CHEMICAL MICROENVIRONMENT CONTROL DEVICE

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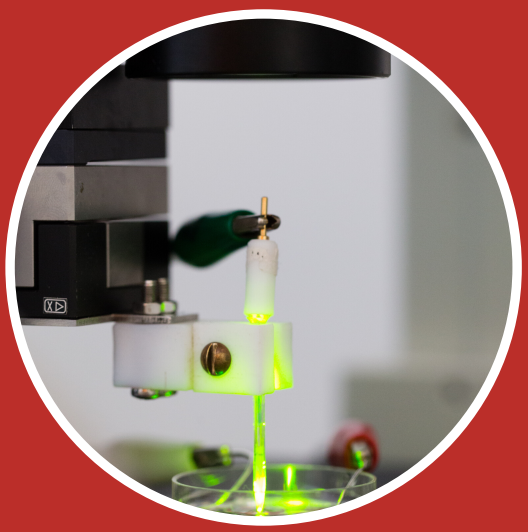

This innovation refers to a device that re-creates in vivo cellular microenvironment. This device is able to accurately mimic the dynamic cellular conditions (such as glucose concentrations and gradients, oxygen and pH conditions) which affect the physiology and pathology of different tissues and organisms.

Protection: Europe, USA, Canada, China, Hong-Kong, India, Japan.

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INVENTION

This innovation consists of both a method and a device that can simulate real-time conditions of oxygen content, pH, glucose availability, biological microenvironment, and nanometric adhesion properties experienced by cells in vivo. This innovation offers a simple, affordable solution and easy-to-use technology that creates a controlled experimental conditions which othervise would not be possible in vitro. It offers a new in vivo mimetic solution to overcome the limitations of traditional cell culture techniques. Indeed, this device can offer a new generation of cell culture experimental procedures.

ADVANTAGES

- Re-creates in vivo conditions for experimentation;
- Very similar to the human cell microenvironments;
- Eventual substitution of animal-based testing models;
- Affordable, simple and easy-to-use.

APPLICATIONS

- Pre-clinical investigation;
- Clinical investigations;
- Drug discovery;
- Teragnostic procedures.

CONTACTS

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