Juvenile Age Sex Estimation – In Class **ANTH 2FF3 McMaster University**

Objective:

This activity aims to get us thinking critically about how we estimate age at death from juvenile (subadult) skeletons. We will practice observing various patterns in epiphyseal fusion and reading ossification and fusion charts in order to estimate the most likely age-range of each individual.

Materials:

- Fabric skeleton with colour coded epiphyses
  - Some individuals are supplemented with other information (e.g., hand x-rays, plastic skeletal casts)
- Epiphyseal fusion charts (see pgs. 2-8).

Method:

A series of epiphyses have been coded according to their degree of fusion on each fabric skeleton:

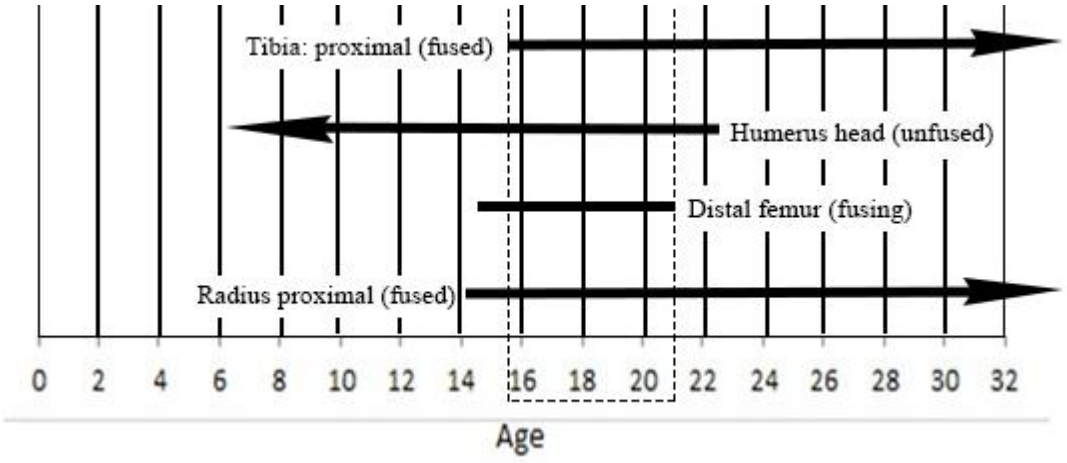
Purple = Not Ossified Yet!
Green = Unfused
Yellow = Fusing
Red = Fused

1) Observe each epiphysis and in consultation with the attached epiphyseal fusion charts and diagrams create a table to help you record your observations. For example:

Epiphysis	State of Fusion	Age Interpretation (years)
Proximal humerus (head)	Unfused	<20
Distal radius	Fusing	14-20
Proximal Ulna	Fused	>12

2) Find the area of the greatest age overlap. This **RANGE** is your individual's estimated age at death. You may find it easier to visualize the area of greatest overlap if you create a chart (see below). Label your x-axis with age and plot your age interpretations for each point of fusion along the y-axis. The area of greatest overlap is indicated by dotted lines.

- Remember we always report *age ranges* in our osteological assessments, as there is some error associated with these methods (some individuals will fuse earlier or later than others)



Figures on pages 4-9 are from Scheuer, L., & Black, S. (2000). *Developmental Juvenile Osteology*. San Diego: Elsevier.