



THE HEAD

SUBJECT: Comparative assessment procedure based on qualifications and interview for the award of no. 1 post-doc research contract pursuant to Article 22-bis of Law 240/2010, at the Department of Biomedical and Neuromotor Sciences - SSD MEDS-26/D GSD 06/MEDS-26

Having regard to the FIS 3 Call for Proposals "Competitive procedure for the development of fundamental research activities, funded by the Italian Science Fund 2024 2025", published by MUR Decree No. 1802 of 21 November 2024;

Having regard to the project proposal entitled "Highland Communities. A Population History of the Hyblaeen Plateau from Antiquity to the Middle Ages", project code FIS-2024-03706, CUP J53C25002530001, has been approved for funding under the SH macro-sector, as part of the FIS 3 project;

Given the emergency Directorial Decree dated 29 May 2026, and the subsequent emergency Directorial Decree dated 8 June 2026, requesting the creation of one post-doctoral post to be funded from the aforementioned FIS 3 project;

Considering that on 26 June 2026 the Board of Governors approved the departmental request;

Considering that the above-mentioned research needs represented by the Department of Biomedical and Neuromotor Sciences can be met by means of a public selection procedure;

Having regard to the legislation referred to in Article 13 of this call for applications;

ORDERS

Article 1 – Subject of the selection

To establish a comparative assessment procedure based on qualifications and interview for the award of no. 1 post-doc research contract pursuant to Article 22-bis of Law 240/2010, entitled "Development of a Point-of-Need Microfluidic Device for On-Site Identification of Pigments, Minerals, and Food Residues in Archaeological Excavations" SSD MEDS-26/D Advanced Medical and Surgical Technology and Methodology GSD 06/MEDS-26 METHODS IN LABORATORY MEDICINE, TECHNICAL DIAGNOSTIC, ASSISTANCE, PREVENTION AND REHABILITATION HEALTH PROFESSION SCIENCES, ADVANCED MEDICAL AND SURGICAL TECHNOLOGY AND METHODOLOGY.

The post-doc research contract is to be activated on the basis of a request made by the Biomedical and Neuromotor Sciences Department of the Alma Mater Studiorum - Università di Bologna. The primary place of work for the post-doc research contract holder will be Bologna.

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OFFICE FOR THE SELECTION OF RESEARCH CONTRACTS, POSTDOC POSITIONS, AND COLLABORATORS

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The contract will last 30 months. The gross annual employee remuneration is € 34.147,77.

Article 2 - Activities to be performed

The task envisages research activity, as well as collaboration in third mission activities, to which the activation of the contract is linked. This activity is performed under the supervision of a Scientific supervisor chosen by the Department of Biomedical and Neuromotor Sciences in Professor Nicola Baldini.

For the purposes of reporting on the research project, the notional quantification of annual activities is 1.500 hours per year. Post-doc research contract holders organise their work in consultation with their Scientific supervisor in relation to the organisational aspects of the project. The performance of the research activity and collaboration in third mission activities must be self-certified monthly and validated by the Scientific supervisor.

The post-doc research contract is entitled: "Development of a Point-of-Need Microfluidic Device for On-Site Identification of Pigments, Minerals, and Food Residues in Archaeological Excavations".

Description of the main research activity in which the post-doc researcher will be engaged: The project aims to develop a point-of-need microfluidic device for the rapid in situ identification of pigments, mineral residues, and food residues in archaeological materials. The system will integrate luminescent probes within a platform capable of generating selective optical responses to compounds commonly found in archaeological contexts. The research will include the fabrication and optimization of the device, as well as the development of a recognition system based on the analysis of spectral fingerprints obtained from reference samples and archaeological artifacts. Through pattern-recognition and data-analysis approaches, the platform will be trained to identify selected compounds. The final objective is to produce a portable prototype that can be used during archaeological excavations, capable of performing in situ analyses and providing immediate analytical support for the interdisciplinary study of the communities of the Hyblaeon Plateau.

