

# AFTER NATURE



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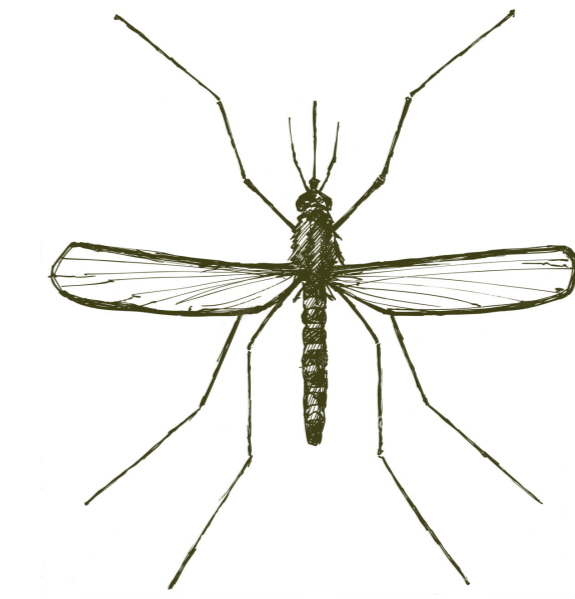
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# AFTER NATURE

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## PROLOGUE

The research and artworks in *After Nature* were inspired by a tiny creature that has terrorised humankind for nearly 500 000 years: the Anopheles mosquito. To assist us in understanding the consequences of a new world driven by human intervention in nature, the artworks explore how we have shaped nature and how nature, in turn, is reshaping us.







## BIBLIOGRAPHY

Born 1996, in Polokwane, Oosthuizen holds the Education and Public Engagement Coordinator position at the Javett Art Centre at the University of Pretoria. She currently works as an artist, academic writer, editor, educator and co-curator. She has co-curated three prominent exhibitions at the Javett Art Centre at the University of Pretoria since being appointed in 2021. Oosthuizen was also the Teaching Assistant for two consecutive years at the Visual Art Department, School of the Art at the University of Pretoria, before being appointed in her current position. Through her performance in transdisciplinary research, she was selected as the first-ever junior researcher in a department other than the Faculty Health Sciences to step into the role of Student Chairperson for the internationally renowned University of Pretoria Institute for Sustainable Malaria Control (UP ISMC) research cluster.

## Selected Group Exhibitions

- 2017 Thami Nyele Fine Arts Award, Scholtz Recreation Centre, Johannesburg.
- 2018 A Beautiful Mind, Diep in die Berg, Pretoria.
- 2018 Ember, Molo Molo, Pretoria.
- 2019 Awesome Womxn, Association of Arts, Pretoria.
- 2019 Mooketi, University of Pretoria, Pretoria.
- 2020 Turbine Art Fair, Online Exhibition, Johannesburg.

## Selected Co-curated Exhibitions

- 2020 Living Legends: Helen Sebidi, University of Pretoria, Pretoria.
- 2021 Willem Boshoff: Word Woes, Javett Art Centre at the University of Pretoria, Pretoria.
- 2021 Handle with Care, South32 Art Collection, Javett Art Centre at the University of Pretoria, Pretoria.
- 2021 Interfacing New Heavens – in collaboration with the Embassy of Switzerland and the artists-in-labs program, Zurich University of the Arts (ZHDK), Javett Art Centre at the University of Pretoria, Pretoria.

## Education

- 2018 BA Fine Art (Cum Laude), University of Pretoria.
- 2020 Professional Tour Guide Certificate. Issued by UNICEF and Professor Karen Harris, University of Pretoria.
- 2020 Branding and Communication Certificate. Issued by UNICEF and Dr Tinashe Ndoro, University of Pretoria.
- 2020 Events and Protocol Certificate. Issued by UNICEF and Neo Maseko, The University of Pretoria.
- 2020 Fine Art Restoration and Conservation Certificate. Issued by UNICEF and Ernest Bellingan Scott, Private Art Restorer.

## Awards

- 2015 Golden Key International Honorary Society Member.
- 2019 JA Euvrard Bursary, Department Fine Art, University of Pretoria.
- 2020 NRF Innovative Research Grant.



# AFTER NATURE

*After Nature* explores postnaturalism<sup>1</sup> through the lenses of science and biotechnology and the questions these subjects raise within the discursive terrain of bio art<sup>2</sup>. The works here look at potential scenarios that this interaction may provoke and its effect on our present.

My research investigates capitalism's promises of progress and a subsequent improved life for humanity by considering issues related to biotechnology and ecology and their interface with human and non-human worlds and weighing the effects of such progress within the Capitalocene<sup>3</sup>. More specifically, I look at how scientific intervention in nature may evolve and whether it will become utopic or dystopic.

The form my art practice takes focuses on, yet moves beyond, the domain of malaria research and the chemical eradication of the mosquito. More specifically, I look at how we have manipulated the mosquito's role in nature and how nature, in turn, is reshaping us. Playing on the delicate balance between utopia and dystopia<sup>4</sup>, these bio artworks present us with certain incongruities concerning our impacts on the bigger biotope and the potential future these developments may hold for us and the natural world. My interest lies in the juxtaposition of paradoxical positions<sup>5</sup> brought together in affective proximity. By using affect<sup>6</sup> as a conceptual framework to create these bio artworks, I aim to provoke and shift the viewer's understanding of our relationship with the mosquito and our inadvertently destructive relationship with nature and ourselves by extension.



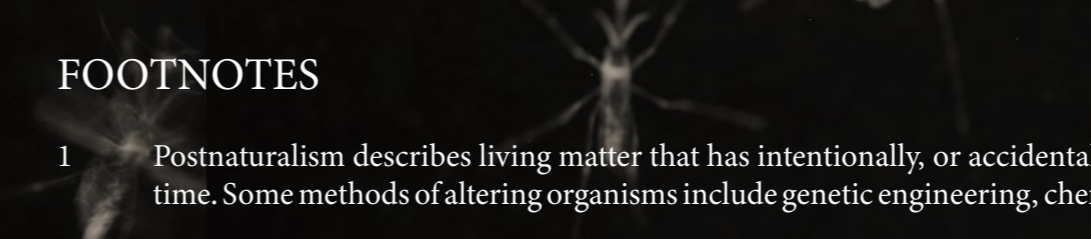
The artworks in *After Nature* attempt to stage an intermission for reflection, a chance to briefly settle in an unknowable landscape that manifests as a postnatural sequence out of time and place. This strategy echoes the unpredictability of our era. It is hoped that such an opportunity for contemplation may lead the viewer to develop a more conscious, critical engagement with the different perspectives and forms of knowledge revealed by the artworks. My intention is that the artworks both invert and refract the realities of our role in shifting ecology back to us while we try to dominate the natural world, and that they disrupt our sense of wellbeing within the Capitalocene.

