Section B

Themes Over the Life Course, Part 2
When things happen in the life course is often as important as whether they happen at all

- Going back to school doesn’t help people to catch up in earnings
- Timing of childbirth is consequential in women’s lives

Timing may not refer to age, but to the relationship of the event to other events

- Having a child prior to finishing education or prior to marriage
- Divorce with and without children
Time Patterns

- Accumulation of risk (cumulative disadvantage)
- Critical and sensitive periods
Cross-Level Processes

- Stress process
- Immunity
- Neurodevelopment
How do people’s life experiences get “under the skin”?  
- Major potential pathway is through the stress process  
- “Stress” is a rather vague term, used differently by various disciplines  
- Basically, an environmental challenge that threatens the operating integrity of an organism and thus requires the organism to adapt in some way (e.g., threat)  
- Process of adaptation includes return to original state
Stress and the Life Course

- Can conceptualize stressors and perceptions of stress in terms of the life course
  - E.g., poverty, divorce, care giving, trauma
  - Note temporality (chronic/acute)
  - Note that context matters: same event may or may not be a stressor depending on what else is going on in the person’s life
Social Environment and Health

Social environment
- Position in social hierarchies
- Social connection and networks
- Neighborhoods

Life challenges
- Sources of stress

Physical and mental health

Source: C. Seplaki.
Social Environment and Health

Social environment
- Position in social hierarchies
- Social connection and networks
- Neighborhoods

Physiological response
- Life challenges
- Sources of stress

Physical and mental health

Source: C. Seplaki.
Allostatic Load


- Systems involved in the stress response include ...
  - Sympathetic nervous system (SNS)
  - Hypothalamic-pituitary-adrenal axis (HPA)
  - Immune system
  - Cardiovascular and metabolic systems

- Homeostasis, allostasis, allostatic load, physiological dysregulation

- Repeated or chronic activation of the stress response can have negative effects on health over time
Stress Response and Development of Allostatic Load

Stress Response and Development of Allostatic Load

- Normal response:
  - Activity: Increase in physiologic response due to stress.
  - Recovery: Return to baseline.

- Repeated “hits”:
  - Normal response repeated over time.
  - Lack of adaptation.

- Prolonged and inadequate responses:
  - No recovery.
  - Prolonged response.
  - Inadequate response.

Results on Allostatic Load

- Measures of allostatic load have been positively associated with mortality and cognitive and physical decline (e.g., Seeman et al., 1997)

- AL measures have also been shown to explain a significant proportion of the excess mortality risk for those of low SES (measured by HS education) (Seeman et al., 2004)
  - Independent of self-reported disease
  - Better than individual biomarkers

- Recently, researchers have also examined the role of immune function in AL

- Research continues on the measurement of AL...