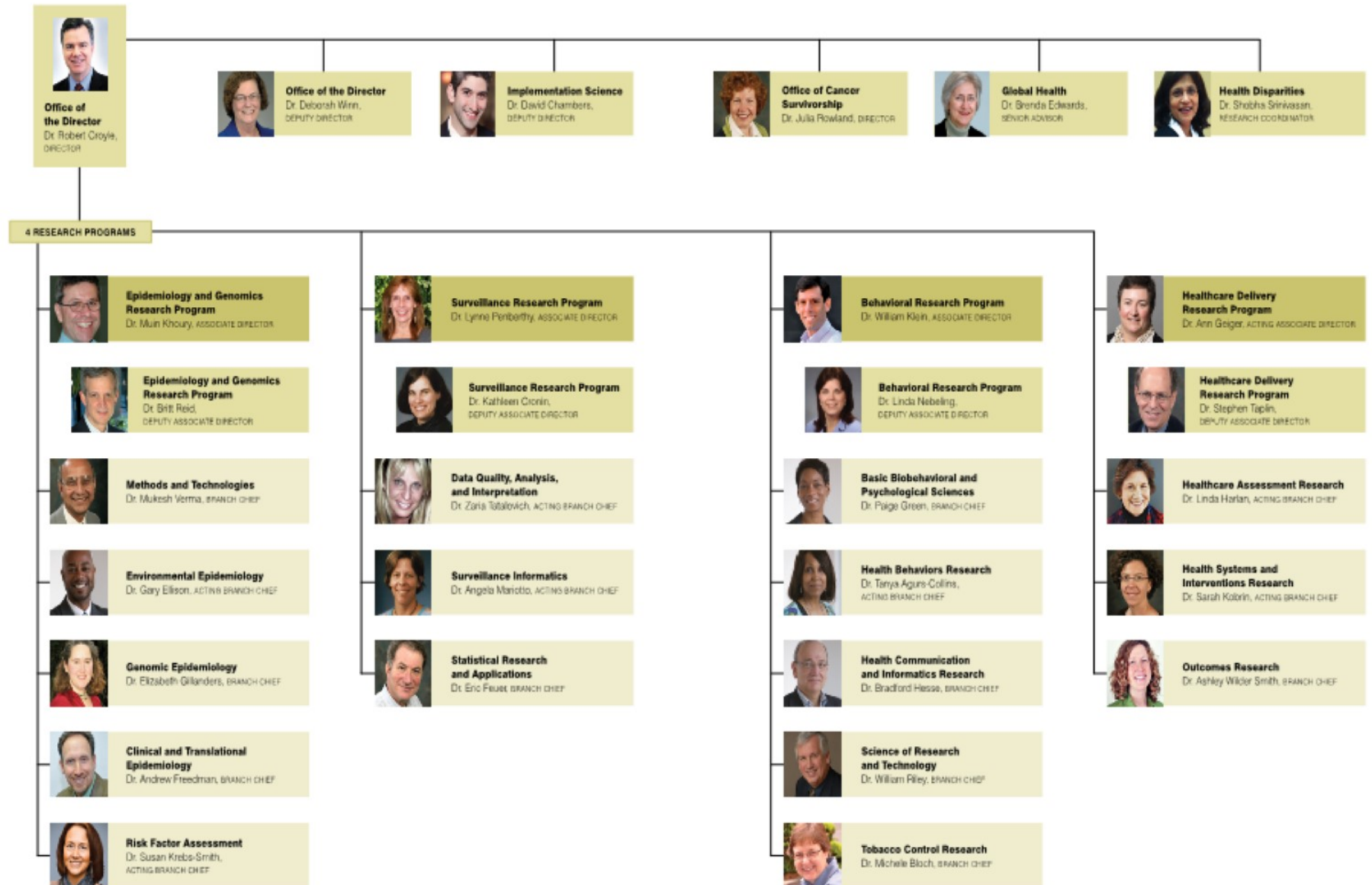


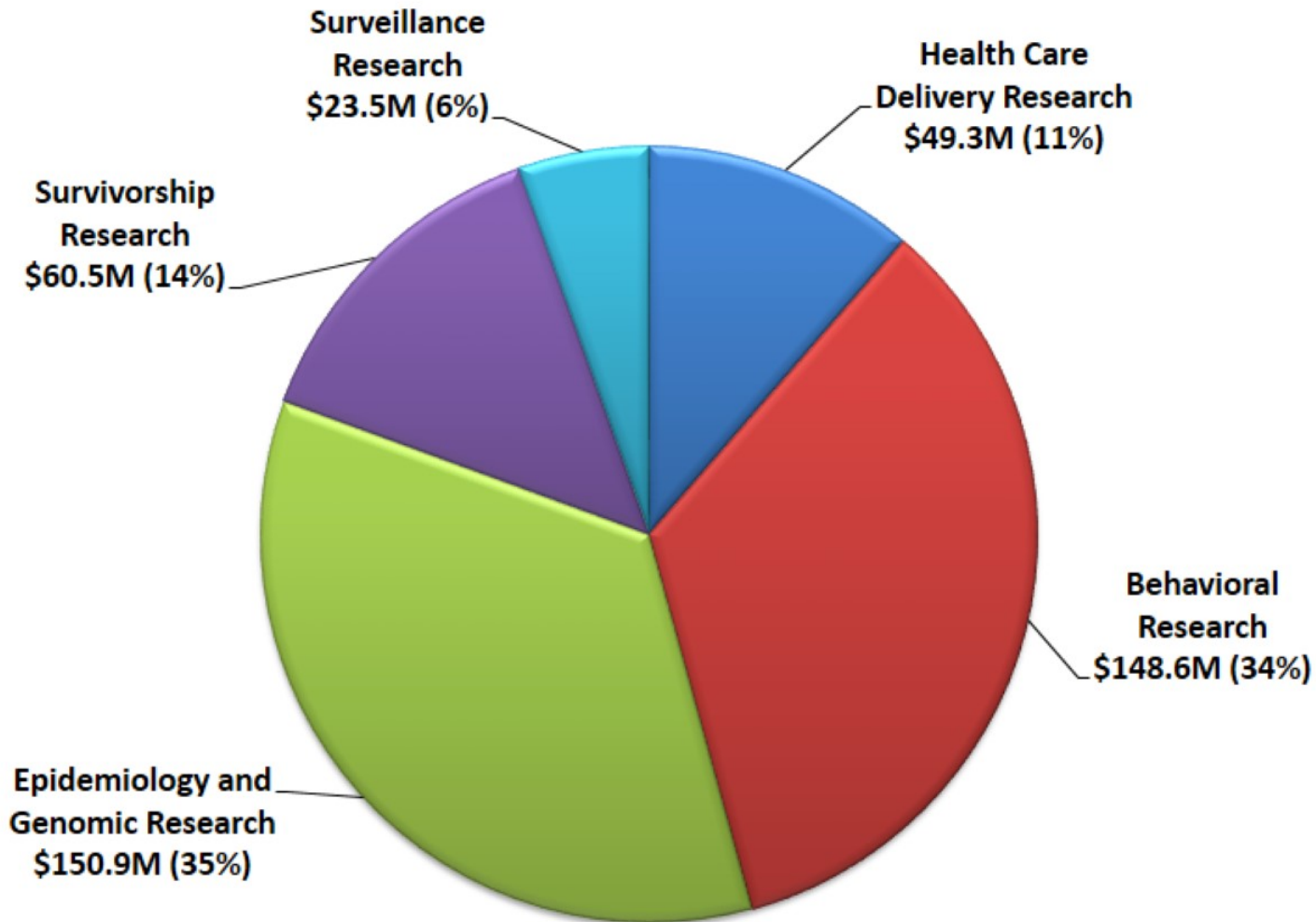
Overview of the Division of Cancer Control and Population Sciences

Robert T. Croyle, PhD
Director

DCCPS Organization – FY 2015



DCCPS FY14 Grant Portfolio Funding



Overview of selected DCCPS – China Research Activities

*Convening, collaborating, and funding to
reduce cancer burden*

Britt Reid, PhD

Division of Cancer Control and Population Sciences

Mutual Scientific Interests

- Environmental exposures in cancer risk
 - Includes diet, nutrition, physical, chemical, and infectious agents
- Genetic variance in cancer risk
 - Includes epigenetic variance
- Tobacco Control
 - Includes policy interventions, behavior change

