



9 Doctoral Candidate positions

*Horizon Europe Marie Skłodowska-Curie Actions Doctoral Network (DN)
HORIZON-MSCA-2022-DN-01, project number 101120283 - PROSTAMET*



PROSTAMET - A Comprehensive Translational Research and Training Pipeline Harnessing Lipid Metabolism to Improve Prostate Cancer Management and Educate Young Researchers in Tackling Complex Disease

OPEN CALL: 15th February 2024 - 15th April 2024

1. AN INNOVATIVE DOCTORAL NETWORK

The Horizon Europe MSCA-Doctoral Network (DN) PROSTAMET involves 8 university-associated research centers ('beneficiaries') that function as main host institutions for 9 Doctoral Candidates (DC) and 8 private or academic entities ('associated partners') that offer unique research and training opportunities in the field of lipid metabolism in prostate cancer.

Beneficiaries / host institutions

- **KU Leuven**, Biomedical Sciences, Leuven - BELGIUM - Coordinator
- **Centre National de la Recherche Scientifique (CNRS)**, Institute of Pharmacology and Structural Biology (IPBS), Toulouse - FRANCE
- **Institut National de la Santé et de la Recherche Medicale (Inserm)**, Mediterranean Centre for Molecular, Medicine (C3M), Nice - FRANCE
- **Université Clermont Auvergne (UCA)**, Institute of Genetics, Reproduction and Development (iGReD), Clermont-Ferrand - FRANCE
- **Università degli Studi di Perugia (UNIPG)**, Department of Pharmaceutical Sciences, Perugia - ITALY
- **Università Degli Studi del Piemonte Orientale (UPO)**, Dipartimento di Scienze del Farmaco, Novara - ITALY
- **Université de Namur ASBL (UNamur)**, Chemistry Department, Namur - BELGIUM
- **Instituto Portugues de Oncologia do Porto Francisco Gentil (IPOPORTO)**, Research Center CI-IPOP, Porto - PORTUGAL

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Associated partners (providing training and secondments)

- **Aspect Analytics**, Genk - BELGIUM
- **IRBM SPA**, Pomezia - ITALY
- **Dompé Farmaceutici SPA**, Milano/L'Aquila - ITALY
- **Horizons Unleashed LTD**, Perthshire – UNITED KINGDOM
- **Sonja Noss**, Wiesbaden - GERMANY
- **University Paul Sabatier-Toulouse 3** (granting degree for CNRS), Toulouse - FRANCE
- **University Côte d'Azur** (granting degree for INSERM), Nice - FRANCE
- **University of Porto** (granting degree for IPOPORTO), Porto - PORTUGAL

2. PROSTAMET GOALS

PROSTAMET is an **immersive Doctoral Network (DN)**, that through the set-up of a unique comprehensive and modular **translational pipeline** aims to expose high achieving doctoral candidates to the complete research chain from cutting-edge molecular discovery all the way to innovative drug development, while focusing on the underexplored clinical potential of altered **lipid metabolism in prostate cancer (PCa)**. Through its modular and bidirectional nature with multiple entry points, this pipeline is expected to generate outputs at multiple levels of the drug development chain for sustainable downstream valorisation. By combining **high-level technological “hands-on” research training, non-academic placements and courses/workshops on scientific and complementary “soft” skills** facilitated by the academic/non-academic composition of the consortium, PROSTAMET's ambition is to provide young researchers with a creative and holistic view on translational research along with strong transferable skills. This will prepare these next generation researchers to take up thriving careers in a transformative health care system focusing on personalized precision medicine to combat complex human disease.

3. INTERCONNECTED PROJECTS

Within the PROSTAMET research pipeline, applicants can choose from **9 interconnected PhD projects**, along the research pipeline.

DC1-3 will generate a **comprehensive and spatial map of changes in lipid metabolism in PCa**.

- DC1 (KU Leuven) will employ state-of-the-art spatial lipidomics technologies to map lipid metabolic changes in PCa.
- DC2 (IPOPORTO - U PORTO) aims to better understand the effect of epigenetic factors in lipid metabolism reprogramming and its implication in the development of high-risk PCa.
- DC3 (KU Leuven) will develop and apply AI-based computational tools to integrate the different layers of molecular and structural information from the different spatial and other omics platforms.

DC4-6 will **explore key players in lipid metabolism as potential biomarkers and targets in PCa**.

- DC4 (Inserm - University Côte d'Azur) will study the role of PGC-1 α in fatty acid oxidation in relation with PCa aggressiveness.
- DC5 (Université Clermont Auvergne, UCA) will explore the impact of HDL uptake through SCARB1 on PCa aggressiveness.
- DC6 (CNRS - University Paul Sabatier-Toulouse 3) will investigate the role of bone-marrow adipocytes in the rewiring of lipid metabolism in PCa bone metastasis.

DC7-9 will focus on the **development of probes and compounds targeting lipid metabolism in PCa**.

- **DC7** (Università Degli Studi del Piemonte Orientale) will focus on the biochemical and structural characterisation of prostate cancer target proteins for the development of inhibitory compounds.
- **DC8** (UNamur) will identify compounds and peptides active on prostate cancer target proteins, also by selectively targeting their oligomeric state.
- **DC9** (Università degli Studi di Perugia) will focus on the design and synthesis of fluorescent probes structurally related to oxysterols. The probes will be instrumental for elucidating the role played by Liver X Receptors and other cholesterol homeostasis-related targets.

