

Rector Decree no. 2436

THE RECTOR

- CONSIDERING the current Statute of the University of Bari Aldo Moro; CONSIDERING the Law no. 210 of 3 July 1998, in particular Article 4;
- CONSIDERING the Legislative Decree no. 198 of 11 April 2006 "Code of equal opportunities between men and women";
- CONSIDERING the Law no. 240 of 30 December 2010, as amended;
- CONSIDERING the National Recovery and Resilience Plan (PNRR), submitted to the European Commission on 30/04/2021 in accordance with art. 18 of Regulation (EU) No. 2021/241 and approved by ECOFIN Council Decision of 13/07/2021 notified to Italy by the General Secretariat of the Council with note LT161/21 of 14/07/2021;
- CONSIDERING the Guidelines defined by the Ministry of University and Research for the system initiatives of Mission 4 "Education and Research", Component 2 "From Research to Enterprise", approved by Ministerial Decree no. 1141 of 7 October 2021;
- CONSIDERING the Interministerial Decree of 07/12/2021 which adopts the guidelines aimed at promoting gender and generational equal opportunities, as well as the employment inclusion of people with disabilities in public contracts financed with the resources of the PNRR and PNC;
- CONSIDERING the Gender Equality Plan (GEP) 2022-2024 of the University of Bari "Aldo Moro" adopted with D.R. no. 4781 of 23/12/2021;
- CONSIDERING the 2021 Gender Report of the University of Bari "Aldo Moro" adopted with D.R. no. 4782 of 23/12/2021;
- CONSIDERING the Ministerial Decree no. 226 of 14.12.2021 Rules on accreditation of doctoral venues and programmes and criteria for the institution of doctoral programmes by accredited bodies"
- CONSIDERING the Ethical Code of this University;
- CONSIDERING the Regulations of the University of Bari on the subject of PhDs, issued with D.R. no. 1867 of 17.05.2022;
- CONSIDERING the Didactic Regulations of the University of Bari Aldo Moro;
- CONSIDERING the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 (General Regulation on Data Protection);
- CONSIDERING the project "Territorial Pact Apulian University System" - CUP F61B23000370006;
- CONSIDERING the Public Notice for the submission of Proposals for the creation of "Partnerships extended to universities, research centers, companies for the financing of basic research projects" – as part of the National Recovery and Resilience Plan, Mission 4 "Education and Research" – Component 2 "From research to business" – Investment 1.3, funded by the European Union – NextGenerationEU (DM MUR no. 341 of 15.03.2022);
- SEEN the MUR Directorial Decrees no. 1552 and 1554 of 11.10.2022 admitting the following Extended Partnerships to funding:
- “multi-Risk sciEnce for resilienT commUnities under a changiNg climate RETURN”– PE00000005; CUP H93C22000610002
 - “One Health Basic and Translational Research Actions addressing Unmet Needs on Emerging Infectious Diseases - INF-ACT”– PE00000007; CUP H93C22000640007;
- SEEN the obligations to ensure the achievement of targets and milestones and the financial objectives set out in the PNRR;
- CONSIDERED the need to comply with the cross-cutting principles set out in the PNRR, such

as, among other things, the principle of contribution to the climate and digital objective (so-called tagging), the principle of gender equality and the obligation to protect and empower young people;

CONSIDERED

also, the need to comply with Article 17 of EU Regulation 2020/852 which defines environmental objectives, including the principle of "Do no significant harm" (DNSH);

ACKNOWLEDGING

that the approved projects provide, among other things, for the activation of PhD scholarships to be allocated to the XL cycle and that the assignment of the same must take place taking within a short period of time, into account the deadline of 36 months set by the Ministry of University and Research for the implementation of the same;

CONSIDERING

Ministerial Decree no. 247 of 23 February 2022 with which, starting from 1 July, the annual amount of the scholarship for attendance at PhD courses is set at € 16,243.00;

CONSIDERING

Ministerial Decree no. 301 of 22.03.2022 with which the Ministry approved the Guidelines for the accreditation of PhD Courses;

CONSIDERING

Directorial Decree 1409 of 14.09.2022 establishing the PRIN 2022 PNRR (Research Projects of Relevant National Interest) programme intended for the financing of public research projects, in order to promote the national research system, to strengthen interactions between universities and research institutions in line with the objectives outlined by the National Recovery and Resilience Plan (PNRR) and to encourage Italian participation in initiatives related to the Programme European Union Research and Innovation Framework;

CONSIDERING

the Reporting Guidelines for the implementing entities of the PNRR interventions in Italy of which the Ministry of University and Research is the titular administration of 8 February 2024 in which art. 6.2.1.2 "*Personnel specifically recruited for the project*" PhD scholarships are expressly referred to among the eligible expenses under the PRIN 2022 PNRR projects;

SEEN

projects funded under notice 1409 of 14 September 2022 - PRIN PNRR 2022 and referred to in the attached sheets;

CONSIDERING

the project "Research actions for reducing the impact on agricultural and natural ecosystems of the harmful plant pathogen *Xylella fastidiosa* (REACH-XY)" funded with funds under Law 234/2021, art. 1 co. 325, as part of the research activities aimed at containing the spread of the harmful organism "*Xylella fastidiosa*" conducted by the CNR – CUP B93C22001920001;

SEEN

the MARVEL project presented by the Department of Soil and Food Sciences – Di.S.S.P.A. of this University, pursuant to article 1, paragraph 321 of Law 11 December 2016, n.232, admitted to funding for Departments of Excellence 2023-2027;

CONSIDERING

Ministerial Decree no. 629 of 24 April 2024 on the allocation of doctoral scholarships under the PNRR, Mission 4, Component 1, "Strengthening the supply of education services: from kindergartens to universities" – Investment 3.4 "Teaching and advanced university skills" and Investment 4.1 "Extension of the number of research doctorates and innovative doctorates for public administration and cultural heritage", with which this University was awarded funding for 19 doctoral scholarships for the macro-areas "Digital and Environmental Transitions", "PNRR", "Public Administration" and "Cultural Heritage";

CONSIDERING

Ministerial Decree no. 630 of 24 April 2024 on the allocation of doctoral scholarships under the PNRR, Mission 4, Component 2 "From Research to Business" – Investment

3.3 "Introduction of innovative doctorates that respond to the innovation needs of companies and promote the hiring of researchers by companies", by virtue of which this University has been awarded ministerial co-funding for no. 87 doctoral

	scholarships in the context of innovative doctorates that respond to the innovation needs of companies;
CONSIDERING	Decree no. 447 of the Director General of the Italian Space Agency (A.S.I.) of 7 June 2024, with which the University of Bari Aldo Moro was the winner of n. 5 Ph.D. scholarships funded by the aforementioned Agency;
CONSIDERED	the possibility that, even after the issuance of this decree, there may be further expressions of interest in the co-financing of doctoral scholarships by external bodies;
CONSIDERING	letters of intent from private bodies/companies for the activation and financing or co-financing of PhD scholarships for the XL cycle, also pursuant to Ministerial Decree 630/2024;
CONSIDERING	the resolutions adopted by the Academic Senate and the Board of Directors respectively at the meetings of 28.05.2024, 30.05.2024 and 13.06.2024;
CONSIDERING	the agreements signed with external bodies for the activation and operation of PhD courses of National Interest and Industrial Doctoral courses pursuant to articles 10 and 11 of Ministerial Decree no. 226/21;
CONSIDERING	the agreements signed with external bodies for the activation and operation of PhD courses in an associated form pursuant to Article 3 paragraph 2 of Ministerial Decree no. 226/21;
CONSIDERING	the accreditation proposals of this University transmitted to the MUR through the CINECA platform;
RESERVED	the provisions of the Ministry of University and Research, with the approval of ANVUR, regarding the application for accreditation for the establishment and/or activation of the Doctoral Courses of the XL cycle for which the University of Bari Aldo Moro is the administrative seat;
ASCERTAINED	the availability of financial resources;
ALLOWING FOR	any amendments and/or additions to this announcement that will be published exclusively on www.uniba.it/it/dottorati/dottorati-di-ricerca/dottorati/40-ciclo/40-ciclo-2024-2025 and on the website of each PhD course, the link to which can be found on the individual sheets

TITLE I

CALLS FOR ADMITTANCE TO PHD PROGRAMMES

Art.1 – ESTABLISHMENT AND ANNOUNCEMENT OF SELECTIONS

The XL cycle of the PhD programme is established at the University of Bari Aldo Moro for the academic year 2024/2025 and the relevant selections for admission to the following three-year doctoral programmes are announced:

1. Biodiversity, Agriculture and Environment
2. Biosciences & Biotechnologies
3. Digital Innovation and E-Health
4. Rights and Protections in Globalized Markets
5. Mediterranean rights, economies and cultures
6. Rights, Institutions and Guarantees
7. Earth Processes and Management of Resources and Risks for a Resilient Society and Territory
(*Doctorate of National Interest*)
8. Economics and Finance of Public Administrations
9. Economics and Management

10. Physics
11. Gender Studies (*Doctorate of National Interest*)
12. Sustainable Land Management
13. Computer Science and Mathematics
14. Leadership, Empowerment, and Digital Innovation in Education and Learning (Lediel)
15. Humanities, Languages and Arts
16. Metabolism, Aging And Social Medicine - Metabolismo, Invecchiamento E Medicina Sociale
17. Applied Neuroscience
18. Archaeological, Historical, Architectural Mediterranean Landscape Heritage: Integrated Systems of Knowledge, Planning, Preservation and Promotion
19. Historical and Philosophical Heritage for sustainable innovation
20. Animal Health and Zoonosis
21. Public Health, Clinical Medicine and Oncology
22. Chemical and Molecular Sciences
23. Veterinary Internal Medicine, Surgery and Obstetric Clinical Sciences
24. Pharmaceutical Sciences
25. Soil and Food Sciences
26. Human Relations' Sciences
27. Political and Social Sciences for Security and Development - SPSSS
28. Sustainable Technologies for the Industrial Development of Medicinal and Diagnostics – TeSSMeD
29. Organs and tissues Transplantation and Cellular Therapies

Pursuant to Ministerial Decree 226/2021, the doctoral courses listed above will be activated after verification of the possession or maintenance of the accreditation requirements by the Ministry of University and Research. Therefore, the assignment of places put out for competition as well as the awarding of scholarships are subject to the confirmation of accreditation by ANVUR and are subject to ministerial approval.

It should be noted that in the event that the MUR does not pay the funding for the coverage of the scholarships on a subject subject tied DD.MM. no. 629/24 and no. 630/24, the same will not be disbursed, with the consequent forfeiture of the positions attributed to the winning candidates.

For each PhD course, the attached forms from 1 to 29, which are an integral part of this call, indicate:

- the Administrative Headquarters Department
- the number of places with and without scholarship that will be assigned according to the order of the specific rankings of the Course, taking into account any breakdown by curriculum;
- the number of places with a scholarship with a restricted topic funded under the DD. MM. no. 629 and no. 630 of 24.04.2024;
- the number of potential apprenticeship contracts;
- the number of places reserved for candidates with a qualification obtained abroad;
- the number of places reserved for candidates with degrees from foreign universities provided for as part of the "Budget MUR Departments of Excellence" funding;
- curricula, if any;
- the procedures for carrying out the admission tests, the diary and the location of the tests, as well as any additional admission requirements.

The types of scholarships are as follows:

Type 1 - Doctoral scholarships pursuant to Ministerial Decree 629/2024

- **Investment 3.4: Digital and environmental transitions**
- **Investment 4.1: NRRP research (generic)**
- **Investment 4.1: Public Administration**
- **Investment 4.1: Cultural heritage**

The grants referred to in this paragraph shall include:

- a) periods of study and research in companies, public administrations or research centres, including museums, Institutes and Training Institutions of the Ministry of Culture, archives, libraries of a minimum of six (6) months to a maximum of twelve (12) months, even if not continuous and also with more than one entity, over the three-year period;
- b) periods of study and research abroad, even if not continuous and also at more than one institution, from a minimum of six (6) months up to the maximum limit provided for in Article 9, paragraph 3 of Ministerial Decree 226/21 over the three-year period;

Exceptions are the doctoral scholarships pursuant to Ministerial Decree 629/24 relating to PNRR (generic) PhD programmes for which only the period of study and research abroad is mandatory, from a minimum of six (6) up to the maximum limit provided for in Article 9, paragraph 3 of Ministerial Decree 226/21 over the three-year period.

The periods of study and research referred to in letters a) and b), where both are provided, are distinct and must be carried out with separate subjects.

- c) a constrained research topic consistent with the specific planning within the scope of Ministerial Decree 629/24;
- d) the drafting, through the appropriate online platform (<http://dottorati.mur.gov.it>) of a six-monthly report indicating the time commitment (divided into months in the company/institution if required, at the headquarters, abroad) and a summary of the main activities carried out, validated by the coordinator of the doctoral course.

These doctoral scholarships cannot be awarded to doctoral students who have renounced scholarships under the PNRR under the XXXVIII cycle and the XXXIX cycle pursuant to art. 11 paragraph 6 of Ministerial Decree no. 629/24.

Type 2 - Doctoral scholarships pursuant to Ministerial Decree 630/24 Investment 3.3: PNRR

The grants referred to in this paragraph shall include:

- a) periods of study and research in companies from a minimum of six (6) months to a maximum of eighteen (18) months, even if not continuous and also at more than one institution, over the three-year period;
- b) periods of study and research abroad, even if not continuous and also at more than one institution, from a minimum of six (6) months up to the maximum limit provided for in Article 9, paragraph 3 of Ministerial Decree 226/21 over the three-year period.

The periods of study and research referred to in letters a) and b) are distinct and must be carried out with separate subjects;

- c) a constrained research topic consistent with the specific planning within the scope of Ministerial Decree 629/24;
- d) the drafting, through the appropriate online platform (<http://dottorati.mur.gov.it>) of a six-monthly report indicating the time commitment (divided into months in the company, at the headquarters, abroad) and a summary of the main activities carried out, validated by the coordinator of the doctoral course.

These doctoral scholarships cannot be awarded to doctoral students who have renounced scholarships under the PNRR under the XXXVIII cycle and the XXXIX cycle pursuant to art. 8 paragraph 7 of Ministerial Decree no. 630/24.

Type 3 - PhD scholarships funded by NRRP Extended Partnerships (PE) Projects -PhD scholarships funded by PRIN 2022 PNRR Projects

The scholarships referred to in this paragraph are financed by projects under the PNRR of which the University of Bari is a beneficiary partner.

Therefore, the entire PhD, training and research course must be carried out in line with the themes and objectives covered by the projects that finance the scholarship, in collaboration with the respective project scientific referents.

The candidate who has been awarded the scholarship referred to in this paragraph must report on the research activities, as required by the doctoral course and the project, producing:

- a periodic summary of the main activities carried out, countersigned by the tutor and the scientific director;
- appropriate documentation certifying the activity carried out;
- a report indicating the time commitment.

In addition, the candidate who has been awarded the scholarship must comply with the indications dictated by the Guidelines and ministerial indications on the subject.

Type 4 - PhD scholarships funded by third parties or Departments

The scholarships referred to in this paragraph are funded by public or private bodies, other Universities or Departments or Departments of excellence of UNIBA, some with a restricted topic requested by the funding body.

Type 5 - Doctoral scholarships co-financed under the notice "Territorial pacts of higher education for companies" pursuant to Article 14 – bis of Decree-Law No. 152 of 6 November 2021"

The scholarships referred to in this paragraph shall be co-financed with funds from the notice "Territorial pacts of higher education for companies" and from external funding bodies indicated in the individual sheets.

The candidate who has been awarded the scholarship must comply with the indications dictated by any Guidelines and indications issued by the Ministry on the subject.

Type 6 - Doctoral scholarships from the University of Bari Aldo Moro.

The scholarships referred to in this paragraph are fully funded by the University of Bari Aldo Moro.

The number of places and scholarships referred to in the annexes could be increased as a result of funding from public and/or private bodies.

All positions with scholarships provided by external funders and Departments and higher education apprenticeships will be activated if the relevant agreement is successful. The individual agreements regulate the organization of the Course, the specific management of financial resources and the resources made available by the affiliated universities for each Course, the relationships and commitments of the Parties and of the PhD student, who will be required to fulfill them.

PhD students whose position is funded under specific international cooperation and/or mobility programmes may be admitted as supernumerary, even after the tests have been held. Admission is in any case subject to the assessment of the candidate's suitability by the Doctoral Board, which will establish evaluation methods and criteria.

This announcement has the value of notification to all intents and purposes, therefore candidates are required to comply with the indications specified in the form relating to the doctorate attached to this decree for the completion of the tests.

The absence of the candidate from the test(s), whatever the cause, will therefore be considered as a withdrawal from the competition.

Any changes, updates or additions to the content of the announcement will be announced, exclusively, with the publication on the website: www.uniba.it/it/dottorati/dottorati-di-ricerca/dottorati/40-ciclo/40-ciclo-2024-2025 and

on the website of each PhD course, the link to which can be found on the individual sheets.

Art. 2 – ADMISSION REQUIREMENTS

Those who have obtained one of the following qualifications may apply to participate in the competition for admission to PhD programmes, without limitations of age and citizenship, without prejudice to the age not exceeding 29 years for those who apply for positions with an apprenticeship contract:

- Bachelor's degree (old system) or master's degree or second-level academic qualification issued by the institutions belonging to the AFAM (Higher Artistic and Musical Education) sector
- Equivalent academic qualification obtained from foreign universities.

A) Admission to the selection process for candidates with an academic qualification obtained abroad:

Those who have a qualification obtained at a foreign university and which has not already been declared equivalent to the Italian degree, must apply for its equivalence only for the purpose of admission to the doctorate to which they intend to compete.

In this case, the application form must be accompanied by the following documentation, in order to allow the evaluation of the qualification held:

- self-certification pursuant to D.P.R. 445/2000 and subsequent amendments of the academic qualification obtained with the list of exams taken, the relative evaluation and the legal duration of the course, if Italian and EU citizens;
- certificate attesting to the academic qualification obtained with an indication of the exams taken, the relative grades and the legal duration of the course together with the translation into Italian and/or English if non-EU citizens. The translation must be signed under one's own responsibility in order to allow the recognition of the qualification.

The suitability of the qualification obtained abroad will be assessed by the Examining Committee for admission to the doctorate in compliance with the regulations in force in Italy and in the country where the degree was obtained and with international treaties and agreements on the recognition of qualifications for the continuation of studies.

In case of admission to the Ph.D., candidates must submit, within 60 days from the date of enrolment, the following documentation:

- curricular qualifications translated into Italian and legalized by the competent Italian diplomatic or consular representations abroad (Master's Degree or Master's Degree certificate in original or certified copy of the original);
- certificate of the exams (Transcripts) taken during the second cycle course in original or certified copy of the original;
- "declaration of value on site" of the qualification obtained abroad issued by the competent diplomatic or consular representations abroad; **alternatively, the Certificate of Comparability of the foreign university qualification issued by the ENIC-NARIC centre in Italy (CIMEA) may be submitted, which contains all the information necessary for the evaluation of the qualification.**

In order to enter Italy, citizens of non-EU countries residing abroad must register on the University portal and apply for an entry visa (postgraduate visa type D) at the Italian Embassy or Consulate competent for the territory.

The Administration reserves the right to request the "declaration of value on site" also to those who have obtained the qualification in a country of the European Union in the event that there are doubts about the validity of the same.

B) Admission to the selection for candidates who have not yet obtained the qualification

Those who obtain the qualification suitable for access to the PhD may also apply to participate in the selection, no later than **30 September 2024**, under penalty of forfeiture of admission to the course. These candidates will be admitted *sub condicione* and no later than **30 September 2024** they must send by certified email (universitabari@pec.it) and email to dottorato@uniba.it the self-certification (or certification in the case of qualifications obtained abroad) dated and handwritten, accompanied by a copy of a valid photo identification document indicating:

- name of the University that awarded the degree
- Date of graduation
- type of qualification (specialized/master's degree, old system, second-level academic qualifications issued by institutions belonging to the AFAM sector)
- Final Vote

Candidates who, for any reason, do not communicate the achievement of the degree within the deadline or who send incomplete, incorrect communications, by different means or to addresses other than those indicated above, will be excluded.

Art. 3 – APPLICATION FORM AND REGISTRATION PROCEDURE

The application to participate in the selection must be submitted exclusively using the appropriate procedure made available at: <https://pica.cineca.it/uniba/dottorati40> no later than **22 July 2024 at 12.00 noon (Italian time CET) under penalty of exclusion from the selection.**

Access to the procedure takes place on the PICA portal (Integrated Platform for University Competitions) which can be accessed after registration or with SPID credentials, as indicated in the Guidelines.

Applications received in a manner other than the one indicated will not be considered valid.

The registration fee for the competition tests is € 40.00 for candidates residing in Italy and EU countries and € 20.00 for candidates residing in non-EU countries;

The registration fee for the test is non-refundable for any reason, given its destination.

The candidate residing in Italy must pay the fee by clicking on the "Pay with Pago PA" button and choosing the following payment method:

- Credit/debit card: for payment with cards
- Current account: for direct debit from your account
- Any other payment methods and circuits that allow the fulfilment of PagoPA notices.

Candidates residing in EU and non-EU countries must pay the fee by bank transfer to a dedicated current account whose coordinates are available on the PICA platform; The reason for the transfer must include the following wording: (Name – Surname) Cost of PhD selection. A copy of the bank transfer must be uploaded to the PICA platform.

Candidates who wish to participate in more than one admission competition must submit as many applications accompanied by the required qualifications, and make as many payments as there are courses chosen.

Each candidate, in the application form, will be able to indicate a position for which to apply and present the related research project, if requested. The choice made will not be binding on the Selection Committee for the purpose of awarding the aforementioned scholarships, in accordance with the provisions of Article 7 below.

All candidates are conditionally admitted to the competition.

The procedure for filling in and submitting applications online can be carried out from any computer connected to the network.

For any technical problems please write to Support .

Candidates are invited to complete the application for participation in the competition **well in advance** of the deadline of this announcement.

It is the responsibility of the candidates to verify the correct conclusion of the procedure. Complaints will not be accepted for any malfunctions of the computer system due to overloads encountered by candidates close to the deadline.

Registration for the selection test is not the sole payment of the above-mentioned fees, even if made within the deadline of the call for applications, in the absence of the submission of the application form.

The application form must be attached, in pdf format, to the documents required by the chosen course

sheet as well as:

1. Self-certification declaration relating to the qualification:

- **for graduate candidates:** self-certification declaration (art.46 T.U. – D.P.R. n. 445 of 28/12/2000) dated and handwritten, containing the type of qualification (old system, specialized/master's degree), the date of achievement, the final grade and the indication of the University that issued the degree;
- **for graduating candidates:** self-certification declaration (art.46 T.U. – D.P.R. n.445 of 28/12/2000), dated and handwritten, indicating the University at which they are enrolled, the type of degree (old system, specialized/master's degree), the name of the degree course, the list of exams taken with relative marks and the date scheduled for the graduation session. In the same self-certification, the weighted average of the marks of all the exams taken at the deadline of this announcement must be specified (the weighted average is obtained by multiplying each grade by the credits of the corresponding exam, adding the products obtained and dividing this sum by the total credits obtained through exams with grade);
- dated and signed curriculum vitae;
- numbered, dated and signed list of qualifications deemed useful for the purposes of the competition attached to the application;
- numbered, dated and signed list of publications deemed useful for the purposes of the competition attached to the application;
- qualifications that the candidate deems useful for the purposes of the competition;
- scientific publications numbered in sequential order; publications indicated in the list but not uploaded will not be taken into consideration;
- photocopy of a valid identity document or identification document of the candidate;
- **where required, a research project, related to the restricted topic chosen by the candidate, of a maximum of 3500 words (unless otherwise indicated in the PhD form attached to this notice) which must include:**
 - scientific assumptions and related bibliographic data;
 - research purpose, methodologies and expectations;
 - where necessary, experimental methodologies and data analysis.

The application is to be considered for all legal purposes as a self-certification, pursuant to art. 46 and 47 of Presidential Decree 445/2000 and subsequent amendments, of the data contained therein and in the documents attached to it.

Once completed, the application must be printed, signed and re-uploaded in the procedure following the instructions described in the online procedure. The absence of a signature and/or identity document is grounds for exclusion from the selection. In the case of authentication with the use of SPID (Public Digital Identity System) credentials, it will not be necessary to sign the application.

Failure to choose a curriculum, where applicable, will result in exclusion from the competition. The submission of the application to the University takes place automatically with the final closure of the online procedure. Therefore, no delivery or shipment of paper material to the Offices must be made.

At the end, the application will be registered and the submission confirmed by email by the system.

The Administration may order, at any time, with a reasoned decision of the Rector, the exclusion from the selection procedure for failure to meet the prescribed requirements and/or for failure to choose the curriculum where provided for in the appropriate forms.

Candidates with sensory and motor disabilities recognized pursuant to Law 104/1992 and subsequent amendments, candidates with a percentage of civil disability equal to or greater than 66% pursuant to Law 68/1999 and

Candidates with specific learning disabilities (SLD) recognized pursuant to Law 170/2010 may, in

relation to their status, request the necessary aids for the performance of the competition tests and/or any additional time. Interested candidates must submit to this University, by the deadline of **22 July 2024 at 12.00 noon** (Italian time CET) the completed application accompanied by appropriate medical certification issued by the competent health authorities.

The preparation of the required aids is not guaranteed if the request is received after the deadline of this announcement. It should be noted that for candidates with SLD and candidates with sensory and motor disabilities recognized pursuant to Law 104/1992, the attached certification must be issued no more than three years ago, by facilities accredited by the aforementioned NHS. In addition, upon request, they will be granted additional time as required by current legislation.

The Administration assumes no responsibility for the event of unavailability or dispersion of communications due to inaccurate indications of the address by the applicant, failure or late communication of the change of address indicated in the application, nor for any misunderstandings or in any case of third parties, fortuitous events or force majeure.

Art.4 – SELECTION BOARDS

The Selection Committees for admission to the Doctoral Courses will be appointed by decree of the Rector in compliance with the Regulations on the subject of PhDs of the University of Bari Aldo Moro. By way of derogation from the current University Regulations on Research Doctorates, for National Doctorates, the Selection Committees will be formed in such a way as to ensure the participation of foreign or external members of the affiliated subjects.

The composition of the individual commissions will be published, after the deadline of the call, on the website: www.uniba.it/it/dottorati/dottorati-di-ricerca/dottorati/40-ciclo/40-ciclo-2024-2025.

Art.5 – SELECTION PROCEDURE BASED ON QUALIFICATIONS AND EXAMS: CRITERIA FOR THE EVALUATION OF QUALIFICATIONS

With regard to competitions based on qualifications and exams, it is established that qualifications will be awarded an overall score of 20 points.

The categories of qualifications that will be evaluated, provided that they are relevant to the subjects of the relevant doctoral courses offered and for which you are applying, with the maximum score attributable to each of them are the following:

- ◆ Graduation assessment up to a maximum of 10 points determined as follows:

up to 100	0 points
101/104	4 points
105/107	6 points
108/110	8 points
110 laude	10 points

For graduating students, the degree grade will be calculated on the weighted average of the marks of all the exams taken at the deadline of this call. If the candidate has more than one degree related to the course for which he/she intends to compete, he/she must indicate the qualification to be taken into consideration for the purposes of evaluation by the Selection Committee.

- ◆ Scientific qualifications, relevant to the topics covered by the PhD course for which you are applying, up to a maximum of **4 points** for:
 - Scientific publications (monographs, articles in scientific journals)
 - Minor publications (proceedings of national and international conferences, specific contributions in volumes, etc.).
- ◆ Academic and study qualifications, related to the topics covered by the PhD course for which you are applying, up to a maximum of **4 points** for:
 - First or second level university master's degree, postgraduate specialization courses, specialization diplomas.

- ◆ Up to a maximum of **2 points** for:
 - Documented research activity at qualified Italian and foreign institutes related to the topics covered by the PhD course for which you are applying.

The evaluation of the qualifications, after identification of the criteria, will be carried out after the completion of the written test, and before the evaluation of the papers.

For procedure B referred to in Article 6 below, the evaluation of qualifications will be carried out before the evaluation of the projects.

Documents and certificates must be produced on plain paper in accordance with Article 1 of Law No. 370 of 23 August 1988; if they are written in a foreign language, they must be accompanied by a certified translation into Italian that conforms to the foreign text, drawn up by the competent diplomatic or consular representation, or by an official translator.

Reference to documents and publications already submitted to this University for any reason is not permitted. Documents, titles or publications not uploaded to the platform will not be taken into consideration.

ART.6 – SELECTION PROCEDURE BASED ON QUALIFICATIONS AND EXAMS: EXAMS

With regard to competitions based on qualifications and exams, the admission examination consists of carrying out a special test, aimed at ensuring an appropriate comparative evaluation and ascertaining the candidates' aptitude for scientific research.

Without prejudice to the valuation of the securities pursuant to art. 5, the assessment method, indicated in the doctoral form attached to the call for applications, is carried out, alternatively, through: A) written and oral tests; B) evaluation of the research project and oral exam; C) oral exam.

In the case of verification methods referred to in letter B), as well as where expressly required by the PhD course sheet (attached), **the research project must be attached to the application, under penalty of exclusion**. The scores for the various tests are awarded as follows:

	A)	B)	C)
Title Score*	max 20	max 20	max 20
Score of the written test	max 40		
Research Project Score		max 40	
Oral exam score**	max 40	max 40	max 80

* Up to 10 per graduation grade

** Includes the verification of the English/other language, as well as the evaluation of the research project, where provided for in the form.

The topics covered by the tests are related to the scientific-disciplinary sectors of reference of the Courses Ph.D.

In order to be admitted to the examinations, candidates must be in possession of one of the following valid identification documents: identity card, passport, driving license, boat license, firearms license, identification cards, provided that they have photographs and a stamp or other equivalent signature, issued by a State administration.

For foreign candidates, the written and oral tests may be carried out, upon prior request, in English or in one of the other foreign languages specified in the doctoral form.

In the case of a written test, only a black ink pen can be used.

The oral exam includes a verification of the knowledge of at least one foreign language indicated by the candidate, among those provided for in the form of the chosen doctoral course.

At the end of the oral examination, the Commission will also examine in depth the topics of finalized research as indicated in the relevant form, without prejudice to the provisions of Article 9 below.

A) Written and oral exam

Each Commission, for the evaluation of each candidate, has, in addition to the score for qualifications, forty points for each of the two tests.

On the day of the written test, the Commission will inform the candidates of the date and place where they will be able to view the list of those admitted to the oral test.

The Examining Committee will draw up the list of candidates admitted to take the oral test. Before taking the oral exam, candidates will be informed of the score obtained in the evaluation of their qualifications and the mark obtained in the written test.

Candidates who have passed the written test with a score of not less than 27/40 are admitted to the oral exam.

Where provided for in the individual PhD sheet, the oral exam may also consist of the discussion of a research project.

The oral exam will be considered passed only if the candidate has obtained a score of not less than 27/40. At the end of each session dedicated to the oral examination, the Examining Committee will draw up a list of the candidates examined with an indication of the mark obtained by each candidate.

The list, signed by the President and the Secretary of the Commission, will be made public by posting on the same day on the notice board of the examination centre or by publication on the doctoral website indicated in the form.

B) Evaluation of the research project and oral exam

Each Commission, for the evaluation of each candidate, has, in addition to the score for qualifications, forty points for the evaluation of the project and forty points for the oral examination.

The Examining Committee will draw up the list of candidates admitted to take the oral test. Before taking the oral exam, candidates will be informed of the score obtained in the evaluation of qualifications and in the evaluation of the project.

Candidates who have obtained a score of not less than 27/40 in the evaluation of the project are admitted to the oral exam.

The oral exam will be considered passed only if the candidate has obtained a score of not less than 27/40. At the end of each session dedicated to the oral examination, the Examining Committee will draw up a list of the candidates examined with an indication of the mark obtained by each candidate.

The list, signed by the President and the Secretary of the Commission, will be made public through the doctoral website indicated in the form.

C) Oral exam

Each Commission, for the evaluation of each candidate, has, in addition to the score for qualifications, eighty points for the oral examination.

Before taking the oral exam, candidates will be informed of the score obtained in the evaluation of qualifications.

Where provided for in the individual PhD sheet, the oral exam may also consist of the discussion of a research project.

The oral exam will be considered passed only if the candidate has obtained a score of not less than 54/80. At the end of each session dedicated to the oral examination, the Examining Committee will draw up a list of the candidates examined with an indication of the mark obtained by each candidate.

The list, signed by the President and the Secretary of the Commission, will be made public by posting on

the same day on the notice board of the examination centre or by publication on the doctoral website indicated in the form.

TELEMATICS TEST

Unless otherwise indicated in the form, candidates may request to take the test remotely when submitting their application, justifying the request in the same application on the PICA platform,

The e-mail address indicated by the candidate will be used by the Selection Committee of the competition to invite him/her to be part of a "group" created through the MICROSOFT TEAMS platform or other telematic platform and thus allow him/her to carry out the tests in shared audio-video mode. Operational instructions will be provided to candidates in the vicinity of the test, through a public notice on the doctoral web page indicated in the form relating to the doctorate of interest to the candidate. Candidates are required to verify their admission to the test on the date established for the presentation of the results of the research project and, in the event that the test is scheduled in telematic mode, they are required to connect on the day and at the time indicated to take it in audio-video mode shared through the MICROSOFT TEAMS platform or similar, install the software of the indicated platform on their own device, and equip yourself with a webcam that allows you to identify them before the test.

ART.7 RANKINGS FOR ADMISSION TO COURSES

Once the tests of the competition have been completed, the Commission compiles the general merit ranking on the basis of the sum of the marks obtained by each candidate in the individual tests.

At the end of the competition procedure, the Rector, having ascertained their regularity, will approve the acts of the competition and the relative merit ranking and will declare the winners of the competition.

The merit ranking will be formed according to the order of the points of the overall mark obtained by each candidate in the exams and in the evaluation of qualifications.

Unless otherwise indicated in the forms, the places offered on specific topics will be assigned according to the order resulting from the separate merit rankings; In case of lack of suitable candidates for the specific project, the places will be assigned according to the order of the general ranking, in which the places with a free theme will also be merged.

In the event that there are no suitable candidates in the ranking list for the posts co-financed by the aforementioned DD.MM. no. 629/24 and

n. 630/24 it will be possible to assign the aforementioned place(s) with scholarship, to the suitable candidates usefully placed in the general ranking according to the order of scrolling of the same.

For scholarships pursuant to Ministerial Decree no. 630/24 and scholarships under Territorial Pacts, places will be assigned on the condition of the successful signing of the agreement with the co-financing company.

Candidates who have been successfully placed in the merit list **will be declared winners**, within the limits of the places available.

In the event of a tie for the assignment of places with scholarships, the evaluation of the economic condition determined pursuant to the D.P.C.M. of 9.4.2001 and the D.P.C.M. of 5.12.2013, n.

159. In this case, the candidate must declare the indicator of the economic and financial position using the valid ISEE PhD form. This declaration must be received within 20 days from the date of publication of the ranking; After the aforementioned 20 days, the candidate will be placed in the least favourable position of the merit list. To this end, the candidate may avail himself of the right to submit the ISEE with a restricted family unit instead of the ordinary one as provided for by art. 8 paragraph 4 of Prime Ministerial Decree 159/2013.

For the assignment of places without a scholarship, the youngest candidate prevails.

For the places reserved for graduates of foreign universities, the Commission will draw up specific merit rankings, according to the overall grade reported by each candidate. In the event of a tie between two or

more candidates, preference will be given to the youngest candidate.

The decrees approving the acts and the relative rankings will be made public by means of an online bulletin board and by publication on the website, at the following address: www.uniba.it/it/dottorati/dottorati-di-ricerca/dottorati/40-ciclo/40-ciclo-2024-2025 This publication shall be deemed to be an official notification to the successful candidates. No communications will be sent to your home.

Art. 8 – ADMISSION TO DOCTORAL COURSES

Candidates will be declared winners according to the order of the competition ranking up to the number of places offered for each doctoral course.

In correspondence with any renunciations by the winners of the competition, the Administration will proceed to call the suitable candidates according to the order of the ranking, without prejudice to the provisions for the scholarships referred to in DD.MM. no. 629/24 and 630/24. Interested parties must enrol within three working days, under penalty of forfeiture.

In the event of a useful placement in more than one ranking, the candidate must exercise the option for only one PhD Course.

Candidates who already hold a Ph.D. degree may be admitted to a second doctorate, other than the one already attended, without a scholarship, after passing the selection tests. In the event of a tie, the candidate who competes for the first time will prevail.

Positions with scholarships and places without scholarship reserved for graduates of foreign universities, if not used, may be assigned to candidates who have been placed in the ordinary ranking.

All candidates are admitted to the course subject to verification of self-certified declarations pursuant to the D.P.R. 445/2000 e ss.mm.ii..

Art. 9 - HIGHER EDUCATION APPRENTICESHIP CONTRACTS

In compliance with current legislation and pursuant to Ministerial Decree 226/2021, it is possible to carry out an advanced training course in the exercise of apprenticeship for the acquisition of the title of PhD and at the same time be hired, with an apprenticeship contract, by a company.

The selected candidate, admitted to the doctorate without a scholarship, is hired by the company with an apprenticeship contract of equivalent duration to that of the training course. For the purpose of providing training activities and tutoring, the company and the University adopt appropriate forms of coordination and integration throughout the duration of the contract.

Those who meet the requirements set out in Article 2 above, who are between 18 and 29 years of age at the time of recruitment by the company and who have Italian nationality or those of other countries belonging to the European Union or nationalities of countries outside the European Union may apply to participate. with a regular residence permit in Italy. Interested candidates must declare in the application their interest in the "position with apprenticeship contract" and will have to deepen at the end of the oral exam the topics on which the doctorate in apprenticeship will focus.

For these reserved places, admission will be carried out through the procedures provided for in the form relating to the doctoral course for which the candidate is applying, without prejudice to the evaluation of a research project discussed with the commission (referred to in art. 4) possibly integrated by a member of the company. To this end, candidates must attach to the application form a specific research project related to the topic indicated in the form relating to the PhD course for which they are applying.

The agreements stipulated between the University and the Company regulate the funding, the methods of carrying out research activities and the distribution of the commitment of the doctoral student-worker. The employee's salary is considered equivalent to a doctoral scholarship and contributes to the calculation of the scholarships advertised.

