancer, the American Cancer Society, the U.S. Department of Health and Human Services 2008 and 2018 Physical Activity Guidelines Advisory Committees, the World Cancer Research Fund International, and the Komen for the Cure Scientific Advisory Council.



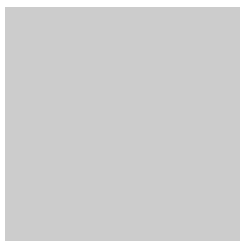
**Matt van Doren**  
*Exercise Physiologist at the Prevention Center*

Bio to come.



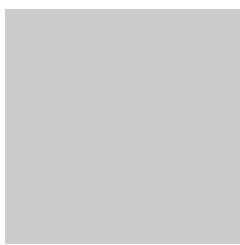
**Jude Warner**  
*Title to come*

Bio to come.



**Claudia Kumai**  
*Physician Assistant*

Bio to come.



**Ann Bradshaw**  
*Medical Assistant*

Bio to come.





**BACKGROUND**

**ELIGIBILITY**

**MEET THE TEAM**

**CONTACT US**

# contact us

Contact information to come.



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