

DAMN

83

Autumn 2022



Stepping into Education

SUMMER 2022 / OFFICE OF DISRUPTION, GENT X - P5019314

EUR €15
UK 13,5€
CHF 16,5
SEK 169



MC1A PROJECT

Research + Realities

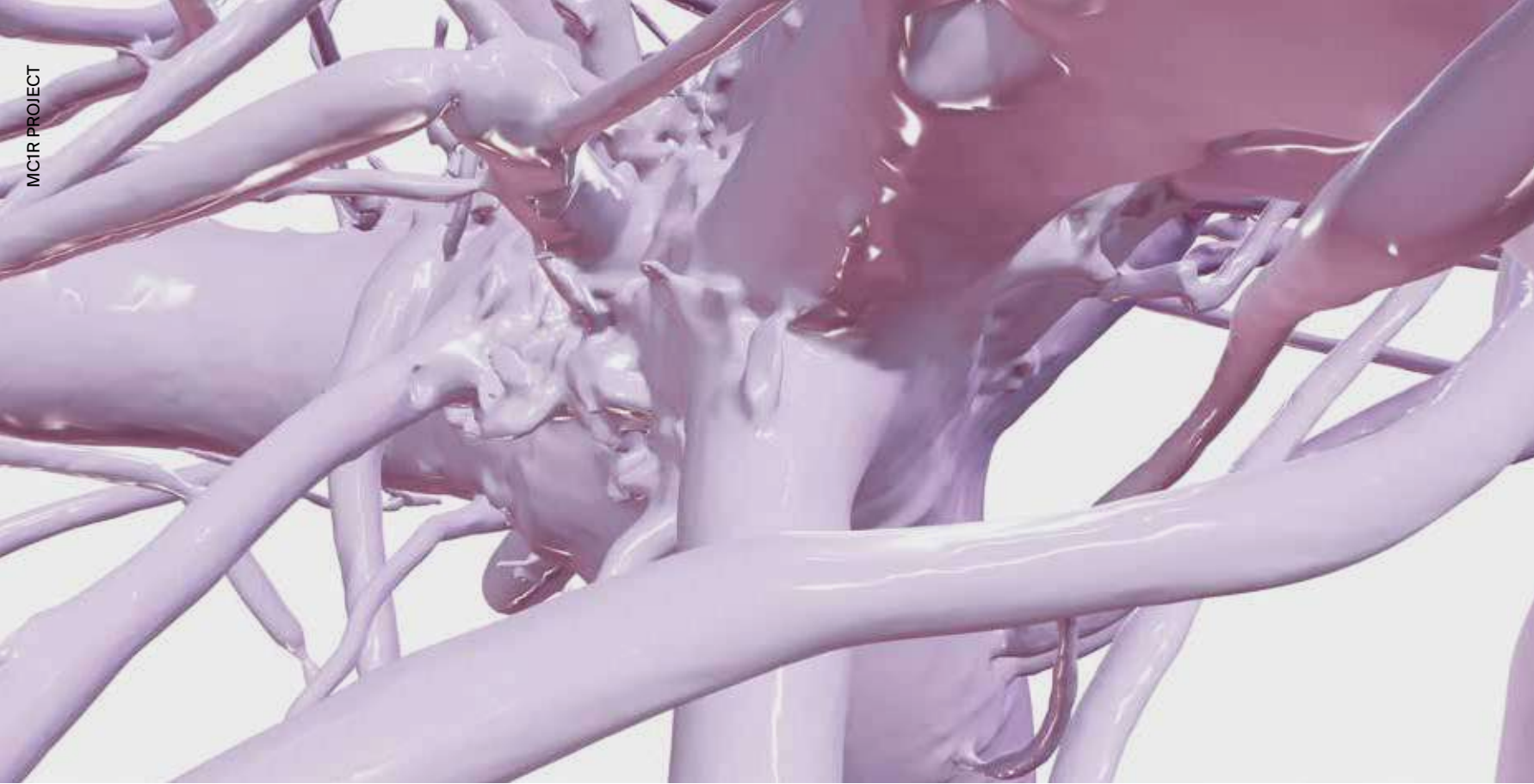
@danafionaarmour

Microscopic View Number 3 (transgenic Nicotiana Benthamiana).

DANA-FIONA ARMOUR

Research + Realities

Microscopic View Number 3 (transgenic Nicotiana Benthamiana).



