

#### A National Cancer Institute Comprehensive Cancer Center

# Strategies for addressing common concerns in collaborative research and how to maximize existing resources?

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#### Concerns

- Resource access and priorities of "collector" vs collaborator
- Academic careers –particularly junior faculty- that include a major contribution to team science

#### Resources

- Questionnaire data
  - (http://epi.grants.cancer.gov/Consortia/cohort.html)
- Blood based samples
  - Plasma (not renewable)
  - DNA (renewable?)
- Tissue samples
  - TMA gets us 100 slides (for cancer)
  - For benign premalignant lesions number of cuts assumed to be less

#### Cohort data

- Questionnaire data readily combined (hormones
  - Oxford; diet pooling project; etc.

http://www.hsph.harvard.edu/poolingproject/about.html

- DNA combined in NCI funded large studies
  - cohort consortium (BPC3)
  - NHS samples in CGEMS (breast)
  - HPFS/PHS samples in CGEMS (prostate)
  - InterLymph case-control studies combined
- Blood less readily shared due to non renewable nature

#### Non-renewable issues

- Priority goes to the collector /curator
  - Had hypothesis to do the collection
  - Expended years collecting cataloging and preparing samples for use
- Multilevel Challenge: balancing
  - careers (individual)
  - study (underlying research endeavor) and
  - scientific needs (society)

# Large scale biomedical science (IOM report)

- Among difficulties addressed by committee was recruitment and retention of qualified scientific managers and staff for large scale projects
- Our challenge is the scientific leadership training, retention, and promotion

 Large-scale biomedical science. Exploring strategies for future research. NCPB/IOM 2001

#### Team Science

- Not large scale:
  - RO1
  - Program Project
- Large scale
  - SPOREs, EDRN, and transdisciplinary Centers (TTURC, TREC, etc)
  - Consortium
    - Through large scale studies the identity of the individual investigator becomes more difficult
    - The time commitment to building collaborations across institutions and even countries, and sustain the team effort increases

#### Tenure

- Investigator criteria HMS
- Serve as associate professor with major accomplishments in research
- Continued publication of exceptional, original, and innovative research findings, and / or important clinical applications of basic science

# Tenure (2) USC

 Promotion to associate professor with tenure requires evidence of independent research as reflected through funding (at least the equivalent of 2 RO1s – at onetime), and having a national impact on an area of research expertise as reflected through referee letters (of people with whom you have not collaborated) and publications in highly ranked journals

#### Where are we?

- Consortia type activities are already a common feature of the epidemiology programs at NCI; DCCPS and DCEG
- Our training programs do not offer any record of focus on how to prepare for participation in these large scale efforts
- Promotion criteria do not yet reflect these activities

## Solutions - promotion

- Support junior investigators through the promotion system
  - Educate academic leaders (deans, provosts, department chairs, and other decision makers) that we can make major contributions through team science
  - Work to revise promotion "rules" to accommodate team science

#### Solutions

- Improve peer review process for consortia
- We need journals to allow long lists of authors – or other solutions
- We need to maintain funding of the basic components that feed into the consortia activities
- We need best practices readily identified
  - DCCPS can be repository

## Addressing the challenges

- We have challenges
- The solutions are still to be defined
- We can continue to build collaborative large studies, frame the evaluation of large endeavors, and support the contributors to sustain academic careers and the research funding base