From the Mouths of Manx Mothers; An Introduction to Maternal Health During the Medieval Period (AD500 – 1500)

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Culture VANNIN

@BoneandRie

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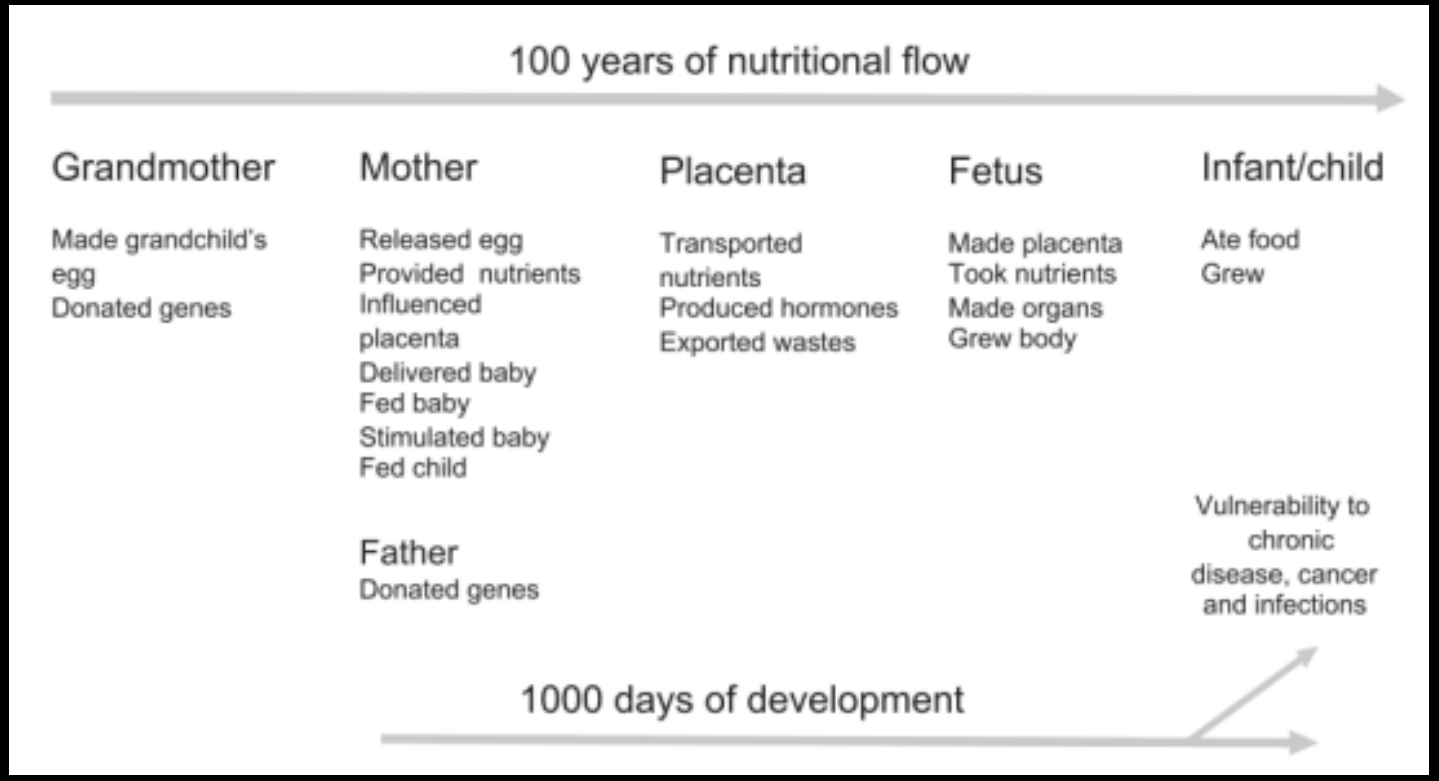
This presentation contains images of human skeletal remains and discusses potentially triggering content of maternal and infant health.

If at any point, you feel uncomfortable, you are welcome to leave.

Maternal-Infant Dyad

- Maternal health during pregnancy is known to have long-term effects on the health of the child throughout their life, this relationship is termed the maternal-infant dyad.
- Maternal health is the foundation of every population
- During development, embryos, foetuses, and young infants are influenced by adverse phenomena that can permanently change the function and structure of the body.



