

Projet FP7 – PHARMEA



Nom du projet	The PharMEA Platform: Multi-Electrode Array technology based platform for industrial pharmacology and toxicology drug screening - PHARMEA
Call	SME-1- Research for SMEs
Type de projet	Research for SMEs
Rôle de la HES-SO	Participant
Chercheur impliqué	Philippe Passeraub (hepia); Andres Perez-Uribe (HEIG-VD)
Participants	Ayanda Biosystems SA (Switzerland) - Coordinateur ; Synome Ltd (United Kingdom) ; Commissariat à l'énergie atomique (France) ; Capsant Neurotechnologies Limited (United Kingdom) ; Bio-Logic (France) ; Haute Ecole Spécialisée de Suisse occidentale (Switzerland).
Budget global	1.89 million euro / financement UE : 1.45 million euro
Durée	24 mois, début le 1.9.2009
Résumé	<p>The project PharMEA is based on the technology platform of multi-electrode arrays, which have been widely used for electrophysiological experiments on neuronal and cardiac tissues.</p> <p>Some of the key advantages of MEA technology include ease of use, non-invasive measurements and simultaneous multi-site recording & stimulation capability. Despite these key advantages, MEA technology utilization has remained largely confined in academic research institutions, primarily due to the low throughput of currently available MEA-based tools.</p> <p>The PharMEA project addresses these shortcomings by developing novel MEA tools and applications that will significantly increase throughput of MEA experiments, facilitate MEA experiments on various culture models, as well as associated applications tailored for the drug discovery industry.</p> <p>Specifically, the new MEA tools will increase the number of channels or measurement sites for simultaneous recording and stimulation from about 120 channels today to 1024 channels, along with the corresponding intelligent data handling and processing strategies. Furthermore, the PharMEA project will develop and automate biological assay protocols that are common in ion-channel based drug discovery activities, as we this will add significant value to and bring out the benefit of the proposed tools.</p> <p>Altogether, the results of this project will accelerate the uptake of MEA tools in the drug discovery industry, thereby significantly increasing the market opportunity and competitive edge of the various sponsoring SMEs in the lucrative drug discovery industry.</p>
Lien	http://www.pharMEA.net