Cellular cartilage instruction

Fact Sheet

Project Information

CELLUCART

Grant agreement ID: 42418

Project closed

Start date
1 September 2007

End date
31 August 2009

Funded under
Human resources and Mobility in the specific programme for research, technological development and demonstration "Structuring the European Research Area" under the Sixth Framework Programme 2002-2006

Total cost
No data

EU contribution
€ 164 053,00

Coordinated by
CELLCOTEC BV
Netherlands

Objective

Cellular Cartilage Instruction has the potential to revolutionize cartilage repair. This phenomenon was recently discovered by CellCoTec (NL, industrial SME) and uses the instructive behaviour of cartilage cells and pliable nature of adult stem cells to eliminate the need for cell culture expansion, enabling a single surgery therapy for cartilage repair. Such a therapy is urgently needed by 1 million patients annually. To exploit the clinical potential of Cellular Cartilage Instruction, the most effective stem cell and cartilage sources have to be identified and a bioreactor based method to

reproducibly generate instructive cell-biomaterial implants has to be established. Inter-sectorial and bi-directional transfer of knowledge between CellCoTec and the University of Basel (UBasel, CH, academic) will allow combining complementary expertise in stem cell and chondrocyte sources, as well as in biomaterial and bioreactor development towards the standardized generation of efficiently instructing grafts, within a long-term strategic partnership.

This project has as a core a carefully designed plan for the exchange of researchers (one year exchange periods). A researcher from CellCoTec will acquire knowledge on effective cell sources at UBasel and transfer this back to CellCoTec. A researcher from UBasel will share the expertise in bioreactor systems with CellCoTec, and transfer the know-how on biomaterials and Cellular Cartilage Instruction to UBasel. The benefits of this knowledge transfer on an EU level are substantial. Research activities so far fragmented will be focused and unified into a common collaborative effort of two leading groups toward one goal: to strengthen EU research output in the field of stem cell biology and bioreactors and to generate the basis for commercialisation of Cellular Cartilage Instruction. Accordingly, SME competitiveness will be directly enhanced through investment of EU GDP into this project.

Fields of science (EuroSciVoc)

engineering and technology > environmental biotechnology > bioremediation > **bioreactors**

medical and health sciences > clinical medicine > **surgery**

medical and health sciences > medical biotechnology > cells technologies > **stem cells**

engineering and technology > industrial biotechnology > **biomaterials**

medical and health sciences > medical biotechnology > **implants**

Programme(s)

FP6-MOBILITY - Human resources and Mobility in the specific programme for research, technological development and demonstration "Structuring the European Research Area" under the Sixth Framework Programme 2002-2006

Topic(s)

MOBILITY-1.3.2 - Marie Curie Host Fellowships - Transfer of knowledge (TOK) - Industry-Academia Strategic Partnership Scheme

Call for proposal

FP6-2005-MOBILITY-3
See other projects for this call

Funding Scheme

TOK - Marie Curie actions-Transfer of Knowledge

Coordinator

CELLCOTEC BV

EU contribution

No data

Total cost

No data

Address

Prof. Bronkhorstlaan 10D
BILTHOVEN
Netherlands

Links

Contact the organisation Website
HORIZON collaboration network

Participants (1)

UNIVERSITY OF BASEL

Switzerland

EU contribution

No data

Address

Petersplatz 1
BASEL

Links

Contact the organisation Website
HORIZON collaboration network

Total cost

No data

Last update: 21 October 2010

Permalink: https://cordis.europa.eu/project/id/42418