Barker 2012, p187

Life Course Theory

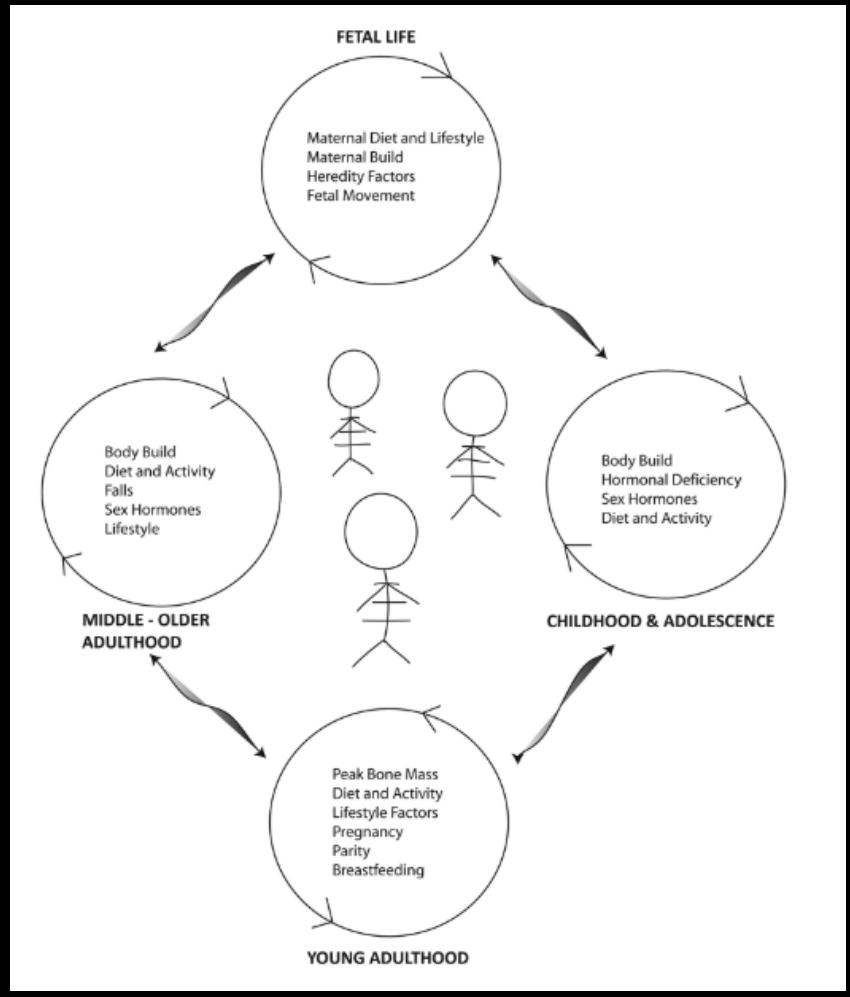
‘’Humanity is shaped by the biological outcomes of cultural strategies which require a multi-disciplinary approach to untangle the biology and culture in past populations (Schutkowski 2003).’’

The life course approach in bioarchaeology identifies and recognises that an individual’s transition through life and this dynamic environment depends on sex, age, and social status.

Life Course Approach in Bioarchaeology

- Identifying and recognising that individual's transition through life and this dynamic environment.
- Transition through life is culturally constructed and influenced by the constraints of society and community that the individual was a part of during their life

(Ben-Shlomo and Kuh 2002; Agarwal 2016)



A model of plasticity in the development and maintenance of the skeleton during life and the variables that can influence in (Agarwal 2016, page 141).

How can we study maternal health in the past?

