

Artificial Hair as a Brain Interface

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Medical technology and devices



> TRL 2
> Preclinical

Problem

Brain sensing technologies are designed for in clinic use, however through healthcare improvements there is increasing demand for longer term patient monitoring long-term treatment in the home. Current solutions are limited to 2 weeks and are visible/obvious to others leading to a decrease in medical privacy for the patient.

Solution

This technology is a miniature device designed to mimic a hair follicle, that is implanted into the skin on the head and is capable of long-term brain monitoring and potentially activation.

Through it's small size this device will be imperceptible to others when placed within the natural hair of the head, which will enable a greater quality of life and also improve the medical privacy for patients who require such monitoring.

Due to the location, there is also the potential for this device to activate and provide small electrical charges to the brain for the potential treatment of a number of diseases including depression.

The devices would be implanted into the subcutaneous tissue of the head through the established process of follicular unit transplant.

Intellectual Property Status

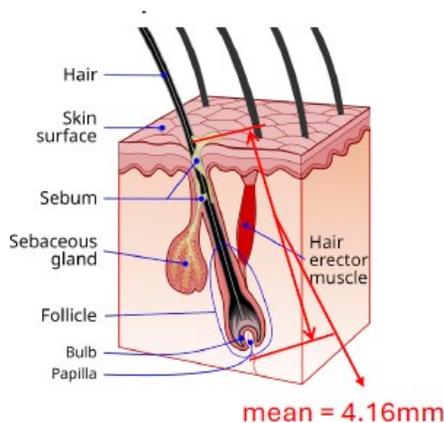
This invention is protected by an Australian Provisional Patent application 2024902803.

Potential Commercial Applications

- Long term brain function monitoring
- Brain activation for treatment of disease
- Brain disease diagnostic

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