

### Case Study No. 3: Bioarchaeology of care

Read the information about the individual and examine the images of their skeletal remains below to complete the Short-Form Index of Care form to the best of your ability.

#### Mortuary Context:

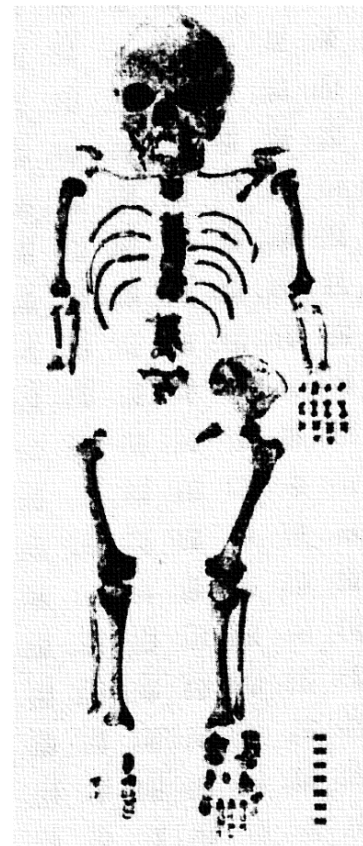
- An individual (Romito 2) was recovered from a double burial in the Romito Cave, in the Southern Apennine Mountains, Italy, and dated to around 9,500 BC (Figure 1).
- Eight individuals (two double and four single burials), including Romito 2, were recovered from this site

#### Individual Romito 2:

- Approximately 75% of Romito 2's skeleton was represented (Figure 2).
- Part of a small, highly mobile, hunter-gatherer group, reliant on a meat diet, subject to frequent nutritional stress, and operating in very challenging mountainous terrain.
- Assessed as male, 17-20 years at time of death (cause unknown). Stature estimated as 110-120 cms (43-48 inches).
- Buried supine, extended, in N-S orientation (all standard for Romito burials), beside an older adult female. The grave contained an auroch horn (so did the other double burial).



**Figure 1:** Above left - map of Italy showing Romito Cave location. Above right – terrain around Romito Cave (Martini and Lo Vetro, 2011:34)



**Figure 2:** Recovered elements of Romito 2 (Mallegni and Fabbri 1995:124)

## Evidence of Pathology

- Alterations are present at the cranium at the frontal and occipital bones (Figure 3).
- Remains display extreme and disproportionate reduction of all long bones (in particular note disproportionately short forearms and femora - Figure 4), leading to much reduced stature (Figure 5).
- Most hand and feet bones are of reduced size and/or malformed, features consistent with those seen in arm and leg bones (no image available).
- Bone growth disruption at the articular surfaces of both elbow and wrist joints limited forearm (lower arm) extension to 130° (normal 180°), restricted forearm rotation and likely compromised wrist mobility and strength (Figure 6)
- Vertebrae C3, T9, T10 and possibly T1 and T3 show anterior wedging (compression at the front of the vertebra), likely the product of chronic stress (no image available).