The scientific productivity targets to be achieved over the term of the contract will be: The research activity will be aimed at producing original scientific results in the field of microfluidics applied to cultural heritage and sensing technologies for on-site archaeometric analyses. Participation in at least two internationally relevant scientific conferences is planned, with the presentation of the results obtained concerning the development of the microfluidic device, the implementation of luminescent probes, and recognition strategies based on spectral fingerprints. The activity is also expected to lead to the publication of at least two scientific articles in international peer-reviewed journals, addressing the technological aspects of the device and its applications in the archaeological field. Additional objectives include the dissemination of results within the interdisciplinary scientific community and the strengthening of national and international collaborations in the fields of microfluidics, analytical chemistry, and archaeometry.

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Description of the third mission activity in which the post-doc researcher will be engaged: The contract provides for the enhancement, dissemination, and technology transfer of the portable point-of-need microfluidic device and the analytical methodologies developed. These activities are intended to promote the external accessibility of the research and to foster its direct application in the cultural heritage sector, by providing immediate analytical support for archaeology and in situ diagnostics. In view of the high level of scientific autonomy required by the role, the contract holder will be responsible for drafting advanced technical, operational, and dissemination documentation. This will include operational protocols for the rapid analysis of artefacts, technical datasheets, and illustrative materials aimed at presenting the features of the microfluidic platform, the pattern recognition methodologies employed, and the correct procedures for using the system in the field. The researcher will also contribute to communication and dissemination initiatives addressed to stakeholders outside the strictly academic sphere, including heritage protection bodies, superintendencies, diagnostic laboratories, museums, and sector professionals. These activities will include support for the organisation and implementation of direct application demonstrations, to be carried out also in conjunction with testing phases in real archaeological environments. During such demonstrations and excavation campaigns, feedback from potential end users, such as archaeologists and conservators, will be collected and systematised. This stage of interaction is considered essential for the final optimisation of the microfluidic prototype and for assessing its concrete practical and commercial potential. The expected outcomes for this area of activity include the production of a complete set of technical and informational documentation, the implementation of dissemination initiatives targeted at sector stakeholders, and the acquisition of structured feedback, all of which are essential for the enhancement and possible technology transfer of the diagnostic solutions developed.

Article 3 - Admission requirements

The selection procedure is open to applicants, including citizens of non-EU countries, who hold a PhD degree or equivalent qualification awarded in Italy or abroad, by the deadline for submitting applications.

In the case of a PhD degree awarded abroad, applicants will need to do one of the following:

1. enclose the decree of academic recognition of the degree (issued pursuant to Article 74 of Italian Presidential Decree no. 382/1980, formerly equivalence, or Article 38 of Legislative Decree 165/2001), if they already have the PhD on the expiry date of the call for applications.
2. request from the University of Bologna, at the application stage, the procedure for recognition of the foreign qualification pursuant to Article 38(3.2) of Legislative Decree no. 165/2001. In this case, the applicant undertakes to forward the necessary documentation to the following email address, apos.selezionepreruolo-collaboratori@unibo.it or certified mail (scriviunibo@pec.unibo.it), should

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she or he be successful in the procedure. The recognition procedure lasts a maximum of 45 days from the delivery of all necessary documentation to the office;

3. as a residual measure, attach a copy of the receipt indicating the start of the equivalence procedure, in accordance with Article 38 of Italian Legislative Decree 165/2001. The form for requesting foreign degree equivalence can be found at [Moduli equivalenza titoli di studio](#). Pursuant to the provisions of Article 38(3) of Italian Legislative Decree no. 165/2001, as amended by Law 69/2025, the Civil Service Department concludes the recognition procedure only with respect to the successful applicants, who are required, under penalty of forfeiture, to submit an application for recognition to the Italian Ministry of University and Research within fifteen days of the publication of the final ranking list. It should be noted that the time limit for concluding the procedure for issuing the provision of recognition of a foreign qualification by the Department of the Civil Service on the opinion of the Ministry is 150 days from the date of the application and is suspended if it is necessary to supplement the documentation. The provision must in any case be produced to the Administration before taking up employment.

