KINGS

Oliver Hull
MULLALOO AND MAGNUS

JUNE
15.06.23–8.07.23

Artist Run

KINGS Artist Run acknowledges the Wurundjeri Woi-wurrung people of the Kulin Nation as the Traditional Custodians of the land on which we operate. We offer our respect to Elders both past and present and extend this offer to all First Nations people.

Established in 2003, KINGS Artist-Run provides a location for contemporary art practice, supporting distinctive experimental projects by artists at all stages of their careers.

Open 12-5pm Thursday, Friday, Saturday

69 Capel Street,
West Melbourne VIC 3003

GALLERY ONE

Oliver Hull
MULLALOO AND MAGNUS

Mullaloo and Magnus is a collaboration between artist Oliver Hull and scientists Dr Mattia Saccò and Dr Matthew Campbell. The exhibition explores via sculpture, generative sound work and real time simulation, the interconnected system of Magnus — the fastest supercomputer in the southern hemisphere — and the Mullaloo Aquifer, a large subterranean body of water spanning the greater Boorloo (Perth) area on Noongar country (Western Australia). For hundreds of thousands of years the Mullaloo Aquifer was sealed, plantless, and populated only by underground fauna known as stygofauna and troglofauna that live only off each others remains. The animals and bacteria that make up the ecosystem of the aquifer have hardly been seen. We are only just beginning to be able to sense them through Environmental DNA (eDNA) sampling technology — a technique which has only recently been made available by supercomputing. Magnus sits above the Mullaloo Aquifer. As the scientists process the eDNA in the water of the Mullaloo using Magnus, the waters of the aquifer flow through Magnus itself, cooling its processors, to be expelled back into the aquifer. A system at once symbiotic and compromised.

Mullaloo and Magnus comprises three connected elements: a real-time simulation of the environmental DNA residue in the aquifer imagining the debris before it is decoded, revealing the trails left by organisms bodies, co-mingling with each other as they interact within the water column; a generative-sound work composed with Mathew Campbell using DNA decoded by the Pawsey Supercomputing Center converted into MIDI; and a sculptural floor work.

Oliver Hull works across digital media, sculpture and installation. He is interested in the poetic and political properties of images and computation and their relationship to time,nature and landscape. His work usually begins with research into places or events where these categories knit, often using digital tools to track, model, simulate and sense as techniques to draw out the political and / or poetic within the subject matter. Hull has participated in solo and group exhibitions nationally and internationally in institutional, artist run, online and offsite settings.

Dr Matthew Campbell
Matthew Campbell is a post-doctoral researcher at the Trace and Environmental DNA (TrEnD) Laboratory at Curtin University (Perth, Western Australia). He is currently investigating the potential of ancient sedimentary DNA (sedaDNA) as a tool for reconstructing the paleoecology and paleoclimate of Western Australia during the late Quaternary period. Matt is a strong advocate for the use of interdisciplinary approaches (e.g., environmental DNA, geochemical proxies) to address complex environmental challenges and believes that sedaDNA has great potential for informing conservation and management strategies in the face of global environmental change.

Dr Mattia Saccò
Mattia Saccò is a Research Associate at the Trace and Environmental DNA (TrEnD) Laboratory, and he is the leader of the Subterranean Research and Groundwater Ecology (SuRGE) Group at Curtin University (Perth, Western Australia). His research focuses on functional ecology of aquatic environments, including groundwater and groundwater dependent ecosystems. He is particularly interested in investigating diversity, food webs, energy flows and ecological niche interactions underground through molecular (e.g., environmental DNA, functional genomics) and biogeochemical approaches (e.g., stable isotope analysis, carbon and nitrogen tracking) both at local and global scales.

List of works:

GALLERY ONE

Oliver Hull
Mullaloo and Magnus, 2023
1700x1450x670mm, unlimited duration.

Fiberglass, epoxy, flatback aluminum 1050 heatsink, aluminum extrusion, hardware,rust,mineral residue,pigment,dirt,organic debris,aquifer water,speakers,amplifier,computer,pla 3d prints, cable ducting, brackets, Real Time-eDNA fluid simulation, DNA to Midi generative sound work, 50" monitor.

KINGS Artist-Run is generously supported by City of Melbourne through the Arts and Creative Partnerships Program.

CITY OF MELBOURNE