

# Fayum Mummy

Impact ID: IMP00012

Institution: Redpath Museum

Designation: RM2720

Date of Acquisition: 1895

Contact: Dr. Andrew Nelson

(anelson@uwo.ca)

Image Modality: CT

Country: Egypt

Dig Site: Hawara el-Maktaa

Time Period: Roman

Dynasty: unknown

Sex: Female

Age: 18-24 years

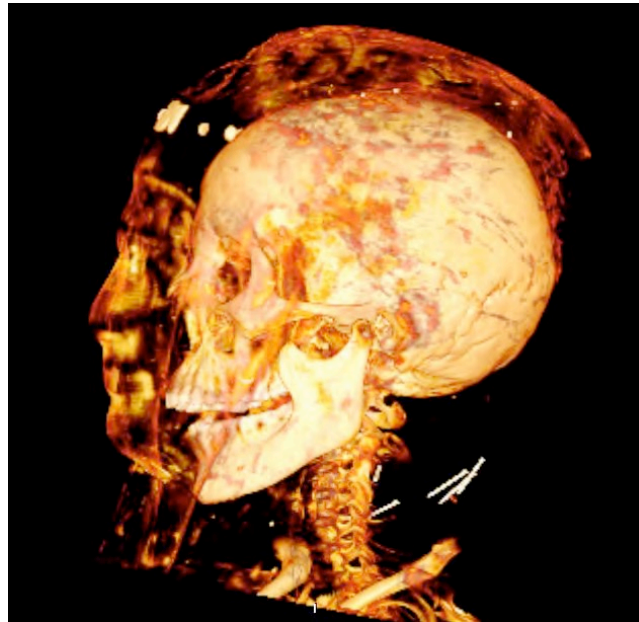


Figure 1. 3D image of head and mask of RM2720 (Wade et al., 2011)

## Background:

In 1895, Sir Thomas Roddick donated a Fayum mummy to the well-established Redpath Museum. When writing to Sir William Dawson, geologist and university administrator of McGill University, Roddick stated the mummy was found in a tomb or solid rock pit at Hawara el-Maktaa, near the Pyramid of Amen, but the age is unknown (Lawson, 2016). Roddick is known to have travelled to Egypt himself on two occasions, serving in the Anglo-Egyptian War of 1882 and with the Camel Corps in 1884-1885 in the Nile Expedition (Lawson, 2016). In a biography about Roddick, it is noted that on the second visit to Egypt is the one in which he brought back a mummy that he donated to McGill to put in the Redpath museum (Lawson, 2016). There is still uncertainty of how he got the mummy; if he excavated it himself or if he bought it from locals in the area (Lawson, 2016).

The next mention of the mummy is in a pamphlet from a meeting of the British Medical Association (BMA) in 1897 stating the mummy was on display at the Redpath Museum (Lawson, 2016). At this meeting, a report in the British Medical Journal on the annual meeting says the mummy had a skiagraphy taken of it, showing its arms crossed over its chest under the

bandaging (Lawson, 2016). Professor Macalister removed some wrappings to explain the significance of mummification in Ancient Egypt to the viewers (Lawson, 2016).

In 1925, when the Natural History Society of Montreal donated their collection to the Redpath museum, the heavy demand for space caused some objects, including the Fayum mummy, to be removed and placed on the ground floor of McGill's Strathcona Medical Building, where a separate Ethnological Museum was established in 1926 (Lawson, 2016). In 1926, there was plans to move the Egyptian collection again to the Library, but it is unclear if this ever happened (Lawson, 2016). In October 1928, all three mummies of the Redpath Museum were on display in the new Ethnological Museum (Lawson, 2016). In the same year an unidentified newspaper clipping announces a new set of x-ray examinations on all the mummies, but no reports survived other than brief, undated descriptions believed to refer to them (Lawson, 2016). This study states good dental health, arms crossed over the chest, and a female pelvis (Lawson, 2016). During the war, the museum collection was packed into storage as the space was used for physical therapy of returning soldiers (Lawson, 2016). The Ethnological Museum reopened briefly displaying the mummies from 1947 to the beginning of 1949 when it closed permanently (Lawson, 2016).

