



# **Expressions of Interest for hosting MSCA fellows**

### **SPANISH HOSTING OFFERS - IF 2021**

#### **EURAXESS**

### TITLE

Marie Curie Post Doc position in "Inflammation and metabolism during Ageing" at Biomedical Research and Innovation Institute of Cadiz (INIBiCA): Expression of Interest for Hosting a Marie Curie Fellowship

### **HOSTING SUMMARY**

The group "Inflammation and metabolism during Ageing "leading by Dr. Mario D. Cordero at the Biomedical Research and Innovation Institute of Cadiz (INIBiCA) in Cádiz (Spain) is interested in hosting a Marie Curie Postdoctoral Fellowship to be supervised by Dr Mario D. Cordero.

Dr. Mario D. Cordero is *Miguel Servet* Principal investigator in Spain leading the group "Inflammation and metabolism during Ageing"

He has been working in inflammasomes during aging and age-related diseases. His Laboratory is working about the role of the inflammasomes in different aspects of aging such as ovarian aging, accelerated aging syndromes (Progeria), metabolic aging and the molecular mechanism of inflammasome modulation and inhibition.

Selected publications:

- Navarro-Pando JM, et al. Inhibition of the NLRP3 inflammasome prevents ovarian aging. Sci Adv. 2021;7(1):eabc7409.
- Nicolás-Ávila JA, et al. A Network of Macrophages Supports Mitochondrial Homeostasis in the Heart. Cell. 2020;183(1):94-109.e23.
- Marín-Aguilar F, et al. NLRP3 inflammasome suppression improves longevity and prevents cardiac aging in male mice. Aging Cell. 2020;19(1):e13050.
- Cordero MD, et al. AMP-Activated Protein Kinase Regulation of the NLRP3 Inflammasome during Aging. Trends Endocrinol Metab. 2018;29(1):8-17.

## **HOSTING DETAILS**

**Description of the center**: FCADIZ is a private non-profit organization which aims to stimulate, develop and harmoniously integrate basic, clinical and public health research, and to potentiate transnational research to encourage better sharing of the scientific advances in the areas of the prevention and treatment of the most common health problems. The Foundation manages the activity of the Cadiz Institute of Biomedical Research and Innovation, hereafter referred to as INIBICA. INIBICA offers coverage for every healthcare area in the province of Cadiz, with a population of more than 1.2 million people who are potential





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beneficiaries of the activities carried out by the Institute. INiBICA principally consists of the University Hospital Puerta del Mar (Cadiz) and the University of Cadiz, which form its basic nucleus, together with the group of Public Health Centres of the province of Cadiz. In total, it manages more than 780 researchers and an annual budget of some three million euros, a figure which increases yearly.

**Description of the group**: Inflammation and metabolism during Ageing group is multidisciplinary group working in the translational science of the inflammasomes and aging. We work with cell lines, animal models and human subjects in collaboration with medical specialists about different diseases. We have national and international collaboration with many expert on the field of immunology and senescence and now, we are looing for a postdoctoral researcher to participate in our research lines and complement us with relevant cutting-edge technologies.

## **Description of the project/projects:**

- Project 1 Objective: Understand the molecular mechanisms of the interaction between the different inflammasomes.
- Project 2 Objective: Evaluation the implication of the inflammasomes in the senescent process.
- Project 2 Objective: Development of tool to modulate and inhibit the inflammasome in different human diseases.

### **Description Principal Investigator**

Mario D. Cordero has a degree in Human Nutrition and a PhD in Health Science. He got a postdoctoral fellowship from the prestigious national program Juan de la Cierva at the University of Granada, Spain, and a senior postdoc for a collaborative project to work about the role of inflammasomes during senescence in the Institute of Ageing (Newcastle, UK). Actually, he is Miguel Servet Principal investigator in Spain leading the group "Inflammation and metabolism during Ageing"

has been working in inflammasomes during aging and age-related diseases. His Laboratory is working about the role of the inflammasomes in different aspects of aging such as ovarian aging, accelerated aging syndromes (Progeria), metabolic aging and the molecular mechanism of inflammasome modulation and inhibition.

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RESEARCHER ID: L-8006-2014 AUTHOR ID: 16444030300

ORCID CODE: 0000-0003-0151-3644

**Supervisor Publications** (Mario D. Cordero)

>> Publications= 100 H Index=36 Patent=5 Grants=7

### **Supervisor** International collaborations:

• Cathepsin C's Five Consortium





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• Collaboration with different researchers: Bernhard Ryffel (France), Alberto Sanz-Montero (UK), Gabriel Mbalaviele (USA), Beverly Mock (USA).

### Supervisor most relevant research projects grants:

- FIS research project of the Institute of Health Carlos III
- Progeria Research Foundation grant program
- Miguel Servet program of the Institute of Health Carlos III

#### More information:

- Number of positions available: 1
- Type of contract: Full time
- Status: Postdoctoral researcher
- Working hours (hour per week or free text): 37.5 hours/week (Flexible)
- State / province: Cádiz
- City: Cádiz
- Postal code: 11009
- Street: Avda. Ana de Viya, 21
- Organisation: Hospital Puerta del Mar
- Country: Spain
- Website: <a href="http://inibica.es/en/">http://inibica.es/en/</a> Phone mobile phone: (+34) 636 174 993

### **APPLICATION DETAILS**

- Envisaged job starting date: within 3 months after receiving the offer
- Application deadline: 15/08/2021
- How to apply: The application must be submitted electronically to <a href="mailto:rrhh@inibica.es">rrhh@inibica.es</a> and shall include: Cover letter (1 page) explaining your motivation, research interests and how you scienfically can contribute to the project. To include a progress plan would be valued. CV (mas 3 pages, including publications if any), Diplomas, diploma supplements and transcripts, Contact information to 1-3 references, Documentation on English language proficiency.

Application e-mail: rrhh@inibica.es

## **REQUIRED EDUCATION LEVEL**

- Required education level 1: PhD
- **Degree:** Biology, biomedical sciences, life sciences or a related discipline

### **REQUIRED EXPERIENCE LEVEL**

**Main research field:** molecular and cellular biology especially innate immunity and more relevant cutting-edge technologies.





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**Sub research field:** Inflammasome, inflammation, senescence or inflammaging.

### **REQUIRED LANGUAGES**

**Language:** English, Spanish (optional) **Language level:** English Professional level

### **ADDITIONAL REQUIREMENTS**

**Skills:** experience in molecular and cellular biology protocols.

**Specific requirements:** experience with confocal microscopy, mammalian cell culture, , proteomic, mouse disease models and desirable siRNA and CRISPR-Cas9 in vitro and in vivo and design of genetic animal models.

At the deadline for the submission of proposals (October, 2021), researchers:

- shall be in possession of a doctoral degree
- must not have resided or carried out their main activities in the country of Spain for more than 12 months in the 3 years immediately prior to the abovementioned deadline.