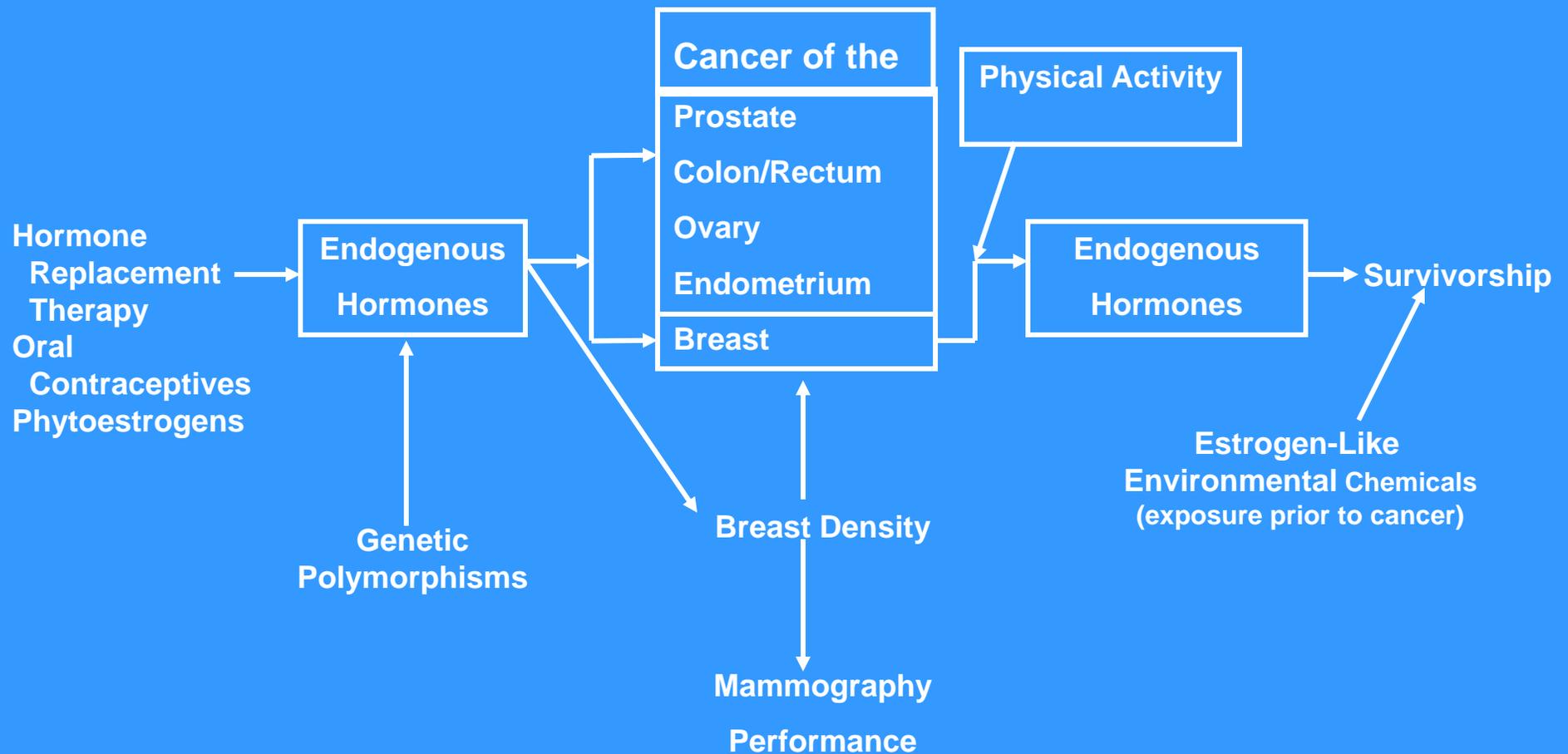


# **Reproductive Hormones and Cancer Projects**