The bioacoustic<sup>7</sup> sound artwork, *Anopheles*, 2021, is central to the exhibition and serves as a backdrop to the other bio artworks. It triggers the practice of deep listening to contemplate the link between matter and meaning. Deep listening was coined in 1989 to describe a method of radical attentiveness and involves tapping into the unspoken meanings and feelings conveyed by an object or other life form (Williger 2020:[sp]). It is done using both the mind and the body to become aware of oneself in the collective whole (Williger 2020:[sp]). The rest of the exhibition's bio artworks – consisting of moving images, photographic prints of ghostly images, and swaying, luminescent, physical life forms – are curated as an assemblage of corporeal and incorporeal objects. The works collide to construct an incongruous and affectively charged installation composition. A kaleidoscope of teaming life, matter, organic profiles, affects, and senses come together to ask: what will our future look like, founded as it is upon rapid biotechnological progress within the Capitalocene?



## FOOTNOTES

- 1 Postnaturalism describes living matter that has intentionally, or accidentally been altered or changed by humans over extended periods of time. Some methods of altering organisms include genetic engineering, chemical contamination or selective breeding (Pell & Allen 2015:[sp]).
- 2 Bio art is a creative practice that combines the arts and sciences. It finds inspiration from both the philosophical, social, and environmental impacts of biotechnology and its future implications for both human and non-human life (Yetisen et al 2015:724).
- 3 In place of the Anthropocene, I argue for our current era to be seen in the light of the Capitalocene. The Capitalocene is bracketed by a system of power, profit and (re)production that prioritises capital accumulation above nature's wellbeing (Moore 2016:594).
- 4 The study questions a utopia premised on the capitalist promise of progress and better living, while foreshadowing elements of dystopia that are manifesting in different parts of nature.
- 5 As we advance our well-being and quality of life with certain biotechnological developments, such as pesticides, we have caused harm to nature and to ourselves. In an attempt to save humanity from the deadly malaria virus, we have imposed unplanned transgenerational health effects onto the very population we set out to protect - humankind. The enigma in *After Nature* is present in the weighing up of the short term need to be malaria-free against the long-term need for the environment and its inhabitants to be healthy.
- 6 Given bio art's complex mode of communication, it is often gleamed from an affective position (Ede 2002:67). Affect is a way of theorising about the social or artistic forces that trigger the body to respond in a certain way (Massumi 2002:22).
- 7 Bioacoustics are centred around forging new listening practices, which can directly engage issues of agency, power, and ethics (Wright 2017:6). By aligning with science, bioacoustics can capture that which usually renders itself inaudible. This function might be summed up as the making visible of the invisible, making perceptible of the imperceptible or, as Guattari and Deleuze (1994:164) term it "the harnessing of forces". This harnessing of forces may enable an affective awareness of the more-than-human worlds around us.







Danielle Oosthuizen, *After Nature*, 2021.  
Installation Photograph.  
University of Pretoria.  
Photograph by Carla Cafford.



Danielle Oosthuizen, *Biocide - Specimen I*, 2019.  
Video Still, 3min 49sec.  
University of Pretoria.  
Image by the Author.



Danielle Oosthuizen, *Biocide - Specimen II*, 2019.  
Video Still, 3min 49sec.  
University of Pretoria.  
Image by the Author.



Danielle Oosthuizen, *Biocide - Specimen III*, 2019.  
Video Still, 3min 49sec.  
University of Pretoria.  
Image by the Author.



Danielle Oosthuizen, *Biocide - Specimen IV*, 2019.  
Video Still, 3min 49sec.  
University of Pretoria.  
Image by the Author.

## Biocide

*Biocide* (2019) is a four-screen video installation. The four videos are digitally projected at a human scale. They depict the impacts of Dichlorodiphenyltrichloroethane (DDT) on four living specimens: a bee, a small bird, abstracted plant life, and food crops. The videos show the often-overlooked impacts of biotechnologies, such as pesticides, on nature and life. By enlarging the scale of the video art, its contents aim to provoke a one-on-one confrontation between the viewer and the specimen, aiming to break down our anthropocentric role in nature. This is intended to force an acknowledgement of the impacts of toxic biotechnologies such as DDT to control mosquitoes.

A small dying bird dominates the first screen. We watch as the animal struggles for breath due to DDT poisoning and eventually lays down to die, becoming consumed by the effects of the toxins. On the third screen, we see footage of a bee suffering the same fate as the bird. Due to climate change and the use of pesticides and other toxins, bees and other small animals are declining at a rapid rate (Sánchez-Bayoa & Wyckhuys 2019:8). We see the tiny insect fight for its life as its body tries, without success, to fight off the chemicals. The main problem with pesticides is that they do not target pests exclusively (Carson 1962:8-9). Once they are distributed into the environment, they get easily transmitted through water and passed on in the food chain (Carson 1962:8-9). This causes a whole variety of species to ingest these chemicals.

The second screen uses 1940 archival footage from DDT campaigns which documented the release of vast amounts of DDT into the environment. In this screen, we see footage of the pesticides metaphorically eroding the projected scene. On the fourth screen, the focus of the footage predominantly falls on flora and cancer cells. The abstracted content interweaves the biological structures of plants with the internal structures of the body. The footage shows DDT becoming absorbed by the particles of the plants and eventually fed back to us humans who consume it. The multiplication of cancer cells across the different screens reveals the many detrimental health concerns caused by DDT (Bornman, Aneck-Hahn, de Jager, Wagenaar, Bouwman, Barnhoorn, Patrick, Vandenberg, Kortenkamp, Blumberg, Kimmins, Jegou, Auger, DiGangi & Heindel 2017:1-3). Microscopically, the cancer cells, pollutants, and larvae blend to form beautiful assemblages. Despite their aesthetic appeal, they foretell the horrors of an ecosystem on the verge of collapse. In attempts to create a utopia free from pests, inadvertently, we are busy shaping a dystopia for both human and non-human life.

