Aging



- People live longer now than ever before
- By 2030, 20% of the US population will be 65 and older
- Significant challenge to medicine ethical, financial, etc.





- What is "normal" in the aging process primary aging
- More susceptibility to disease secondary aging
- More heterogeneity in the elderly population
- Onset indeterminable and progression varied
- Genetic and environmental factors



Aging-associated disease



An aging-associated disease is a disease that is most often seen with increasing frequency with increasing senescence. Examples of aging-associated diseases are cardiovascular disease, cancer, arthritis, cataracts, osteoporosis, type 2 diabetes, hypertension and Alzheimer's disease. The incidence of all of these diseases increases rapidly with aging (increases exponentially with age, in the case of cancer).

Of the roughly 150,000 people who die each day across the globe, about two thirds—100,000 per day—die of age-related causes. In industrialized nations, the proportion is much higher, reaching 90%.

Why do we age?

- Cumulative Damage (Environment)
- Inherited (Genetic, passive or programmed)
- Gene x Environment interaction