The Redpath Museum then loaned the Fayum mummy and the Theban female mummy to be part of an exhibit, *Ancient World*, at Divinity Hall (Lawson, 2016). The exhibit text for the Fayum mummy states she was a young girl with an unknown cause of death with her dental health in excellent condition (Lawson, 2016). Her wrappings and gold mask are also listed as being practically undisturbed (Lawson, 2016). In 1969, all artifacts were removed from Divinity Hall in preparation for renovations and the Egyptian collection was sent back to the Redpath Museum (Lawson, 2016). However, in 1970 McGill University closed the Redpath Museum to the public due to financial shortcomings and allowed only the university community and researchers in on appointment basis (Lawson, 2016). During the closure, the Fayum mummy and the Theban female were loaned to the *Man and his World* exhibit during the summers of 1976 to 1981, when the exhibit closed (Lawson, 2016).

While not on display at *Man and his World* the Fayum mummy was displayed at Redpath Museum for researchers to visit and underwent x-ray examination at the Royal Victoria Hospital in January 1981 (Lawson, 2016). This examination confirmed female sex from the ovoid pelvis shape, was in good health, and that the age was likely between 21 and 40 years old and not a young girl like previously believed (Lawson, 2016). The radiographs also showed several modern pins and staples holding the wrappings together, indicating the mummy was unwrapped recently and any possible jewellery or amulets were likely removed (Lawson, 2016). This unwrapping likely happened at the BMA meeting in 1897 when mummy unwrapping was still a popular event (Lawson, 2016). Dr. Bierbrier, Assistant Keeper of the Department of Egyptian Antiquities at the British Museum, examined these scans and said the mummy likely dates to late Ptolemaic or Roman period and the lack of ornaments makes it unlikely there is any papyrus within the wrappings (Lawson, 2016). The mummy also displays intricate wrappings and cartonnage decorations typical of the Ptolemaic Period when more investment went into the external appearance than the embalming of the body itself (Lawson, 2016). The cartonnage

includes a gold mask, the deceased shown wearing a long wig with ceremonial beads in the hair, and depictions of the goddesses Isis and Nephthys and the god Anubis watching the mummification ritual of the dead (Lawson, 2016).

In 1997, the Theban and Fayum mummies were moved to the third floor of the Redpath Museum for their new display together in the Ethnology gallery, now known as the World Cultures gallery, that was completed at the end of 2004 (Lawson, 2016). The last time all three mummies were displayed together was 55 years previous in McGill's Strathcona Medical Building (Lawson, 2016).

In 2008, Dr. Andrew Nelson, a bioarchaeologist with the University of Western Ontario, approached the Redpath Museum with his new IMPACT database for Egyptian mummies (Lawson, 2016). In 2010, Dr. Nelson suggested the mummies be scanned using the newest CT technology before being entered into the database (CTV News Montreal, 2011; Lawson, 2016). These examinations took place in April 2011 at the Montreal Neurological Institute (MNI) with intent to determine the method of mummification the osteobiography, state of preservation, dental and overall health, and further examine the package or scroll in the Fayum mummy (CTV News Montreal, 2011; Lawson, 2016). Using these scans in 2012, the skulls were 3D printed from the CT scans and then the faces were reconstructed by a forensic artist, Victoria Lywood (Lawson, 2016). Lywood also reconstructed a wig that matches the hairstyle seen on the Fayum mummy (Lawson, 2016). The facial reconstructions are on display in the World Cultures Gallery with the mummies (Lawson, 2016).

#### Pathological Features:

The 2011 examinations found that the Fayum mummy was of a late adolescent or young adult, between 18 and 24 years old, female of elite status (Lawson, 2016; Wade et al., 2011). The mummy is definitely a female according to its pelvis which has a wide subpubic angle, a wide, shallow pre-auricular surface, and very obtuse sciatic notch (Wade et al., 2011). All epiphyses are fused, but there are clear growth plates still visible meaning they only recently fused (Wade et al., 2011). The pubic symphysis morphology indicates an individual of 15-24 years old (Wade et al., 2011). The teeth are in excellent condition with very little wear compared to other Ancient Egyptian mummies (Lawson, 2016; Wade et al., 2011). The third molars have all erupted, suggesting the individual is over 18 years of age (Wade et al., 2011). All factors considered the individual is estimated at being between 18 and 24 years old (Wade et al., 2011). She is estimated at being 5ft2in tall, which was average height during her time (Wade et al., 2011).

