

Università di Pisa

Excerpt from the Rector's decree n. 277/2023

Call for the selection of n. 7 Junior Research Fellows

(Under the Italian Law 240/2010 article 24, subparagraph 3, point a)

The University of Pisa announces a call for 7 Junior 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 Junior Research Fellow is required to perform lectures for a minimum of 36 up to a maximum of 60 hours per academic year, allocated as an institutional assignment for Bachelor's and Master's degree programmes, Specialization Schools and PhD programmes. It is possible to provide a further derogation up to a maximum of 72 hours, in order to avoid an excessive partitioning of teaching modules.

Contract duration: 3 years

Deadline for application: 20th of March 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 has to be provided as stated under:

D.Lgs.165/2001, article 38:

http://www.funzionepubblica.gov.it/sites/funzionepubblica.gov.it/files/modulo_equivalenza_Titoli_Accade mici.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.

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 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: <u>https://pica.cineca.it/unipi/ric2023pnrr-pe6/</u> 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 or via e-mail at: 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

For any IT malfunctioning please refer to 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, on the **27th of March 2023** (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. Live Streaming will be provided at <u>https://www.unipi.it/index.php/concorsigare-e-bandi</u> (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 "inpresence" 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

Department of Clinical and Experimental Medicine

Academic Recruitment Field 05/F1- EXPERIMENTAL BIOLOGY

Academic Discipline **BIO/13 - EXPERIMENTAL BIOLOGY**

Nr. of positions available: 1

Progetto PNRR Partenariato Esteso 6 - HEAL ITALIA - Health Extended Alliance for Innovative Therapies, Advanced Lab-research, and Integrated Approaches of Precision Medicine - Spoke n. 8 "Clinical Exploitation".

Focus of research:

Specific research activity: Within the framework of SSD BIO/13 (Applied Biology), research activities are focused on the integrated study of cells and living organisms, with particular attention to the basic mechanisms involved in the processes of: a) expression, duplication and transmission of genetic information; b) development, differentiation and cell proliferation; c) biogenesis of organelles and cellular structures; d) interaction between cells; c) biological bases of behaviour and evolution. Biotechnology and general as well as molecular genetics applications in the above processes are relevant features of alla this, together with the need to apply at the cutting-edge biological technologies, in order to achieve the planned objectives. In particular, methodologies for the morphological, functional and molecular study of the endocrine pancreas will have to be developed/used for the purposes of this project, aiming to precision medicine in diabetes mellitus.

Scientific productivity:

Research activity objectives: Publication of results in peer reviewed international journals, and presentation of data at national and international meetings

Head office:

Department of Clinical and Experimental Medicine

Teaching activity of the contract:

Biology, Endocrinology and Metabolism

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

Department of Chemistry and Industrial Chemistry

Academic Recruitment Field 03/A1 - ANALYTICAL CHEMISTRY

Academic Discipline CHIM/01 - ANALYTICAL CHEMISTRY

Nr. of positions available: 1

Progetto PNRR Partenariato Esteso 6 - HEAL ITALIA - Health Extended Alliance for Innovative Therapies, Advanced Lab-research, and Integrated Approaches of Precision Medicine - Spoke n. 8 "Clinical Exploitation".

Focus of research:

Research activity in the fields relevant to SSD CHIM/01, and so related to the development of instrumental techniques and methods for the determination of the (qualitative and quantitative) composition of natural and synthetic chemical systems, both in the biological and anthropic fields, as well as nano- and biotechnology. In particular, the research activity will be focused on the development of innovative electrochemical sensors and biosensors to be integrated into point of care (POC) devices capable of identifying pathogens and remotely communicating the information obtained. To this end, established transduction techniques such as amperometry and electrochemical impedance spectroscopy will be combined with the use of nanomaterials, nanocomposites and innovative enzyme and bioreceptor systems. The activity will contribute to the development of new diagnostic technologies to be used in precision medicine for the protection of particularly vulnerable subjects, such as preterm infants and immunocompromised patients, for whom the rapid identification of infections can prevent the development of a sepsis.

Scientific productivity:

Publications on scientific peer-reviewed international journals, communications to national and international scientific conferences.

Head office:

Department of Chemistry and Industrial Chemistry

Teaching activity of the contract:

Teaching courses that pertain to the discipline CHIM/01-Analytical Chemistry

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

Department of Chemistry and Industrial Chemistry

Academic Recruitment Field 03/C1 - ORGANIC CHEMISTRY

Academic Discipline CHIM/06 - ORGANIC CHEMISTRY

Nr. of positions available: 1

Progetto PNRR Partenariato Esteso 6 - HEAL ITALIA - Health Extended Alliance for Innovative Therapies, Advanced Lab-research, and Integrated Approaches of Precision Medicine - Spoke n. 6 "Healthy Toolbox".

