Genetic code expansion for biocatalysis and enzyme engineering doctoral network

Fact Sheet

Project Information

BiocatCodeExpander
Grant agreement ID: 101072686

Funded under
Marie Skłodowska-Curie Actions (MSCA)

DOI
10.3030/101072686

Start date
1 January 2023

End date
31 December 2026

Total cost
€ 0,00

EU contribution
€ 2 635 624,80

Coordinated by
STICHTING VU
Netherlands

Project description

Innovative biotechnological applications of non-canonical amino acids

The expansion of the genetic code to incorporate non-canonical amino acids (NCAA) in proteins provides biotechnology with novel tools. NCAA applications might include investigation of the structure and dynamics of proteins, protein imaging and spectroscopy, metal chelators, and click-chemistry reagents. Funded by the Marie Skłodowska-Curie Actions programme, the BiocatCodeExpander project aims to bring experts from different fields to organise a training network for the development of the NCAA methodologies in a collaborative manner. The network will train 10 PhD researchers in the subjects of biocatalysis, synthetic biology, peptide chemistry, and
computational biology. The project research will develop new tools and applications for the design of biotechnological processes for the environmentally responsible production of chemicals and pharmaceuticals.

Fields of science

natural sciences > biological sciences > synthetic biology
natural sciences > biological sciences > biochemistry > biomolecules > proteins > protein folding
natural sciences > chemical sciences > catalysis > biocatalysis
natural sciences > chemical sciences > organic chemistry > amines
natural sciences > biological sciences > biochemistry > biomolecules > proteins > enzymes

Keywords

Biocatalysis rational protein design directed evolution genetic code expansion
non-canonical amino acids novel enzyme design orthogonal protein conjugation

Programme(s)

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

Topic(s)

HORIZON-MSCA-2021-DN-01-01 - MSCA Doctoral Networks 2021

Call for proposal

HORIZON-MSCA-2021-DN-01

See other projects for this call

Funding Scheme

MSCA-DN - MSCA-DN
Coordinator

STICHTING VU
Net EU contribution
€ 548 740,80
Address
De boelelaan 1105
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Region
West-Nederland > Noord-Holland > Groot-Amsterdam
Links
Contact the organisation  Website  Participation in EU R&I programmes  HORIZON collaboration network
Other funding
€ 0,00

Participants (7)

TECHNISCHE UNIVERSITAET GRAZ
Austria
Net EU contribution
€ 540 662,40
Address
Rechbauerstrasse 12
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Südösterreich > Steiermark > Graz
Links
Contact the organisation  Website  Participation in EU R&I programmes  HORIZON collaboration network
ACIB GMBH
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Net EU contribution
€ 270 331,20
Address
Krenngasse 37/2
8010 Graz
SME
Yes
Region
Südösterreich > Steiermark > Graz
Links
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Other funding
€ 0,00

UNIVERSITAT ROVIRA I VIRGILI
Spain
Net EU contribution
€ 251 971,20
Address
Carrer de escorxador
43003 Tarragona
Region
Este > Cataluña > Tarragona
Activity type
Higher or Secondary Education Establishments
Links
ASOCIACION CENTRO DE INVESTIGACION COOPERATIVA EN BIOMATERIALES- CIC biomaGUNE
Spain
Net EU contribution
€ 251 971,20
Address
Paseo miramon 182, parque tecnologico de san sebastian edificio empresarial c 20009 San sebastian
Region
Noreste > Pais Vasco > Gipuzkoa
Activity type
Research Organisations
Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network
Other funding
€ 0,00

ENANTIS SRO
Czechia
Net EU contribution
€ 237 038,40
Address
Kamenice 771/34 625 00 Brno
SME
Yes
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links
Contact the organisation
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HORIZON collaboration network

Other funding
€ 0,00

RIJKSUNIVERSITEIT GRONINGEN
Netherlands
Net EU contribution
€ 274 370,40

Address
Broerstraat 5
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Other funding
€ 0,00

FREIE UNIVERSITAET BERLIN
Germany
Net EU contribution
€ 260 539,20

Address
Kaiserswerther strasse 16-18
14195 Berlin
LENIOBIO GMBH

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Net EU contribution
€ 0,00

Address
Erkrather strasse 401
40231 Dusseldorf

SME
Yes

Region
Nordrhein-Westfalen > Düsseldorf > Düsseldorf, Kreisfreie Stadt

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

Links
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Other funding
€ 0,00

ASTRAZENECA UK LIMITED

United Kingdom
**Net EU contribution**

€ 0,00

**Address**

1 francis crick avenue cambridge biomedical campus
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**Region**

East of England > East Anglia > Cambridgeshire CC

**Links**

Contact the organisation  
Website  
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HORIZON collaboration network

**Other funding**

€ 0,00

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**UNIVERSITY OF MANITOBA**

Canada

**Net EU contribution**

€ 0,00

**Address**

Administration building room 202
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**Links**

Contact the organisation  
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HORIZON collaboration network

**Other funding**

€ 0,00

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**moloX GmbH**

Germany

**Net EU contribution**

€ 0,00

**Address**
Takusstr. 6
14195 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

Other funding
€ 0,00

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SYNCOM BV

Netherlands

Net EU contribution
€ 0,00

Address
Kadijk 3
9747 AT Groningen

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Noord-Nederland > Groningen > Overig Groningen

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

Links
- Contact the organisation
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Other funding
€ 0,00

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UNIVERSITAET FUER BODENKULTUR WIEN
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Net EU contribution
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€ 0,00

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Czechia
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Zerotinovo namesti 9
601 77 Brno
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Other funding
€ 0,00

UNIVERSIDAD DEL PAIS VASCO/ EUSKAL HERRIKO UNIBERTSITATEA
Spain
Net EU contribution
Sweden

Net EU contribution
€ 0,00

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Von kraemers alle 4
751 05 Uppsala

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Activity type
Higher or Secondary Education Establishments

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Other funding
€ 0,00

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