

Partnering Opportunity

Profile Status: Published

Research & Development Request

MSCA-ITN-2020: Consortium is looking for additional industrial partners to host a PhD student for 18 months internship in the area of ATMP (Advanced Therapy Medicinal Products)/Digital Twin

Summary

A German university is coordinator of a proposal for MSCA-ITN training network with the overall aim to exploit the power of model-assisted strategies (Digital Twins) for the development of next generation ATMPs (Advanced Therapy Medicinal Products). Sought are companies with expertise in development of ATMPs, preferred in the anti-tumour immune therapy, to join consortium and host a PhD student for EU-funded 18 months internship.

Creation Date	18 November 2019
Last Update	21 November 2019
Expiration Date	15 December 2019
Reference	RDDE20191118001
Public Link	https://een.ec.europa.eu/tools/services/PRO/Profile/Detail/b1fa3de8-d1ab-4665-b8b5-9bdf9f73c772

Details

Description

Advanced Therapy Medicinal Products (ATMP) based on gene therapy, cell therapy or tissue-engineering have a vast potential to provide novel breakthroughs in meeting therapeutic needs. They offer multiple advantages such as a decentralized approach for the development and manufacturing of more targeted (personalized and precision) health therapies at an affordable cost.

The overall aim of the intended innovative training network (ITN) is to ensure the competition of the European biopharmaceutical industrial sector in the field of next generation medicines, as ATMPs using today's and tomorrow's digitalization capabilities as captured in Digital Twins.

Ref: RDDE20191118001

Therefore, the intended project wants to shape young researchers to gain solid scientific experience in cross-sectoral fields (medicine, life science, engineering), while simultaneously developing domain based process digitalization skills in industry and business. A tailored integrated program will be established to provide a generation of highly skilled scientists and engineers co-trained by industry and world-leading research institutions, capable of developing fundamental understanding and technologies in the field and its implementation in the European market.

Early stage researchers (ESR) are enrolled in the new doctoral program and jointly supervised by the academic and non-academic partners. Within the project, PhD students work on bioprocess engineering, cell biology, modelling and simulation as well as data handling. Each PhD candidate will crucially gain cross-sectoral experience in an individual research project, with the main working period (36 months) of the ESR equally split into an academic and an industrial part of 18 months to be completed in two different countries.

Scientifically, the project will tackle the fundamental challenge of providing improved manufacturing processes by applying new computational tools known as multi faceted Digital Twin as “Process Development and Manufacturing Platform” (PDMP) for ATMPs. It will enable full integration of all the process steps, regulatory requirements and business process workflows involved in leap frogging new therapies to market in shorter times. The PDMP will be uniquely characterized by the use of current enablers of digitalization and Internet of Things (IoT) in the combination of process models and workflows, which assist in setting up and following up quality systems within a novel software architecture.

The consortium is composed of University Research teams and industrial partners with expertise on medical aspects of immune cell therapy, development of production processes for advanced therapies, model-assisted design of bioprocesses, development of data science methods for integrated and efficient bioprocess development along PAT (Process Analytical Technology) and QbD (Quality by Design) principles.

To complete the consortium, sought are additional industrial partners that are experienced in the development of ATMPs, preferred in anti-tumour immune therapy. Companies must be located in EU or eligible H2020 country. Within the project the industrial partners are expected to host a PhD student for 18 months and to participate in a training event. All costs for internship will be covered by the H2020 project.

For the proposal industrial partners are expected to contribute with

- A company profile.
- Description of experience with ATMPs and (if applicable) with mentoring of PhD students.
- Outline of a research project that the PhD candidate shall perform during internship at the company (to be defined before submission together with the research partner involved).

English is the spoken language within the project.

Expression of interest deadline: 15th of December 2019.

Call deadline: 14th of January 2020.

Consortium is planned to be finally composed by 20th of December 2019.

The project is applied for to start in autumn 2020.

Advantages and Innovations

Industrial partners can

- Benefit from EU-funded 18 months internship of highly promising PhD candidates within the companies' R&D department
- Get involved in cutting-edge R&D in the area of ATMP/Digital Twin
- Cooperate with a consortium of highly qualified research and industrial partners
- Work with a very experienced coordinator of EU-projects

Technical Specification or Expertise Sought

Experience in the development of ATMPs, preferred in anti-tumor immune therapy. Experience with mentoring of PhD candidates would be beneficial but is not obligatory.

Keywords

Technology

01004001	Applications for Health
06001009	Gene - DNA Therapy
06001015	Pharmaceutical Products / Drugs
06002002	Cellular and Molecular Biology
06006012	Bioprocesses

Market

04001003	Medical genetic engineering applications
04006	Cellular and Molecular Biology
05007002	Pharmaceuticals/fine chemicals

Network Contact

Issuing Partner

ZACHODNIOPOMORSKI UNIWERSYTET TECHNOLOGICZNY W SZCZECINIE

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Open for EOI : **Yes**

Dissemination

Relevant Sector Groups

Healthcare

Client

Type and Size of Organisation Behind the Profile

University

Year Established

0

Already Engaged in Trans-National Cooperation

No.

Languages Spoken

English
German

Client Country

Germany

Partner Sought

Type and Role of Partner Sought

Type:

Sought are pharmaceutical companies (SMEs or corporates) experienced in the development of ATMPs, preferred in anti-tumour immune therapy. Experience with mentoring of PhD candidates would be beneficial but are not obligatory. Companies must be located in EU or eligible H2020 country.

Role:

The company is expected to host a PhD student for at least 18 months and to participate in a training event. All costs for internship will be covered by the H2020 project.

Type and Size of Partner Sought

SME 11-50, SME <10,>500 MNE, 251-500, SME 51-250,>500

Type of Partnership Considered

Research cooperation agreement

Program - Call

Framework Program

Marie Skłodowska-Curie Actions

Call title and identifier

MSCA-ITN-2020

Submission and evaluation scheme

single-stage submission

Coordinator Required

No

Deadline for EOI

15 Dec 2019

Deadline of the Call

14 Jan 2020

Weblink to the Call

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/msca-itn-2020>