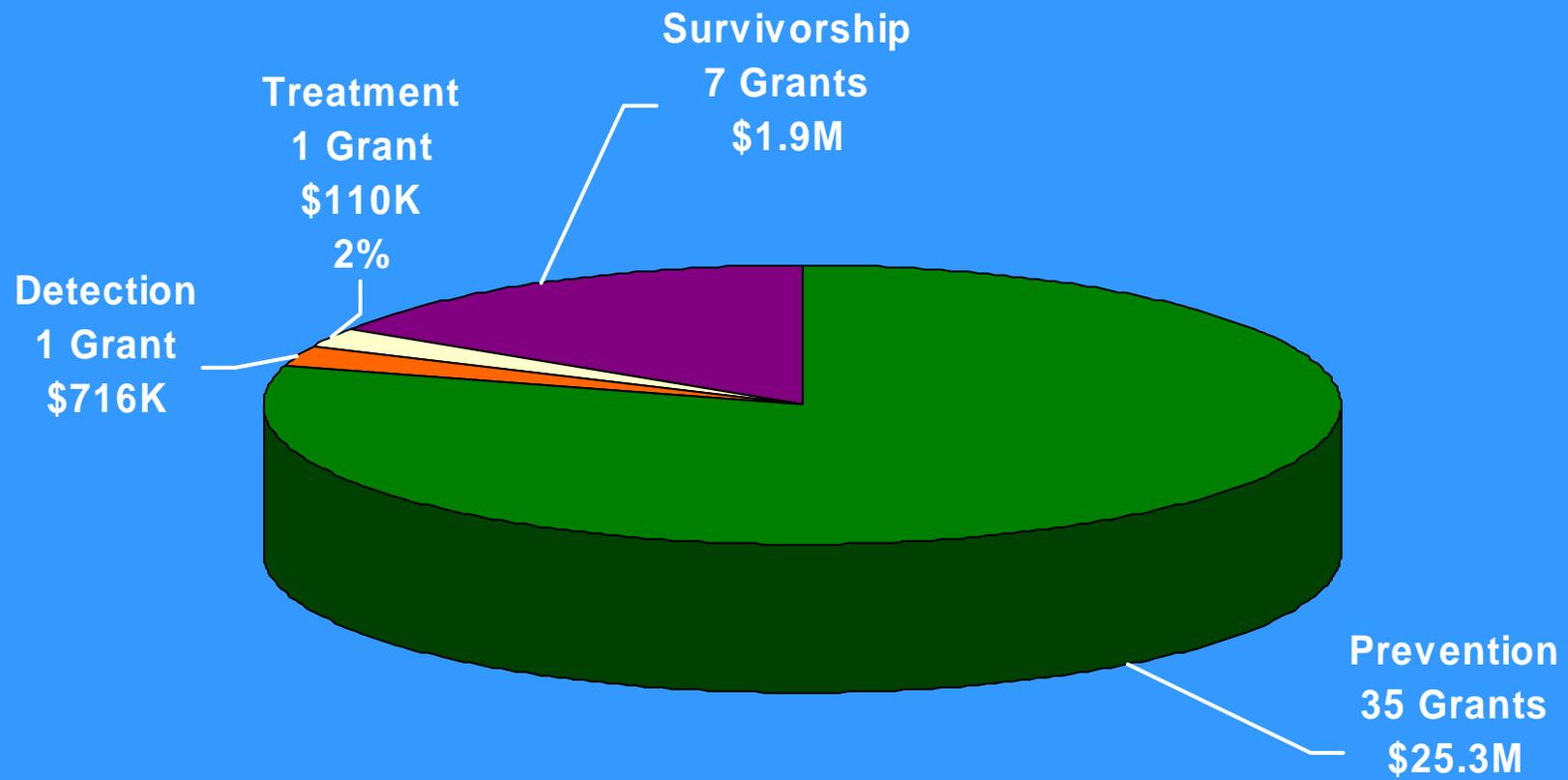
**Deborah M. Winn, Ph.D.**

**Division of Cancer Control and  
Population Sciences**

