



## **POSITION**

### **Project Title/ Job position title**

Translational Research in Pediatric Oncology, Hematopoietic Transplantation & Cell Therapy/  
Pre-doctoral Position

### **Area of Knowledge** (choose only one)

Life Science Panel

Human Biology, Microbiology, Genetics, Cell Biology, Genomics and Proteomics,  
Biochemistry

### **Research Project/Research Group Description**

#### Research Group:

Our group is named "Translational Research in Childhood Cancer, Hematopoietic Transplantation and Cell Therapy" and is led by Dr. Antonio Pérez-Martínez, at the Research Institute of the University Hospital La Paz (IdiPAZ). It is a multidisciplinary team, composed of expert genetists, pediatric hemato-oncologists and cell therapy researchers. Currently, the team is leading five clinical trials of immunotherapy with activated and expanded NK cells in patients with relapsed or refractory acute leukemia, lymphoma, multiple myeloma and sarcoma.

We are a young and motivated team that conducts several lines of research into diagnosis, molecular bases, and new alternative treatment for pediatric cancer. The goal of our laboratory is to improve the accuracy of prognosis and to obtain genetic information useful for the management of patients.

#### Research Project:

The student would collaborate in the project focused in the molecular characterization of childhood cancer. Acute leukemia is the most common cancer in children and constitute about 30% of childhood cancers. Over the last several decades, advances in the treatment pediatric leukemia have dramatically increased its survival rate to almost 90%. Despite the improvements, a considerable number of children continue to relapse following standardized treatment. Leukemia is considered a genetic disease that develops from DNA changes that allow the transformation of a normal cell into a cancer cell. Our goal with this project is to incorporate advanced and innovative genetic technologies that have the ability to simultaneously study many genetic alterations in a short time, with the aim of detecting possible genetic abnormalities that cause malignant transformation of cells, detecting genetic changes that allow to develop clinical trials for new drugs and to identify genetic markers as prognostic factors used to adjust the intensity of treatment.



### **Job position description**

The student will join to the Laboratory of Pediatric Molecular Hematooncology under the supervision of postdoctoral researchers Adela Escudero and Leila Cardoso. We are looking for an enthusiastic and motivated applicant with high organizational skills that want to learn some techniques in genetics including RNA /DNA extraction, Sanger sequencing, real-time PCR and Next Generation Sequencing (NGS) at the HULP Institute of Medical and Molecular Genetics (INGEMM). Knowledge of Spanish language and previous experience in molecular biology and genetic will be positively evaluated.

### **GROUP LEADER**

**Title:** PhD

**Full name:** Antonio Pérez Martínez PhD

**Email:** [aperezmartinez@salud.madrid.org](mailto:aperezmartinez@salud.madrid.org)

**Research project/Research group website:**

<http://www.idipaz.es/PaginaDinamica.aspx?IdPag=95&Lang=EN>