Art. 10 - SCHOLARSHIPS

The scholarships offered in the attached forms of this announcement, as well as those in addition pursuant

to Article 1, will be awarded by Rector's Decree in compliance with the merit rankings of each PhD Course, taking into account any breakdown by curriculum. The assignment of the different types of scholarships in favor of those entitled will be carried out, at the sole discretion, by the Academic Board of each Doctoral Course on the basis of the outcome of the tests and the candidate's curriculum vitae et studiorum. For the purpose of awarding scholarships funded by external companies/bodies, the Academic Board of the relevant Doctoral Course, where it deems it appropriate, may be supplemented by a contact person of the funding body, with advisory functions.

In the case of scholarships funded by a third party and/or aimed at carrying out a specific research project, it will be the responsibility of the Coordinator to inform the successful candidate who will carry out this project of the related commitments and to obtain their consent, to be transmitted to the competent Office.

The number of places and scholarships may be subject to a subsequent expansion as a result of the University's participation in competitive calls, public notices issued by public or private bodies, to be assigned to candidates in possession of the requirements of the selection notice issued by the aforementioned Institute.

The assignment of the relevant scholarships will be carried out on the basis of the rules contained in the calls themselves and, where applicable, in the regulations, after admission to funding, using, in the absence of different indications contained in the aforementioned calls, the general ranking of eligibility of the competitions for admission to the XL cycle of the PhD Courses referred to in this call.

The annual amount of the scholarship is € 16,243.00 subject to the separately managed INPS social security contribution.

The duration of the scholarship is equal to the entire duration of the course.

The scholarship will be disbursed in deferred monthly installments and for its use the limit of total gross annual personal income set at Euro 16,000.00 (Euro sixteen thousand/00).

Income from assets as well as emoluments of any other nature contribute to the determination of this income. Exceeding the income limit results in the loss of the right to the scholarship for the year in which it occurs and entails the obligation to repay any monthly payments already received.

The scholarship cannot be combined with any other scholarship or form of subsidy, except for those provided to integrate, with stays abroad, the research training activity.

The scholarship cannot be awarded in the event of suspension of more than thirty days or exclusion from the course.

The amount of the scholarship increased for any periods of stay abroad to the extent of 50%.

Those who have benefited from a scholarship for a doctoral course (even for a single year or part of it) cannot apply for it a second time.

Those who are entitled to the scholarship must submit at the time of enrolment a presumptive declaration relating to the total gross personal income and the absence of the causes of incompatibility contained in this article. Scholarship recipients will also have to provide for the establishment of an INPS contribution position, enrolling in the "Separate Management" of the Institute itself.

The provisions on tax benefits referred to in art. 4 of Law no. 476 of 13.08.1984.

In any case, the particular provisions indicated in each specific scholarship financing agreement remain unaffected.

It is understood that, if a scholarship is declared ineligible for funding following verification by the competent ministerial office, the candidate enrolled in the position corresponding to said scholarship will be declared forfeited.

Art. 11 – SUPERNUMERARY ADMISSION

Any supernumerary admitted will not benefit from the scholarship.

They may be admitted as supernumerary, up to a maximum of 10% of the positions with scholarships, subject to a resolution taken by the Department Councils concerned regarding the guarantee of the payment, from their own funds, of 10% (or 20% in the case of Doctorates of national interest) and 50% of the amount of the scholarship for research activities in Italy and abroad and without prejudice to the maximum number of places for which it has been requested accreditation

pursuant to Article 5, paragraph 2 of Ministerial Decree no. 226/21:

- holders of research fellowships, where the competition for the award of the fellowship did not include the necessary requirement of a Ph.D. degree, who were found to be eligible, following passing the admission tests to a PhD course, provided that the doctoral course concerns the same scientific-disciplinary area as the research referred to the fellowship. Admission to the course will take place upon resolution of the Board of Professors of the PhD and the Council of the Department where the research grant takes place, which must express themselves favorably on the compatibility in carrying out the two activities. In the event that the research fellow carries out the activity at another university, the authorization of the said university is required;
- non-EU citizens and civil servants who will be eligible, following the passing of the admission tests. For civil servants, admission as supernumerary is also subject to the opinion expressed, pursuant to Article 8, paragraph 2 of the current University Regulations on PhDs, by the Academic Board, which may eventually request the signing of a special agreement with the public body to which they belong, without prejudice to the regulatory provisions and the sector's CCNL.

Admission to the PhD programme will also be granted to those who, although not having applied to the competition, at the official start date of the PhD have been selected within the actions of the HORIZON 2020 programme of the European Union or other international cooperation and/or mobility programmes (e.g. Erasmus Mundus) and have been awarded a scholarship or a research contract within the Scientific Disciplinary Area of interest of the Doctorate. They will have to submit a specific application for registration, which must be approved by the Academic Board. Enrolment is in any case subject to the prior approval of the Academic Board of the doctoral course, which may eventually establish further evaluation methods.

Art. 12 - PUBLIC EMPLOYEES

The civil servant admitted to the PhD courses is placed, upon request, compatibly with the needs of the relevant Administration, on extraordinary leave for study reasons without allowances for the duration of the course and benefits from the scholarship if the required conditions are met.

In the event of admission to PhD programmes without a scholarship, or renunciation of one, the person on leave retains the economic, social security and retirement benefits enjoyed by the public administration with which the employment relationship is established.

If, after obtaining the PhD, the employment relationship with the public administration is terminated by the employee's will in the following two years, the amounts paid pursuant to the second sentence shall be recovered.

Public servants who have already obtained the title of Ph.D., nor public employees who have been enrolled in doctoral courses for at least one academic year, benefiting from such leave, are not entitled to extraordinary leave, with or without allowances. The period of special leave is useful for the purposes of career progression, retirement and social security benefits.

Art. 13 – DOCTORATE AND MEDICAL SPECIALIZATION SCHOOLS

Students enrolled in university medical specialization schools, if they have been awarded a Ph.D., will be able to enrol in the Ph.D. programme in compliance with the following conditions:

- a) compatibility, also in consideration of the distance between the locations, the activities and the commitment provided by the postgraduate school and the doctoral course, certified by the council of the medical postgraduate school and the doctoral board;
- b) incompatibility between the doctoral scholarship and the emoluments, however named, received in relation to the activities of the Graduate School.

In cases of joint attendance, the request for reduction of doctoral activities is accepted by the Academic Board of the doctoral course, subject to a positive assessment of the consistency of the research activities, already carried out in the medical specialization course, with the doctoral project. In order to accept the application referred to in this paragraph, the opinion of the compatibility of the doctoral project with the teaching purposes of the school of specialization is also required, expressed by the board of the school of specialization. If the application referred to in this paragraph is accepted, the doctoral course shall in any case last not less than two years.

Art. 14 - ENROLMENT

The successful candidates must enrol by the dates that will be announced at the same time as the publication of the rankings.

No communication will be sent to the winners regarding the deadline for enrolment.

Failure to enrol within the deadlines established for each PhD Programme will be considered as renunciation of the place, which will be assigned to the next candidate, according to the order of the ranking.

The enrolment application and its attachments must be uploaded to the Esse3 platform during enrolment, with the documentation listed below:

1. photocopy of a valid identity document, duly signed;
2. proof of payment of the enrolment fee by civil servants admitted to the doctoral course, who are not beneficiaries of a scholarship;
3. receipt of payment of the Regional Tax for the right to university study to be made by following the instructions on the ADISU website at the link: <https://w3.adisupuglia.it/pagamenti-pa/>;
4. photocopy of the tax code;
5. a passport-sized photo duly signed on the reverse;
6. payment of stamp duty of Euro 16.00 through PagoPA on the Esse3 platform;

In addition, in case of admission to the doctorate, candidates in possession of an academic qualification obtained abroad must also submit, within 60 days from the date of enrolment, the following documentation:

- curricular qualifications translated into Italian and legalized by the competent Italian diplomatic or consular representations abroad (Master's Degree or Master's Degree certificate in original or certified copy of the original);
- Certificate of the exams (Transcripts) taken during the second cycle course in original or certified copy of the original;
- "declaration of value on site" of the qualification obtained abroad issued by the competent diplomatic or consular representations abroad; alternatively, the Certificate of Comparability of the foreign university qualification issued by the ENIC-NARIC centre in Italy (CIMEA) may be submitted, which contains all the information necessary for the evaluation of the qualification.

The Administration reserves the right to request the "declaration of value on site" also to those who have obtained the qualification in a country of the European Union in the event that there are doubts about the validity of the same.

Foreign citizens not residing in Italy must submit the following certificates within 60 days from the date of enrolment:

- a) Birth certificate
- b) Certificate of citizenship
- c) certificate of enjoyment of civil and political rights in the country of origin or origin;
- d) certificate equivalent to the general criminal record certificate issued by the competent authority of the State of which the foreign candidate is a national.

In order to enter Italy, citizens of non-EU countries residing abroad must register on the University portal and apply for an entry visa (postgraduate visa type D) at the Italian Embassy or Consulate competent for the territory.

In addition, non-EU citizens must present a valid residence permit or a copy of the application to the competent authorities and an Italian tax code.

The certificates issued by the competent authorities of the State to which the foreigner is a citizen must

comply with the provisions in force in the State itself and the signatures on them must be legalized by the competent Italian consular authorities. Those written in a foreign language must be accompanied by a certified translation into Italian that conforms to the foreign text, drawn up by the competent diplomatic and consular representation or by an official translator.

The forms relating to the aforementioned obligations will also be available on the website at the following address: www.uniba.it/it/dottorati/dottorati-di-ricerca/dottorati/40-ciclo/40-ciclo-2024-2025

Art.15 – FEES AND CONTRIBUTIONS

The annual fee for access to and attendance at PhD courses, payable only by public employees who do not benefit from a scholarship, amounts to € 940.00 divided as follows:

First instalment, of € 385.40, to be paid at the time of registration with PAGOPA method at the same time as the Regional Tax;

The instalment of € 554.60, due by PhD students with an ISEE PhD indicator greater than € 14,518.38, must be paid by 31 July of each year of the course using the PAGOPA method.

A 75% reduction in the annual fee applies to PhD students who are not beneficiaries of a scholarship and are employed by the University of Bari Aldo Moro.

Doctoral students who do not benefit from the scholarship or renounce it are exempt from paying tuition fees. Doctoral students who are civil servants who are not scholarship recipients are required to pay fees.

Doctoral students who are beneficiaries of ADISU scholarships and any honor loans, eligible students, who are not beneficiaries due to lack of resources, are exempt from paying the contribution.

Doctoral students with a disability with a recognized disability equal to or greater than 66%, even if they already have an academic qualification, are totally exempt from fees and contributions.

All students enrolled in PhD programmes are required to pay the regional tax for the right to university education, except for doctoral students with disabilities with a recognised disability equal to or greater than 66%.

All PhD students are required to pay the regional tax, determined according to the income of their family unit (Mod. ISEE), of the amount indicated in the table below:

ADISU REGIONAL TAX

less than or equal to € 25,000.00	€ 130,00 VAT included
from € 25.000,01 to € 50.000,00	€ 160,00 VAT included
over € 50,000.00	€ 180,00 VAT included

Students who do not submit the ISEE are placed in the maximum range of the regional tax. The amount of the ADISU regional tax must be made by following the instructions on the ADISU website at the link: <https://w3.adisupuglia.it/pagamenti-pa/>.

PhD students already in possession of another Ph.D. degree are required to pay the maximum amount of the contribution.

Doctoral students who do not renew their enrolment in the years following the first will be excluded from the PhD programme. In any case, the amount of € 67.60 is due for the diploma cost, in addition to the stamp duty in force from time to time.

Late payments will be charged a penalty of € 20.00 for payments made within 30 days of the deadline, € 40.00 for those made within 60 days, € 80.00 for those made after 60 days of the deadline.

TITLE II

COMPETITIONS FOR POSITIONS RESERVED FOR GRADUATES IN FOREIGN UNIVERSITIES

Art. 16 – PROVISIONS FOR PLACES RESERVED FOR GRADUATES OF FOREIGN UNIVERSITIES

The provisions of this Title govern the procedures for participation in competitions reserved for graduates of foreign universities, where provided for in the individual doctoral forms attached (from 1 to 29).

Candidates who have graduated from foreign universities and hold a qualification equivalent to the Italian degree referred to in Article 2 may apply to participate in the reserved selection.

Those who are in possession of a qualification obtained at a foreign university and which has not already been declared equivalent to the Italian degree, must apply for its equivalence only for the purpose of admission to the doctorate to which they intend to compete as regulated in article 2 of this call.

Applications for admission must be completed online using the appropriate procedure available at: <https://pica.cineca.it/uniba/dottorati40>

Applicants must indicate in their application:

- surname and first name, date and place of birth, citizenship, tax code, if any, residence and address elected for the purposes of the competition, postal code, e-mail address and telephone number;
- the exact name of the Ph.D. course in which they intend to compete.

Art. 17 - SUBMISSION OF APPLICATIONS AND SELECTION PROCEDURES

The application for participation in the selection must be submitted exclusively using the appropriate procedure made available at: <https://pica.cineca.it/uniba/dottorati40> no later than **22 July 2024 at 12.00 noon (CET Italian time)** under penalty of exclusion from the selection.

Access to the procedure takes place on the PICA portal (Integrated Platform for University Competitions) which can be accessed after registration or with SPID credentials, as indicated in the Guidelines.

Applications received in a manner other than the one indicated will not be considered valid.

The application for participation in the competition must refer exclusively to the PhD Course for which you intend to participate. In the event that you intend to participate in more than one Course, you must submit as many applications.

The application is to be considered for all legal purposes as a self-certification, pursuant to art. 46 and 47 of Presidential Decree 445/2000 and subsequent amendments, of the data contained therein and in the documents attached to it.

The University Administration assumes no responsibility for the loss of communications, due to inaccurate indications of residence and address by the candidate or failure or late communication of the change of the same, nor for any misunderstandings not attributable to the fault of the Administration itself. The following documents must be attached to the application form:

- ◆ certificate attesting to the foreign qualification with an indication of the exams taken and the relative grades together with the translation into Italian. The translation must be signed under one's own responsibility in order to allow the recognition of the qualification;
- ◆ curriculum vitae including academic qualifications and study of scientific activity and professional experience, written in Italian or in English or in French, indicating the academic qualifications obtained. In particular, the candidate will indicate: any scholarships awarded by Italian, foreign or international institutions, specifying the start, end and duration dates; certificates of participation in post-graduate and master's courses, specifying the date of achievement, duration and the provider of the training; any awards and other scientific/academic qualifications deemed useful for the selection;
- ◆ scientific publications;
- ◆ a summary of the degree thesis in English or French, with a minimum length of 3 and a maximum of 6 pages organized as follows: topic of the thesis, research methodology, results obtained;
- ◆ Statement of Research Interest;
- ◆ at least two letters of reference, from specialists in the field or professors from institutions where the candidate has been trained or has worked or with which he/she has collaborated;

- ♦ research project where provided for in the form relating to the PhD course for which the candidate is applying;
- ♦ photocopy of a valid identity document, duly signed;

The conformity of the qualifications to the original will be declared by the candidate by means of self-certification or declaration in lieu of an affidavit provided for by art. 19, 46 and 47 of D.P.R. 445/2000. Once completed, the application must be printed, signed and reloaded in the procedure following the instructions described in the online procedure. The absence of a signature and/or identity document is grounds for exclusion from the selection.

In the case of authentication with the use of SPID (Public Digital Identity System) credentials, it will not be necessary to sign the application.

Failure to choose a curriculum, where applicable, will result in exclusion from the competition. The submission of the application to the University takes place automatically with the final closure of the online procedure. Therefore, no delivery or shipment of paper material to the Offices must be made. At the end, the application will be registered and the submission confirmed by email by the system.

The Selection Committees will be appointed by Rector's Decree as provided for in art. 4 of this call.

The Commission has a total of 100 points available for the evaluation of candidates, which will be done only for qualifications (procedure 1), for qualifications and oral examination (procedure 2), according to the indications contained in the individual doctoral sheets attached. Candidates who have obtained a score lower than 60/100 will not be considered eligible.

The categories of qualifications that will be evaluated, provided that they are related to the subjects of the relevant doctoral courses put up for competition, and the maximum score attributable to each of them are described below:

A) Selection procedure for qualifications only (procedure 1)

Unless otherwise indicated in the form for each doctoral programme, the Selection Board has 100 points for the evaluation of the qualifications presented by the candidates, divided as follows:

- ♦ for curriculum vitae and studiorum (including academic and study qualifications as well as scientific activity and professional experience) up to a maximum of 60 points;
- ♦ for scientific qualifications, related to the topics covered by the PhD course for which the competition is held, up to a maximum of 20 points:
 - scientific publications (monographs, articles in scientific journals)
 - minor publications (proceedings of national and international conferences, specific contributions in volumes, etc.);
- ♦ for professional expertise and reference letters, illustrating the candidate's skills, competencies and aptitudes, written in English, up to a maximum of 20 points.

B) Selection procedure based on qualifications and oral examination (procedure 2)

For the evaluation of the qualifications presented by the candidates, the Selection Board has, unless otherwise indicated in the form relating to each doctoral course, 60 points, distributed as indicated:

- ♦ for curriculum vitae and studiorum (including academic and study qualifications as well as scientific activity and professional experience), up to a maximum of 30 points;
- ♦ for scientific qualifications, related to the topics covered by the PhD course for which the competition is being held, up to a maximum of 15 points:
 - scientific publications (monographs, articles in scientific journals)
 - minor publications (proceedings of national and international conferences, specific contributions in volumes, etc.);
- ♦ for professional expertise and letters of reference, illustrating the candidate's skills, competencies and aptitudes, written in English, up to a maximum of 15 points.

In the event that the PhD form requires the research project, the positive evaluation of which together with the other qualifications is a condition for admission to the oral examination, it is awarded up to a maximum of 20 points. In this case, the scores assigned to the other titles will be reduced, assigning 20

points for resumes, 10 points for publications and 10 points for letters of reference.

The oral exam, up to a maximum of 40 points, is aimed at ascertaining the knowledge of the foreign language and the aptitude of the candidates for scientific research, also through discussion of the research project presented by the candidate, for those doctoral courses for which it is provided for in the relevant sheet referred to in Article 1.

The oral exam will be considered passed only if the candidate has obtained a score of not less than 27/40.

Only and exclusively if provided for in the form relating to the chosen PhD Course, candidates residing abroad can take the oral exam remotely, using the MICROSOFT TEAMS platform or other online platform. In this case, interested parties must make a specific request and provide their contact in the application for admission to the selection and guarantee the use of a webcam to allow their identification to the Selection Board. The candidate must be available at the personal address, previously communicated, on the day of the oral examination, according to the calendar published on the website indicated in the form. The Commission has the right to agree with the candidate on a precise time for the start of the interview.

For the purposes of identification and, under penalty of exclusion from the selection procedure, each candidate is required, before the interview begins, to identify himself, by showing the same identity document already sent, in copy, as an attachment to the application.

Failure to provide the personal address, failure to connect, unavailability of the candidate on the day or time established or failure to show a valid identification document pursuant to the previous paragraph are grounds for exclusion from the selection procedure.

The University of Bari declines any responsibility for the eventuality that technical reasons prevent the regular conduct of the oral exam.

The provisions of Article 6 of this announcement shall apply as far as they are compatible.

In the event of a tie between two or more candidates, preference will be given to the youngest candidate.

For places reserved for graduates from foreign universities, the Commission will draw up a specific merit list. The merit ranking will be formed according to the order of the points of the overall mark reported by each candidate.

Candidates who have been successfully placed in the merit list will be declared winners, within the limits of the places available.

At the end of the selection procedure, the Rector will approve the acts of the competition and the relative merit ranking.

All candidates are conditionally admitted to the competition.

The decrees approving the acts and the relative rankings will be made public by means of an online bulletin board and by publication on the website, at the following address: www.uniba.it/it/dottorati/dottorati-di-ricerca/dottorati/40-ciclo/40-ciclo-2024-2025. This publication shall be deemed to be an official notification to the successful candidates. No communications will be sent to your home.

In case of withdrawal by one of the winners, the next candidate will be summoned on the basis of the merit ranking.

Art. 18 - ENROLMENT PROCEDURES

Successful candidates must enrol by the dates that will be announced at the same time as the publication of the rankings.

Failure to enrol within the established deadline will be considered as renunciation of the place that will be assigned to the next candidate, according to the order of the ranking.

The enrolment application and its attachments, referred to in Article 14, must be uploaded to the Esse3 platform during enrolment.

The forms relating to the aforementioned obligations will also be available on the website at the following address: www.uniba.it/it/dottorati/dottorati-di-ricerca/dottorati/40-ciclo/40-ciclo-2024-2025

FINAL PROVISIONS

Art. 19 - TRANSLATION AND LEGALIZATION OF DOCUMENTS

Deeds and documents drawn up in a foreign language must be translated and legalized by the competent authorities. Italian diplomatic or consular representations to the foreign State and must comply with the provisions in force in the State itself.

Art. 20 – INSURANCE COVERAGE

The University guarantees the insurance coverage of doctoral students for civil liability and accidents for the entire duration of the course for the activities that refer to the doctoral course, providing for the stipulation of the relevant policy.

Art. 21 – RIGHTS AND OBLIGATIONS OF DOCTORAL STUDENTS

Without prejudice to the rights and obligations provided for by the current University Regulations on PhDs and by Ministerial Decree no. 226/21, the acceptance of scholarships from the funds of DD.MM. 629/24 and 630/24 and scholarships from PNRR projects as well as scholarships that insist on public notices implies compliance with the relevant obligations. Students are required to attend courses and to continuously carry out study and research activities within the structures intended for this purpose according to the procedures that will be established by the Academic Board of the doctoral course, with an exclusive and full-time commitment of 1500 hours per year.

This commitment is ascertained by the compilation of an activity register.

The Academic Board, at the motivated request of the PhD student, may authorize the performance of paid activities, verifying their compatibility with the profitable performance of the training activities (teaching and research) related to the course. In particular, it is understood that for doctoral students with scholarships, paid activities must be limited to those consistent with the doctoral student's educational path; For doctoral students without a scholarship, the possible incompatibility deriving from the work activity must in any case be concretely assessed, without this leading to conduct detrimental to rights protected at the constitutional level, such as the right to study for the capable and deserving even if they lack means.

Doctoral students, as an integral part of the training project, can carry out, subject to the authorization of the Academic Board and the opinion of the competent teaching structures, without this entailing any increase in the scholarship, tutoring activities for students of bachelor's and master's degree courses as well as, in any case within the maximum limit provided for by the regulations, supplementary teaching activities. PhD students in the medical area can participate in clinical-assistance activities, without prejudice to the provisions of art. 4, paragraph 1 of the current Regulations on PhDs. After the third year of the doctorate, the limit is abolished.

The interventions provided for by Legislative Decree no. 68 of 29 March 2012 are extended to doctoral students, in the manner regulated therein.

In addition, where compatible, Ministerial Decree no. 930/22 "Provisions to allow simultaneous enrolment in two university courses" applies to doctoral students.

The provisions for the protection of maternity referred to in the decree of the Minister of Labour and Social Security of 12 July 2007, published in the Official Gazette no. 247 of 23 October 2007, apply to doctoral students. The University regulations ensure that doctoral students are represented on the Doctoral Board for the treatment of teaching and organizational problems.

Attendance of the doctoral course may be suspended, subject to deliberation by the Academic Board, up to a maximum of one year, maintaining the rights to any scholarship in use, unless the relative disbursement is interrupted, with subsequent recovery upon resumption of attendance, in cases of maternity, military service or civil service, serious and documented illness.

The enjoyment of the scholarship for attendance at the doctorate is compatible with other incomes, even those received continuously in the calendar year in which the scholarship is received, as long as they do

not exceed the maximum limit established by the regulations in force. If the income limit is exceeded, the scholarship is deemed to be revoked for the entire year. The interested party is required to declare annually the income received and to report any exceeding of the prescribed limit.

By the date established by the Academic Board (CdD), for the purposes of the annual tests, the doctoral student is required to submit to the Board a written report regarding the research activity carried out and the results achieved, as well as the certificates of any participation in seminars and congresses and other scientific initiatives, together with the publications produced. A positive evaluation by the Academic Board entails the transfer to the next year of the course, i.e. admission to the final exam in the case of students enrolled in the last year. The CdD may propose, with a reasoned resolution, after hearing the interested party, that a doctoral student be temporarily suspended from the course, or that he be excluded, with the consequent partial or total loss of any scholarship in use, in the event of:

- negative opinion by the Academic Board during the annual verification of the activity;
- unexcused and prolonged absences;
- conduct that is contrary to the rules of incompatibility.

Art. 22 – INTELLECTUAL PROPERTY AND CONFIDENTIALITY OBLIGATIONS

In cases where the doctoral student, during his/her doctoral course, has obtained research products that qualify as intellectual property rights, on which it is possible to obtain an industrial property right, such as inventions (patentable or not), know-how, utility models, ex ornamental models and designs, software, data and data collections, these will be regulated in accordance with the current legislation on the inventions of university researchers and the University regulations, without prejudice to the various agreements concluded by virtue of particular types of relationship (such as apprenticeship contracts).

The PhD student is required to sign a specific commitment of confidentiality and recognition of intellectual property rights in relation to information, data and documents of a confidential nature that may become aware of in the performance of his/her activity, including any carried out at a company or an institution/university.

In any case, the doctoral student is guaranteed the possibility of carrying out the ordinary publication activities provided for by the training course, which must take place in compliance with the confidentiality commitment undertaken with the University for the activity carried out also in a company, as well as any specific agreements concluded by virtue of particular types of relationship (such as doctorates with an apprenticeship contract).

Art. 23 – GRADUATION

The title of Ph.D. or Ph.D. is awarded following the positive evaluation of a research thesis that contributes to the advancement of knowledge or methodologies in the chosen field of investigation. The PhD thesis, accompanied by a summary in Italian and English, is written in Italian or English, or, with the authorization of the Academic Board, in another language.

The Selection Committees of the final examination will be formed and appointed, for each PhD Course, in accordance with the current University Regulations on PhDs.

The exam cannot be repeated.

Art. 24 – CONTROLS

The University carries out appropriate checks on the truthfulness of the self-declarations made by the candidate. If the control ascertains the falsity of the content of the declarations, the candidate is excluded from taking the competition tests or, if already registered, because he or she is the winner of the competition, he or she is declared forfeited, without prejudice to the criminal sanctions provided for by art. 76 of D.P.R. n. 445/2000.

Art. 25 - PROCESSING OF PERSONAL DATA AND RIGHT OF ACCESS

The personal data contained in the application form (and in the curriculum vitae) will be processed for the purposes of managing this procedure and in application of the current regulatory provisions on the processing of personal data. The data will be processed – by the subjects authorised to process – with manual, IT and telematic tools within the scope and for the purposes specified above, in compliance with

the security measures adopted by the University and in compliance with the provisions of EU Regulation no. 2016/679 and current national legislation on the protection of natural persons with regard to the processing of personal data. The Data Controller is the University of Bari Aldo Moro, with registered office in Piazza Umberto I, n. 1, 70121 - BARI. The designated Data Protection Officer can be contacted at the following email address: rpd@uniba.it. The full text of the policy it is available at <https://www.uniba.it/it/ateneo/privacy/informativa/informativa-selezioni/view>.
Insolvency proceedings are public.

Candidates have the right to exercise their right of access to the documents of the competition procedure in accordance with the procedures and terms provided for by current legislation.

Art.26 - PERSON IN CHARGE OF THE PROCEDURE

Pursuant to Law no. 241/1990 and subsequent amendments, the person in charge of the procedure is Dr. Maria Luisa Loiudice – Head of the Ph.D. Unit.

Any clarifications can be requested at the following e-mail address: dottorato@uniba.it.

Art. 27 – REFERENCE STANDARDS

For anything not provided for in this announcement, please refer to the regulations currently in force on the subject and in particular to the University Regulations on the subject of PhDs published on the www.uniba.it website. Foreign students can obtain more information at [“Procedure per l’ingresso, il soggiorno, l’immatricolazione degli studenti internazionali e il relativo riconoscimento dei titoli, per i corsi della formazione superiore in Italia”](#). Acknowledging that this announcement will be translated into English, in the event of any disputes, only the text in Italian will be authentic.

Art. 28 – PUBLICATION

The notice of the announcement of this competition has been forwarded to the Ministry of Justice for publication in the Official Gazette of the Italian Republic – 4th Special Series – Competitions and is published on the online register and on the Euraxess platform.

This decree will be ratified by the Governing Bodies in the first available sessions.

Bari, 21st June, 2024

For THE RECTOR
F.to Prof.ssa Grazia Paola NICCHIA

ANNEX 1)

PROFILE

PhD PROGRAMME IN BIODIVERSITY, AGRICULTURE, AND ENVIRONMENT

Scientific Area CUN: 07 - Agricultural and Veterinary Sciences; 05 - Biological Sciences

Scientific Subject Code: AGR/01, AGR/02, AGR/03, AGR/04, AGR/05, AGR/07, AGR/11, AGR/12, AGR/17, AGR/19, BIO/03, BIO/04, BIO/05, BIO/07, BIO/18, CHIM/12 and ICAR/03

Coordinator: Prof.ssa Cinzia Montemurro

Administrative office: Dipartimento di Scienze del Suolo, della Pianta e degli Alimenti

PEC: disspa@pec.uniba.it

Duration: 3 years

Curricula:

- 1) Genetics and Plant Biotechnology (Scientific Subject Code: AGR/07);
- 2) Environmental Sciences (Scientific Subject Codes: BIO/03, BIO/04, BIO/05, BIO/07, BIO/18, CHIM/12 and ICAR/03);
- 3) Mediterranean Sustainable Agriculture (Scientific Subject Codes: AGR/01, AGR/02, AGR/03, AGR/04, AGR/05, AGR/17 and AGR/19);
- 4) Crop Protection (Scientific Subject Codes: AGR/11 and AGR/12).

Total number of places available: n. 25 of which no. 1 reserved for graduates of universities abroad

- n. 1 position with a scholarship funded by the University of Bari for curriculum 2);
- n. 10 positions with a scholarship funded by D.M. n. 630/2024 – innovative doctorates with industrial address: 2 positions for curriculum 1); 1 position for curriculum 2); 3 positions for curriculum 3); 4 positions for curriculum 4);
- n. 10 positions with a scholarship co-funded by companies and University of Bari: 3 positions for curriculum 1); 1 position for curriculum 2); 3 positions for curriculum 3); 3 positions for curriculum 4);
- n. 1 position with a scholarship co-funded by the project PRIN PNRR 2022 codice P2022PYC4A "New tools for seedlessness in sustainable table grapes. NOSEEDS" CUP H53D23010700001 for the curriculum 1);
- n. 1 position with a scholarship funded by CNR IRSA for curriculum 2);
- n. 1 position with a scholarship funded by EFSA grant BIODROB "Biology, ecology and transmission of Xylella fastidiosa of the sharpshooter Draeculacephala robinsoni". GP/EFSA/PLANTS/2023/06, Lot3; for the curriculum 4);
- n. 1 position with a scholarship funded by project MARV.E.L. reserved to graduates at foreign Universities curriculum 3);

POSITIONS WITH SCHOLARSHIP:

1 position for curriculum 2 funded by University of Bari Aldo Moro

Project title: Assessment of biodiversity, biological resources, and fishery sustainability in the Ionian Sea
Habitat degradation, overfishing, marine pollution, spread of non-indigenous species, and climatic change are the main impacts on the marine ecosystems and biodiversity, which provide ecosystem services essential to the human wellness. The research project aims to evaluate the spatial-temporal distribution of the biodiversity and the fishery resources in the Ionian Sea, highlighting their changes over the last thirty years and the effects of environmental threats deriving from fishing activities, dumping and accumulation of marine litter, introduction and spread of non-indigenous species and ocean warming. The research team has a time series data (more than

30 years) on the fishery resources of the Ionian Sea collected in the context of the experimental surveys financed by EU. The integrate and novel statistical analysis on these data will allow to explore the influence of the different factors (ecological, genetic, anthropic) on the dynamics of marine assemblages and fishery resources.

Abroad period: maximum 12 months

- **D.M.630/24**
- 1. **D.M.630/24**
 - **Project title and scholarship theme: position for the curriculum 1; Improving sustainability and resilience to climate change in durum wheat through the application of advanced genomic knowledge**
 - **Research Activity Description:** The project involves the characterization of a tetraploid wheat collection for adaptation to hot-arid environmental conditions of the Mediterranean area exacerbated by ongoing climate change. Through association analysis, phenotypic data on traits regarding phenology, disease resistance, yield and yield quality will be combined with molecular data and genomic sequencing. The ultimate goal is the analysis and mapping of the genetic basis of the most important agronomic traits linked to adaptation and the development of corresponding molecular tools for implementing this knowledge in wheat breeding programs.
 - **Co-financing company/body:** CREA Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria
 - **Period abroad:** 6 months
 - **Period at the institution provided for by Ministerial Decree no. 630/24:** 12 months
- 2. **D.M.630/24**
 - **Project title and scholarship theme: position for the curriculum 1; Breeding strategies for the Apulian table grape**
 - **Research Activity Description:** The growing demand for sustainable and environmentally friendly viticulture is leading to a multiplication of breeding programs aimed at obtaining vines that are resistant to powdery mildew (PM) and downy mildew (DM), the two most damaging vine diseases. In Puglia, the most important Italian region to produce table grapes, an extensive crossing program was launched in 2015 with 113 crosses, including elite table varieties, seedless varieties and resistant varieties, by IVC network. The main seedling production parameters were measured for each cross. The proposed project research aims to develop new crosses both between two seedless parents and new combinations to obtain candidate varieties resistant and seedless. The tools for the selection for seedlessness will be the marker VvAGL11 and other two new ones and for resistance to PM and DM different SSR markers associated to the resistance genes.
 - **Co-financing company/body:** Italian Variety Club network
 - **Period abroad:** minimum 6 months
 - **Period at the company provided for by Ministerial Decree no. 630/24:** 12 months
- 3. **D.M.630/24**
 - **Project title and scholarship theme: position for the curriculum 2; Development of innovative sensor-based methodological approaches for the evaluation of indoor and outdoor pollution and health risk assessment in areas of high industrial density**
 - **Research Activity Description:** The research project aims to develop and implement an innovative methodological sensor-based approach addressed to health risk assessment in urban settlements nearby high industrialized areas, through the field testing of a smart sensor network for high-temporal and spatial resolution monitoring of indoor and outdoor pollutants. The developed monitoring network will allow a more accurate characterization of the inhalation exposure to high priority pollutants, emitted both from channeled and/or diffuse outdoor sources and from specific indoor sources, and the development of a system for real-time processing and mapping of network outputs capable of improving life quality and risk perception of population in a Citizen science perspective.
 - **Co-financing company/body:** BEEFREST
 - **Period abroad:** 6 months

- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 18 months

4. D.M.630/24

- **Project title and scholarship theme: position for the curriculum 3; Nickel uptake and accumulation in vegetables grown with soilless cultivation systems**
- **Research Activity Description:** This project aims to study how production factors (water, fertilizers, and growing substrate) contribute to nickel accumulation in hydroponically grown vegetables and how nickel uptake and translocation are influenced by environmental climatic parameters (temperature, radiation, relative humidity). Additionally, through the adoption of modern and sustainable agricultural practices, such as closed-cycle hydroponic systems (high efficiency of water and nutrient use and reduction of the environmental impact of agricultural activities), the effectiveness of organic chelating agents in limiting nickel root absorption will be evaluated.
- **Co-financing company/body:** Azienda Agricola F.lli Lapietra s.s
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 12 months

5. D.M.630/24

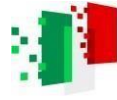
- **Project title and scholarship theme: position for curriculum 3; Innovative protocols for managing the microclimate of kiwifruit orchards in Southern Italy**
- **Research Activity Description:** The project should address the development of environmentally and economically sustainable protocols for managing kiwifruit orchard in hot and dry conditions (typical of Southern Italy). It will be necessary: to study the ecophysiology of the recently introduced kiwifruit cultivars in semi-arid environments with high temperature and evapotranspirative demand; to evaluate the effects of different covering materials on the functional and productive performances of the vines; to provide some indication on the best matching between the pedoclimatic conditions, the variety and the covering material to be used.
- **Co-financing company/body:** Jingold S.p.a.
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 12 months

6. D.M.630/24

- **Project title and scholarship theme: position for curriculum 3; Fruit tree species in agrivoltaics systems**
- **Research Activity Description:** The project should address the evaluation of hybrid agriculture (fruit tree crops)-energy production systems that contribute to environmental and economic sustainability on the farm. Data should be collected on the different crops grown below the solar panels. In particular, the research should investigate deeply on the microclimatic conditions, water consumption, biodiversity, climate change resilience, and agricultural productivity/quality for different types of fruit crops.
- **Co-financing company/body:** Svolta s.r.l.
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

7. D.M.630/24

- **Project title and scholarship theme: position for curriculum 4; Development of an organic amendment with reinforcing activity against soil-borne pathogens, derived from olive pomace.**
- **Research Activity Description:** The project aims to develop sustainable strategies to protect Mediterranean crops from soil-borne pathogens (e.g., *Verticillium dahliae*, *Phytophthora* spp., *Fusarium* spp.) by improving soil health using olive pomace, a byproduct of olive oil extraction using ultrasound



technologies. The pomace contains phenolic compounds with antimicrobial and antioxidant properties that can control pathogens and enhance soil fertility. The project will assess the effectiveness of the pomace against soil pathogens, its impact on plant growth and yield, and the overall health of the crops. Changes in the soil microbial community will also be analyzed using traditional and metagenomic techniques, along with the mechanisms of action triggered by the phenolic compounds. The composition of the pomace will be analyzed to determine nutrient content and other relevant parameters.