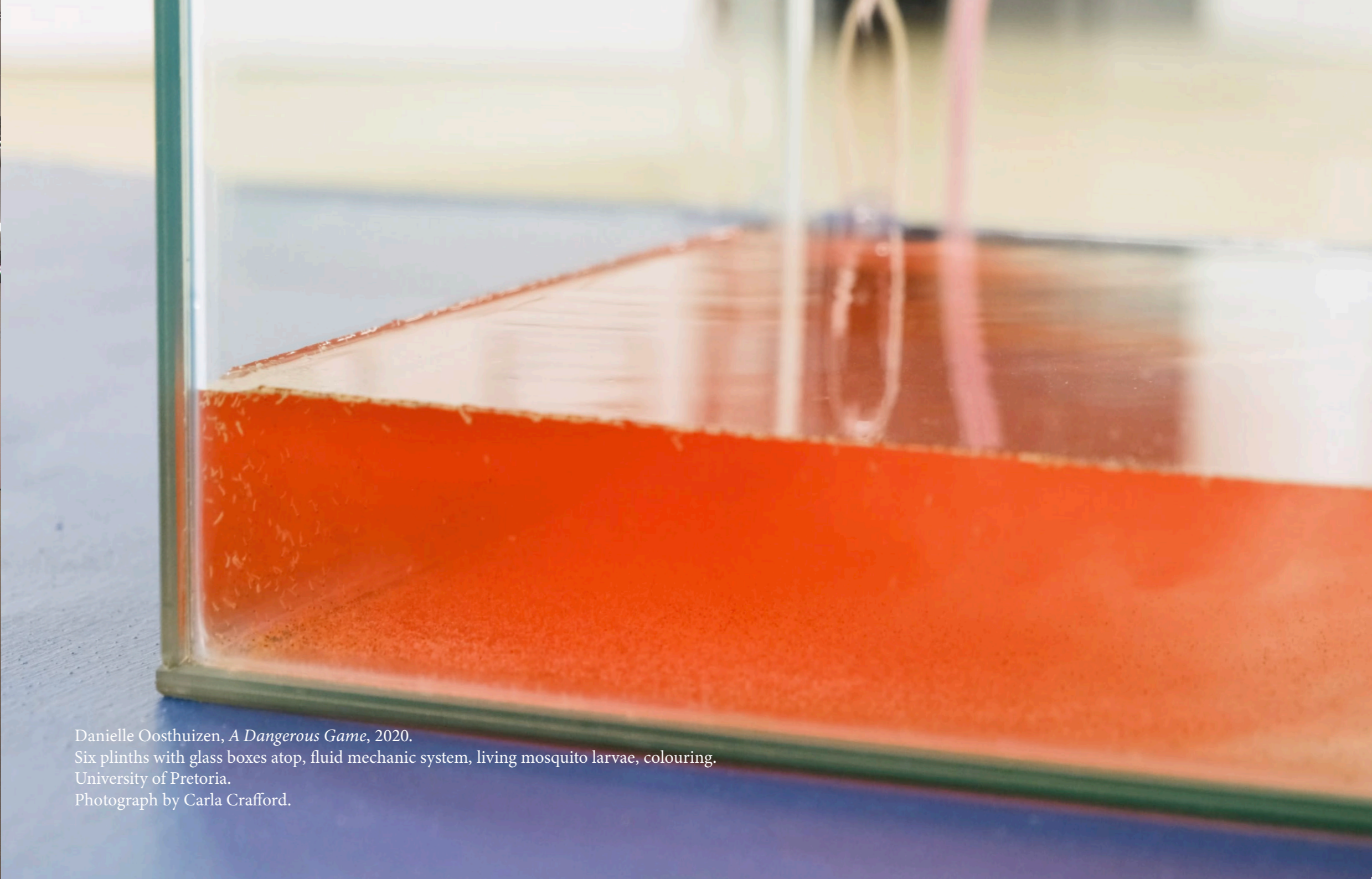




## A Dangerous Game

The installation *A Dangerous Game* (2021) comprises six plinths with a glass box atop each. Each glass box is filled with varying water levels and is connected using a system of fluid mechanics. True to bio art, living matter forms the crux of this artwork, and in each glass box, I place infant mosquito larvae. The artwork becomes a performance where the water levels in the different glass boxes slowly change over time. This slow shift in water levels underpins research on global warming impacting the proliferation of vector-borne diseases (Ryan, Lippi, Zermoglio 2020:1-2). The erratic weather patterns brought on by climate change is linked to an increase in the dispersion and breeding of Anopheles mosquitoes in previously malaria-free areas. In contrast, other places – known for their malaria – may become malaria-free (Ryan, Lippi, Zermoglio 2020:1-2). This unpredictability in vector proliferation echoes Professor of Natural Resource Economics at Columbia University, Scott Barrett's (2015:[sp]) warning to humanity that we are busy playing a most dangerous game with the Earth's ecology and weather stability.

As the water is drained from certain glass cases while filling up others, the work enacts, at a micro-scale, the shift in more significant global temperatures impacting the spread of malaria. The two glass cases filled with red water and larvae stand out in contrast with their surroundings. Often thought to be the most emotionally charged colour, red tones carry much affective symbolism and meaning (Mentzel, Schücker, Hagemann & Strauss 2017:1). One of the boldest colours in the spectrum, red, is a signal of danger or warning, making the colour familiar to associations with risk, fear, and intensity. The red tones signal a warning of our actions as we slowly continue to impact all life on Earth.



