

Press Release: iPSpine Kick-off Meeting

13-02-2019



On February 12th and 13th, the kick-off of an international, 15-million-euro, 20-partner project titled **iPSpine** (*Induced pluripotent stem cell-based therapy for spinal regeneration*) was held in Utrecht, The Netherlands. This 5-year project falls under the European Union's Horizon 2020 programme to fund research that improves knowledge, testing, and exploitation platforms that address the future of advanced therapies in Europe. The project is coordinated by Professor Marianna Tryfonidou at Utrecht University.

The study aims to address chronic lower back pain (LBP), which is the leading cause of disability and morbidity worldwide. It impacts more than 700 million people globally of all ages, each year. LBP is a major cause of reduced activity and work absence, and imposes an economic burden of nearly ~€240 billion every year in the EU.

“The success of this innovative project will be possible by mobilization of our unique consortium. The network is rich in diverse expertise that ranges from the basic science to the development and implementation of a working treatment for chronic lower back pain. I am delighted and ready to kick-off the project and begin working with this talented network.” –Professor Marianna Tryfonidou.

The iPSpine consortium includes 20 partners across Europe, the United States of America, and China. Their expertise includes; Fundamental science (i.e. induced pluripotent stem cells, genome editing, pathobiology, regenerative medicine, intervertebral disc degeneration, bioreactor technology, MRI analysis); Therapeutic design (e.g. biomaterials, safety, clinically relevant animal models, biomechanics, GLP-like biodistribution studies, clinical orthopaedics); Final implementation (e.g. smart business management platforms, ethics, policy and regulatory affairs, stakeholder engagement & dissemination). iPSpine will use state-of-the art technology to design a novel therapy for LBP that will be closer to clinical translation after completion of the project in 2023. The treatment will use advanced stem cells and smart biomaterials that can be injected into the degenerated discs in the spine to help re-populate regions that have deteriorated, with the goal of returning spinal function.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 825925.



Follow the study on Twitter: [@iPSpine](https://twitter.com/iPSpine)

For the Editor

The entire multidisciplinary consortium includes the following members from Europe, United States of America, and China: Utrecht University, Eindhoven University of Technology, University of Nantes, University Medical Center Utrecht, National University of Ireland Galway, Ulm University, University of Bern, INSERM, NMI Research Institute at the University of Tübingen, AO Research Institute Davos, Sheffield Hallam University, Campus Bio-Medico University of Rome, NTrans Technologies B.V., University of Montpellier, University of Miami, SpineServ, University of Hong Kong, Pharmalex, Catalyze and the Dutch Arthritis Society (Reuma NL).