

Workshop on the Implications of Convergence for How the National Center for Science and Engineering Statistics Measures the Science and Engineering Workforce

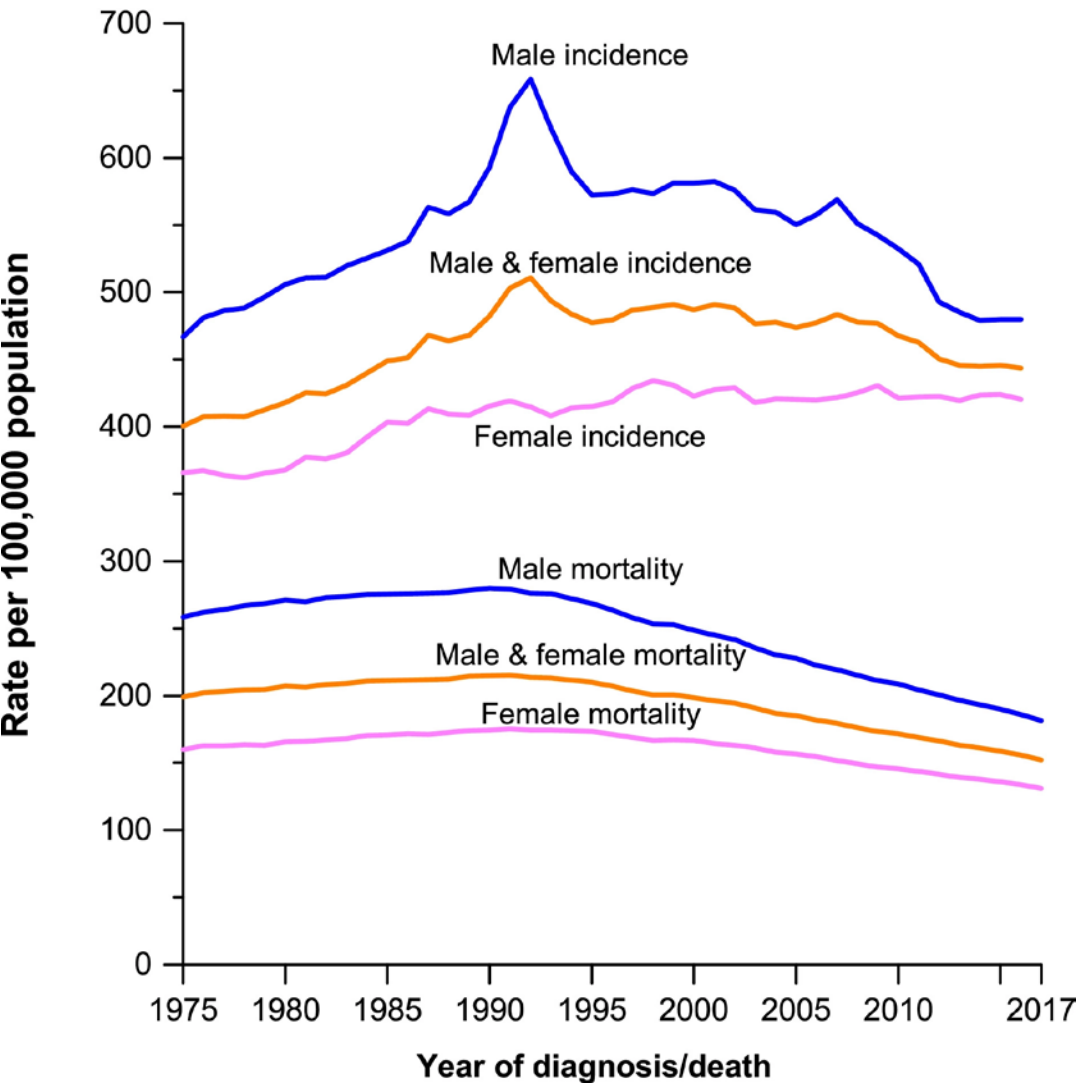
Dan Gallahan, PhD

Director

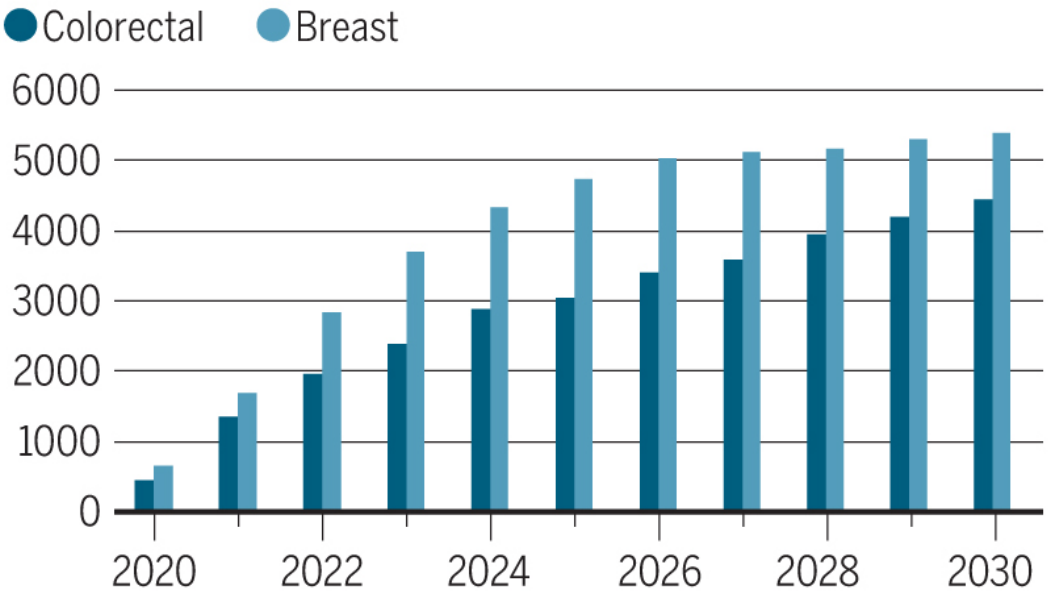
Division of Cancer Biology, NCI