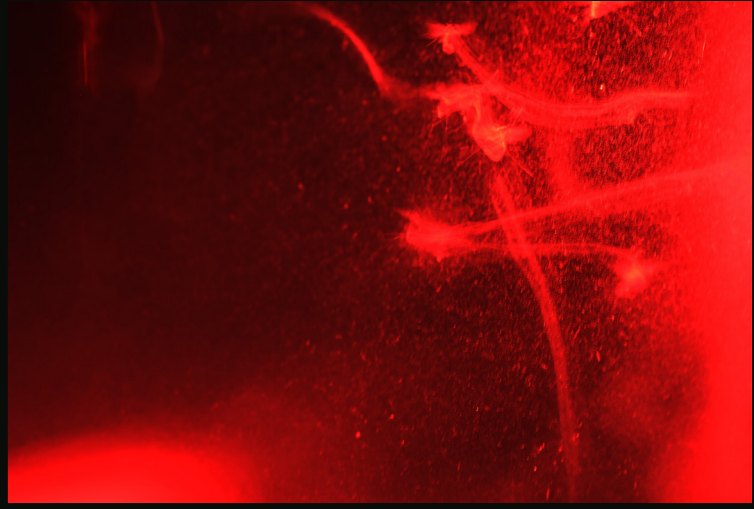
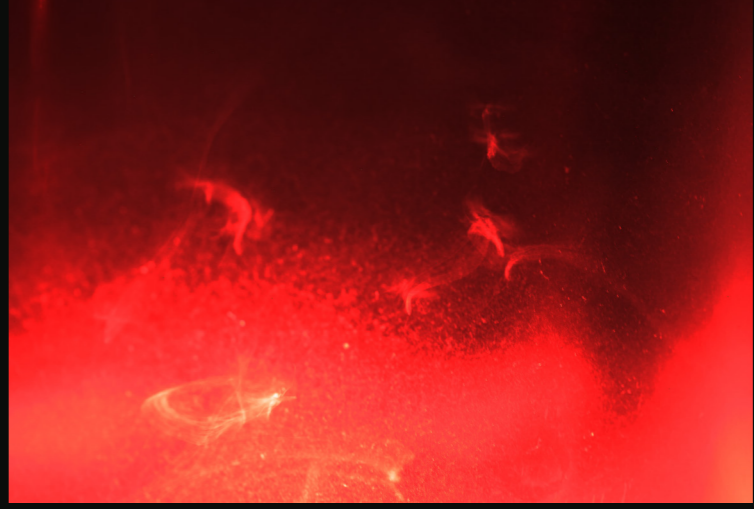
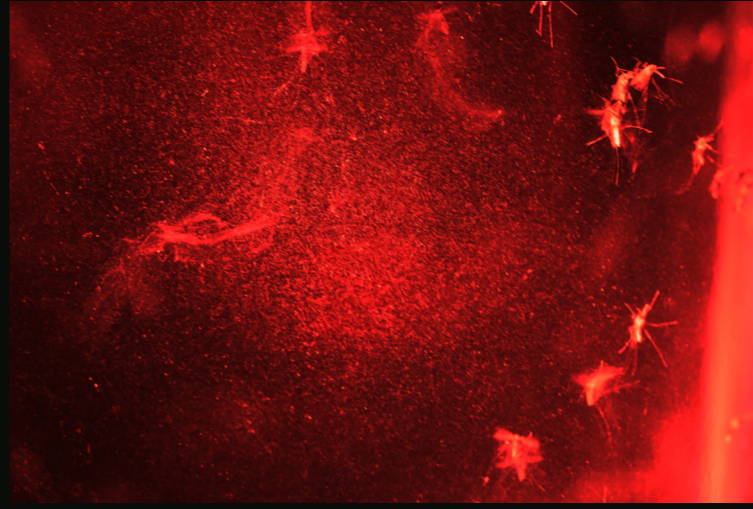
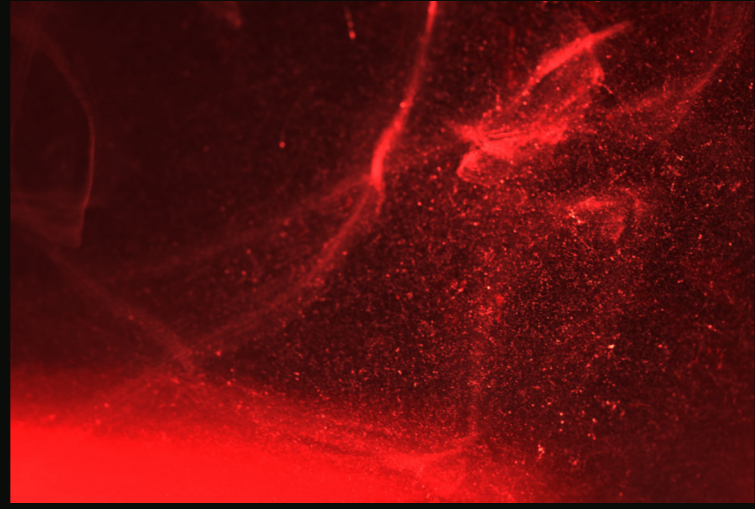
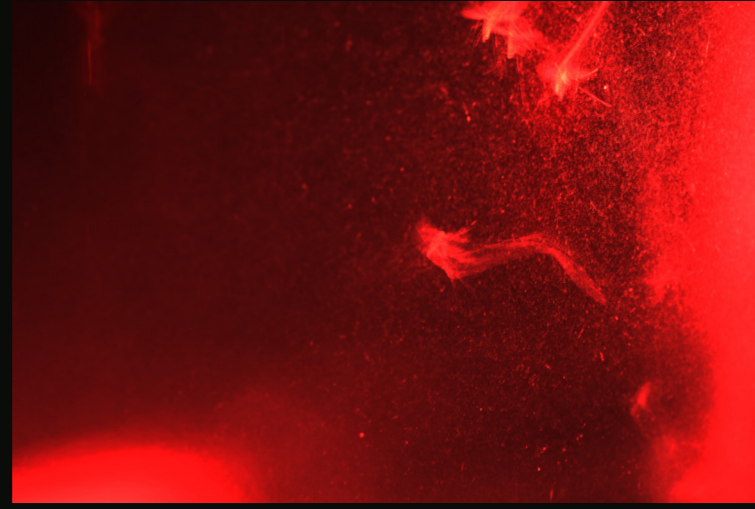
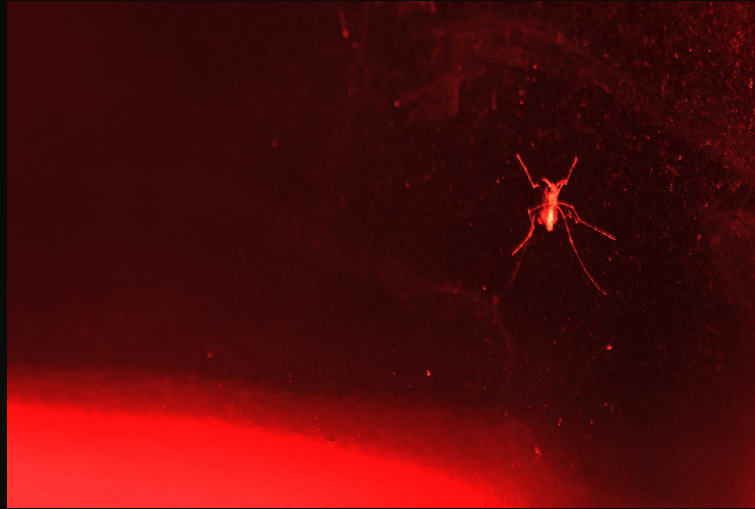
Danielle Oosthuizen, *A Dangerous Game*, 2020.  
Six plinths with glass boxes atop, fluid mechanic system, living mosquito larvae, colouring.  
University of Pretoria.  
Photograph by Carla Crafford.