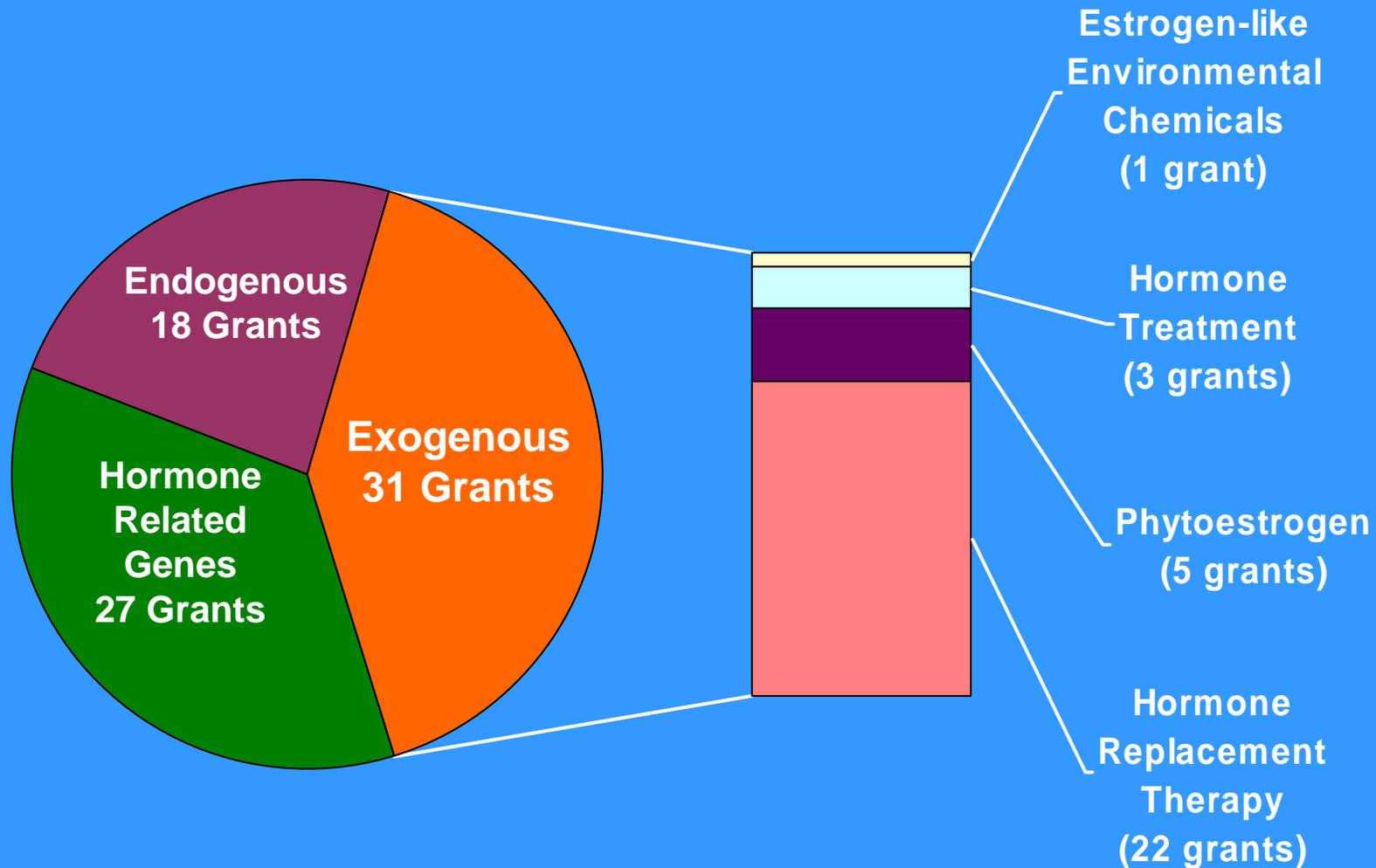
# DCCPS Research Portfolio on Reproductive Hormones and Cancer



