

## POSTDOCTORAL RESEARCH POSITION IN BREAST CANCER STEM CELLS, DRUG RESISTANCE AND METASTASIS - JUAN DE LA CIERVA “INCORPORACION”

The group of “Cancer stem cells, tumor resistance and metabolomics”, led by Sergio Granados-Principal Ph.D. at Hospital Complex of Jaen and Center for Genomics and Oncological Research (GENYO) in Granada (Spain), seeks out motivated postdoctoral researchers to apply for a “Juan de la Cierva” Postdoc grant (Ministry of Economy and Competitiveness of Spain).

### Description

Dr Sergio Granados-Principal’s group is searching for a highly-motivated, enthusiastic and independent postdoc researcher to apply for a “Juan de la Cierva-Incorporacion” Grant. We are a young and competitive research group from the Hospital Complex of Jaen (Spain); our laboratory is integrated in the Center for Genomics and Oncological Research (GENYO) in Granada (Spain), where the candidate will develop the project. GENYO is a leading center of excellence in oncology and genomic research that integrates a multidisciplinary environment for innovative young and established researchers. This center is supported by excellent core services built with the latest technology, what allows the development of new and competitive research areas. Triple negative breast cancer (TNBC) is a very aggressive form of cancer with an elevated prevalence of recurrence, metastases and mortality after chemotherapy, events that are triggered by cancer stem cells (CSCs). There is lack of effective therapies against metastatic TNBC to target both the chemotherapy-sensitive tumor cells and the chemotherapy-resistant CSCs. We aim at discovering novel CSCs-related genes and/or pathways involved in drug resistance, tumor metastasis and relapse in order to further develop new therapeutic approaches to be translated into the clinical practice.

### Candidate’s profile and competences:

Candidates should have competences in the following areas: breast cancer, cancer stem cells and typical functional assays, 3D *in vitro* models of breast cancer (i.e. organoids), cell and molecular biology (i.e. Western blot, RT-PCR, ChIP, DNA cloning, knockdown, overexpression), *in vivo* models of breast cancer, epithelial-mesenchymal transition, *in vivo* imaging, immunofluorescence, flow cytometry/cell sorting, Next-Generation Sequencing (DNA-seq, RNA-seq, ChIP-seq).

### 1. Who can apply?

Candidates must have a PhD degree in Health Sciences such as Biology, Pharmacy, Biochemistry, Medicine, or similar. Candidates must meet the following requirements, published at BOE 7th December, 2015:

- PhD Degree MUST has been awarded between 01/01/2011 and 12/31/2013.
- Candidates must not have applied to Ramon y Cajal grant in the current call.



- Candidates must not have been previously beneficiary of a Ramon y Cajal or a Juan de la Cierva "Incorporacion" Grants.

## **2. Minimum requirements of candidates:**

- Good record of publications in high impact journals: in the last 5 years, candidates must have a minimum of 3 publications in the first quartile/decile as lead author (first, last or corresponding author).

- Mobility: international research stays for a minimum of 12 months.

- Awards, mentions or distinctions.

- Participation in research projects.

- Candidates must have capacity for team work, demonstrate initiative, independence, motivation, good communication skills (in English and Spanish), and experience in paper/grant writing.

## **3. The following will be highly valued:**

- Experience in 3D models of breast cancer stem cells: tumor-spheres and organoids.

- Experience in cancer stem cell functional assays.

- Experience in mechanistic assays of tumor cell biology.

- Experience in *in vivo* models of patient-derived xenografts.

- Flow cytometry.

- Experience in Next-Generation Sequencing (RNA-seq, ChIP-seq).

- Experience in gene-editing (CRISPR/Cas9).

- Primary cultures.

## **Research Fields**

Biological sciences

## **Career Stage**

Experienced researcher or 4-10 yrs (Post-Doc)

## **Research Profiles**

Established Researcher (R3)

**Candidates interested in the position must send the full CV by email to [mbernier@fibao.es](mailto:mbernier@fibao.es) (Please, indicate in the subject the reference JDC2016/Oncology).**

**Candidatures until 20 th of January, 2016.**