Each Doctoral Candidate (DC) will closely interact with other DCs in order to grasp ‘the big picture’ of the entire research programme and will perform a well-selected complementary **cross-disciplinary or cross-sectoral secondment** of at least 3 months in total with co-supervision by the recruiting institution, and at the secondment institution.

4. IMMERSIVE DOCTORAL TRAINING

PROSTAMET aims to provide high quality doctoral training for DCs, in line with the European Commission's principles for innovative doctoral training. Each DC will participate in the following training activities:

- **Training through research at the home institution**
- **Interdisciplinary/intersectoral secondments** involving stays (at least 3 months total) at other beneficiaries or associated partners to acquire complementary expertise
- **Advanced courses/seminars and acquisition of soft and transferable** skills provided by the doctoral school at the home institution
- **Network-wide training activities at annual meetings / summer schools and virtual meetings.** Activities include sessions on ethics, open science, DMP, IP protection and valorisation, transferable and transversal training, keynote lectures, hands-on training, progress reports, meetings with patients and clinical staff, company visits, journal clubs, communication training, training in resilience, stress-management and mindful leadership, participation in conferences, organization of meetings and maintenance of websites and social media.

5. WHY PARTICIPATE?

- Cutting-edge research with high societal impact
- Exposure to a unique translational pipeline from basic discovery to drug development
- Interdisciplinary and multi-sectoral research environment
- Collaborative networking
- International mobility
- Advanced and comprehensive skills training

6. PROSTAMET'S OFFER

The DC will receive a **36-month scholarship** to cover her/his living costs. The gross amount of the doctoral scholarship is based on a living allowance that is dependent on a country correction coefficient which takes into account the cost of living in the country of the recruiting institution. Please contact projectmanager@prostamet.net for more details on the monthly scholarship amount for the institution you are applying for.

The cost of all training activities, including all expenses related to travel and accommodation to attend annual meetings and other network-organized events will be paid by the network through the Horizon Europe MSCA-DN grant. DCs will have access to a dedicated workspace and to research facilities. Bench/consumables costs to execute the research project will be covered by the institutions.

7. ELIGIBILITY CRITERIA

- Applicants should **hold a Master's Degree** or an equivalent higher education degree that is relevant for the doctoral research. They should not have a PhD title yet. They should also fulfill any other **requirement for admission to the doctoral school at the home institution** (for instance a degree 'cum laude' or a minimal score). Please contact projectmanager@prostamet.net for more details on local doctoral school requirements.
- As per Horizon Europe MSCA-DN regulations, at the time of recruitment, applicants must (i) **not have been awarded a doctorate** and (ii) **not have resided or carried out their main activity (work, studies, etc.) in the country of their host institution for more than 12 months** in the 3 years immediately before their recruitment date. Compulsory national service and/or short stays such as holidays and time spent as part of a procedure for obtaining refugee status under the Geneva Convention are not taken into account.

8. HOW TO APPLY

Interested candidates can apply for a maximum of 3 PhD projects, indicating the order of preference.

Applicants are required to submit the following documents:

- **Motivation letter** in English indicating which project they apply for and why, and how this fits with their research ambitions
- **Research statement** describing the applicant's research experience (e.g. master's thesis project, any other relevant research experience) in relation to the selected project
- **Self-evaluation** on scientific and soft skills
- **Detailed curriculum vitae** in European format, including personal information (gender, age), studies, list of publications, participation in research projects, extracurricular training, mobility, other qualifications or relevant skills
- **Certified copy/ies of Academic Degree/s** in the original language along with a certified translation into English, and/or Diploma Supplement
- **Certified copies of official Academic Transcripts relating to all academic courses** taken to earn every degree (bachelor/master or equivalent), translated into English, and correspondent grade point average
- **Copy of passport** (or, for EU citizens, equivalent ID document)
- **Contact details of at least two references** (no recommendation letters to be included)

All applications will have to be written in English and will be checked for eligibility. Incomplete applications will not be considered.

Applications must be submitted by email to projectmanager@prostamet.net before **15th April 2024 at 17:00** central European time. All data provided by the applicants are processed according to GDPR regulations and will be used solely for the purpose of the selection of the doctoral candidates.

9. SELECTION PROCEDURE

PROSTAMET will adopt the Charter for Researchers and Code of Conduct promoting an inclusive, merit-based, transparent and unbiased recruitment and attractive working and employment conditions.

A **two-step procedure** for applicants' selection will be followed:

1. After an eligibility check, an **initial selection** will be made based on the submitted documents and the following selection criteria:
 - **Motivation** to join the network
 - **Acquired research skills and research experience**
 - **Fit between the education / research experience and the research project**
 - **Communication skills and English proficiency**
 - **Team work attitude**
 - **Career ambitions and potential for excellence**
 - **Potential impact of the offered training on the DC's career**
2. Within three weeks from the deadline for applications, short-listed applicants will be invited for an **interview** by the project (co)supervisors and other members of the Supervisory Board. Non-selected candidates will be placed on a reserve list. After all interviews have been completed, the Supervisory Board will make/approve the final ranking and assignment to specific projects and will communicate the decision to the candidate by email before end June 2024. In case no suitable candidate is found for a specific project, candidates from the reserve list will be invited for an interview. It is the intention that **all DCs start before September 15th 2024**.

For further information and applications please contact: projectmanager@prostamet.net