

Via A. Gabelli 63 - 35121 Padova
C.F. 80006480281 - P.IVA 00742430283

For legal purposes refer only to the Italian version of the Call. This translated version is intended only for a better comprehension.

Re. n. 1475 dated 30.03.2023

University of Padova – Department of Molecular Medicine
Selection announcement for the awarding of 01 research fellowship entitled
“Development of biological models to recapitulate the Quorum sensing relationship with
antibiotic resistance”

Candidates shall also refer to the forms and documentation related to the selection announcement available at the links hereunder:

<https://www.medicinamolecolare.unipd.it/> under the section “bandi”

<https://www.unipd.it/borse-di-ricerca>

Having regard to par. 4 of Art. 80 of the University's “Regolamento di Ateneo per l’amministrazione, la finanza e la contabilità” (Regulations Governing Administration, Finance, and Accounting) and “Regolamento delle borse per lo svolgimento di attività di ricerca”, (Regulations Governing Research Fellowships) a selection announcement for titles has been published for the awarding of 01 research fellowship at the Department of Molecular Medicine, under the supervision of the Research Project Supervisor, Prof.ssa Paola Brun (SSD MED/07).

The research fellowship shall last for **6 months**.

The research fellowship shall be for a total amount of **€ 8.700,00** and it is financed by the research project entitled "Restoring Antibiotic sensitivity in Bacteria: a synthetic biology approach (ReActing)" in the framework of “Bando di Ricerca Scientifica di Eccellenza 2021 della Fondazione Cassa di Risparmio di Padova e Rovigo” of which Prof.ssa Paola Brun is responsible. The research fellowship will be paid in deferred monthly instalments.

The Research Fellowship Holder must carry out the following research activity: the study will exploit signal molecules, bacterial interactions, and genetic components to counteract antibiotic resistance in two high-priority antibiotic-resistant pathogens, i.e. *Klebsiella pneumoniae*

and *Acinetobacter baumannii*. The candidate will characterize genetic components (transcriptional promoters, genes encoding for key-role proteins and specific signal molecules or transcriptional regulators) involved in the resistance to construct gene reporter circuits. The models will be helpful in dissecting environmental and biological cues promoting horizontal gene transfer or bacterial conjugation. The dynamics of Quorum sensing enzymatic inhibitors will be investigated for their efficiency in blocking the occurrence of resistance.

Admission requirements

Master's degree - Classe LM-9

(The eligibility of qualifications awarded abroad will be verified by the Selection Committee.)

Required skills:

- English knowledge;
- Computer skills: use of Microsoft Office and programs to perform statistical analysis; ability to query online databases of scientific-medical literature.

Consideration will be given to:

- Documented relevant study and research activities;

Incompatibility

The fellowships within this announcement may not be combined with:

- other research grants;
- fellowships of any other kind, with the exception of those awarded by national or foreign institutes to integrate, with periods abroad, the specific research activities required by this announcement.

In the case of self-employed, employed or parasubordinate employed, compatibility shall be determined by the Research Project Supervisor.

Research Fellowship Holder may not have family or kinship relationships up to the fourth

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degree with lecturers or researchers working at the Department elected as "Research Base", or with Rector, or Director General, or a member of the University Board of Governors.

Procedures for submission of application form

The deadline for submitting the application form is **14th April 2023 at 13:00**.

The application must be filled out using only the form available on the Department of Molecular Medicine webpage at the link <https://www.medicinamolecolare.unipd.it/> under the "Bandi" section (Bando DMM-062023) and it can be submitted as follows:

1) delivered in person to Segreteria Amministrativa del Dipartimento di Medicina Molecolare, via U. Bassi 58/b, room 60 (4° floor North Complesso Vallisneri) - 35131 Padova, on the following days: Monday – Friday from 09:00 to 13:00;

2) posted by registered mail with advice of receipt to the following address: Segreteria Amministrativa del Dipartimento di Medicina Molecolare, via U. Bassi 58/b (4° floor North, Complesso Vallisneri) - 35131 Padova. Should the application be sent by registered letter, the postmark will not be accepted as evidence of meeting the application deadline. The date of receipt will be considered. Therefore, the application must reach the office before the deadline of this selection announcement.

Please consider that the Complesso Vallisneri will be closed from 7th to 11th April 2023 inclusive.

3) sent by certified e-mail (PEC) to dipartimento.medicinamolecolare@pec.unipd.it

The envelope or subject heading of the email must indicate the following: "Selection Announcement for the Awarding of Research Fellowship -" *insert the title of the research fellowship and the number*" at the Department of Molecular Medicine.

The application must include:

- a) a dated and signed Europass CV, available at the links indicated on the selection announcement;
- b) a photocopy of a valid identity document (Identity Card or Passport);
- c) any other document, qualification or publication useful for the selection process (it is recommended to attach a copy of the thesis);
- d) the substitutive declaration of certification (made in order to declare the conformity of

a document to the original) dated and signed, available on the web page of the Department <https://www.medicinamolecolare.unipd.it/> under the section "Bandi" referring to the specific call.

Selection procedure

Candidates' applications shall be evaluated by a Selection Committee that will be nominated in accordance with the "Regulations Governing Research Fellowships," on the basis of their qualifications.

Prior to assessing candidates, the Selection Committee shall establish the maximum score, criteria and the procedure to be used in evaluating qualifications.

At the end of the selection process, the Selection Committee shall send the report to the Head of the Department for approval.

After verifying the legality of the deeds, the Head of Department shall approve by decree the ranking order and the awarding of the research fellowship.

The administrative office of the Department that issued the selection announcement shall notify the successful candidate.

The winner must accept the award within ten days of notification. Otherwise the winner shall forfeit the right to the research fellowship. In case of renunciation, the fellowship will be awarded to the next eligible candidate, according to the ranking order.

The ranking order will be published on the Department's web page at the following address <https://www.medicinamolecolare.unipd.it/> and on the University's website.

Return of Documents and Publications

Any documents and publications sent to the University can be returned at the applicant's expense after two months from the completion of the selection process, subject to any ongoing litigation.

Processing of personal data

In accordance with Legislative Decree no. 196 dated 30 June 2003 and s.m.i, it is hereby

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stated that any data provided, in print or electronic format, shall be handled only for the purposes of this announcement and the entering into and managing of the relationship with the University.

The person responsible for administrative proceedings

In accordance with Art. 5 of Law no. 241 dated 7 August 1990, the person responsible for the selection process (RPA) is Dr. Edda Fassari, Secretary of the Department of Molecular Medicine, e-mail: edda.fassari@unipd.it - Tel. n. 049 8218681. For any clarification or information regarding the call, write to the following email address: ricerca.dmm@unipd.it

Final provisions

For anything not specified in this selection announcement, see the University of Padova's current regulations regarding the awarding for research fellowships.