



## Call for PhD 9 fellowship (DC9)

*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.

**DC9 PROJECT TITLE.** Expression, purification and characterization of sialyltransferases, and validation of glycosyltransferases inhibitors using microplate assays.

*Host Institution:* Structural and Functional Glycobiology Unit (UGSF), UMR 8576 (CNRS-ULil), University of Lille, France.

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

*Supervisor:* Anne Harduin-Lepers; [www.researchgate.net/profile/Anne-Harduin-Lepers](http://www.researchgate.net/profile/Anne-Harduin-Lepers)

*Co-supervisor:* Henrik Clausen (GlycoDisplay, DK), Sophie Groux-Degroote (UGSF, FR).

*Progress Committee Members:* Anne Harduin-Lepers, Ramon Hurtado-Guerrero (University of Zaragoza, ES), Henrik Clausen.

**DC9 PROJECT.** This PhD project will focus on the large-scale production and purification of active sialyltransferases (STs: ST6Gal I and ST6GalNAc I). The DC9 will develop innovative, rapid and sensitive assays on microplates for STs and fucosyltransferases (FTs), which includes preparation of glycoprotein acceptor substrates and synthesis of sugar donors for the identification of potential specific STs and FTs inhibitors. DC9 will be trained in organic synthesis and structural biology for enzyme expression and purification and inhibitors characterization in cell-based assays.

**PLANNED SECONDMENTS.** 1. Unizar, (Academia, ES), production of GTs; 2. UL, (Academia, SI), synthesis of donor derivatives; 3. GD, (Industry, DK), cell-based assays.

**PhD School enrolment:** Biology and Health Doctoral School at the University of Lille ([www.edbsl.univ-lille.fr/en/](http://www.edbsl.univ-lille.fr/en/))

**APPLICATION PROCEDURE.** The position is open to candidates of any nationality, as long as they fulfil the requirements set for the DCs funded by MSCA (**Annex A**). The applicant must send the documents in the **Annex A** to the email specified ([glycandrug@chim.unifi.it](mailto:glycandrug@chim.unifi.it)) within **1<sup>st</sup> January 2024**, clearly indicating in the subject "*Application for DC9 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

- 5-years degree (Master) in Biochemistry, Molecular Biology, Glycobiology or health-related fields
- Practical experience in biochemistry, cell biology and molecular biology
- Good level of English proficiency (understood, spoken and written)
- Team spirit and proactive attitude

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