



UNDER WRAPS

At a new Sydney exhibition, technology allows us to look through the ancient covering at the Egyptian individuals inside, writes **Jane Cornwell**

Nestawedjat. Try saying her name out loud. Roll the syllables around on your tongue: Nest-a-wed-jat. She might be old — like, 2500 years old — and swaddled in mottled yellow-brown bandages but she was once a real person like you and me. Married, wealthy, just over 153cm tall, Nestawedjat lived east of the Nile in Thebes, now Luxor, then the most bling-city in ancient Egypt. For a long time, under wraps, she was thought to be a man.

Thanks to the latest non-invasive CT technology we know all this without having to crack open Nestawedjat's carapace or disturb her eternal slumber — a carefully regulated return flight from London to Sydney notwithstanding. Along with five other mummies from the collection at the British Museum, all of whom lived in Egypt between 1800 and 3000 years ago, Nestawedjat stars in the world premiere of *Egyptian Mummies: Exploring Ancient Lives* at Sydney's Powerhouse Museum.

While the exhibition is underpinned by science, by detailed and unprecedented analysis of what lies beneath the coffins and bandages, the mummies as individuals, not as objects, are the main focus. The British Museum took a similar tack in 2014 with its popular smaller exhibition, *Ancient Lives, New Discoveries: Eight Mummies, Eight Stories*. Visitors who poured through the Greek revival-style entrance of this long-time London landmark (founded in 1753 under Enlightenment principles) were informed that “the museum is committed to caring for human remains with respect and dignity”.

Daniel Antoine, the curator of physical anthropology with responsibility for the British Museum's human remains, and one of the people behind both exhibitions, nods vigorously. “We are very aware of the importance of preserving the collection,” says this suave French doctor of archaeology, who has met me by the information desk in the museum's cavernous inner courtyard and led the way up a private spiral staircase to the first floor offices he shares with colleague Marie Vandebusch, a project curator in the department of ancient Egypt and Sudan.

“We want these mummies to be around for a thousand more years,” Antoine continues. “We're lucky that none of our predecessors decided to unwrap our mummies; it would be so easy to misplace wrappings and objects unless you record everything extremely carefully.”

It's a delicate topic. While the mummies in the museum's collection were all legally acquired in the 19th century by the likes of English Egyptologist EA Wallis Budge, they were purchased during the time of empire. Besides, documents were lost and coffins swapped: “In the 19th century and even in ancient times the best preserved mummy was often put into the best preserved coffin,” sighs the Swiss-born Vandebusch. “We've done a lot of double-checking.”

As visitors to the Powerhouse will discover, today we can dress and undress Nestawedjat and her fellow travellers Tamut (a female temple singer from Thebes) and Irthorru (a dentally challenged



Cartonnage case containing Tamut's mummy, main; the mummy of a young man from Egypt during the Roman era, left

priest from nearby Akhmim) with the scroll of a button. Take Tamut: a virtual zoom through her gold, red and blue cartonnage case reveals a woman who, being bald, wore a wig, has protective amulets placed on her skin — a winged metal deity at her throat, stones over her eyes to help to see in the afterlife — and four wax figurines, each containing an organ, buried inside her chest cavity. Her nails are covered with thin layers of metal, probably gold. Another zoom, a peeling back of the skin, and we see calcified plaque in Tamut's right thigh bone; like too many people in the modern world, Tamut suffered from high cholesterol.

“Tamut is fantastically preserved,” Antoine enthuses. “She provides us with many insights about what it would be like to live in that period, both from a religious point of view and also a biological one. We're building a greater idea of cardiovascular disease in antiquity; it seems to have been particularly prevalent among the wealthy of the Nile valley, or at least in those who could afford mummification.”

One floor above us, most of the museum's 120 mummies are on permanent display (minus the six en route to Australia), along with their coffins and other tomb artefacts. So too is a description of mummification by the Greek historian Herodotus, who records that this heavily ritualised process took 70 days, and involved removing perishable organs, which were then dried, wrapped and either placed in canopic jars or back inside the salt-dried body. The brain was removed through the nose with a hook.