- **Co-financing company/body:** TIMAC Agro Italia.
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months
- **Transferring university (if any):** *In the case of scholarships deriving from transfers from other universities, also enter the transferring university or delete the entry*

8. D.M.630/24

- **Project title and scholarship theme:** position for curriculum 4; **Non-thermal plasma based innovative technologies for promoting plant growth and defences**
- **Research Activity Description:** The project will be aimed at defining innovative and environmentally friendly methods based on non-thermal plasma for plant growth and health, effective against pathogens and other stress factors. Energetically efficient non-thermal plasma based technologies should be explored for nitrogen fixation in gases and liquids, and proposed as innovative methods for sustainable fertilizers production with possible biostimulant and resistance induction effects.
- **Co-financing company/body:** TIMAC Agro Italia.
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

9. D.M.630/24

- **Project title and scholarship theme:** position for curriculum 4; **Interference with insect vector-plant interaction through endotherapeutic compounds for a sustainable control of *Xylella fastidiosa* transmission**
- **Research Activity Description:** The project aims at interfering with the insect vector-plant interaction and consequent *X. fastidiosa* transmission through the alteration of the xylem sap chemistry via endotherapeutic compounds. Furthermore, the candidate will investigate i) the possible activation of plant defensive pathways upon injection in the xylem stream of feeding deterrent compounds; ii) the impact on the insect behavior, transmission dynamics and bacterial growth of xylem sap profiles favorable/unfavorable for the insect vector.
- **Co-financing company/body:** LAINCO S.A
- **Period abroad:** 12 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

10. D.M.630/24

- **Project title and scholarship theme:** position for curriculum 4; **Application of plant extracts to improve plant's response to stresses and the shelf-life of its products**
- **Research Activity Description:** The project must concern the application of extracts of plant origin in *in vitro* and *in vivo* assays to test their effectiveness against relevant plant pathogens. It must provide applications of those extracts on plants and/or their products, identifying crops of particular interest, in order to reduce product losses and prolong their shelf-life. It must also include a characterization of the extracts' composition and the study of their mode of action by conventional and omic approaches.
- **Co-financing company/body:** SICIT S.p.a.
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

- ***scholarships co-financed with companies***
- 1. **Scholarship co-funded by company: CON.CER.**
 - **Project title and scholarship theme: position for curriculum 1; Traceability and Identification of durum wheat genotypes with high nutritional value**
 - **Research Activity Description:** Durum wheat is the essential raw material for the pasta industry and plays a crucial role in our country, especially in the South, where the lack of viable crop alternatives makes it fundamentally important for the overall agricultural economy.
 - To enhance the value of Apulian cereal productions, the quality of wheat will be studied by leveraging the biodiversity present within the species. The identification of genotypes suitable for the pedoclimatic condition of the Capitanata and the marginal areas and the study of the genetic bases of quantitative traits related to wheat quality will enable the identification of varieties with good productive performance and high nutritional quality. Furthermore, protocols for the traceability and tracking of varieties and finished products will be optimized to ensure the varietal identification of raw materials, guaranteeing safety and transparency for the consumer.
 - **Period abroad:** 6 months
 - **Period at the company:** 6 months
- 2. **Scholarship co-funded by company: cantine LIZZANO.**
 - **Project title and scholarship theme: position for curriculum 1; Varietal selection and gene expression studies to obtain a fermented drink with low alcohol content**
 - **Research Activity Description:** Wine production represents an ancient human activity and one of the most economically important markets in Europe. Moreover, the health effects of grapes and related products have been largely demonstrated, and mostly depend on their richness in bioactive molecules such as flavonoid and non-flavonoid phenolic compounds. Italy has the highest global wine production and provides one of the richest grapevine germplasms in the Mediterranean area. In this research, our attention is focused on the evaluation of the total phenol and anthocyanin content in autochthonous Apulian grapevine cultivars. In collaboration with Cantine Lizzano different dealcoholized wines will be obtained, in order to study a product with high nutraceutical value and low or 0.5 % alcohol. The analysis of gene's expression involved in the synthesis and accumulation of bioactive compounds will be carried out on the most promising autochthonous cultivars (Negramaro, Nero di Troia and Susumaniello and so on).
 - **Period abroad:** 6 months
 - **Period at the company:** 12 months
- 3. **Scholarship co-funded by company: Pantaleo s.p.a**
 - **Project title and scholarship theme: position for curriculum 1; Molecular traceability and quality improvement of olive and tomato**
 - **Research Activity Description:** In the last decades, the demand for molecular tools for authenticating and tracing agri-food products has significantly increased. Food safety and quality have gained an increased interest for consumers, producers, and retailers, therefore, the availability of analytical methods for the determination of food authenticity and the detection of major adulterations takes on a fundamental role. In this research, we want to focus on the molecular techniques for fresh and processed olive and tomato authentication and traceability. Moreover, a special focus on the application of biotechnologies tools like the genome editing will be set up on autochthonous Apulian tomato cultivars to reduce the allergenic proteins. The application of these techniques to agri-food traceability and authentication and the improvement of quality of production, could contribute a great deal to the reassurance of consumers in terms of transparency and food safety and may allow producers and retailers to adequately promote their products.
 - **Period abroad:** 6 months
 - **Period at the company:** 12 months
- 4. **Scholarship co-funded by company: Maricoltura Mar Grande**
 - **Project title and scholarship theme: position for curriculum 2; Development of integrated rearing systems and restoration of filter-feeding marine invertebrates**

- **Research Activity Description:** The project should be addressed at the development of integrated systems for cultivating non-edible filter-feeding invertebrates, with particular focus on sponges, both in situ and ex situ. It will also include sponges obtained from regenerative aquaculture systems which, in addition to acting as bioremediators, reduce the exploitation of natural stocks and produce biomass used for the restoration of depleted areas. The objective is to improve knowledge on the biology of target species and establish a sustainable and replicable model for cultivation and translocation of sponges, enhancing marine ecosystem health and promoting the restoration of benthic areas.

- **Period abroad:** 6 months
- **Period at the company:** 6 months

5. Scholarship co-funded by company: Agridatalog

- **Project title and scholarship theme: position for curriculum 3; The precision management of fruit crops**

- **Research Activity Description:** The project aims to develop systems for the automatic management of irrigation for fruit species based on physiological and climatic indicators in relation to the different phenological stages. The increasingly reduced availability of water resources in many countries in the Mediterranean area and the higher costs of the same resource require systems for optimal management of the water resource through precision agriculture strategies.

- **Period abroad:** 6 months
- **Period at the company:** 12 months

6. Scholarship co-funded by company: Vivai Murciano

- **Project title and scholarship theme: position for curriculum 3; Use of innovative in vitro multiplication techniques on species belonging to the Vitis genus, as an opportunity to develop the Apulian nursery sector**

- **Research Activity Description:** The project focuses on nursery activities for the multiplication of new grape varieties and clones, approved and in the process of being registered. Furthermore, the project also aims to provide ongoing phytosanitary monitoring to protect plantations and nurseries, ensuring the production of healthy and high-quality vine-nursery materials. In particular, the research intends to develop production protocols through the in vitro multiplication of viticultural material. This further advancement would make it possible to increase the health of the commercialized propagation material, exploiting the possibilities provided by the remediation and maintenance of sanitary conditions in vitro.

- **Period abroad:** 6 months
- **Period at the company:** 15 months

7. Scholarship co-funded by company: PUGLIAOLIVE

- **Project title and scholarship theme: position for curriculum 3; Study of the effects of using 4.0 technologies in Olive Cultivation**

- **Research Activity Description:** The project will focus on defining 4.0 agriculture approaches specific to new olive cultivation systems, contributing to the environmental and agronomic sustainability of olive farms. Different 4.0 technologies must be used, including drones for aerial treatments and crop monitoring, field sensors, DSS, precision pruning systems. Their performance in terms of effectiveness, efficiency, and sustainability, in the olive cultivation sector must be evaluated in order to assess the 4.0 technologies and strategies that best fit this crop.

- **Period abroad:** 6 months
- **Period at the company:** 6 months

8. Scholarship co-funded by company: CRSFA Locorotondo

- **Project title and scholarship theme: position for curriculum 4; Impact of agricultural management practices on soil biological quality in olive groves**

- **Research Activity Description:** The project should address the study of soil biological quality and the ecosystem services associated with it in response to agronomic management in olive groves. It is necessary to investigate the effects of agricultural practices, including intercropping, soil cover management, irrigation, application of soil amendments, herbicides and insecticides, on the abundance

and diversity of the soil communities in olive groves. The soil fauna (carabids, araneids, mites, nematodes...) should be used as an indicator of soil biological quality determined through the QBS-ar index, based on the degree of adaptation of microarthropods to the soil. The experimental investigations should also concern the provision of important ecosystem services provided by the soil such as biological control, nutrient cycling, carbon storage.

- **Period abroad:** 6 months
- **Period at the company:** 12 months

9. Scholarship co-funded by company: Orofruit Soc. Coop. Agricola

• **Project title and scholarship theme:** position for curriculum 4; **Innovation in protection techniques also in postharvest aimed at raising the quality and competitiveness of fresh fruit and vegetables**

• **Research Activity Description:** The project must concern the implementation of enabling artificial intelligence and 'omics, physical and biological technologies to improve quality and competitiveness of fresh fruits and vegetables also in postharvest. Experiments will be carried out in planta, in packing-house and in vitro to collect data on the effectiveness of a selection of possible tools for controlling the main table grape pathogens. In particular, in controlled conditions and on the plant, the activity towards the biological target and more generally on the plant microbiome of different varieties of table grapes, the main company's product, will be measured.

- **Period abroad:** 6 months
- **Period at the company:** 6 months

10. Scholarship co-funded by company: Plasmapps s.r.l.

• **Project title and scholarship theme:** position for curriculum 4; **Effect of plasma-activated water (PAW) on phytopathogens of mediterranean interest and on the bioavailability of soil macro and micronutrients**

• **Research Activity Description:** The project proposal focuses on defining alternative and eco-sustainable strategies for protecting Mediterranean crops from soilborne pathogens. Specifically, the activity of plasma-treated water against soilborne pathogens (e.g., *Verticillium dahliae*, *Phytophthora* spp., etc.) will be investigated. Additionally, the effects on the microbial community and the chemical-physical characteristics of the soil (availability of nutrients, organic matter degradation, redox potential, etc.) will be evaluated. The effects of plasma-activated water on pathogens, microorganisms, plants, and soil will be assessed using techniques such as metagenomics, transcriptomics, and metabolomics analysis.

- **Period abroad:** 6 months
- **Period at the company:** 6 months

ADDITIONAL PLACES WITH SCHOLARSHIPS AND/OR EQUIVALENT

1. n. 1 position with a scholarship for the curriculum 1), co-funded by the project PRIN PNRR 2022 codice P2022PYC4A "New tools for seedlessness in sustainable table grapes. NOSEEDS" CUPH53D23010700001

Research Activity Description: New tools for seedlessness in sustainable table grapes. NOSEEDS

Grapevine (*Vitis vinifera* L.) is a worldwide important species mainly cultivated to produce berries used in the winemaking process. However, the table grapes for fresh consumption are also highly requested by consumers. Table grape breeding programs focus on different traits such as seedlessness, pathogen resistance and berry quality.

The aim of the project NOSEEDS is the establishment of new Italian seedless varieties that are also simultaneously resistant to biotic stress, through the application of innovative biotechnological breeding approaches. The development of these new varieties will allow the promotion and the competitiveness of the Italian grapevine sector.

The starting point of the activities foreseen by the project will be the collections of grapevine genotypes obtained from an extensive crossing program, launched in 2015 in Apulia region, between elite table grape varieties, seedless cultivars and resistant genotypes.

These will be evaluated through an extensive marker assisted selection approach complemented by phenotypic evaluations, that will allow to select most promising genotypes. Furthermore, as an alternative, the project will also take advantage of material already developed (i.e. transgenic Arabidopsis lines expressing the VviINO gene involved in ovule development. This material provides a unique opportunity to support the development of innovative biotechnological approaches aiming to evaluate the suitability of VviINO editing in seedlessness engineering and for the fast development of new more sustainable pathogen resistant seedless varieties.

- **Period abroad:** 12 months maximum

2. n. 1 position with a scholarship for the curriculum 2), funded by the CNR IRSA

Research Activity Description: Green solutions for recovering contaminated areas

Among the nature-based solutions for the redevelopment of degraded areas, the phyto-assisted bioremediation (PABR, Plant-Assisted BioRemediation) is an eco-sustainable strategy for the environmental recovery of areas affected by widespread and multiple contamination. Since 2013, the IRSA-CNR has been experimenting with this technique, using the Populus tree species to decontaminate three areas within an experimental site (Taranto) from PCBs and heavy metals. This research is aimed at developing innovative protocols to improve the efficiency of the PABR strategy in planting areas where contamination is significantly high and in the areas of poplar groves affected by fire (Jul-22), testing new generation soil improvers and the use of nanomaterials, optimizing the agronomic management of the plants, evaluating the release of plant metabolites and the related effects on microbial communities through field applications and microcosm tests. Chemical analyzes of soil properties, contaminants in the soil and plant organs, analysis of the structure and functionality of microbial communities, spectroradiometric analyses of soil and vegetation will be conducted. Furthermore, protocols will be developed for the definition of the quality of PABR biomass to develop innovative techniques for energy valorisation.

- **Period abroad:** 6 months

3. n. 1 position with a scholarship for the curriculum 4), funded by EFSA grant BIODROB “Biology, ecology and transmission of Xylella fastidiosa of the sharpshooter Draeculacephala robinsoni”. GP/EFSA/PLANTS/2023/06, Lot3; for the curriculum 4);

Research Activity Description: Transmission biology of Xylella fastidiosa by the sharpshooter Draeculacephala robinsoni. The sharpshooter *D. robinsonii* is a xylem feeding insect native to North America and recently introduced in Europe. The goal of the project is to determine through classical transmission trials and EPG-assisted probing behavioral studies the sharpshooter-mediated epidemiology of the fastidious bacterium. The study will be complemented with the characterization of the insect vibrational communication aimed at devising a semiophysical-based strategy of behavioral manipulation and interference with *X. fastidiosa* transmission.

- **Period abroad:** 18 months maximum

4. n. 1 position with a scholarship for the curriculum 3), funded by project MARV.E.L. reserved to graduates at foreign Universities;

Research Activity Description: Analysis of agroecological transition pathways in Mediterranean marginal areas

The project must investigate the sustainability criticalities of current agricultural systems in a context of climate change and identify possible reconfigurations of the farms' business models in an agroecological perspective. The project should also study the connections of agriculture with the other components of the agri-food system and the possible effects of transition on the agri-environmental landscape.

- **Period abroad:** 12 months

Admission mode:

The selection will be made following the art. 6 typology B of the call.

The examination will be based on the evaluation of candidate qualification, proposed research project (at most 12000 characters, spaces included) on the specific selected thematic and oral interview (on submitted documentation and research project) and foreign language knowledge checking (English).

Admission tests for foreign candidates:

Foreign candidates are allowed to be examined in English.

Admission exam dates and time:

Evaluation of the qualification: 1 August 2024, at 8,30 am CET

Evaluation of the research project: 2 August 2024, at 8,30 am CET

Oral interview: 5 August 2024, at 8,30 am CET

Oral interview Place: Aula XI – Agricultural Building, Via Amendola, 165/A – Bari

For more information see the website: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 2)

PROFILE

PhD PROGRAMME IN BIOSCIENCES AND BIOTECHNOLOGIES

CUN Scientific Areas CUN: 05-Scienze Biologiche, 06-Scienze Mediche, 07–Scienze Agrarie e Veterinarie, 03-Scienze Chimiche, 09 - Ingegneria industriale e dell'informazione.

Academic disciplines: AGR/17, BIO/01, BIO/04, BIO/05, BIO/06, BIO/07, BIO/08, BIO/09, BIO/10, BIO/11, BIO/12, BIO/13, BIO/16, BIO/17, BIO/18, BIO/19, CHIM/11, ING-IND/34, MED/03, MED/04, MED/46, VET/10,

Coordinator: Prof. Giovanna Valenti

Administrative Office: Department of Biosciences, Biotechnologies and Environment

PEC: direzione.bioscienze@pec.uniba.it

Duration: 3 years

Curricula: Yes

1. Biomolecular Sciences and Bioinformatics (Scientific disciplinary sectors: BIO/10, BIO/11, MED/46, MED04)
2. Cellular and Molecular Physiology and Biotechnology (Scientific disciplinary sectors: BIO/09, BIO/17, VET/10, AGR/17, MED/04, ING-IND/34)
3. Biochemical Sciences and Cell Biology (Scientific disciplinary sectors: BIO/10, BIO/12, BIO/13, BIO/14, BIO/16, CHIM/11)
4. Genetics, Microbiology and Molecular Evolution (Scientific disciplinary sectors: BIO/18, BIO/19, BIO/08, MED 03)
5. Morphofunctional Biology (Scientific disciplinary sectors: BIO/01, BIO/04, BIO/05, BIO/06, BIO/07).

Total number of places available: n. 18:

1. Number of scholarships available n. 15:
 - with scholarship on Ateneo funds: n. 3
 - with scholarship on D.M. n. 630/24: n. 4
 - with scholarship with scholarship co-financed by “Patti territoriali dell’alta formazione per le imprese” – CUP: F61B23000370006 n. 3
 - with scholarship co-financed by PRIN-PNRR n. 3
 - with scholarship financed by CREA n.1
 - with scholarship financed by Italian Space Agency n.1
2. Number of places without scholarship available n. 3

POSITIONS WITH SCHOLARSHIP

University scholarship ‘Ateneo funds’

Fellowship 1. (*curriculum 2*)

- **Title:** Human microbiome Eubiosis/dysbiosis state prediction based on in vitro functional evaluation on human intestinal 3D models
- **Research activity description:** Investigating the human microbiome has unveiled its role in various physiological and pathological processes. However, an operational definition of a healthy

microbiome is still lacking. DNA metabarcoding offers a cost-effective method for monitoring the microbiome, but predictions of eubiosis and dysbiosis need in vitro validation to test microbiota-intestinal barrier interactions. A 3D model of the intestinal barrier, composed of epithelial and muciparous cells, will be created in vitro under dynamic conditions to simulate native tissue. Exposure to eubiotic/dysbiotic microbiota can alter the secretome of the 3D barrier, affecting proinflammatory cytokines, exosomes release, and mucins secretion. This in vitro approach is a crucial tool for characterizing the gut microbiome.

Fellowship 2. (*curriculum 3*)

- **Title:** Unravelling metabolic signals of macrophage function in the tumor microenvironment
- **Research activity description:** Tumor-associated macrophages (TAMs) sustain tumor development by supporting angiogenesis, tumor cell invasion, and metastasis formation. Signals from both cancer cells and the tumor microenvironmental (TME) hijack TAM function to promote cancer growth. This project is based on the hypothesis that TAMs are remodeled through specific metabolites present in the TME, which influence their anti-tumorigenic potential and thus tumor growth and patient outcome. The research will be focused on investigating the ovarian TME to study fundamental metabolic programs of macrophages that could be targeted for functional reprogramming and unravelling the metabolic crosstalk mechanisms in the TME responsible for the acquisition of those TAM specific metabolic and functional features.

Fellowship 2. (*curriculum 5*)

- **Title:** Redox-dependent molecular mechanisms in plant stress response
 - **Research activity description:** Plants, being sessile organisms, need to activate multiple defense mechanisms in the adaptation to environmental changes. In this context, reactive oxygen species (ROS) play a key role in the acquisition of tolerance to abiotic stresses. Indeed, ROS although are toxic molecules may play a significant role in the signal transduction. This project will focus on the involvement of ROS in altering gene expression and cellular metabolism, directly or via interaction with other second messengers. Additionally, the redox-dependent regulation of transcription factors and epigenetic modifications will be studied, with particular attention to methylation/demethylation of histone lysine.
- **D.M.630/24**
 1. **Call: D.M.630/24**
 - **Project title and scholarship theme:** Identification and monitoring of physiological biomarkers to evaluate the effectiveness of the EMSi (Electrical Muscle Simulation) spacesuit in counteracting human tissue changes in microgravity conditions (*curriculum 2*)
 - **Research Activity Description:** This doctoral project focuses on space biomedicine. Specifically, thanks to the monitoring of some physiological plasma and urinary biomarkers, the beneficial effects of the EMSi (Electrical Muscle Simulation) space suit engineered by the REA Space Technologies for Humans company will be evaluated in counteracting some physiological alterations in humans, in microgravity conditions. . To simulate microgravity, we will make use of the collaboration with the Medical University of Graz (Austria), Gravitational Physiology, Aging and Medicine Unit where there are specific structures such as the tilting Head-Up table (HUT) combined with a lower body negative pressure (LBNP), or bedrest facility.
 - **Co-financing company/body:** REA Space Technologies for Humans
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months
2. **Call: D.M.630/24**
 - **Project title and scholarship theme:** Metabolic engineering of *Yarrowia lipolytica* for lipid production from low cost substrates (*curriculum 3*)
 - **Research Activity Description:** The research project aims to develop recombinant yeast strains capable of producing high-value lipids, mainly for use in the food industry, using low-value substrates, mainly derived from waste materials such as molasses or short-chain fatty acids. The chassis yeast will be the industrial workhorse non-conventional yeast, *Yarrowia lipolytica*, due to its ability to produce

lipids and the wide range of substrates it can use for growth and production. Advanced synthetic biology tools such as golden gate assembly of transforming DNA and CRISP/Cas9 for site-specific DNA integration and gene deletion will be used to construct these strains. The strain will be improved using the DBTL (design-build-test-learn) approach of metabolic engineering.

- **Co-financing company/body:** Cultivated Biosciences
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

3. Call: D.M.630/24

- **Project title and scholarship theme:** Process and Product Innovation for the Sustainability of the Regenerated Leather Sector (*curriculum 3*)
- **Research Activity Description:** The research theme focuses on innovation in processes and products for regenerated leather, with the aim of identifying efficient practices and solutions for the use of regenerated leather. The activities to be carried out are as follows: 1) Analysis of samples collected at various stages of production to study different materials and their applications, 2) Analysis of existing or developing industrial processes to optimize production, reduce waste, and improve efficiency, 3) Analysis and study of innovative materials for "Animal Free" products or those with a low environmental impact, 4) Feasibility study of process design, techno-economic analysis, and LCA analysis to evaluate the technical, economic, and environmental effectiveness of the proposed processes

Co-financing company/body: Italian Leather Group S.p.A.

- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

4. Call: D.M.630/24

- **Project title and scholarship theme:** New methods of study and management of alien mammal species in the Metaponto area
- **Research Activity Description:** The nutria (*Myocastor coypus*) is a semi-aquatic rodent native to South America, invasive in Europe. Thanks to its reproductive potential and adaptability, the species has become naturalized in wetlands, rivers, canals and minor watercourses, but due to its extremely confident nature it has come to colonize the internal canals of some urban centers. The tunnels dug along the banks create problems for the stability of the banks and in areas assiduously frequented by the nutria, the rarefaction of the local vegetation has been observed and a negative impact on the populations of birds, amphibians and other mammals of conservation interest with which it shares the space such as the otter (*Lutra lutra*). This project aims to investigate the real distribution and impact of the species along the watercourses in Basilicata.

- **Co-financing company/body:** NatureOffice APS
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 12 months

• **scholarships co-financed with "Patti territoriali dell'alta formazione per le imprese" – CUP: F61B23000370006**

□

n 1 scholarship co-financed by: DISTILLERIA BARTIN SRL

- **Project title and scholarship theme:** Biotechnological Innovation in the Dairy Sector for Sustainable Production of High-Value Products. (*curriculum 3*)

Research Activity Description: The research focuses on the valorization of by-products from the dairy industry in Puglia, a region with a historical tradition in the sector. Whey, the main by-product of milk processing, is currently managed inefficiently, contravening the principles of economic, social, and environmental sustainability. The research aims to develop new biorefinery models based on microbial fermentations, conducting techno-economic feasibility studies to industrialize laboratory results. By utilizing metabolic engineering and process optimization, the model data will be validated, promoting sustainable practices in whey management.

- **Period abroad:** 6 months
- **Period at the company/institution:** 6 months

n 1 scholarship co-financed by: GREEN OIL SRL

- **Project title and scholarship theme:** Tecnologie innovative e sostenibili applicate alla gestione biotecnologica dell'olio vegetale esausto (*curriculum 3*)

Research Activity Description: Following the principles of the circular economy, the proposed research aims to valorize organic waste from the food industry, such as waste cooking oils, to produce high-value compounds through innovative and sustainable technologies using biocatalysts. These catalysts, selective for specific molecules, avoid secondary reactions and further waste, employing green technologies with aqueous solutions and low temperatures. Optimization studies of single and/or cascade biocatalytic reactions will also be conducted to produce monomers and polymers for the cosmetic industry and other sectors, exploring new market applications.

- **Period abroad:** 6 months
- **Period at the company/institution:** 6 months

n 1 scholarship co-financed by: Tersan Puglia S.p.A.

- **Project title and scholarship theme:** Biotechnological Valorization of Urban Organic Waste in a Circular Bioeconomy Perspective (*curriculum 3*)
- **Research Activity Description:** The proposed research theme aims to develop new models of biorefineries integrated with the territory to valorize urban organic waste in a cascading approach. Biotechnological platforms will be created to convert the by-products of anaerobic digestion of organic waste into high-value products. Using both conventional and non-conventional microorganisms, and through metabolic engineering and synthetic biology approaches, studies will be conducted for screening, characterization, and process optimization. These activities will support the research and development efforts of Tersan Puglia, promoting sustainable and innovative solutions for urban waste management.
 - **Period abroad:** 6 months
 - **Period at the company/institution:** 18 months
 - (*other university, external body, projects, etc.*) indicating the funding body

n 1 scholarship co-financed by PRIN-PNRR: CUP: H53D23008820001 (*Curriculum 1*)

- **Project title and scholarship theme:** Use of ionic liquids for the delivery of bioactive molecules into mitochondria.
- **Research Activity Description:** In the recent years the progress in 3D modeling approaches has allowed to build a trustable 3D comparative model of the human AAC2 in both c-/m-conformation and to successfully perform virtual screening of an in-house developed chemical library on the c-conformation. In this project a new library will be built and used for a virtual screening to predict the ligands with the highest affinity for the AAC. The cDNA coding for the four human AAC paralogs will be cloned and expressed as recombinant proteins. The binding affinity of the predicted best binders will be estimated through calorimeter and transport assays. The validated small bioactive molecules will be tested in toxicity assays on cell-lines as naked molecules or in combination with/solubilized in ionic liquids.

n 1 scholarship co-financed by PRIN-PNRR: CUP: H53D23011150001 (*Curriculum 2*)

- **Project title and scholarship theme:** New Strategies for Hypercholesterolemia Therapy
- **Research Activity Description:** Hypercholesterolemia is a condition characterized by elevated cholesterol levels. Current medications, such as statins and antibodies, reduce cholesterol by 50% in high-risk patients but have side effects. PCSK9, a convertase related to blood cholesterol concentration, is a potential pharmacological target. This project will investigate the interaction between PCSK9 and the N-terminal region of LDLr, as well as with proteins involved in the secretion, maturation, and degradation of PCSK9. Known gain- and loss-of-function variants of PCSK9 will also be analyzed to evaluate the effects of mutations on protein folding and the formation of protein-protein complexes related to cholesterol homeostasis through in silico/in vitro assays.

n 1 scholarship co-financed by PRIN-PNRR: CUP:H53D23007700001 (*Curriculum 4*)

- **Project title and scholarship theme:** Study of Genetic Variation Underlying Reproductive Failure
- **Research Activity Description:** This project aims to explore the role of genetic variants in reproductive failure using long-read and single-cell strand sequencing technologies to identify cryptic balanced chromosomal rearrangements in patients with idiopathic infertility. Balanced structural rearrangements can

escape detection by traditional cytogenetic tests but are crucial for understanding reproductive failure. Carriers of such rearrangements, although phenotypically normal, are at risk of producing unbalanced gametes, reducing the chances of natural conception.

n 1 scholarship completely financed by: CREA Council for Agricultural Research and Economics Research Center Viticulture and Enology (*Curriculum 4*)

- **Project title and scholarship theme:** Genetic enhancement of autochthonous varieties of *Vitis vinifera* through Marker Assisted Selection and New Breeding Techniques
- **Research Activity Description:** The research activity is part of the Project named VINO-BIO "Excellent Organic Wine." It aims to reduce the impact of wine production by minimizing chemical inputs and enhancing the adaptability of crops to current climate changes. The study will focus on viticulture due to its significance in the socio-economic context. It will investigate the physiological and molecular responses to biotic stresses of native vines specific to the Apulian and Abruzzo regions. The goal is to identify the genes responsible for desired characteristics and develop molecular tools for the genetic improvement of these varieties, making them more resilient to climate changes through assisted selection and/or genomic editing.

n 1 scholarship completely financed by: Italian Space Agency

- **Project title and scholarship theme:** Advanced models of outer blood-retina barrier under gravitational unloading: identification of possible targets of countermeasures to spaceflight-induced retinal alterations
- **Research Activity Description:** Spaceflight-associated neuro-ocular syndrome (SANS) is a priority risk for the astronauts' health during interplanetary travels. SANS alters blood-retina barrier anatomy and function, making advanced retinal models highly needed in the elaboration of preventive and curative treatments of retinal impairments with impact on vision function and ascribable also to terrestrial pathologies. Research activity will consist in microfabrication by two-photon lithography of biomimetic retinal interfaces, in their physico-chemical characterization and in their functional validation with different retinal cell populations that will be exposed to simulated microgravity. Biological responses will be interrogated with physiology and multiomics approaches.
 - **Period abroad:** 6 months

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POSITIONS WITHOUT SCHOLARSHIP (3)

- **Project title and scholarship theme:** Strategies for reactivating the cellular levels of the TRIM8 (*curriculum 1*)
- **Research Activity Description:** Strategies for reactivating the cellular levels of the TRIM8 protein (modulator of the stability and activity of p53 tumor suppressor) in aggressive and chemotherapy-resistant tumors, and identification of the activated molecular pathways (p53-dependent and -independent) that lead to the arrest of cell proliferation and recovery of chemo-sensitivity, through the application of integrated -omics and functional genomics approaches.
- **Project title and scholarship theme:** Effects of Umbilical Cord Blood Platelet-rich Plasma in Cellular Models of Atrophic Age-related Macular Degeneration (*curriculum 3*)
- **Research Activity Description:** The project is part of a prospective, multicentric, interventional study that aims to evaluate the efficacy of intravitreal injections of Umbilical Cord Blood Platelet-rich Plasma (CB-PRP) in Atrophic Age-related Macular Degeneration (AMD). The student will be involved in the part of the project regarding the evaluation of the protective effect of CB-PRP in model cell lines, derived from the retinal pigmented epithelium, which underwent lipopolysaccharide (LPS)-induced degeneration. Quantitative parameters regarding apoptosis, inflammation and mitochondrial functions will be screened in the investigated cell lines to measure the cellular response to the LPS-induced damage and the ability of CB-PRP to modulate and/or rescue the altered cellular functions. The molecular composition of CB-PRP will be also defined and the effect of selected molecules will be evaluated by *in silico/in vitro* assays.

- **Project title and scholarship theme:** Unveiling the epigenetic landscape and therapeutic implications of epigenetic modifiers in human T-cell leukemia initiation and progression (curriculum 4)
- **Research Activity Description:** T-cell acute lymphoblastic leukemia (T-ALL) is a malignancy with frequent loss-of-function (LOF) mutations in genes encoding different epigenetic modifiers. In this proposal, we aim 1) to understand cancer initiation and progression by characterization of the epigenetic landscape in T-cell leukemia and 2) to study the potential use of epigenetic modulators to overcome resistance to anti-cancer therapies in T-ALL. Using a model of human T-ALL in which hematopoietic stem/progenitor cells are transformed into clonal T-ALL-like malignant cells, we will evaluate the contribution of inactivation of distinct epigenetic modifiers. Flow cytometry analyses combined with single-cell RNA sequencing methods, will decipher the mechanistic insights of T-cell leukemias in response to epigenetic modulators.

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Admission procedures:

The selection will be made following the art. 6 typology B of the call.

The examination will be based on the evaluation of candidate qualification, proposed project, oral interview, and foreign language knowledge checking (English).

Admission tests for foreigners:

The videoconference interview of foreign candidates will be in English.

Calendar and location of the entrance exam:

Qualifications and Titles evaluation:	31/07/2024
Proposed project evaluation:	01/08/2024
Oral interview:	05/08/2024

The oral examination will be held in the 'Aula Magna' on the ground floor of the Biological Departments Building - "Ernesto Quagliariello" University Campus in Via Orabona – Bari starting from 9.30 a.m.

For more information see the website: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 3)

PROFILE

PhD PROGRAMME IN “DIGITAL INNOVATION AND e-HEALTH”

CUN Scientific Areas: 01 – Mathematical and Computer Sciences, 03– Chemical Sciences, 05 – Biological Sciences, 06 – Medical Sciences, 09 – Industrial and Information Engineering, 11 – Historical, Philosophical, Pedagogical, Psychological Sciences, 13 – Economics and Statistics.

Scientific Subject Codes: INF/01 – Informatics; CHIM/12 – Chemistry of the environment and cultural heritage; BIO/12 – Clinical biochemistry and clinical molecular biology; BIO/14 – Pharmacology; BIO/18 – Genetics; MED/09 – Internal Medicine; MED/13 – Endocrinology; MED/14 – Nephrology; MED/48 – Nursing Sciences and Neuropsychiatric and Rehabilitative Techniques; ING-INF/05 – Information Processing Systems; M-PSI/01 – General Psychology; M-PSI/08 – Clinical Psychology; SECS-S/01 – Statistics; SECS-P/10 – Business Organization

Coordinator: Prof. Monica MONTAGNANI

Administrative office: Department of Precision and Regenerative Medicine and Ionian Area (DiMePRE- J)

PEC: direzione.dimeprej@pec.uniba.it

Duration: 3 years

Curricula: NO

Total number of positions: n. 14, as follows:

- with University of Bari Fellowship: n.4
- with University of Bari Fellowship (PATTI TERRITORIALI) co-funded by Agency/ies: n.4.
- with Fellowship sponsored according to D.M. n. 630/24: n. 4
- without Fellowship n. 2

POSITIONS WITH FELLOWSHIP:

N. 4 - University of Bari Fellowship

Candidates are asked to freely develop a research project of interest to the doctorate on one of the topics relating to the ERC macro-sectors Life Sciences (LS), Physical Sciences and Engineering (PE) and/or Social Sciences and Humanities (SH), which summarizes the objectives of research on the protection and prevention of human health through the implementation of e-Health approaches.

N. 4 - University of Bari Fellowship funded by “Patti territoriali dell’alta formazione per le imprese” – CUP: F61B23000370006:

Fellowship co-financed by the company: **Emtesys Biomedical Engineering**

– **Project title and scholarship topic:** *Digital and technological innovation at the service of exposomics and telemedicine: development and validation of sensorial and digital platforms for monitoring the state of human health*

– **Description of research activity:** The research intends to promote the development of innovative IoT technologies for the contextual and real-time monitoring of the physiological parameters of the individual and the main meteorological/microclimatic parameters (temperature and relative humidity, concentration of the main organic and inorganic pollutants target) which collectively define the risk.

For more information see the website: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 4)

PROFILE

PhD PROGRAMME IN “RIGHTS AND PROTECTION IN GLOBALIZED MARKETS”

CUN Scientific Areas: 12 – Legal Sciences; 13b – Economics and business sciences

Academic disciplines (codes): IUS/01, IUS/02, IUS/03, IUS/04, IUS/05, IUS/07, IUS/13; IUS/14; IUS/15; IUS/17; IUS/20; SECS-P/07

Coordinator: Prof. Vito Sandro Leccese

Administrative Office: Department of Law (Dipartimento di Giurisprudenza)

PEC: direzione.giurisprudenza@pec.uniba.it

Duration: 3 years

Total number of places available: n. 6, of which:

- with scholarship pursuant to Ministerial Decree no. 629/24: no. 1
- with scholarship pursuant to Ministerial Decree no. 630/24: no. 1
- with University scholarship: n. 4

In detail, POSITIONS WITH SCHOLARSHIP:

- **n. 1 position with scholarship D.M. 629/24:**

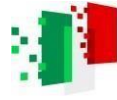
1. Notice: D.M. 629/24 (*typology PNRR 4.1*)

- **Project title and scholarship theme:** "The protection of business continuity for companies in crisis in light of the 'Insolvency' Directive" (Academic discipline: IUS/04).
- **Research Activity Description:** The research investigates the adequate organisational, administrative and accounting structures in SMEs for the prevention of business risks in light of the so-called Directive Insolvency. In particular, attention will be paid to the need for timely intervention through the activation of the Negotiated Settlement of the crisis (art. 12 et seq. CCII) or one of the judicial procedures of Negotiated Resolution of the crisis (art. 39 et seq. CCII), as well as the needs of protection of third-party creditors of companies in crisis to the best possible alternative satisfaction to judicial liquidation. In any case, the study will have as reference the protection of the so-called *continuity* which continues to constitute resources for every interested party, the erosion of the traditional code principle of the so-called *par condicio creditorum* as well as the tendential "*dejurisdictionalization*" of the procedures for negotiated resolution of the crisis.
- **Period abroad:** 6 months in Institut Internationales Privat- und Wirtschaftsrecht – University of Heidelberg (Germany).

- **n. 1 position with scholarship D.M. 630/24:**

1. Notice: D.M. 630/24

- **Project title and scholarship theme:** "People Analytics Tools and Implications for Labor Law and Industrial Relations: A Multidisciplinary Analysis" (Academic discipline: IUS/07).
- **Research Activity Description:** The advent of digital technologies and big data has revolutionized human resource management in organizations, leading to the emergence of People Analytics as a crucial tool for improving business performance. However, this evolution raises significant legal and governance issues in industrial relations. This project aims to explore the impact of People Analytics on labor law and industrial relations, examining the legal, ethical, and organizational implications of this technology. The main objectives of the research are: to analyze the legal framework to identify any regulatory gaps; to explore the ethical implications, particularly regarding privacy, transparency, and discrimination; to assess the impact on industrial relations and propose guidelines for the responsible implementation of People Analytics in organizations.
- **Co-financing company/body:** Hrcoffee Srl



- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 12 months

- **N. 4 positions with University scholarships:**

- **N. 1 Scholarship - Project title and scholarship theme:** “Worker participation in enterprises and in public sector”

(Academic discipline: IUS/07).

- **Research Activity Description:** Over the past few years, the economic crisis, the loss of representativeness of intermediate bodies, and the growing alienation and disaffection of workers with respect to their workplaces have re-proposed, among others, the issue of employee participation in the choices that affect them. A push in this direction has been given by both the legislature and the social partners themselves (e.g. with the so-called Factory Pact of 2018). The object of the research is the reconnaissance, typification and study of models of participation based on law and collective bargaining and the comparison, even if only possible, between what is provided for in companies and third sector organization and the different regulation in force for public administrations.
- **Period abroad:** planned

- **N. 1 Scholarship - Project title and scholarship theme:** “The European Union’s energy transition in the context of

the *Green Deal*. Implementation measures and protection of rights” (Academic discipline: IUS/14).

