

SELECTION ANNOUNCEMENT NO. 2025S62

BY QUALIFICATIONS AND EXAMINATIONS, TO RECRUIT NO. 1 LEVEL I RESEARCH TECHNOLOGIST (FINANCIAL POSITION EQUIVALENT TO THE EP1 LEVEL) ON A FULL-TIME, FIXED-TERM CONTRACT, FOR NO. 24 MONTHS, PURSUANT TO ART. 24-BIS OF LAW NO. 240 OF 30.12.2010, AND TO THE NATIONAL COLLECTIVE BARGAINING AGREEMENT OF 19.04.2018, AT THE DEPARTMENT OF MOLECULAR MEDICINE – DMM OF THE UNIVERSITY OF PADUA.

By implementing art. 24-*bis* of Law no. 240 of 30.12.2010 and the National Collective Bargaining Agreement of 19.04.2018, the University of Padua plans to recruit no. 1 Level I research Technologist (financial position equivalent to the EP1 level), by qualifications and examinations, on a full-time, fixed-term contract, for no. 24 months, at the Department of Molecular Medicine – DMM.

The Technologist will be called to carry out the following activities:

technical support to research during the design of experiments and interpretation of biological results, including the use of virtualization and containerization technologies (e.g., Git, Docker, Singularity) and the use of workload management systems on HPC infrastructures (e.g., SLURM). In particular:

- management and development of advanced computing platforms for the analysis of highly complex data, with particular reference to omics data, including genomics, transcriptomics, and proteomics;
- design, implementation, and maintenance of automated, scalable, and reproducible bioinformatics pipelines, as well as the software infrastructure required for their execution, integrating open-source tools and scientific programming environments (e.g., Python, C/C++, R);
- management of local and distributed computing systems, including cloud infrastructures (e.g., AWS), with a focus on security, resource management, and process automation;
- application of modern software engineering practices (version control, automated testing, documentation, continuous integration workflows), structured data models, and metadata schemas for large-scale omics data:
- development of new computational methods and algorithms (e.g., data integration methods), along with production quality analysis software, using best practices for packaging and distribution (e.g., Poetry, PyPI, conda);
- maintenance of IT infrastructure to support research and technical support for users.

To perform the above activities, the following **professional skills, knowledge, and expertise** are required including experience in bioinformatics and scientific computing:

- in-depth knowledge of Linux-based operating systems and the administration of both local and distributed computing systems;
- technical knowledge of the management of HPC resources that are available at the Department of Molecular Medicine. Expertise in automation, virtualization, containerization, and code versioning tools (e.g., Git, Docker, Singularity, AWS ECR);
- knowledge of the design, management, implementation, and maintenance of complex biomedical data analysis and sequencing pipelines, and of the software infrastructure required to execute them, integrating open-source tools and scientific programming environments (e.g., Python, C/C++, R);
- familiarity with software engineering and collaboration platforms (e.g., Git-based workflows, code review, structured documentation, automated testing);

♦ UNIVERSITÀ DEGLI STUDI DI PADOVA

AMMINISTRAZIONE CENTRALE AREA RISORSE UMANE UFFICIO PERSONALE TECNICO AMMINISTRATIVO

- knowledge of molecular biology principles, including the underlying principles of NGS experimental techniques, Illumina short-read sequencing, PacBio HiFi/Kinnex, Oxford Nanopore, and standard omics experiments (WGS, WES, RNA-seq);
- user orientation, both internal (researchers) and external, and aptitude for technical coordination of teamwork:
- proficiency in English (B2 reference level).

Admission requirements

Candidates must have the following requirements by the selection announcement deadline:

a) academic qualification

a second-cycle degree (*Laurea Magistrale ex D.M. 270/2004*) in class: LM-06 Biologia, or LM-07 Biotecnologie agrarie, or LM-08 Biotecnologie industriali, or LM-09 Biotecnologie mediche, veterinarie e farmaceutiche, or LM-61 Scienze della nutrizione umana, or LM-75 Scienze e tecnologie per l'ambiente e il territorio;

or a second-cycle degree (*Laurea Specialistica ex* D.M. 509/1999) recognised as the equivalent by D.I. 09.07.2009 in class: 6/S Biologia, or 7/S Biotecnologie agrarie, or 8/S Biotecnologie industriali, or 9/S Biotecnologie mediche, veterinarie e farmaceutiche, or 69/S Scienze della nutrizione umana, or 82/S Scienze e tecnologie per l'ambiente e il territorio;

or a degree (*Diploma di Laurea ante* D.M. 509/1999) recognised as equivalent by Interministerial Decree D.I. 09.07.2009: Scienze biologiche, or Biotecnologie agro-industriali, or Biotecnologie indirizzo Biotecnologie agrarie vegetali, or Biotecnologie indirizzo Biotecnologie farmaceutiche, or Biotecnologie indirizzo Biotecnologie industriali, or Biotecnologie indirizzo Biotecnologie mediche, or Biotecnologie indirizzo Biotecnologie veterinarie, or Scienze ambientali.

