

# Induced pluripotent stem cell seeded active osteochondral nanofibrous scaffolds

## Fact Sheet

### Project Information

iP-OSTEO

Grant agreement ID: 824007

**Funded under**

EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

[Project website](#) 

**Total cost**

€ 1 099 400,00

DOI

[10.3030/824007](#) 

**EU contribution**

€ 1 099 400,00

Project closed

EC signature date

14 November 2018

**Coordinated by**

USTAV EXPERIMENTALNI MEDICINY AKADEMIE VED CESKE REPUBLIKY VEREJNA VYZKUMNA INSTITUCE



Start date

1 February 2019

End date

31 July 2024

## Project description

### Novel biodegradable implants for older patients with osteochondral defects

The degeneration of cartilage in joints is associated with trauma or conditions such as osteoarthritis and rheumatic arthritis. To treat patients with these conditions, specific scaffolds are being developed for restorative procedures. The scaffolds should be biocompatible and biodegradable, able to control stem cell differentiation into osteoblasts via bioactive compounds, and they should also allow cell ingrowth

from the adjacent tissues. Moreover, they should mimic the natural porous extracellular matrix of the tissue and form three-dimensional structures. Funded by the Marie Skłodowska-Curie Actions programme, the iP-OSTEO project aims to develop cell-based scaffolds for bone and cartilage repair in older patients with poor regenerative capacity. The proposed technology involves induced pluripotent stem cells with improved regeneration capacity and novel nanostructured scaffolds with a drug delivery system, stimulating cell regeneration.

## Keywords

[iPSCs](#)

[scaffolding system](#)

[osteoporosis](#)

[osteoarthritis](#)

[ageing](#)

[musculoskeletal disease](#)

[3D cell culture](#)

[bioreactors](#)

[personalized medicine](#)

[drug delivery](#)

[controlled release](#)

[nanofibers](#)

## Programme(s)

[H2020-EU.1.3. - EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions](#)

MAIN PROGRAMME

[H2020-EU.1.3.3. - Stimulating innovation by means of cross-fertilisation of knowledge](#)

## Topic(s)

[MSCA-RISE-2018 - Research and Innovation Staff Exchange](#)

## Call for proposal

[H2020-MSCA-RISE-2018](#) ↗

[See other projects for this call](#)

## Funding Scheme

[MSCA-RISE - Marie Skłodowska-Curie Research and Innovation Staff Exchange \(RISE\)](#)

## Coordinator



## USTAV EXPERIMENTALNI MEDICINY AKADEMIE VED CESKE REPUBLIKY VEREJNA VYZKUMNA INSTITUCE

Net EU contribution

€ 257 600,00

Total cost

€ 257 600,00

Address

VIDENSKA 1083

14220 Praha 4

Czechia

Activity type

**Research Organisations**

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

## Participants (13)

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*INOCURE SRO*

Czechia

Net EU contribution

€ 156 400,00

Address

POLITICKYCH VEZNU 935/13

11000 Praha

SME

Yes

Region

Česko > Praha > Hlavní město Praha

Activity type

**Private for-profit entities (excluding Higher or Secondary Education Establishments)**

Links

[Contact the organisation](#)

[Participation in EU R&I programmes](#)

Total cost

€ 156 400,00

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## SZECHENYI ISTVAN EGYETEM

 Hungary

Net EU contribution

€ 165 600,00

Address

**EGYETEM TER 1**

9026 Gyor 

Region

Dunántúl > Nyugat-Dunántúl > Győr-Moson-Sopron

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 165 600,00

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## OSPIN GMBH

 Germany

Net EU contribution

€ 46 000,00

Address

**FEURIGSTRASSE 54**

10827 Berlin 

SME 

Yes

Region

Berlin > Berlin > Berlin

Activity type

## Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 46 000,00



### BIONEER A/S

 Denmark

Net EU contribution

€ 9 200,00

Address

**KOGLE ALLE 2**

**2970 Hoersholm**



Region

**Danmark > Hovedstaden > Nordsjælland**

Activity type

**Research Organisations**

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 9 200,00



### ORTHOSERA GMBH

 Austria

Net EU contribution

€ 46 000,00

Address

**DR. KARL-DORREK-STRASSE 23-29**

**3500 Krems An Der Donau**



SME 

Yes

Region

Ostösterreich > Niederösterreich > Waldviertel

Activity type

**Private for-profit entities (excluding Higher or Secondary Education Establishments)**

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

**€ 46 000,00**



## UNIVERSITY COLLEGE LONDON

 United Kingdom

Net EU contribution

**€ 115 000,00**

Address

GOWER STREET

WC1E 6BT London 

Region

London > Inner London — West > Camden and City of London

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

**€ 115 000,00**



## HOCHSCHULE RHEIN-WAAL-HSRW RHINE-WAAL UNIVERSITY OF APPLIED SCIENCES

 Germany

Net EU contribution

€ 55 200,00

Address

**MARIE CURIE STRASSE 1**

47533 Kleve 

Region

**Nordrhein-Westfalen > Düsseldorf > Kleve**

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 55 200,00



## LLS ROWIAK LASERLABSOLUTIONS GMBH

 Germany

Net EU contribution

€ 18 400,00

Address

**GARBSENER LANDSTRASSE 10**

30419 Hannover 

SME 

Yes

Region

**Niedersachsen > Hannover > Region Hannover**

Activity type

**Private for-profit entities (excluding Higher or Secondary Education Establishments)**

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 18 400,00



## CORTICALIS AS

Norway

Net EU contribution

€ 27 600,00

Address

**OSLO SCIENCE PARK, GAUSTADALLEEN 21**

0349 Oslo

SME

Yes

Activity type

**Private for-profit entities (excluding Higher or Secondary Education Establishments)**

Links

[Contact the organisation](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

€ 27 600,00



## FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG EV

Germany

Net EU contribution

€ 27 600,00

Address

**HANSASTRASSE 27C**

80686 Munchen

Region

**Bayern > Oberbayern > München, Kreisfreie Stadt**

Activity type

**Research Organisations**

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

€ 27 600,00

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## BIOFABICS LDA

Portugal

Net EU contribution

€ 101 200,00

Address

**RUA ALFREDO ALLEN 455/461**

**4200-135 Porto**

SME

Yes

Region

**Continente > Norte > Área Metropolitana do Porto**

Activity type

**Private for-profit entities (excluding Higher or Secondary Education Establishments)**

Links

[Contact the organisation](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

€ 101 200,00

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## SCINUS HOLDING BV

Netherlands

Net EU contribution

€ 32 200,00

Address

**PROFESSOR BRONKHORSTLAAN 10 G 48**

**3723 MB Bilthoven**

SME

Yes

Activity type

**Private for-profit entities (excluding Higher or Secondary Education Establishments)**

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 32 200,00



## INSTYTUT PODSTAWOWYCH PROBLEMÓW TECHNIKI POLSKIEJ AKADEMII NAUK

Poland

Net EU contribution

€ 41 400,00

Address

**UL. ADOLFA PAWINSKIEGO 5B**

**02-106 WARSZAWA** 

Region

**Makroregion województwo mazowieckie > Warszawski stołeczny > Miasto Warszawa**

Activity type

**Research Organisations**

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 41 400,00

**Last update:** 30 May 2025

**Permalink:** <https://cordis.europa.eu/project/id/824007>

European Union, 2025