- **Research Activity Description:** The research concerns the European energy action, pursuant to Article of the 194 TFEU, implemented in the context of the green transition that engages the Union and Member State levels. The interrelation between the energy policy (based on the “Energy Union Strategy”), the environment and climate policy of the EU has become more evident with the adoption of the Green Deal. The decarbonisation of the energy system is indeed crucial for achieving the climate targets set for 2030, and for 2050. To align the objectives of energy efficiency with those in the climate field, the principle “Energy Efficiency First” has been integrated into the European legislation as a pillar of the Energy Union. In line with this principle is Dir (EU) 2023/1791, in which energy efficiency measures, in accordance with the social dimension of the green transition, must also ensure the protection of people living in energy poverty, as well as vulnerable customers, people from low-income households and residing in social accommodation
- **Period abroad:** planned

- **N. 1 Scholarship - Project title and scholarship theme:** “The re-semantization of the categories of “space” and “time” of work in the context of Public Administrations, from a gender perspective” (Academic discipline: IUS/07).

- **Research Activity Description:** The objective that the research aims to achieve consists in the innovative elaboration of the classic categories of labor law such as "time" and "space" from a gender perspective. In other words, we aim to investigate the possibilities of reformulating the notion of time and its measurement systems in order to take into account that during the day of the worker and, much more often of the worker, there are care needs to be expected in correspondence of which there is no remuneration (this is free work) or which in any case lack a system for accounting for the time spent there, also for the purpose of reconciling life and work times. Likewise, as regards space, we want to investigate the possibility of rethinking the latter in order to understand if new notions of space exist from a female perspective of which agile working is just an example. The possibilities of declination of these categories must imply the recognition of the legal sources on the matter, in addition to the contractual ones, also in order to imagine new application practices
- **Period abroad:** planned

- **N. 1 Scholarship - Project title and scholarship theme:** “Substantial protections in the activity of the Company

Courts and "deflationary" needs of litigation" (Academic discipline: IUS/04).

Research Activity Description: The company law reform of 2003 first and the art. 2 of the legislative decree 24 January 2012, n. 1 dedicated to the establishment of the Company Courts have partly

strengthened, and on the other hand introduced, forms of protection (substantial and procedural) *now* of the shareholders and corporate representatives of profitable companies, *now* of third parties interested in the financial relationships with said companies, to be exercised necessarily before specialized judges, now organized on a district basis. The research aims to prepare a general survey of these particular forms of protection specific to collective enterprise activity ten years after the completion of the reform and then on the one hand evaluate their concrete systematic coherence with the "deflationary" needs of civil litigation and on the other, to delve into the concrete functioning practices of the most recurring of them to verify the coherence of the application effects of these reforms with respect to the *ratio* that justified their adoption.

- **Period abroad:** planned

The available positions scholarships will be assigned according to the order in the merit ranking for each topic. In the absence of suitable candidates for a specific research activity, positions will be assigned according to the order in the merit ranking. Any additional scholarship will be assigned according to the order in the merit ranking.

Admission procedures for ordinary places:

The selection will be made following the art. 6 typology B of the call, by qualifications, research project and interview. The oral exam will be based on the discussion of an original research project (maximum 12000 characters including spaces) on the topic of the call, previously sent by the candidate, together with the admission application under penalty of exclusion, to be assessed in relation to its originality, rigor methodological and consistency with the topic covered by the call. The oral exam will also be based on verifying the maturity and knowledge, skills and aptitude for scientific research of each candidate in relation to the Academic discipline (or disciplines) to which the research refers, as well as foreign language knowledge checking (English/French/German/Spain, at the choice of the candidate). The oral exam will be held in person.

Procedures for carrying out the tests for foreign candidates:

Foreign candidates can choose to do the admission test in Italian or English language.

Calendar and location of the entrance exam:

Oral exam: 5th August 2024, h 10.00. Venue: Meeting Room Private Law – 1st floor - Dipartimento di Giurisprudenza –
Corso Italia, 23 – Bari (Italy)

For further information, please consult the following Web address: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 5)

PROFILE

PhD PROGRAMME IN MEDITERRANEAN RIGHTS, ECONOMIES AND CULTURES

CUN Scientific Areas: 11a Historical, philosophical and pedagogical sciences, 12 - Legal sciences, 13 - Economic and statistical sciences, 14 – Political and social sciences

Scientific Subject Code: IUS/01, IUS/02, IUS/03, IUS/04, IUS/05, IUS/06, IUS/07, IUS/08, IUS/10, IUS/11, IUS/12, IUS/13, IUS/16, IUS/17, IUS/19, IUS/21, SECS-P/01, SECS-P/02, SECS-P/06, SECS-P/07, SECS-P/08, SECS-P/11, SECS-P/13, SECS-S/01, M-PED/01, SPS/12

Coordinator: Prof. Pietro Alexander Renzulli

Administrative Office: Dipartimento Jonico in "Sistemi Giuridici ed Economici del Mediterraneo: società, ambiente, culture"

PEC: segreteria.djsge@pec.uniba.it Duration: three years

Curricula: NO

Total available PhD positions 9 organised as follows:

- scholarship of University of Bari "Aldo Moro": n. 3
- scholarship D.M. n. 629/24: n. 2
- scholarship D.M. n. 630/24: n. 2
- scholarship co-founded with "Patti territoriali dell'alta formazione per le imprese" – CUP: F61B23000370006": n. 2

1. Scholarship DM n. 630/2024 – Scientific sector: SECS-P/13 Commodity Sciences

- **Project** n. 1 scholarship on the subject "Life Cycle Assessment (LCA) of photovoltaic systems with focus on the phases of predictive maintenance and end of life" co-financed by **ITALCAVE Spa**
- **Call for tender:** DM n. 630/2024
- **Scholarship thematic title:** "Life Cycle Assessment (LCA) of photovoltaic systems with focus on the phases of predictive maintenance and end of life", regarding Life Cycle Assessment, Commodity Sciences SECS- P/13
- **Description of research activities:** The objective of this PhD project is to apply the LCA tool to photovoltaic systems, with particular attention to the maintenance and end-of-life phases. The maintenance phase has a considerable impact on the environmental profile of the system. The information necessary for the activation of predictive maintenance paths dedicated to photovoltaic systems can be produced by applying different survey methods via UAV (unmanned aerial vehicle). The increasing extension of the renewable installations requires new data acquisition technologies to improve maintenance efficiency; in this sense, UAVs equipped with thermographic cameras lead to the reduction of maintenance costs and operational risks and increase the effectiveness of aerial inspections. During the PhD project attention will be paid to these technologies, to the LCA of the protocols and to the identification of the most efficient and environmentally friendly operating methodologies.
- **Research period at the Company:** 6 Months at Italcave s.p.a. via per Statte, 6000 – 74123 Taranto
- **Research period at Universities or research institutions abroad:** 6 months at Mineral and Energy Economy Research Institute Polish academy of Science ul. J. Wybickiego 7° 31-261 Kraków, Poland

2. Scholarship co-financed with university funds ““Patti territoriali dell’alta formazione per le imprese” – CUP: F61B23000370006:” - Scientific sector: SECS-P/11 - Economics of financial markets and institutions.

- **Project** n. 1 scholarship on the subject “ESG (Environmental, Social, and Governance) factors and biodiversity as value drivers in banking” co-funded by **Federazione delle Banche di Credito Cooperativo di Puglia e Basilicata**
- **Call for tender:** Patti Territoriali

Scholarship thematic title: “ESG (Environmental, Social, and Governance) factors and biodiversity as value drivers in banking”, regarding cooperative banks, ESG factors, banking biodiversity, sustainable finance

climate risk management, risk management - Economics of financial markets and institutions SECS-P/11.

- **Description of research activities:** In recent years, the consideration of climate risks and biodiversity within the broader topic of ESG factors has also become a prominent area of focus within the banking sector. European financial sector authorities have intensified their initiatives, recognizing that a transition to a sustainable economy also necessitates a financial system aligned with the same principles. The integration of ESG factors and biodiversity into banking and investment strategies is crucial for promoting sustainability and driving the transition to a greener and socially sustainable economy. The objective of the PhD course is to educate a professional figure capable of evaluating companies and investments in accordance with ESG factors, biodiversity, and systemic risk, also through the metrics of complex network science. The objective of the PhD project is to train a professional figure capable of examining the social sustainability of banking activity in cooperative credit, the primary drivers of value creation in cooperative credit banks linked to ESG factors and banking biodiversity, and the role played by local cooperative banks as mitigating factors of systemic risk.
- **Research period at enterprise:** 6 months at Federazione delle Banche di Credito Cooperativo di Puglia e Basilicata, Viale Luigi Einaudi 15, Bari.
- **Research period at universities or research institutions abroad:** 6 months at Universiteit Leiden, Faculty of Mathematics and Natural Sciences, Leiden Institute of Physics, Niels Bohrweg 2, P.O. Box 9504, 2300 RA Leiden – The Netherlands

3. Scholarship co-financed with university funds “Patti territoriali dell’alta formazione per le imprese” – CUP: F61B23000370006:” - Economics of financial markets and institutions.

- **Project** n. 1 scholarship on the subject “Financial advising and business crisis forecasting between digital innovation and artificial intelligence” co-funded by **Studio Vittoria Cardone & Associati SRL**
- **Call for tender:** Patti Territoriali
- **Scholarship thematic title:** “Financial advising and business crisis forecasting between digital innovation and artificial intelligence”, regarding financial advising, business crisis forecasting, digital transformation and technological risks of companies, artificial intelligence, risk management - Economics of financial markets and institutions SECS-P/11.
- **Description of research activities:** Digital innovation and artificial intelligence are transforming the manner in which banks and advisory firms interact with businesses. These technologies are facilitating greater efficiency, personalisation and accessibility of financial and advisory services. The application areas of digital innovation and artificial intelligence are numerous and encompass the collection, analysis and interpretation of large volumes of data, as well as the identification of patterns and trends that can influence companies’ financial decisions. The application of advanced algorithms enables banks and consultancy firms to assess the risks associated with business activity and to provide financial advice that is tailored to the specific needs of each company. Furthermore, artificial intelligence is employed to develop predictive models that assist banks in evaluating the probability of success of specific investments or loans to businesses. In this context, the objective of the research project is to develop a business crisis prediction and early warning model to provide support to companies.

The objective of the PhD course is to educate a professional figure who is capable of providing advice to the business world and assessing them in light of digital transformation and technological risks, also through the metrics offered by the science of complex networks.

- **Research period at enterprise:** 6 months at Studio Vittoria Cardone & Associati SRL, Via Angelo Berardi, 89, Taranto.

- **Research period at universities or research institutions abroad:** 6 months at Universiteit Leiden, Faculty of Mathematics and Natural Sciences, Leiden Institute of Physics, Niels Bohrweg 2, P.O. Box 9504, 2300 RA Leiden – The Netherlands

4. Scholarship DM n. 630/2024 – IUS/07 Labour law

- **Project** n. 1 scholarship on the subject: “Digital and ecological transition and new organizational models for the protection of the environment inside and outside the enterprise”, co-funded by **Magna PT S.p.A.**

- **Avviso:** DM n. 630/2024

- **Scholarship thematic title:** “Digital and ecological transition and new organizational models for the protection of the environment inside and outside the enterprise”, regarding digital and ecological transition, improvement of living and working conditions, business organizational models that integrate the protection of the environment inside production sites with the protection of the environment outside them, corporate responsibility (including social responsibility), labour law; IUS/07

impact of corporate choices on the environment outside the enterprise, also in the light of the new “One Helath” paradigm. The first phase will be devoted to the reconstruction of the international, supranational and national (including decentralized/territorial) regulatory framework on occupational health and safety and environmental protection. The research period at the partner company (Magna PT S.p.A.) will be useful to study how a manufacturing company operating in a high-tech sector is adjusting its organization and what are the determinants of business choices. The phase of the course of study at the ILO will provide the doctoral student with useful cognitive elements on the topic of international reference standards and related implementation policies, also with regard to tools and measures aimed at training policy makers, through participation in workshops and similar activities held at the ILO-ITC.

- **Research period at the Company:** 12 months at Magna PT S.p.A., Via dei Ciclamini 4, 70026 Modugno (BA, Italy).

- **Research period at Universities or research institutions abroad:** 6 months at International Labour Organization (ILO), Route des Morillons 4, 1211 Ginevra (Switzerland).

5. Scholarship DM n. 629/2024 – PNRR 4.1. PUBLIC ADMINISTRATION - scientific sector M-Ped 01 General and Social Pedagogy

- **Project** no. 1 scholarship on the subject “Development of intelligent strategies (AI-gen) to combat educational and digital poverty”.

- **Call for tender:** DM No. 629/2024 4.1. P.A.

- **Scholarship thematic title:** 'Development of intelligent strategies (ai-gen) for combating educational and digital poverty', regarding educational and digital poverty.

- **Description of research activities:** Generative Artificial Intelligence (AI-gen), by offering new tools and opportunities to personalise learning, promote inclusion and combat educational and digital poverty, features the potential to revolutionise education and instruction. However, in order for AI-gen to have a positive impact in these fields, it is crucial that teachers and trainers are supported in its use by specific theoretical and practical expertise, from disciplinary (pedagogical-didactic) as well as interdisciplinary (philosophical, informatics, engineering) areas. This will make it possible to approach the topic of AI-gen with a less sectorial and more open-minded outlook, taking into account the complexity of variables, implications and methodological approaches suggested by the different research fields. This will contribute to outlining the foundations of a pedagogy of artificial intelligence, which opens up to a phenomenological-hermeneutic questioning on the experience of learners, on the limits and the potential of increasingly sophisticated technological devices (robots, algorithms and

virtual worlds) and no less on the responsibilities of our choices, on the risks and opportunities linked to its use in learning processes. It is a question of developing the foundations of an education to deal with the innovation produced by technology, taking into account the educational needs and socio-cultural inequalities that generate poverty. In this key, the pedagogy of artificial intelligence urges to take care of existential fragilities in order to foster “intelligent”, equitable and solidarity- based responses in education and training processes.

Starting from these epistemological premises, the project aims to:

- Carry out a detailed analysis of the pedagogical needs of trainers in relation to the adoption and use of AI-gen in the context of inclusive education and the fight against educational and digital poverty;
- develop educational materials and training content dedicated to the AI-gen, based on identified needs;
- create a virtuous AI-gen design and evaluation model to support educators in integrating this learning model into the school environment.

From a methodological point of view, three fundamental moments in the project are identified:

- Development of a literature survey: to review existing literature on the training needs of educators in relation to AI-gen and inclusive education.
- Creation of didactic training modules: to develop pedagogical-didactic modules covering the following items:
 - i. introduction to AI-gen and its potential for more inclusive education;
 - ii. case studies on the use of AI-gen in inclusive education and the fight against educational and digital poverty;
 - iii. practical examples of using AI-gen in the classroom;
 - iv. guidelines for the integration of AI-gen in the educational environment.

Dissemination: publication of articles and reports on the project results to spread knowledge about the use of AI-gen in education

- **Research period in Public Administration:** 6 months at CNR - STIIMA - Consiglio Nazionale delle Ricerche - Istituto di Sistemi e Tecnologie Industriali Intelligenti per il Manifatturiero Avanzato - Via G. Amendola, 122 D-O - 70126 Bari, Italy
- **Research period at Universities or research institutions abroad:** 6 months at the Department of General and Specific Didactics and Educational Theory - Universidad de León - Leon, Castilla y León, Spain

6. Scholarship DM n. 629/2024 – PNRR 4.1. PUBLIC ADMINISTRATION - scientific sector IUS/16 Criminal procedural law

- **Project** n. 1 scholarship on the subject “The role of Public Administration in implementing restorative justice programs following the Cartabia Reform: governance models in the coordination between Judicial Offices and Restorative Justice services.”
- **Call for tender:** DM n. 629/2024 4.1. P.A.
- **Scholarship thematic title:** “The role of Public Administration in implementing restorative justice programs following the Cartabia Reform: governance models in the coordination between Judicial Offices and Restorative Justice services”, regarding the the Organic Discipline of the Reparative Paradigm and the New "Architectures" of Criminal Justice
- **Description of research activities:** The activity will proceed from a systematic analysis of the comprehensive regulation on restorative justice (Legislative Decree No. 150/2022 and Legislative Decree No. 31/2024) and will focus on the ontologies of the traditional justice paradigm and the restorative justice paradigm, outlined as complementary to each other. Consequently, it aims to identify the best solutions—in terms of effectiveness, efficiency, and respect for fundamental rights—to connect the "service" of criminal justice with "restorative services." The research aims to contribute to the innovation of criminal justice policies,

offering new perspectives, also through contributions from the international field and the comparison between the Italian approach and the different models of other European countries. Particular attention will be given to the area of juvenile justice, to adapt the solutions to the personality and needs of the minor, considering his or her best interest, as well as to resolving conflicts related to the environment during the stay abroad.

- **Research period in Public Administration:** 12 months at Center for Juvenile Justice Puglia-Basilicata, G. Amendola Street 172/C, Bari (BA).
- **Research period at Universities or research institutions abroad:** 6 months at the FEAD European Waste Management Association, Rue de la Science 23, 1040 Bruxelles, Belgium

7. 3 free topic scholarships (financed with University funds)

The PhD positions put out to tender with thematic scholarships pursuant the DD. MM. n.629/2024 and n.630/2024, and the PhD positions put out to tender with thematic scholarships co-financed with “Patti Territoriali” University funds will be assigned according to the order in the merit ranking for each topic, until availability of seats.

Admission procedure:

The selection will take place pursuant to art. 6 of the call.

The exam will be based on the evaluation of qualifications and on the oral examination with discussion of an original research project, consistent with the research lines of the doctoral course, previously sent by the candidate (maximum 12,000 characters including spaces) together with the application for admission. The submission of the research project is an essential part of the application procedure, and therefore must be included together with the application and the documents required for the call. Failing to do so will determine the **exclusion from the evaluation process**.

The oral exam will focus on the discussion of the research project in relation to its originality, methodological rigor and coherence with the research lines of the doctorate, as well as the candidate's aptitude for scientific research and the coherence of his scientific profile with the themes of the doctoral program. As part of the oral test, knowledge of the foreign language (English) will also be tested.

Procedures for carrying out tests for foreign candidates: Foreign candidates can choose to take the entrance exam in Italian or English.

Calendar and location of the admission tests:

Evaluation of qualifications and evaluation of the project:

31st July 2024 Oral examination: 1st August 2024, 10:00 am

Examination venue Classroom IV Ionian Department in " Sistemi Giuridici ed Economici del Mediterraneo: società, ambiente, culture ", Via Duomo, 259 Taranto or remotely on Microsoft teams platform upon request.

For further information please visit the website: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 6)

PROFILE

PhD PROGRAMME IN RIGHT, INSTITUTIONS AND GUARANTEES

CUN Scientific Areas: 12. Legal sciences – 14. Political and social sciences

Academic disciplines: **IUS/01, IUS/08, IUS/09, IUS/10, IUS/11, IUS/13, IUS/14, IUS/16, IUS/19, IUS/20, IUS/21, SPS/06.**

Coordinator: Prof. Alessandro Torre

Administrative Office: Department of Law

PEC: direzione.giurisprudenza@pec.uniba.it

Duration: **3 years**

Curricula: **NO**

Total number of places available: **no. 5**

- with University scholarship: **no. 4**
- with scholarship pursuant to Ministerial Decree no. 629/24: **no.1**

POSITIONS WITH SCHOLARSHIP

The applicant is required to submit his/her own research project pertaining to one of the following topics:

- 1. Humanitarian assistance and international organizations in scenarios of crisis;**
- 2. Public rules for the use of new technologies in public administration procurement;**
- 3. Subsidiarity and e-participation tools in the regional, local and sub-local levels;**
- 4. The history of manufacturing and labor in the Mediterranean area.**

- **D.M.629/24**

- Notice: **D.M.629/24: PNRR 4.1**

- **Project title and scholarship theme:** *The implementation in Italy of the Istanbul Convention on preventing and combating violence against women and domestic violence*
- **Research Activity Description:** Retrace and interpret the relevant national and supranational legal framework in the area of combating violence against women, including secondary legislation and the instructions with a technical/applicative nature that necessarily complement said legal framework.
- **Period abroad:** minimum 6 months
- **Period at the Institution/Company:** minimum 6 months (where mandatory in sub-investments in Ministerial Decree 629/24)

The scholarship will be awarded according to the rank order in the merit list.

Admission procedures for ordinary places:

The selection will take place in accordance with Article 6 letter B of the call. The exam will be based on the review of the project submitted by the candidate.

Examination procedures for foreign candidates:

Foreign applicants may choose to take the admission exam in English, French or Spanish. Calendar and location of **the entrance exam:**

Qualifications Rating: 31th July 2024 –
8.30 a.m. Rating Progetto: 1st August
2024 – 8.30 a.m.

Oral exam: 2nd August 2024 – 8.30 a.m.

**Palazzo "Del Prete" - Fourth floor of the Department of Law - Classroom B - Piazza Cesare Battisti,1 -
Bari**

For further information consult the website: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 7)

PROFILE

PhD PROGRAMME IN EARTH PROCESSES AND MANAGEMENT OF RESOURCES AND RISKS FOR A RESILIENT SOCIETY AND TERRITORY

CUN Scientific Areas: 01 to 14

Academic disciplines: GEO/01; GEO/02; GEO/03; GEO/04; GEO/05; GEO/06; GEO/08; GEO/09; GEO/10; GEO/12; ICAR/02; ICAR/09; FIS/01; ING-IND/24; SECSP/01; CHIM/01; CHIM/12; BIO/03; BIO/05; BIO/07; BIO/19, MED/44

Coordinator: Prof. Roberto Sulpizio

Administrative Office: Dipartimento di Scienze della Terra e Geoambientali

PEC: direttore.geo@pec.uniba.it

Duration: 3 years

Curricula: YES

1. Earth processes
2. Risk assessment and mitigation
3. Resource management
4. Resilient Society and Territory

Total places available: n. 37

- n. 25 with scholarship belonging/financed/co-financed by the University of Bari Aldo Moro:
 - n. 10 with scholarship D.M. n. 630/24
 - n. 7 with scholarship co-funded by companies and “Patti territoriali dell’alta formazione per le imprese” – CUP: F61B23000370006 ;
 - n. 1 with scholarship financed by the Horizon Europe Project – 101147618 - GO-Forward
 - n. 7 with scholarship co-financed by the PNRR RETURN project - PE00000005; CUP H93C22000610002 – Next Generation EU
- n. 7 with scholarship financed by the associated institutions:
 - n. 1 with scholarship D.M. n. 629/24 financed by the University of Florence
 - n. 1 with scholarship D.M. n. 630/24 financed by the University of Naples Federico II
 - n. 1 with scholarship D.M. n. 630/24 financed by the University of Salento
 - n. 1 with scholarship D.M. n. 630/24 financed by the University of Pisa
 - n. 1 with University scholarship financed by the University of Palermo
 - n. 1 with University scholarship financed by the Polytechnic of Bari
 - n. 1 with University scholarship financed by the University of BOLOGNA
- n. 2 with scholarship financed by the Italian Space Agency
- n. 3 without scholarship

POSITIONS WITH SCHOLARSHIP

- **DD.MM. 329/2024 and 630/2024 scholarship**
 - **D.M.629/24**
1. **Notice: D.M.629/24: PNRR 4.1**
 - **Project title and scholarship theme: Big data, AI and physically based modeling**

- **Research Activity Description:**

Changes in climate and socio-economic systems pose unprecedented challenges in the understanding of hydrological risks, such as floods and droughts, and of societal responses in terms of adaptation and resilience. Synergy among emergent (AI, big data-analytics) and more consolidated techniques (direct and EO observation, physical based modeling) are required to address such challenges. The research will focus on the integration of distributed hydrologic modeling and resilience dynamics system modeling to assimilate traditional and new sources of data with the aid of AI-based data assimilation techniques.

- **Period abroad:** 6 months
- **Transferring university:** Università di Firenze

- **D.M.630/24**

1. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** Development of innovative methods for integration of last generation telesurveyed data for the assessment of the hydro-geomorphological risk
- **Research Activity Description:**

The project will deal with innovative methods for data acquisition from satellite and drones in order to mitigate the hydro-geomorphological risk

- **Co-financing company/body:** Planetek Srl
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

- **D.M.630/24**

2. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** From acquisition to interpretation of seismic reflection data in marine areas characterized by tectonic deformation
- **Research Activity Description:**

The project is aimed to train a highly qualified profile in the field of technical and scientific activity for planning seismic reflection survey in marine areas, collection of relative data, their elaboration and interpretation.

- **Co-financing company/body:** ENSU Srl
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

- **D.M.630/24**

3. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** Tecniche di machine learning per l'interpretazione di dati di geofisica marina applicati all'identificazione di elementi geomorfologici
- **Research Activity Description:**

The identification of seafloor morphologies through the use of geophysical techniques is widely used in industrial settings and for environmental monitoring. In this context, the analysis of morphological data finds important applications, especially for the definition and monitoring of high ecological value biocenoses such as Posidonia meadows. Currently, interpretation techniques are often very costly in terms of time and personnel involved. The aim of the project will be to develop Machine Learning techniques for the automatic identification of seafloor forms from geophysical data, in order to make survey campaigns more efficient and accurate, allowing for more frequent and precise monitoring.

- **Co-financing company/body:** ENSU Srl
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

- **D.M.630/24**

4. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** Digital innovation and geo-paleontological heritage: a tool for the dissemination of the scientific knowledge and sustainable development of the territory
- **Research Activity Description:**

The scientific museums, and particularly the geo-naturalistic museums, have a key function in helping our society to develop a deeper understanding of scientific method and natural processes to increase awareness of human impact on our planet. The geo-palaeontological heritage, housed in scientific museum, is evidence of

the natural changes of a territory and the evolution of its biodiversity in relation to global and local climate changes, during the geological time and fully satisfy the educational role. The combination museum-virtual reality has proven to be an excellent tool for the dissemination of knowledge and to involve a wider and more aware audience. In the archaeological context, the digital technologies have been more widely developed and utilized for inside and outside museum exhibitions. This project is in line with the expectations of the company to improve the skills in digital products and visual content exhibitions in a geo-paleontological context and in general to encourage the growth of new professional figures that could be work on the territory.

- **Co-financing company/body:** CETMA
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

- **D.M.630/24**

5. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** Development of Machine Learning Techniques for the measurement of flow velocity in river environment
- **Research Activity Description:**

The project is framed within the themes of analyzing the flood vulnerability of river areas. Currently, the techniques for measuring river flow rates and flow velocities are particularly laborious and costly in logistical and economic terms. Recently, the development of Machine Learning techniques, especially in coastal areas, has allowed for the simplification and acceleration of procedures for measuring water flow velocities. The aim of the project will be to develop similar techniques in the fluvial context to lay the foundations for a new Early Warning system.

- **Co-financing company/body:** CETMA
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

- **D.M.630/24**

6. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** Enhanced Design and Evaluation of Porous Materials for Nutrient Recovery and Their Potential as Fertilisers
- **Research Activity Description:**

The global fertilizer industry plays an important role in sustaining agricultural productivity and ensuring food security on a global scale. However, it faces significant challenges, particularly concerning the availability of raw materials. Depletion of natural phosphate ores and the energy-intensive nature of synthetic ammonia production, a key nitrogen source in fertilizers, underscore sustainability concerns within the industry. In response to these challenges, there is a growing recognition of the importance of nutrient recovery from different wastes. This approach addresses concerns related to nutrient discharge and mitigates the adverse impacts on water ecosystems. Policy initiatives such as the Nutrient Recovery and Reuse Regulation and Circular Economy Action Plan, spearheaded by the European Union, underscore the imperative of efficient nutrient management in the fertilizer industry. The research project will focus on a systematic approach towards developing and applying innovative strategies for the efficient removal and recovery of nutrients, specifically nitrogen and phosphorus, from waste sources. The research will contribute significantly to the burgeoning field of sustainable water management and agricultural practices, offering promising avenues for future exploration and application.

- **Co-financing company/body:** TIMAC-AGRO SpA

- **Period abroad:** 6 months

- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

- **D.M.630/24**

7. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** Development of strategies for nutrient recovery from waste streams for contributing to the fertiliser industry's sustainability
- **Research Activity Description:**

Aim of the project is the development of methodologies for the reuse and valorization of the mineral content present in industrial and anthropic wastes into the fertilizer production industry. In a first steps, selected waste materials will be characterized with the aim of evaluating the content of essential nutrient for plants (e.g. Fe,

K, Mg, Ca, Si, Cu, Zn, N, P,...). The subsequent research work will concern the development of physical and chemical pre-treatments for the removal of possible harmful elements from wastes to recovery their “useful” mineral content for a valorization in the production of fertilizers. The project is conducted in collaboration with TIMAC AGRO Italia S.p.A, a worldwide leader in the production of fertilizers.

- **Co-financing company/body:** TIMAC-AGRO SpA
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

- **D.M.630/24**

8. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** Assessing environmental risk of anthropogenic origin in surface water bodies
- **Research Activity Description:**

Ensuring a good ecological status of water bodies is one of the objectives of the European Water Framework Directive. The project aims to assess the ecological and chemical status in different categories of surface water bodies in the Apulian region. The study will be applied to water and sediment samples, combining results from bioindicators, such as benthic community sensitive to pollution and habitat degradation, environmental parameters, also evaluating potential interference with the presence of microplastics. The comparison between acquired data and available historical series will be able to provide data and information useful for evaluating the environmental evolution of the analyzed surface water bodies through time

- **Co-financing company/body:** ARPA-Puglia
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 18 months

- **D.M.630/24**

9. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** Recovery of matter from biomass and transformation into materials for environmental, biomedical and functional applications
- **Research Activity Description:**

Matter recovery from waste and biomass is a crucial process in addressing environmental concern and promoting sustainability. For example, recovering phosphorus from biomass represents a sustainable solution to both resource scarcity and environmental pollution. This not only reduces the dependency on phosphate rock, a non-renewable resource predominantly imported from outside the EU, but also mitigates the risk of eutrophication by preventing excess phosphorus from entering waterways. The objective of the PhD thesis is the recovery of phosphorus and other substances from biomass and their transformation and valorisation into materials (e.g., ceramics) for environmental, biomedical and functional applications.

- **Co-financing company/body:** AGROSISTEMI SpA
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

- **D.M.630/24**

10. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** Drone sensing and artificial intelligence for environmental management

- **Research Activity Description:**

The project will focus on drone-based territory detection techniques in order to introduce innovative methods for environmental risk management.

- **Co-financing company/body:** Distretto Tecnologico Aerospaziale (DTA)
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 month

- **D.M.630/24**

11. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** Assessment of structures and infrastructures behaviour in ground instabilities-affected areas through remote sensing data and structural analysis

- **Research Activity Description:**

The project aims to evaluate the behavior of structures and infrastructures subjected to land instability phenomena (landslides, earthquakes, floods, etc.), particularly using remote sensing systems and structural analysis.

- **Co-financing company/body:** SINTEMA Engineering Srl
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months
- **Transferring university:** Università di Napoli Federico II

- **D.M.630/24**

12. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** Multi risk resilient assessment of water supply networks

- **Research Activity Description:**

The project will focus on evaluating the resilience of water distribution networks subjected to multiple risks, including natural and anthropogenic ones. The doctoral scholarship will be in collaboration with Acquedotto Pugliese.

- **Co-financing company/body:** Acquedotto Pugliese SpA
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months
- **Transferring university:** Università del Salento

- **D.M.630/24**

13. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** Analysis and Management tools for Marine and Fluvial Flood Hazards in Tuscany Coastal Plains

- **Research Activity Description:**

The project is aimed to analyze the river and marine floods hazard and their frequent connections, in selected coastal area of Tuscany Region. The project will take into account the analyses of the ongoing climate change. Specifically, some key points that will be addressed during the project will be:

- the analysis of the climate context and its evolution (considering the different aspects that impact on the flood hazard, e.g. sea level rise, change frequency of extreme events...),
- the correct monitoring of the environmental variables for the hazard evaluation (taking into account available data and possibility to improve the acquisition of data, in selected areas, using low cost sensors),
- the developing of machine learning predictive models (where possible)
- the developing of action protocol for managing flood hazard in coastal plain (in agreement with land management agencies)
- the developing of IT tools useful for managing flood hazard in coastal plain

- **Co-financing company/body:** TerreLogiche Srl
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months
- **Transferring university:** Università di Pisa

- **Scholarships co-funded by companies and Patti territoriali dell'alta formazione per le imprese" – CUP: F61B23000370006 :**

1. **Scholarship co-funded by ARPA-Puglia company:**

- **Project title and scholarship theme:** Soil consumption in Apulia region
- **Research Activity Description:**

The project will focus on the analysis of land consumption in the Puglia region over time, with assessments of its environmental sustainability over time

- **Period abroad:** eventual

- **Period at the company/institution:** 18 months

2. Scholarship co-funded by CNR-IREA company:

- **Project title and scholarship theme:** Development of innovative methods for analyzing and integrating synthetic aperture radar (SAR) data in environmental applications
- **Research Activity Description:**

Earth observation (EO) technologies play a vital role in environmental monitoring and advance our understanding of Earth's bio-geophysical processes. Synthetic Aperture Radar (SAR) systems acquire high-resolution images (e.g., 10-100 m) day or night and in any weather because they operate in the microwave region. SAR data are sensitive to plant geometry, soil surface morphology (roughness), and water content in the vegetation and soils. In this sense, they are highly complementary to optical imaging, which is sensitive to the biochemical characteristics of surfaces. The goal of the project is to develop innovative approaches to the analysis and integration of SAR and optical data into Mediterranean-scale environmental applications

- **Period abroad:** 6 months
- **Period at the company/institution:** 6 months

3. Scholarship co-funded by INGV company:

- **Project title and scholarship theme:** Advanced geodetic methodologies applied to the analysis and management of natural risks
- **Research Activity Description:**

Monitoring ground deformations is crucial for managing natural hazards such as earthquakes, landslides, and subsidence. GNSS (Global Navigation Satellite System) techniques provide powerful tools for detecting these deformations with high precision. In recent years, artificial intelligence (AI) has shown great potential in enhancing the analysis and interpretation of GNSS data. This PhD project aims to develop innovative AI-based methods for real-time monitoring of ground deformations using GNSS data. Specifically, the research objectives will focus on:

1. Development of AI Algorithms for GNSS Data Analysis:
 - Create machine learning and deep learning models for analyzing data collected from CORS (Continuously Operating Reference Stations) networks managed by the University of Bari and INGV.
 - Implement anomaly detection algorithms to quickly identify significant deformations.
2. Integration of AI Models with Real-Time Monitoring Systems:
 - Integrate the developed AI models with the real-time GNSS monitoring platforms of the University of Bari and INGV.
 - Design an early warning system to alert in case of detection of critical deformations.
3. Evaluation and Validation of AI Models:
 - Test and validate the AI models on historical and real-time GNSS data.
 - Compare the performance of the developed models with traditional GNSS data analysis methods.

This PhD project represents a significant advancement in the application of artificial intelligence for real-time geodetic monitoring. Through the development of new algorithms and integration with GNSS systems, it aims to achieve results that can significantly improve the prevention and management of natural hazards.

- **Period abroad:** eventual
- **Period at the company/institution:** 6 months

4. Scholarship co-funded by INGV company:

- **Project title and scholarship theme:** Advanced geophysical methods for the study of active seismo-tectonic processes
- **Research Activity Description:**

The recent increase of the seismic and geodetic monitoring infrastructure across the Gargano promontory has been obtained thanks to important EU project and more recently with Next Generation EU NRRP plan. One of the main scientific results is related to the evidence of a dramatic seismic release, comparable to the seismic release we observe in the Apennines, but occurring in the lower crust. The relationship between seismic and geodetic deformation is far to be understood with important consequence on the capability to provide good estimate on the seismic hazard of the region. The work we propose is to provide a detailed picture of the strain rate tensor within the active deforming lower crust deduced from earthquakes moment tensor and compared to

the surface deformation deduced from the GNSS network. A numerical modelling will provide a quantitative explanation of the active deformation of the Gargano promontory. The work will cover seismic and geodetic data analyses, numerical modelling approaches and field work for seismic and geodetic data acquisition.

- **Period abroad:** eventual
- **Period at the company/institution:** 6 months

5. Scholarship co-funded by INGV company:

- **Project title and scholarship theme:** Probabilistic multi-volcano hazard quantification for the Italian volcanoes
- **Research Activity Description:** The PhD project will develop innovative research toward the multi-volcano multi-hazard quantification, with focus on the eruptive phenomena at the volcanoes of the Mediterranean area. The analysis will initially concentrate on the Italian volcanoes (Mt. Vesuvius, Campi Flegrei, Ischia, Stromboli, Vulcano, Lipari, Etna), for which an extensive literature already exists. The research activity will start by retrieving and analyzing eruptive data, identifying potential analogue volcanoes, and developing a statistical model for the long-term occurrence of the eruptions and of the individual eruptive phenomena. Then, the activity will concentrate in characterizing eruptive parameters to initialize the modelling of the volcanic processes through High Performance Computing techniques. The final goal will be the development of coherent probabilistic hazard models at the different volcanoes, to produce multi-source regional hazard models. The research activity will be carried out in a multi-disciplinary group at the University of Naples Federico II and at the National Institute of Geophysics and Volcanology (INGV).
- **Period abroad:** eventual
- **Period at the company/institution:** 6 months

6. Scholarship co-funded by Regione Puglia company:

- **Project title and scholarship theme:** Assessing the charge capability of Apulian beaches
- **Research Activity Description:**

The project will focus on assessing the capacity for exploiting the beaches in the Puglia region.

