

## **New European FP-7 Collaborative Research Project Aims to Develop Stem Cell Culture Conditions for Therapeutic Applications.**

A new collaborative research project has been awarded €3M European Union FP7-HEALTH funding in order to develop novel stem cell culture conditions. The Partners across Europe will attend the project launch meeting which is being held in Lyon on the 29<sup>th</sup> and 30<sup>th</sup> of October.

The project entitled “Biochemically Equivalent Substitutive Technology for Stem Cells” (BEST-Stem Cells) aims to develop ways to overcome the current need for the use of animal derived products in stem cell culture. Currently products, such as serum and enzymes are still required in the maintenance, production and storage of stem cells. Removing animal derived products from the manufacture of stem cells represents an important step towards their use in clinical applications because these products are considered a disease risk.

The project, which will run over 3 years, is being co-ordinated by Dr Paul de Sousa of the MRC Centre for Regenerative Medicine University of Edinburgh and is a collaboration with 7 centres across Europe. The European partners include the Centre National de la Recherche Scientifique (CNRS) and the Institut National de la Sante et de la Recherche Medicale (INSERM) in France; Rheinische Friedrich-Wilhelms-Universitaet Bonn, Germany and the Universite de Liege, Belgium; along with Bioneer A/S in Denmark; Roslin Cells Limited and Glycomar Limited in Scotland.

The BEST- Stem Cells project will provide new tools and methods for safer and more efficient growth and renewal of stem cells. Each partner will bring a range of expertise to the project.

In Edinburgh Dr Paul De Sousa along with colleagues Prof Mark Bradley and Prof Brendon Noble will employ high throughput microarray based polymer screening and small molecule chemical library screening to identify chemically defined substrates and molecules which will support attachment and renewal of both human embryonic and adult derived stem cells.

At CNRS/INSERM Dr Brian B Rudkin and Dr Pierre Savatier will use novel Peptide Aptamer technologies in order to promote human embryonic stem cell survival and self-renewal capacity.

Dr Frank Edenhofer from the University of Bonn in collaboration with Drs Lars Pederson and Bjorn Holst (BIONEER) will explore the potential of protein transduction to deliver FASTbody technology in order to manipulate cellular pathways that affect hESC survival and self renewal.

Other partners will contribute in terms of cryopreservation of cells using novel marine derived molecules - Dr Charlie Bavington at GLYCOMAR with Dr Luc Gorbet and Dr Fabien Ectors from University of Liege optimising cryopreservation technologies. Roslin Cells will assist in the translation of BEST-Stem Cell activities towards Good Manufacturing Practice (GMP) standards.

Notes to Editor:

The release is a brief background to the BEST-Stem Cell project. Individual scientists will be available for comment during the launch meeting.

Contact details

Val Mann

Project Manager BEST-Stem Cells

Mob: +44 (0) 7590 455481

**Sébastien BUTHION**

***Chargé de communication***

***CNRS - Délégation Rhône Auvergne***

***2 avenue Albert Einstein - BP61335***

***69609 VILLEURBANNE CEDEX***

**Tél. 04 72 44 56 12**