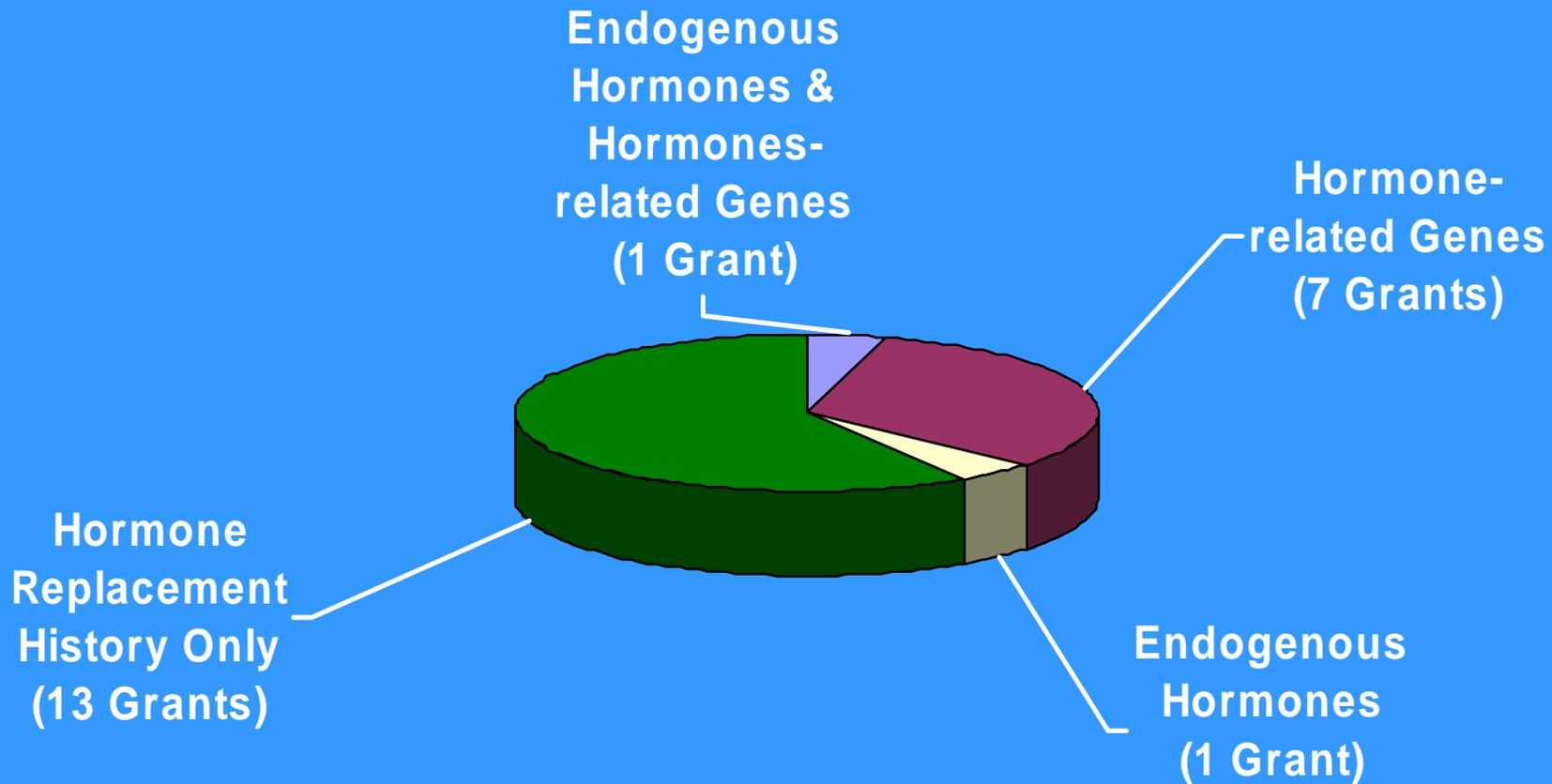
# Distribution of DCCPS Research Grant Projects on Hormones and Cancer (n=44 , \$28.0 million)



