



INSTITUTO DE
TECNOLOGÍA
QUÍMICA



EXCELENCIA
SEVERO
OCHOA



UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA

Applications are invited for a multidisciplinary PhD position to develop hybrid DNA-nanomaterials for early cancer diagnosis. The project will be carried out jointly at the Institute of Molecular Science of the University of Valencia (Unit of Excellence María de Maeztu, ICMol-UV) and at the Institute of Chemical Technology of Polytechnic University of Valencia and the Higher Council for Scientific (Severo Ochoa Center, ITQ-UPV-CSIC).

The applicant will be involved in the chemical synthesis and characterization of nanomaterials, and in the biofunctionalization of these materials with nucleic acids. Furthermore, these hybrid materials will be validated and evaluated both *in vitro* and *in vivo* as valid diagnostics using different molecular imaging techniques (MRI, PET, Fluorescence). The research project will be aimed at improving the diagnosis of cancer and seek for innovative technologies to speed up the early detection process.

The project will be developed in collaboration with lead scientists in the fields of nanotechnology and nucleic acids. Mobility between both institutions will be highly encouraged.

Requirements: MSc in Chemistry, Biotechnology, Nanomaterial, or related fields (or its foreseen completion date before September 2023). In addition, research experience, good theoretical background and previous practical experience in molecular imaging (specially radiochemistry), nanotechnology and/or nucleic acids will be preferred. Experience in *in vitro* cultures and animal studies will also be valued.

Good written and oral communication skills in English, motivation, and ability to collaborate in a multidisciplinary team will be also preferred.

Duration: Predoctoral contract of 12 months renewable annually up to 36 months.

Supervisor: Applicants should send a motivation letter and a detailed Curriculum Vitae to either Dr. Jorge González García (jorge.gonzalez@uv.es) or Dr. Javier Hernández Gil (jahergi@itq.upv.es) before May 31, 2023.