

**Project coordinator:**

**M<sup>a</sup> Angeles Muñoz Fernandez (ES)**

[mmunoz.hgugm@salud.madrid.org](mailto:mmunoz.hgugm@salud.madrid.org)

**Project partners:**

**Jean-Pierre Majoral (FR)**

**Valentin Ceña (ES)**

**Fco. Javier de la Mata (ES)**

**Dietmar Appelhans (DE)**

**Maria Bryszewska (PL)**

## **Peptides-associated dendrimers in dendritic cells for the development of new nano-HIV vaccines (DENPEPTHIV)**

The aim of this project is to develop an effective HIV vaccine, an unattained goal so far. We will focus on dendritic cells (DCs), which are among the first HIV-1 targets due to their localization at mucosal surfaces, and their antigen-capturing proficiency. In order to target DCs for immunization, HIV-peptides would be associated with dendrimers (branched, spherical molecules, known to be versatile carriers). Our hypothesis is that the dendrimers' dendrites induce better uptake and processing of HIV antigens by DCs, leading to a better vaccine. Epitope and dendrimer optimization will also be essential for the development of an effective anti-HIV vaccine.

