Design of novel Magnetic Graphene Oxide Nanozyme platform for Theranostic applications

Fact Sheet

Project Information

MagGraphZyme
Grant agreement ID: 101068591

DOI
10.3030/101068591

Funded under
Marie Skłodowska-Curie Actions (MSCA)

Total cost
€ 0,00

EU contribution
€ 261 380,64

Coordinated by
UNIVERSIDAD DE ZARAGOZA
Spain

Project description

Hybrid platform to induce death of cancer cells

Focusing on the mechanisms underlying cancer cell death is key for producing effective multifunctional materials for oncological applications. Funded by the Marie Skłodowska-Curie Actions programme, the MagGraphZyme project aims to develop a hybrid platform to trigger the intracellular production of reactive oxygen/nitrogen species (ROS/RNS). These species will be used to cause death in cancer cells. To improve ROS/RNS production, the proposed platform will rely on magnetic nanoparticles, N-decorated graphene oxides and a polymer shell (PLGA). Furthermore, certain signalling pathways will be studied to better understand the different cellular pathways involved in the toxicity and final death of the cells.
Fields of science

natural sciences > biological sciences > cell biology > cell signaling

engineering and technology > nanotechnology > nano-materials

Programme(s)

HORIZON.1.2 - Marie Skłodowska-Curie Actions (MSCA)

Topic(s)

HORIZON-MSCA-2021-PF-01-01 - MSCA Postdoctoral Fellowships 2021

Call for proposal

HORIZON-MSCA-2021-PF-01

See other projects for this call

Funding Scheme

MSCA-PF - MSCA-PF

Coordinator

UNIVERSIDAD DE ZARAGOZA

Net EU contribution

€ 261 380,64

Address

Calle pedro cerbuna 12
50009 Zaragoza

Spain

Region

Noreste > Aragón > Zaragoza

Links
Partners (1)

RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

United States

Net EU contribution

€ 0,00

Address

Rutgers plaza 3
08901 New brunswick

Activity type

Higher or Secondary Education Establishments

Links

Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Other funding

€ 0,00

EC signature date 29 August 2022
Last update: 4 September 2022

Permalink: https://cordis.europa.eu/project/id/101068591

European Union, 2023