One should note that simple Declarations of Validity (*Dichiarazioni di Valore*) cannot be attached. Pending the issuing of the provision referred to in point 2 or 3, applicants may take part in the competition by being admitted conditionally.

For more information on procedures for the recognition of foreign qualifications, one should consult the University's webpage on "[Recognition of a foreign qualification](#)".

Participation in this procedure is not permitted to:

- staff permanently employed by universities, public research organisations and institutions whose postgraduate scientific diploma has been recognised as equivalent to a doctorate in accordance with Article 74(4) of Italian Presidential Decree no. 382 of 11 July 1980;
- persons who have benefited from fixed-term researcher contracts pursuant to Article 24 of Law 240/2010 in the text in force after the date of entry into force of Decree-Law no. 36 of 30 April 2022, converted, with amendments, by Law no. 79 of 29 June 2022 (RTT);
- persons who are related up to and including the fourth degree of kinship and affinity to a professor within the Department or Entity proposing the activation of the contract or to the Rector, the Director General or a member of the Board of Governors of the University.
- persons who have already held post-doc research contracts in accordance with Article 22-bis of Law 240/2010 at the University of Bologna or other Italian state or independent universities, or online universities, or at the bodies referred to in paragraph 1 of the same Article, for a period which, added to the expected duration of the assignment referred to in this call for applications, exceeds a total of three years, even if not continuous. For the purposes of calculating the above total duration,



periods spent on maternity or paternity leave or leave for health reasons under the applicable legislation are not taken into account;

- persons who have already held research contracts (Article 22 of Law 240/2010), post-doctoral assignments (Article 22-bis of Law 240/2010) and research assignments (Article 22-ter of Law 240/2010), even if awarded or stipulated by different institutions, for a period which, added to the expected duration of the assignment referred to in this call for applications, exceeds a total of 11 years, even if not continuous. For the purposes of calculating the above total duration, periods spent on maternity or paternity leave or leave for health reasons under the applicable legislation are not taken into account.

Article 4 - Submission of applications

Applications to take part in the selection process must be submitted exclusively online by accessing the Pica portal: <https://pica.cineca.it/unibo/>

Deadline of the call for applications: Friday 21 August 2026 - 12:00 noon (Italian time)

The application must be submitted at the same time as all the necessary accompanying documentation.

The following documents, preferably in PDF format (other formats JPG, BMP, PNG), must be attached in the online procedure:

1. scan of a valid ID document (10MB max);
2. curriculum vitae containing scientific-professional activity (10MB max);
3. list of publications (include type of publication, all authors, full title, year of publication – or specify if accepted but pending publication – any additional information useful for finding them online);
4. any further annexes deemed useful for the purposes of the evaluation (e.g. master's degrees, postgraduate specialisation courses, scholarships and assignments for research activities, receipt of prizes and awards for research activities, letters of reference, etc.).

In their application, applicants must declare, under their own responsibility:

1. name and surname;
2. place and date of birth;
3. nationality;
4. residence;
5. (if Italian citizens) that they are registered in the electoral rolls, or that they are not registered with an indication of the reasons for their non-registration or cancellation;
6. that they have never been convicted of any criminal offence and that they have no pending criminal proceedings; conversely, they must indicate the convictions (the date of the measure



and the judicial authority that issued it) and any pending criminal proceedings. The existence of a previous criminal conviction is not in itself a cause for refusal of employment unless it is a conviction for an offence that prevents the establishment of an employment relationship with the public administration because it results in disqualification from public office, or inability to enter into contracts with the public administration, or the termination of the employment relationship (Articles 28, 29, 32-ter, 32-quater, 32-quinquies of the Italian Penal Code, Articles 3, 4 and 5 of Law no. 97 of 27 March 2001). In other cases, the Administration will be responsible for independently ascertaining the seriousness of the criminal deeds committed by the person concerned with respect to their possible access to state-funded employment. Such checks are carried out with the aim of ascertaining the existence of the element of trust that constitutes a fundamental prerequisite in the relationship between employer and employee, as well as for the purpose of assessing the existence of the requirements of moral suitability and aptitude to perform the activities of a civil servant;

