



3-year PhD position in Molecular and Cellular Immunology at the Department of Biosciences, University of Salzburg

The group of molecular immunology at the department of [BIOSCIENCES](#) of the University of Salzburg (PLUS), Austria and the Marie Skłodowska - Curie Innovative Training Network (MSCA-ITN) project "[DIRNANO](#) - Directing the immune response through designed nanomaterials" offers an **Early Stage Researcher (PhD Student) position** within the doctoral program Medical Biology.

Thesis project:

Interaction between nanovaccines and dendritic cells (DCs)

Background and objectives of the thesis project:

DCs are first responders that mediate activation of adaptive immunity to either tolerogenic or defensive reactions, thus their interaction with Nanoparticles (NPs) is crucial for early stages in the development of nano-based tumor vaccines.

The objective is to study the reaction of DCs towards novel nanovaccines in an early stage of product development, supporting Safe-by-Design. In addition, associations between nanoparticle/coating/corona properties and type and extent of the DC response will be established, to improve our ability to predict biological responses to novel agents. Moreover, protective T cell responses induced by NP-loaded DCs will be analysed.

International collaborations and secondments are foreseen in: The school of pharmacy of the University of Newcastle for training in methods for assessing the protein corona, and the department of Oncology, Angiogenesis Unit of the Fundacion Rioja Salud to learn techniques for in vivo immune mapping.

Applicants should be highly motivated individuals holding a Master degree in (Molecular) Biology, Immunology, Biotechnology or related disciplines with a strong background within the fields of immunology, tumor immunology, cancer biology, molecular biology or related fields. The candidates should appreciate working in an international and interactive environment. Candidates should have the ability to work independently and in collaboration with others, and have excellent oral and written communication skills in English.

Eligibility criteria for Marie Skłodowska-Curie candidates:

Mobility rule: Applicants have not resided in the country of the recruiting university (Austria) for more than 12 months in the 3 years immediately before the recruitment date (01 February 2021) and have not carried out their main activity (work, studies, etc.) in that country (Austria) – unless as part of a procedure for obtaining refugee status under the Geneva Convention

Applications should include (i) a letter of motivation including a summary of the applicant's past research accomplishments (1 page) (ii) a CV (iii) a list of publications and congress participations (publications themselves should not be enclosed) (iv) copies of certificates and grades and (v) two letters of recommendation as well as (vi) names and contact details of three references (name, relation to candidate, e-mail and telephone number).

Three-year contracts will be based on collective contract (§ 27, 40 hours per week, € 2.929,00 per month, 14 x). Expected starting date: 01 February 2021

Applications should be **submitted until 20 November 2020** to:

Assoc. Prof. Dr. Jutta Horejs-Hoeck University of Salzburg, Department of Biosciences, Hellbrunnerstraße 34, 5020 Salzburg, Austria, phone 0043 662 8044 5709, mailto: jutta.horejs_hoeck@sbg.ac.at

For further information please see: <http://www.uni-salzburg-at/horejs-hoeck>