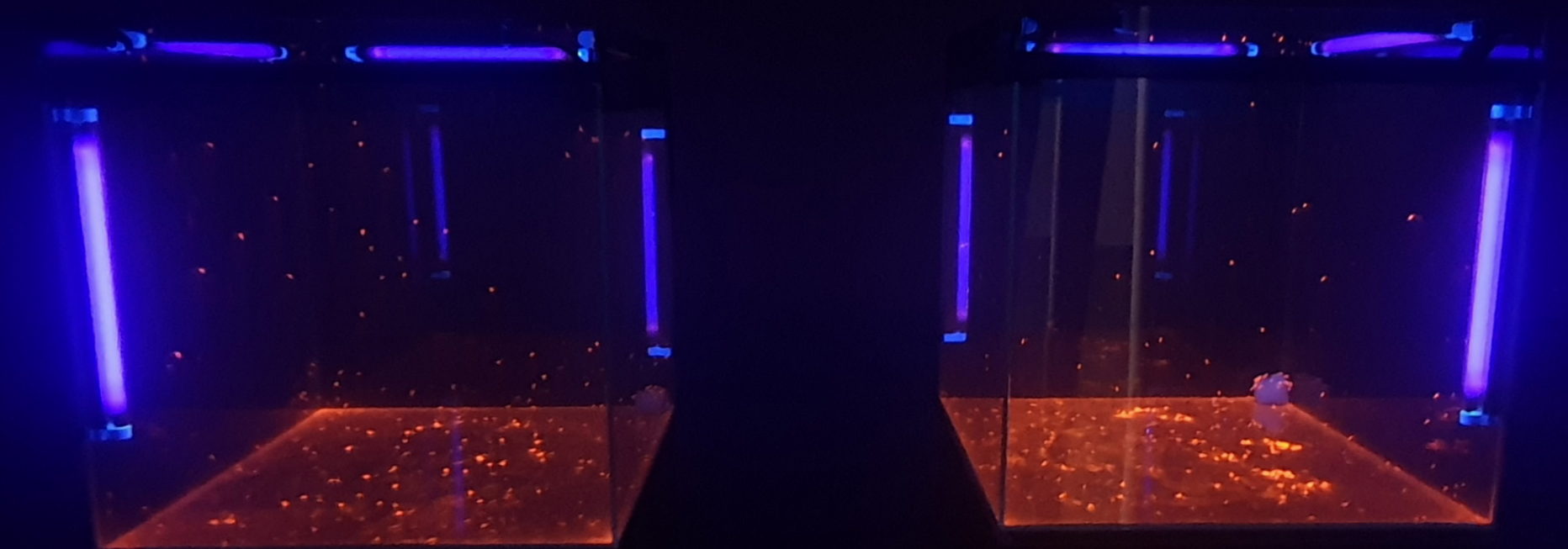
## Lufu kha a kovhela

*Lufu kha a kovhela* (2021), translated from Venda to mean 'death after sundown', comprises a series of photographs that explore different local and environmental themes relating to the mosquito. Using a micro lens on a slow shutter, the photographs were taken in situ at the laboratory while experimenting with other colour dusting compounds for *Khosi khadzi wa lufu*.

From one perspective, the photographs aim to capture an African origin myth that believes mosquitoes originally came from the ashes of a giant creature or demon that was sent to plague humanity (Constantine 2011:49-50). The photos attempt to capture the enigmatic nature of the mosquito as they are described in local folklore as spirits that prowl in the night to bring death and misfortune to families and communities. From another perspective, the photographs also share likenesses to photographic documentation of solar flares emitted by the sun. Due to the thinning of our atmosphere, we are gradually falling victim to rising temperatures emitted by the sun's rays. According to Professor S.D. Fernando (United Nations 2021:[sp]) warmer temperatures will alter the growth cycle of the parasite in the mosquito, enabling it to develop faster, increasing transmission and thus having implications on the burden of disease. Visually the photographs amplify the notion of heat – and the mosquitoes emerging from there – through its use of colour.



Danielle Oosthuizen, *Lufu kha a kovhela*, 2021.  
Giclée on archival paper, 610mm x 434mm.  
University of Pretoria.  
Photograph by the Author.



Danielle Oosthuizen, *Khosi khadzi wa lufu*, 2021.  
Fluorescent dusted *Anopheles* mosquitoes mixed with undusted *Anopheles* mosquitoes,  
six ultraviolet lights, two glass boxes on top of plinths.  
Photograph by Carla Crafford.

