

Stem cell technology

Prestigious European stem cell bank project launched with Danish partner

Bioneer is to deliver stem cells to one of the largest and most strategically focused biotechnological investments ever by the EU. The *European Bank for induced pluripotent Stem Cells (EBiSC)* will in the future serve as a ‘federal reserve’ of patient-specific induced pluripotent stem cells on the European continent.

Japan has one, the Food and Drug Administration in the US has initiated a national stem cell bank project, and now the European Union has granted € 37 million for banking a large number of quality-assured patient-specific stem cells that can be programmed to different cell types in order to reproduce specific disease mechanisms in stem cell-based models of diseases. With a total budget of € 50 million the project has several sponsors from the pharmaceutical industry and is based on the international Innovative Medicines Initiative (IMI).

“The iPS technology offers a quantum leap forward in drug discovery with patient-specific disease models based upon any tissue and, therefore, it has been on top of the wish list for years for many scientists and organisations working with biomedicine and biotechnology,” says Christian Clausen, Head of Department at Bioneer.

The EBiSC aims at supporting EU-based as well as global research however, a fundamental difference to many other cross country scientific project, is the way the funding is put together. The financial support from IMI and EU will get the stem cell bank up and running, and after four years the EBiSC must be “financially self- sustaining.”

Poul Andersson, CEO at Bioneer, believes that this important large-scale EU set-up will provide critical support to the European bioscience community, and he is excited about Bioneer taking part.

“This is an excellent opportunity to showcase our expertise and, in addition, to expand our network of international collaborations with scientific experts across the EU,” he says.

Bioneer is spearheading Danish cutting edge stem cell expertise

Among the group of SME (small-medium enterprises) and academic partners, Bioneer is the only Danish member of the EBiSC consortium. Christian Clausen is hoping that clinicians and scientists working with stem cell technology will welcome the EBiSC initiative.

“The European stem cell bank unfolds unlimited possibilities for Danish pharma and biotech companies and certainly also for scientists and university hospitals working with stem cell biology or disease modelling,” he ends.

**For more information, please contact Christian Clausen, ccl@bioneer.dk, tel: +45 24 81 75 46
Turn to the next page for facts about EBiSC, Bioneer, and the iPS technology.**

FACTS

ABOUT THE EUROPEAN BANK FOR INDUCED PLURIPOTENT STEM CELLS (EBISC)

- The purpose is to establish a European repository for research and grade human induced pluripotent stem cells (iPS) at an unprecedented scale
- A repository to be run on a self-sustaining, not-for-profit basis and on terms of open access for all qualified users
- A repository to catalyse and support international collaborations to the forefront of applied human disease-related iPS research

ABOUT BIONEER

- Bioneer is an independent, research-based service company within biomedicine, biomedical technology and biotechnology
- Bioneer carries out industry-sponsored research and develops new product and process opportunities by cross-linking ideas from the world of science with those of the market
- Bioneer is a fully owned subsidiary of the Danish Technical University (DTU) and is located in Scion-DTU research park in Hørsholm
<http://www.bioneer.dk>

ABOUT THE IPS TECHNOLOGY

- Cells from a human biopsy (eg. skin, fat, or blood) are multiplied and subsequently re-programmed back to a state resembling embryonic stem cells. Being pluripotent, the cell line has the capacity to become any human tissue uniquely allowing testing of drug candidates for effects against a specific disease simultaneously in a range of different tissues.
- The iPS cell lines are patient-specific and efficient disease models allowing for an improved and targeted early drug discovery. The self-renewal capacity of iPS cell lines yields an infinite supply of patient-matched cells.
- Induced Pluripotent Stem Cells, iPS, is a revolutionizing technology that since its birth has been further refined and improved by Bioneer in order to match the needs of researchers in pathophysiology as well as highly targeted early drug discovery. Based on human biopsies the iPS technology provides patient-specific disease models and has opened up a new era within the concept of personalized medicine.
- The scientist behind the iPS technology, Professor Shinya Yamanaka (Japan), was awarded The Nobel Prize in Medicine 2012 for his revolutionizing discoveries in induced Pluripotent Stem Cells, (iPS).
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