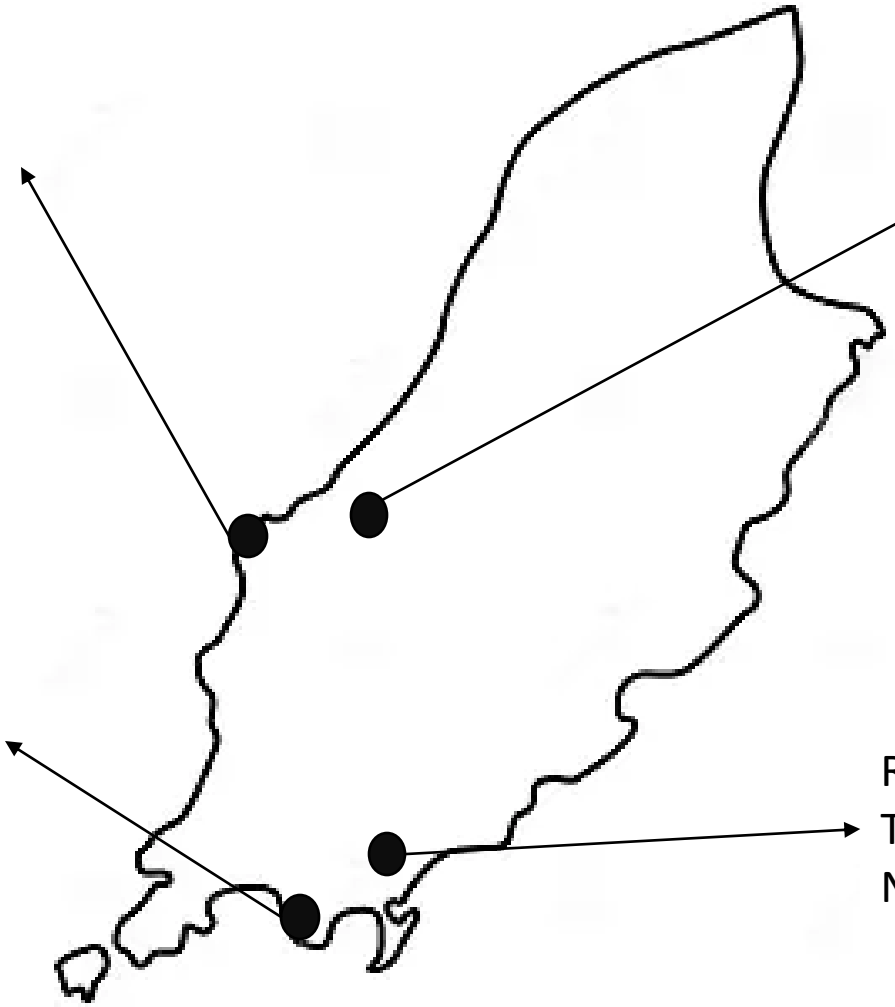
- Human skeletal remains

growth and a range of diseases including nutritional and hereditary conditions

- Teeth

Form during childhood so can be used to study specific periods of childhood even when someone in an adult

