

*A training network for the rational design of the next generation of well-defined glycoconjugate vaccines – GLYCOVAX (MSCA-ITN-2015-675671)*

**PhD Project Title (Task) – A modular approach to the construction glycoprotein vaccine candidates uniform in site and glycan loading number**

**Application deadline:** 30/10/2015

**Objectives:** Developing an innovative modular approach to produce pure, defined glycoprotein vaccine candidates against GBS infection.

**Description:** This PhD project will focus on the development of a novel chemical site-selective method for placement of antigens at pre-determined sites within a recombinant immunogenic protein carrier that will be engineered with a conserved peptide found in GBS associated proteins. The chemical site-selective approach is based on Aza-Michael addition of antigens synthesised in an automated fashion. The innovative constructs will be tested in vitro and in vivo. This project will provide a thorough training in chemical site-selective glycosylation, protein engineering and vaccine testing.

Planned secondment(s): Month 9: building block synthesis at UMIL, 3 months. Month 19: UL to synthesize by automated fashion a GBS oligosaccharide equipped with an amine terminal linker for 3 months; Month 30: NVD to test immunogenicity of the proposed constructs for 2 months.

**Candidates Profile**

- Valid degree in any field of Life Sciences or Natural Sciences
- Knowledge in chemical synthesis.
- Good knowledge in English, spoken and written
- Good informatic skills
- Experience with standard laboratory equipment and tools
- Motivation for new challenges

**Documents for application**

- Motivation Letter
- Detailed CV
- Academic Certificates
- 2 reference letters

Applications should be addressed to Dr. Gonçalo Bernardes through the general email [imm-hr@medicina.ulisboa.pt](mailto:imm-hr@medicina.ulisboa.pt)

The successful candidate will be employed **for a maximum of 36 months** and will receive an annual salary package according to the allowance amounts defined in the rules for Early Stage Researchers (ESRs) EU Marie Skłodowska-Curie Actions Innovative Training Networks (ITN) ([http://ec.europa.eu/research/participants/portal/doc/call/h2020/h2020-msca-itn-2015/1622613-itn\\_2015\\_-\\_guide\\_for\\_applicants\\_v1\\_en.pdf](http://ec.europa.eu/research/participants/portal/doc/call/h2020/h2020-msca-itn-2015/1622613-itn_2015_-_guide_for_applicants_v1_en.pdf))

- Living allowance – 33.252, 12€
- Mobility allowance – 7.200€
- Family allowance – 6.000€

**IMPORTANT NOTE:** The annual amounts above include all charges with gross salary and other allowances under the contract, work accident insurance and all taxes due according to Portuguese Labor Law.

**Eligibility criteria:**

- IMM Lisboa welcomes candidates of any nationality, irrespective of gender, age, race or ethnic background

- be an 'early stage researcher' (i.e. in the first four years of his/her research career and not have a doctoral degree)

- Not have resided in Portugal for more than 12 months in the 3 years prior to the recruitment date and not have carried out their main activity (work, studies, etc.) in Portugal.