



UNIVERSITÀ DI PISA

Excerpt from the Rector's decree n. 2108/2023

**Call for the selection of n. 12 Senior Research Fellows**  
(Under the Italian Law 240/2010 article 24, subparagraph 3, point b)

The University of Pisa announces a call for 12 Senior Fixed-Term Research Fellows for the Departments and the Academic Fields or Academic Disciplines as listed in Annex A.

The fixed-term contract is to carry out research activities, teaching, integrative teaching activities and services for students, for a 350 hours commitment, on a full-time basis.

The Senior Research Fellow is required to perform lectures for a minimum of 48 up to a maximum of 96 hours per academic year, allocated as an institutional assignment for Bachelor's and Master's degree programs, Specialization Schools and PhD programs.

Contract duration: 3 years

**Deadline for application: 15<sup>th</sup> of December 2023, 1 p.m.**

**Admission requirements:**

PhD or equivalent academic qualification awarded in Italy or abroad and recognized as eligible for admission.

As for a qualification awarded abroad, equivalency or comparability documentation must be provided as stated under:

D.Lgs.165/2001, article 38:

[http://www.funzionepubblica.gov.it/sites/funzionepubblica.gov.it/files/modulo\\_equivalenza\\_Titoli\\_Accademici.pdf](http://www.funzionepubblica.gov.it/sites/funzionepubblica.gov.it/files/modulo_equivalenza_Titoli_Accademici.pdf)

Or under:

D.P.R. 382/1980, article 74:

<https://www.unipi.it/index.php/titoli-accademici-esteri>

As for an equivalent or comparable academic qualification, the candidate shall be admitted within the application's deadline and shall provide the qualification equivalency or comparability before the signing of the contract.

**Candidates are required to declare what follows:**

1. To enjoy the full rights of citizenship in their home State
2. Not to have been convicted or found guilty of any criminal offence; in the event of any conviction, it is mandatory to provide the details of the relevant judgments and any pending criminal proceedings;
3. Not to have been dismissed or dispensed from employment by a Public Administration for persistent unsatisfactory performance; not to have been lapsed from State employment, in compliance with art. 127, first paragraph, point d) of the Consolidation Act of Provisions concerning the State civil servants approved by Presidential Decree no. 3 of 10 January 1957;

4. to be registered on the electoral roll.

**Required qualifications:**

to have been employed as a Fixed-Term Research Fellow for a three- year period already completed by the application's deadline; (Under the Italian Law 240/2010, article 24, subparagraph 3, point b)

or

to be a researcher, a scholar or a scientist holding the Italian National Certification for Full or Associate Professor (Under the Italian Law 240/2010 article 16);

or

to hold a Postgraduate School qualification for the relevant medical fields;

or

to have had at least a three-year period of contracts, even when not consecutive and already completed by the application's deadline, performed with:

- research grants (under the Italian Law 449/97, art 51, subparagraph 6 or the Italian Law 240/2010 article 22 or comparable academic contracts abroad)
- post PhD grants (under the Italian Law 398/1989, article 4 or comparable academic contracts abroad)
- contracts concluded in compliance with the Law no. 230 of 4 November 2005, art. 1, paragraph 14.

Please note: the above-mentioned three-year period could aggregate: Fixed-Term Research Fellowship, post PhD research grants and fellowship in foreign Universities (under DM 662/2016).

**No admission to this selection for:**

- Professors or Research Fellows with permanent position at the university, currently employed or currently retired.
- Fixed-term Research Fellowship or Post PhD research grants at the University of Pisa or other Italian universities, either public, private or online, and other public institutions (Under the Italian Law n. 240/2010, articles 22 and 24) for a period that, totaled over this contract, would exceed 12 years altogether, even when not consecutive. As for the duration of the working period mentioned above, parental leave or medical leave, are excluded (under the existing legislation).