7. that they have the degree required in Article 3 of this call for applications with the relevant information;
8. that they are fit for continuous and unconditional work in the post to which the selection relates;
9. that they are not permanently employed by the institutions referred to in Article 22(1) of Law 240/2010 (universities, public research organisations and institutions whose postgraduate scientific diploma has been recognised as equivalent to a doctorate in accordance with Article 74(4) of Presidential Decree 382 of 11 July 1980);
10. that they have not benefited from fixed-term researcher contracts pursuant to Article 24 of Law 240/2010 in the text in force after the date of entry into force of Decree-Law no. 36 of 30 April 2022, converted, with amendments, by Law no. 79 of 29 June 2022 (RTT);
11. that they are not related up to and including the fourth degree of kinship and affinity to a professor within the Department or Entity that is proposing the contractual assignment or to the Rector, the Director General or a member of the Board of Governors of the University.
12. that they have or have not been the holder of previous post-doc research contracts pursuant to Article 22-bis of Law 240/2010 and, if they have, they must state the months already benefited at the date of submitting the application;
13. that they have not already held research contracts (Article 22 of Law 240/2010), post-doctoral assignments (Article 22-bis of Law 240/2010) and research assignments (Article 22-ter of Law 240/2010), even if awarded or stipulated by different institutions, for a period which, added to the expected duration of the assignment referred to in this call for applications, exceeds a total of 11 years, even if not continuous. For the purposes of calculating the above total duration,



periods spent on maternity or paternity leave or leave for health reasons under the applicable legislation are not taken into account;

14. email address for receiving communications relating to the competition;

15. for foreign citizens only, that they have adequate knowledge of the Italian language and enjoy civil and political rights also in the States of their nationality or origin, or conversely the grounds for not enjoying such rights.

During the opening phase of the call for applications, the system allows applications to be saved in draft mode. The application must, in any case, be finalised and sent by the deadline, after which the computer system will deny access to the application and its submission. Applications still in 'draft' mode will not be considered, once the deadline for submitting applications has expired.

Applicants will receive an email confirming their application submission, which will also contain an identifier number that will identify the applicant from that moment onwards and must be quoted in any further communication. The identifier number must also be retained for the purposes of communications from the University requiring, for the sake of privacy, that the name be omitted from the communication.

Any changes must be promptly notified to apos.selezionepreruolo-collaboratori@unibo.it. In the event of technical problems, you can contact Cineca Support at the bottom of the webpage at <https://pica.cineca.it/unibo/>.

Article 5 - Compulsory requirements for applicants under penalty of exclusion

Applicants will be automatically excluded from the selection procedure in the following cases:

- Failure to comply with the deadlines and procedures for sending their applications;
- Lack of the requirement set out in Article 3 of this call for applications.

All candidates are admitted to the selection procedures subject to verification that they actually meet the requirements to participate. The Administration may decide to exclude an applicant from the selection procedure at any time, including after the interview.

Article 6 – Award Committee

The Award Committee is appointed by a measure issued by the Administration and is composed of three members chosen from among professors or researchers, excluding junior fixed-term researchers, or members with an equivalent role if they come from foreign universities or research institutions, chosen by the Department that proposed the activation of the contract and, as a rule, are classified in the subject area or, subordinately, in the subject group in which the procedure has been advertised.



In order to ensure equal opportunities between men and women for access to work and treatment at work as provided for in Article 57 of Legislative Decree 165/2001, as a rule, the members are representatives of each gender.