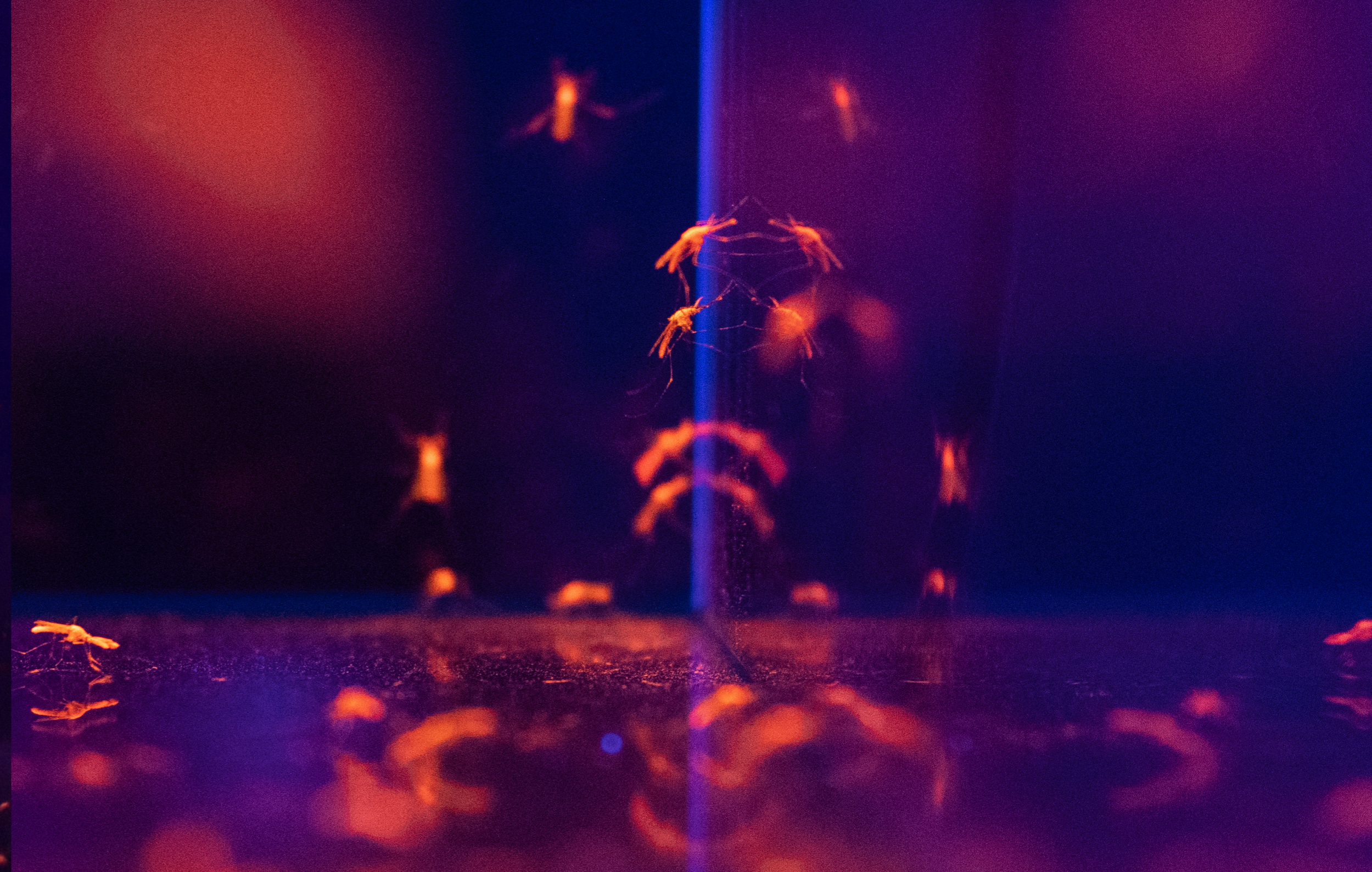
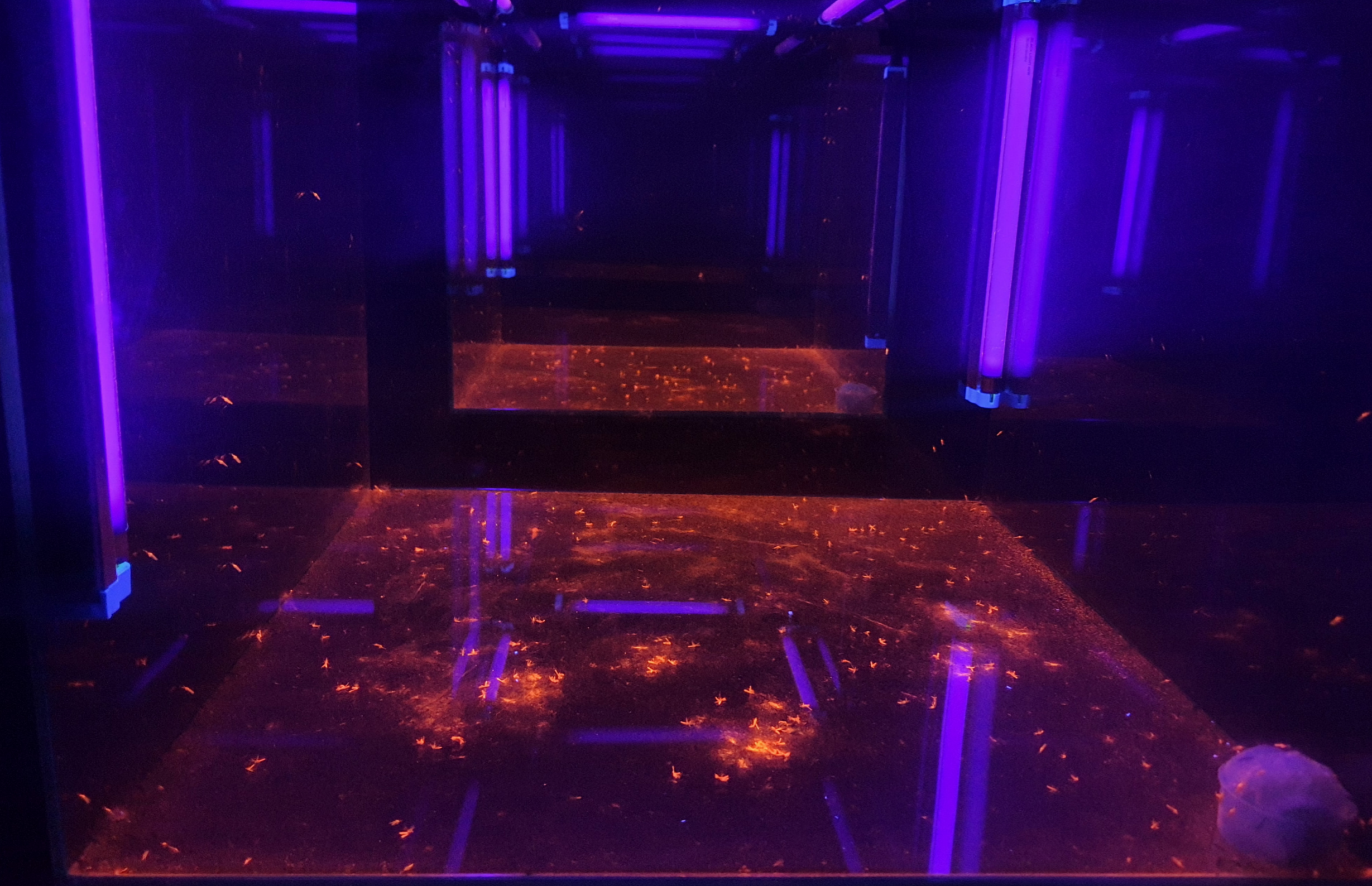
## Khosi khadzi wa lufu

The title of this work, *Khosi khadzi wa lufu* (2021), meaning ‘Queen of Death’ in Venda, is derived from the local name given to the female *Anopheles* mosquito. The regal and performative nature of the installation uses the mosquito’s body itself as a work of art. Situated in a pitch-black room, the glowing silhouettes of neon colour-dusted mosquitoes under ultraviolet lights stand out among the other undusted mosquitoes that share the same box. The work was created using a scientific dye technique whereby the mosquito is frozen, coloured, and then released (Verhulst, Loonen & Takken 2013:1).