Samples

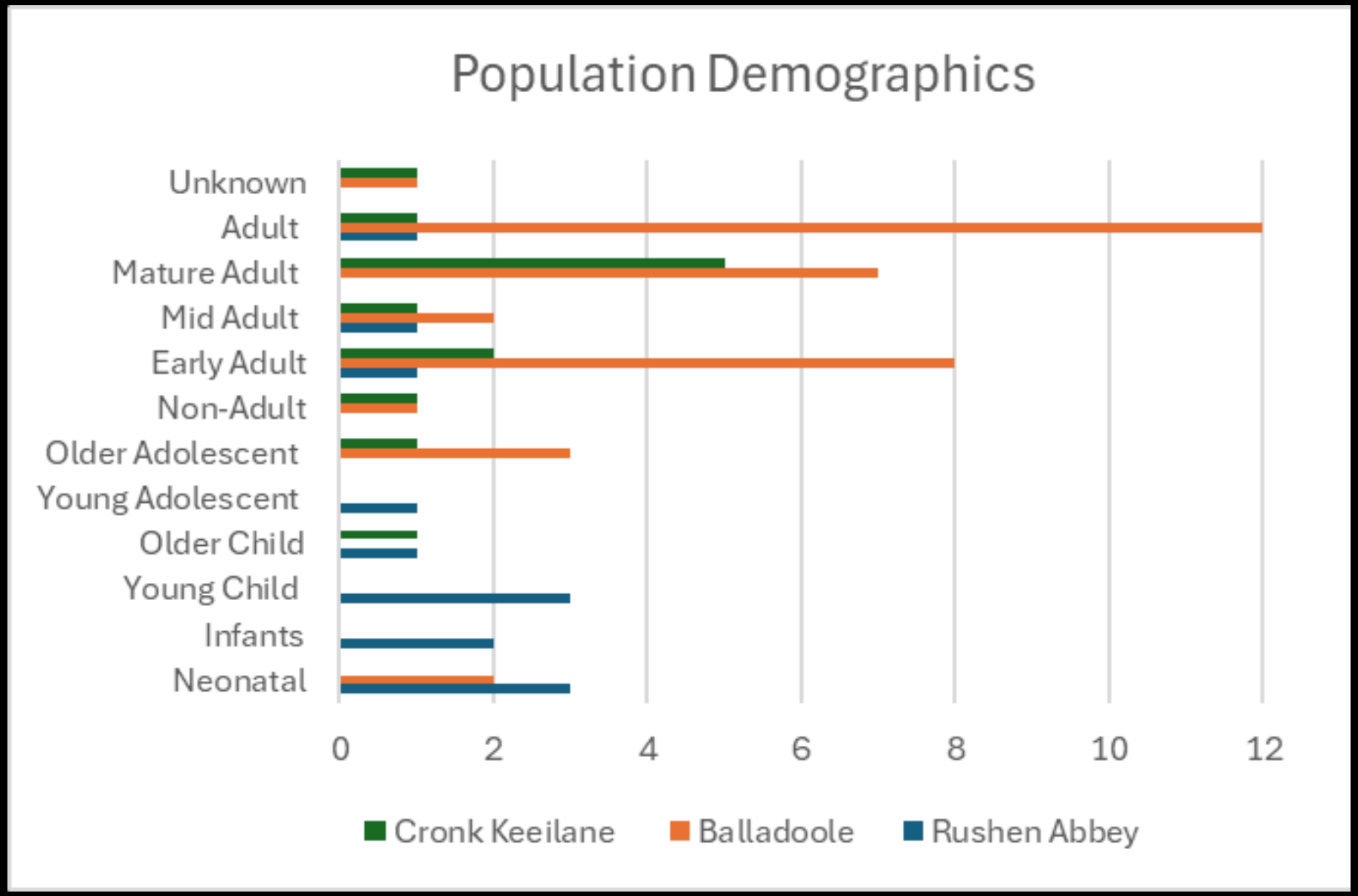


Peel Castle (Early medieval)
Tooth samples = 1

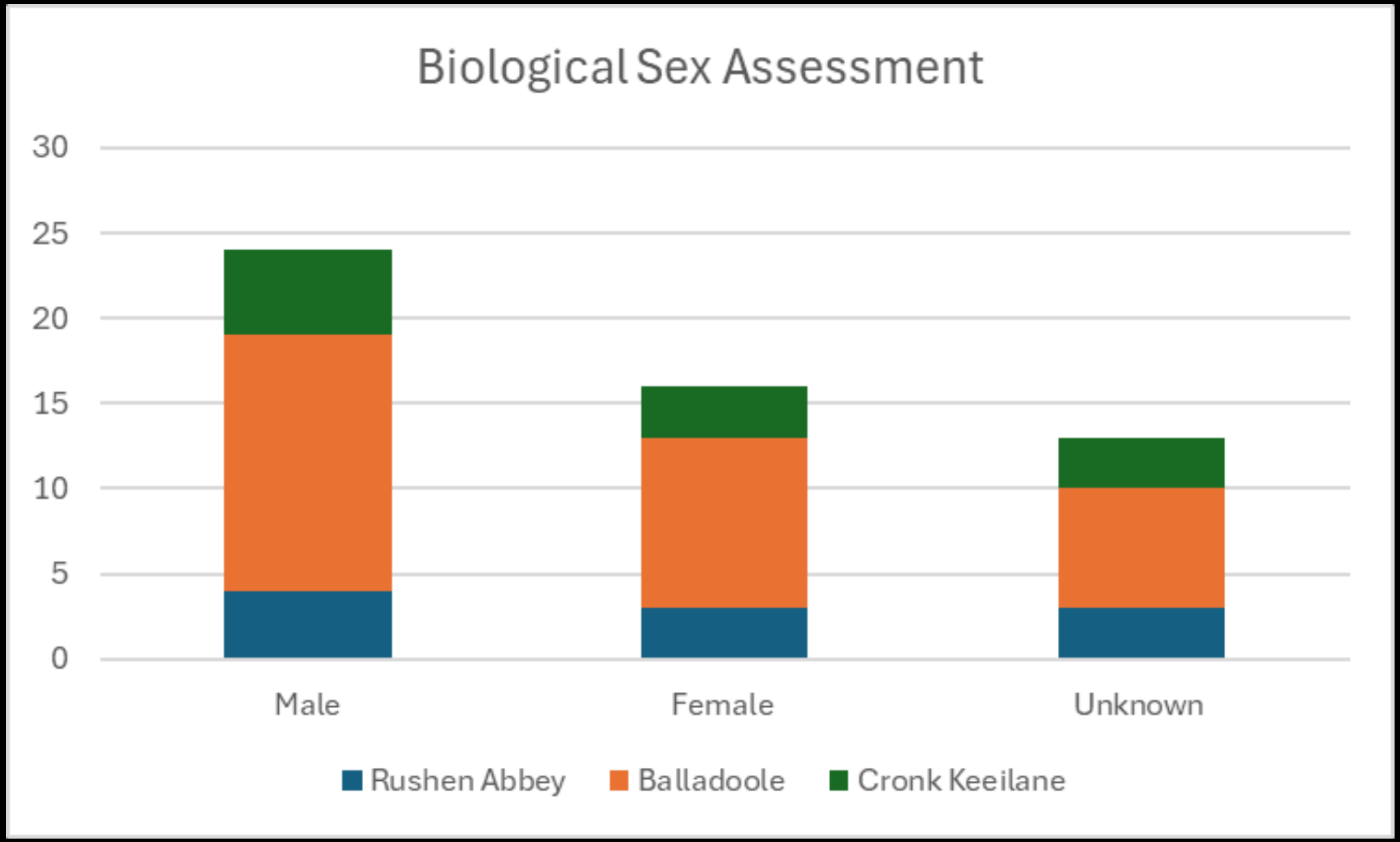
Cronk Keeilane (Early medieval)
Tooth samples = 2

