

File name: Naked_mole_rat_microCT.tif

File type: Stacked tiff of microCT slices

Specimen: Naked mole-rat, *Heterocephalus glaber* (family Bathyergidae, order Rodentia) from the collections of Dr Chris Faulkes, Queen Mary University of London. Stored in 95% ethanol for approximately 10 years.

Staining protocol: Specimen was immersed in a 5% solution of iodine potassium iodide dissolved in phosphate-buffered formal saline for two weeks.

Scanning protocol: The specimen was scanned by Mrs Sue Taft at the Department of Engineering, University of Hull (February 2014). The scan was performed at 80 kV and 60 μ A without a filter, with 4000 projections averaging 2 frames per projection, and using a beryllium target. Voxels were isometric (0.0223 x 0.0223 x 0.0223 mm), the field of view was 1002 x 1090 voxels, and there were 1436 slices.

Please acknowledge Sue Taft and Professor Michael Fagan (Department of Engineering, University of Hull) in publications using this scan stack.

File name: Naked_mole_rat_muscles.ply

File type: Surface file (Stanford PLY)

Object: Reconstruction of the skull, mandible and masticatory muscles of the naked mole rat specimen scanned in file Naked_mole_rat_microCT.tif

Reconstruction: Carried out by Dr Philip Cox (Hull York Medical School, University of Hull) in March 2014 using Avizo 8.0 (FEI Visualization Sciences Group, Burlington, MA, USA).

Please acknowledge Dr Philip Cox (Hull York Medical School, University of Hull) in publications using this reconstruction.