**Applications:**

Applications are to be submitted online only, using the following link: <https://pica.cineca.it/unipi/ric2023b9/> or shall be invalid. It is necessary to have an email address to login and complete the application.

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

The system allows saving a draft of the application within the application deadline. The system will register the online application date and send a receipt with an automatic e-mail reply. After deadline, the system will not allow login nor application submission.

In order to be valid, application shall include all the required data, applicant's signature and a valid identification document.

Each application will be assigned a tracking number to be cited in all subsequent communications, together with the selection code provided by the application form.

Applicants undertake to 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 University of Pisa Rector via the Italian certified e-mail system address (P.E.C. Posta Elettronica Certificata): [protocollo@pec.unipi.it](mailto:protocollo@pec.unipi.it) or via e-mail at: [concorsi@adm.unipi.it](mailto:concorsi@adm.unipi.it). Applicant's valid identification document shall be annexed.

For further information on application submission, please refer to [concorsi@adm.unipi.it](mailto:concorsi@adm.unipi.it)

For any IT malfunctioning please refer to [unipi@cineca.it](mailto:unipi@cineca.it).

Applications shall be completed with the following annexes:

1. A self-attested Curriculum of the personal didactics, teaching and scientific activities, dated and signed;
2. The Publications applicant considers eligible for this selection with the corresponding list dated and signed;
3. A complete list of all Publications, dated and signed;
4. A copy of the fiscal code (if applicable) and identification card/passport, dated and signed;

All publications should not exceed 30 megabyte and are to be submitted in PDF format only, using the specific section of the application form.

#### **Selection procedure:**

A Rector's Decree will appoint the Selection Committee, consisting of three members.

The selection will be made according to a preliminary assessment of the candidates with an accurate and evidenced analytic evaluation of the Curriculum, of qualifications and scientific results, including PhD thesis.

After the preliminary assessment, the candidates that have comparatively proven to be the most meritorious, will be admitted to an open interview; they will represent between 10 and 20 % of the total and will be not less than six. The interview will concern applicant's qualifications and scientific results. In the event the number of applicants is six or less, all candidates are admitted.

Information about date, time, list of candidates admitted, and the conditions of the assessment interview will be published on the University website at the following link: <https://bandi.unipi.it/public/Bandi?type=RIC> , in the specific section reserved to the selection, 45 days after the deadline for the submission of the applications (with a twenty days' notice guarantee).

The publication on the University website is to be regarded as convocation notice for the participants to the selection, who must show the day and time indicated; no further communications will be published. The failed attendance to the interview will be considered as a voluntary waiver to the selection.

Selection Committee meetings for purposes other than qualifications and publications assessment may be held remotely, in whole or in part, using a video meeting platform, in compliance with the Regulation "Regolamento temporaneo per lo svolgimento delle sedute collegiali in modalità telematica" art. no. 2, 3 and 4, referred to in the Rectoral Decree no. 491/2020 of 6 March 2020 and subsequent amendments, as well as with the Rectoral Decree no. 1099/2020 of 7 August 2020, art. 3.

Qualifications and publications assessment will be held "in-presence", pursuant to the Rectoral Decree no. 1099/2020 of 7 August 2020, art. 1, and in compliance with the "Safety Protocol against Covid-19 Spread.

Guidelines for in-presence Selection Procedures”, issued by the Rectoral Decree no. 1011/2020 of 21 July 2020.

At least one member of the Selection Committee shall be present during the qualifications and publications assessment; the other Committee members can attend the selection procedure either “in-presence” or remotely, in compliance with the Regulation “Regolamento temporaneo per lo svolgimento delle sedute collegiali in modalità telematica”.

In the event of “in-presence” selection procedures also attended remotely by one or more Committee member, it shall be specified that the session is held “in-presence”, allowing however one or more Committee member to attend remotely and indicating the possible operating procedures for attendance; the selection minutes must include both the names of the members “in presence” and remotely connected, along with the operating platform used.