Balladoole (Early medieval)
Tooth samples = 2
Neonatal Skeletons = 2

Rushen Abbey (Early – Mid medieval)
Tooth samples = 6
Neonatal Skeletons = 2



Age Categories	
Neonatal	Foetal to 1 month
Infants	1 month - 3 years
Young Child	4 - 7 years
Older Child	8 - 11 years
Young Adolescent	12 -15 years
Older Adolescent	16 - 19 years
Non-Adult	<20 years
Early Adult	20 - 34 years
Mid Adult	35 - 50 years
Mature Adult	50+ years
Adult	20+ years
Unknown	Age not possible


Biological Sex Assessment
30
25
20
15
10
5
0
Male
Female
Unknown
Rushen Abbey
Balladoole
Cronk Keeilane

Average Stature Estimation

Height in Centimetres

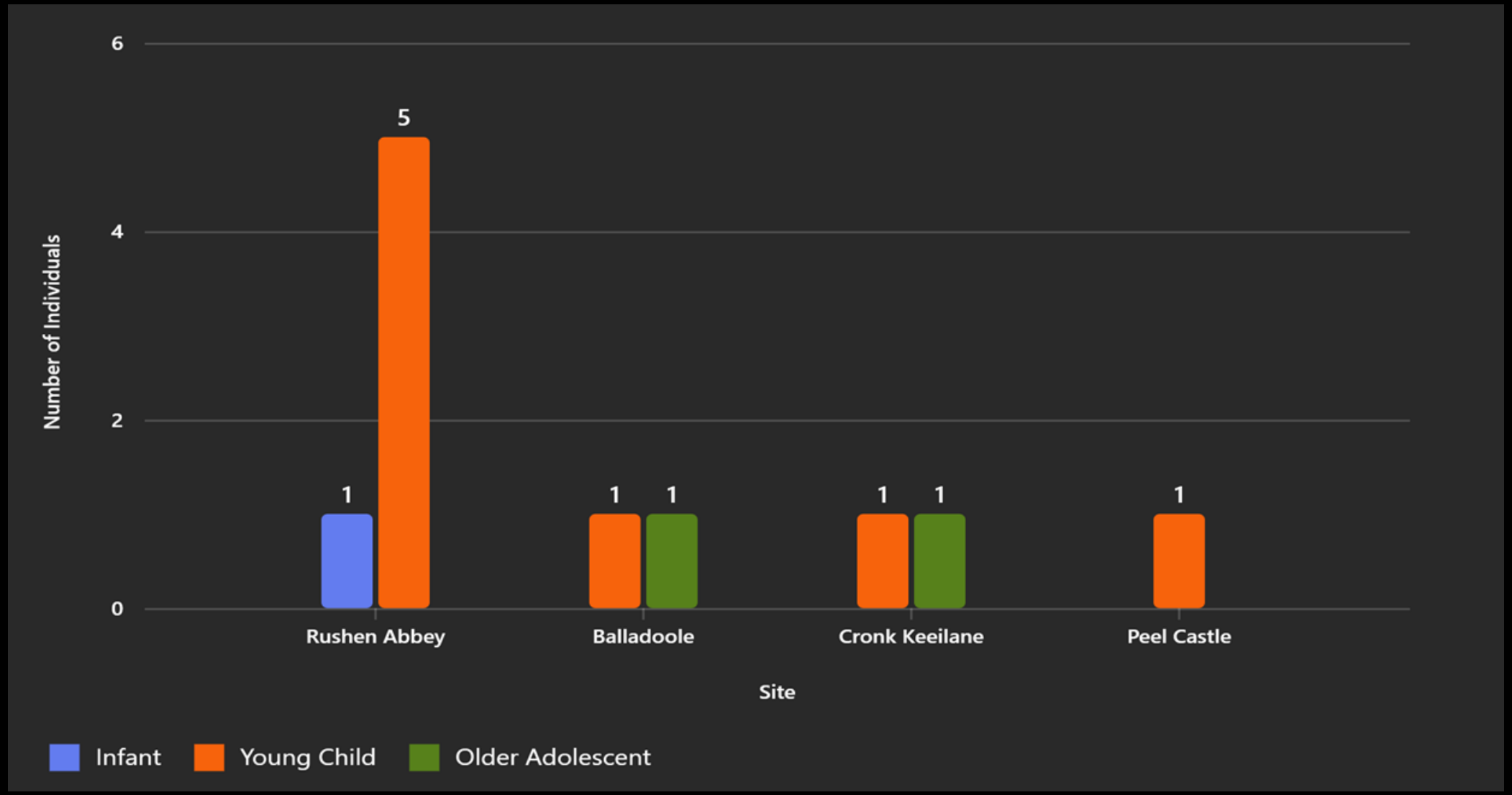
Stature	Rushen Abbey	Balladoole	Cronk Keeilane
Female	160.79cm	151.83cm	N/A
Male	166.995cm	165.75cm	165.19cm
Unknown	N/A	167.47cm	N/A

Height in Feet and Inches

Stature	Rushen Abbey	Balladoole	Cronk Keeilane
Female	5ft 3	4ft 11	N/A
Male	5ft 8	5ft 3	5ft
Unknown	N/A	5ft 9	N/A

Neonatal Skeletons

Sampled Individuals



BD993

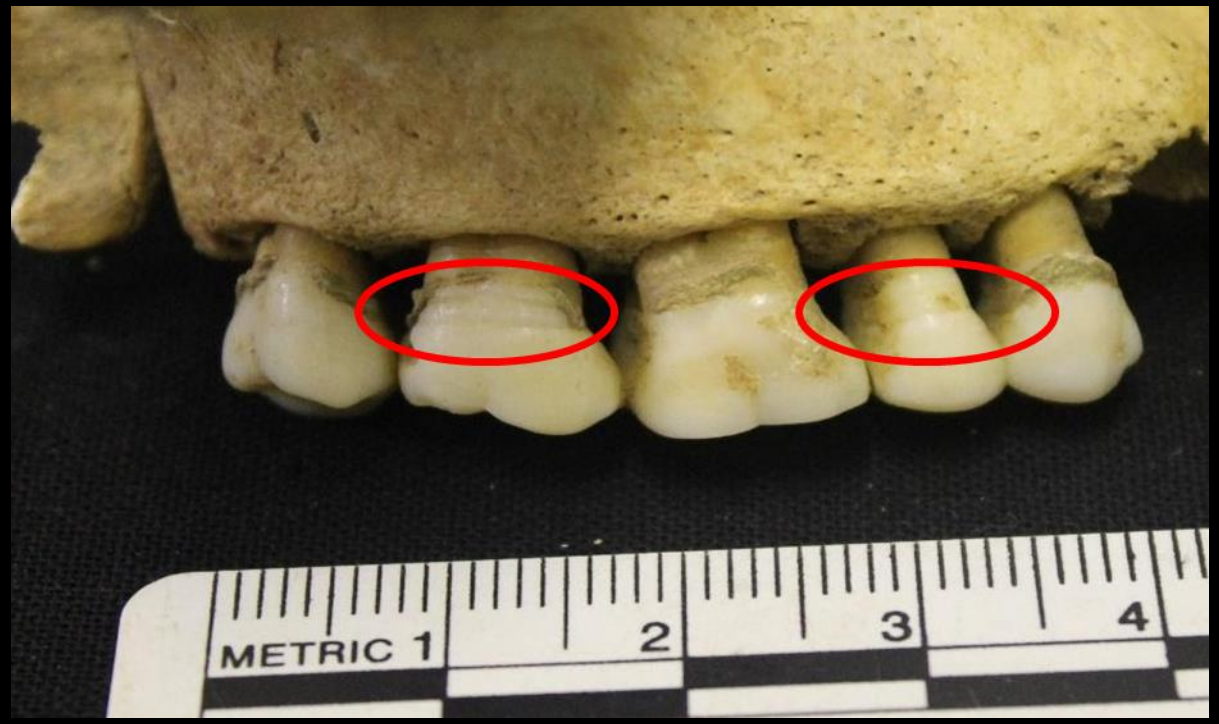
- Female, between 16 – 19 years old
- Remodelled fracture to her right ulna.

