# Lady Hudson

Impact ID: IMP00006

Institution: University of Western Ontario

Contact: Dr. Andrew Nelson (anelson@uwo.ca)

Image Modality: CT, xray, microCT, and MRI

For the CT scans:

<u>KVP</u>: 10

X-Ray Tube Current: 170

Acquisition Date: 2016/09/15

Manufacturer: GE Medical Systems

Manufacturer Model Name: Discovery CT750 HD

For the MRI scan:

Manufacturer: SIEMENS

Manufacturer Model Name: Biograph mMR

**Country**: Egypt

Dig Site: Unknown

Time Period (mummy): Roman Period

Time Period (coffin): 21st Dynasty coffin

Earliest Date: 30BC

Latest Date: 641AD

Sex: Female

Age: Middle Adult

Height: Approx. 155cm tall



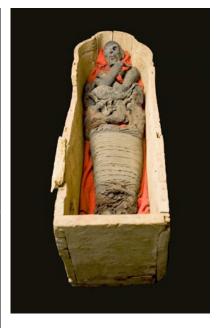


Figure 2. Lady Hudson (Lady Hudson, Mummipedia)

Figure 1. Lady Hudson's coffin (Beauchesne et al., 2008)

#### Background:

Lady Hudson joined the Department of Anthropology at Western University in May 2003 (Beauchesne et al., 2008; Nelson, 2018). In 1963, a museum in Brussels, Belgium sold her to Mr. George Bannister of Ottawa, Ontario as an ancient artifact, to avoid export laws over human remains (Beauchesne et al., 2008; Nelson, 2018). In 1974, she was donated to the MacSkimming Natural Science School of the Ottawa Carlton School Board on behalf of the Bannister family estate (Beauchesne et al., 2008; Nelson, 2018). In May 1999, Lady Hudson was loaned to the Canadian Museum of Civilization for a travelling exhibit called "Mysteries of Egypt", preparation included 71.5 hours of stabilization and C-14 dating of the coffin was undertook, dating to 2874±80 BP (Beauchesne et al., 2008; Nelson, 2018). This travelling exhibit was seen by 500,000-750,000 people through Canada and the United States from June 1999-March 2001 (Beauchesne et al., 2008; Nelson, 2018). In October 2001, Lady Hudson was transferred from the Canadian Museum of Civilization to the Royal Ontario Museum (Beauchesne et al., 2008; Nelson, 2018). May 2003 she was transferred to Western University as the focus of a new PhD program in Archaeological Sciences (Nelson, 2018).

## Coffin Mix-Up:

Lady Hudson and her coffin do not match. The coffin was carbon dated to the 21st dynasty and was originally designed for a male, which can be seen in the positioning of the hands and ceremonial beard, which has been broken off (Beauchesne et al., 2008; Nelson, 2018; von Kalckreuth, 2004). However, Lady Hudson is a female and has the herringbone style wrappings and individual finger wrappings of a Roman Period mummy (Nelson, 2018). However, her crossed-pectoral arm positioning is more typical of the Ptolemaic Period (Nelson, 2018). No clear evidence exists to explain why she is in the wrong coffin, but theories include that she was buried in a used coffin or she was paired with an empty coffin during the mummy trade for a higher price. Inside the coffin a matchstick, bug larval casing, and a blanket were also found (Beauchesne, 2008). The inscription "Bryant and May" on the matchstick is characteristic of those from 20<sup>th</sup> century production in England (Beauchesne et al., 2008). This matchstick may be evidence that she was temporarily stores in England before reaching Belgium. The bug casings are from a dermestid beetle and are attached to spores believed to be from a fern (Beauchesne et al., 2008). The blanket was originally believed to be a Hudson's Bay blanket, giving Lady Hudson her name. However, the blanket is now believed to be a French 19<sup>th</sup> century trade blanket after research by the Hudson's Bay Heritage department and Harold Tichenor, a blanket consultant (Beauchesne et al., 2008; Nelson, 2018).

#### <u>Pathological Features</u>:

Lady Hudson's dental health was in a very poor stage and she suffered from advanced osteopenia, seen by radiological and histological examinations (Beauchesne et al., 2008; Nelson, 2018). The molars were worn down all the way to the tooth root, which would have caused immense pain while alive (Nelson, 2018; von Kalckreuth, 2004). Oral infection from her poor dental health is also evident from small holes in the bone around her teeth (von Kalckreuth, 2004). She is also missing several maxillary teeth and has three abscesses (Nelson, 2018). Since

sections of her body are missing, many clues to asses age are also missing. From what can be observed, she likely was not a young woman, nor an old woman, likely around 30-40 years old (Beauchesne et al., 2008; Nelson, 2018).

A large defect in the nasal opening shows where the entirety of the brain was removed from by plunging a probe through the left nostril (Beauchesne et al., 2008; Nelson et al., 2007). The defect is considerably large, having destroyed the left and right cribriform plate and planum to entirety (Nelson, 2018; Nelson et al., 2007). Resin was then added, filling the posterior third of the cranial cavity (Beauchesne et al., 2008; Nelson, 2018; Nelson et al., 2007). A linen tampon was then inserted in the transnasal route and a wad in the oral cavity, but no padding of the cheeks (Nelson, 2018; Nelson et al., 2007).

Lady Hudson's chest and upper abdomen are completely absent. Most of her thorax is missing, making it impossible to know exactly which organs were removed. However, there is some cotton stuffing visible in the top of her pelvis, likely there to preserve shape of her abdomen from eviscerated organs (Nelson, 2018; von Kalckreuth, 2004).

An examination of her arteries revealed Atherosclerosis. This condition is determined due to hard plaque formations, typically from a high fat diet, but also speculated to be related to age, inflammation, and inhalation of soot-filled smoke (Nelson, 2018).

### Her Origin:

Isotopic analysis was carried out on Lady Hudson's skin to analyze her food intake over the last month of the life. The plant base of her diet would have been wheat, barley, fruits, and vegetables, which was not distinctly different from any other sites known in Egypt during that time (Beauchesne et al., 2008; Nelson, 2018). However, her nitrogen levels are consistent with people who come from an oasis or along the Nile River, where the soil is rich in nitrogen (Beauchesne et al., 2008; Nelson, 2018).

Due to the herringbone wrapping, evisceration, excerebration, and older age, it is likely Lady Hudson was of a wealthy family while alive. These are signs of top quality mummification techniques that not everyone had access to (Beauchesne et al., 2008). However, due to the poor preservation and incorrect coffin no body will never know who Lady Hudson really is.

#### References

Beauchesne, P., Colquhoun, I., Cross, A., Gardner, J., Longstaffe, F., Marciano, L., Metcalfe, J., Nelson, A.J., Pawlowslo, A., Wheeler, S., White, C. D., & Williams, L., 2008. Lady Hudson and Mummy Studies at The University of Western Ontario. Paper presented to the *World Congress on Mummy Studies*.

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Nelson, A.J. 2018. Mummies, memories and marginalization: the changing social roles of a mummy from ancient to modern times. In: Mant, M.L. and Holland A.J., editors. BIOARCHAEOLOGY OF MARGINALIZED PEOPLE.

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von Kalckreuth, H. 2004. Lady Hudson. Transcript of Welt der Wunder TV show. Aired September 2004.