- **Period abroad:** eventual
- **Period at the company/institution:** 6 months

7. Scholarship co-funded by ESSITY Italy SpA company:

- **Project title and scholarship theme:** Eliminating the barriers to total well-being of frontline workers
- **Research Activity Description:**

The "Frontline Total Well-Being Project" seeks to enhance the overall health of Essity frontline employees worldwide, aligning with the WHO's definition of health as complete physical, mental, and social well-being. The project aims to eliminate barriers to well-being through a coordinated network of global and local teams. The "Global Well-Being Team" will guide local teams in creating tools, procedures, training, and screening programs. A pilot program will test the project's effectiveness before broader implementation. The project targets four specific objectives:

- Occupational Risk Prevention: Identifying and mitigating workplace risks to prevent occupational diseases through data collection and analysis, informing preventive measures.
- Diversity Management: Promoting an inclusive workplace by assessing and addressing barriers for minority groups, providing training, psychological support, and resources to foster an inclusive environment.
- Healthy Aging: Encouraging healthy aging by implementing screening programs, promoting healthy lifestyles, and offering physical activity and dietary support tailored to job-specific needs.
- Climate Change Adaptation: Integrating climate resilience into workplace health strategies by assessing climate-related risks and implementing measures to protect employee health from environmental impacts. These interventions aim to achieve a holistic well-being for Essity's frontline workforce, ensuring a healthy, inclusive, and supportive work

- **Period abroad:** eventual
- **Period at the company/institution:** 6 months

• *Scholarships co-financed by research projects*

1. Scholarship co-funded by PNRR RETURN - PE00000005; CUP H93C22000610002 – Next Generation EU project:

- **Project title and scholarship theme:** Dispersal of pollutants from volcanic activity and impact on society and territory
- **Research Activity Description:**

The project is dedicated to evaluating the dispersion of potentially polluting materials (gases, particulates, etc.) from volcanoes using numerical simulation models in the atmosphere, and assessing their impact and mobility on soils and waters.

- **Period abroad:** 3 months

2. Scholarship co-funded by PNRR RETURN - PE00000005; CUP H93C22000610002 – Next Generation EU project:

- **Project title and scholarship theme:** Population dynamics, social vulnerability, and natural hazards
- **Research Activity Description:** The research aims to evaluate the connections between demographic dynamics, social vulnerability, and risks from exogenous shocks. Unbalanced demographic growth undermines sustainable development and social cohesion, making declining areas more vulnerable and increasingly exposed to exogenous shocks. Conversely, urban areas with high population density face negative environmental impacts and exacerbated social inequalities. This demographic and socio-economic polarization has long characterized the Italian context, linking high-risk exposure to exogenous shocks with social vulnerability. The study will examine these processes to understand their impact on the resilience of different local contexts and identify vulnerable areas to promote targeted territorial policies. The project, based on an interdisciplinary approach integrating demographic and social statistical sciences with spatial applications at a local scale, will include a comprehensive literature review, detailed data analysis, and the application of appropriate statistical methodologies to interpret empirical evidence and elucidate the interconnections between demographic dynamics, social vulnerability, and exposure to exogenous shocks (i.e., natural hazards).
- **Period abroad:** 3 months

3. Scholarship co-funded by PNRR RETURN - PE00000005; CUP H93C22000610002 – Next Generation EU project:

- **Project title and scholarship theme:** Rheological properties of fluidized and non-fluidized pyroclastic flow mixtures
- **Research Activity Description:**

The knowledge of the powder rheology is a fundamental resource that can be applied to a wide range of sectors, both in the fundamental research and industrial sector. In nature, this has important implications on the fluid dynamics of gravity-driven currents like, e.g., pyroclastic density currents, debris avalanches, debris flows, etc.. The possible concurrent fluidization is often invoked to explain the exceptional mobility of these flows. In this research, we will use cutting edge rheometry, coupled with analytical techniques to analyse the particle size and shape distributions and large-scale experiments, to investigate the rheology of fluidized and non-fluidized granular material of natural origin. The candidate will have the opportunity to work in a multidisciplinary environment and is expected to spend six months in the LAIMA (Laboratorio de Análisis de Imágenes y Modelado Analógico) laboratory at the University of San Luis Potosí (Mexico), where two state-of-the-art flumes at different scales are available.

- **Period abroad:** 6 months

4. Scholarship co-funded by PNRR RETURN - PE00000005; CUP H93C22000610002 – Next Generation EU project:

- **Project title and scholarship theme:** Methods for the study of rupture mechanisms for small magnitude earthquakes
- **Research Activity Description:**

The project falls within the scope of the RETURN-PNRR project (natural risks topic), in particular in the SPOKE 3: Volcanoes and Earthquakes (Workpackage 4 task 4.3). Specifically, the topic concerns the modeling of small-magnitude earthquakes using quasi-dynamic models that include the variability of the rupture speed. A possible natural outcome of this research work is the construction of a network/connection between different research institutes-groups in the field of seismology which deal with interpreting seismic recordings using advanced methods for the study of the seismic source and the Green's function of the propagation medium. From this perspective, the topic in question will see the University of Bari

and the University of Naples (prof. Aldo Zollo's seismology group) involved in the co-supervision of the doctoral work.

- **Period abroad:** eventual
5. **Scholarship co-funded by PNRR RETURN - PE00000005; CUP H93C22000610002 – Next Generation EU project:**
 - **Project title and scholarship theme:** Free topic within the PNRR themes
 - **Research Activity Description:** Not available
 - **Period abroad:** no
 6. **Scholarship co-funded by PNRR RETURN - PE00000005; CUP H93C22000610002 – Next Generation EU project:**
 - **Project title and scholarship theme:** Free topic within the PNRR themes
 - **Research Activity Description:** Not available
 - **Period abroad:** no
 7. **Scholarship co-funded by PNRR RETURN - PE00000005; CUP H93C22000610002 – Next Generation EU project:**
 - **Project title and scholarship theme:** Free topic within the PNRR themes
 - **Research Activity Description:** Not available
 - **Period abroad:** no
 8. **Scholarship co-funded by Horizon Europe Project- 101147618 — GO-Forward:**
 - **Project title and scholarship theme:** Relation between fractures and fluid flow in fractured crystalline basement rocks
 - **Research Activity Description:**

This PhD project aims at applying tools and methods in crystalline rocks to define the interplay between pre-existing discontinuities and the main fractures channeling fluid flow. The student will investigate the fracture network and their connectivity, with emphasis to the fluid-rock interaction. The study is based on exhumed, fossil geothermal systems, located in Cornwall and Tuscany. The results will be applied to the barely known deep crystalline basement of the Vallès Basin, in the Catalan Coastal Range, where exploration is planned. The main goal is contributing to reduce the pre-drill uncertainty on flow properties and connectivity and on the techno-economic feasibility of potential (deep) crystalline geothermal reservoirs, ensuring safe operational envelopes for proposed exploitation scenarios.

- **Period abroad:** no
 - **Scholarships financed by external bodies**
1. **Scholarship funded by Agenzia Spaziale Italiana (ASI):**
 - **Project title and scholarship theme:** The astrobiological potential of authigenic clays from hypersaline environments
 - **Research Activity Description:**

This project is focused on the mineralogical and geomicrobiological characterization of authigenic clay minerals from hypersaline lakes for the assessment of Mars present and past habitability. The candidate will focus on the mechanisms that form these minerals in the Makgadikgadi Basin of Botswana and their potential of preserving, and even fostering, microbial life. Field campaign and preliminary sedimentological analysis will be performed at the partner institution in Botswana. Further mineralogical and organic matter characterization will be performed using Raman spectrometry, IR spectroscopy and scanning electron microscopy. Microbial communities, both prokaryotic and eukaryotic components, will be investigated by metagenomics, to extend our knowledge in the adaptation of microorganisms to an extreme environment. Candidates should have a strong background in geology and possibly a basic knowledge in one or all the analytical techniques outlined above.

- **Period abroad:** no
2. **Scholarship funded by Agenzia Spaziale Italiana (ASI):**

- **Project title and scholarship theme:** Multi-platform remote sensing for the analysis of links between geomorphological instability, sediment dynamics, and flood events for multi-risk assessment
- **Research Activity Description:**

The proposed research activity falls within the context of using state-of-the-art satellite technologies for multi-risk assessment in terms of both spatial-temporal evaluation and the connection and interrelation of hydro-geomorphological processes. Specifically, it aims to explore the cascade relationships among land instability (e.g., landslides), sediment connectivity, and flood events. The project aims to develop innovative methodologies that integrate optical and SAR satellite data (e.g., Sentinel-1/2, Prisma, CSK and CSG, SAOCOM, etc.) with other information sources such as UAV data (e.g., photogrammetric DTM data, lidar data, etc.) and ground-based sensors (e.g., video cameras, weather stations, etc.). This integration aims to bridge the spatial scale gap and provide a more accurate and detailed understanding of risks associated with these processes, enabling more informed and timely land management decisions.

- **Period abroad:** eventual

• University scholarships

1. Scholarship funded by Università di Bologna:

- **Project title and scholarship theme:** Exploring the onset of mild to intermediate explosive eruptions (EXPLONSET)

- **Research Activity Description:**

This project is aimed at exploring the processes that lead to the onset of mild to intermediate explosive eruptions and transitions to different states of activity. Selected Holocene eruptions at different scales on Lipari and Vulcano (Aeolian Islands) will be considered, together with analogues in other volcanic systems (i.e. Milos – Greece; Te Maari and Taranaki- New Zealand). The different case studies allow for consideration of both purely phreatic (or hydrothermal) eruptions and the opening phases of weakly to highly explosive eruptions involving magma arrival to the surface. In this regard, it will be considered also the influence of different magma compositions that testify for the occurrence of these processes in different volcanic settings. A multidisciplinary approach will be adopted that brings together volcanic stratigraphy and sedimentology and field sampling aimed at characterizing the mineralogical, geochemical and micro-textural features of the erupted products. The expected results are to characterize magma-rock interaction processes and the physical-chemical parameters that may trigger phreatic (or hydrothermal) eruptions in volcanoes characterized by intense hydrothermal activity and define the chemical and physical characteristics of magmas involved in the subsequent eruptive phases and their history of storage and ascent. The final goal is to give a contribution for the development of an interpretative framework and conceptual model(s) to better understand the conditions driving the eruptive onset, particularly in active volcano-hydrothermal systems. This knowledge is fundamental for the assessment of volcanic hazards and the interpretation of the observables during the unrest phase prior to an eruption and monitoring data.

- **Period abroad:** eventual

2. Scholarship funded by Università di Palermo:

- **Project title and scholarship theme:** Free argument
- **Research Activity Description:** Not available
- **Period abroad:** no

3. Scholarship funded by Politecnico di Bari:

- **Project title and scholarship theme:** Fluid-structure interaction of floating wind turbines

- **Research Activity Description:**

The need for innovative offshore systems is a key priority, as the lack of standardized structures is one of the main obstacles to the deployment of floating offshore wind. This project proposal aims to obtain an innovative pilot tool, based on an efficient and sustainable numerical methodology, to parametrically design a new generation of offshore wind towers. The new tool will also need to take into account the existing correlation between the underwater noise generated over time by offshore wind turbines and the quality of ecosystems, with the intention of addressing and potentially reducing this environmental impact. The methodology to be employed will be based on high-resolution calculations performed by High-Performance Computing (HPC), capable of reproducing high-quality acoustic spectra, enabling the generation of a comprehensive database of

hydrodynamic simulations, depending on the combination of structural parameters of offshore wind turbines and wave conditions. Hydrodynamic optimization of wind turbine shapes and anchorages (both in the submerged and emerged parts), achievable through the implementation of computational tools and data-driven algorithms with machine learning techniques, will help designers achieve optimal wind turbine design in terms of acoustics and hydrodynamic efficiency. Optimized solutions and tools will be used to design a new generation of floating wind towers. The project will contribute to the achievement of the priority of "A more competitive and smarter Mediterranean" and to the "Development and enhancement of research and innovation capacities and the adoption of advanced technologies" by providing new solutions in the shape and anchorages of wind turbines (both in the submerged and emerged parts) and in new analysis methodologies related to the implementation of computational tools and data-driven algorithms with machine learning techniques (tools that can be used in other fields as well).

- **Period abroad:** no

POSITIONS WITHOUT SCHOLARSHIP

3

Admission procedures for ordinary places:

The selection for ordinary places will take place in accordance with Article 6 letter B of the call.

The exam will be based on the discussion of the presented project

Procedures for carrying out the tests for foreign candidates:

Foreign candidates may choose to take the entrance exam in Italian or English

Calendar and location of the entrance exam:

Qualifications Rating: July 29-31, 2024

Project rating: August 1-2, 2024

Oral exam: August 5-7, 2024, since 9 a.m. CEST at Dipartimento di scienze della Terra e Geoambientali.

Where it is not possible to do it in person, candidates may ask to do it remotely with a motivated request. The motivated letter of request, together with the copy of an identity document, valid to travel abroad, must be uploaded on PICA web platform. It will be the responsibility of the commission to communicate the methods of connection.

For further information, please consult the following Web address: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 8)

PROFILE

PhD course in “Economics and Finance of Public Administrations”

CUN Scientific Areas: 13a – Economic and statistical science; 12 - Law; 13b - Economics and business sciences

Settori Scientifico Disciplinari: SECS-P/01, SECS-P/02, SECS-P/03, SECS-P/06, SECS-P/07, IUS/05, IUS/09, IUS/10, IUS/12, IUS/21, SEC-S/01, SEC-S/06

Coordinator: Prof. Nicola Daniele Coniglio

Administrative Unit of the PhD course: Dipartimento di Economia e Finanza, Università degli Studi di Bari Aldo Moro

PEC: direttore.dsem@pec.uniba.it

Duration: 3 years

Total PhD positions for this Call for Applications:

- n. 5 on research topics proposed by the candidate;
- n. 2 on research topics listed and described below; Ministerial Decree no. 629/24:

PhD course with a single curricula:

POSITIONS WITH SCHOLARSHIP

- *n. 5 University scholarships*

- **Borsa D.M.629/24** Avviso: D.M.629/24: (4.1 Pubblica Amministrazione)

Project title and scholarship theme: “**Demographic crisis and territorial sustainability**” (in cooperation with **Bank of Italy** – Bari; **Aix-Marseille School of Economics**, France)

Descrizione attività di ricerca: The research aims to analyze the determinants and consequences of the demographic dynamics taking place in the Italian regions and the main consequences on the socio-economic system as well as on the optimal structures of public policies for promoting growth dynamics and collective protection from risks (welfare measures).

- **Period abroad:** 10 months at Aix-Marseille School of Economics (Francia)
- **Period at the Institution:** 6 months at Bank of Italy – Bari branch

- **Borsa D.M.629/24** Avviso: D.M.629/24: (4.1 Pubblica Amministrazione)

Project title and scholarship theme: “**Territorial disparities in the Italian Health System**” (in cooperation with **Bank of Italy** – Bari; **Aix-Marseille School of Economics**, France)

Descrizione attività di ricerca: This research project aims to evaluate the territorial disparities of the healthcare system in Italy, the dimensions of efficiency and equity, following its evolution over the last twenty years. The analysis will combine empirical and theoretical approaches and focus on three key aspects: 1. The evolution of hospital efficiency in light of the reorganization of hospitals in the area; 2. Equity in access to hospital services; 3. The allocation of regional expenses.

- **Period abroad:** 10 months at Aix-Marseille School of Economics (Francia)
- **Period at the Institution:** 6 months at Bank of Italy – Bari branch

Admission procedures for ordinary places:

The selection will take place in accordance with Article 6 letter B) of the call.

The exam will be based on the evaluation of academic titles + PhD project on a topic related to the Doctoral school proposed by the applicant (for the n. 5 University scholarships) or related to one of the 2 listed topics to be submitted with the application + oral exam for the discussion of the PhD project

The selection of PhD candidates will be carried out considering the academic titles/professional experiences of the applicants as well as an interview. During the interview (oral exam), applicants will also discuss their PhD project (max 4 pages). The candidates are required to submit the PhD project together with the application form. The interview will also be finalized to test proficiency in English language. Where it is not possible to do it in person, candidates may ask to do it remotely with a motivated request. The motivated letter of request, together with the copy of an identity document, valid to travel abroad, must be uploaded on PICA web platform. It will be the responsibility of the commission to communicate the methods of connection.

Foreign candidates might decide to take the written test and the interview in Italian or in English.

Selection dates:

Oral exam/Interview: 5/August/2024 (time 10 am)

Location: Biblioteca 'Etta Chiuri' (2nd floor), Dipartimento di Economia e Finanza, Università degli Studi di Bari Aldo Moro, Largo Abbazia Santa Scolastica, 70124 Bari (Italy).

For further information: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 9)

PROFILE

PHD PROGRAM IN ECONOMICS AND MANAGEMENT

CUN Scientific Areas: 13 Economics and statistics

Academic disciplines: SECS-P/01, SECS-P/02, SECS-P/03, SECS-P/05, SECS-P/06, SECS-S/06, SECS-P/07, SECS-P/11, SECS-P/13 and SECS-S/01

Coordinator: Prof. Andrea Morone

Administrative Office: Department of Economic, Management and Business Law

PEC: direzione.demdi@pec.uniba.it

Duration: 3 years

Curricula: YES

1. Economics (Scientific Subject Codes: SECS-P/01, SECS-P/02, SECS-P/03, SECS-P/05, SECS-P/06 and SECS-S/06)
2. Management and technology (Scientific Subject Codes: SECS-P/07, SECS-P/11, SECS-P/13 and SECS-S/01)

Total number of places available: n. 12

- with University scholarship: n. 3
- with scholarship pursuant to Ministerial Decree no. 630/24: no. 4
- with scholarship "Patti territoriali dell'alta formazione per le imprese" – CUP: F61B23000370006 n. 3
- without scholarship no. 2

POSITIONS WITH SCHOLARSHIP

n. 12 places with University scholarship

- **D.M.630/24**
- 1. **Avviso: D.M.630/24**
- **Project title and scholarship theme: Artificial intelligence modelling for urban sustainability**
- **Research Activity Description:**

The emergence of artificial intelligence (AI) and its ever-widening impact on many sectors calls for an assessment of its effect on achieving spatial sustainable development goals. The adoption of AI technologies in cities not only promises to improve the quality of life for citizens, but can also foster greater environmental sustainability. Through AI tools, cities are becoming more efficient and eco-friendly, resulting in a new urban model that puts people and the planet at the center. However, while there are many benefits, challenges emerge, such as data management and security. The PhD student will work with the support of the partner company to download spatial data from various sources (satellite, open source, scraping) for the past 10 years at the municipal and provincial level on a daily basis. Using big data analytics and machine learning, the Ph.D. student will use AI and econometrics tools to help predict and manage energy consumption, optimize traffic flows to reduce CO2 emissions, improve garbage collection, or even predict extreme weather events using previously collected data. In this way, smart cities can become not only more efficient but also more environmentally friendly. The analysis will also cover the state of infrastructure and local fiscal policies for the adoption of sustainable mobility policies in different urban and suburban contexts in Italy.

- **Co-financing company/body: SFERA INFORMATICA & STRUMENTAZIONE SRL**
- **Period abroad: 6 months**

- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 12 months.

- **D.M.630/24**

2. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** The impacts of emerging technologies on institutional and organizational arrangements in health care
- **Research Activity Description:**

The development of highly specialized technical-scientific skills in the field of healthcare management, business organization, data analysis methodologies and emerging technologies will enable the doctoral student to interact with regional healthcare companies engaged in reorganization projects in order to arrive at the implementation of more shared and adaptable actions and obtain results that meet the overall objectives. The didactic-scientific pathway of the doctoral program, exploiting the potential of emerging digital technologies (such as telemedicine, Big Data, artificial intelligence, Internet of Things), aims to define new organizational and institutional approaches useful to ensure the reduction of inequalities and the integration of prevention, early diagnosis and patient care by fully grasping the objectives of the National Recovery and Resilience Plan (NRP) in terms of change and digital transformation in healthcare. Analysis of the impacts of new technologies on institutional and organizational arrangements will enable the identification of new solutions aimed at making the National and Regional Health System equitable and sustainable.

- **Co-financing company/body:** Giovanni Paolo II Bari Cancer Institute - IRCCS
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

- **D.M.630/24**

3. **Avviso: D.M.630/24**

Project title and scholarship theme: The integration of ESG risks into banks' business processes

- **Research Activity Description:**

In recent years, regulators and supervisors have focused their efforts on promoting greater awareness among financial intermediaries of the challenges and opportunities arising from ESG (Environmental, Social and Governance) factors within their business models. Regulations on the topic are constantly evolving, and the need arises to train figures who can support banks and companies in this rapid process of change.

The development of research topics on ESG risks and sustainable business models is perfectly consistent with the country's needs and employment prospects in the regional, national and international spheres.

Highly qualified technical-scientific skills in the field of data analysis methodologies, sustainability in business and corporate governance will enable the PhD student to interact not only with lending institutions that need to integrate ESG risks into their business processes, but also with the small, medium and large enterprises that make up the regional and national production fabric.

- **Co-financing company/body:** BdM Bank S.p.A.
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

- **D.M.630/24**

4. **Avviso: D.M.630/24**

Project title and scholarship theme: Study of the impact and direct and indirect added value of the tourism supply chain at the territorial level

- **Research Activity Description:**

This research project focuses on using econometric techniques to assess the impact of the tourism sector at the local level. The methodologies used will allow estimating the direct effects on tourism activities, such as accommodation, catering and cultural recreation, but also the indirect effects on other tourism-related sectors (such as infrastructure, mobility, cultural services, etc.). The unit of analysis will be the individual municipality/tourist destination. The project aims for an accurate and comprehensive analysis of the overall economic impact of tourism on a given area. In addition, the project aims to maximize the usefulness of the exceptional amount of data that is generated daily at the urban level and channel it through mathematical models applied to economics to make inferences and provide information of great analytical value for the study of territories. In particular, the use of Big Data, allows for up-to-date insights regarding human behaviors

and activities, which are crucial for the tourism industry. Through predictive analytics, sentiment analysis algorithms and natural language processing techniques, the PhD student with the partner company can identify emerging patterns and predict future tourism trends. Data will be collected at the municipal level and used in econometric models.

- **Co-financing company/body:** Quantitas Ltd.
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 12 months

- **D.M.630/24**

5. Avviso: D.M.630/24

- **Project title and scholarship theme:** Study of innovative urban management models aimed at economic, behavioral and social sustainability of territories
- **Research Activity Description:**

The research project aims to study new models and data drivers to build sustainable strategies both from an economic - financial point of view and in relation to the 17 ESG (Environmental, Social and Governance) goals of the 2030 Agenda for Sustainable Development of the cities of the future.

The constant technological and digital evolution and the resulting changes in people's habits impose continuous paradigm shifts also in the expected model of the city and in the citizen's interactions with the city itself. Such changes require new tools and methods of analysis in order to ensure fast and smooth social and urban adjustment. In such a scenario, it may be useful to imagine a parallel model of the city, a “digital twin” of it, on which scenario simulations (e.g., micro- and macroeconomic or policy-making) aimed at enhancing the well-being of the city and consequently of the citizen can be done. The study of these models requires a multidisciplinary approach: both economic-financial and technological expertise. In the current state of technology, “measuring” city development is possible thanks to digital technologies of direct monitoring (e.g., data collection through sensors) or indirect monitoring (database processing through algorithms). Based on these premises, the main objective of the research project is to build the models that enable both real-time monitoring of the city's performance and scenario building based on public policy alternatives and policy agenda goals. That is, the project wants to maximize the usefulness of the exceptional amount of data that is generated daily at the city level and channel it through mathematical models applied to economics to make inferences and provide information of great analytical value with respect to governance models. To this end, the project will be divided into several phases: initially, municipal governments that can represent case studies will be identified, and then local performance indicators (and data sources) appropriate to the goals of economic and financial sustainability and citizen welfare will be identified. They may cover, for example, urban transportation and parking, development of green areas, public services and infrastructure, indices of environmental quality and energy efficiency, school facilities, etc.. The research activity will have a strong interdisciplinary character (computer science, mathematics, engineering, public policy analysis and land governance).

- **Co-financing company/body:** Exprivia S.p.A.
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 12 months

- **D.M.630/24**

8. Avviso: D.M.630/24

- **Project title and scholarship theme:** DIPSTA – Developing Innovation Practices and Sustainable Transition in Agro-industry

Research Activity Description: The DIPSTA Project is being developed in coherence with the needs of the country and regional as well as local territories, specifically analyzing some dynamics of the agro-industrial sector with the aim of developing effective practices towards digital and sustainable transition, as envisaged by the PNRR. In particular, through collaboration with one of the world's leading companies in the processing and distribution of durum wheat and one of the major players in the soft wheat market, a research unit is proposed to support innovative industrial development, working on the one hand with the methodologies proper to the Merchandise Sciences and on the other hand providing companies with implementable improvement practices towards full digital and technological sustainability and innovation.

- **Co-financing company/body:** CASILLO SPA SOCIETA' BENEFIT

- **Period abroad:** 12 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

- **D.M.630/24**

9. Avviso: D.M.630/24

- **Project title and scholarship theme:** Digital transformation and technological innovations: the new challenges for SMEs
- **Research Activity Description:** The Economics and Management course aims to train professionals suitable for enhancing the growth potential of the social and economic system of the regional and national territory.

The development of highly specialized technical-scientific skills in the field of innovation, business models and data analysis methodologies will enable the PhD student to interact with companies in the territory engaged in projects of digital transformation and implementation of technological innovations. With this in mind, the Ph.D.'s didactic-scientific track, by leveraging the potential of emerging digital technologies (such as Big Data, artificial intelligence, Internet of Things, cyber security systems), aims to identify existing best practices in the adoption of strategic and operational solutions, fully grasping the objectives of the National Recovery and Resilience Plan (NRP) in terms of digital change and transformation. Analysis of the implementation of technological innovations and examination of the impact on the business organization will concretely support the development of the territory in order to meet the needs of businesses.

The skills on the definition of data-gathering and analysis systems essential to support strategic decisions in companies are perfectly consistent with the processes of territorial development and employment prospects in the regional, as well as national and international spheres.

- **Co-financing company/body:** Btinkeeng - Digital Innovators
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

POSITIONS WITHOUT SCHOLARSHIP

No. 2 Position without a scholarship

Admission procedures for ordinary places:

The selection will take place in accordance with Article 6 letter B of the call.

The examination will be based on the discussion of a research project proposed by the candidate, inherent to the themes of the PhD (written in Italian or English, between 1,000 and 2,000 words), sent together with the application for admission. Knowledge of the following foreign language will be part of the assessment: English. There will be only one examination and a single ranking list of merit. The places offered in the competition will be allocated, among the various curricula, according to the order in the merit list, until the places are filled. Scholarship places will be allocated in priority according to the order of the merit list. In the event of the renouncement of successful candidates, the ranking list may be extended. The research project discussion may be conducted online upon request.

Procedures for carrying out the tests for foreign candidates:

Foreign candidates may choose to take the entrance exam in Italian and English.

Calendar and location of the entrance exam:

Qualifications Rating and Research Project: July 31, 2024

Oral exam: August 01, 2024, from 3:00 pm, at the P. E. Cassandra Lecture Hall, (3rd floor - Department Body)
- according to the schedule that will be published on the website.

For further information, please consult the following Web address: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

PROFILE

PHD PROGRAM IN PHYSICS

in agreement with NATIONAL INSTITUTE OF NUCLEAR PHYSICS, FRASCATI – ROME

CUN Scientific Areas: 02 – Scienze Fisiche

Academic disciplines: FIS/01, FIS/02, FIS/03, FIS/04, FIS/07 (nuovi PHYS-01/A, PHYS-02/A, PHYS-03/A, PHYS-04/A, PHYS-06/A)

Coordinator: Prof. Domenico Di Bari

Administrative Office: Dipartimento Interateneo di Fisica “M. Merlin”

PEC: direzione.fisica@pec.uniba.it

Duration: 3 anni

Curricula: YES

- 1) Nuclear, subnuclear and astroparticle physics (Academic disciplines: FIS/01, FIS/04) (new PHYS-01/A)
- 2) Condensed Matter Physics, Photonics and Quantum Technologies (Academic disciplines: FIS/01, FIS/03) (new PHYS-01/A, PHYS-03/A)
- 3) Fisica applicata (Academic disciplines: FIS/01 e FIS/07) (new PHYS-01/A, PHYS-06/A)
- 4) Fisica Teorica (Academic discipline: FIS/02) (new PHYS-02/A, PHYS-04/A)

Total positions advertised: **n.14**

- with University scholarship: **n.4**
 - with scholarship pursuant to Ministerial Decree no. 630/24: **n.3**
 - with scholarship **n.3** funded by the National Institute of Nuclear Physics (INFN) of Frascati, Rome;
 - with scholarship **n.2** in the context of the ‘*Patti territoriali dell’alta formazione per le imprese*’ CUP: F61B23000370006’
 - with scholarship **n.2** funded by the Italian Space Agency (ASI), Rome;
-
- **D.M.630/24**
 - 1. **Notice: D.M.630/24:** PNRR - Missione 4, componente 2 “Dalla Ricerca all’Impresa” - Investimento 3.3
 - **Project title and scholarship topic:** _ “*Development of an RF electric field atomic quantum sensor*”
 - **Description of research activities:** The project falls within the themes of Spoke 7 of the PNRR NQSTI - National Quantum Science and Technology Institute (PE4 - Quantum Science and Technology) extended partnership, with a strong scientific-technological vocation. In particular, the scientific activity will concern the realization of a radiofrequency electric field sensor with vapors of alkaline atoms, confined in microfabricated cells. The project is aimed at the integration of electric field sensors for space and space surveillance awareness (SSA) applications. The project involves interdisciplinarity between atomic physics, quantum optics and microfabrication of alkaline vapor cells. The project is part of the research activities of Prof. Lucivero's group, thanks to which UNIBA is the only Italian member of the international network INMAQS – International Network for micro-fabricated atomic quantum sensors. The project involves co-financing by the company Thales Alenia Space (TASI), in the framework of the PNRR-NQSTI partnership and a period of research abroad at the University of Stuttgart.
 - **Co-financing Company/Entity:** Thales Alenia Space (TASI)
 - **Period abroad:** minimum 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** minimum 6 months

2. **Notice: D.M.630/24:** PNRR - Missione 4, componente 2 “Dalla Ricerca all'Impresa” - Investimento 3.3

- **Project title and scholarship topic:** *“Development of radiation-hardened, Silicon Photomultipliers optimized for earth observation and for astroparticle physics experiments”*

- **Description of research activities:** The aim of the project is to contribute to the development of the next generation of single photon detectors, SiPM, currently under development at FBK, through their theoretical study and advanced experimental characterization. In particular, the activity will focus on the development of Backside Illuminated SiPMs, on SiPMs equipped with advanced interconnection techniques towards the reading electronics (e.g., TSV), on 2.5D (and 3D) integration activities between SiPM sensor and reading electronics. The technology of single photon detectors is strategic in many application sectors, with great potential for impact on society, ranging from medical, to industrial, from space to large physics experiments. The developments covered by this project will allow to achieve improvements in many of these applications and maintain a competitive advantage for FBK and for the Italian research ecosystem. In particular, resistance to radiation damage is one of the major unsolved problems that limit the use of SiPMs in strategic space and "high energy physics" sectors. As a result, a significant part of the efforts will focus on characterizing and improving the characteristics of SiPMs in this area, exploiting the potential introduced by Backside Illuminated technologies.

- **Co-financing company/body:** Fondazione Bruno Kessler (FBK)

- **Period abroad:** minimum 6 months

- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** minimum 6 months

3. **Notice: D.M.630/24:** PNRR - Missione 4, componente 2 “Dalla Ricerca all'Impresa” - Investimento 3.3

- **Project title and scholarship topic:** *“Development of piezoelectric patterns by direct 3D writing applied to atomic layer deposition”*

- **Research description:** The deposition of piezoelectric materials in patterns on viscoelastic substrates is not trivial and will be the object of study of this project together with the study of the multimorphic materials obtained. To this end, the interface between substrates and piezoelectrics will be studied and, above all, the mechanical properties of piezoelectric substrates and patterns will be characterized. The central idea will be tested that any point where the stiffness of the material changes can behave as an inflection point and give complex deformations such as out-of-plane bending, bending, twisting, or bending. The method that will be used is direct atomic layer processing (DALP). This is an extremely innovative technique that adapts the ALD process to direct writing: it uses micro-nozzles that deliver the precursors in the immediate vicinity of the substrate, thus exposing only a limited area of the substrate to the action of the ALD process precursors. The process was invented by the Danish start-up, called Atlant 3D and which will be a partner in this PhD scholarship. So far, lateral resolutions of 200-300 μm have been achieved. This technique will be used in this project to create piezoelectric patterns on viscoelastic substrates. The project involves the development of a new multimorphic material with a state-of-the-art deposition technique. Their combination will lead to unprecedented adaptability and logical operation.

- **Co-financing Company/Entity:** Atlant 3D A.P.S.

- **Period abroad:** minimum 6 months

- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** minimum 6 months

- *“Patti territoriali dell’alta formazione per le imprese” CUP: F61B23000370006*

1. **Project title and scholarship topic:** *“Study and development of quantum imaging for space observation”*

- **Description of research activities:** The topics of the project are perfectly consistent with those envisaged within the PNRR PE National Quantum Science and Technology Institute (NQSTI) project. The close collaboration of the proposing group with Italian and international institutions, companies and universities, strongly favors the adhesion of the project to international networks. The development of interdisciplinarity and intersectorality is guaranteed by the necessary interactions with colleagues from various disciplinary fields (from biology and medicine, to aerospace and security) interested in super-

resolved imaging technologies; Collaborations with biologists, physicians, and corporate personnel in the aerospace and safety sector are already underway.

- **Co-financing company:** Thales Alenia Space (TASI)
- **Period abroad:** minimum 6 months
- **Period at the company/institution:** minimum 6 months

2. **Project title and scholarship topic:** “*Development of satellite data fusion algorithms for innovative remote sensing services*”

- **Description of research activities:** L’obiettivo del progetto è l’analisi, la progettazione e lo sviluppo di tecniche, anche AI-based, finalizzate alla fusione di dati satellitari sia dati ottici che SAR al fine di mettere a punto servizio di osservazione della Terra innovativi basati sull’uso delle più recenti missioni satellitari. A tale scopo, saranno affrontati studi e sviluppi finalizzati a valorizzare i dati derivanti dalla costellazione satellitare IRIDE prevista dal PNRR.

- **Company/Co-financing body:** Geophysical Applications Processing (GAP) srl
- **Period abroad:** minimum 6 months
- **Period at the company/institution:** minimum 6 months

- *Additional places with scholarships (2 ASI)*

1. **Project title and scholarship topic:** “*Advanced cubesat technologies for space weather studies*”

- **Research Description:** CubeSats are miniaturized satellites that offer a versatile and cost-effective platform for conducting a wide range of experiments in space. The study of space weather is of great importance for understanding and mitigating the effects of solar radiation and magnetic storms on terrestrial technology, orbiting satellites and power grids. CubeSats can be used to monitor space climate in innovative and efficient ways. Advanced technologies employed in CubeSats to study the space climate may include solar sensors to measure the intensity and spectrum of solar radiation, magnetometers to monitor magnetic fields, spectrometers to analyze the composition of charged particles in the surrounding space, and devices to measure the density and temperature of plasmas. The use of CubeSats to study the space climate offers several advantages, including the ability to quickly and cheaply launch a constellation of satellites to cover a large area of space, the ability to conduct experiments in low Earth orbit for long periods of time, and the ability to rapidly deploy new technologies and sensors. The use of advanced technologies in CubeSats to study the space climate offers an exciting opportunity to broaden our understanding of this phenomenon and improve our ability to predict and mitigate its effects.

- **Co-financing company/body:** Italian Space Agency (ASI)
- **Period abroad:** 6 months
- **Period at company/institution:** 12 months

2. **Project title and scholarship topic:** “*Security of Quantum Cryptography*”

- **Research description:** Among the main elements contributing to the development of quantum communications are security demonstrations. In fact, the security of a quantum cryptography protocol cannot be measured directly in the laboratory, but must be mathematically demonstrated from experimental data. Currently, one of the major open problems, to which numerous research groups around the world are dedicated, concerns the security of quantum cryptography based on continuous variables, i.e. on phase coding and quadrature of the electromagnetic field. Solving this problem will foster the development of quantum cryptography protocols that will be characterized by high compatibility with existing infrastructures, both for terrestrial and satellite communication channels. The research activity proposed for this PhD scholarship will therefore have as its object: - the mathematical modeling of the physical systems used for quantum cryptography with continuous variables; - the development of new continuous variable protocols; - the development of new techniques and methodologies to demonstrate the security of quantum cryptography; - the simulation and feasibility study of these protocols, with particular attention to satellite communications.

- **Co-financing company/body:** Italian Space Agency (ASI)
- **Period abroad:** 12 months
- **Period at the company/institution:** 3 months

- *Additional positions with scholarships (3 INFN)*
- **n.3** scholarships with the **funding body**: National Institute of Nuclear Physics (INFN);

Admission procedures for ordinary places:

The selection will take place in accordance with art. 6 **letter C)** of the call for applications and oral exam, with verification of knowledge of the English language.

The test will consist of an interview on fundamental topics of physics of the Bachelor's Degree in Physics, and on the candidate's research interests related to the PhD in physics.

To participate in the call for scholarships on a free theme of the University and for those funded by the National Institute of Nuclear Physics, the presentation of a research project is not required. For scholarships with a restricted theme, the submission of a research project is required.

The places put up for competition will be assigned according to the order in the merit list, until all places are filled.

Procedures for carrying out the tests for foreign candidates:

Foreign candidates can choose to take the entrance exam in Italian or English.

Calendar and location of the entrance exam:

Oral exam: 31 July 2024, 10.00 am at the Department of Physics, Room I, University Campus, via Orabona 4, Bari, Italy.

For more information, please visit the website: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 11)

PROFILE

PHD PROGRAM IN GENDER STUDIES

CUN Scientific Areas: Area 06 - Medical Sciences; Area 08 - Civil Engineering and Architecture; Area 10 - Ancient, Philological-Literary and Historical-Artistic Sciences; Area 11 - Historical, Philosophical, Pedagogical and Psychological Sciences; Area 12 - Legal Sciences; Area 13 - Economics and Statistics; Area 14 - Political and Social Sciences.

Academic disciplines: ICAR/14; ICAR/18; IUS/01; IUS/08; IUS/10; IUS/13; L-ART/03; L-ART/05; L-ART/06; L-FIL-LET/10; L-FIL-LET/14; L-LIN/12; MED/42; M-FIL/01; M-FIL/03; M-FIL/05; M-FIL/06; M-GGR/02; M-PED/01; M-PED/02; M-PSI/04; M-PSI/07; M-PSI/08; M-STO/02; M-STO/04; SECS-P/01; SECS-P/02; SECS-P/06; SECS-P/11; SPS/01; SPS/02; SPS/04; SPS/07; SPS/08

Coordinator: Prof. Prof. Francesca R. RECCHIA LUCIANI

Administrative Office: Department of Ricerca e Innovazione Umanistica - Università degli Studi di Bari Aldo Moro

PEC: dottorato.genderstudies@pec.uniba.it

Duration: 3 years

Curricula: YES

1) Philosophical-Political (Scientific Disciplinary Fields):

M-FIL/01 Theoretical Philosophy; M-FIL/05 Philosophy and Theory of Languages; M-FIL/06 History of Philosophy; M-STO/02 Modern History; M-STO/04 Contemporary History; SPS/01 Political Philosophy; SPS /02 History of Political Doctrines; SPS /04 Political Science.