CK1769

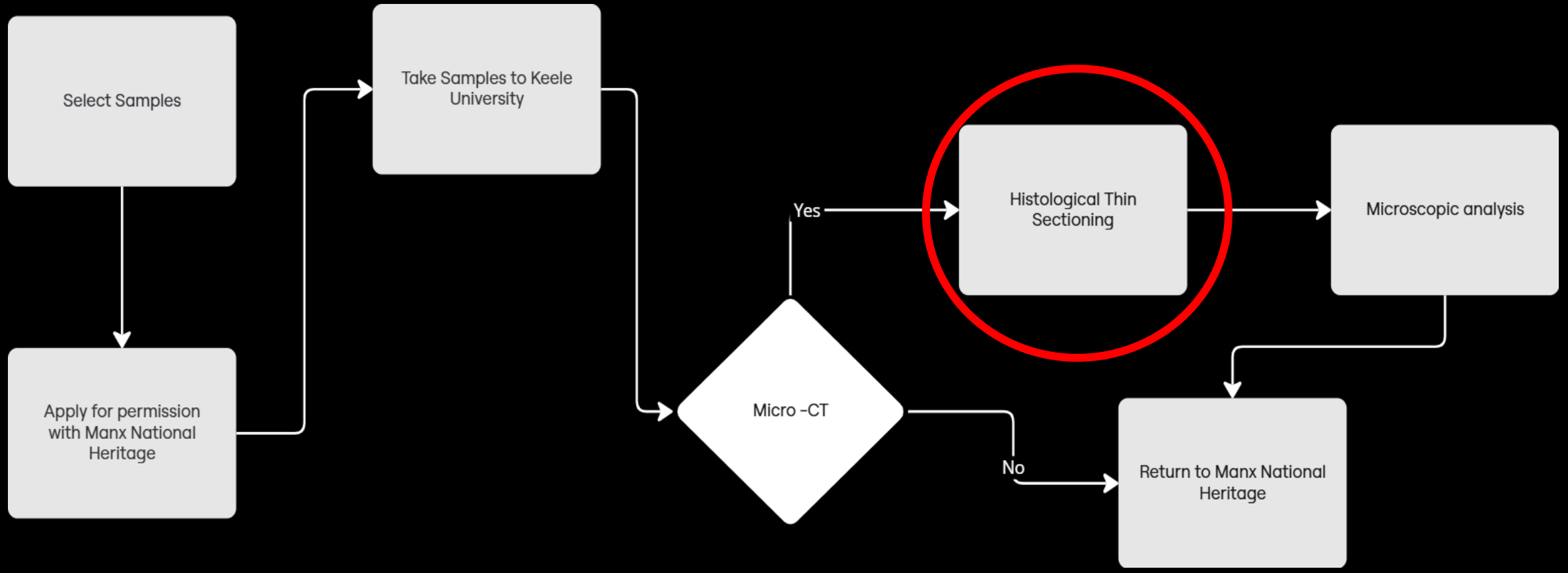
- Male, between 17 -21 years
- 167cm +/- 3.66cm or 5ft3 to 5ft5

