The Metabolic Niche Framework – Linking Metabolic Changes and Behavioural Responses of Fishes to Climate Change.

Fact Sheet

Project Information

**OxyTempFish**

Grant agreement ID: 893895

**DOl**

[10.3030/893895](https://doi.org/10.3030/893895)

**Start date**

1 September 2021

**End date**

2 June 2024

Funded under

EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

Total cost

€ 202,158,72

EU contribution

€ 202,158,72

Coordinated by

NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Norway

Project description

Fish behavioural reactions to climate change

Fish abundance and distribution have been affected by anthropogenic warming of the oceans and expanding ocean zones with low oxygen levels (hypoxia). Since fish behaviour have been connected with other species’ existence, behavioural reactions of fish to ocean warming and aquatic hypoxia could affect species distribution standards. However, while high temperatures and low oxygen levels influence fish
metabolism, it is unknown how fish behaviour is affected by metabolic alterations. The EU-funded OxyTempFish project will study zebrafish from lines selectively bred to create and test an inclusive experimental model focused on how changes in fish metabolism influence their behavioural responses to ocean warming and aquatic hypoxia. The project's results will contribute to conservation planning and forecasting of species distribution under anthropogenic climate change.

**Fields of science**

- agricultural sciences > agriculture, forestry, and fisheries > fisheries
- natural sciences > earth and related environmental sciences > atmospheric sciences > climatology > climatic changes

**Keywords**

- Global climate change
- ocean warming
- aquatic hypoxia
- fish metabolism
- fish behaviour
- adaptation potential
- experimental framework
- zebrafish

**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)
Coordinator

NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU

Net EU contribution
€ 202 158,72

Address
Hogskoleringen 1
7491 Trondheim
Norway

Region
Norge > Trøndelag > Trøndelag

Activity type
Higher or Secondary Education Establishments

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

Other funding
€ 0,00

EC signature date 18 March 2020
Last update: 28 August 2023

Permalink: https://cordis.europa.eu/project/id/893895

European Union, 2023