





Call for the selection of 5 research contracts

The University of Pisa announces public selection procedures for the award of 5 research contracts in accordance with Article 22 of Law 240/2010 and D.D. MUR no. 47 "Decree for the recruitment of international post-doctoral researchers" of 20 February 2025, in line with the PNRR - Mission 4 "Education and Research" - Component 2 "From Research to Enterprise" - Investment 1.2 "Funding of projects submitted by young researchers" - funded by the European Union - NextGenerationEU, as set out in Annex A) to this call, in which the information sheets indicating the reference structures, the description of the research projects, the specific responsibility within the project and the functions to be performed, as well as the scientific disciplinary area and information on the interview, are provided.

Deadline for submitting the application: 05 May 2025 at 1.00 p.m.

Contract duration: 24 months

All-inclusive annual administrative gross amount: €54.500,00

Admission requirements:

- A PhD or medical specialisation degree
- Completion of the doctoral course, with a minimum of three months of training and research spent abroad.
- Be a "young researcher" as defined in Article 1, paragraph 8, of Director's Decree no. 47 of 20 February 2025, i.e. "a researcher of any nationality who, for various reasons, has not yet gained consolidated experience in managing research groups and does not have a secure career in research.

This definition includes all researchers who, as of 20 February 2025, are 40 years of age or younger. For those over 40 and up to 45 years of age, it includes those who have completed a PhD no more than 7 years ago and who are in one or more of the following conditions:

- \circ They need to gain initial experience as a fund manager and/or research activity manager;
- $\circ~$ They need to gain experience in leading and managing a national and/or international research team;
- They do not to have, or have not had before winning the European grant, a Full Time Equivalent (FTE) permanent contract as a researcher and/or full professor".

Those in their third year of a PhD programme are also eligible to apply, provided they are expected to obtain their degree by the strict deadline of 14 May 2025, in order to sign the contract by 15 May 2025 at the latest, as specified in D.D. no. 47/2025.

If candidates have completed their studies abroad, the requirement of at least 3 months of training and research abroad is considered met.

Documents to be attached:

The application must include:

a) A research development project related to the research project specified for each selection in Annex A);

b) A comprehensive scientific-professional curriculum containing all the necessary elements for assessing prior research activities and any relevant work experiences, in connection with the content of the research project under consideration (specifically indicating: date/duration, place of completion, etc.);

c) For individuals with a foreign doctoral degree, an equivalence decree or determination; if the candidate already holds one, a copy of the foreign doctoral degree or a suitable certification issued by the foreign institution, confirming the components, duration, and activities of the doctoral programme undertaken to achieve the doctoral degree;

d) Additional documents that the candidate deems useful for the selection purposes;

e) Publications that the candidate considers relevant for the selection, considering the maximum number set for each selection, as indicated in Annex A), with a list signed by the candidate;

f) Photocopies of the tax code and a current valid identification document.

Candidates must submit the publications they intend to present exclusively in PDF format through the dedicated section of the online procedure.

Each publication shall not exceed 30 megabytes.

Publications not enclosed with the application will not be considered by the Selection Board. Lists with links to texts are not allowed as a replacement for publications.

Applications

Applications must be submitted online only, using the following link: <u>https://pica.cineca.it/unipi/</u>

or shall be invalid. An e-mail inbox is required to login and complete the application.

Candidates can login into PICA platform using the digital identifier SPID (Sistema Pubblico d'Identità Digitale - Public Digital Identity System), selecting the University of Pisa among the available Institutions. If candidates have no SPID, they can request it according to the procedures set forth on the website www.spid.gov.it.

Candidates can also login with the credentials issued directly by PICA platform (please note: in order to apply online, the system requires an e-mail inbox for self-registration), with their LOGINMIUR, REPRISE or REFEREES account.

Applicants should provide all the required data and upload all documents in PDF format.

The system allows saving an application draft within the application deadline, recording the online application's date and sending a receipt with an automatic reply. After the deadline, the system will not allow login nor application submission.

Each application will be assigned a unique identification number to be referred to in all subsequent communications, along with the selection code provided by the application form.

Under penalty of exclusion, the application shall be valid only if including all the required data, the copy of a valid ID and:

- if submitted without accessing with digital identifier SPID, the applicant's signature is compulsorily required;

- If submitted by accessing with digital identifier SPID, the application will be automatically processed by the system and the applicant's signature is not required.

