

**FPS groups are looking for R3-R4 researchers** who can apply for competitive HR grant from the 2023 call "*Acción C - Programa Nicolás Monardes*" of the *Servicio Andaluz de Salud (SAS)*. Specifically:

# MODALITY C.2. PROMOTION OF CLINICAL-TRANSLATIONAL RESEARCH ACTIVITIES IN *SAS* CLINICAL UNITS THROUGH COLLABORATIVE PROGRAMMES WITH A RESEARCH GROUP FROM MIXED THEMATIC RESEARCH CENTRES IN WHICH *SAS* PARTICIPATES

Submission of applications: expected to be launched in May.

<u>Total annual cost of contracts</u>, according to scientific level (including gross salary, incentives and employer Social Security contribution in charge of the contracting entity):

NOTE: The scientific levels are assigned according to the score obtained by the candidates in the evaluation of their curriculum, based on the following distribution (Modality C.2 (over 45p)).

- Level A (more than 32,90p): 62.991,00 €
- Level B (between 29,25 y 32,90p): 61.197,00 €
- Nivel C (less than 29,25p): 55.475,00 €

<u>Eligibility requirements (in case that they remain the same as in the last call (2022))</u> - Candidates should:

- Have a **PhD degree**, with a **postdoctoral research career** in the field of <u>biomedicine</u> and <u>health sciences</u> of **more than eight years**.
- Be a **research group leader** of a health or research centre in the field of <u>biomedicine</u> and <u>health sciences</u>. The term "research group leader" refers to the person who coordinates a group of researchers organised around one or more common lines of scientific activity.
- Have at the time of submission of applications at least one **line of research** related to the research group to which they are applying for. This line of research will also be related to one of the lines of the Clinical Unit of the *SAS* with which the collaborative translational research programme will be subscribed for the next four years.
- Have an **outstanding level** of **scientific activity**. Specifically, the following minimum levels of scientific activity in the last 5 years (2018-2023) must be met:

1. Resources:

- a1) Total projects:  $\geq$  1 active project/year, for at least four of the last five years.
- a2) National and international project funding (PI):  $\geq$  70.000 euros.
- a3) Projects as  $PI: \geq 2$ .

Candidates must meet subcriteria a1, a2 and a3 to pass criterion 1.

Any of the following will be considered as merits equivalent to all of the above:

a4) International competitive financing as PI/CoPI/work package leader or equivalent, more than 70.000 euros for at least 3 years of the period.

a5) Total financing volume as  $PI/CoPI \ge 300.000$  euros, active for at least 3 years of the period.



2. Knowledge generation:

b1) Publications in 1st decile  $\geq$  2, one of them, at least, led (first or last author or corresponding author).

b2) Publications in 1st quartile (including first decile)  $\geq$  4, three of them, at least, led (first or last author or corresponding author).

Candidates must meet subcriteria b1 and b2.

More information

## Information on host group:

1. Group: Pancreatic Islet Development & Regeneration.

**Principal Investigator of the Group:** <u>Benoit R. Gauthier</u>. CABIMER (Andalusian Centre of Molecular Biology and Regenerative Medicine).

**Research line in which the candidate will work:** <u>Development of novel delivery systems for</u> <u>anti-autoimmune disease pharmacological agents.</u>

**Summary of research line:** In partnership with a strong functional nanomaterial chemistry group at the Institute of Chemical Investigation (led by Dr. Noureddine Khiar el Wahabi) and the Endocrinology and Nutrition Clinical service of the University Hospital Virgen Macarena (headed by Dr. Maria Asuncion Martinez Brocca) the successful candidate will develop and test in pre-clinical models and human samples new encapsulation and delivery systems for anti-autoimmune disease drugs.

## Profile of the desired candidate:

- PhD in Biochemistry with a strong knowledge of chemistry
- Experience in drug development and testing
- MOTIVATED TO WORK

More information about the research group here: <u>Pancreatic Islet Development & Regeneration</u> Principal Investigator contact: <u>benoit.gauthier@cabimer.es</u>



2. Group: Genetics of Complex Diseases.

**Principal Investigator of the Group:** <u>Marta E. Alarcón Riquelme</u>. Pfizer - University of Granada - Junta de Andalucía Centre for Genomics and Oncological Research (GENYO).

