

Wearable and Portable Analysers for Monitoring of Biomarkers



Interested topic 1 - Innovative non-animal human-based tools and strategies for biomedical research.

Interested topic 2 - Validation of fluid-derived biomarkers for the prediction and prevention of brain disorders.

Droplet Scientific will provide wearable and portable microfluidic sampler and biomarker analyser. These new devices will enable the discrete collection of body fluids (plasma, sweat, interstitial fluid, cerebrospinal fluid, urine, saliva etc.), and provide online and real-time analysis or interface with offline analysis e.g. LC-MS. The biomarkers targeted include lactate, pyruvate, glucose, cytokines, cortisol and other hormones, or therapeutic drugs.

The devices are wearable or portable, designed directly for human use, therefore eliminating the use of animal models.

Pharmaceutical companies can use the device in clinical trials for drug development to obtain high-frequency data, allowing less spending and a faster pace of innovation and regulatory approvals.

Healthcare providers and patients will benefit from real-time and continuous monitoring and trends predictions enabling improved disease prediction, prevention and treatment, especially in critical care.

We are looking for partners 1. clinicians and researchers who are interested in obtaining continuous monitoring biomarkers and therapeutic drugs. 2. pharmaceutical companies interested in obtaining high-density data for new-drug trials or drug monitoring

Experience

Droplet Scientific has a strong team with the founding director (Prof. Xize Niu) and advisors (Prof. Michael Grocott) experienced in running multiple million worth of national and international grants and collaborations. We are familiar with the EU regulations, QMS (Rod Ruston) and product development and marketing (Prof. Xize Niu, who is also the founder of SouthWestSensor Ltd).

Droplet Scientific has started to work with top clinicians and academics in the UK. Via an early grant supported by InnovateUK, we also set up links with top clinicians from EU and US hospitals.

Organisational Capabilities

Droplet Scientific is a UK-based SME startup developing wearable and portable microfluidic analyser products for continuous, autonomous, and real-time monitoring of biomarkers from body fluids. Droplet Scientific owns patented platform technology, strong know-how and the freedom to operate.

Point-of-care Propofol Analyser



We are interested in joining bids as a partner but are open to coordinating if the bid is appropriate.

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