In order to ensure a limited access to the premises where the qualifications and publications assessment is carried out, auditors shall be allowed in (in compliance with the aforementioned Safety Protocol) only upon written request to be emailed at least two days before the selection procedure to [concorsi\\_ricercatori@unipi.it](mailto:concorsi_ricercatori@unipi.it). Live Streaming will be provided at <https://www.unipi.it/index.php/concorsi-gare-e-bandi> (see the relevant section) to guarantee the publicity of the qualifications and publications assessment.

Upon the Selection Committee approval, candidates living abroad and therefore unable to attend the “in-presence” interview at the University of Pisa, will be interviewed via web, prior their identification by approved international universities or research centers. The Selection Committee is appointed to assure the duly examination of the candidates and shall collect their ID copy.

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 shall prevail as the only valid. For full Italian text see: <https://bandi.unipi.it/public/Bandi?type=RIC>

**Selection code A1**

**Department of Economics and Management**

Academic Recruitment Field 3/D4 Mathematical methods of economics, finance and actuarial sciences

Academic Discipline SECS-S/06 Mathematical methods of economics, finance and actuarial sciences

Nr of available positions: 1

Focus of research

Mathematical and computational methods for management science, economics, social sciences, decision theory, risk theory and finance.

Scientific productivity

Papers published in international journals with high impact factor and high evaluation in VQR and ANVUR.

Head office

Department of Economics and Management

Specific teaching activity of the contract

Courses mainly related to mathematics (SSD SECS-S/06) offered by the Department of Economics and Management.

Candidates may present a maximum number of 12 scientific publications.

Candidates will be required to demonstrate an adequate knowledge of English language.

## Selection code A2

### **Department of Pharmacy**

Academic Recruitment Field 05/D1 Physiology

Academic Discipline BIO/09 Physiology

Nr of available positions: 1

### Focus of research

The scientific activity will cover topics specific to the disciplinary scientific field BIO/09 (Physiology) including the study of homeostatic responses of an organism at the cellular and tissue level, in the context of changes in the surrounding environment. In particular, it will focus on the study of the electrophysiological and functional mechanisms of communication systems in biological membranes as well as the specialized functions of individual cells.

### Scientific productivity

Gain full scientific independence, possibly through the supervision of BSc, and MSc theses. Acceptance during the three year period of an appropriate number of papers on international journals coherent with the examination sector. Dissemination of the obtained results in national and international meetings, and on the web.

### Head office

Department of Pharmacy

### Specific teaching activity of the contract

Teaching courses of BSc, and MSc of the Department Pharmacy and other Departments of the University of Pisa in which the SSD (disciplinary scientific sector BIO/09) skills are requested.

Candidates may present a maximum number of 14 scientific publications.

Candidates will be required to demonstrate an adequate knowledge of English language.

## Selection code A3

### **Department of Pharmacy**

Academic Recruitment Field 03/D1 Medicinal, toxicological and nutritional chemistry and applied technologies

Academic Discipline CHIM/08 Pharmaceutical chemistry

Nr of available positions: 1

### Focus of research

The study of synthetic products with biological activity, developing the design, the synthesis, the study of the properties, of the action mechanisms at the molecular level, and the relationships between chemical structure and biological activity.

### Scientific productivity

Gain full scientific independence, possibly through the supervision of BSc, and MSc theses. Acceptance during the three year period of an appropriate number of papers on international journals coherent with the examination sector. Dissemination of the obtained results in national and international meetings, and on the web.

### Head office

Department of Pharmacy

### Specific teaching activity of the contract

Teaching courses of BSc, and MSc of the Department Pharmacy and other Departments of the University of Pisa in which the SSD (disciplinary scientific sector CHIM/08) skills are requested.

Candidates may present a maximum number of 15 scientific publications.

Candidates will be required to demonstrate an adequate knowledge of English language.

