

BIOMARKER SENSORS

Unmet need

Drug development for neurological brain disease requires knowledge of brain metabolism processes. Such information allows for more rapid screening of potential drugs.

Our Solution

We have developed novel biosensors to selectively monitor neurochemicals in the living brain on a timescale from milliseconds to days. The sensors are used to understand the complex functioning of the brain in terms of behaviour and disease. One of the major hurdles to the discovery of new medicines to treat psychiatric and neurological disorders is the paucity of suitable animal models capable of predicting clinical benefit. This is particularly true of disorders associated with cognitive disturbance such as schizophrenia and Alzheimer’s disease. The sensor monitoring concept provides a solution to this deficit in pre-clinical drug discovery in that it enables the recording of continuous signals, in freely-moving behaving animals, of the haemodynamic and metabolic consequences of neuronal activation that form the basis of functional brain magnetic resonance imaging in man. The work also has significant potential clinical applications.

Development Stage

Stage 5: Commercialisation.

What is Sought

Commercial partners for specific applications.

Intellectual Property

Knowhow.

Contact

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Development Stages of Opportunities