The Committee shall appoint from among its members a chairperson and a secretary to take the minutes.

Notice of the Committee's appointment is published on the website of the Alma Mater Studiorum – Università di Bologna.

Article 7 – Selection procedures

Applicants are assessed by means of a comparative procedure based on qualifications and interviews and is aimed at verifying the applicants' possession of a scientific-professional curriculum suitable for the performance of the activity that is the subject of the call for applications.

The final score is the sum of the score obtained in the preliminary comparative assessment and the score obtained in the interview. A maximum of 100 points in total may be awarded, of which a maximum of 60 points for the preliminary comparative assessment and a maximum of 40 points for the assessment of the interview.

The Committee conducts the preliminary comparative assessment on the basis of the following criteria:

- a) the consistency of the publications as well as their originality, innovativeness, methodological rigour, relevance and congruence with the subject of the call for applications. The Committee will only take into consideration publications or texts accepted for publication in accordance with the applicable regulations, as well as any essays included in collective works and articles published in journals in paper or digital format with the exclusion of internal notes or departmental reports: up to a maximum of 25 points;
- (b) scientific research activity with reference to research carried out in the three years prior to the publication of the call for applications, (e.g.: scholarships and assignments/contracts for research activities, receipt of prizes and awards for research activities, etc.), up to a maximum of 20 points;
- c) other previously performed activities (e.g. ownership of patents, teaching activities, participation as a speaker at conferences and congresses, etc.) that are duly certified up to a maximum of 15 points.

The Committee proceeds collectively towards expressing a reasoned assessment and the attribution of the relative score, for each individual assessment criterion.

Following the preliminary assessment, applicants with a score of at least 40/60 shall be admitted to the interview.



The interview shall be conducted in public and online, using a video conference call on the Teams platform. The workstation through which the tests will be held must be equipped with a webcam – essential for recognition purposes – a microphone and headphones and/or speakers.

Notice of the date and time will be published with at least 15 days' notice on the University website on the following page: <https://bandi.unibo.it/ricerca/incarichi-post-doc>.

The publication of the notice on the University's website serves as notification for all participants in the selection process, without any further communication being required.

Notice of the publication and of the admission to the interview will be sent to the email address indicated by the applicants in their application.

Failure to make the online connection to the interview at the scheduled date and time, or late connection thereto, even if due to force majeure, will be considered as a renunciation of participation in the selection process.

When the applicants are called to take part, the scores obtained in the preliminary assessment will be made known to them.

The Alma Mater Studiorum - Università di Bologna accepts no liability with regard to the email not being received or read. Candidates, however, are responsible for keeping themselves informed by checking the call for applications website for information on the selection.

Applicants must attend the interview with an appropriate identification document.

Those with citizenship of an EU country must show their passport or an identity document issued by their country of origin. Those from non-EU countries must show their passport.

The interview is aimed at assessing the candidates' scientific maturity and preparation, with particular reference to the activities that are the subject of the selection.

The discussion will take place in Italian, in addition, adequate knowledge of the following language shall be tested: English.

The interview is deemed to have been passed with a minimum score of 28/40. For those who have passed both tests, the final score will be the sum of the scores obtained in the assessment of qualifications and in the interview.

Article 8 – Formulation of the ranking list

Once the interviews have been completed, the Committee shall draw up a ranking list, taking into account the overall marks awarded to the candidates.

Where there is a tie, preference will be given to the younger candidate.

The ranking list shall be approved by a measure issued by the Administration and will be published in the online Notice Board of the Alma Mater Studiorum – Università di Bologna and will be valid for 6 months.



From the date of publication of that notice, the time limit for appeals begins to run, if the measure has not otherwise been made known.

Article 9 – Entry into service

The successful applicant will be invited to enter into an individual contract for the purpose of establishing a fixed-term employment relationship, which must be signed within the deadline set by the Administration.