It is specified that:

Candidates holding a foreign degree may take part in the selection under the following conditions:

- if they hold a declaration of equivalence issued by an Italian University;
- if they do not have any equivalence, the candidates are provisionally admitted to the selection, pursuant to Art. 38, paragraph 3 of Legislative Decree DL 165/2001. In this case, candidates shall declare, while submitting their application, that they hold a foreign degree officially recognised by the country in which they obtained the title, and, at the same time, should they pass the selection exams, they shall start the equivalency process by sending the request of equivalence to the Italian Ministry for Universities and Research (MUR) within 15 days from the publication of the final ranking.

The degree-equivalency application form is available at the following link:

https://www.funzionepubblica.gov.it/it/il-dipartimento/documentazione/moduli-equivalenza-titoli-di-studio/

b) **specific cultural and professional qualification** related to the type of activities the candidate will carry out:

PhD in ERC areas LS2, LS2_10, LS2_11 and at least three years of documented professional experience in computational biology;

- c) italian citizenship (Italians who are not citizens of the Republic of Italy have the same rights as Italian nationals), or citizenship of an EU Member State.
 - Following the implementation of Art. 7 of Law 97/2013, family members of citizens of an EU Member State who do not have citizenship of an EU Member State, but do have the right of residence, or the permanent right of residence; and third-country nationals with a long-term EU permit of stay, with refugee status, or with subsidiary protection status, may also apply for the selection procedure;
- d) full political rights;

◆ UNIVERSITÀ DEGLI STUDI DI PADOVA

AMMINISTRAZIONE CENTRALE AREA RISORSE UMANE UFFICIO PERSONALE TECNICO AMMINISTRATIVO

e) physically suitable for the position;

Non-Italian nationals are required to:

- · have full civil and political rights in their country of origin;
- fulfil the same requirements as Italian nationals, with the exception of the possession of Italian citizenship;
- have a good knowledge of the Italian language.

Those who have been excluded from the exercise of active electoral rights, as well as those who have been dismissed or excluded from employment with a public administration due to persistent inadequate performance, pursuant to Article 2, paragraph 7 of D.P.R. (Presidential Decree) no. 487/1994, in accordance with sectoral regulations, or removed for the same reasons or for disciplinary reasons pursuant to legal or contractual regulations in force, or declared disqualified for having obtained the appointment or employment by producing false documents or documents affected by irremediable nullity, as well as those who have been convicted of offences constituting an impediment to employment in a public administration, are not eligible for selection.

Application form

The application form and appendices for this selection announcement <u>must be submitted online</u> with the Pica platform at: https://pica.cineca.it/unipd/tipologia/pta.

To apply online, candidates must have a valid email address so that they can register with the system. They must also provide all of the information needed to complete the application and attach the required documents in electronic form.

The system allows the application to be saved in draft form until the submission deadline. The online application procedure and submission must be completed by 2 pm of the 15th day from the day of publication, when the selection announcement closes.

The system will certify the date that the online application form is submitted by emailing candidates an automatic receipt. Once the submission deadline has expired, the system will shut down access and applications can no longer be sent.

If necessary, a submitted application form can be withdrawn and another one submitted before the application deadline (2:00 p.m. of the fifteenth day).

Each application will be given an identification number which must be included in any correspondence, along with the selection announcement code stated in the online procedure. Candidates must complete each and every part of the application form in accordance with the online instructions. In case of access through SPID, no signature will be required when submitting the application. In case of accessing the system by another mode, the application is to be completed as follows:

- with a digital signature using a smart card, USB token or remote signature that enables the user to sign
 documents with signature software. Alternatively, a web portal may be used to provide a certified remote
 signature. Candidates with a smart card or USB token for digital signing can check for compatibility with
 the server's digital-signing system. If compatible, the user may sign the application on the server;
- candidates who do not have compatible digital-signing devices and users of remote digital signatures
 without web portal access for signing documents will have to save a system-generated pdf file on their
 computer. After which, they must not edit the file and e-sign it in CAdES format. A file with a p7m extension
 will be generated and uploaded into the system. If the file is edited before the e-signature is applied, the
 system will be unable to verify whether the content of this document matches the original. If this occurs, the
 application will be rejected;

AMMINISTRAZIONE CENTRALE AREA RISORSE UMANE

UFFICIO PERSONALE TECNICO AMMINISTRATIVO

If none of the aforementioned options are available:
 print and hand-sign the application form, then upload a scanned copy along with a scanned form of
 identification. Candidates not providing identification may be excluded from the selection
 procedure.

