

Division of Cancer Prevention: Impact of Prevention & Screening Research

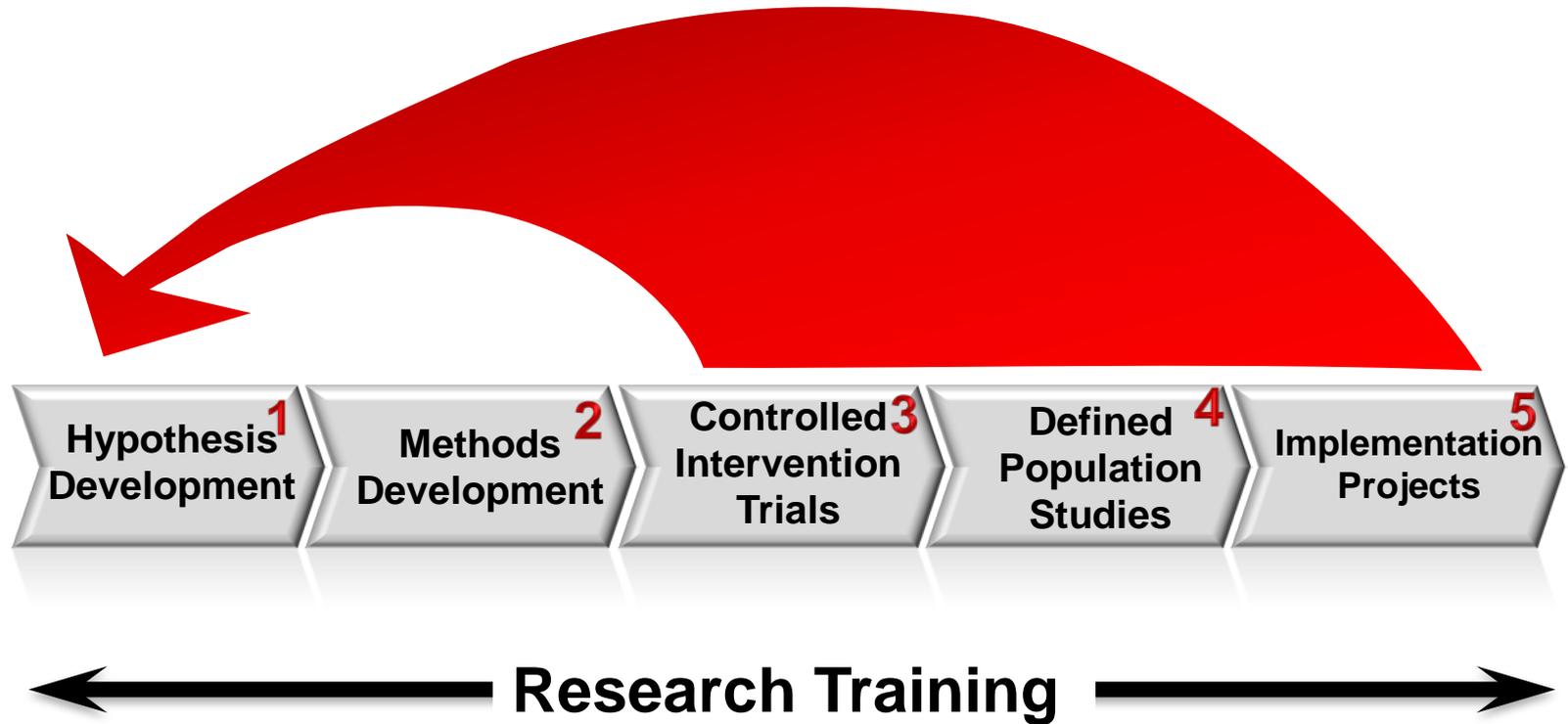
**National Cancer Advisory Board
Board of Scientific Advisors
Joint Meeting
December 2014**

**Barry Kramer, MD, MPH
Director
Division of Cancer Prevention**

Recent NCAB and BSA Presentations on DCP Research

- Prostate Cancer Screening (Dec. 2011)
- DCP Research Priorities (March 2013)
- NCI Community Oncology Research Program (June 2013 and Sept. 2014)
- Molecular Characterization of Screen-Detected Lesions (Nov. 2013)
- Colorectal Cancer Screening (Dec. 2013)
- Early Detection Research Network (June 2014)
- Aspirin for Cancer Prevention (June 2014)

Phases of Cancer Prevention Research Continuum



Core Issues in Screening and Prevention

- It is difficult to make healthy people better off than they already are.
 - It is sometimes easy to make healthy people worse off.
- Strong evidence of benefit is important when putting large numbers of healthy people in harm's way.

