Co-Chair: Julia Rowland
National Cancer Institute
Projected Number of US cancer cases for 2000 through 2050 based on projected census population estimates and age-specific cancer incidence from cases diagnosed in 1995-1999 in the SEER and NPCR areas.

60% of survivors are ≥ 65 yrs
Prevalence by age and duration among survivors aged 65 and older

Source: Angela B. Mariotto, Surveillance Research Program, National Cancer Institute, National Institutes of Health/US Department of Health and Human Services, Bethesda, MD. Prevalence was projected for 2014 using SEER data and applying the Prevalence Incidence Approach Model (PIAMOD), a method that calculates prevalence from cancer incidence, cancer survival, and all-cause mortality.
% with Limitations:
Survivors vs. General Population
(NHIS 1998-2000; survivors N = 4,878 vs. gen pop N = 90,737)

Aging, Comorbidity, Cancer Survivorship

- Older cancer survivors have more comorbidity than younger
  \textit{Hewitt, JGMS 58: 82, 2003}

- Older cancer survivors have more comorbidity than age matched non-cancer survivors
  \textit{Barker, Cancer 97: 674, 2003}

- Comorbidities dominate QOL, functional status, survival costs
  \textit{Garman, JGMS 58: 1119-24, 2003}
  \textit{Seo, Cancer 101: 2276-84, 2004}

- Older cancer survivors have functional decline, but comorbidity increases it geometrically
  \textit{Hewitt, JGMS 58: 82, 2003}
  \textit{Avis, Cancer 113: 3519, 2008}
What is aging?
Heterogeneity in aging cannot be explained by comorbidity or organ function alone.
How does cancer therapy impact aging?

“How Premature Aging Syndrome”

Will I recover?
Geriatric assessment variables independently predicted the risk of toxicity.

- These included: **functional status** (incl. limited ability to walk one block, decreased social activity due to physical or emotional problems, falls in the last 6 mos, need for assistance taking meds), **vision problems**, and **poor hearing**.
**Secrets to successful survivorship (young or old ?)**

- Optimism
- Social engagement (support and meaning)
- Healthy lifestyle, including stress reduction (lower inflammatory/immune markers)
- Getting older (and the wisdom that comes with it)!
The Quantified Self
Self-Knowledge Through Numbers
Realizing the promise of technology...

- Facilitating the generation and wise use of survivorship care plans
- Linking survivors, family members, and healthcare providers seamlessly
- Tracking desired outcomes and delivering tailored, timely and effective interventions to achieve these
- Recruiting for research
Realizing the promise of technology…

- Promoting resilience: connection, purpose, healthy lifestyles, stress management
- Identifying gaps in our knowledge base

*Overarching Challenge*: Promoting survivorship care that successfully melds high tech with high touch
Cautionary tale of tech for the elderly...
2013 Institute of Medicine Report
Delivering High-Quality Cancer Care: Charting a New Course for a System in Crisis

- Number of cancer cases on the rise
- Majority of cancers occur in older adults
- Older adults under-represented in research
- Projected shortage of healthcare providers with geriatrics expertise
- IOM Committee makes recommendations to improve our evidence base and strengthen the national workforce that cares for older patients with cancer
We have to be in this work for the long haul...

Fauja Singh, here aged 100, prepares for Britain’s Edinburgh marathon in 2011.
Ms. Ida Keeling, 100, who holds the record for the 60-meter dash for American women ages 95-99

(courtesy of the New York Times, April 22, 2016)