Andrea La Croix (UCSD)
Presentation

Introduction: Why are we here?
- Population Pyramid
- To define directions to develop valid and reproducible markers (bio- and clinical markers) of exceptional aging
- What questions need to be answered?
  - Maximizing health span
  - Distinguishing health aging from unhealthy aging at any age.

What are we trying to achieve?
- A published paper that defines new directions, appropriate study designs and short term and long term opportunities and challenges in this field

What is exceptional longevity (for today)?
- Working definition that is simple, like survival to age 95+ with enough cognitive function to live independently and enough physical function to walk a block and climb stairs

What are the ground rules for today?

Judy Campisi (Buck Institute)
Presentation

Hallmarks of Aging (molecular markers of aging)
- How might the Hallmarks be related to each other?
- Which are most relevant to assessing human aging and could be useful in a composite marker?

Luigi Ferrucci (National Institute on Aging)
Presentation

Markers of physical aging
- Classical biomarkers and functional tests in aging research (non-cognitive)
- Concept of resiliency (physical, biochemistry tests)
- Adaptive response as a new marker (OGTT-ability to adapt and repair that when compromised results in disease)
Linda McEvoy (UCSD)  
Presentation

Markers of cognitive aging
- Markers that predict adult cognitive performance/aging (what in the field is accepted)?
- Describe what they are measuring, the different types of tests, at what age you are able to detect changes, which domains are most sensitive to complete loss of cognition (advanced AD is like death of the brain)
- How does imaging contribute (if it does) to a composite marker of cognitive aging or even biological aging?

Morgan Levine (Yale)  
Presentation

Composite Aging Biomarker Models
- Synthesizing and models of bringing biomarkers together to get at methylation age (description and methods of how these scores were created)
- Framingham risk score, allostatic load, Dan Belsky’s biological aging, Levine’s phenotypic age and biologic age
- What are the differences between these scores, what are they telling us? How will be move forward with 100 different scores?
- What are the scores good at, and what are they poor at?

Michelle Shardell (National Institute on Aging)  
Presentation

Survival bias, competing risks, and immortal time
- How does selective survival influence human aging studies?
- Which analytic methods are useful?
- In what scenarios is it important to apply statistical techniques to account for earlier mortality?
- How do we address the question, “This cohort (say of centenarians or nonagenarians) is affected by selective survival, immortal time bias, etc.”