Background

- 12 male individuals
  - Ages 36 – 78
- University of Iowa, 1928 – 1935
- Inventory by Dr. Dawnie Wolfe Steadman
- What is the most common pathology in this collection?
- What does this contribute to forensic anthropology?
ISUAL #103

- Age: 78
- Cause of death: natural causes
- Has the most pathology marks in inventory records
- Ankylosing spondylitis
  - Osteoporosis, fusion of 2 vertebrae
- 4 fractures
  - Left tibia, left fibula, left ulna, left radius
ISUAL #105

- Age: 42
- Cause of death: pneumonia
- Osteoarthritis
  - Lipping
  - Common in people over 40: degeneration of intervertebral discs
- Schmorl’s node
ISUAL #107

- Age: unknown
- Cause of death: unknown
- Odd morphology of vertebrae/sacrum
  - Compression fractures?
- Extra bone growth on sternum
  - Not listed as anything strange in inventory
- Ossified thyroid
- Fracture in right tibia
Figure 8-43 Compression fracture of the S3 vertebra. (Male at 25 years of age from the medieval hospital of St. James and St. Magdalene, Chichester, England, Burial C-31.)

Pathological human skeletal examples of fracture callus because of long-term survival and remodeling after the trauma.
Figure 8-40 Compression fracture of the second lumbar vertebrae in an adult male skeleton from the Hawikuh archeological site in New Mexico. (NMNH 308653.)
Age: 36
Cause of death: gunshot wound/lung hemorrhage
Fracture in left femur
Osteomyelitis, right femur
  ◦ Localized, infection can occur through various means
Enthesophyte, left humerus
  ◦ Inflammation, stress at point of ligament/tendon attachment
Most Common Pathologies

- Fractures
  - 103, 107, 173
  - Fracture patterns can be unique to an individual, assist with personal identification through antemortem records

- Changes in vertebral columns
  - 5, 103, 105
Biological Profiles: Sex Assessment

- Particular pathologies can be more prevalent in one sex
- Females
  - Osteoporosis
- Males
  - Enthesophytes
Biological Profiles: Age Assessment

- Some pathologies may be support an age assessment for an older individual
  - Bone degeneration
- Osteoarthritis
- Ossified thyroid cartilage
  - Ossifies slowly, more often in men aged 41 – 60
- Ankylosing spondylitis
  - 2\textsuperscript{nd} or 3\textsuperscript{rd} decade of life
Picture Sources

- www.turbosquid.com
- Archive.museumoflondon.org.uk
- *Identification of Pathological Conditions in Human Skeletal Remains* by Donald J. Ortner