Research fellowship on "High-throughput screening of novel genetically-encoded cyclic peptide binders against cell surface protein targets for selective delivery of nucleic acid-based therapeutics" – Università Ca' Foscari Venezia
(Italian law 30 December 2010, n.240, art. 22 and subsequent amendments and additions)

The present document in English is to be considered as a mere summary of the main provisions of the notice of competition which is available in Italian at the following (link) The text in Italian is the official text of the notice of competition for all legal intents and purposes and, in the event of non-conformity with the present document, it shall prevail.

Description

The Department of Molecular Sciences and Nanosystems at Università Ca' Foscari Venezia invites applications for a fellowship lasting 12 months titled "**High-throughput screening of novel genetically-encoded cyclic peptide binders against cell surface protein targets for selective delivery of nucleic acid-based therapeutics"**, SSD: BIOS-07/A, GSD:05/BIOS-07, project ALLIANCE - "A novel integrated cyclic peptide-based platform for precision delivery of nucleic acid-based therapeutics", CUP H73C24000120005, funded by the National Recovery and Resilience Plan (PNRR), Mission 4 "Education and Research", component 2 "From research to business", investment line 1.4 "Strengthening Research Facilities and Creation of National R&D Champions on Some Key Enabling Technologies" as part of the research activities of Spoke 8 with reference to the research program "National Center for Gene Therapy and Drugs based on RNA Technology" Call Code CN00000041 (CUP of project E63C22000940007), Funded by the European Union – NEXT GENERATION-EU, tutor and principal investigator: prof. Alessandro Angelini

The fellowship is intended to provide the successful candidate with the opportunity to pursue his/her own research while benefiting from the range of expertise at Università Ca' Foscari Venezia.

Abstract:

The Research Fellow will work on the development of novel cyclic peptides capable of binding with high affinity and selectivity cell surface tissue-specific receptors that have historically been resistant to conventional modalities ultimately enabling the generation of nucleic acid-based therapeutics with better tissue-selectivity, lower toxicity, and superior efficacy. The Research Fellow will be mostly involved in the high-throughput screening of novel genetically-encoded cyclic peptide binders against selected receptor targets. In this perspective skills in molecular, structural and synthetic biology, as well as chemical combinatorial chemistry of cyclic peptides will be key for the rapid and successful implementation of the project. The Research Fellow will be part of an interdisciplinary team including biochemists, bioorganic chemists, biophysicists computer scientists and bioinformaticians with complementary experimental and computational skills and proven experience in the field of cyclic peptides development.

Who can apply

Prospective candidates are expected to hold a **Master's degree in the field of Biology** (or equivalent) and professional scientific curriculum suitable for carrying out research activities.

Ca' Foscari encourages applications from researchers with positive evaluation in all the criteria in individual proposals such as Marie Skłodowska Curie Actions - Individual Fellowships/ERC Starting

Grants/FIRB (Italian Fund for basic research investments)/SIR (Scientific Young Independence Research) or similar.
Researchers having successfully completed Marie Skłodowska Curie Actions - Individual Fellowships/ERC Starting Grants/FIRB (Italian Fund for basic research investments)/SIR (Scientific Young Independence Research) or similar funded projects are warmly encouraged to apply.

The following qualifications are considered as evaluation criteria:

a. PhD graduation;
b. the completion of attendance of a PhD course pending the awarding of the title;
c. specialization diplomas and certificates of attendance of post-graduate specialization courses, obtained both in Italy and abroad, the carrying out of documented research activities at public and private entities with contracts, scholarships or assignments both in Italy and abroad;
d. scientific publications, patents, bachelor's degree theses, master's degree theses, doctoral's degree theses and letters of references, that demonstrate proven research experience in the field.

Duration of contract: 12 months, approximately starting in **October 2024.**

Stipend: The research fellowship amounts to **Euro € 21.077,66** per year gross of the recipient, net of the expenses to be sustained by the Provider.

