

# Pathways Study

- Prospective study of CVD in 14,942 breast cancer survivors diagnosed at KPNC (2005-2013)
- Each person is matched to 5 women without a history of breast cancer (74,702)
- **Goal:** Examine incidence of CVD events in women with and without breast cancer, and
  - how incidence varies by breast cancer treatment received, and by CVD medications taken

Funded by the National Cancer Institute R01 CA214057 (MPI: Kwan and Greenlee)

# CVD Risk and Breast Cancer Treatment

- Higher Incidence of Hypertension and Diabetes in Women with Breast Cancer
  - Hypertension Short-term ↑ Incidence within 2 years
  - Diabetes Overall ↑ Incidence over 10 years
  - Dyslipidemia Overall ↓ Incidence over 10 years
- Chemotherapy Treatment: 2-3 times Higher Risk of Heart Failure and Cardiomyopathy
  - Anthracyclines
  - Trastuzumab

# Neighborhood and CVD Risk

- What is the influence of the social and built environment on risk of CVD in ~4,000 breast cancer survivors in the Pathways Study?
  - Lower Asian American and Pacific Islander neighborhood population: 1.9-times higher risk of CVD
  - Higher neighborhood crime: 1.5-times higher risk of CVD
- What have we learned:
  - Residential environments can shape health outcomes
  - Stress pathways could be responsible for some health effects

\*manuscript under review