## Selection code A4

### Department of Civil and Industrial Engineering

Academic Recruitment Field 09/C2 Thermal sciences, energy technology, building physics and nuclear engineering

Academic Discipline ING-IND/19 Nuclear power plants

Nr of available positions: 1

### Focus of research

The objective of the research is the theoretical and experimental study of safety systems and components of nuclear fusion and/or fission plants from the thermohydraulic and thermofluidynamic points of view. In particular, the research will cover fourth-generation fission reactors and fusion nuclear installations.

The research will be carried out using the experimental equipment available at the Department of Civil and Industrial Engineering, System Thermohydraulic and CFDs codes in collaboration with Universities and national and international research centers.

### Scientific productivity

The objectives of scientific productivity will be:

- design, implementation and coordination of research activities in the field of fission and/or fusion nuclear reactors, developed in national and international environments in collaboration with Italian and foreign institutions;
- participation in European, national and international research projects, and technology transfer
- improved reliability and safety of fission and/or fusion nuclear installations;

publication of results in indexed international scientific journals, and participation in national and international conferences

### Head office

Department of Civil and Industrial Engineering

### Specific teaching activity of the contract

Teaching, tutoring of students, supervising of Bachelor's, Master's Degree and PhD theses, and other institutional activities for a total of 350 hours per year, including 90 hours of frontal teaching (lectures) and/or teaching support for the courses relevant to the scientific field of 'Nuclear Plants'.

Candidates may present a maximum number of 12 scientific publications.

Candidates will be required to demonstrate an adequate knowledge of English language.



## Selection code A5

### **Department of Information Engineering**

Academic Recruitment Field 09/D1 Materials science and technology

Academic Discipline ING-IND/22 Materials science and technology

Nr of available positions: 1

### Focus of research

The selected candidate will have to carry out scientific research at an international level, both basic and oriented towards the applications of Civil and Industrial Engineering. The research activity, which will take place within the specific themes of the SSD ING-IND/22 sector, will focus on the study of the relationship between the structure of materials and their properties, on the selection, production and evaluation of thermo-mechanical and fracture properties of polymer and ceramic matrix composite materials. In particular, materials from renewable sources will be investigated and developed, by evaluating their recyclability, biodegradability and environmental sustainability of the materials. The research also includes the development, application and, where necessary, modification of analytical models for the prediction of the main mechanical and interface properties.

### Scientific productivity

The scientific activity foresees the participation and the management and scientific coordination of research projects and collaboration at national and international level, funded by public or private bodies, the preparation of scientific papers for publication on international journals or for presentation during national and international Conferences.

### Head office

Department of Information Engineering

### Specific teaching activity of the contract

The teaching commitment will consist of bachelor and master courses in the SSD ING-IND/22 of the School of Engineering of Pisa, up to the completion of the teaching tasks as established by the University regulations; it may also include teaching in doctoral and post-graduate specialization courses.

Candidates may present a maximum number of 12 scientific publications.

Candidates will be required to demonstrate an adequate knowledge of English language.

## Selection code A6

### **Department of Energy, Systems, Territory, and Construction Engineering**

Academic Recruitment Field 09/C1 Fluid machinery, energy systems and power generation

Academic Discipline ING-IND/09 Energy systems and power generation

Nr of available positions: 1

#### Focus of research

Research activity will be focused on the topics included in the declaration of the scientific and didactic sector ING-IND/09 with particular attention to methods and technologies for the research and development of components and distributed power and thermal systems with activities of design, control and energy, fluid dynamic and environmental analysis of components and energy systems with an approach based on numerical methods and experimental measurements.

#### Scientific productivity

The aim of scientific production is writing scientific papers in international scientific journals, participation at national and international congresses and conferences, participation in projects funded by the EU, the Italian national and regional governments, other national and international public and private institutions and participation at projects of technology transfer. Improvement of knowledge about energy systems with the aim of contributing to the technical and engineering development.

