**FORENSIC & MORTUARY ARCHAEOLOGY**

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**WHAT IS FORENSIC ANTHROPOLOGY**

**THE BIOLOGICAL PROFILE**

**TECHNOLOGY & METHODS**

**HOW CAN UM ANTHROPOLOGY HELP**

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**FORENSIC ANTH/ARCH & MORTUARY ARCH & BIOARCH**

- Complete recovery of remains
- In-situ analysis of human remains and artifacts
- Interpretation of grave goods

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**FORENSIC ANTHROPOLOGY VS. ARCHAEOLOGY VS. BIOARCHAEOLGY VS. PHYSICAL ANTHROPOLOGIST**

- **Phys. Anth.** = one of the 4 subdisciplines of Anthropology, the study of skeletal remains (includes primate to modern humans)
- **Bioarchaeology** = the study of human biology in the archaeological context (i.e., human remains, mortuary practices, chemical & molecular)
- **Forensic Anthropology** = the application of phys. anth. in the legal setting (current time <50 years) for identification
- **Forensic Archaeology** = using archaeology methods to recover human remains and evidence in a forensic context
- **Mortuary Arch.** = the archaeology of mortuary contexts including human remains, graves, monumental architecture that houses mortuary remains, and grave goods.

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**GOALS OF MORTUARY ARCH & BIOARCH**

- **Complete recovery of remains**
- **In-situ analysis of human remains and artifacts**
- **Interpretation of grave goods**

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**GOALS OF FORENSIC ANTH/ARCH**

- **Try to identify victim**
- **Class Characteristics**
  - Sex, Age, Ancestry, Height, Weight, Health
- **Individual Characteristics**
  - Pathology, Trauma, Disease, Residues
  - Match medical and dental records
FIRST THING FIRST – IS IT HUMAN?

AGE

- Pelvis
- Degredation of joint surface
- Suture Closures
- Teeth
  - Crown formation, root formation, tooth eruption
  - Epiphyseal closure

SEX (ADULTS ONLY)

- Observation of features
- Heavily sexually dimorphic
- Best indicator of sex
- Second best – cranium

ANCESTRY (ADULTS ONLY)

- Observation of features
- Metric analysis, craniometrics
- Three main categories
  - Multiple sub-categories

STATURE

- Based on measurements of long bones
- Gives a range
- Can be effected by nutrition, occupation, trauma

WHEN DID TRAUMA OCCUR

- Antemortem = premortem = before death
- Perimortem = around the time of death
- Postmortem = after death
- May have to do with cause of death
PATHOLOGY

- Effect of Disease on Bone
- Specific vs. Non-specific
- We cannot diagnose pathology, only ME can do that

SURVEY & EXCAVATION

- Plenty of time in advance
- Line and grid survey
- Burial excavation

FUN EXTRAS

- ADNA & DNA
- Stable isotope analysis
- Microscope
- 3D scanning and reconstruction
- CT scans

UM ANTHROPOLOGY

- Human vs. Non-human classification
- Species determination
- Biological profile
- Age, sex, stature, ancestry, pathology, trauma
- Survey & excavation

CAUTIONARY TALE OF THE BEAVERHEAD TRIO

Ind. 1
Coffin wood
Incomplete recovery
Fragmentary remains
Artifacts

QUESTIONS?

YOU HAVE QUESTIONS
I HAVE ANSWERS
SHOW AND TELL!!!