Studies of Genetic Variance and Environmental Exposures

- DCCPS currently funds 31 individual grants or cooperative agreements among Chinese populations
 - Combined total costs of \$18.3M annually
 - Combined total enrolment of over 226,000 Chinese participants
- Outcomes include: Incidence of breast, colon, prostate, gynecologic, lymphoma, gastric, and lung cancers

Critical Cohorts for Discovery

1. Shanghai Women's Health Study
 - 61,850
 - 2001 - present
2. Shanghai Men's Health Study
 - 75,220
 - 1996 - present
3. Shanghai/Singapore Cohort
 - 81,500
 - Shanghai Health Study – 1987 - 2010;
 - Singapore Cohort Study – 1999 -2010;
 - The two cohorts were combined in 2010

Shanghai Women's Health Study (SWHS)

- Established 1996, N=75,000. PI – Wei Zheng
 - Over 5,000 incident cases identified by the Shanghai Cancer Registry
 - 90% of study participants provided blood, urine and buccal cell samples at baseline; tumor tissue for 70% of cancer cases
 - Repeated measures of exposures over years, 92% response rate
 - Over 200 manuscripts published, 80 studies supported, 50 junior investigators/postdoctoral fellows mentored
 - SWHS resources used in over 20 GWAS, including glioma, pancreas, esophagus, stomach, ovary, and liver cancers

Shanghai Women's Health Study (SWHS)

- SWHS investigators identified 7 novel susceptibility loci/risk variants for breast cancer, first locus for ER-negative breast cancer (Nature Genetics, 2009)
 - HZ 60% elevated risk of breast cancer
- SWHS investigators established the Asia Colorectal Cancer Consortium
 - 12 groups, over 13,000 cases/controls, found 3 novel risk loci for CRC (Nature Genetics, 2012)
 - Asian Cohort Consortium including SWHS investigators, 1M subjects from 19 cohorts, found a U-shaped association between BMI and cause-specific mortality (NEJM, 2011)
 - Protective effect shown for soy-food intake with breast cancer risk among premenopausal women (Am J Clin Nutr, 2009)

Consortia with Chinese populations

- Ability to study rare cancers and exposures by pooling data
- Ability to establish common data elements and protocols
- Ability to share expertise
- EGRP provides portal, scientific liaison, and best practices
- 15 consortia include Chinese populations
 - wide range of cancers and exposures
 - Over last 5 years these consortia have submitted 26 grant applications, 15 of which were funded

Extent and Range of Relevant Consortia

- 1) Asia Cohort Consortium (ACC)
- 2) Asian Breast Cancer Consortium
- 3) Asian Colorectal Cancer Consortium
- 4) Asian Barrett's Consortium
- 5) Breast Cancer Association Consortium (BCAC)
- 6) Breast Cancer Consortium for Outcomes and Survival (BC2OS)
- 7) Genetics and Epidemiology of Colorectal Cancer Consortium (GECCO)
- 8) The Consortium of Investigators of Modifiers of BRCA1/2 (CIMBA)
- 9) Epidemiology of Endometrial Cancer Consortium (E2C2)
- 10) Genetic Associations and Mechanisms in Oncology (GAME-ON)
- 11) International Consortium for Investigation of Inherited Renal Malignancies (I-ConFIRM)
- 12) International Consortium of Bladder Cancer (ICBC)
- 13) International Lung Cancer Consortium (ILCCO)
- 14) Ovarian Cancer Association Consortium (OCAC)
- 15) Pancreatic Cancer Case Control Consortium (PANC4)

Collaboration for Tobacco Control

mHealth Projects

DCCPS and Chinese partners test mHealth tools for smoking cessation

- RCT of a text-message-based smoking cessation intervention
- RCT of strategies to reduce secondhand smoke exposure among infants

HINTS China (sponsored by China's Ministry of Health)

DCCPS technical support and analyses for the Health Information National Trends Survey (HINTS) in China

China-US Smokefree Workplace Partnership

Public-private partnership to promote smokefree workplaces

Workshops and Technical Assistance

Joint workshops and ongoing scientific exchange in tobacco control research with China CDC, the Chinese Academy of Medical Sciences, Peking University Medical College, WHO China Office, and other partners

Future Opportunities to Collaborate

- Top DCCPS Scientific Priorities
 - Health Disparities:
 - Differences in risk and occurrence
 - Survivorship:
 - Current lack of Asian survivorship cohorts
 - Implementation and Dissemination:
 - Translation of risk predictors into interventions