#### Head office

Department of Energy, Systems, Territory, and Construction Engineering

#### Specific teaching activity of the contract

The researcher will do didactic activities, including face-to-face lessons, in the courses and modules classified in the disciplinary sector of Systems for Energy and Environment for the programs of study for the achievement of first and second level degrees, that foresee them, and PhD studies. The researcher will have to contribute to tutoring activities and to support students in the preparation of their Master and PhD thesis.

Candidates may present a maximum number of 12 scientific publications.

Candidates will be required to demonstrate an adequate knowledge of English language.

## Selection code A7

### **Department of Energy, Systems, Territory, and Construction Engineering**

Academic Recruitment Field 09/C2 Thermal sciences, energy technology, building physics and nuclear engineering

Academic Discipline ING-IND/10 Thermal engineering and industrial energy systems

Nr of available positions: 1

#### Focus of research

Specific areas of Thermal Engineering and Industrial Energy Systems, with reference to methodological analyses and experimental activities related to the energy performance of components and systems for civil and industrial applications.

#### Scientific productivity

The scientific activity includes the management or participation in research projects financed by public or private bodies, the preparation of scientific articles for mainly international publications, both in journals and scientific conferences, and the possible filing of industrial patents. The scientific productivity must be consistent with that of the SSD ING-IND/10.

#### Head office

Department of Energy, Systems, Territory, and Construction Engineering

#### Specific teaching activity of the contract

The teaching activity will be carried out in the framework of the teaching of the SSD ING-IND/10 and will consist of lectures and exercises for students, according to the needs of the teaching programs. It will also include tutoring activities in the preparation of master's and doctoral theses. The total annual commitment for the activities of teaching, complementary teaching and service to students must be consistent with that provided for in the current legislation (as specified in the Regulation of the University of Pisa).

Candidates may present a maximum number of 12 scientific publications.

Candidates will be required to demonstrate an adequate knowledge of English language.

## Selectin code A8

### **Department of Energy, Systems, Territory, and Construction Engineering**

Academic Recruitment Field 09/E4 Measurements

Academic Discipline ING-IND/12 Mechanical and thermal measurements

Nr of available positions: 1

#### Focus of research

Research activities in the field of SSD ING-IND/12, with a specific focus on thermal measurements and the characterization of systems influenced by thermal factors. The research will also encompass the development of measurement methodologies and procedures, system characterization, calibration, and testing of measurement systems, modeling of measurement methods, metrological characterization of measurement components and systems, as well as the extraction, interpretation, and representation of measurement data.

#### Scientific productivity

The objectives of scientific productivity encompass directing or participating in national or international research projects funded by public or private entities, publishing scientific articles in internationally recognized journals and conference proceedings, organizing or participating in national and international events related to technology transfer. Scientific productivity must be consistent with the themes of the SSD ING-IND/12.

#### Head office

Department of Energy, Systems, Territory, and Construction Engineering

#### Specific teaching activity of the contract

The teaching activity will cover topics in mechanical and thermal measurements in alignment with the needs of the educational programs of undergraduate and doctoral courses. Additionally, supervisory roles will be undertaken for the preparation of undergraduate and doctoral theses. The annual commitment to teaching, supplementary teaching, and student support will adhere to the regulations set by the University.

Candidates may present a maximum number of 12 scientific publications.

Candidates will be required to demonstrate an adequate knowledge of English language.

## Selectin code A9

### **Department of Translational Research and of New Surgical and Medical Technologies**

Academic Recruitment Field 05/H1 Human anatomy

Academic Discipline BIO/16 Human anatomy

Nr of available positions: 1

#### Focus of research

The research activity, within the field of the scientific-disciplinary sector BIO/16, Human Anatomy, will be carried out by using those methods which typically belong to the scientific disciplinary sector BIO/16, both at macroscopic and ultrastructural levels. This research activity is supposed to contribute to the development of biomedical and motor sciences with particular reference to the musculoskeletal system, nervous system as well as their morpho-functional interactions.

