

THE AWARDS 2021

Research Project of the Year: STEM

Institution name	Royal Holloway, University of London in collaboration with University of York, Leeds Museums and Galleries, and Leeds Teaching Hospitals NHS Trust
Submission title or project name	Recreating a sound from the 3,000-year-old mummy Nesyamun
Nominee/key personnel	Professor David M Howard; Professor John Schofield; Dr Stephen Buckley; Professor Joann Fletcher; Ms Katherine Baxter; Mr Gareth Iball
URL	
Submission	<p>Using a novel approach developed by Professor David Howard (Royal Holloway, University of London), an authentic vowel sound was recreated from the 3,000 year-old mummified remains of the Egyptian priest Nesyamun, whose documented ambition at death was to speak again in the afterlife.</p> <p>Howard's Vocal Tract Organ synthesizes the sound of a human larynx via a special loudspeaker that inputs this sound to a 3-D printed vocal tract, created from a CT scan. The images allowed a 3-D model of the vocal airway to be produced and a sound was created on a falling pitch using the Vocal Tract Organ loudspeaker.</p> <p>This offers the possibility for entirely new research directions into ancient worlds, and provides a way to introduce audiences and ENT patients to healthy voice function. Furthermore, it presents the opportunity for visitors to engage with historical figures as people rather than simply as artefacts.</p>