



Research fellowship on “Statistical properties of the microbiota network and their use for diagnostics and/or measuring effects in neurohabilitation treatments” - 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 in: “Statistical properties of the microbiota network and their use for diagnostics and/or measuring effects in neurohabilitation treatments”, SSD: FIS/02, , lasting 18 months, funded by project Ricerca Finalizzata “Role of the gut-microbiota on ageing and neurodegeneration: a clinical and brain imaging study” – code RF-2021-12372224 - CUP H73C21001350001, tutor and principal investigator: prof. Guido Caldarelli.

Abstract

Scientific research has progressively highlighted the crucial role of the intestinal microbiota in human health, with particular attention to its connections with the central nervous system. This study focuses on the statistical properties of the microbiota network and their application in diagnostics and assessing the effects of neurorehabilitation treatments. Understanding the complexity of microbial interactions through statistical analysis of microbiota networks provides a detailed framework of the dynamics involved. This perspective presents a unique opportunity to develop innovative diagnostic tools, enabling a more precise evaluation of neurological health. Furthermore, the use of statistical measures of microbiota networks may prove essential in monitoring the impact of neurorehabilitation therapies on the microbiota.

The research may be carried out in English.

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.

Who can apply

Prospective candidates are expected to hold a master's degree, (or equivalent) or equivalent qualification obtained abroad 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. 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 'abroad';

Duration of contract: 18 months (approximately starting in February 2024).

Stipend: The research fellowship amounts to **€ 20.267,00** per year gross of the recipient, (corresponding to 30.400,50 Euro gross of the recipient for 18 months), including taxes and social charges.

Deadline for submission of applications: January, 10th 2024, 12.00 noon (Italian time).

How to apply:

Candidates shall submit:

1. The application form;
2. A motivation letter (max 1 page) along with their CV in European format, **with mark degree**, 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 held the interview in remote ([Link](#)) to be send via email at the following address: ricercar.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 the notice webpage ([link](#))

Or submit here:

<https://apps.unive.it/domandeconcorso-en/accesso/dsmn-rf-2021-12372224-caldarelli>

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 **January, 10th 2024, 12.00 noon (Italian time)**.

If you don't have an Italian tax identification code, please click on "Calculate Italian tax identification code (codice fiscale)".

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 an 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.

Please note that the University will be closed from 12/23/2023 to 01/07/2024.

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.

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 January 19th 2024 at 11.00 a.m. (Italian time)

The interview will be held in remote at the link

meet.google.com/uzm-gy fz-owo

The short-list of the candidates admitted to the interview, or any postponement, will be published on the University's webpage on January 12th 2024. ([link](#)).

Topics of the interview:

- knowledge of Statistical physical;
- Knowledge of complex networks; •
- Knowledge of microbiota properties; •
- Knowledge of brain physics; A
- ssessment of the Italian language for foreign candidates;
- Assessment of knowledge of the foreign language English.

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: 041-2348633/8514

Il Direttore del Dipartimento di
Scienze Molecolari e Nanosistemi
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 fax 041-2348517