Applicants undertake to promptly communicate in writing any variations of what declared in the application form.

The communication shall be edited in PDF format, signed and forwarded to the Rector of the University of Pisa by the Italian certified e-mail system address (P.E.C. Posta Elettronica Certificata): protocollo@pec.unipi.it or emailed to concorsi_contratti@unipi.it , within the application's submission deadline.

An applicant's valid identification document shall be annexed.

For further information on application submission, please refer to <u>concorsi_contratti@unipi.it</u>.

For technical problems support only, please click on the bottom link available at <u>https://pica.cineca.it/unipi</u>.

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Selection procedure:

For each selection under Annex A) the Director of the Department appoints a Selection Board consisting of the head of the research project and two other members.

Candidates are assessed comparatively on the basis of the following elements:

a) Quality, originality and innovativeness of the research development project, with reference to the research project under consideration;

b) Relevance and significance of the research activities previously carried out, as well as any work experience, in relation to the contents of the research project subject to the selection, in addition to documented qualifications (such as, for example, grade point average, postgraduate diplomas, any contracts, scholarships, conference presentations, and other documented qualifications);

c) Quality, originality and innovativeness of the attached publications, as well as their relevance to the research project under consideration;

d) An interview aimed at assessing the knowledge of the basic subjects of the scientific disciplinary sector to which the subject of the research project belongs, the suitability for carrying out the research activity under the contract and for the implementation of the research project, as well as the evaluation of knowledge of the English language and/or other languages relevant to the research (as reported in the relevant Annex A). During the interview, the commission also assesses the knowledge of the Italian language for foreign candidates.

The Selection Board has 100 points available for the comparative evaluation of the candidates: 60 points can be allocated for the criteria mentioned above under a), b) and c), and 40 points for the interview.

The Selection Board may stipulate a minimum score below which eligibility cannot be awarded.

Candidates are summoned for the interview on the day and time specified in the information sheet for each procedure.

Failure to attend an interview by a candidate is considered an explicit indication of their intention to withdraw from the selection process.

Applicants for this selection are required to consult the University website at https://bandi.unipi.it/public/Bandi?type=COR (on the selection procedure page) during the two days preceding the date set for the interview.

On the University website (<u>https://bandi.unipi.it/public/Bandi?type=COR</u>), in the section dedicated to the procedure, the following will be published:

- Assessment scores for criteria a), b) and c);
- The list of candidates admitted to the interview;

• Practical instructions for carrying out the interview and/or any details should the interview be rescheduled;

• The procedure approval decree and the merit ranking that takes into account the scores achieved by the candidates.

The research contracts referred to in this call for proposals will be awarded no later than 15 May 2025, as provided for by Director's Decree no. 47 of 20 February 2025, "Decree for the recruitment of international post-doctoral researchers" - Mission 4 "Education and Research" - Component 2 "From Research to Enterprise" - Investment 1.2 "Funding of projects submitted by young researchers" - funded by the European Union - NextGenerationEU".

The prospective doctoral or postgraduate student may only enter into a contract after obtaining a doctoral or postgraduate medical degree. In the event that the PhD candidate or postgraduate student fails to obtain the degree by the strict deadline of 14 May 2025, they will lose the right to be awarded the research contract.

Please note that the English version is given as a matter of courtesy, for the only purpose of information. It cannot be legally used in the event of a dispute or a claim arising from the interpretation of this translation and concerning the contents, a possible uncertainty, contradiction, or discrepancy. Should this occur, the Italian version of the call should prevail as the only valid. For full Italian text see: https://bandi.unipi.it/public/Bandi?type=COR (on the selection procedure page).

No. of positions 1

Department of Political Sciences

SSD GSPS-06/A "Sociology of Cultural and Communication Processes"

CUP Project I53C25000430006

Head of the Research Project Prof.ssa Roberta Bracciale

Research Project:

Information Disorder, Silly Citizenship, Digital Skills.

The widespread access to online content—often lacking clear sources—is reshaping the dynamics of political and social participation, fostering the emergence of informal and seemingly playful communicative practices, encapsulated in the concept of silly citizenship. Memes and viral content become tools for enhancing civic expression, but also serve as vehicles for disinformation and propaganda, leveraging irony to accelerate their circulation within algorithmically-driven environments.

