Gut microbiota have co-evolved with the host to facilitate homeostasis through complex host–microbe and microbe–microbe interactions. Scientists of the EU-funded RiPPs from the Gut project are interested in studying the microbiota from a functional perspective, focusing on microbial secondary metabolites or natural products (NPs). Using bioactivity assays and chemical proteomics, they will investigate the role and synthesis of different NPs from biosynthetic gene clusters in...
the most abundant gut bacteria. Emphasis will be placed on NPs of the ribosomally synthesised and post-translationally modified peptide (RiPP) family. The results will help decipher the possible therapeutic applications of these metabolites in syndromes associated with gut microbiota disturbance.

Fields of science

natural sciences > biological sciences > biochemistry > biomolecules > proteins > proteomics
natural sciences > biological sciences > microbiology > bacteriology
natural sciences > physical sciences > astronomy > astrophysics > dark matter
natural sciences > chemical sciences > organic chemistry > amines
natural sciences > biological sciences > genetics > genomes

Keywords

Microbiology, Natural Product Biosynthesis, Ribosomal Peptides, Chemical Proteomics, Genome Mining, Biological Function

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
EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZUERICH

Net EU contribution
€ 191 149,44

Address
Raemistrasse 101
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Switzerland

Region
Schweiz/Suisse/Svizzera > Zürich > Zürich

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

Other funding
€ 0,00

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Permalink: https://cordis.europa.eu/project/id/897571

European Union, 2023