October 22-23, 2020

The continuing cancer challenge...



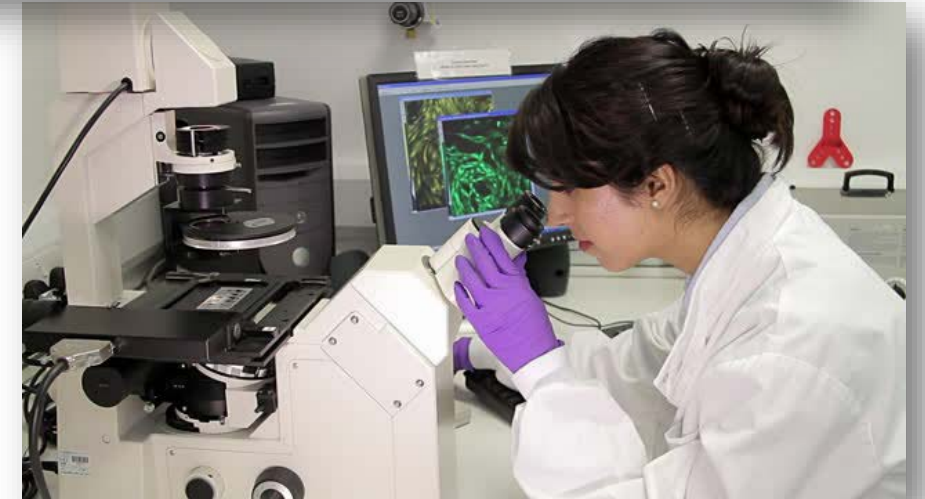
Modeled cumulative excess deaths from colorectal and breast cancers, 2020 to 2030*



*predicted due to Covid delayed screening and treatment

We need new approaches to cancer research?