The system may be momentarily offline for technical reasons.

Non-Italian candidates are to submit their application form as per the methods and deadlines stated in this application procedure.

Documents must be in a static, non-editable format and must not contain executable codes or macro-instructions. PDF is the preferred format. Documents must not exceed 30 MB.

The University of Padua is not liable for undelivered correspondence should candidates not provide a complete address, or when late or no notification is provided should the address on the application form change. Nor is it liable for problems caused by third parties, misfortune or force majeure.

For additional information or queries about the application procedure, please contact the Technical and Administrative Personnel office on +39 049 827 3155 - 3183 between 9 am and 1 pm.

For technical problems only, contact the following link at home page PICA CINECA supporto.

Candidates must state under their own responsibility their surname and first name, their date and place of birth, their permanent address, any telephone number, any criminal convictions and pending criminal procedures, that they enjoy full political rights, a detailed statement they meet the aforementioned requirements, and the exact contact address for any correspondence.

Candidates with no Italian citizenship, must declare to have an adequate knowledge of the Italian language.

Pursuant to Article 16 of Legge (Law) no. 68/1999 and Article 20 of Legge (Law) no. 104/1992, applicants must make an explicit request concerning the assistance they require and the possible need for additional time to complete the tests. To this end, candidates must enclose with their application to participate in the selection procedure a suitable certification issued by the appropriate Public Medical Board, to enable the Administration to prepare in good time the means and tools needed to ensure regular participation in the selection procedure.

Pursuant to Legge (Law) no. 170/2010, as amended and supplemented, candidates with specific learning disorders (SLD) may ask the Committee to have the written test replaced by an interview, or to make use of any technical aids to compensate for reading, writing and calculation difficulties, in order to take the aforementioned tests, as well as to make use of additional time not exceeding 50% of the time allocated for the test.

The request must be prepared following the instructions available in the online application procedure.

The adoption of the above measures will be determined at the sole discretion of the Selection Committee, based on the documentation provided by the candidate in the application.

Candidates are admitted to the selection procedure conditionally. Should any of the requirements not be met, candidates may be excluded from the selection procedure at any moment, even after they have taken the tests.

Selection

Candidates are selected by qualifications and examinations.

A total of 90 points are awarded for qualifications and examinations. They are divided as follows:

• 30 points for qualifications;

AMMINISTRAZIONE CENTRALE AREA RISORSE UMANE UFFICIO PERSONALE TECNICO AMMINISTRATIVO

- 60 points for examinations, they are divided as follows:
 - 30 points for the written test;
 - 30 points for the oral examination.

Qualifications

The following qualifications, will be evaluated (max 30 points):

PhD relevant to the required profile: ERC LS2	max 10 points
domain (LS2_10, LS2_11)	max to points
documented professional experience, gained in	
national and international research facilities, at	may 10 points
universities, public, or private entities, relevant to the	max 10 points
skills required in the call for applications	
scientific publications on a topic relevant to the	max 10 points
required profile	

EU candidates must provide all of the statuses, information and qualities that they deem useful for the assessment of their qualifications in a statutory declaration, as per Art. 46 and 47 of Presidential Decree DPR no. 445/2000. Non-EU candidates are not allowed to use a statutory declaration, as per Art. 3 of Presidential Decree DPR no. 445/2000.

The application must include the following significant elements:

- the exact name of the awarding body (public or private)
- the period (from dd/mm/yy to dd/mm/yy)
- the type of contract and any category it falls under, the functions carried out and the position held.

Certificates issued by the European Union or Italy's Public Administration must not be submitted.

Publications must be attached to the application and must conform to the original.

Only publications or texts accepted for publication, in accordance with current regulations, as well as essays included in collective works and articles published in journals on paper or in digital format will be assessed, with the exclusion of internal notes or departmental reports. Doctoral theses or equivalent qualifications are taken into account even in the absence of the aforementioned conditions.

In the case of publications published abroad, the following details should be provided if possible: date, place of publication or, alternatively, the ISBN code or equivalent.