In 2012 the museum premiered its virtual autopsy table, a medical visualisation tool that allowed visitors to explore the “natural” mummy known as Gebelein Man, who was buried in a dry, sandy cemetery in Upper Egypt with his knees drawn up to his chest and a deep stab wound in his back. The popular success of the table — “It is in use 95 per cent of the time” — led to the creation of 2014 exhibition and now, with different mummies and superior scanning technology afforded by London's Royal Brompton Hospital, to *Egyptian Mummies: Exploring Ancient Lives*.

“For Sydney we used dual-energy CT scanners, or two X-ray machines on different settings that bombarded every part of the mummy,” Antoine says. “We've captured the texture of the skin and thicker areas such as bones and objects made of stone. And we're using the sort of software Formula One might use to scan an engine's brake pads, so they can see what is happening inside.”

Processing the resulting data involves intensive work: “Marie and I and a colleague in Paris sat down for thousands of hours so we could get as close to the truth as science allows us to get. We will never deceive the viewer,” he says. “A process called segmentation allows us to ‘remove’ objects and put them in a 3-D printer, so

we can then hold in our hands exact replicas of what are still on the bodies of the mummies. All without ever having to unwrap them.”

A far cry, then, from the early 20th century, when Egyptology was a new academic discipline and public “unrollings” were all the rage. Fetching an old exhibition catalogue, Vandebusch shows me a black-and-white photograph taken in 1908 at the Manchester Museum of several scholars standing over the skeleton of a freshly unravelled mummy: a 12th-dynasty man named Khnum-Nakht. More than 500 people had gathered to watch pioneering archaeologist Margaret Murray reveal his mysteries; Murray and her team look triumphant. Khnum-Nakht seems vulnerable, exposed.

No ancient Egyptians would be harmed in this way today. So did Murray suffer any supernatural wrath? Did anyone involved fall prey to the mummy's curse, as whipped up by Howard Carter's 1922 discovery of King Tutankhamun's tomb and dramatised by Boris Karloff in the 1932 film *The Mummy*? Antoine and Vandebusch roll their eyes.

It was Roman, not Egyptian, mummies who had their arms wrapped separately (all the better for coming back to life and grabbing you with), Antoine tells me later. For now both curators reiterate the due care taken with their charges: data is presented, not interpreted, they say.

“We don't do facial representations,” Antoine adds. “We are creating visualisations of what is underneath the wrapping, including the embalmer's reconstructive padding of lips, nose and cheeks. The embalming varies, of course. “Each embalmer had their own style.”

The mummies, largely untouched, are treated as precious cargo; the trucks that took them to the hospital to be scanned were fitted with air suspension. The team that brought them to Australia is highly trained in packing and transportation. Both curators are delighted the exhibition space in Sydney can accommodate the large coffins and several statues, along with 200 objects exploring themes such as gods, goddesses, health, medicine and childhood (one of the mummies is two-year-old boy from the Roman period, wrapped inside a gilded cartonnage).

Neither Antoine or Vandebusch wishes to comment on the controversy surrounding the Powerhouse Museum's mooted move from Ultimo to Parramatta in western Sydney. The initiative is the subject of a parliamentary inquiry. As long as the mummies are handled with care, approached with respect and regarded as individuals, it arguably doesn't matter what side of Sydney they occupy.

Nestawedjat has come into her own, resting in her correct coffin after some forensic CSI-style sleuthing from Vandebusch (“There were three coffins with her name on them, but the inner coffin closest to her had a black stain which matched the substance on her shoulder”), and reassigned her correct gender.

“When the mummies in the collection were X-rayed back in the 1960s it was thought that this was the mummy of a man,” says Vandebusch. “It was only after the CT scan was done — and the embalmer's extra padding revealed — that Antoine realised Nestawedjat was actually a woman.”

Antoine flashes a grin. “It's a privilege to be able to stare in the face of the distant past. I'm always reminded that these are the remains of a person who once lived and had family and friends and took part in community activities,” he says. “Their name, if we know it, is so important. It is important for them.”

“By repeating the name of Nestawedjat, we are helping her live forever.”

Egyptian Mummies: Exploring Ancient Lives runs until April 25 at Sydney's Powerhouse Museum.