Within this context, digital skills assume a crucial role, not merely as technical competencies but as critical and interpretive capacities essential for navigating the digital information ecosystem.

This project investigates the relationship between information disorder, silly citizenship, and digital skills, analyzing the impact of online communicative practices on the perception of disinformation. Through a multidisciplinary approach—grounded in both qualitative and quantitative data—the study examines the strategies adopted by citizens, particularly comparing younger generations and digital immigrants, in coping with the infodemic.

The objective is to provide analytical tools to strengthen digital literacies and counteract information disorders, in alignment with the priorities of the National Recovery and Resilience Plan (PNRR) concerning digital transition and civic education.

Specific responsibilities within the project and functions to be performed:

The position requires a thorough knowledge of contemporary socio-cultural dynamics, with particular attention to the interconnections among different social actors and the evolving nature of the public sphere within the framework of the Platform Society (e.g., the impact of algorithmic systems).

A consolidated experience in the collection and analysis of big data from digital sources and social media is also essential, with a methodological approach grounded in computational social sciences and digital methods.

Maximum number of publications that candidates may submit, including the doctoral thesis, if submitted: 5

Language skills: English language

Date, time and mode of the interview:

12 May 2025 10.00 in telematic mode

No. of positions 1

Department of Law

SSD GIUR-11/B "Comparative Public Law"

CUP Project I53C25000480006

Head of the Research Project Prof.ssa Angioletta Sperti

Research Project:

The Amicus Curiae and Its Role Before Supreme Courts in Common Law Systems and Supranational Courts.

The research activity will focus on the topics indicated in the description of the scientific-disciplinary sector GIUR-11/B, with particular reference to macro-comparative studies between systems, legal orders, and institutions of public law. The subject of investigation is the interaction of civil society as amicus curiae with supreme, constitutional, and supranational courts, starting from the U.S. model, where the institution is deeply rooted.

On a horizontal level, the research will concern a comparative study of the amicus curiae in other common law systems (e.g., Canada) and in mixed jurisdictions (e.g., South Africa). On a multilevel dimension, the research will focus on the use of the institution before European supranational courts.

Within the tasks to be performed, particular importance will be given to an in-depth study on the research topics in common law common law and the undertaking of a research period in a common law country. An excellent knowledge of English is also required, to be assessed during the interview and based on participation in internationally significant conferences and/or the production of publications in English.

Specific responsibilities within the project and functions to be performed:

The research results will be disseminated and presented at national and international seminars and conferences. They will also be published in a monograph or in at least three peer-reviewed journal articles at the national and international level. Furthermore, the project includes the participation of the researcher, either as a PI or as a contributing member, in at least one European or national research project aimed at funding research and/or training activities.

Maximum number of publications that candidates may submit, including the doctoral thesis, if submitted: 8

Language skills: English language

Date, time and mode of the interview:

12 May 2025 12.00 noon in telematic mode

No. of positions 1

Department of Economics and Management

SSD ECON-06 /A "Business Administration, Accounting & Performance Measurement"

CUP Project I53C25000450006

Head of the Research Project Prof. Stefano Garzella

Research Project:

Continuous innovation: how companies balance open innovation, internal processes and markets responsiveness.

In a context of rapid technological and market development, companies must continuously innovate. Traditional innovation management patterns, focused on in-house research or partnerships, are no longer adequate for dealing with the dynamism of current markets.

The research project aims to identify the external and internal drivers of entrepreneurial innovation, also considering the impact of technological and digital innovation. In this perspective, the evolution of companies' dynamic capabilities requires constant attention to market and technological changes.

The aim is to define the key-factors that may result in competitive advantages for companies within a scenario in which open innovation, the value of ideas, the new intrapreneurship activities and the companies' ability to respond to signals of technological advancement (e.g. A.I., Machine learning, Big data) converge. The search for a systemic approach to innovation, integrating strategic, entrepreneurial, managerial and performance drivers, is the key factor to pursue a sustainable competitive advantage, allowing companies to move flexibly across different sources of innovation.

Specific responsibilities within the project and functions to be performed:

The functions to be carried out include:

First year

- Literature review and definition of the state of the art related to the project topics.
- Development of a framework to systematize the literature analysis.

