



Call for 1 PhD fellowship (DC3)

A training network on the design of precision therapeutics that target key glycan motifs implicated in cancer

GlyCanDrug is a glycoscience-oriented European Training Network funded in the framework of HORIZON Europe Marie Skłodowska-Curie Doctoral Networks (MSCA-DN). Within GlyCanDrug, Doctoral Candidates (DCs) will be equipped with a thorough multifaceted knowledge of the potential of glycoscience in the discovery of cancer precision therapeutics and the necessary transferable skills. GlyCanDrug will provide an international, intersectoral and interdisciplinary educational program, according with the EU Principles for Innovative Doctoral Training. This will put DCs in an advantageous position for job opportunities in both academia and industry.

DC3 PROJECT TITLE. Evaluation of glycosyltransferases inhibitors and targeted approaches in cancer cells and tumour spheroids.

Host Institution: i3S-Instituto de Investigação e Inovação em Saúde Da Universidade Do Porto, PORTUGAL. (i3S-University of Porto) <https://www.i3s.up.pt/>
<https://www.i3s.up.pt/research-group.php?groupid=26>.

Duration: 36 months, starting between January 2024-November 2024

Supervisor: **Celso A. Reis.** <https://orcid.org/0000-0002-0286-6639>

Co-supervisor: Erdmann Rapp (GlyXera, DE), Joana Gomes (i3S, PT), Catarina Gomes (i3S,PT);*Progress Committee Members:* Celso Reis, Anne Harduin-Lepers, Erdmann Rapp.

DC3 PROJECT. This PhD project will focus on the evaluation of the effect of the glycosylation inhibitors in the biosynthesis of key glycan motifs in cancer cells, the targeting of these cancer-associated glycans, and the analysis of the functional effects in the tumor biology and their potential therapeutic applications. With this in mind, the DC will be trained in the cancer glycobiology using advanced glycoengineered models and in glycosylation analytical approaches. The DC will evaluate the effects of the selected inhibitors in the glycan biosynthesis mediated by the targeted enzymes (fucosyltransferases and sialyltransferases), their functional effects in cancer biology and the glycan-based therapeutic efficacy on cancer models.

PLANNED SECONDMENTS. 1. CNRS (Academia, FR), Glycosyltransferases; 2. GlyXera GmbH (Industry, DE), Glycomics; 3. GD (Industry, DK), Glycan analysis.

PhD School enrolment: Biomedical Sciences at the University of Porto (https://sigarra.up.pt/icbas/en/cur_geral.cur_view?pv_ano_lectivo=2022&pv_origem=CUR&pv_tipo_cur_sigla=D&pv_curso_id=1297)

APPLICATION PROCEDURE. The position is open to candidates of any nationality, as long as they fulfil the requirements set for the DCs funded by Marie Skłodowska-Curie actions (**Annex A**). The applicant must send the documents in the **Annex A** to the email specified (glycandrug@chimica.unifi.it) within **1st January 2024**, clearly indicating in the subject "*Application for DC3 position*".

The salary of the DCs will be paid according to the MSCA rules. See: <https://marie-skłodowska-curie-actions.ec.europa.eu/calls/msca-doctoral-networks-2022>

CANDIDATE PROFILE. - Master Degree in Biochemistry, Biology, Biotechnology, Bioengineering, Medicinal Chemistry or related fields.

- Practical experience in biochemistry, cell biology and/or analytical techniques.
- Good level of English proficiency (understood, spoken and written).
- Team spirit and proactive attitude.

Information also available at: <https://euraxess.ec.europa.eu/>