# Grants Involving Endogenous & Exogenous Hormones and Hormone-related Genes



# Grants Involving Hormone Replacement Therapy Users



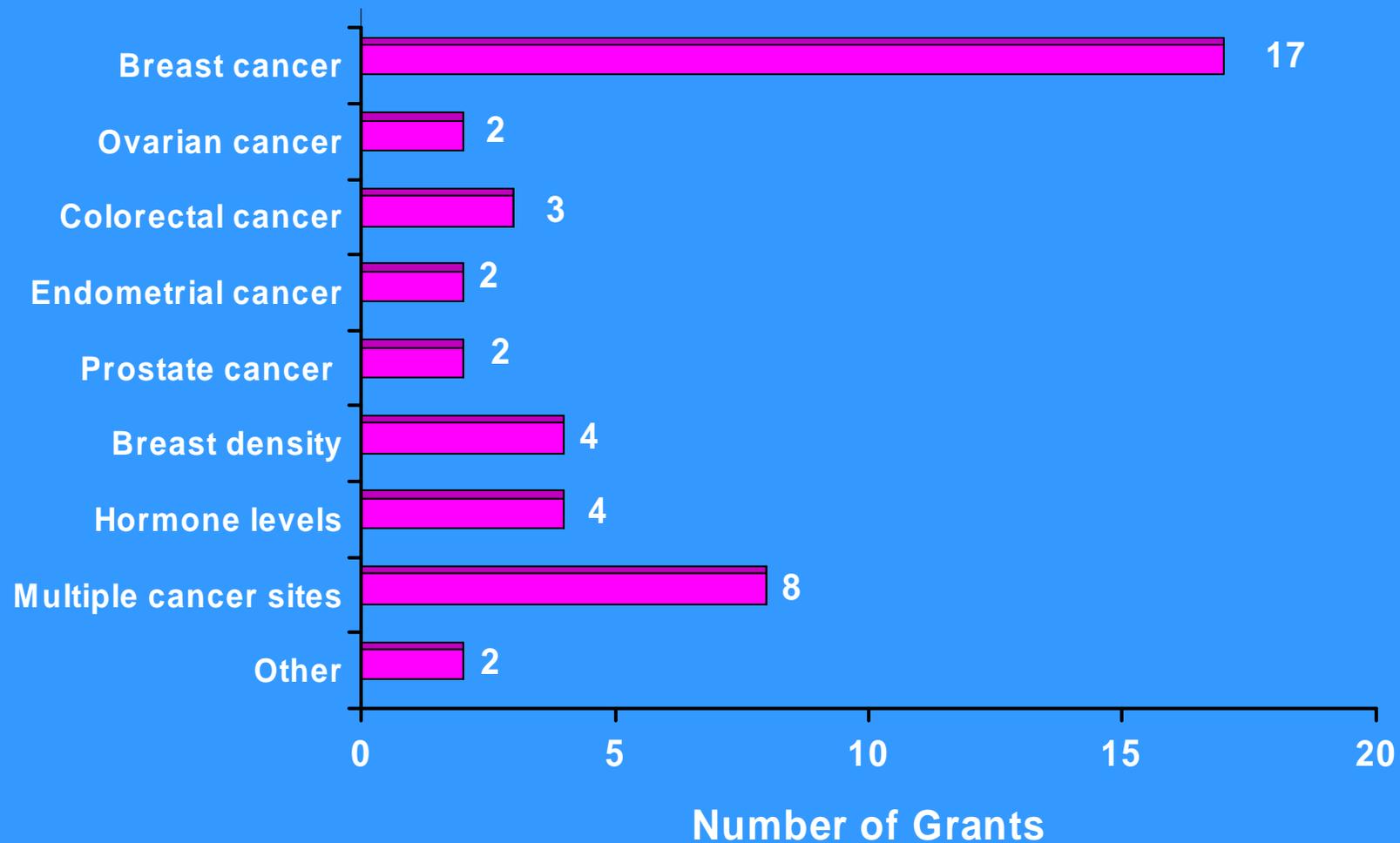
# **Diet, Hormones, and Risk of Breast and Prostate Cancer**

- **Multi-ethnic cohort in Hawaii (Japanese, Caucasian, Native Hawaiians)**
- **29,000 persons enrolled and interviewed at baseline**
- **Blood and urine obtained**
- **Followed for incident cancers**