#### Scientific productivity

Publishing papers on national and international peer-reviewed journals, data presentation at national and international meetings, participation in collaborative national and/or international research projects.

#### Head office

Department of Translational Research and of New Surgical and Medical Technologies

#### Specific teaching activity of the contract

The teaching activity within the scientific-disciplinary sector Human Anatomy (BIO/16) will include lecturing in different degree courses: Medicine and Surgery, master and bachelor degree courses in the health sciences and also degree courses in motor sciences. The teaching activity will include lectures and practical lessons of macroscopic and microscopic anatomy, tutoring gross anatomy through cadaver dissection and anatomy in vivo through imaging techniques including echography. Seminar activities and supervision of undergraduate and PhD students are also expected.

Candidates may present a maximum number of 12 scientific publications.

Candidates will be required to demonstrate an adequate knowledge of English language.

## Selectin code A10

### **Department of Translational Research and of New Surgical and Medical Technologies**

Academic Recruitment Field 06/A3 Microbiology and clinical microbiology

Academic Discipline MED/07 Microbiology and clinical microbiology

Nr of available positions: 1

#### Focus of research

Research in the field of microbiology and clinical microbiology in its general and applied aspects, with special emphasis on the study of the cellular and molecular basis of microbial pathogenicity, microorganism-host interactions, microbial biotechnologies, bacteriology, virology, mycology and parasitology, and aspects of diagnostic-clinical methods of microbiological and virological analysis.

#### Scientific productivity

Scientific publications (original studies and reviews) in national and international journals indexed in such a way as to allow the accreditation of indexes required for access to the qualification of second level professor, active participation in conferences and "webinars", participation in cooperative research projects in Italy and abroad, study internships in Italy and abroad.

#### Head office

Department of Translational Research and of New Surgical and Medical Technologies c/o  
Centro Retrovirus, SS 12 Abetone e Brennero, 2 56127 Pisa

#### Specific teaching activity of the contract

Microbiology teaching activities in medical area study courses where the MED 07 scientific disciplinary sector is present.

Candidates may present a maximum number of 12 scientific publications.

Candidates will be required to demonstrate an adequate knowledge of English language.

## Selectin code A11

### **Department of Political Sciences**

Academic Recruitment Field 14/B2 History of international relations and of non-european societies and institutions

Academic Discipline SPS/06 History of international relations

Nr of available positions: 1

### Focus of research

The specific object of the scientific activity will be the historical reconstruction and critical analysis of the relations between the state and non-state actors of the system of the international system with particular attention to the history of political relations between the actors of Western and Eastern Europe widely understood.

### Scientific productivity

Partecipation in national and international conferences; monographs; edited volumes; chapters in collective volumes; articles in peer-reviewed journals.

### Head office

Department of Political Sciences

### Specific teaching activity of the contract

History of International Relations, History of Eastern Europe, International Geopolitical Dynamics, Geopolitical Dynamics of the post-Soviet space, History of international relations between Russia, Europe and the states of the post-Soviet area.

Candidates may present a maximum number of 12 scientific publications.

Candidates will be required to demonstrate an adequate knowledge of English language

## Selectin code A12

### **Department of Veterinary Sciences**

Academic Recruitment Field 07/H4 Veterinary clinical medicine and veterinary pharmacology

Academic Discipline VET/08 Veterinary clinical medicine

Nr of available positions: 1

### Focus of research

The scientific work will be related to veterinary internal medicine in small animals, horse and food animals in relation to pathogenesis, epidemiology, symptomatology, diagnosis and differential diagnosis, therapy of the diseases, direct clinical exam, clinical pathology and diagnostic imaging

### Scientific productivity

Scientific papers on national and international journals, oral presentations in national and international meetings

### Head office

Department of Veterinary Sciences

### Specific teaching activity of the contract

Courses relevant for the SSD VET08

Candidates may present a maximum number of 14 scientific publications.

Candidates will be required to demonstrate an adequate knowledge of English language