2) Economic-Ethical-Law (Scientific Disciplinary Fields)

IUS/01 Private Law; IUS/08 Constitutional Law; IUS/10 Administrative Law; IUS/13 International Law; M-FIL/03 Moral Philosophy; M-GGR/02 Economic-Political Geography; SECS-P/01 Political Economy; SECS-P /02 Economic Policy; SECS-P /06 Applied Economics; SECS-P /11 Economics of Financial Intermediaries.

3) Area -Pedagogical-Psychological-Sociological (Scientific Disciplinary Fields):

MED/42 General and Applied Hygiene; M-PED/01 General and Social Pedagogy; M-PED/02 History of Pedagogy; M-PSI/04 Developmental Psychology and Educational Psychology; M-PSI/07 Dynamic Psychology; M-PSI/08 Clinical Psychology; SPS/07 General Sociology; SPS /08 Sociology of Cultural and Communicative Processes.

4) Artistic-Literary-Linguistic-Media (Scientific Disciplinary Fields)

ICAR/14 Architectural and Urban Composition; ICAR/18 History of Architecture; L-ART/03 History of Contemporary Art; L-ART/05 Disciplines of the Performing Arts; L-ART/06 Cinema, Photography and Television; L-FIL-LET/10 Italian Literature; L-FIL-LET/14 Literary Criticism and Comparative Literature; L-LIN/12 Language and Translation - English Language; SPS /08 Sociology of Cultural and Communicative Processes.

Total number of positions available: n. 35

- with scholarships Università degli Studi di Bari Aldo Moro: n. 4
- with scholarship as per Ministerial Decree no. 629/24: n. 8
- with scholarship as per Ministerial Decree no. 630/24: n. 13
- with scholarship co-financed by company(ies) ("Patti territoriali dell'alta formazione per le imprese" – CUP: F61B23000370006): n. 4
- with scholarships with affiliated Universities: n. 5
- with scholarship funded by other projects: n. 1
 - 1 scholarship UniBA on PRESERVE (no. 101168309) Horizon Europe call CL3-2023 FCT 0101

POSITIONS WITH UNIVERSITY SCHOLARSHIP

- University scholarships 9 of which:

- 4 scholarships Università degli Studi di Bari Aldo Moro
- 1 scholarship Università degli Studi della Campania Luigi Vanvitelli
- 1 scholarship Università degli Studi Magna Grecia Catanzaro
- 1 scholarship Università degli Studi di Chieti-Pescara G. d'Annunzio
- 1 scholarship Università degli Studi di Perugia
- 1 scholarship Università degli Studi di Roma La Sapienza (department of excellence).

POSITIONS WITH SCHOLARSHIP

- **D.M.629/24**
 1. **Notice: D.M.629/24: 4.1 PA**
 - **Project title and scholarship theme: Gener@, Competences and Migration: guidelines for inclusive public administrations**
 - **Research Activity Description:** The research line, Area 14 SPS /08 Sociology of Cultural and Communicative Processes, intends to build and test a skills validation model based on the intersectional analysis of the processes of enhancement of gender differences and migration background. A particular focus will be dedicated to the theme and the "target" divers - ability also in continuity with previous applied research projects developed by the collaboration between Uniba and ISMU - The model aims to focus on formal, informal and non-formal contexts of education.
 - **Period abroad:** 6 months
 - **Period at the Institution/Company:** 12 months
 - **D.M.629/24**
 2. **Notice: D.M.629/24: 4.1 PA**
 - **Project title and scholarship theme: Transformability of gender politics and public administration: an intersectional perspective for diversity management - Public Administration.**
 - **Research Activity Description:** Through the project (Area 14, SPS/02 History of Political Doctrines) it is intended to verify how transfeminism theories and intersectionality political cultures may affect the governance of public administration, regarding gender mainstreaming and diversity management practices. The transformational potential of gender politics will be adopted to verify the inclusiveness of organizational and institutional contexts, as well as their capability to guarantee social identities, valorise human resources, favour work well-being, and the growth of political participation, fill in the gender gap in the job market. In this direction, the project aims to qualify professional roles that, in addition to developing competencies of inclusive management and difference ruling, may gain specific knowledge in respect of cultural sensitization processes, to favour the prevention and overcoming of gender stereotypes, the normalization and reiteration of gendered power relations and of other forms of discrimination that inhibit social sustainability. Such roles shall be trained in respect of the horizontal principles of PNRR, cultural sensitization and monitoring of politics aimed at fostering social inclusion processes.
 - **Period abroad:** 6 months
 - **Period at the Institution/Company:** 6 months (where mandatory in sub-investments in Ministerial Decree 629/24)
- **D.M.629/24**
 3. **Notice: D.M.629/24: 4.1 PA**
 - **Project title and scholarship theme: Enhancing differences: theories, practices and policies of inclusion & diversity management in PA**
 - **Research Activity Description:** The project is framed in disciplinary Area 11 and, in particular, in SSD M-FIL/06 History of Philosophy. It is aimed to take up the challenge of managing issues related to the inclusion of differences and the enhancement of human resources. It responds to the organization's need to address the issues posed by workers able aware of their diversity and of the processes of

emancipation of differences. Inclusion of men and women, young and old, with different physical abilities, people from minority ethnicities and cultures, and of different sexual orientations has become a central issue in organizations and companies.

- **Period abroad:** 6 months
- **Period at the Institution/Company:** 6 months

- **D.M.629/24**

4. Notice: D.M.629/24: 4.1 PA

- **Project title and scholarship theme: Gender stereotypes and hate language, language strategy for inclusiveness and valuing differences in public administration**

- **Research Activity Description:** The project is framed within disciplinary Area 11 and, in particular SSD M-FIL/05 Philosophy and Theory of Languages. It focuses on the relationship between linguistic performativity and gender-based power relations within workplaces, particularly in Public Administration. It proposes an investigation into stereotypes and forms of hate speech circulating in everyday language use, with particular reference to gender discrimination. The project aims to foster active policies of respect and integration of women and gender minorities through linguistic innovation and the activation of shared good practices within workplaces, starting with effective communication on the performative level. The overall goal is to contribute to the deconstruction of the models of hegemonic masculinity and of the stereotypes of femininity in order to foster a cultural change. The methodology employed involves a multi- and trans-disciplinary approach that, starting from the analysis of the language that conveys stereotypes and messages of hatred analyses, in order to deconstruct them, the mechanisms that reproduce toxic power relations of discrimination.

- **Period abroad:** 6 months
- **Period at the Institution/Company:** 6 months

- **D.M.629/24**

5. Notice: D.M.629/24: 4.1 PA

- **Project title and scholarship theme: Diversity management, inclusive citizenship and PA**

- **Research Activity Description:** The project is framed in disciplinary Area 11 and, in particular, in the SSDs M-FIL/06 History of Philosophy and M-FIL/05 Philosophy and Theory of Languages. The project aims to take the concept of “inclusive citizenship” beyond its mere enunciation and to provide, in PA work contexts, for real inclusion of cultural, ethnic, sexual, gender and “ability” differences. In order to enhance internal and recruitable human resources with their actual potential, it is necessary to imagine models of diversity management that can be effective and efficient not only in problem-solving, but also in the elaboration of policies that consent to the Public Administration to provide services in inclusive and non-discriminatory ways. These policies will be elaborated in relation to their intern and external orientation, so as to implement the principles contained in Art. 3 and 97 of the Constitution.

- **Period abroad:** 6 months
- **Period at the Institution/Company:** 6 months

- **D.M.629/24**

6. Notice: D.M.629/24: 4.1 PA

- **Project title and scholarship theme: Age, race, class, gender and disability in Italian festivals**

- **Research Activity Description:** The project, SSD L-ART/06 Cinema, Photography and Television (Area 10), proposes to research the ways in which Italian film festivals interface with issues of age, race, social class, gender and disability, with particular attention to the public funding policies that support them (at both local and national levels). It will take into account both the forms of discrimination and prejudice that still exist, as well as the strategies for improvement that have been implemented (both at institutional level and by individual social actors) and the possible existence of good practices. The perspective adopted by the project may include both a historical study and an analysis of the current situation. Methodologically, the project combines festival studies, film and media studies, gender studies, production studies and sociology of work.

- **Period abroad:** 6 months
- **Period at the Institution/Company:** 6 months

- **Transferring university:** UNIVERSITY OF TURIN
- **D.M.629/24**
- 7. **Notice: D.M.629/24: 4.1 PA**
 - **Project title and scholarship theme:** *Redefining Public Space: Gender, Mobility, Security.*
 - **Research Activity Description:** (Area 14 - SPS/01 Political Philosophy) The struggle for women's human rights begins with the demand for an active presence in the public sphere, meant as a politics of presence. However, access to public space has always been restricted, not only due to socio-political reasons, but because of cultural reasons. Indeed, the socialization of women has always been limited in comparison to men by the idea of the danger they might face in an 'unsafe' space. Conversely, recent data has shown how the walls of the home can be a place of abuse. From this perspective, the doctoral fellowship aims, on the one hand, to study the reasons why women's access to public space is still limited and, on the other hand, to identify strategies and modalities of incorporating specific criteria in the planning and design of urban mobility and environmental sustainability. The aim is to study and to propose public policies that support ideas and practices of safety in urban space, understood as living without fear, exercising one's professions unhindered and freely expressing one's abilities and aspirations.
 - **Period abroad:** 6 months
 - **Period at the Institution/Company:** 6 months
 - **Transferring university:** UNIVERSITY OF MILANO – BICOCCA
- **D.M.629/24**
- 8. **Notice: D.M.629/24: 4.1 PA**
 - **Project title and scholarship theme:** **Stress dimensions, Conflict management, and Psychological health across genders: sUpporting working Staff (SCOPUS)**
 - **Research Activity Description:** (Area 11 - Scientific Disciplinary Area: M-Psi/07 Dynamic Psychology) Within the context of the growing national and international needs to promote the value of differences/gender differences, and to enhance processes of inclusion, development, and social sustainability, in line with the ONU 2030 Agenda for Sustainable Development (Objective 5 on Gender Equality) and the PNRR (Gender Equality as a transversal principle among the Missions) the project SCOPUS aims to develop a statistically valid multidimensional model of work-related stress for diversity management and for the promotion of psychological health and the individual, organizational and social wellbeing that recognizes and values gender differences and specificities in different categories of workers/occupational contexts. SCOPUS aims to identify a wide range of individual, situational, and relational factors that can be used for the development of tailored, evidence-based support interventions - at the individual, group, and organizational levels - for the promotion of psychological health, the effective management of stress and interpersonal conflicts, and for work-life balance. SCOPUS has the potential to yield significant scientific, social, and economic benefits, by ensuring the measurability of its results and contributing to the design of welcoming and inclusive organizations, social facilities, companies, and communities that effectively promote psychological, relational, and social wellbeing through the recognition and valorization of differences.
 - **Period abroad:** 6 months
 - **Period at the Institution/Company:** 6 months
 - **Transferring university:** UNIVERSITY OF NAPLES FEDERICO II
- **D.M.630/24**
- 1. **Avviso: D.M.630/24**

Project title and scholarship theme: Organizational Models and Policies to contrast the gender gap in work contexts.

Research Activity Description: The Research Project, Area 14 SPS /08 Sociology of Cultural and Communicative Processes, intends to work on the specific need for social innovation of the companies of the Consorzio Mestieri which has offices not only in the metropolitan area of Bari but also in the territories of Lecce, Foggia, Martina Franca. The research develops within the framework of realistic evaluation and critical realism and in an intersectional perspective (gender and migration studies) aims to bring transparency to recruitment processes capable of developing models and policies of social and work inclusion that address gender, migration and socio-cultural backgrounds.

- **Co-financing company/body:** CONSORZIO MESTIERI -Viale della Repubblica 71/L-M – 70125 Bari
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 12 months
- **D.M.630/24**
2. **Avviso: D.M.630/24**
- **Project title and scholarship theme:** THEORIES AND PRACTICES ON FINANCIAL INSTRUMENTS TO COUNTER FINANCIAL EXCLUSION AND ECONOMIC VIOLENCE ON MARGINALIZED SUBJECTIVITIES IN EUROPE
 - **Research Activity Description:** The project, of Area 13 - SECS-P /11 Economics of Financial Intermediaries, that the PhD student must develop has the objective of analyzing and structuring financial instruments intended to combat financial exclusion and economic violence against women and marginalized subjects, in particular those involved in public administration, to support them on a path of empowerment and financial and social inclusion. The research areas are the following:
 - Analysis of the problems related to financial exclusion and the consequent social exclusion;
 - Analysis of financial instruments that can support a process of financial inclusion for women and marginalized subjects;
 - Critical evaluation and identification of possible areas for improvement of practices already in place at national and European level, with the structuring of new tools and modification of existing ones to improve their effectiveness in pursuing the identified objectives.
 - **Co-financing company/body:** Fondazione Finanza Etica
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months
- **D.M.630/24**
3. **Avviso: D.M.630/24**
- **Project title and scholarship theme:** GENDER EQUITY AND CORPORATE WELFARE
 - **Research Activity Description:** The project, of Area 13 SECS-P/01 - Political economy, aims at elaborating innovative operational strategies in work organisation with the objective of spreading gender equity and favoring integration paths for minorities, fragile individuals or those with a migration background. Pursuing theoretical and practical corporate welfare objectives, the pivotal points to be developed as corporate strategies and policies are i) gender equality, starting a virtuous path leading to gender certification, and ii) the activation of increasingly inclusive recruitment processes. In this sense, the most innovative tools for gender certification will be deployed, analysing the data and its areas of application and showing the progress and any criticalities that have emerged both during the certification process and post-certification and application. Knowledge and analysis of obstacles, especially cultural and corporate ones, will allow a more accurate use of gender certification, also in connection with other certifications, especially those useful for enterprises of a cooperative nature.
 - **Co-financing company/body:** CSG FACILITY soc. coop.
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 12 months
 - **Transferring university:** UNIVERSITY OF ROME LA SAPIENZA
- **D.M.630/24**
4. **Avviso: D.M.630/24**
- **Project title and scholarship theme:** Communication aspects of gender medicine
 - **Research Activity Description:** The project, from AREA 11, ssd M-Fil/05 Philosophy and Theories of Language, addresses the communicative issues of gender medicine. These communicative issues are related, on the one hand, to the need for a gendered health approach not only based on the universally constructed model of the male gender that declines prevention, diagnosis and treatment in health care in a univocal sense and on, the other hand, to the need to make usable to a wide audience



specialized disciplinary elements. The research will focus on the discursive construction of gender medicine and on the linguistic model (verbal and not verbal) able to communicate gender differences in health care and to build prevention pathways aimed at a full awareness that gender medicine enhances health care and all pathways aimed at health. The doctoral student engaged in the project will study and develop communication techniques for dissemination, collection and cataloging, end will be engaged, in particular in the construction of databases, communication platforms and dissemination materials.

- **Co-financing company/body:** COOPERAZIONE SALUTE SMS ETS - Via Segantini, 10 - 38122 Trento
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 12 months

• **D.M.630/24**

5. **Avviso: D.M.630/24**

- **Project title and scholarship theme: Languages and stereotypes: well-being at work**
- **Research Activity Description:** The research project (Area 14 - SPS/01 Political Philosophy) aims to analyse the transformations of the instruments used to study occupational well-being in relation to health in the face of the metamorphosis of environments, relationships, time and, therefore, of organisations with digital technology. The aspects affected by well-being involve the body, the psyche, and relationships. In this perspective, the analysis of the working environment employs a gender and intersectional perspective to focus on stereotypes in communication and relationships, within the framework of anti-discrimination law.
 - **Co-financing company/body:** Dami srl
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months
 - **Transferring university:** UNIVERSITY OF MACERATA

• **D.M.630/24**

6. **Avviso: D.M.630/24**

- **Project title and scholarship theme: Measuring gender equality and diversity in organisations**
- **Research Activity Description:** (Area 13 Secs-P/02 Economic Policy). Diversity in organisations is a source of value. A working environment in which diversity is not penalised but valued enables the organisation to make visible a commitment that has a strong social value in welcoming within it people who are often excluded from the labour market and incentivising their inclusion and career opportunities with positive repercussions in terms of greater equity and greater growth for society as a whole. The research project will focus on the measurement of gender equality and diversity from an intersectional perspective in organisations with the aim of achieving a measurement capable of guiding a transformative process based on a data-based system by analysing their employment structure, measuring gender gaps and recognising the policies and organisational models that contribute to their persistence or widening in order to bring about real change. The project is consistent with component C2 'From Research to Enterprise' of Mission 4 'Education and Research' with a high impact with respect to the promotion of social inclusion and gender equality from an intersectional perspective.
 - **Co-financing company/body:** IDEM SRL in Modena Largo Marco Biagi,10 IDEM
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 12 months
 - **Transferring university:** UNIVERSITY OF MODENA AND REGGIO EMILIA

• **D.M.630/24**

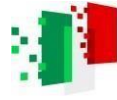
7. **Avviso: D.M.630/24**

- **Project title and scholarship theme: Ethics and Gender Communication**
- **Research Activity Description:** (Area 11 - M-FIL 03 Moral philosophy) The project takes an ameliorative approach, with the explicit goal of providing an account of the meaning of the terms "gender" and "woman" that can be a useful tool in combating sexism and achieving social justice. One of the main goals of the project is to distinguish between a descriptive level, which aims to reveal the



concept that is actually used or the property that we actually pursue with our use of the term, and an ameliorative level, which aims to reveal the concept that we should use or the meaning that we should associate with the corresponding term, given our goals and objectives in corporate communication. The main idea of the "Ethics and Gender Communication" project is that gender is a hierarchical social structure in which some components are placed in a position of privilege and others in a position of subordination along social, economic, political, legal or cultural dimensions, by virtue of their real or imagined biological role in reproduction. Specifically, being a woman because of perceived or imagined biologically feminine bodily characteristics amounts to occupying a specific position of subordination within this social structure.

- **Co-financing company/body:** Acquedotto Pugliese SpA
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months
 - **Transferring university:** UNIVERSITÀ DEGLI STUDI DEL SALENTO
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- **D.M.630/24**
8. **Avviso: D.M.630/24**
- **Project title and scholarship theme: GENDER CERTIFICATION: ANALYSIS OF THE TOOLS AND THE EFFECTS ON BUSINESSES AND ON WORKERS**
 - **Research Activity Description:** The project, of Area 13 - SECS-P/06 Applied Economics, intends to document and analyze the dynamics of entry and evolution of gender certification in companies and on workers, with particular attention to the NPRR cooperative enterprises. The starting point is the companies present in the Northern Piedmont area (Turin, Biella, Vercelli, VCO, Novara), but from a national perspective. Using the tools, data and areas of application of the certification, the aim is to show the progress and any critical issues that emerged both during the certification process and post-certification and application. The research will analyze how certification is a tool for changing corporate culture, the culture of individuals, work, performance, including economic, and the twin transition for companies. A better understanding of these dynamics would also contribute to understanding the obstacles and changes needed to increase its use and application. The knowledge and analysis of the obstacles, especially cultural and business ones, will allow a more accurate and targeted use of this new tool also in connection with the other certifications.
 - **Co-financing company/body:** IL NODO c.s.c.s. with registered office in Corso Francia 15 – 10138 Turin (TO)
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 12 months
- **D.M.630/24**
9. **Avviso: D.M.630/24**
- **Project title and scholarship theme: Youth and Skills for Intergenerational Exchange**
 - **Research Activity Description:** (Area 14 - SPS/07 General Sociology) The research line aims to develop and test a model for validating the skills acquired through new youth cultures in non-formal education spaces, with particular emphasis on highlighting the competencies outlined in the National Recovery and Resilience Plan (PNRR) such as "digital natives," sensitivity to gender differences, and potential migratory backgrounds. Specifically, the research in the corporate sector aims to realistically support engagement policies, taking into account the intergenerational dimension that brings together as many as five generations of workers, thereby fostering a virtuous cycle of intergenerational exchange and renewal. The research methodologies will involve extensive experimentation with innovative tools and governance models, including a comparative and interdisciplinary approach across different policy sectors: youth policies, education and training policies, social policies, and gender policies.
 - **Co-financing company/body:** AQP Acquedotto Pugliese Via Cognetti 36, Bari
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months



- **D.M.630/24**
- 10. Avviso: D.M.630/24**
- **Project title and scholarship theme: Humanity, (bio)diversity and sustainability: systemic answers to productive challenges in environmental complexity**
- **Research Activity Description:** In February 2022 the “protection of environment, biodiversity and ecosystems, also in the interest of future generations”, as well as the “protection of animals” entered by right within the article 9 of the Italian Constitution. In this complex context, and in line with the principles of the UN Agenda 2030, the *European Green Deal*, and the EU Gender Equality Strategy, the project of Area 14 (SPS/01 Political philosophy) aims to promote the interaction between territory, sustainable economic innovation, fight against discrimination and participation of communities. This will be done by training researchers able to operate within companies/firms already committed to such issues and in close synergy with their *vision*, their *know-how*, and their specific production activities. For that purpose, Feminist theories, and more generally the wide wealth of knowledges emerging from minority thinking, will provide theoretical and practical tools to favor the elaboration of an innovative systemic response to the crisis induced by the already evident alteration of the relationship between human beings and the environment.
 - Co-financing company/body: Recupero Etico Sostenibile SPA (RES SPA)
 - Period abroad: 6 months
 Period at the company/institution provided for by Ministerial Decree no. 630/24: 12 months
 - Transferring university: UNIVERSITY OF MOLISE
- **D.M.630/24**
- 11. Avviso: D.M.630/24**
- **Project title and scholarship theme: “Diversity & Inclusion”: an analysis of gender, sexual, ethnic and religious discrimination, in the context of private companies.**
- **Research Activity Description:** The research grant, Area 14 (SPS/01 Political Philosophy), aims to develop an autonomous path useful for enhancing effective communication skills for private companies, especially with respect to analyzing and overcoming gender, sexual, ethnic and religious discrimination. It is thus aimed at enhancing policies designed to diagnose the coordination responsibilities of the policy cycle on discrimination issues, first of all by including women migrants. Activity includes study of scientific literature on the topic, application to social analysis, internship at the company, 6 months stay at a foreign university, thesis writing.
 - **Co-financing company/body:** Saint-Gobain Italia
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 12 months
 - **Transferring university:** SCUOLA SUPERIORE SANT’ANNA DI PISA
- **D.M.630/24**
- 12. Avviso: D.M.630/24**
- **Project title and scholarship theme: Online violence and International and European protection of vulnerable persons**
- **Research Activity Description:** The research, Area 12 IUS/12 International Law, aims to analyze the multiple legal aspects that concern online violence against vulnerable persons (often gender-based) in the light of International and European law acts to identify regulatory gaps and propose solutions.
 - **Co-financing company/body:** International Institute Jacques Maritain (Rome)
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months
 - **Transferring university:** UNIVERSITY OF SALERNO
- **D.M.630/24**
- 13. Avviso: D.M.630/24**
- **Project title and scholarship theme: Gender-based violence: a long-term perspective**
- **Research Activity Description:** The project refers to disciplinary area 11 scientific-disciplinary field M-STO/02 Early Modern History. This gender history research investigates the topic of

violence from a long-term perspective. It aims to contribute to the history of women and gender, to overcome women's marginalization, and to investigate the sites of the construction and negotiation of gender roles, focusing on the multiple forms of violence that this history reveals. Knowledge of the past is fundamental to the implementation of effective policies in the present aimed at preventing gender-based violence in all social spheres and transforming a socio-cultural paradigm of inferiorization.

- **Co-financing company/body:** in the process of being defined
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months
- **Transferring university:** UNIVERSITY OF URBINO CARLO BO

SCHOLARSHIPS CO-FINANCED WITH COMPANIES and “Patti territoriali dell’alta formazione per le imprese” – CUP: F61B23000370006

1. Scholarship co-funded by company: ZeroDD S.c.a r.l

- **Project title and scholarship theme: Digital health literacy for immigrant women and victims of GBV (gender-based violence)**
- **Research Activity Description:** The project of Area 12, SSD L/LIN 12 English Language, involves the creation of a multilingual app of health literacy services that can be used by both social and health operators who work in the reception centers, as well as the immigrant women live in the same centers. In order to support the project, the collaboration of ReSPES (Directory of Health Equity-Oriented Public Health Interventions managed by ReNIP-National Network for issues in health and social care for populations migrants and poverty), along with WikInmp (a mapping project of interventions and analysis of regional policies for the promotion and protection of migrant's health) will be provided with the attempt to empower foreign citizens' health literacy.
- **Period abroad:** 6 months
- **Period at the company/institution:** 12 months

2. Scholarship co-funded by company: La Nuvola s.c.s – Impresa Sociale ONLUS- via Convento Aguzzano, 13/L 25034 Orzinuovi (BS)

- **Project title and scholarship theme: The variable geometries of family care for frail persons**
- **Research Activity Description:** The project relates to Area 11 and SSD M-FIL/06 History of Philosophy and SSD M-FIL/03 Moral Philosophy. The aim of the research is to analyse the implicit and explicit dimensions/dynamics in the assumption of care roles between men and women and/or in same-sex couples in families in which there is a person with frailty. The project aims at highlighting whether in today's society there is a gender variation in the assumption of care roles compared to the traditional model in which the woman takes charge of everything related to the care of her family member (care-hygiene-social life-intervention of services). A better knowledge of how the caring role is assumed today can help operators, even in organisations where women are predominantly present, to put in place adequate tools to foster greater co-responsibility in caring, not only within the family, but by paying attention to all the subjects that revolve around frail persons.
- **Period abroad:** 6 months
- **Period at the company/institution:** 12 months

3. Scholarship co-funded by company: Cooperativa Sociale Artemide - Latiano (BR)

- **Project title and scholarship theme: The new future life. prospects, work and career paths for women who turn to anti-violence centers**
- **Research Activity Description:** The project, hinged in Area 11 on SSD M-Fil 06 History of Philosophy/SSD M-FIL/01 Theoretical Philosophy/SSD M-FIL/03 Moral Philosophy, intends to elaborate a protocol to enable women who have interrupted abusive or violent relationships by turning to CAV to access the labour market and/or to advance in their previous working careers. The 'research-action' promotes both structured employment-oriented training courses and the implementation of the ability to plan one's future through channels that encourage employment in public administration, private enterprise or through European projects. Furthermore, the protocol which will be the subject of

the research and which aims to become a best practice for other CAVs, by drawing up lines of intervention, intends to prevent career breaks for women through the understanding of the obstacles and cultural changes necessary to enable those who come out of a toxic relationship to aim at their total self-determination, at economic autonomy capable of guaranteeing their own livelihood and possibly that of their offspring, as well as their own personal existential reconstruction.

- **Period abroad:** 6 months
- **Period at the company/institution:** 9 months

4. Scholarship co-funded by company: Laboratorio VIDEODROME SRL

- **Project title and scholarship theme:** **Movie-going, genres and genre**
- **Research Activity Description:** The aim of the project, related to the SSD L-ART/06 Cinema, photography, television (Area 10), is to examine the forms and practices by which the viewing experience is connoted as a function of gender distinction, and will attempt to reflect on how gendered cinema-going is influenced by preferences for specific film genres (comedy, Italian western, gothic horror, etc.). In this way, innovative management proposals will be formulated, aimed at formulating "audience engagement" strategies, which can be implemented through operational tools such as proposing educational workshops, activating educational initiatives, adopting digital devices, etc., aimed at involving new or hard-to-reach audiences, also by revitalizing the experience of going to the cinema.

- **Period abroad:** 6 months
- **Period at the company/institution:** 6 months

1 UniBA scholarship on project

PRESERVE (no. 101168309) Horizon Europe Call CL3-2023 FCT 0101.

- **Project title and scholarship theme:** **BIG DATA, CRIME FIGHTING, AND INTERNATIONAL HUMAN RIGHTS PROTECTION**
- **Research Activities Description:** Artificial intelligence systems and big data are increasingly being used by government authorities to combat crime and terrorism. However, the reliable use of these technologies requires data and information management that respects fundamental rights. In this context, the PhD research, Area 12 SSD IUD/13 International Law, aims to (a) critically analyze the international, European, and national regulatory framework related to the use of big data in law enforcement activities, (b) assess the impact of big data on privacy, security, and human rights, and (c) formulate recommendations for law enforcement authorities to balance the effectiveness of crime fighting with the protection of human rights.
- **Funding Organization:** The PhD scholarship is provided as part of the research activities of the European project *PRESERVE – Ethical and Privacy-preserving Big Data platform for supporting criminal investigations*. The PRESERVE project has been funded under the Horizon Europe call “Fighting Crime and Terrorism 2023” (HORIZON-CL3-2023-FCT-01) — HORIZON-CL3-2023-FCT-01-01.
- **Abroad Period:** 6 months

Admission procedures for ordinary places:

The selection will take place in accordance with Article 6 lett. B) of the call.

The exam will be based on the evaluation of qualifications and research project, oral test, English language.

Procedures for carrying out the tests for foreign candidates:

Foreign candidates may choose to take the admission exam in Italian/English.

Calendar and location of the entrance exam:

Title evaluation: 29 July-31 July 2024

Project evaluation: 1-2 August 2024

Oral test: 5 (9:00 a.m.)-6-7 August 2024

c/o University of Bari Aldo Moro, Palazzo Ateneo, Department of Humanistic Research and Innovation, 2nd floor, PhD Room PhD in Gender Studies.

Where it is not possible to do it in person, candidates may ask to do it remotely with a motivated request. The motivated letter of request, together with the copy of an identity document, valid to travel abroad, must be

uploaded on PICA web platform. It will be the responsibility of the commission to communicate the methods of connection.

For further information, please consult the following Web address: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 12)

PROFILE

PHD PROGRAM IN SUSTAINABLE LAND MANAGEMENT in convention with POLYTECHNIC UNIVERSITY OF BARI

CUN Scientific Areas: 07 – Agricultural and Veterinary Sciences, 08 – Civil Engineering and Architecture, 02 – Physical sciences, 04 – Earth Sciences, 05 - Biological Sciences, 09 - Industrial and information engineering. _____

Academic disciplines: AGR/01, AGR/03, AGR/04, AGR/05, AGR/08, AGR/09, AGR/10, AGR/11, FIS/01, FIS/07, BIO/03, GEO/05, ICAR/01, ICAR/02, ICAR/03, ICAR/06, ICAR/07, ICAR/20, ING-IND/16, INGIND/22, ING-IND/35 e ING-INF/07.

Coordinator: Prof. Francesco GENTILE (francesco.gentile@uniba.it)

Administrative Office: Dipartimento di Scienze del Suolo, della Pianta e degli Alimenti, DiSSPA (Department of Soil, Plant and Food Sciences)

PEC: disspa@pec.uniba.it

Affiliated headquarters: Polytechnic University of Bari

Duration: 3 years

Curricula: NO

Total number of places available: n. 17 of which:

- with University scholarship: n. 3;
- with Polytechnic University of Bari scholarship: n. 3 “Patti territoriali dell’alta formazione per le imprese” – CUP: F61B23000370006 ;
- with University of Bari Aldo Moro scholarship, Excellence Project DiSSPA Department “MARginal areas: Valorization of Ecosystem resources for fair and sustainable Livelihood (MAR.V.E.L.): n. 1 reserved for students graduated abroad;
- with scholarship pursuant to Ministerial Decree no. 630/24: n. 5;
- with scholarship co-financed by companies and “Patti territoriali dell’alta formazione per le imprese” – CUP: F61B23000370006 : n. 5.

POSITIONS WITH SCHOLARSHIP

- *n. 3 with University scholarship;*
 - *n. 3 with Polytechnic University of Bari scholarship* “Patti territoriali dell’alta formazione per le imprese” – CUP: F61B23000370006 ;
 - *n. 1 reserved for students graduated abroad with University of Bari Aldo Moro scholarship, Excellence Project DiSSPA Department “MARginal areas: Valorization of Ecosystem resources for fair and sustainable Livelihood (MAR.V.E.L.);*
- **D.M.630/24**
1. **Avviso: D.M.630/24**
- **Project title and scholarship theme:** Automation and Tele-Management of Precision Irrigation Systems
 - **Research Activity Description:** The doctoral project "Automation and Tele-Management of Precision Irrigation Systems" aims to optimize water resource use in agriculture through automation and remote management. It proposes creating an integrated system with advanced sensors, IoT technologies, and artificial intelligence algorithms to monitor soil and crop conditions in real-time.

This system will analyze collected data to determine optimal irrigation timings and quantities, reducing waste and improving efficiency. The tele-management platform will allow farmers to manage irrigation systems remotely, ensuring timely and targeted interventions. This innovative approach will contribute to sustainable water resource management and increase agricultural productivity.

- **Co-financing company/body: SCARABELLI SRL**
- **Period abroad: min 6 months**
- **Period at the company/institution provided for by Ministerial Decree no. 630/24: min 6 months**

2. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** Development of a digital twin for modelling, monitoring and analysis of slope stability problems
- **Research Activity Description:** Landslide risk management and mitigation at the slope scale require the collection, processing and analysis of a very large number of heterogeneous, cross-disciplinary, multi-source data, including results of interpretative models. It is desirable that the relevant data are digitized, homogenized and fed into a structured, georeferenced database underlying a 3D platform for further processing, analysis and visualization. The platform might also provide means for live monitoring and real-time analysis of landslide activity. In this context, the project, to be carried out in collaboration with IDeCOM s.r.l., aims at the development of a digital platform for data collection, processing and analysis, 3D visualization and for quantitative analysis of slope stability problems at the slope scale
- **Co-financing company: IDeCOM s.r.l.**
- **Period abroad: min 6 months**
- **Period at the company provided for by Ministerial Decree no. 630/24: min 6 months**

3. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** Development of a full-hybrid robotic base for agriculture
- **Research Activity Description:** Study, analysis and understanding of the technologies of self-driving land rovers with hybrid electrical power, with particular reference to their use in unstructured contexts such as agricultural ones. Aspects related to safety will also be explored in depth. At DiSSPA, the candidate will delve into all the theoretical aspects relating to hybrid electric power supply with particular reference to that of self-driving land rovers. The period in the company, however, will allow the PhD student to carry out a practical internship on the study and build of a full-hybrid powered robotic base for construction of an autonomously driven land rover particularly suitable for use in an agricultural context.
- **Co-financing company/body: Agricobots srl**
- **Period abroad: min 6 months**
- **Period at the company/institution provided for by Ministerial Decree no. 630/24: min 6 months**

4. **Avviso: D.M.630/24**

- **Project title and scholarship theme:** Autonomous driving algorithms and safety sensors in the field of mobile robotics used in the agro-forestry sector
- **Research Activity Description:** Study, analysis and drafting of specific software relating to autonomous driving algorithms that allow greater effectiveness in the use of terrestrial rovers in agricultural and forestry contexts. Study and development of safety sensors aimed at the use of the aforementioned terrestrial rovers in conditions of extreme safety for the surrounding agricultural operators. At DiSSPA, the PhD student will delve into all the theoretical aspects relating to the locomotion of self-driving ground rovers. Conversely, the period in the company will allow the PhD student to carry out a practical internship on autonomous driving algorithms and safety sensors used on autonomously driving rovers to make them suitable for agricultural and forestry contexts.
- **Co-financing company/body: Clor Industry srl**
- **Period abroad: min 6 months**

- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** min 6 months
5. **Avviso: D.M. 630/24**
- **Project title and scholarship theme:** Urban regeneration for the energy transition of disadvantaged neighbourhoods
 - **Research Activity Description:** The research project aims at the definition of approaches and methods to promote just energy transitions in disadvantaged neighborhoods through place-based urban regeneration strategies and local energy cooperation addressing the social, economic and environmental implications of transitions, while strengthening self-organisational capabilities of local communities. To this end, the research should: investigate potential correlations between the socio-economic-territorial characteristics of disadvantaged neighborhoods and the risks of inequality related to energy transitions; explore the potential of renewable energy communities and other forms of local energy cooperation to contrast energy poverty by acting on its multiple dimensions; activate co-construction processes of strategies for urban regeneration and energy transition with local communities through urban living labs approaches; define appropriate governance strategies and tools for energy transition processes at urban and neighborhood level.
 - **Co-financing company/body:** RSE (Ricerca sul Sistema Energetico) S.p.A.
 - **Period abroad:** min 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** min 6 months
- **scholarships co-financed with companies funded by** “Patti territoriali dell’alta formazione per le imprese” – CUP: F61B23000370006 ;
1. **Scholarship co-funded by the company: Bernardi Trade srl.**
- **Project title and scholarship theme:** Study of functional parameters to optimize the operating effectiveness of aerial drones used for substances spreading within agro-forestry environments
 - **Research Activity Description:** Study of the mechatronic and IT technologies supplied on the latest generation remotely piloted aerial systems (aerial drones). Analysis of the relative operating parameters that allow for greater effectiveness of use, making them more suitable for use in precision agriculture. At DiSSPA, the candidate will explore all the theoretical and safety aspects relating to the use of remotely piloted aerial systems suitable for the release of substances. Conversely, the period in the company will allow the PhDstudent to carry out a practical internship on the mechatronic and IT technologies supplied with aerial drones and will acquire experience on the solutions to be adopted regarding the optimal operating parameters for effective operation.
 - **Period abroad:** min 6 months
 - **Period at the company/institution:** min 6 months
2. **Scholarship co-funded by 1 company: Sfera Informatica & Strumentazione s.r.l.**
- **Project title and scholarship theme:** ESG (Environmental, Social, and Governance): Assessment tools and indicators supporting corporate transition to sustainability
 - **Research Activity Description:** The ecological transition is one of the pillars of the Next Generation EU project and constitutes a guideline of the PNRR for achieving the 2030 Agenda. The project involves the development and application of ESG criteria within corporate and public organizations in the regional territory to achieve the objectives of the 2030 Agenda. ESG represent fundamental analysis tools for measuring and managing an organization's commitment to sustainability. In particular, the environmental criteria (E) will be examined which allow the contribution of an organization to be examined on issues such as: waste management, reduction of deforestation, reduction of emissions and to quantitatively evaluate the performance achieved according to specific objectives.
 - **Period abroad:** min 6 months
 - **Period at the company/institution:** min 6 months
3. **Scholarship co-funded by the company: REAGRI srl**
- **Project title and scholarship theme:** Evaluation of innovative methods extraction, isolation and characterization of nematodes and eco-sustainable techniques for microbiological pest control

- **Research Activity Description:** The majority of nematodes are free-living organisms found in soil or in water. Onequarter of all nematodes are parasites of plants or animals, and, among the latter, some species are associated in various ways with insects. These relationships range from phoresy to symbiosis, and from commensalism to facultative or obligate parasitism. Among more than 30 families of nematodes associated with insects, the families Steinernematidae Filipjev, 1934, and Heterorhabditidae Poinar, 1976 (order Rhabditida), are the ones that arouse the most interest and from a practical point of view in terms of hexapod control, nematodes within these two families are more accurately called entomopathogens because they exert their action in association with symbiotic bacteria. Innovative methods of investigation on the extraction, isolation and characterization of entomopathogenic nematodes and their symbiotic bacteria (with metabolites produced) and their relationships with phytoparasitic nematodes will be analyzed, evaluated and standardized, with a view to eco-sustainable control of plant pests.