Second year

- Collection of empirical evidence.
- Analysis of empirical evidence.

- Reporting of research findings.

Maximum number of publications that candidates may submit, including the doctoral thesis, if submitted: 8

Language skills: English language

Date, time and mode of the interview: 12 May 2025 10.30 in telematic mode

No. of positions 1

Department of Geosciences

SSD GEOS-02/A "Paleontology and Paleoecology"

CUP Project I53C25000460006

Head of the Research Project Prof. Giovanni Bianucci

Research Project:

Reconstructing the environmental evolution of the Humboldt Current System through more than 40 megayears of global change—from the times of Perucetus to the present and beyond.

This project aims to provide new integrative insights into the processes that control the stability and resilience of marine ecosystems in response to climate change, with emphasis on the analogues of the present-day global warming and ocean acidification such as the Middle Eocene and Middle Miocene climatic optima, which in turn will have implications for the conservation of modern ocean communities and the sustainable management of fisheries. Its focus will be on the Humboldt Current System (HCS), a global biodiversity hotspot and the most productive marine ecosystem worldwide, whose deep-time evolution is witnessed by a rich rock and fossil record reflecting major climatic and oceanographic transitions. Based on the Pisco Basin (Peru), this project will result in a comprehensive paleoenvironmental reconstruction of the HCS's past 40+ Myr, from the greenhouse days of the heavyweight early whale Perucetus colossus to the present, to unravel how global change has influenced the ecological structures over time. This will be possible through ad hoc fieldwork, micropaleontological investigations of biogenic sediments, radioisotope analyses of tephra and taphonomic studies of selected fossils that will unveil the paths and patterns of biodiversity and productivity against a solid chronological background.

Specific responsibilities within the project and functions to be performed:

For the functions to be performed, knowledge of stratigraphy, micropaleontology, paleoecology, paleoclimatology and taphonomy of marine vertebrates is important, with proven experience of field and laboratory work in the preparation of samples and performance of biostratigraphic, tephrostratigraphic, taphonomic and geochemical analyses, using techniques such as electron microscopy, spectroscopy and mass spectrometry.

Maximum number of publications that candidates may submit, including the doctoral thesis, if submitted: 8

Language skills: English language

Date, time and mode of the interview: 12 May 2025 10.00 in telematic mode

No. of positions 1

Department of Pharmacy

SSD CHEM-01/A "Analytical Chemistry"

CUP Project I53C25000470006

Head of the Research Project Prof.ssa Maria Minunni

Research Project:

Development of innovative bioanalytical systems.

Development of affinity-based bioanalytical systems using biomimetic receptors, such as sustainable, bioinspired molecularly imprinted polymers (MIPs) in the form of thin films or nanostructures, synthesized from naturally occurring monomers such as neurotransmitters and polyphenols. These systems are intended for the development of label-free optical plasmonic (bio)sensors based on localized surface plasmon resonance (LSPR) for the detection of diagnostic biomarkers, with applications in liquid biopsy (e.g., blood analysis). The resulting MIPs will be characterized in terms of affinity (KD), composition, and morphology, and integrated into sensors with optical detection.

MIPs, often referred to as "plastic antibodies," are considered a promising alternative to natural antibodies, in light of the recommendations issued in 2020 by the EU Reference Laboratory for alternatives to animal testing (EURL ECVAM), which promoted the use of non-animal-derived antibodies. The use of naturally derived monomers enables aqueous-phase synthesis, making these MIPs more sustainable compared to those based on acrylamide. Nanostructured MIPs (nanoMIPs) will also be evaluated for their stability and cytotoxicity on cell lines, with potential applications in therapeutic contexts.

Specific responsibilities and tasks within the project:

The tasks to be carried out require expertise in separation techniques (e.g., HPLC) as well as spectroscopic methods, aimed at the development of innovative, user-friendly, and cost-effective analytical methods. Additionally, skills and competencies in chemical synthesis are essential for the development of synthetic biomimetic receptors, specifically molecularly imprinted polymers (MIPs), to be used as affinity recognition elements.

Maximum number of publications that candidates may submit, including the doctoral thesis, if submitted: 8

Language skills: English language

Date, time and mode of the interview: 12 May 2025 16.30 in telematic mode