Histidine Phosphorylation and Obesity

Fact Sheet

Project Information

HisPO
Grant agreement ID: 891097

Funded under
EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

Total cost
€ 203 149,44

EU contribution
€ 203 149,44

Coordination
UNIVERSITAT BASEL
Switzerland

Project terminated on 30 September 2021

Start date
1 May 2020

End date
30 April 2022

Project description

Role of histidine phosphorylation in glucose metabolism and obesity

Histidine phosphorylation is crucial for prokaryotic signal transduction and as an intermediate for several metabolic enzymes. Its role is poorly understood as the relative instability of phosphohistidine makes its study difficult. Recent data have implicated histidine phosphorylation dysregulation in heart failure and cancer, and the histidine phosphorylation state has been associated with insulin secretion regulation in the pancreas. The main goal of the EU-funded HisPO project is to determine the role of protein histidine phosphorylation in obesity-associated metabolic dysfunction. Researchers will study global histidine phosphorylation levels
in obesity, histidine kinase and phosphatase expression or activity and specific protein histidine phosphorylation. The objective is to evaluate whether a change in histidine phosphorylation levels impacts whole-body glucose metabolism as well as body weight and composition.

**Fields of science**

natural sciences ➔ biological sciences ➔ biochemistry ➔ biomolecules ➔ proteins
medical and health sciences ➔ clinical medicine ➔ endocrinology ➔ diabetes
medical and health sciences ➔ clinical medicine ➔ oncology
medical and health sciences ➔ clinical medicine ➔ cardiology
medical and health sciences ➔ health sciences ➔ nutrition ➔ obesity

**Keywords**

- Obesity
- Insulin resistance
- Diabetes
- Histidine phosphorylation

**Programme(s)**

H2020-EU.1.3. - EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions  
H2020-EU.1.3.2. - Nurturing excellence by means of cross-border and cross-sector mobility

**Topic(s)**

MSCA-IF-2019 - Individual Fellowships

**Call for proposal**

H2020-MSCA-IF-2019

See other projects for this call

**Funding Scheme**

MSCA-IF - Marie Skłodowska-Curie Individual Fellowships (IF)
UNIVERSITAT BASEL

Net EU contribution
€ 203 149.44

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Region
Schweiz/Suisse/Svizzera > Nordwestschweiz > Basel-Stadt

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

Other funding
€ 0,00

EC signature date 3 April 2020
Last update: 24 July 2023

Permalink: https://cordis.europa.eu/project/id/891097

European Union, 2023