The tiny insects become the visual amplification of human intervention in nature. We begin to see the effects of this ‘intervention’ on the neon dusted mosquitoes as they start to drop dead after approximately four hours into the exhibition. Throughout the show, the other undusted mosquitoes also become infected with the dusting compound as they interact. The artwork’s performative nature brings developments in biotechnological techniques such as Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR) gene editing into conversation. CRISPR has allowed the creation and release of hordes of lab-designed sterile male mosquitoes designed to crash mosquito population numbers when mating with wild females in the US, West Africa, Brazil, Mexico and Cuba (James 2005:64). After initial mass-die outs of mosquito populations, the wild mosquitoes returned approximately a year later in roaring numbers (Noor 2021:[sp]). According to Dharna Noor (2021:[sp]), this could be due to them developing resiliency to the measure, making their population even harder to quash. Now, several regions have been left with a massive population of hybrid, postnatural mosquitoes – an outcome that is causing the entire population to be more resistant to original mosquito control measures (Noor 2021:[sp]).

Despite *Khosi khadzi wa lufu*’s ethereal beauty, the work functions as a warning to the interweaving of the natural with the engineered. It acknowledges that we must proceed with caution when manipulating the ecology around us, as we can never truly predict the outcomes of our interventions. *Khosi khadzi wa lufu* neither celebrates nor rejects the technological harnessing of fundamental lifeforms but intends to explore how lives might co-exist as the natural and unnatural merge to form a new ecology.





## Anopheles

Upon entry into a darkened room, one is overwhelmed by the ephemeral sounds of mosquitoes projecting from different angles. Made using the wingbeat frequencies of approximately 100 *Anopheles* mosquitoes, *Anopheles* (2020-2021) explores the relationship of the mosquito towards its environment. Made as a distinct 11-minute composition, the bioacoustics sound work follows the narrative of a tautological battle raged by man against malaria, and by extension, the mosquito. Using different electroacoustic and immersive sound design techniques, the installation was created to mimic the natural flight around one's body. Through deliberate compositional narratives, the artwork references themes around the mosquito dying out and re-emerging more violently; the mosquitoes' wingbeats manipulated to sound like the crashing of water about climate instability and mosquitoes morphing to echo the screams of humans.

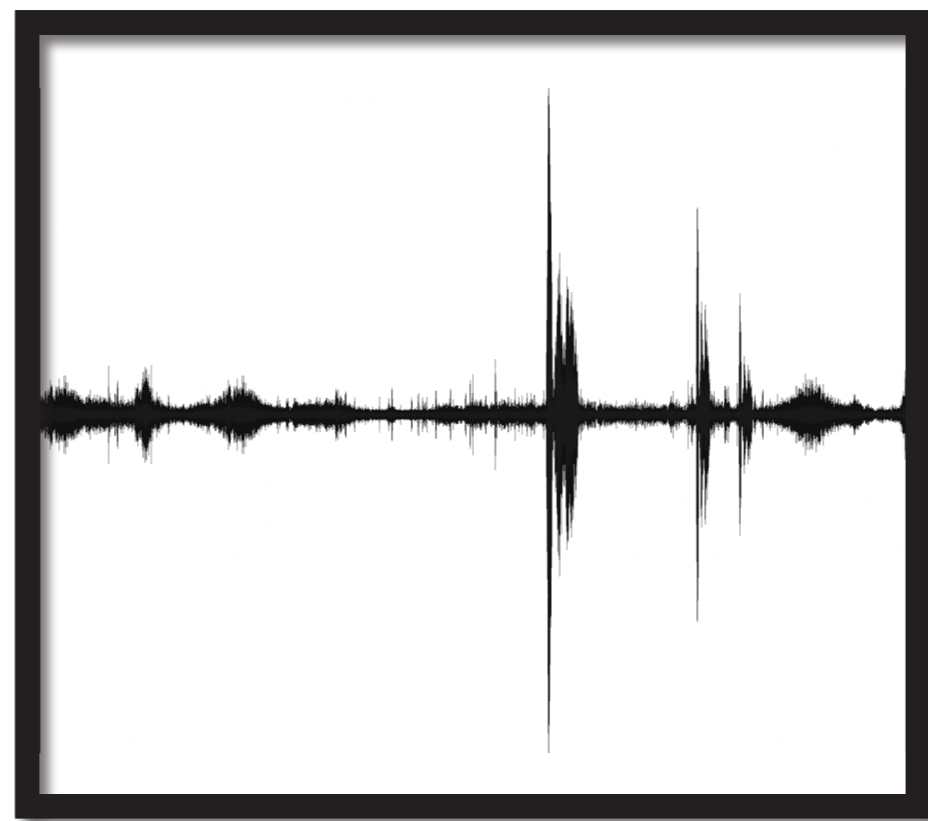
During the peak of the composition, we also hear the sound of the mosquito transformed into a technological simulation – a reference to a nature infused and transmuted by biotechnology. By incorporating electroacoustic techniques, the original sound of the mosquito's wingbeats is transformed. This is achieved by stretching the acoustic parameters of the mosquito's sound to sculpt an artificial mosquito melody. By manipulating the raw sounds of the mosquito, the composition builds a sense of discomfort and eeriness. The sound can be seen as having an alluring texture and a sonic splendour that complicates our limited preconceptions of the mosquito as a living being.