#### Research line in which the candidate will work: <u>Neuroimmunology</u>.

**Summary of research line:** Neurological alterations in autoimmune diseases. Pre-clinical models of neuro-psichiatric manifestations of autoimmune disease and implications of the findings to human disease.

#### Profile of the desired candidate:

- PhD in Immunology or Biochemistry with at least 10 years of postdoctoral experience, including international stays.
- Strong background in Immunology and Neurosciences.
- Experience in preclinical models of systemic lupus erythematosus and neurological diseases such as multiple sclerosis
- Experience in training PhD student
- Participation in international consortiums and/or multicentric projects.

More information about the research group here: <u>Genetics of Complex Diseases</u>

Principal Investigator contact: marta.alarcon@genyo.es

3. Group: Proteases and Extracellular Matrix.

**Principal Investigator of the Group:** <u>Juan Carlos Rodríguez-Manzaneque</u>. Pfizer -University of Granada - Junta de Andalucía Centre for Genomics and Oncological Research (GENYO).

# **Research line in which the candidate will work:** <u>Control of tumor progression and its immune</u> <u>response by remodelling the extracellular matrix.</u>

**Summary of research line:** Fight against cancer requires a deep knowledge of multiple players withing the complex tumor heterogeneity, including the composition and nature of the dynamic **extracellular matrix (ECM).** In this scenario, many studies of extracellular proteases as modifiers of the tumor microenvironment have revealed their participation as oncogenic as well as tumor-protective molecules. Given their extracellular nature, the characterization of these proteases and their substrates in tumor samples, together with a deep analysis of the immune infiltration will disclose new and underexplored targeting pathways.



#### Profile of the desired candidate:

- Expertise in the study and characterization of cell populations in human tumors, using techniques such as immunohistochemistry, cytometry, multiplex, and others.
- Advanced knowledge and understanding of the complexity of tumor heterogeneity.
- Advanced knowledge of the use of tumor mouse models and their relationships with specific human tumors.
- Knowledge of bioinformatic tools to analyze RNAseq and cancer-related big data

More information about the research group here: <u>Proteases and Extracellular Matrix</u> Principal Investigator contact: <u>juancarlos.rodriguez@genyo.es</u>

4. Group: Metabolism, Immunology and Cardiovascular Risk.

**Principal Investigator of the Group:** <u>Inés Pineda Torra</u>. CABIMER (Andalusian Centre of Molecular Biology and Regenerative Medicine).

# **Research line in which the candidate will work:** <u>Impact of metabolic and environmental</u> <u>stressors and CV risk: sex differences.</u>

**Summary of research line:** Overall, our studies focus on pathways predominant in cardiovascular disease (CVD), the leading cause of mortality for women worldwide. We are focusing our studies on women since they remain understudied and are significantly underrepresented in trials for cardiometabolic drugs. Cardiovascular risk factors, such as lipid profiles, change substantially in women during their lifetime. The main pathology underlying ischemic CVD is atherosclerosis, a process resulting from dysregulation and build-up of lipids with inflammation in the vascular wall. Innate and adaptive immune cells, such as monocytes and CD4+/Tregs and CD8+ Tcells, are key in the initiation and development of atherosclerosis. Women also show different immunological responses than men. Continuing from our studies exploring lipid metabolism in human immune cells and our work on cardiovascular risk in women with autoimmunity, we will now investigate cardiovascular risk in women from the general population at different life stages and uncover the underlying mechanisms to understand these changes.

## Profile of the desired candidate:

- Research Field: biomedicine or computational analysis
- Research specialty: cardiovascular disease, metabolism, immunology, atherosclerosis, sex differences, transcriptomics, metabolomics, network analysis, multi-omic data integration analysis, machine learning (1-3 of the above would be desirable)

More information about the research group here: <u>Metabolism, Immunology and Cardiovascular</u> <u>Risk</u>

Principal Investigator contact: ines.pineda@cabimer.es