- **Period abroad:** min 6 months

Period at the company/institution: min 6 months

4. **Scholarship co-funded by the company: SOMMAPOSITIVA s.r.l.**

- **Project title and scholarship theme:** Advanced enabling techniques to support production processes

• **Research Activity Description:** Production processes are characterized by a set of activities that make complex the management and the operation. Processes consist of many variables that affect primary and secondary performance, and consequently sustainability. The enabling technologies developed with the Industry 4.0 paradigm found a wide diffusion in the recent past, but their experience in the field has highlighted the limits. Today more and more research is ongoing toward hybridization of the techniques or evolution of the same that allow to overcome those limits, among which the lack of adaptability to rapid changes and interaction with the human factor, that is increasingly becoming the determining factor for the success of business resilience.

- **Period abroad:** min 6 months

- **Period at the company/institution:** min 6 months

5. **Scholarship co-funded by the company: Acquedotto Pugliese S.p.A.**

- **Project title and scholarship theme:** Digital twin for predictive maintenance in water distribution networks

• **Research Activity Description:** The management of water networks is a very complex challenge for companies in the sector, which must ensure the provision of an efficient and safe service, minimizing costs and ensuring the water supply with maximum sustainability. Traditional maintenance, based on planned or on-fault interventions, is often inefficient and costly. To improve this approach, artificial intelligence (AI) is increasingly emerging as a promising technology to change water network maintenance techniques, introducing predictive maintenance that can use all available information from sensory systems. More and more successful applications of digital twin for the integrated management of distribution networks.

- **Period abroad:** min 6 months

- **Period at the company/institution:** min 6 months

Admission procedures:

The selection for ordinary places will take place in accordance with Article 6 letter C of the call.

The selection for places reserved for graduates of foreign universities will take place in accordance with art. 17 procedure 2 of the call.

The selection will be based on the evaluation of the qualifications and on an oral test. The knowledge of a foreign language (English) will be evaluated. Upon submitting the application, **the candidate must attach a synthetic research project**, which can be written in Italian or English, of a maximum length of 2500 words. The research project, which must be relevant to the topics of the PhD Course in Sustainable land management, will be discussed during the oral test. During the oral test, the knowledge of the English language will also be verified. For scholarship positions funded by the University of Bari, the topics covered in the research project are in no way binding for the identification of the topic that will be developed during the PhD Course.

Failure to submit the project in the application is under penalty of exclusion from the procedure.

Procedures for carrying out the tests for foreign candidates:

Foreign candidates may choose to take the entrance exam in Italian or in English.

Calendar and location of the exam:

Ordinary places:

Qualifications Rating: July, 31, 2024 at 10:00 a.m. Oral exam: 1 August 2024 at 3.00 pm, with possible continuation on 2 August 2024 at 9.00 am until the evaluation of all candidates is completed.

Places reserved for graduates of foreign universities:

Qualifications Rating: July, 31, 2024 at 10:00 a.m. Oral exam: 1 August 2024 at 2.00 pm

The oral test will be held at the Department of Soil, Plant and Food Sciences, via Amendola 165/A, 70126 Bari. Where it is not possible to do it in person, candidates may ask to do it remotely with a motivated request. The motivated letter of request, together with the copy of an identity document, valid to travel abroad, must be uploaded on PICA web platform. It will be the responsibility of the commission to communicate the methods of connection.

The list of those admitted to the oral test, the test calendar and the methods of access to the Teams platform will be published on the PhD website by 8.00 pm on 31 July 2024.

For further information, please consult the following Web address: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 13)

PROFILE

PHD PROGRAM IN COMPUTER SCIENCE AND MATHEMATICS

CUN Scientific Areas: 01 Mathematics and Computer Science, 09 Industrial and Information Engineering.

Academic disciplines: INF/01, ING-INF/05, MAT/02, MAT/03, MAT/04, MAT/05, MAT/06, MAT/07, MAT/08

Coordinator: Prof. Francesca Mazzia

Administrative office: Dipartimento di Informatica – Università degli studi di Bari Aldo Moro

PEC: direzione.di@pec.uniba.it

Duration: 3 years

Curricula:

1) COMPUTER SCIENCE (Scientific Subject Code: INF/01, ING-INF/05)

2) MATHEMATICS (Scientific Subject Code: MAT/02, MAT/03, MAT/04, MAT/05, MAT/06, MAT/07, MAT/08)

Even if the PhD programme is organized in the two curricula mentioned above, the available positions will be assigned according to the ranking obtained by the applicants, until all positions are covered and by taking into account the reserved positions. Thus, the applicants do not have to provide their choice of the curriculum in attachment A), which is an integral part of this call for applications.

Total number of places available: n. 16

- with University scholarship: n. 3
- with scholarship pursuant to Ministerial Decree no. 630/24: no. 7
- with scholarship co-financed by company(s) and “Patti territoriali dell’alta formazione per le imprese” – CUP: F61B23000370006: n. 6.

POSITIONS WITH SCHOLARSHIP

- n. 3 places with University scholarship
- **D.M.630/24**
 1. **Notice: D.M.630/24**
 - **Project title and scholarship theme:** *Semantically enriched neural-symbolic methods for Knowledge Graph Refinement and Explanation*
 - **Research Activity Description:** The project aims to develop neuro-symbolic solutions, capable of integrating data-driven methods and model-driven solutions (such as knowledge representation, knowledge graphs, complex reasoning and inference), as well as providing explanation for the solved tasks. The project will be focused on the development of neuro-symbolic methods with the aim of building robust Machine Learning models with the ability to represent, reason and explain numerical methods, characterized by high scalability on large amounts of data. The research will be particularly focused on the development of neuro-symbolic methods for: a) Knowledge Graph (KG) refinement tasks; d) providing explanations for the provided solutions. Improving the quality of KGs constitutes a fundamental element for improving the results of the numerous tasks currently solved with the massive usage of KGs. The research that will be developed will be functional to multiple disciplines, considering

the use of KG in various fields such as e-commerce, web search, legal, medical. In particular, the possibility of verticalisation in the e-commerce and tourism sectors will be considered.

- **Co-financing company/body:** Sidea Group S.r.l.
- **Period abroad:** 6 months
- **Period at the Institution/Company:** 6 months

2. Notice: D.M.630/24

- **Project title and scholarship theme:** *Development and application of Generative Artificial Intelligence models based on the Symbiotic AI paradigm to support the Public Administration*

- **Research Activity Description:** The project aims to develop tools to support Public Administration using data-driven approaches and Artificial Intelligence (AI) based on the Symbiotic AI paradigm. The goal is to create AI applications that serve as a bridge between Public Administrations and citizens, facilitating citizens' access to existing services and information and improving the efficiency of public employees' daily activities. A central aspect of the project is using generative AI techniques in public administration services, focusing on Public Procurement. This includes implementing technological processes to facilitate the acquisition of goods and services and monitoring procurement procedures through intelligent management of information collected from regional and national procurement documents.

- **Co-financing company/body:** InnovaPuglia SpA
- **Period abroad:** 6 months
- **Period at the Institution/Company:** 6 months

3. Notice: D.M.630/24

- **Project title and scholarship theme:** *Generative approaches based on artificial intelligence for the automatic extraction of knowledge from books and manuals to support practical teaching activities.*

- **Research Activity Description:** The project aims to study generative Artificial Intelligence (AI) techniques to support didactic and laboratory training for students from elementary school to university. Currently, in schools and universities, virtual reality (VR) systems are increasingly used for training, allowing the acquisition of skills in a simulated environment. However, for these systems it is expensive and time-consuming to create content. The project intends to provide a work environment that identifies entities, relationships and actions, offering intelligent assistance during teaching activities in a VR environment, where contents are created with generative AI techniques. The goal is to propose symbiotic environments in which AI, VR and students actively collaborate. New generative AI methods will be proposed to create content from educational texts and to interact with students, suggesting corrections during laboratory-practical activities.

- **Co-financing company/body:** MTM Project Srl
- **Period abroad:** 6 months
- **Period at the Institution/Company:** 6 months

4. Notice: D.M.630/24

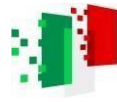
- **Project title and scholarship theme:** *Development and application of Artificial Intelligence methods for human capital management and enhancement*

- **Research Activity Description:** The research project exploits the capabilities of Large Language Models (LLMs) in HR to create individual productivity tools and new ways of analyzing HR data, supporting teams' strategic planning. Focusing on personalized content generation, analysis of employee feedback and interpretation of HR data using Artificial Intelligence, the research will help companies in digital transformation and development of digital skills needed for the modern labor market, integrating advanced technical and management skills.

- **Co-financing company/body:** Talentia Software
- **Period abroad:** 6 months
- **Period at the Institution/Company:** 6 months

5. Notice: D.M.630/24

- **Project title and scholarship theme:** *Systems and techniques of Retrieval Augmented Generation for the exploitation of information resources in the industrial domain.*



- **Research Activity Description:** Many machine learning techniques (e.g., embedding, deep-memory, vector store, etc.) are being actively studied in academia and industry for the improvement of retrieval augmented generation systems. In this context, the specific objectives of the research will be: the development and application of benchmarks to characterize and quantify the effectiveness of existing systems based on the application context; and the development of innovative approaches or improvement of RAG systems based on specific quality, cost, and time objectives posed by the different industrial reference contexts (digital health, logistics, document management, etc.).

- **Co-financing company/body:** Asclepyus srl
- **Period abroad:** 6 months
- **Period at the Institution/Company:** 6 months

6. Notice: D.M.630/24

- **Project title and scholarship theme:** *CSS - Cyber Social Security: personal social security as an individual and as part of a community*

- **Research Activity Description:** The aim of the project is the analysis, design and development of solutions to support the Cyber Social Security, i.e. the social security of the person as an individual and as part of a community, adopting tools defined as social sensors, AI and adopting measures aimed at the safety of the instruments themselves. This objective can be achieved through the identification, response and prevention of certain events such as cases of violence, crimes and hate speech. The security of the tools used consists in identifying and protecting them from attacks aimed at compromising their functionality and reliability, known in the literature as "Data Poisoning" attacks.

- **Co-financing company/body:** Cybersecurity srl
- **Period abroad:** 6 months
- **Period at the Institution/Company:** 6 months

7. Notice: D.M.630/24

- **Project title and scholarship theme:** *Conversational agents and large language models to support services, products, and processes based on the Symbiotic AI paradigm.*

- **Research Activity Description:** The research project aims to explore the use of conversational agents and large language models, including multimodal ones, to support innovative services, products, and processes based on the Symbiotic AI paradigm, with the goal of improving user experience and operational efficiency across various sectors. The focus will be on applying Symbiotic AI technologies in contexts such as e-commerce, customer support, online education, and more. The core of the project will be the integration of advanced conversational agents and large multimodal models to optimize user-service interactions, facilitating information access and task execution in an intuitive and efficient manner.

- **Co-financing company/body:** QuestIT S.r.l
- **Period abroad:** 6 months
- **Period at the Institution/Company:** 6 months

- **scholarships co-financed with companies and "Patti territoriali dell'alta formazione per le imprese" – CUP: F61B23000370006:**

□

1. n. 1 Scholarship co-funded by company: Asclepyus srl.

- **Project title and scholarship theme:** *Integration of analytical, heuristic and AI Generative models for primary prevention and treatment of disabling diseases.*

- **Research Activity Description:** The natural history of many disabling or degenerative diseases can be effectively described by mathematical (e.g., differential equations) and heuristic (e.g., statistical methods and machine learning) methods. The research will be concerned with combining the two approaches, including the use of generative AI techniques for synthesizing and comparing time series, quantitative and qualitative information about patients, with specific objectives such as analysis of data and time series; derivation of families of analytical models oriented toward personalized and precision

medicine; development of effective diagnostic and predictive ML models complemented by analytical models; advanced use of retrieval augmented generation and generative AI techniques.

- **Period abroad:** 6 months
 - **Period at the Institution/Company:** 6 months
2. **n. 1 Scholarship co-funded by company:** InnovaPuglia SpA
- **Project title and scholarship theme:** *Predictive AI in Value Based Procurement (VBP).*
 - **Research Activity Description:** The aim of the project is the application of predictive Artificial Intelligence techniques in the field of public administration services, particularly in Public Procurement, in order to improve administrative processes with advanced Machine Learning tools that reference the information assets available through Empulia and available databases to build innovative pathways for research, design, development and validation of data-driven and user-centered solutions. With a research effort thus geared toward Symbiotic AI specific to Process Mining, a powerful tool can be developed for the development of a value-based approach to the procurement of innovative technologies and services, particularly in healthcare.
 - **Period abroad:** 6 months
 - **Period at the Institution/Company:** 6 months
3. **n. 1 Scholarship co-funded by company:** Asclepyus S.r.l.
- **Project title and scholarship theme:** *Development of innovative anomaly detection techniques and application to patient health monitoring and early disease sign detection*
 - **Research Activity Description:** The research program aims to develop advanced anomaly detection techniques also involving machine learning and artificial intelligence techniques, with applications in the field of Digital Health. The ultimate goal is to provide innovative mathematical tools useful for formulating predictive and diagnostic algorithms capable of improving disease management and personalized healthcare. In more detail, the project objectives include: researching numerical techniques to identify anomalous patterns in clinical and biometric datasets, enabling the timely detection of early signs of diseases; integrating outlier detection techniques to improve the predictive power of linear and non-linear models, possibly including machine learning and neural network-based techniques, in the presence of noisy data; Studying mathematical tools to support decision-making processes for more accurate diagnoses, real-time monitoring of patients' condition evolution, and planning of personalized preventive interventions.
 - **Period abroad:** 6 months
 - **Period at the Institution/Company:** 6 months
4. **n. 1 Scholarship co-funded by company:** AI Venture Builder
- **Project title and scholarship theme:** *Advanced generative models for conversion between images, text and audio*
 - **Research Activity Description:** The research project aims to develop an advanced generative model that transforms visual, textual and audio signals, overcoming the limitations of current systems. Using advanced deep learning techniques and multimodal data analysis, the system will be able to interpret and translate visual features into detailed audio signals, transform audio signals into accurate textual descriptions, and generate realistic images from audio signals. Validation will be done by testing the quality and relevance of the outputs. The project aims to improve interaction and content representation, with therapeutic applications and increased accessibility for people with visual impairments.
 - **Period abroad:** 6 months
 - **Period at the Institution/Company:** 6 months
5. **n. 1 Scholarship co-funded by company:** Digital Innovation S.r.l.
- **Project title and scholarship theme:** *AI methodologies for sustainability assessment of public administration processes*

- **Research Activity Description:** The research project aims to analyze, design and develop artificial intelligence (AI)-based solutions for process optimization in public administration (PA). Through the analysis of complex data and the generation of predictive models, the project intends to solve specific problems in local government, leveraging generative AI to improve efficiency, transparency and accessibility of services with a focus on the sustainability of the entire process. The system will provide benefits to citizens in terms of streamlined services, quick response times, transparent communication and improved accessibility, and for officials in terms of decision support, task automation, error reduction and increased efficiency.
 - **Period abroad:** 6 months
 - **Period at the Institution/Company:** 6 months
6. **n. 1 Scholarship co-funded by company:** AI² – Applicazioni di Ingegneria ed Informatica srl
- **Project title and scholarship theme:** *SymbioticRAIL2 – Symbiotic AI techniques supporting design and maintenance of railway systems*
 - **Research Activity Description:** Rail systems are increasingly characterized by the wide variety of data involved in the different phases of the life cycle: formalization of requirements to design, verification of data consistency and expected operation, and diagnostics (for rapid fault prevention and analysis or in support for predictive maintenance). The risks of loss of quality and increased costs brought about by the growth in the complexity and quantity of information managed lead to the need for specific professional figures who are aware of the form and semantics of data. The activity is aimed at designing tools to support railway engineering through Data Driven approaches based on the Symbiotic AI paradigm. It is focused on enhancing the capabilities of domain experts and designers to produce and (re)use knowledge in the different phases of the systems life cycle, thus nurturing a symbiotic process of training/learning and explanation underlying the use of AI tools.
 - **Period abroad:** 6 months
 - **Period at the Institution/Company:** 6 months

Admission procedures:

The selection will take place in accordance with Article 6 letter B of the call.

The applicants will be evaluated on the basis of: a) the documents presented with the application, b) a research project (written in English, max 1000 words), c) an oral exam in which, among other things, they will discuss a research project presented with the application and that will also include the assessment of the applicant's knowledge of the English language. For the applicants to the fellowships with theme bound, the oral exam will concern questions about the related research activity. The admission to the oral examination requires a positive evaluation of the presented documents and the research project.

Calendar and location of the entrance exam:

Qualifications Rating: starting from July 31, 2024

Project Rating: starting from July 31, 2024

Oral exam: starting from August 5, 2024 at 9:30 am, "Sala Consiglio" on the seventh floor of the Computer Science Department.

Where it is not possible to do it in person, candidates may ask to do it remotely with a motivated request. The motivated letter of request, together with the copy of an identity document, valid to travel abroad, must be uploaded on PICA web platform. It will be the responsibility of the commission to communicate the methods of connection.

For further information, please consult the following Web address: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 14)

PROFILE

PHD PROGRAM IN LEADERSHIP, EMPOWERMENT AND DIGITAL INNOVATION IN EDUCATION AND LEARNING (LEDIEL)

in agreement with Italian universities

CUN Scientific Areas: 10 Ancient, philological-literary and historical-artistic sciences; 11A Historical, philosophical, pedagogical sciences; 11B Psychological sciences; 08 Civil engineering and architecture; 01 Mathematical and computer sciences; 13 Economic sciences and statistics.

Academic disciplines: L-LIN/03, L-FIL-LET/12, M-PED/01, M-PED/03, M-PED/04, M-PSI/03, M-PSI/05, M-PSI/06, M-PSI/07, ICAR/04, M-FIL/01, MAT/04, SECS-P/08

Coordinator: Prof. Michele Baldassarre

Administrative Office: University of Bari "Aldo Moro" - Department of Education, Psychology, Communication (FOR.PSI.COM.)

PEC: direttore.forpsicom@pec.uniba.it

Duration: 3 years

Curricula: NO

Total number of places available: n. 10

- with University scholarship: n. 3
- with scholarship pursuant to Ministerial Decree no. 629/24: no. 1
- with scholarship pursuant to Ministerial Decree no. 630/24: no. 3
- with scholarship financed by University of Palermo: n. 1
- with scholarship cofinanced by "Patti territoriali dell'alta formazione per le imprese" – CUP: F61B23000370006: no.1
- without scholarship no. 1

POSITIONS WITH SCHOLARSHIP

Project: Leadership, Empowerment and Digital Innovation in Education and Learning 1

Topic title: **LEDIEL_Uniba 1**_Artificial Intelligence Systems for the Development of Learning Management Systems

Description of research activity: The project aims to evaluate the implementation of AI-based solutions within learning management systems (LMS) to improve teaching practices and learning outcomes.

Project: Leadership, Empowerment and Digital Innovation in Education and Learning 2

Topic Title: **LEDIEL_Uniba 2**_Universal Design for Learning: Inclusive Strategies in Higher Education Contexts

Description of research activity: The project aims to explore and develop strategies based on Universal Design for Learning principles to promote inclusive and accessible education in Higher Education contexts. The goal is to analyze how U.D.L. can be effectively integrated into leadership, empowerment and digital innovation practices to improve the engagement and learning of all students, including those with special educational needs.

1. Project: Leadership, Empowerment and Digital Innovation in Education and Learning 3

Topic Title: **LEDIEL_Uniba 3**_Predictive analytics tools and strategies to enhance the professional development of university teachers

Description of research activity: The project aims to explore the use of predictive analytics technologies to support the ongoing professional development of university faculty through models, applications, and technologies that can identify training needs and implement practice in higher education systems.

- **D.M.629/24**

2. Project: Leadership, Empowerment and Digital Innovation in Education and Learning 4

Notice: D.M.629/24: *investment 4.1 P.A.*

Project title and scholarship theme: The promotion of life skills as a tool for innovation and empowerment

Research Activity Description: Theories and processes related to the development of soft skills (with special reference to critical-reflective, ethical, and problem-solving skills) as a tool to promote empowerment, innovation, and guide change.

Period abroad: minimum 6 months

Period at the Institution/Company: not planned

Transferring university: *University of Study of Verona*

- **D.M.630/24**

1. Project: Leadership, Empowerment and Digital Innovation in Education and Learning 5

Notice: D.M.630/24: *investment 3.3 - innovative doctorate*

Project title and scholarship theme: Balance and enhancement of skills: perspectives of work pedagogy and career coaching for organizations

Research Activity Description: The project is aimed at recovering the potential of the younger generation and building an institutional and business environment capable of fostering their development and prominence within society. It aims to design and test pedagogical models and strategies to recognize and enhance skills in the transition between school and the labor market and, at the same time, to support the spread of a culture of decent work centered on the person as well as on corporate social responsibility and an ethical and sustainable economy.

Co-financing company: Io faccio futuro Srl

Period abroad: minimum 6 months

Period at the company/institution provided for by Ministerial Decree no. 630/24: minimum 6 months

Transferring university: *University of Studi of Foggia*

2. Project: Leadership, Empowerment and Digital Innovation in Education and Learning 6

Notice: D.M.630/24: *investment 3.3 - innovative doctorate*

Project title and scholarship theme: Artificial intelligence for hearing sensory disability

Research Activity Description The project aims to integrate innovative AI solutions into 3D Verse educational software to develop features that improve accessibility and interactivity for students with hearing disabilities, thereby increasing their active participation and inclusion in school activities.

Co-financing company: Dotslot Srl

Period abroad: minimum 6 months

Period at the company/institution provided for by Ministerial Decree no. 630/24: minimum 6 months

3. Project: Leadership, Empowerment and Digital Innovation in Education and Learning 7

Notice: D.M.630/24: *investment 3.3 - innovative doctorate*

Project title and scholarship theme: Artificial intelligence for visual sensory disability

Research Activity Description The project aims to integrate innovative AI solutions into 3D Verse educational software to develop features that improve accessibility and interactivity for students with visual disabilities, thereby increasing their active participation and inclusion in school activities.

Co-financing company: Dotslot Srl

Period abroad: minimum 6 months

Period at the company/institution provided for by Ministerial Decree no. 630/24: minimum 6 months

- **Scholarships co-financed with companies and "Patti territoriali dell'alta formazione per le imprese" – CUP: F61B23000370006:**

I. Project: Leadership, Empowerment and Digital Innovation in Education and Learning 8

Scholarship co-funded by Forethinking Srl company: no. 1

Project title and scholarship theme: Sustainability and communication for reliable and transparent information that facilitates business and consumer adoption of technologically and environmentally superior products

Research Activity Description: The project aims to delve into the planning and implementation actions of corporate projects in line with Agenda 2030 (declined in 169 targets on economic, social and environmental spheres) that need dedicated communication and enhancement activities aligned with international reporting standards and able to engage and motivate the various stakeholders of the organization.

Period abroad: minimum 6 months

Period at the company/institution: minimum 6 months

Project: Leadership, Empowerment and Digital Innovation in Education and Learning 9

Project Title: **LEDIEL_UniPa** - Research and Teaching methods for a more sustainable built environment

Research Activity Description: The project aims to explore innovative research methods and teaching strategies to promote and integrate sustainability principles into the design practices of inclusive and accessible learning environments.

Co-financing institution: University of Palermo

POSITIONS WITHOUT SCHOLARSHIP

Project: Leadership, Empowerment and Digital Innovation in Education and Learning 10

Project title: Quality of teaching models in Higher Education

Research Activity Description: The project aims to explore theories and processes underlying leadership, empowerment and entrepreneurial culture to promote the improvement of the quality of teaching in the perspective of TLC and Digital Hub organizational chart establishment.

Admission procedures for ordinary places:

The selection will take place in accordance with Article 6 letter B of the call.

Regarding the criteria for the conduct of the examination tests, the test will be held in the form of a verification of qualifications, presentation of an original research project to be attached to the application, and an oral interview on the theoretical and methodological insights inherent in the contents of the submitted project. The text of the project will be maximum of 15000 characters, including spaces and bibliography. The project must have four sections: 1) state of the art/rational and objectives of the project, 2) Method, 3) expected results, and 4) potential threats to project success. The oral interview will be held in-person and will include concurrent verification of foreign language proficiency: English. Admission to the oral interview is subject to successful evaluation of the research project.

The examination tests will be separate for each project, and the respective rankings will merge into a single final ranking list that will qualify for admission.

Procedures for carrying out the tests for foreign candidates:

Foreign applicants can choose to take the entrance exam in Italian or English.

Calendar and location of the entrance exam:

Opening of proceedings (committee only) with evaluation of qualifications and evaluation of projects: July 31, 2024 at 9:00 am.

Publication admitted to the oral exam on August 01, 2024, on the website:

<https://www.uniba.it/ricerca/dipartimenti/forpsicom/didattica/formazione-postlaurea-dottorato>

Oral test: August 02, 2024 9:00 am, in presence Nelson Mandela Classroom I Floor Chiaia-Napolitano building. Via Crisanzio, 42 Bari. Where it is not possible to do it in person, candidates may ask to do it remotely with a motivated request. The motivated letter of request, together with the copy of an identity document, valid to travel abroad, must be uploaded on PICA web platform. It will be the responsibility of the commission to communicate the methods of connection.

Admission exam schedule for candidates residing off-site:

Oral interview: August 02, 2024 9:00 a.m.

For further information, please consult the following Web address: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 15)

PROFILE

PHD PROGRAM IN HUMANITIES, LANGUAGES AND ARTS

CUN Scientific Areas:10 - Antiquity Studies, Philology, Literary Studies, Art History
11 - History, Philosophy, Pedagogy and Psychology

Scientific Subject Codes: L-FIL-LET/02, L-FIL-LET/09, L-FIL-LET/10, L-FIL-LET/11, L-FIL-LET/13, L-FIL-LET/14, L-LIN/01, L-LIN/02, L-LIN/04, L-LIN/07, L-LIN/10, L-LIN/11, L-LIN/12, L-LIN/13, L-LIN/21, L-ART/01, L-ART/02, L-ART/03, L-ART/06, L-ART/07, M-GGR/01

Coordinator: Prof.ssa Olimpia Imperio.

Administrative Office: Department of "Ricerca e Innovazione Umanistica"

PEC (certified email):
direzione.dirium@pec.uniba.it

Duration: 3 anni

Curricula: Yes

- 1) LITERATURES AND PHILOLOGY (Scientific Subject Codes: L-FIL-LET/02, L-FIL-LET/09, L-FIL-LET/10, L-FIL-LET/11, L-FIL-LET/13, L-FIL-LET/14; L-LIN/03, L-LIN/04, L-LIN/05, L-LIN/10, L-LIN/13, L-LIN/21)
- 2) LANGUAGES, LINGUISTICS AND TRANSLATION (Scientific Subject Codes: L-LIN/01, L-LIN/02, L-LIN/04, L-LIN/07, L-LIN/10, L-LIN/12, L-LIN/13)
- 3) ARTS, THEATRE, MUSIC AND PERFORMANCE STUDIES (Scientific Subject Codes: L-ART/01, L-ART/02, L-ART/03, L-ART/06, L-ART/07, L-FIL-LET/02, L-FIL-LET/10, L-FIL-LET/11, L-LIN/10, L-LIN/11, L-LIN/21, M-GGR/01)

Total number of positions: no. 5 of which:

- with University scholarship: no. 4
- with scholarship pursuant to Ministerial Decree no. 629/24: no. 1

POSITIONS WITH SCHOLARSHIP

- **Positions with University scholarship**
- No. 4

- **D.M.629/24**

Notice: D.M.629/24: PNRR 3.4 Digital Transition: no. 1 (Curriculum: Language, Linguistics and Translation)

- **Project title and scholarship theme:** "Ai e traduzione nella comunicazione societaria"/ "AI and Translation in Corporate Communication"
- **Research Activity Description:**
 - The research project aims to explore the role that AI plays and will play in the context of *corporate communication*. In particular, the study will assess the impact of AI on corporate communication systems, including the translation of *management accounting* statements, that are concerned with communication within and among businesses.
 - The research results should help fill the gaps that currently affect the relation between corporate communication and *Large Language Models*, that underlie AI. This will help in understanding the

current utility and the limits that companies implementing (or planning to implement) new technologies in external communication processes are experiencing.

- **Period Abroad:** Institute for Logic, Language and Computation, Faculty of Science, University of Amsterdam (6 months)
- **Periods at the Institution/company:** REV3RD S.r.l. (6 months)

Admission procedure for ordinary places:

The selection will take place in accordance with Art. 6 letter B) of the call.

The selection will be based on: 1) Evaluation of the candidate's qualifications to be submitted together with a research project that may be written in Italian or English; 2) Oral interview (in Italian or English); 3) Assessment of two foreign languages of the candidate's choice (one of which must necessarily be English) from among those included in the PhD Board (English, French, German, Spanish, Russian, Polish).

Candidates must indicate the curriculum they want to apply for, under penalty of exclusion from the admission procedure.

Admission procedures for foreign candidates:

The selection will be based on: 1) Evaluation of the candidate's qualifications to be submitted together with a research project that may be written in Italian or English; 2) Oral interview (in Italian or English); 3) Assessment of Italian and English, if different from the candidate's mother tongue (otherwise the candidate will take a test in another foreign language of his/her choice from among those included in the PhD Board (English, French, German, Spanish, Russian, Polish).

Examination schedule and venue:

Assessment of qualifications: July 31th 2024, 9.00 a.m.

Assessment of the research project: August 2024 1st, 3.00 p.m.

Oral interview: August 2nd, 2024, 9.00 a.m. Aula Multimediale – Palazzo Ateneo, 2nd floor.

For further information, please consult the following website:

<https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 16)

PROFILE

PHD PROGRAMME IN METABOLISM, AGING AND SOCIAL MEDICINE- METABOLISMO, INVECCHIAMENTO E MEDICINA SOCIALE

CUN Scientific Areas: 05 – Biological sciences; 06 – Medical Sciences; 07 – Agricultural and veterinary sciences

Academic disciplines: MED/04; MED/06; MED/07; MED/09; MED/11; MED/13; MED/18; MED/28; MED/36; MED/40; MED/43; MED/44; MED/46; MED/50; AGR/15; BIO/10; BIO/18; VET/04.

Coordinator: Prof. Antonio Moschetta

Administrative office: Interdisciplinary Department of Medicine – p.zza G. Cesare n.11 - 70124 Bari

PEC: direzione.dim@pec.uniba.it

Duration: 3 years

Curricula: NO

Total number of places available: n. 9

- 4 place with a university scholarship
- 3 places with scholarship D.M. 630/24
- 2 place without scholarship

POSITIONS WITH SCHOLARSHIP

- *Positions with University scholarship*
- **D.M.630/24**
- 1. **Avviso: D.M.630/24**
 - **Project title and scholarship theme:** Using third-generation sequencing for predictive genetic tests based on DNA methylation (topic: preventive and precision medicine);
 - **Research Activity Description:** The project aims to acquire advanced expertise in the field of precision medicine that can be applied to promote the preventive health care and to improve patient well-being. The project involves the development of new predictive genetic tests based on DNA methylation analysis to predict an individual's metabolic state and/or pharmacological response. The process may also be patented and is part of the fourth Mission, Education and Research of the NRP and affects factors indispensable for a knowledge-based economy - M4C2 - From research to enterprise;
 - **Co-financing company/body:** PersonGene srl;
 - **Period abroad:** 6 months;
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 18 months.
- 2. **Avviso: D.M.630/24**
 - **Project title and scholarship theme:** Analysis and assessment of risks arising from the testing of hybrid and electric engines (topic: New technologies and solutions for sustainable mobility; Sustainable manufacturing; Human and environmental health);
 - **Research Activity Description:** The aim of the PhD will be to establish under the various testing conditions possible accidents, possible remedies, and actions to be taken as a first step. Systematically identify all hazards, dangerous situations and events related to the various cycle

phases of the test bench components and their mechanical and electrical combination. Using a risk analysis, identify the maximum risk of each hazardous situation, determining the severity of the damage and the probability of occurrence.

Decide which hazardous situations require further risk reduction. Identify whether the required risk reduction has been achieved without generating further hazards or increasing other risks. Identify design-integrated protective measures to eliminate hazards or reduce risks that include both protective devices and complementary protective measures. Evaluate whether risks remain, flagging residual risks with information for use. Produce risk assessment and risk reduction documentation with company guidelines to be adopted for any adaptation to technological evolution of testing devices;

- **Co-financing company/body:** Bosch Italia srl;
- **Period abroad:** 6 months;
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months.

3. Avviso: D.M.630/24

- **Project title and scholarship theme:** Digital innovation in food (topic: Digital Technologies for Health; Entrepreneurship, Incubation and Innovation);
- **Research Activity Description:** The aim of the new project is to disseminate the application in the regional and national market and to start collecting and evaluating anonymous nutritional data from users in order to improve the food proposal by the application using machine learning and artificial intelligence techniques;
- **Co-financing company/body:** Kemanji s.r.l.;
- **Period abroad:** 6 months;
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 18 months.

POSITIONS WITHOUT SCHOLARSHIP: N.2

Admission procedures for ordinary places:

The selection will take place in accordance with Article 6 letter B of the call for applications.

The examination will be based on the assessment of the qualifications, the research project proposed by the candidate (to be sent with the application), and an oral exam. The latter will be aimed at discussing the research project submitted as well as verifying general knowledge of the topics to which the project refers.

The Project, written in Italian or English, must be attached, under penalty of exclusion, to the application and must not exceed 12,000 characters in length, including spaces.

During the oral test, knowledge of the English language will also be tested.

Procedures for carrying out the tests for foreign candidates:

Foreign candidates may choose to take the same admission tests in Italian or in English.

If necessary, the tests will take place telematically on a Microsoft Teams platform. The motivated letter of request, together with the copy of an identity document, valid to travel abroad, must be uploaded on PICA web platform. It will be the responsibility of the commission to communicate the methods of connection.

Calendar and location of the entrance exam:

Evaluation of qualifications: 31 July 2024, 9:00 am.

Project evaluation: 31 July 2024, 02:00 pm.

Oral exam: 02 August 2024, 9:00 am.

Location: Aula Frugoni - Interdisciplinary Department of Medicine, c/o Pad. Chini - Bari Polyclinic, p.zza G. Cesare n.11 – 70124 Bari

For further information, please consult the following Web address:

<https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

PROFILE

PhD PROGRAMME IN APPLIED NEUROSCIENCES

Scientific CUN areas: 05 (BIOLOGICAL SCIENCES), 06 (MEDICAL SCIENCES), 11(HISTORY, PHILOSOPHY, PEDAGOGY AND PSYCHOLOGY Sciences), 02 (PHYSICAL SCIENCES).

Scientific Subject Codes:

Curricula:

- 1) Basic Sciences (Scientific Subject Codes: BIO/09, BIO/10, BIO/11, BIO/12, BIO/13, BIO/16, BIO/17 M-PSI/02 e FIS/07).
- 2) Clinical Sciences: (Scientific Subject Codes: MED/05, MED/10, MED/25, MED/26, MED/27, MED/30, MED/31, MED/33, MED/34, MED/39, MED/48, MED/50, M-PSI/01, e M-EDF/02).

Coordinator: Prof. Domenico RIBATTI

Administrative office: Department of Translational Biomedicine and Neuroscience

PEC: direzione.dibrain@pec.uniba.it

Duration: 3 years

Curricula: Yes

Curricula:

- 1) Basic Sciences
- 2) Clinical Sciences

Total number of places available: n. 9

- with university scholarship: **n. 4**
- with scholarship pursuant to Ministerial Decree no. 630/24: **n. 2**
- with scholarship co-financed by company(s): **n. 1**
- without scholarship: **n. 2**

POSITIONS WITH SCHOLARSHIP: N. 7

- **Number 3 positions with scholarship for curriculum # 1**
- **Number 1 position with scholarship for curriculum # 2**

- **D.M.630/24**

Number 1 position with scholarship for curriculum # 1

1. Avviso: D.M.630/24

- **Project title and scholarship theme:** *Microbiome and Aging: From Agricultural Methods to Human Well-being*
- **Research Activity Description:** *The project aims to explore the link between the soil microbiome and inflammatory processes related to ageing, with a particular focus on tumor and neurodegenerative diseases. The project involves an initial phase where advanced sequencing techniques and bioinformatics analysis, changes in the microbiome of soils subjected to different*

treatments will be studied. The second objective will be to study the effect of particular nutrients and/or the onset of inflammatory response signals using human cellular models also linked to tumor and neurodegenerative pathologies. The index of proliferation, differentiation and cell death will be explored through in vitro studies. Specific pathways will be explored in depth, the autophagic-lysosomal one, a crucial point in the aging process. A study will also be carried out on the modifications of a biosensor, AMPK, which currently represents a therapeutic potential in allergies, aging and cancer due to its fundamental role in maintaining the energy homeostasis of the cell.