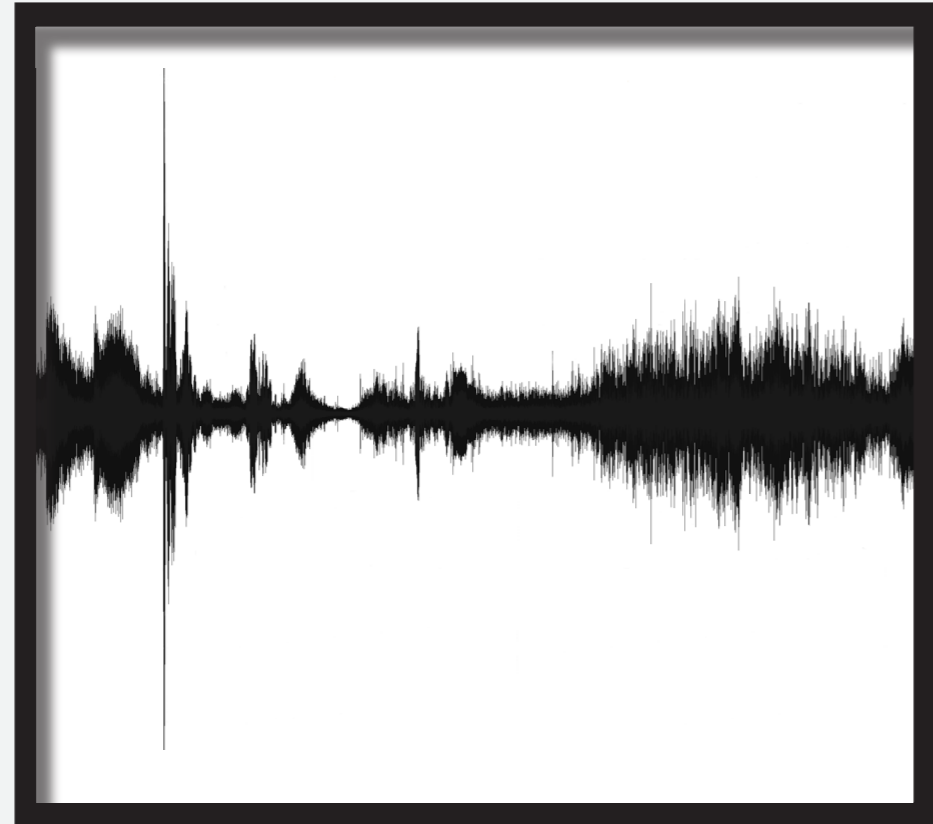
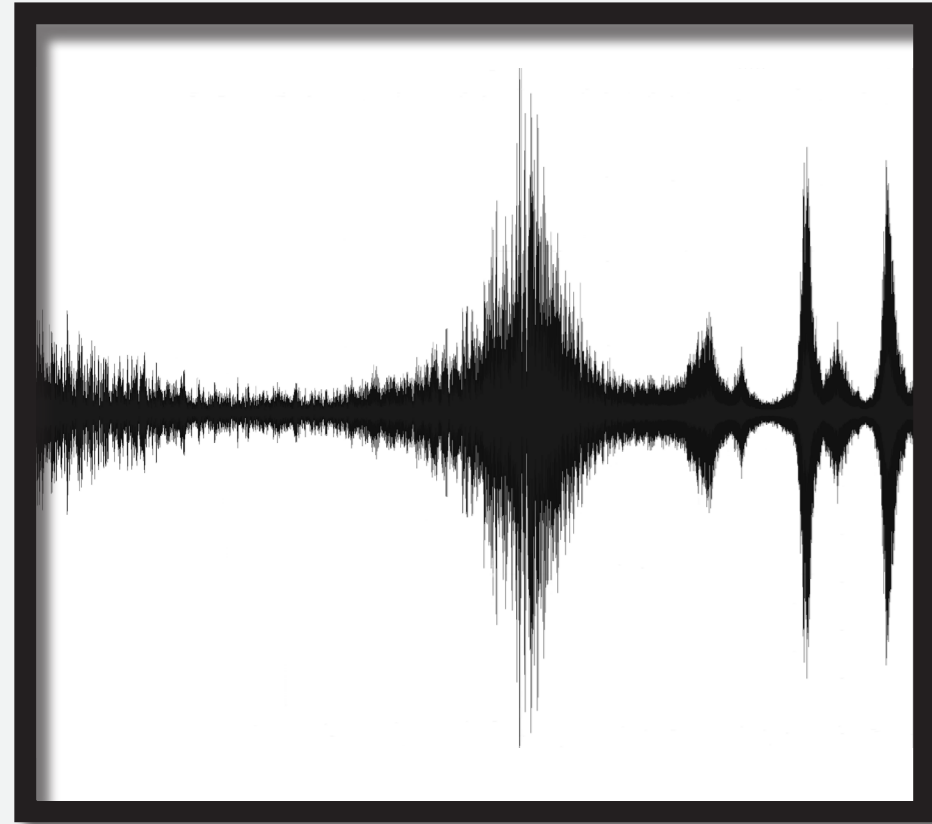
*Anopheles* urges one to listen to the hidden structures within nature and beyond the immediate sense of irritation and prejudice often invoked by these insects. In this way, the work aims to move one's body to feel closer to what we usually despise. However beautiful the composition may sound at its peak, the noise of nature ensnared and transformed by technology represents the ultimate Earth that follows after nature.





Danielle Oosthuizen, *Anopheles*, 2021.  
11-minute bioacoustic sound composition, 24 interface audio  
installation, mixing board.  
Photograph by Carla Crafford.





Danielle Oosthuizen, *Tachycardia*, 2021.  
Giclée on archival paper, 440mm x 387mm.  
Photograph by Author.

## Tachycardia

*Tachycardia* (2021) consists of a series of soundwave prints designed using *Anopheles*' sound composition. The prints juxtapose the soundwaves of *Anopheles* with that of a heartbeat as captured by an electrocardiogram (ECG). Drawing its name from the medical term Tachycardia – a term that describes a heart that beats at an unhealthy pace – the series of prints reveal the 'unsteady' rhythms of nature as human impacts continue to determine what lives and what dies. The work explores the link between the changing human-nature relationship and its effects on people's health. During the last century, research has been increasingly drawn toward understanding the human-nature relationship and has revealed the many ways humans are linked with the natural environment (Seymour 2016:[sp]).

By juxtaposing the rhythms of *Anopheles* with that of a heartbeat, the work comments on the responsibility that we should have towards maintaining and positively growing the Earth. Just as we care for our health, we must also be compassionate towards the wellbeing of nature's health. Commenting on the delicate balance between humans, nature, and technology, *Tachycardia* proposes that for every action or new development that we thrust into nature, consequential reactions influence both humanity's and nature's well-being.



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in

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