The employment relationship is governed by the individual contract, by the Regulations governing post-doc research contracts pursuant to Article 22-bis of Law 240/2010, by legal provisions and by EU regulations.

The individual contract shall specify the grounds for termination of the contract and the periods of notice. The cancellation of the recruitment procedure, on which the contract is based, is in any case a condition of termination of the contract, without any obligation to give notice.

The probationary period lasts one day of actual work for every fifteen calendar days, starting from the date the employment relationship begins. At the end of this period, unless the employment contract has been terminated by one of the parties, the employee's service will be confirmed and the entire period worked from the start of the contract will be counted for seniority purposes.

Employees of public administrations, other than those referred to in Article 22(1) of Law 240/2010, are granted leave of absence for the entire duration of their contract, without social security allowances or contributions, or are placed in a position of secondment if such a position is provided for by the regulations to which they belong, likewise without social security allowances or contributions.

Article 10 – Documents required for the purposes of taking part in the public selection and for entry into service

In order to take part in the public selection, documents, publications and titles in English, French, German and Spanish can be produced in the original language.

Documents and titles drawn up in other languages must be submitted in the original language with an Italian or English translation attached. The translation must be certified as conforming to the foreign text by the competent diplomatic or consular mission or by an official translator. As regards the documentation required for entry into service, deeds and documents drawn up in a foreign language must be accompanied by an Italian translation, certified as conforming to the foreign text by the competent diplomatic or consular mission or by an official translator.



Article 11 – Rights and obligations

Without prejudice to the rights and obligations provided by the Italian Civil Code for employment relationships, by entering into the employment contract, the contracting party assumes the right and obligation to perform the activity referred to in Article 2.

The contracting party shall perform the agreed activities in compliance with the hierarchical obligation existing in the entity to which he or she belongs, with the obligation to coordinate his or her activity in line with the envisaged research activity.

The contracting party shall carry out the requested activities personally, without the use of any substitutes.

The statutory regulations on maternity protection, accidents and illness apply to the post-doc researcher.

The post-doc researcher undertakes to comply with the provisions of the Regulations governing post-doc research contracts, the Regulations governing industrial and intellectual property rights, the Regulations containing the code of conduct for preventing and combating discrimination and moral and sexual harassment and the rules on trusted advisor(s), and in the University's Code of Ethics and Conduct.

The post-doc researcher also agrees to fulfill all training requirements related to occupational health and safety, ensuring that they complete the relevant training courses before commencing any work activities, as well as those related to personal data protection, upon starting work and, in any case, no later than 60 days thereafter.

Article 12 – Processing of personal data and Procedure Supervisor

Information on the processing of personal data provided in order to participate in the selection procedure is available at www.unibo.it/privacy (Privacy policy for participants in competitions and selections announced by the University).

The administrative procedure supervisor (RPA) is Michele Menna.

For any further information on the competition procedure, one can contact the APOS - PERSONNEL DIVISION - UNIT SELECTION AND CONTRACTS OFFICE FOR THE SELECTION OF RESEARCH CONTRACTS, POSTDOC POSITIONS, AND COLLABORATORS.

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Article 13 – Regulatory framework

The legislation under which this call for applications is issued is as follows:

- Law no. 240/2010 and, in particular, Article 22-bis;
- Italian Legislative Decree no. 165 dated 30 March 2001;
- Presidential Decree no. 445 of 28 December 2000;

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- Presidential Decree no. 487 of 9 May 1994;
- Law no. 241 of 7 August 1990;
- Ministerial Decree 592 of 6 August 2025;
- Regulations governing post-doc research contracts pursuant to Article 22-bis of Law 240/2010¹, issued by Rector's Decree no. 1620/2025 prot. no. 352687 of 14 October 2025.

Head of the APOS - Personnel Division
Michele Menna
Digitally signed

¹ [Link to the University Legislation Documentation Site.](#)