Scan Micro CT Nicotiana Benthamiana – pre-transgenesis, 2022. Virtual Reality, 6'13. In collaboration with Constance Valero and Lorenzo Furlan.



Installation view, MC1R Project, Collection Lambert, Avignon, France, 2022.

MC1R Project was envisioned as part of a residency at Collectis, a clinical-stage biotechnology company that uses its pioneering gene-editing technology TALEN® to develop innovative therapies for treating serious diseases. The collaboration gave rise to the conception of a hybrid plant, both human and plant, named Nicotiana Benthamiana, that now carries the MC1R gene, a human gene associated with complexion, skin colour, the development of freckles and red hair.

We started by synthesizing the MC1R gene and cloned it into a virus vector (Tobacco Rattle Virus). This procedure was done in Minnesota at Calyxt (a plant-based technology company, a branch of Collectis) with the help of Daniel Voytas, an expert in the field of plant genomics. The virus, which now contained a human gene, was subsequently sent to the Biological Institute Aix Marseille (BIAM), where the matter was enlarged in an agro-bacterium and injected into a nicotine plant through the leaves. The virus then spread throughout the plant and simultaneously the gene circulated until it had taken possession of the entire organism. A new species was born.

We obtained confirmation of the genes' presence through a PCR test. The MC1R gene is expressed in leaves, stem and root. In addition we also observed a physical impact on the plant. We noticed a large amount of trichomes (a white fur-like duvet) around the puncture site. We strongly

assumed that this is a direct reaction to the introduction of the MC1R gene.

'MC1R Project was shown at the Collection Lambert in Avignon until October 9, 2022 and is a work composed of several elements that gradually unfolds over the course of the exhibition. For instance, the video and VR 'Scan Micro CT Nicotiana Benthamiana – pre transgenesis' shows the root of the plant taken from an MRI (Magnetic Resonance Imaging – a large 3D scanning device for medical use) scan. These high-precision images capture every intricate detail of the root (exterior and interior). The purple complexion of the roots evokes the colours of the 'LacZ gene', a marker gene that is used to see whether or not a new sequence is successfully integrated into an organism's DNA.

The aesthetics and morphology of the plant form a symbiosis between the natural and the artificial. The roots appear to float in an infinite space without the presence of gravity. A strange semi-living being is isolated, separated from half of its body. It is a kind of anatomical observation, an analysis, a journey into a microcosm that is invisible to the naked eye. It is the dissection of the cerebral part of the plant (Darwin Root Brain Theory) and its examination. The plant's detached parts respond to the operations of the transgenesis; the human gene, as well as the virus, have taken complete possession of the plant's organism.

"Through this project, Dana-Fiona Armour continues her exploration of an unstable world in which the forms she creates stand as mutagens, transform one another, and alter the organisation of the spaces they occupy, causing a feeling of disturbing strangeness in us.

The genetically modified plants, sculptures of a new kind, stand as the centre of a genuine laboratory of transformations where installations, immersive videos, glass or marble sculptures unfold, while an unbelievable song resounds in the rooms – an incredible litany in the form of an alert generated by plants audible only to animals until that moment.

In this hybrid world where the artificial blends with the natural, the human with the non-human, science acts as a key element in the construction of our relationships with the world and their representation. Both authoritative and fragile, it is this place of tension where boundaries change with a concerning instability between ethics and progress, between the opening of new liberating spaces and the achievement of dangerous mutations with irreversible consequences."

(Stephane Ibars, Chief Curator at Collection Lambert)



Portrait of Dana-Fiona Armour taken in her MC1R Project installation, Collection Lambert, Avignon, France 2022.

Dana-Fiona Armour was born in 1988 in Willich, Germany and studied at the Ecole Nationale Supérieure des Beaux-Arts, Paris, from which she graduated in 2019. Armour is a multi-disciplinary artist creating hybrid shapes where the organic blends with rigid forms of minimalism and conceptual art. Her work could also be characterized as a fusion of medicine, science and art – she has in fact collaborated with researchers and doctors on some of her projects. Armour lives in Paris where she works out of art incubator Poush Manifesto. Her work has been shown at the Collection Lambert in Avignon (Projet MC1R), at the 2022 Venice Biennale (as part of the Nicolas Bourriard curated group show called 'Planet B') and at Paris + par Art Basel this year. She is represented by the Andréhn-Schiptjenko Gallery (Stockholm and Paris).