In the case of publications published in Italy before 2 September 2006, the obligations must be fulfilled in accordance with the forms provided for by article 1 of Decreto luogotenenziale (Legislative Decree of the King's Lieutenant) no. 660 of 31 August 1945. From 2 September 2006, the obligations must be fulfilled in accordance with the forms provided for by Legge (Law) no. 106 of 15 April 2004 and by the relevant regulation issued by D.P.R. (Presidential Decree) no. 252 of 3 May 2006, by the date on which the Call for Applications for Selection expires.

Publications and any documentation in a foreign language must be accompanied by a translation in Italian, certified as conforming to the original (foreign) text, prepared by the competent diplomatic or consular Representation or by an official translator or, where permitted, prepared by the candidates themselves with a statement that it conforms to the original text by means of a declaration in lieu of an affidavit which, pursuant to article 47 of D.P.R. (Presidential Decree) no. 445/2000, certifies the conformity of the translated text to the

AMMINISTRAZIONE CENTRALE

AREA RISORSE UMANE

UFFICIO PERSONALE TECNICO AMMINISTRATIVO

◆ UNIVERSITÀ DEGLI STUDI DI PADOVA

original text. Publications written in a foreign language may, however, be submitted in the original language (without the need for an accompanying translation) if this language is one of the following: French, English, German or Spanish.

Publications uploaded via the procedure may not exceed a total of 30 MB.

The evaluation of the qualifications will be carried out after the oral examination has taken place.

The score of evaluation of qualifications will be published on the noticeboard of the Department of Molecular Medicine – DMM, Via Gabelli, n. 63, Padua and posted on the University of Padova website at https://www.unipd.it/selezione-2025S62.

Examinations

Examinations will comprise a written test and an oral examination.

- the written test will consist of open-ended questions, and may focus on the following topics:
 - design, management, implementation, and maintenance of complex biomedical and sequencing data analysis pipelines;
 - software infrastructure required to perform complex analyses, integrating open-source and scientific programming tools and languages, including but not limited to Python, C/C++, and R;
 - Linux-based operating systems, complex computing infrastructures, and cloud computing;
 - automation, virtualization, containerization, and code versioning systems (e.g., Git);
 - principles of molecular biology and basic principles of experimental techniques (e.g., NGS, RNA-seq);
- the **oral examination** may focus on the following topics:
 - experience in managing tools and resources for bioinformatics research groups;
 - strong understanding of molecular biology, including advanced omics techniques and their integration into well-organized, structured analytical workflows.

Assessment of English language proficiency (reference level B2).

The examinations pass mark is 21/30 (equivalent to 7/10).

Examinations' calendar and locations will be notified on the University of Padova's Official Register (https://protocollo.unipd.it/albo/viewer) and on the University of Padova website at the following link: https://www.unipd.it/selezione-2025862 starting from 2:00 p.m. on 22nd December 2025.

Publication of this calendar is to be considered as an official notification.

Candidates who are unable to comply with the aforementioned schedule due to pregnancy or breastfeeding will be entitled to participate in the examinations, also by holding asynchronous tests and, in any case, appropriate spaces will be made available to allow for breastfeeding.

Wherever possible, the candidates concerned will promptly notify the Selection procedure manager, so that the Administration can plan in good time how and when to ensure regular participation in the examinations. Candidates who have not received an exclusion communication must come on the date and at the time

communicated. No further notice will be given.

Candidates must show a valid ID document before being admitted to the examinations.

Any candidates not coming to the examinations will be deemed to have waivered their place, regardless of the reason.

AMMINISTRAZIONE CENTRALE + UNIVERSITÀ DEGLI STUDI DI PADOVA

AREA RISORSE UMANE
UFFICIO PERSONALE TECNICO AMMINISTRATIVO

Only those candidates who pass the written test will be admitted to the oral examinations.

The list of candidates admitted to the oral examinations will be published, with their scores for the written test, on the noticeboard of the Department of Molecular Medicine – DMM, Via Gabelli, n. 63 – Padua, and posted on the University of Padua website at https://www.unipd.it/selezione-2025S62.

All Commission sessions during the oral examination are public.

At the end of each oral examination session, the Commission will draw up a list of the candidates assessed with a score for those who have passed the examination. This list will be posted on the noticeboard of the Department of Molecular Medicine – DMM, Via Gabelli, n. 63 – Padua, and posted on the University of Padua website at https://www.unipd.it/selezione-2025S62.

Candidates will be able to access the list by using a personal password provided to all selection participants.

Overall ranking

The final score is calculated by adding up the average score obtained between the written and the oral examination and the score for qualifications assessment.