Figure 3 Romito 2 cranium, right profile

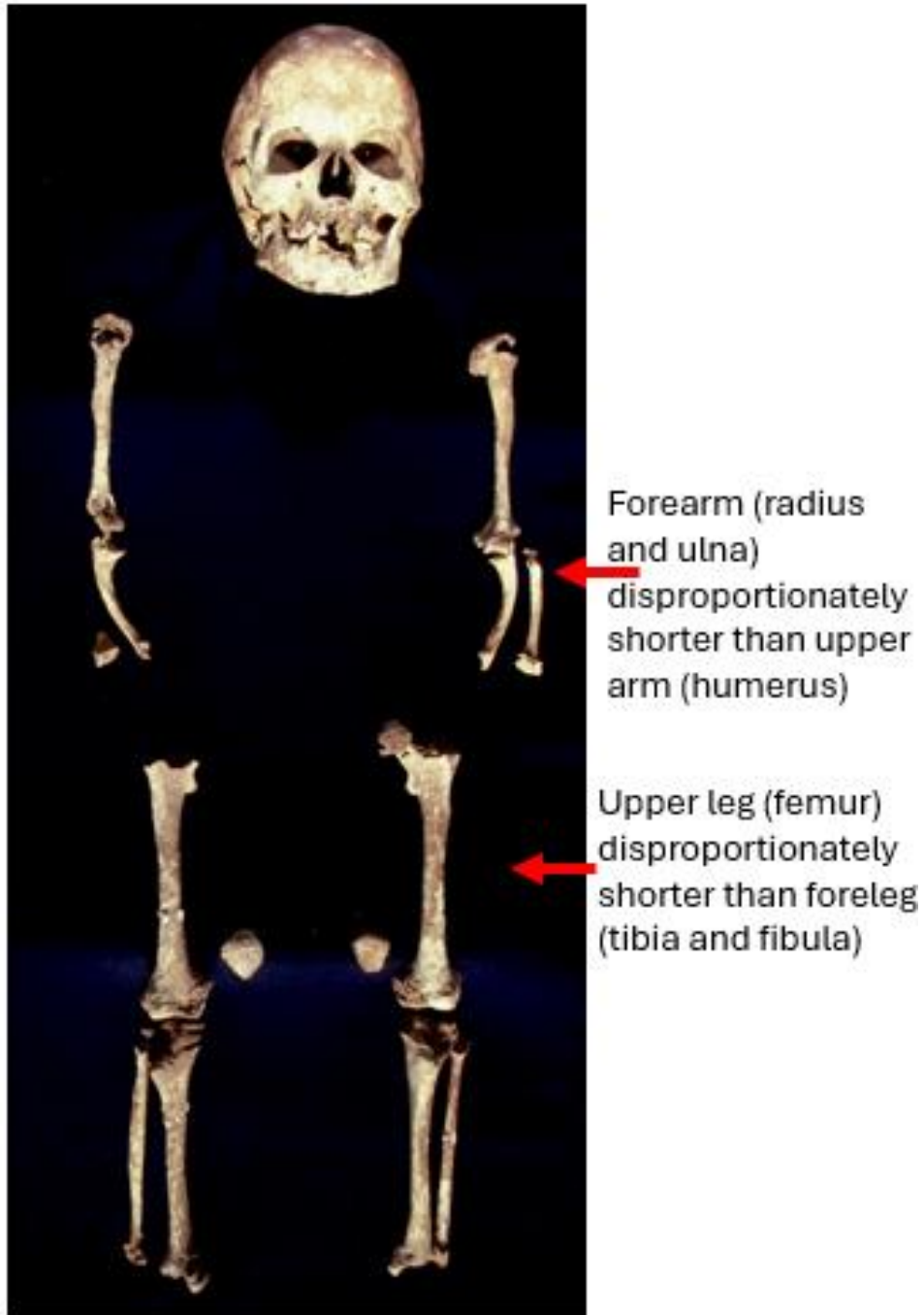
Figure 4 Romito 2 – extreme and disproportionate reduction of long bones.

Figure 5 Romito 2 stature compared to the average stature of Romito adult males

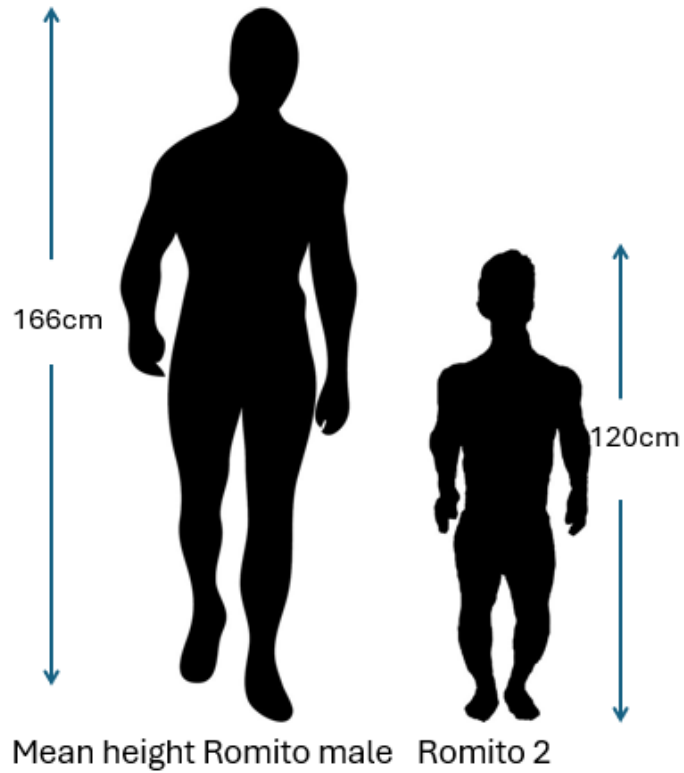
Figure 6 Romito 2 left humerus and ulna - forearm at maximum extension (130°).