Clinical & Public Health Impact of Screening Studies

- **ASCUS-LSIL Triage (ALTS) Trial:** Established the role of HPV testing in triaging low-grade cervical lesions
- **National Lung Screening Trial:** Grade “B” recommendation from US Preventive Services Task Force mandates 3rd party payment (May 2013)
- **Prostate Cancer Screening:** Grade “D” recommendation against routine screening (Dec. 2013)
- **Ovarian Cancer Screening:** Grade “D” recommendation against screening (Sept. 2012)

Clinical & Public Health Impact of Prevention Studies

- **SERMS/Breast Cancer Prevention:**
Grade “B” recommendation to discuss use of tamoxifen or raloxifene in women at increased risk for breast cancer (Sept. 2013)
- **Beta-Carotene and Vitamin E Trials:**
Grade “D” recommendation against beta-carotene and vitamin E supplements to prevent cancer and cardiovascular disease (Feb. 2014)

Research Directions and Resources

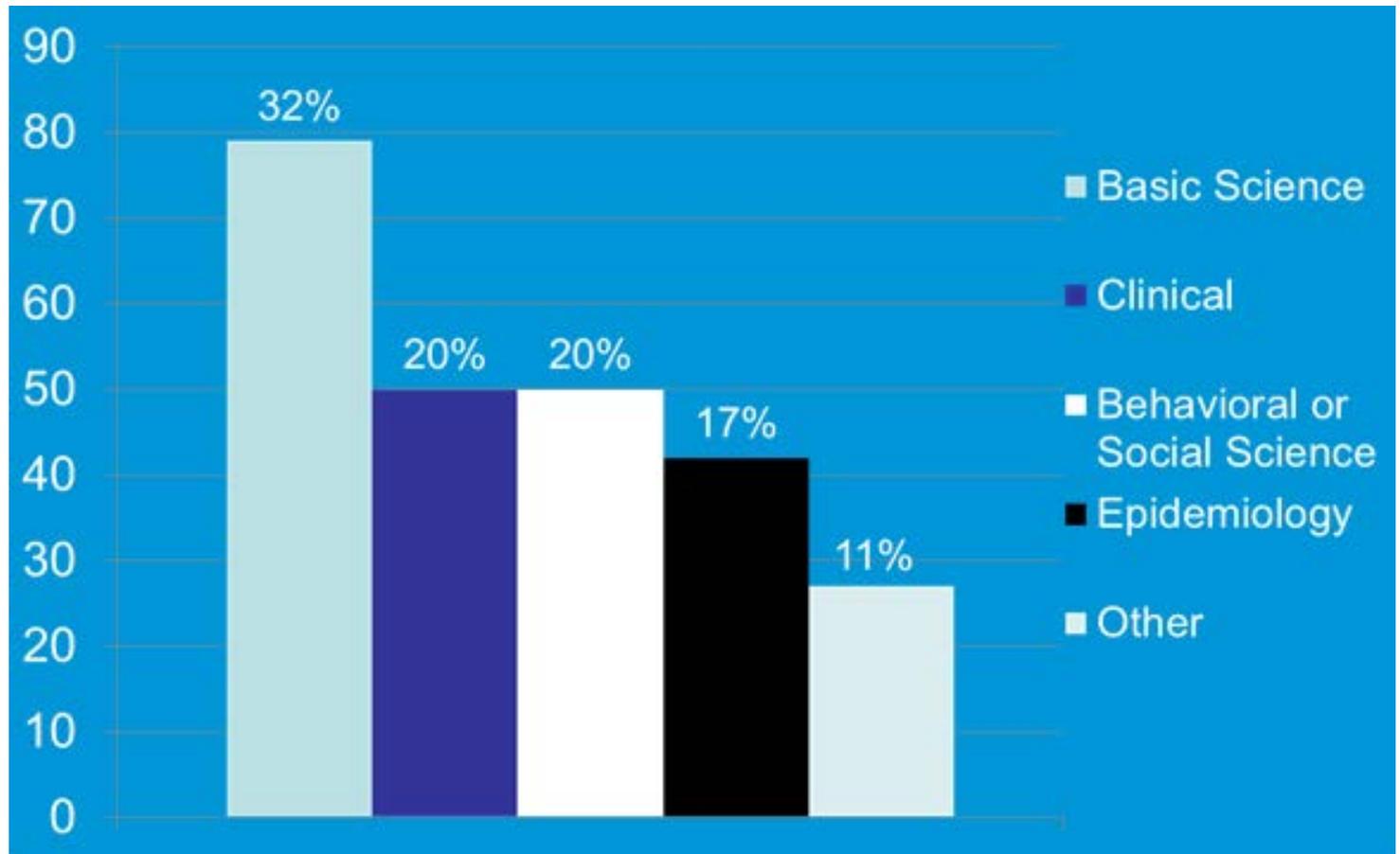
- NCI Community Oncology Research Program (NCORP): a national network for studying the effects of healthcare organizations on prevention & care
- ASPREE Trial to study aspirin in the elderly
- Molecular Characterization of Screen-Detected Lesions/Overdiagnosis RFA: Closed Sept. 18, 2014
- Prostate, Lung, Colorectal, Ovarian(PLCO) Trial Biorepository: a national resource
- Early Detection Research Network RFA: Applications Due Jan. 6.
- National Resource: IDATA Study of Measurement Error in Diet and Physical Activity: in preparation

NCI Cancer Prevention Fellowship Program: Training the Next Generation

- Post-doctoral intramural fellowship for early-career scientists
- Independent, mentored research in cancer prevention
- Multidisciplinary
- Up to 4 years funding support
- 10-15 fellows selected annually
- <http://cancer3.gov/prevention/pob>

Fellows' Scientific Disciplines

(1987-2012, n = 248)



Areas of Potential Expansion in Prevention and Screening Research

- Microbiomics
 - Obesity/energy exchange
 - Role in carcinogenesis
 - Immunomodulation
 - Risk identification
- Immunoprevention
 - Oncogenic infections
 - Non-infection related
- HPV gaps
 - Less than 3 doses
 - HPV self-collection
 - HPV therapeutic vaccines
- Genomics of pre-malignant lesions (“pre-TCGA”)