There are a few lesions noted on the skeletal remains. There is slight sclerosis at the SI joint of the sacrum and ilia (Wade et al., 2011). There is also evidence of a lytic focus and sclerotic margin on the femoral head, with differential diagnoses (Wade et al., 2011). There is also a lesion present on both the tibia and fibula (Wade et al., 2011). Lastly, there is a large bubbly lytic lesion in the infero-distal quarter of the lateral cuneiform of the right foot (Wade et al., 2011). There are three punctures in the right abdominal wall, separated by 5-10mm and are possibly related to cause of death as they appear to be ante-perimortem in nature (Wade et al., 2011).

The brain was removed through the right nostril, seen by damage to the right side of the ethmoid bone, but the eyes remain intact in their orbits (Lawson, 2016; Wade et al., 2011). The left side of the facial bones are all intact (Wade et al., 2011). There has been poured into the back eight of the cranial cavity, some is present on the ethmoid bone but is likely left from pouring the resin into the cranial cavity (Wade et al., 2011). There is an object at the front of the oral cavity that is suspected to be resin-soaked linen rolled up and folded (Wade et al., 2011).

The evisceration was done through the perineal area and then plugged with a large piece of resin-soaked linen (Lawson, 2016; Wade et al., 2011). The heart is absent while the lungs are intact in the thoracic cavity (Lawson, 2016; Wade et al., 2011). The liver, stomach, intestines, kidneys, and bladder have been eviscerated as well (Lawson, 2016; Wade et al., 2011). There was no abdominal packing, so the abdominal cavity has collapsed inwards against the spine with no organs present (Lawson, 2016; Wade et al., 2011).

The supposed scroll is not a scroll but a rolled piece of linen separating the legs (Lawson, 2016; Wade et al., 2011). The mummy is wrapped in three layers of linen separated each by resin and has all four limbs wrapped separately with limbs crossed over the chest (Lawson, 2016; Wade et al., 2011). The wrappings over the face have been cut to expose the face and numerous modern pins in the wrappings proves it was unwrapped and then rewrapped in modern times (Lawson, 2016; Wade et al., 2011). The hair is styled in long braids and drawn into a bun at the crown of her head which dates at 96-161 CE, typically worn by Roman provincial women, but is seen in the late Ptolemaic Period (Lawson, 2016; Wade et al., 2011).

She is suspected to be of elite status due to the condition of her body. There are no Harris Lines present in her long bones, indicating her body was never under physiological stress causing arrested growth periods (Wade et al., 2011). These periods of arrested growth are from malnutrition or disease, meaning she never encountered severe periods of these conditions, which most people in Ancient Egypt did (Wade et al., 2011). Her elite status is also seen in her dental health, which is excellent. There are no abscesses or caries present in the dentition (Wade et al., 2011). However, her dental health is not diagnostic of status by itself as she is very young, which leaves less time for dental wear and caries to form in her teeth (Wade et al., 2011). The inclusion of a gilded gold mask, and other plaques, on the cartonnage, as well as the resin in her cranium, individual limb wrapping, and perineal evisceration all indicate elite status (Wade et al., 2011).

## References

(May 7, 2011) Montreal mummies reveal secrets from the ancient world. CTV News Montreal.

Lawson, B. 2016. Egyptian Mummies at the Redpath Museum: Unravelling the History of McGill University's Collection. Prepared for the Redpath Museum. Fontanus. 14: 1-37.

Wade, A., Garvin, G., Williams, L., Lawson, B., Nelson, A. & Tampieri, D. 2011. Preliminary report on the CT findings of the human and bird mummies from the Redpath Museum. Report prepared for the Redpath Museum.

Contributions by: Precious Adekoya, Teegan Muggridge, Lauren Poeta, and David Seston