Focus of research:

The research activity will concern the topics of the SDD CHIM/06 (Organic Chemistry). More specifically, this activity will be aimed at the development of efficient and selective synthesis methods of new biocompatible nanocarriers for the transport of pharmacologically active organic molecules and their structural analogues, and at the development of pro-drugs activated by external stimuli.

Scientific productivity:

Achievement of scientific autonomy, also through the supervision of degree and doctoral theses. International scientific publications and access to competitive research calls. Dissemination of research results through communications at national and international congresses, and in activities aimed at the public and on the web.

Head office:

Department of Chemistry and Industrial Chemistry

Teaching activity of the contract:

Laboratory and theoretical courses for characterizing and mandatory training activities of the SSD CHIM06 (Organic Chemistry) for bachelor's and master's degree courses of the University of Pisa, compatibly with the minimum and maximum commitments defined by law and by the University Regulations for the role of RTD-A.

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

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Department of Physics

Academic Recruitment Field 02/D1 - APPLIED PHYSICS, PHYSICS TEACHING AND HISTORY OF PHYSICS

Academic Discipline FIS/07 - APPLIED PHYSICS

Nr. of positions available: 1

Progetto PNRR Partenariato Esteso 6 - HEAL ITALIA - Health Extended Alliance for Innovative Therapies, Advanced Lab-research, and Integrated Approaches of Precision Medicine - Spoke n. 6 "Healthy Toolbox".

Focus of research:

The issues reported in the DECLARATORIA of the 'settore concorsuale' 02/D1, SSD FIS/07

Scientific productivity:

Application of imaging methods suitable for the study and understanding of living matter in the biological and medical context. Gaining of full scientific independence, possibly including the supervision of BSc, MSc, and PhD theses. Publications on peer-reviewed, international journals. Dissemination of the results of the performed research in national and international conferences. Scientific objectives are in the framework of the development of multimodality imaging systems and of the use of data analysis and image reconstruction techniques based on artificial intelligence.

Head office:

Department of Physics

Teaching activity of the contract:

Courses on fundamental physics, applied physics, or advanced courses on the topics covered by the research activity.

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

Department of Pharmacy

Academic Recruitment Field 03/D1 - MEDICINAL, TOXICOLOGICAL AND NUTRITIONAL CHEMISTRY AND APPLIED TECHNOLOGIES

Academic Discipline CHIM/08 - PHARMACEUTICAL CHEMISTRY

Nr. of positions available: 1

Progetto PNRR Partenariato Esteso 6 - HEAL ITALIA - Health Extended Alliance for Innovative Therapies, Advanced Lab-research, and Integrated Approaches of Precision Medicine - Spoke n. 3 "Prediction models".

Focus of research:

The study of natural, biotechnological and 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 in 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

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

Department of Information Engineering

Academic Recruitment Field 09/E3 - ELECTRONICS

Academic Discipline ING-INF/01 - ELECTRONIC ENGINEERING

Nr. of positions available: 1

Progetto PNRR Partenariato Esteso 6 - HEAL ITALIA - Health Extended Alliance for Innovative Therapies, Advanced Lab-research, and Integrated Approaches of Precision Medicine - Spoke n. 6 "Healthy Toolbox".

Focus of research:

Research activity relevant to the topics of the ING-INF/01 "Elettronica" disciplinary sector with particular reference to the activities described in the PNRR Project Partenariato Esteso on Precision Medicine "HEAL ITALIA" - Health Extended ALliance for Innovative Therapies, Advanced Lab-research and Integrated Approaches of Precision Medicine, Spoke 6: Healthy Toolbox

Scientific productivity:

Scientific publications on international journals and proceedings of international conferences; technical reports on topics of the PNRR Project Partenariato Esteso on Precision Medicine "HEAL ITALIA"

Head office:

Department of Information Engineering

Teaching activity of the contract:

Teaching and support activity on topics of the disciplinary scientific sector of "Electronics" ING-INF/01

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

Department of Biology

Academic Recruitment Field 05/I1- GENETICS

Academic Discipline BIO/18 - GENETICS

Nr. of positions available: 1

Progetto PNRR Partenariato Esteso 6 - HEAL ITALIA - Health Extended Alliance for Innovative Therapies, Advanced Lab-research, and Integrated Approaches of Precision Medicine - Spoke n. 3 "Prediction models".

Focus of research:

Topics of the scientific disciplinary sector BIO/18, with particular reference to molecular genetic studies applied to oncology and precision medicine, including the development of theranostic approaches.

Scientific productivity:

Publication of scientific articles in international journals with IF (1-3 articles/year), dissemination and presentation of research results at national and international scientific congresses

Head office:

Department of Biology

Teaching activity of the contract:

The teaching commitment will concern teachings relevant to the scientific disciplinary sector BIO/18

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