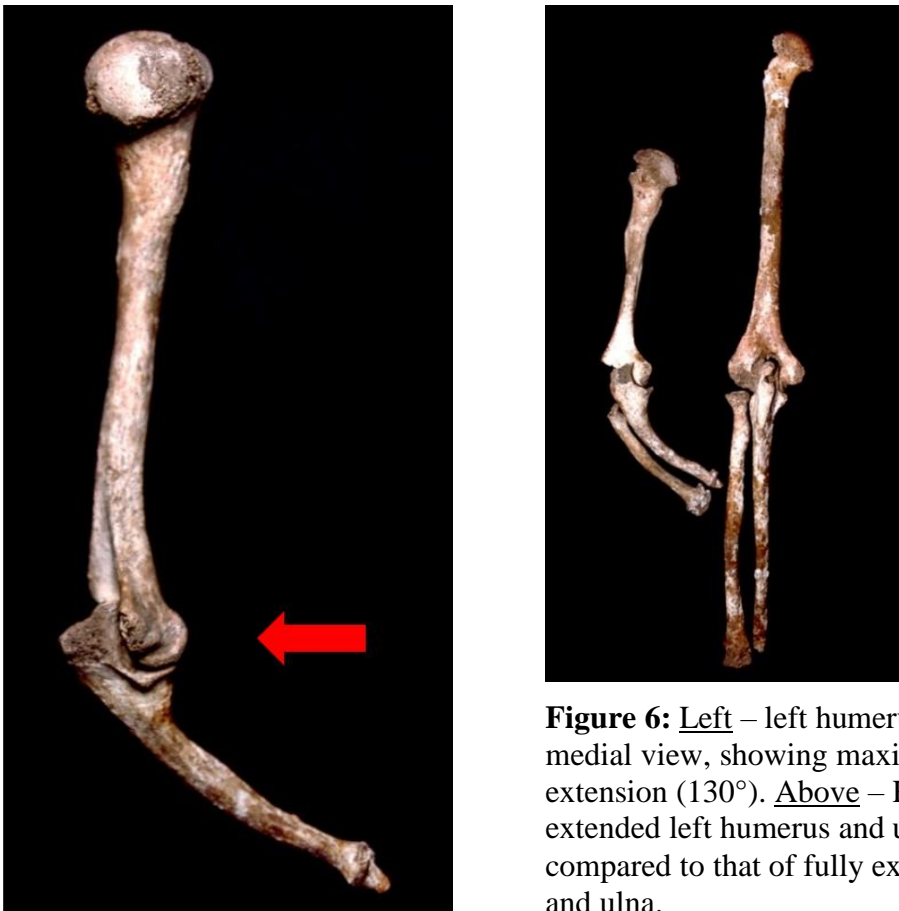
**Figure 3:** Cranium, right profile. Note note occipital ‘bulge’, frontal and parietal bossing, and the ‘flat’ midface.



**Figure 4:** Romito 2, showing only the major long bones and cranium



**Figure 5:** Comparison between Romito 2 stature and the mean stature of Romito adult males.



**Figure 6:** Left – left humerus and ulna, medial view, showing maximum forearm extension (130°). Above – Romito 2 fully extended left humerus and ulna (on left) compared to that of fully extended humerus and ulna.