Linear Enamel Hypoplasia

- A defect caused by the disruption of enamel while it was growing
- Childhood physiological stress



Dental Histology Process



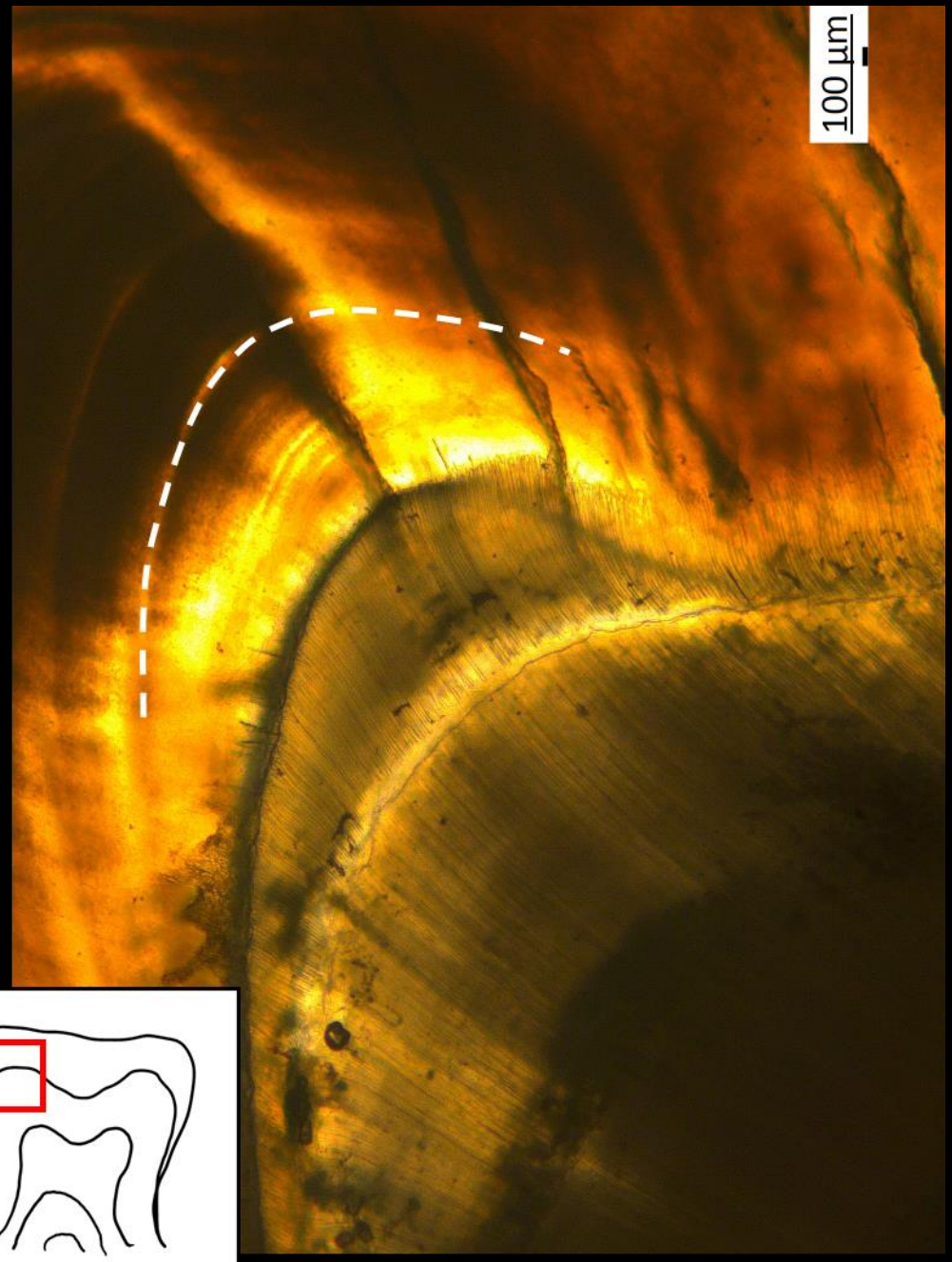
Dental Histology Samples

First permanent molars

- Start to form around 30 weeks *in utero* – complete around 10 years of age
- Neonatal line in the enamel and sometimes the dentine

Can be used to:

- Identify in utero evidence of deficiency (Following the methodology of Brickley et al 2019)



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Thank you
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Questions?

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