The categories of citizens who have a preference, merit being equal, are:

- a) recipients of military and civil valour medals, if they have left the service;
- b) amputees and invalids for service in the public and private sectors;
- c) orphans of the fallen and children of the mutilated, disabled and permanently incapacitated for work due to service in the public and private sectors, including the children of health professionals, social workers and socio-medical workers who died as a result of the Cov-2 Sars infection contracted when exercising their activity;
- d) those who have performed meritorious service in any capacity whatsoever for not less than one year in the administration holding the competition, where they have no other preferential qualification by reason of their service;
- e) higher number of dependent children;
- f) invalids and civilian amputees who do not fall under (b);
- g) military volunteers of the Armed Forces who were not dishonourably discharged at the end of the regular or extended period of military service
- h) athletes who have sporting employment relationships with military sports groups and the civil corps of the State;
- i) people who have successfully completed the further improvement period at the process office pursuant to Article 50, paragraph 1-quater, of decreto-legge (Decree-Law) no. 90 of 24 June 2014, converted, with amendments, by legge (Law) no. 114 of 11 August 2014;
- people who have successfully completed the traineeship at the judicial offices pursuant to Article 37, paragraph 11, of decreto-legge (Decree-Law) no. 98 of 6 July 2011, converted, with amendments, by legge (Law) no. 111 of 15 July 2011, while not being part of the process office, pursuant to Article 50, paragraph 1-quinques, of decreto-legge (Decree-Law) no. 90 of 24 June 2014, converted, with amendments, by legge (Law) no. 114 of 11 August 2014;
- m) people who have successfully completed the internship at judicial offices pursuant to Article 73, paragraph 14, of decreto-legge (Decree-Law) no. 69 of 21 June 2013, converted, with amendments, by legge (Law) no. 98 of 9 August 2013;
- n) people who hold or have held collaboration assignments given by ANPAL Servizi S.p.A., in implementation of the provisions of Article 12, paragraph 3, of decreto-legge (Decree-Law) no. 4 of 28 January 2019, converted, with amendments, by legge (Law) no. 26 of 28 March 2019;
- o) younger age.

AMMINISTRAZIONE CENTRALE **◆ UNIVERSITÀ DEGLI STUDI DI PADOVA**

AREA RISORSE UMANE

UFFICIO PERSONALE TECNICO AMMINISTRATIVO

Pursuant to Article 3, paragraph 4, of DPR (Presidential Decree) no. 487/1994, as amended by DPR (Presidential Decree) no. 82/2023, which states that notices of competition shall take into account the gender representativeness referred to in Article 6, as at 31.12.2024, the percentage of representativeness of the male gender is 45.2%, while that of the female gender is 54.8%, and therefore the gender differential is 9.6%, (lower than 30%).

The overall ranking will be published in the University of Padua Official Register. Any appeals may be filed the day after the ranking is published.

The overall ranking is immediately effective.

The winner is entitled to the gross annual salary for the EP category, financial position EP1, as per the University section of the current National Collective Bargaining Agreement (C.C.N.L. Comparto "Istruzione e Ricerca"), as well as to an additional quota as specified in the "University Regulations for Recruiting and Regulating 'Fixed-term Research Technologists', in accordance with Art. 24-bis of Law no. 240 of 30 December 2010." The salary will be paid into a bank or post-office account only.

The administration may decide not to draw up the agreement should there cease to be the need, opportunity or resources to proceed.

The ranking is valid for two years from its publication date and may be used to recruit additional fixed-term technologists with the same profile and level. All other aspects of employment will depend on the University's specific needs.

Anything not stated above is covered by the "University Regulations for Recruiting and Regulating 'Fixed-term Research Technologists', in accordance with Art. 24-bis of Law no. 240 of 30 December 2010", available at: http://www.unipd.it (see "Statuto e Regolamenti").

Pursuant to Law no. 241 of 7 August 1990, the selection procedure Manager is Dr. Cristian Poletti - Ufficio personale tecnico amministrativo, Riviera Tito Livio, 6, Padua, Italy.

The Technical-Administrative Staff Office (Ufficio personale tecnico amministrativo) is open to the public with the following schedule:

- from Monday to Friday from 10:00 a.m. to 1 p.m.,
- in addition, on Tuesdays and Thursdays from 3:00 p.m. to 4:30 p.m as well.

Office tel. 049 827 3159 - 3155

Office e-mail: reclutamento.pta@unipd.it

NB: This selection announcement has been translated into English for publication purposes only. The Italian version is valid for all legal purposes and for the resolution of any disputes.

> The Director-General Alberto Scuttari digital signature (ex Legislative Decree 82/2005)

Il Responsabile del procedimento amministrativo	Il Dirigente dell'Area
Dott. Cristian Poletti	Dott. Tommaso Meacci