

# PROJECT PROPOSAL FOR A MARIE SKLODOWSKA CURIE ACTIONS-INDIVIDUAL FELLOWSHIP (MSCA-IF)

## PARTICIPATION MODALITIES:

### 1. European Fellowships

- Held in the [EU or associated countries](#) .
- Open to researchers coming to Europe or moving within Europe.
- Can help restart research careers after a break such as parental leave.
- Can help reintegrate researchers returning to Europe.

### 2. Global Fellowships

- Fund secondments outside Europe for researchers based in the [EU or associated countries](#) .
- There is a mandatory one-year return period.

European and Global Fellowships can also include a **secondment period** of up to 3 or 6 months in another organization in Europe to increase fellowship impact.

**PROJECT TITLE:** Analyzing resilience of exploited long-lived fish populations to climate change in the North Atlantic (RESILFISH).

**HOST INSTITUTION:** Spanish Institute of Oceanography (IEO, [www.ieo.es](http://www.ieo.es)).

**CONTACT PERSON IN HOST INSTITUTION:** Dr. Rosario Domínguez Petit ([rosario.dominguez@vi.ieo.es](mailto:rosario.dominguez@vi.ieo.es))

**FOREIGN HOST INSTITUTION (in case of Global Fellowship):** University of Texas Marine Science Institute (UTMSI, <https://utmsi.utexas.edu/>)

**CONTACT PERSON IN FOREIGN HOST INSTITUTION:** Dr. Bryan Black

**SUMMARY:** Fish ecology and population variability are closely linked to climate dynamics. Thus, understanding how fisheries and marine ecosystems respond to climatic variability is critical for developing sustainable management strategies and forecasting fishery responses to the impacts of climate change. This is particularly relevant for species suspected of having low resilience to perturbation, as may be the case for many long-lived fish species.

A major limitation to assessing relationships between environmental variability and population or ecosystem response is the lack of biological time series. Thus, this project seeks to analyze growth increments in exploited, long-lived fish species to assess relationships between environment and various life-history attributes including growth and maturity parameters. Specifically, the goals of the project will be:

1. Use growth-increment analysis (sclerochronological) techniques on the hard parts of long-lived, exploited fish species to hind-cast various growth and maturity life-history parameters.
2. Identify key environmental drivers of these reconstructed, multidecadal indicators of fish biology.
3. Model relationships among climate, biology, and stock dynamics
4. Analyze resilience of exploited fish populations to climate variability, climate change, and fisheries exploitation in the North Atlantic.
5. Forecast fish stock dynamics under various climate change scenarios.

#### **CANDIDATE PROFILE:**

##### Mandatory qualifications

- PhD in biology, ecology, marine science, fisheries science, or related discipline obtained after January 1<sup>st</sup> 2010. The PhD certificate must be recognized by the Spanish Ministry of Education.
- Post-doctoral experience that did not involve 2 or more years of training outside Europe.
- Excellent analytical and statistical skills.
- English fluency.
- Excellent oral and written communication skills.

##### Preferred qualifications

- Experience in small project management.
- Interest in ecosystem approaches to fisheries management
- Experience in sclerochronology or dendrochronology.
- Rigor, autonomy, and ability to work in a team
- Interest in interdisciplinary work

**PRINCIPAL ACTIVITIES:**

- Sampling of fish sclerostructures (at sea and lab)
- Sclerochronological analysis of biological traits (growth and reproduction).
- Quantify relationships between biology and environment.
- Participate in national and international calls for project funds
- Collaborate in a multidisciplinary team
- Lead and co-author scientific publications
- Attend international meetings and workshops

**JOB CONDITIONS:**

- Full-time contract
- 42.000 € (gross annual salary) during time in USA (in case of Global Fellowship) + 36.000 € (gross annual salary) during time in Spain.
- Full-coverage insurance (Medical, accidents and public liability)

**DEADLINE OF THE CALL:** 14/09/2016

**DEADLINE FOR RECEIVING CV AND MOTIVATION LETTER:** 15/06/2016