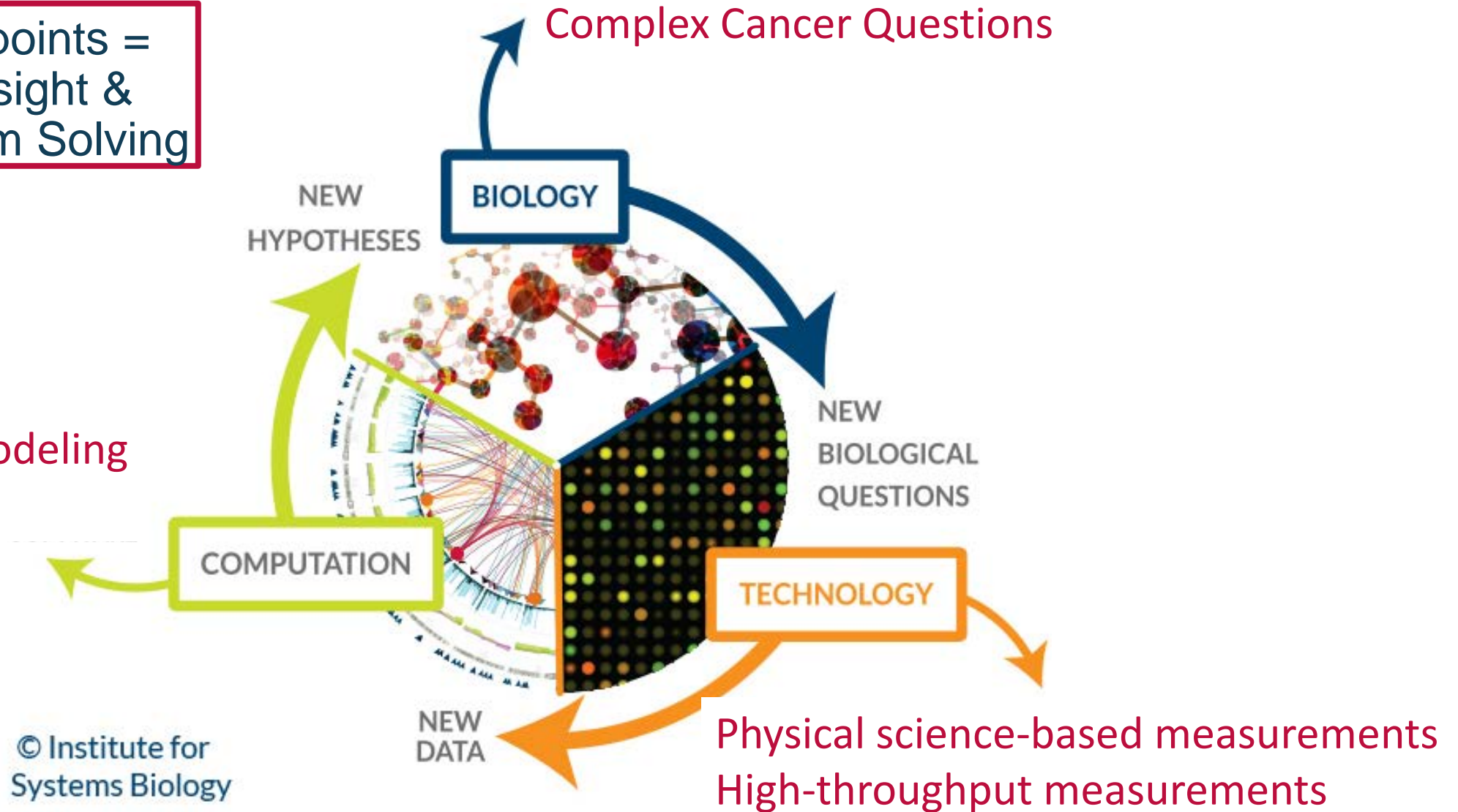
How Things Appear is Always a Matter of Perspective . . .



The PS-ON and CSBC investigators bring new approaches to cancer research

Multiple Viewpoints =
Enhanced Insight &
Efficient Problem Solving

New theory
Mathematical modeling
Big data analysis



But critical evaluation is needed/

Evaluation goal: Determine program success and future directions through engagement of an external expert panel and extensive quantitative and qualitative data collection.

Example for the NCI Cancer Systems Biology Consortium (CSBC)

Program goals:

1. Address and advance understanding of mechanisms underlying fundamental processes in cancer.
2. Support the development and broad application of systems biology and computational modeling in cancer research.
3. Expand the cancer systems biology field of research through education, training and outreach programs.

Evaluation questions:

1. Should NCI continue to support a dedicated program in cancer systems biology?
2. What impact is CSBC having on the field of cancer biology?
3. What is the role of CSBC in supporting a strong and stable research community?
4. Are the current funding mechanisms (U24, U54, and U01) appropriate to achieve the program goals?
5. Are there additional training and outreach activities that should be pursued to achieve program goals?