Deadline for submission of applications: 18th September 2024, at 12.00 a.m. (Rome CET).

How to apply:

Candidates shall submit:
1. The application form;
2. A motivation letter (max 1 page) along with their CV in European format, duly dated and signed, both to enclosed as a one single.pdf file (link); a declaration must be appended in the footnote of the curriculum, pursuant to the Italian DPR 445/2000 and subsequent amendments and additions, that the information provided corresponds to the truth. Moreover, the candidates have to consent to the use of their personal data for the purposes of this selection procedure pursuant to the Italian Legislative Decree 196/2003 and to the EU Regulations 2016/679;
3. The attachments called “obligations and understanding” and “participation and compatibility”;
4. All documents, qualifications and publications relevant for the selection procedure (please, see the notice - link);
5. A copy of a valid identity document (either Identity Card or Passport);
6. (If available) Evaluation Summary Reports of Marie Skłodowska Curie Actions - Individual Fellowships/ ERC Starting Grants/FIRB (Italian Fund for basic research investments)/SIR (Scientific Young Independence Research) individual proposals having passed all the evaluation thresholds;
7. (If available) Details of Marie Skłodowska Curie Actions - Individual Fellowships, ERC Starting Grants, FIRB (Italian Fund for basic research investments)/ SIR Scientific Young Independence Research funded projects;
8. Declaration on availability to conduct the interview in remote (Link) to be send via email at the following address: ricerca.dsmn@unive.it

All the schemes of the quoted documentation are available on the website (link).

Incomplete applications will be rejected.

How to submit your application

Applications should be submitted by the online procedure, available on this link:

https://apps.unive.it/domandeconcorso-en/accesso/dsmn-ar2angelini-alliance

The candidate, after the uploading, will receive a submission number and an e-mail acknowledging receipt of his/her application.
The candidate, if necessary, could access the procedures for updating any data and materials by the link provided by the e-mail, in any case any updates must be made no later than the deadline 18th September 2024, at 12.00 noon.

Foreign citizens not yet in possesion of the Italian Tax Code can use the following link https://apps.unive.it/utils/cf to obtain a temporary one and be able to proceed with the request.

Please note that the University can be contacted for any support needs by the candidate until 24 hours prior to the deadline.
Please note that in case of a high number of applications and / or weight of the materials loaded by the candidates the system might become slower. Therefore, it is suggested not to start the process close to the deadline.

NB: the University does not take on responsibility for wrong or late communication of addresses, nor for any communication problem not depending on the University.

Topics of the interview:

- Assessment of knowledge and proven experience in the generation of combinatorial libraries of genetically encoded cyclic peptides, use of in vitro directed evolution techniques and flow cytometry.
- Assessment of knowledge and proven experience of recombinant production of cyclic peptide fusions in bacterial, yest and mammalian cells, use of multiple liquid chromatography techniques, use of enzymatic and cell-binding assay.
- Assessment of knowledge of the foreign language English by carrying out part of the interview in English.

Evaluation

Up to 100 points, specifically:
For qualifications, publications and possible tests, from 0 to 60;
For interview, from 0 to 40.

Selection procedure

The interview will be on 02/10/2024 at 01:00 p.m.

by remote at the link:

meet.google.com/zps-dura-rkx

The list of candidates admitted to the interview or any postponements will be made known on 27th September 2024 through a notice that will be published on the website of this University (link) and on the web pages required by current legislation.

Information and contacts

Candidates may find further details about the application process and the research project in the official call published on the following (link).
For further information please contact the Research Office, email: ricerca.dsmn@unive.it, Ph: 0412348633/8514.

The Head of Department
of Molecular Sciences and
Nanosystems
Prof. Maurizio Selva
f.to digitalmente ex art.24 Dlgs 82/2005 (CAD) e ss.mm.ii.

VISTO La responsabile del procedimento
La Segretaria del Dipartimento di Scienze Molecolari e Nanosistemi
Sonia Barizza: barizza@unive.it Telefono: 041-2348535