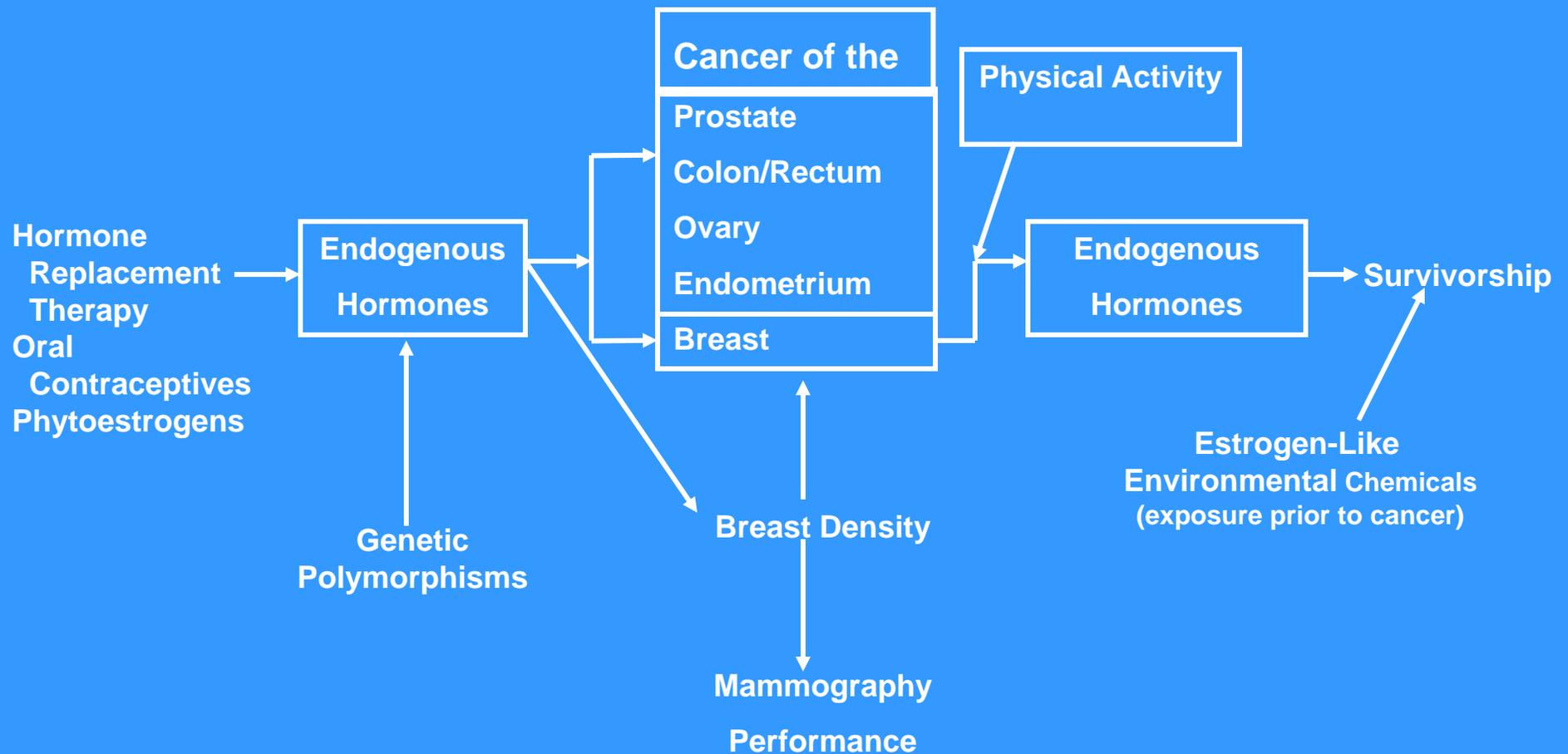
# Aims

- Interactions of phytoestrogens, carotenoids, tocopherols, insulin-like growth factors, estrogens and androgens on risk of **breast** cancer
- Interactions of selenium, phytoestrogens, carotenoids, tocopherols, fatty acids, insulin-like growth factors, isoprostane, and androgens on risk of **prostate** cancer

# Hormone-related Cancers and Other Health Conditions



# DCCPS Research Portfolio on Reproductive Hormones and Cancer



# Hormones and Breast Density

- 875 postmenopausal women aged 45-64
- From trial of conjugated equine estrogens plus one of 3 progestins
- Aims: investigate changes in breast density in relation to serum levels of estrone from HRT therapy

# **New Hampshire Mammography Network Detection and Prognostic Indicators**

- **74,200 women from mammography registry**
- **Includes 26,700 current HRT users**
- **Impact of HRT on mammography performance**
- **Breast cancer incidence**
- **Breast cancer prognostic indicators**

# Survival After Breast Cancer

- Breast cancer case-control study in Long Island
- Recent findings of no association with estrogen-like environmental chemicals
- Now examining effect of PCBs, chlordane, dieldren, and DDE on breast cancer survival

# Surveillance of Use of Exogenous Hormone Medications

- 2000 National Health Interview Survey
  - Nationally representative sample survey of 39,000 households
  - Survey asks about current use of HRT, tamoxifen, raloxifen, birth control pills/implants/shots
- California Health Interview Survey
  - Representative of California population, especially ethnic subgroups
  - Current use of hormone replacement to control menopause symptoms

# Potential Future Project

- Proposed administrative supplement
- Cancer Research Network
- CRN supports the development of research capabilities across multiple healthcare provider organizations for the conduct of cancer research projects

# Primary Aims are to

- Compare the rate of HRT discontinuation among women in HMO organizations before and after the release of the WHI results
- Compare the rate of HRT initiation before and after the release of the WHI results
- Document how HRT clinical guidelines change in response to the WHI results at five large HMOs across the U.S.

# Cohort Consortium

- Consortium of investigators of 9 very large prospective cohorts
- Addresses need for high quality, large sample sizes to study gene-environment interactions
- Biological specimens obtained prior to diagnosis