- **Co-financing company/body:** *O.P. SOLE E RUGIADA SACPA - Via Manerbio n.10 – 25021 Bagnolo Mella (Brescia) Lombardia Italia*
- **Period abroad:** *6 months*
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** *6 months*

Number 1 position with scholarship for curriculum # 2

2. Avviso: D.M.630/24

- **Project title and scholarship theme:** *E-Health Integration for Prevention and Care in Active Aging*
- **Research Activity Description:** *Given that 14.177 million Italians (24.1% of the population) are in their old age, this project targets aging and the rising number of neurocognitive disorders among the elderly. Its mission to prevent and control pathological aging with its technologically and multidisciplinary solutions is centered around the view of the pursuit of a healthy lifestyle throughout life. The aim is to devise novel means of detection of neurocognitive liabilities as they emerge and establish a continuous monitoring paradigm via digital and wearable approaches. They will be individually tailored interventions using artificial intelligence to improve the quality of life of the elderly and lessen the burden on social and healthcare. The project aims to help ensure the availability of knowledge and the sharing of innovation globally, thereby influencing policies for older persons' well-being.*
- **Co-financing company/body:** *EMTESYS - Biomedical Engineering - Piazza Giuseppe Massari, 6–70122 Bari (BA)–ITALY*
- **Period abroad:** *6 months*
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** *6 months*
- **scholarships co-financed with companies**

Number 1 position with scholarship for curriculum # 1

1. Number 1 position with Scholarship co-funded by company: *Istituto di Tecnologie Biomediche – Consiglio Nazionale delle Ricerche - Sede Istituto Via F.lli Cervi, 93 - 20054 Segrate (MI)*

- **Project title and scholarship theme:** *Role of Glial Cells in Brain Homeostasis Under Pathophysiological Conditions for Pharmacological Treatment in Neurodegenerative Processes*
- **Research Activity Description:** *_ The proposed project aims to explore the glymphatic system, a recently discovered mechanism for the drainage of waste products produced by the central nervous system. The focus is on isoforms of Aquaporin-4 (AQP4), proteins that regulate the flow of water between cerebrospinal fluid (CSF) and interstitial fluid (ISF) and are located in the perivascular glial processes of astrocytes.*

The PhD student will use advanced fluorescence imaging techniques to study glymphatic flow and the contribution of different AQP4 isoforms in preclinical models of neurodegenerative diseases. Mouse models of Alzheimer's disease, such as 5xFAD, and genetic variants lacking specific AQP4 isoforms will be used to examine how modifications in these proteins affect the pathogenesis of neurodegenerative diseases through alterations in the clearance of toxic substances like beta-amyloid. This study will also assess the dependency of the glymphatic system between wakefulness and anesthesia in mice using fluorescent tracers injected into the brain parenchyma or the cisterna magna to observe their outflow or inflow into the cerebral cortex.

- **Period abroad:** *6 months*
- **Period at the company/institution:** *6 months*

POSITIONS WITHOUT SCHOLARSHIP: N. 2

- ***Number 2 positions with scholarship for curriculum # 2***

Admission procedures for ordinary places:

The selection will take place in accordance with Article 6 letter B of the call.

The exam will be based on the on the evaluation of candidate qualification, proposed project, oral interview, and foreign language knowledge checking (English).

Admission tests for foreigners: Foreign candidates can do the exam in Italian or in English.

Calendar and location of the entrance exam:

Selection procedures start (for the panel members only): THURSDAY, AUGUST 1, 2024

Oral exam: MONDAY, AUGUST 5, 2024, at 10:00 AM

Venue of the exams: Classroom “A” - “New Complex of Biomedical Sciences” – Policlinico Consorziiale di Bari – Piazza Giulio Cesare, 11 – Bari – 70124.

For more information, see:

<https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 18)

PROFILE

PhD PROGRAMME IN ARCHAEOLOGICAL, HISTORICAL, ARCHITECTURAL MEDITERRANEAN LANDSCAPE HERITAGE: INTEGRATED SYSTEMS OF KNOWLEDGE, PLANNING, PRESERVATION AND PROMOTION

CUN Scientific Areas: 08a – Architecture, 10 - Ancient History, Philology, Literature and Art History, 11 - Historical, philosophical, pedagogical and psychological sciences

Scientific Subject Codes: L-ANT/01; L-ANT/06; L-ANT/07; L-ANT/08; L-ANT/09; L-ANT/10; L-OR/05, L-OR/06; L-ART/01; L-ART/02; L-ART/03; L-ART/04; ICAR/08; ICAR/10; ICAR/11; ICAR/13; ICAR/14; ICAR/15; ICAR/16; ICAR/17; ICAR/18; ICAR/19; ICAR/21; M/DEA/01; M-PED/01; M-PSI/08.

Coordinator: Prof. Giuliano VOLPE

Administrative office: Department of Humanistic Research and Innovation, University of Bari 'Aldo Moro'

PEC: direzione.dirium@pec.uniba.it

Duration: 3 years

Curricula: YES/NO (choose according to the accreditation form)

Curricula:

1) Archaeological, historical, architectural and landscape heritage: knowledge, methods and techniques
Scientific Subject Code: L-ANT/01 (5%), L-ANT/06 (5%), L-ANT/07 (10%), L-ANT/08 (10%), L-ANT/09 (5%), L-ANT/10 (20%), L-OR/05 (3%), L-OR/06 (2%), ICAR/10 (5%), ICAR/18 (10%), ICAR/19 (10%); ICAR/15 (5%), ICAR/21 (5%), ICAR/22 (5%)

2) Archaeological, historical, architectural and landscape heritage: project methods and techniques
Scientific Subject Code: L-ANT/01 (5%), L-ANT/06 (5%), L-ANT/07 (10%), L-ANT/08 (10%), L-ANT/09 (5%), L-ANT/10 (20%), L-OR/05 (3%), L-OR/06 (2%), ICAR/10 (5%), ICAR/17 (5%), ICAR/18 (10%), ICAR/19 (10%); ICAR/15 (5%), ICAR/21 (5%), ICAR/22 (5%)

3) Archaeological, historical, architectural and landscape heritage: methods and techniques of participation and inclusion

Scientific Subject Code: M-DEA/01 (50%), M-PED/01 (20%), L-ANT/10 (5%), L-ART/01 (5%); L-ART/02 (5%); L-ART/03 (5%); L-ART/04 (5%); ICAR/22 (5%)

Total number of positions available: n. 30

with University scholarship: n. .5

with scholarship pursuant to Ministerial Decree no. 629/24: no. 1.

with scholarship pursuant to Ministerial Decree no. 630/24: no. 2

with scholarship co-financed by companies funded by "Patti territoriali dell'alta formazione per le imprese" – CUP: F61B23000370006 n. 4

with scholarship No. 18, of which No. 5 Poliba (3 free theme, 2 tied theme co-financed by companies funded by "Patti territoriali dell'alta formazione per le imprese" – CUP: F61B23000370006); No. 2 CNR (free theme); No. 2 Uniroma1 (tied theme co-financed by companies M.D. No. 630/24); No. 2 Unina (1 free theme, 1 tied theme M.D. No. 629/24, PA); No. 1 Unifg (tied theme M.D. M. No. 629/24, PC); No. 1 Unibas (theme-bound co-funded by companies M.D. No. 630/24); No. 1 Unipa (theme-bound); No. 1 Unica (theme-bound); No. 1 Unipg (theme-bound); No. 1 Unict (theme-bound, PNRR PE5 CHANGES project funds); No. 1 Uniroma3 (theme-bound, PNRR PE5 CHANGES project funds);

POSITIONS WITH SCHOLARSHIP

University of Bari:

No. 5 places with free theme scholarship from the University of Bari

D.M.629/24:

No. 1 place **Notice: D.M.629/24 4.1 Cultural Heritage**

Project title and scholarship theme: Historic, urban, rural, underwater landscapes

Research Activity Description: Research on settlement patterns, the organization of urban, rural and coastal spaces, socio-economic systems, the circulation of goods, navigation, the exploitation of land and sea resources, craft and industrial production from prehistoric to modern-contemporary times with particular reference to the Apulian territory and/or southern regions. The studies will be articulated in the scientific paths and methodologies of investigation proper to the fields of Landscape Archaeology, Contemporary Age Archaeology, Underwater and Naval Archaeology, Architectural Archaeology, Archaeology of Production and Material Culture and will take into account aspects related to preventive archaeology, protection, communication, enhancement and management and the relationship between historical landscapes and local communities in the spirit of the European Landscape Conventions (Florence 2000) and on the value of cultural heritage for society (Faro 2005).

Period abroad: 6 months

Period at the Institution/Company: minimum 6 months

No. 2 places with free theme scholarship **D.M.630/24**

Avviso: D.M.630/24

Project title and scholarship theme: Archaeology, cultural heritage and publishing in the third millennium

Research Activity Description: Scientific publishing is undergoing profound change, particularly with the digital revolution and the emergence of Open Access, which represents great opportunities but also threats to specialist publishing. There is a need for the development of new modes of publishing that ensure scientific quality, maximum dissemination and low cost. The research, in addition to considering all stages of producing a publishing product (relationship with authors, editing, layout, image treatment, promotion, dissemination) and a national and international survey of current trends, will aim to experiment with new publishing systems in archaeology and more generally in the humanities.

Co-financing company/body: Edipuglia Publishing House Ltd, Bari-Santo Spirito.

Period abroad: 6 months

Period at the company/institution provided for by Ministerial Decree no. 630/24: minimum 6 months at Edipuglia Publishing House Ltd, Bari-Santo Spirito.

Project title and scholarship theme: Archaeology, research and enterprise

Research Activity Description: The project, developed within the framework of the PE5 CHANGES of the PNRR, of whose partnership EdilCo of Altamura is a component, aims to study ways for a company to address the various areas of protection, preventive investigation, restoration of enhancement and management of archaeological sites and monuments, starting with the case of Altamura, where the enhancement, including multimedia, of an archaeological site now located under a building is under way. High sample case will be World War II Camp 65, along with other cases that will see EdilCo engaged in the coming years in Puglia and other territories. The research aims to develop the research component in the entrepreneurial field also through an analysis to be conducted nationally and internationally.

Co-financing company/body: EdilCo srl, Altamura.

Period abroad: 6 months

Period at the company/institution provided for by Ministerial Decree no. 630/24: minimum 6 months at : EdilCo srl, Altamura.

No. 4 scholarships co-financed with companies

No. 1 Scholarship co-funded by company: Fondazione Archeologica Canosina.

Project title and scholarship theme: Archaeological heritage of Canosa and the territory: innovative experiences of research, valorization, participation and bottom-up management in public-private partnership

Research Activity Description: FAC has been conducting outreach and social protection of Canosan's archaeological heritage for more than thirty years. The research, which will have as its reference the archaeology of Canusium and its territory, aims not only to develop research, protection and enhancement but also to build, including through an analysis conducted at the national and international level, new forms of management of

the archaeological heritage, particularly with the application of public-private partnership, and the development of ever greater forms of active participation of citizenship, in tune with the principles of the Faro Convention, in the perspective of a "heritage community of Canosa".

Period abroad: 6 months

Period at the company/institution: minimum 6 months at Fondazione Archeologica Canosina, Canosa di Puglia

No. 1 Scholarship co-funded by company: SAP Società Archeologica srl

Project title and scholarship theme: Archaeology of the War Landscape

Research Activity Description: The research focuses on the analysis of territories that have undergone natural and anthropogenic modifications, which were exploited or reshaped during wartime events. The study will consider the organization of the territory in all its aspects, both pre-war and post-war events, with particular attention to the evolution of military and civilian infrastructure, highlighting possible sites of conflict archeology.

Period abroad: 6 months

Period at the company/institution: minimum 6 months at SAP Società Archeologica srl, Quingentole MN

No. 1 Scholarship co-funded by company: ArcheoLogica srl

Project title and scholarship theme: Multi-scalar spatial enhancement and development strategies

Research Activity Description: The research involves the development of experimental solutions for the narrative of cultural heritage, archaeological and/or architectural, with a multi-scaled approach from the individual cultural property to the historic landscape. The subject of the research may be archaeological sites, historic architecture, hamlets, urban cores, understood as individual units and complex entities that have contributed to the formation of the stratified historic landscape. General objectives will be: the definition of the level of knowledge of the heritage, from single assets to stratified articulations, functional to its valorization; the elaboration of narrative and popularization techniques that are able to restore the complexity of historical stratifications; the proposal of an innovative solutions of heritage management

Period abroad: 6 months

Period at the company/institution: minimum 6 months at ArcheoLogica srl, Foggia

No. 1 Scholarship co-funded by company: Cityopensource srl

Project title and scholarship theme: Cultural heritage and local communities. Digital infrastructure for collaborative mapping.

Research Activity Description: Research focused on experimenting with innovative methodologies of co-production of cultural heritage knowledge, including through the promotion of heritage community building and the collective generation of data in open, interoperable and reusable formats. Specific attention should be paid to the 'collaborative' mapping of tangible and intangible heritage in southern Italian contexts with the development, in particular, of digital participatory platforms based on spatial planning tools, such as interpretive frameworks, planning frameworks and design strategies at the landscape scale, and on research activities to be conducted in specific experimental contexts. The participatory approach must be declined not only on the level of co-creation and co-design of content, but also contemplating the activation 'from below' of processes of protection, valorization, regeneration and sustainable management of diffuse heritages in the spirit of the Convention on the Value of Cultural Heritage for Society (Faro 2005) and in the most innovative methodological scenarios of Cooperative Learning, Citizen Science and Living Labs, inspired by the principles of Public History and Public Archaeology

Period abroad: 6 months

Period at the company/institution: minimum 6 months at Cityopensource srl, Naples

Politecnico di Bari:

No. 3 Bari Polytechnic University open-topic scholarship places

No. 2 scholarships co-financed with companies funded by "Patti territoriali dell'alta formazione per le imprese – CUP: F61B23000370006

No. 1 Scholarship co-funded by the company Homa società cooperativa

Project title and scholarship theme: Student Housing as opportunities for urban regeneration in the historic city

Research Activity Description: The relationship between the University and the City has assumed considerable centrality in architectural and urban planning, as well as sociological, debates, especially since the 1970s, following the shift from the elite university to the mass university. On the other hand, in the contemporary condition where the advance of the Knowledge Economy becomes increasingly central and cities have to compete in the global economy, the relationship between University and City appears relevant. Student Housing play a central role in the social growth of the student in a system of active relationships between the University and the City. In particular, the realization of innovative housing solutions (e.g. the model of diffuse residency within the consolidated city) that are functional and at the same time accessible for the entire Knowledge Society is a determining factor in the urban and social regeneration of the neighborhoods affected by these interventions. Therefore, the realization of new forms of university residences, both in Italy and abroad, centered on the introduction of new urban-level, open and inclusive functionalities, testifies to a renewed conception of the relationship between student housing and the urban context to which it belongs. Starting from the domain of university welfare policies, the research project will look at student housing in the current incremental processes taking place in our country, framing them as urban regeneration strategies underway in most Italian cities, mainly in historic cities hosting university institutions.

Period abroad: 6 months

Period at the company/institution: minimum 6 months at Homa società cooperativa

No. 1 Scholarship co-funded by the company Metallurgica Ledrense soc. coop.

Project title and scholarship theme: Reshaping the Land of Historic Landscapes: Design Techniques and Innovative Building Systems for the Critical Re-Figuration of Topographies in Ancient Places

Research Activity Description: The theme of soil reconfiguration, through actions aimed at the prevention of instability and the protection of archaeological areas, makes it possible to integrate safety aspects with the possibility of directly intervening on the latent form of the traces of archaeology. Through such interventions, the opportunity to entirely redesign the site is also realised, including the improvement of accessibility and routes. The use of traditional construction elements for earthen containment such as dry-stone caged walls is spreading significantly because it meets the needs of effectiveness, removability, distinction, identity with respect to the ruins, but at the same time poses problems in defining the form and its grammar, construction techniques and utilisation. The research will investigate this constructional and formal element from a constructive and formal point of view, declining it through an appropriate valorisation project

Period abroad: 6 months

Period at the company/institution: minimum 6 months at Metallurgica Ledrense soc. coop. Tiarno di Sopra TN

CNR:

No. 2 positions with a CNR-ISCP open-topic fellowship.

Sapienza University of Rome:

No. 2 places with free theme scholarship **D.M.630/24**

Avviso: D.M.630/24

Project title and scholarship theme: Architecture and Archaeology: the historical-urban landscape along the Aniene Valley between understanding and enhancement

Research Activity Description: The study of the stratified contexts of the Aniene Valley is the subject of a PNRR research project conducted by the Department of Architecture and Design of Sapienza University of Rome within the framework of the Extended Partnership 5 CHANGES spoke 1 'Historical Landscapes, Traditions and Cultural Identities', which investigates Italian landscapes as complex stratified palimpsests that preserve millenary traces of the man-nature relationship.

The study of the territorial context of reference has been related to the sites of the sacred, identifying a number of specific areas on which to explore projects on a closer scale. The area of investigation extends between the Via Tiburtina Valeria and the Via Prenestina, taking into consideration the Serenissima Park and the Aniene Park in Rome, Tivoli and Subiaco as nodal elements of a greenway, i.e. a linear system of interconnected territories, protected, managed and developed to obtain recreational, ecological and historical-cultural benefits. The backbone of this system is the Aniene river. As the Faro Convention reminds us Cultural heritage, sustainable mobility and environmental infrastructures play a crucial role in building more equitable and

inclusive societies in order to improve the quality of life and recognizes 'the need to place people and human values at the centre of a broader and interdisciplinary concept of cultural heritage'. Within this overall framework, the doctoral student will have to identify, together with his/her tutors of reference, a specific theme for the doctoral thesis.

Co-financing company/body: L'Erma di Bretschneider, publishing house

Period abroad: 6 months. A 6-month stay and research period in Athens at the National Technical University of Athens or at the University of Coimbra, or the Vrije Universiteit in Amsterdam is possible.

Period at the company/institution provided for by Ministerial Decree no. 630/24: 6 months. A six-month period at the publishing house L'Erma di Bretschneider is part of the training course, participating in editorial projects concerning the Archaeological, Historical, Architectural and Landscape Heritage, and collaborating in the various activities leading to the printing and dissemination of the product: editing and layout, relations with authors, contacts for cultural activities, digitization and indexing processes, etc.

Transferring university: Sapienza University of Rome

Avviso: D.M.630/24

Project title and scholarship theme: The Garden of Ninfa and the vestiges of the fortifications of the medieval city: innovative experiences in research, valorization, participation and management.

Research Activity Description: Historical-critical research on the fortified system of the town of Ninfa in the Middle Ages and comparison with defensive systems in the Pontine area, on the border between the Patrimony of St. Peter and the Kingdom of Naples. Knowledge, valorization, conservation for the participation and management of the Garden of Ninfa. The research activity will concern the survey and direct and indirect study of the fortifications of the medieval settlement of Ninfa, near Cisterna di Latina, transformed into a garden from the early 20th century. The survey will avail itself of the consultation of archive documents kept mainly in the Caetani Archive (Rome) and others at the Roffredo Caetani Foundation (Latina - Tor Tre Ponti Headquarters) and will be aimed at the knowledge of the various phases of modification, integration and restoration of the town's defensive walls in their relationship with the built-up area and any pre-existing buildings. The study will also make use of comparisons with other cases of fortifications in the lower Lazio area, owned by the Caetani family and in a long state of abandonment and therefore at least partially undisturbed.

Co-financing company/body: Fondazione Roffredo Caetani onlus

Period abroad: A 6-month stay and research period in the UK, where the heirs of the Caetani family are based, or in specific French or Spanish universities for topics related to the history of the fortifications of Ninfa, is possible

Period at the company/institution provided for by Ministerial Decree no. 630/24: A six-month period at the Roffredo Caetani Foundation was part of the training course, participating in its activities both with regard to cultural initiatives such as conferences or seminars on the history and culture of the Pontine area and with regard to the cataloguing of documents kept in the Foundation's archives at the Tor Tre Ponti complex and others.

Transferring university : Sapienza University of Rome

University of Naples 'Federico II':

No. 1 open-topic scholarship positions of the University of Naples 'Federico II'

Project title and scholarship theme: Between the Lesson of Antiquity and Vincian Experimentalism in the Modern South: Methods, languages and models for architecture and engineering.

Research Activity Description: Between the turn of the fifteenth century and the first half of the sixteenth century, the Renaissance context of the Mezzogiorno was strongly marked by the contribution of Francesco di Giorgio Martini, Antonio Marchesi da Settignano and Fra Giocondo to architecture and engineering, aimed at revisiting Leonardo's lesson under the banner of antiquarianism and early Vitruvianism. By the end of the sixteenth century, thanks to the contribution of treatises and 'books of drawings', the dissemination of the linguistic codes of Antiquity and the 'new' models for architectural and urban design of Leonardo's brand would be ensured in the Neapolitan environment as well. The direction given by Leonardo, even in the technological-constructive and military fields, with his already 'experimental' method of approaching nature, its laws and consequent applications to architecture and engineering, was destined to transcend the entire modern age. On this basis, between the eighteenth and nineteenth centuries, we witness the leading role reserved for the Bourbon capital within the European debate between Enlightenment rationalism and the new archaeological classicism and its contemporary developments.

D.M.629/24:

No. 1 place Notice: D.M.629/24 4.1 Public Administration

Project title and scholarship theme: Design strategies for marginal archaeological areas in Campania's cities.

Research Activity Description: Research activities in the field of architectural design, with general methodological insights, territorial analysis, in-depth study of the Campania region.

Period abroad: 6 months

Period at the Institution/Company: 6 months

Transferring university: University of Naples 'Federico II'

University of Foggia:

D.M.629/24:

No. 1 place Notice: D.M.629/24 4.1 Cultural Heritage

Project title and scholarship theme: Landscapes and Archaeological Heritage

Research Activity Description: Research on landscape archaeology, settlements and material culture from prehistory to the modern-contemporary age, with particular reference to Apulia and South Italy and an interdisciplinary approach, focusing on the actual outcomes in the fields of the promotion, preservation and management of territories, as well as on forms of communication and the use of technologies.

A period of stay and research of six months at one or more of the Ministero della Cultura (SABAP) locations, in connection with the topics of the doctoral research, and one of equal length at SAIA-Scuola Archeologica Italiana di Atene is envisaged.

Period abroad: 6 months

Period at the Institution/Company: minimum 6 months

Transferring university: University of Foggia

University of Basilicata:

No. 1 place with free theme scholarship D.M.630/24

Avviso: D.M.630/24

Project title and scholarship theme: Tratturi and transhumance as landscape actions in movement

Research Activity Description: The research focuses attention on the phenomenon of transhumance by analyzing its social, spatial and economic aspects. The objective is to analyze the practice of transhumance in the territory of central-southern and European Italy, with particular attention to the grassy paths, also considered "paths of existence", along which the shepherds lived integrating the economic order and the dimension of life. The shepherd's nous was based on a vision of the world as movement and displacement, in a continuous search for variation. His life was the path along which all aspects of an existence, material and immaterial, were experienced, fused together without any dividing lines. Materials and concepts that could trigger a landscape action as a design process and support for the choices of policies for the protection and enhancement of the territory.

Co-financing company/body: Fondazione Banco di Napoli

Period abroad: 6 months

Period at the company/institution provided for by Ministerial Decree no. 630/24: minimum 6 months at CREA

Transferring university: University of Basilicata

University of Palermo:

No. 1 open-topic scholarship positions from the University of Palermo

University of Cagliari:

No. 1 open-topic scholarship positions from the University of Cagliari

University of Perugia:

No. 1 open-topic scholarship positions from the University of Perugia

University of Catania:

No. 1 fellowship funded with funds from the PNRR PE5 CHANGES project.

Project title and scholarship theme: Productive Spaces, Ceramic Workshops, Trades, Specializations, and Imagery in Hellenistic and Roman Sicily: towards a corpus of evidence

Description of research activity: In recent years, the study of stratified contexts in Hellenistic and Roman Sicily has seen a significant investment in terms of knowledge and data acquisition, which has made the political, social, and economic landscape of the island during the Hellenistic period - later becoming a province of the Roman Empire - better understood. The *provincia Sicilia* thus represents a privileged observation place due to the significant concentration of data that can help understand the need of consolidating dialogue today among archaeology, history, geography, ecology, and other disciplines along a diachronic line of knowledge. However, despite the strong process of knowledge acquisition in the last two decades, with the re-evaluation of old, unpublished excavations integrated with new researches, much remains to be done. Today, we are in a good position to know much more about some urban realities on the island (*Agrigentum, Catina, Syracusae*, etc.), where the re-evaluation of old excavations and recent research are facilitating the task of researchers. Nonetheless, some major themes remain fragmented and poorly deciphered.

It is therefore necessary to identify an operational path that investigates the diachronic models of occupation and social evolution of productive areas active on the island, the material culture produced there, evaluating human action, technical knowledge, the organization of productive spaces, practiced crafts, labor forces, active production workshops in various fields, production models, markets and commercial dynamics. This should be done by building a *corpus* of evidence that brings together all collected evidence on a single plane.

The goal is to make finally available to the international scientific community a comprehensive synthesis, a corpus that unites and organizes, for the first time, all known documentation, both published and unpublished, across distinct categories. This includes literary sources (mentioning production centers not yet known archaeologically) to material sources, including representations of manufacturing activities documented by various products (sculptural reliefs, votive materials, ceramics, epigraphs, glass, etc.), and ultimately including all those production indicators (raw materials, kilns, tools, trademarks, potters, entrepreneurs, etc.) that help reconstruct the commercial image of an island at the center of the Mediterranean with strong connections between the East and the West over a long period.

A six-month period of residence and research is possible in Athens at the Italian Archaeological School and other libraries of foreign schools, as well as at the University of Oxford, Faculty of Classics (Oxford Roman Economy Project) and Sackler Library.

Period abroad: 6 months

Period at the company/institution: 6 months

Transferring university: University of Catania

University of Roma Tre:

No. 1 fellowship funded with funds from the PNRR PE5 CHANGES project.

Project title and scholarship theme: The role of cultural heritage on the boundary between country and city

Application field: Identity landscape along major consular roads

Description of research activity: The PNRR project conducted by the Department of Architecture and Humanistic Studies of the University of Roma Tre is part of the Extended Partnership CHANGES spoke 1 "Historic Landscape, Tradition and Cultural Identities." The theme concerns the study of the Italian landscape as a layered palimpsest that preserves millennia-old traces of the human-nature relationship. In recent years, there has been a significant investment in the study of Roman stratified contexts, which makes the social, economic, political and cultural framework of liminal landscapes between city and countryside more understandable. However, this progress is accompanied by an observable destruction and failure in lived reality. There is a paradox between the progress of civilization and its host environment, reflecting an irremediable conflict. Dwelling, understood as caring for a place, is fundamental to describing its human nature. The current situation calls for a refounding based on a methodological approach that investigates the nature of phenomena, grasping the essential principles. This interest focuses on the relationship between land form and city form, between memory, history and contemporary places. The focus on contexts and identity represents a listening to the narratives of time, place and techniques. This process of reality acquisition leads to a conscious dialogue with the past, layer by layer, in order to intuit and recognize similarities, discontinuities and variations. Archaeology and places take a central role in the ideational process, allowing a reaffirmation of a conversation with the echo of time.

Period abroad: 6 months

Period at the company/institution: 6 months at ETSAVA (Escuela Técnica Superior de Arquitectura. Universidad de Valladolid).

Transferring university: University of Roma Tre

PLACES WITHOUT SCHOLARSHIP

There are no places without supernumerary scholarship

Admission procedures for ordinary places:

The selection will be made following the art. 6 typology B of the call.

The examination will be based on the evaluation of the qualifications, the research project proposed by the candidate and an interview, with verification of knowledge of the following foreign language: English or French or Spanish. The interview will take place preferably in person or also by videoconference at the candidate's motivated request. The applicant may also submit with the application two reference letters from scholars specialised in the proposed field of research to accompany the research project.

Projects must be contained within 16,000 characters and must include: 1.1 Title; 2.1 Key words (no. 5); 2.2 Description of the research project; 2.2.a); State of the art; 2.2.b); Objectives; 2.2.c); Methods; 2.2.d) Expected results; 2.3 Bibliographic references.

The examination tests are unique, and the merit ranking will be unique. The places put up for competition will be allocated, among the three curricula, according to the order in the merit list, until the places are filled.

Procedures for carrying out the tests for foreign candidates:

Foreign candidates may choose to take the entrance examination in Italian, English, French or Spanish.

The selection will take place based on the evaluation of the qualifications, the research project proposed by the candidate and an interview. Foreign candidates will have to demonstrate knowledge of a language other than that of their own country and sufficient knowledge of Italian. The applicant may also submit with the application two reference letters from scholars specialised in the proposed field of research, to accompany the research project.

Where it is not possible to do it in person, **foreign candidates** may ask to do it remotely with a motivated request. The motivated letter of request, together with the copy of an identity document, valid to travel abroad, must be uploaded on PICA web platform. It will be the responsibility of the commission to communicate the methods of connection.

Access requirements:

“Laurea magistrale” or “Laurea specialistica” (second cycle university degree, e.g., M.A., M.Sc.) in:

LM-1 Cultural anthropology and ethnology

LM-2 Archaeology

LM-3 Landscape architecture

LM-4 Architecture and building engineering-architecture

LM-4 c.u. Architecture and building engineering-architecture (five-year)

LM-5 Archival and library science

LM-10 Conservation of architectural and environmental heritage

LM-11 Science for the conservation of cultural heritage

LM-14 Modern Philology

LM-15 Philology, literature and history of antiquity

LM-23 Civil engineering

LM-24 Building Engineering systems

LM-35 Environmental and land use engineering

LM-43 Information technology methodologies for the humanities

LM-48 Urban and environmental spatial planning

LM-49 Planning and management of tourism systems

LM-50 Educational services planning and management

LM-75 Science and technology for the environment and territory

LM-76 Economic sciences for the environment and culture

LM-80 Geographical sciences

LM-84 Historical sciences

LM-88 Sociology and social research

LM-89 History of art

LMR/02 Conservation and restoration of cultural heritage

1/S (master's degree in cultural anthropology and ethnology)

2/S (master's degree in archaeology)

3/S (master's degree in landscape architecture)

4/S (master's degree in architecture and construction engineering)
5/S (master's degree in archival and library science)
10/S (master's degree in conservation of architectural and environmental heritage)
12/S (master's degree in conservation and restoration of historical and artistic heritage)
13/S (master's degree in publishing, multimedia communication and journalism)
15/S (master's degree in philology and literature of antiquity)
16/S (master's degree in modern philology)
24/S (master's degree in computer science for the humanities)
28/S (master's degree in civil engineering)
54/S (master's degree in urban and environmental planning)
55/S (master's degree in planning and management of tourism systems)
93/S (master's degree in ancient history)
95/S (master's degree in art history)
97/S (master's degree in medieval history)
98/S (master's degree in modern history)
Degree taken under the old Italian university system (prior to the one introduced by the Italian Ministerial Decree No. 509/99) in Humanities, Architecture, Engineering

Access requirements for graduates from foreign universities:

Equivalent foreign degree in the same scientific fields

Calendar and location of the entrance exam:

Qualifications Rating: July 29-31, 2024

Rating progetto: August 1-2, 2024

Oral exam: August 5-6-7, 2024, Santa Teresa dei Maschi, Via Torretta, old town, Bari, 9 a.m.

For further information, please consult the following Web address: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

PROFILE

PHD PROGRAM IN HISTORICAL AND PHILOSOPHICAL HERITAGE FOR SUSTAINABLE INNOVATION

CUN Scientific Areas: 10 Antiquities; Philology; Literary Studies; Art History11 – History, Philosophy, Pedagogy and Psychology; 13 – Economics and Statistics

Academic disciplines list for Italian University Research and Teaching: L-ANT/02, L-ANT/03, L-OR/21, M-FIL/01, M-FIL/03, M-FIL/04, M-FIL/06, M-FIL/08, M-STO/01, M-STO/02, M-STO/04, M-STO/05, M-STO/07, M-STO/09, SECS-P/12

Coordinator: Prof.ssa Elisabetta TODISCO

Lead Department: DIPARTIMENTO DI RICERCA E INNOVAZIONE UMANISTICA

E-MAIL: elisabetta.todisco@uniba.it

Duration: 3 years

Curricula: YES

1. PHILOSOPHICAL DISCIPLINES (Academic disciplines list for Italian University Research and Teaching: M-FIL/01 ; M-FIL/03 ; M-FIL/04 ; M-FIL/06 ; M-FIL/08 ; M-STO/05)
2. HISTORICAL DISCIPLINES (Academic disciplines list for Italian University Research and Teaching: L-ANT/02 ; L-ANT/03 ; L-OR/21 ; M-STO/01 ; M-STO/02 ; M-STO/04 ; M-STO/07 ; M-STO/09 ; SECS-P/12)

Total number of positions available: n. 14 of which:

- o with University scholarship: n. 3 of which no. 1 reserved for graduates from foreign universities
- o with scholarship pursuant to Ministerial Decree no. 629/24: no. 1
- o with scholarship pursuant to Ministerial Decree no. 630/24: no. 5
- o with scholarship co-financed by companies funded by “Patti territoriali dell’alta formazione per le imprese” – CUP: F61B23000370006 n. 5

POSITIONS WITH SCHOLARSHIP

- NO. 1 POSITION, FUNDED BY UNIVERSITY OF BARI, RESERVED TO CANDIDATES WITH DEGREES FROM FOREIGN UNIVERSITIES (not distributed among the curricula);

- NO. 5: CURRICULUM 1: PHILOSOPHICAL STUDIES, as follows:

- *no. 1 position with scholarship from the University of Bari with free project;*
- *no. 1 position with scholarship D.M.630/24*

Project title: “The underbelly of Bari. History “from below” of the city of Bari and its water-sewer network as a planning tool” (Topic: History of science)

Research Activity Description: The history of Bari has been written over and over again, almost believing that what happens on the surface is independent of life “underground.” It would be a matter of rewriting the history of the city from an unprecedented point of view: below. Research could show how mismanagement

of water has brought catastrophes, while more judicious and technologically alert management has led and will lead, in future planning, to undoubted benefits.

Co-financing company/body: Acquedotto

Pugliese S.p.A. Period abroad: 6 months

Period at the company/institution provided for by Ministerial Decree no. 630/24: 6 months

- **no. 1 position with scholarships co-funded by companies and “Patti territoriali dell’alta formazione per le imprese” – CUP: F61B23000370006**

Scholarship co-funded by TEATRO KOREJA soc. Coop.

Project title: “Performance Philosophy” (topic: History of philosophy)

Research Activity Description: The task of the research project will be to develop the philosophy of performance as a method, framing it as an alternative and performative paradigm to the philosophical approach of the arts that has historically dominated the approaches to aesthetics.

Period abroad: 6 months

Period at the company/institution: 6 months

- **no. 1 position with scholarships co-funded by companies and “Patti territoriali dell’alta formazione per le imprese” – CUP: F61B23000370006**

Scholarship co-funded by BTINKEENG s.r.l.

Project title: “Complexity Theories, Neural Networks and Algorithm Certification in Artificial Intelligence” (topic: History of philosophy)

Research Activity Description: Artificial Intelligence and its generative applications raise important normative issues that transversally affect almost all areas of knowledge. The project aims at investigating the relevance of the humanities, and philosophy in particular, for the management of Artificial Intelligence and the certification of algorithms in accordance with values such as equity and social sustainability.

Period abroad: 6 months

Period at the company/institution: 6 months

- **no. 1 position with scholarships co-funded by companies and “Patti territoriali dell’alta formazione per le imprese” – CUP: F61B23000370006**

Scholarship co-funded by PREDICT S.r.l

Project title: “History, business culture and innovation as social values” (topic: History of science)

Research Activity Description: Corporate culture and innovation research are sometimes understood as mere collections of strategies designed to optimize production and earnings. This does not correspond to the social function of many of the enterprises in the high tech sector in our area, which have been working for years to establish themselves as producers of culture and values. The project aims to reconstruct the history of high tech in the territory and identify business storytelling and communication strategies that resemantize the role of business culture as a driver of not only technological, but also democratic and social growth.

Period abroad: 6 months

Period at the company/institution: 6 months

- NO. 8: CURRICULUM 2: HISTORICAL STUDIES, as follows:

- **no. 1 position with scholarship from the University of Bari with free project;**

- **no. 1 position with scholarship D.M.629/24, typology 4.1. PNRR**

Project title: “The quality of life in Greek cities” (topic: Greek history)

Research Activity Description: The project aims to investigate, through the analysis of some categories of sources, what the perception of the quality of life and liveability was in the Greek cities of the Classical and Hellenistic periods, with particular reference to some specified areas, such as hygiene, safety, housing conditions and opportunities for socialising. Period abroad: 6 months

Transferring university: Università di Napoli l’Orientale

- **no. 1 position with scholarship D.M.630/24**

Project title: “History and Historiography of the “Southern Question” since 1944” (Topic: Contemporary History) Research Activity Description: This research deals with two issues: 1) how historiography has defined the Italian “Southern question” in relationship with extraordinary intervention and European community policies for South Italy; 2) digital cataloguing of texts and documents on the Southern issue, starting from those available at the Gramsci Foundation in Rome.

Co-financing company/body: Fondazione Gramsci Period abroad: 6 months

Period at the company/institution provided for by Ministerial Decree no. 630/24: 6 months

Transferring university: Università degli Studi di Foggia

- **no. 1 position with scholarship D.M.630/24**

Project title: “Gender identity and music: castrati in the Italian and European baroque panorama” (Topic: Modern History) Research Activity Description: The project, at the intersection of music history and gender history, looks at the figure of castrati, who will be studied, on the one hand, for their fluid identity and, on the other, for their role in the Italian and international artistic and cultural scenario. This is an analytical subject that also considers studies and reflections on transvestitism and gender fluidity in a historical perspective.

Co-financing company/body: 1) Fondazione Pietà de' Turchini e 2) Fondazione San Giuseppe dell'Opera di vestire i nudi Period abroad: 6 months

Period at the company/institution provided for by Ministerial Decree no. 630/24: 6 months

- **no. 1 position with scholarship D.M.630/24**

Project title: “Supplying Water to Southern Italy. The public body “Acquedotto Pugliese” and the policy of water in the second half of the 20th Century” (Topic: Contemporary History)

Research Activity Description: This interdisciplinary project focused on Water History will inquire two issues: 1) strategies of water supply and governance models of the “Acquedotto pugliese” in relationship with the extraordinary intervention for South Italy; 2) digital representation of the above through open source databases, digital maps and timelines.

Co-financing company/body: Acquedotto Pugliese S.p.A. Period abroad: 6 months

Period at the company/institution provided for by Ministerial Decree no. 630/24: 6 months

- **no. 1 position with scholarship D.M.630/24**

Project title: “Matteotti's “fortune” in the Italian republic. Institutional, political and communicative features” (Topic: Contemporary History)

Research Activity Description: This research, which is part of the inquiries for the Centenary of Matteotti's murder, hinges on two issues: 1) public memory of Giacomo Matteotti after 1945 in Italy and abroad: periodization, forms of transmission, political and cultural heritage; 2) digital edition of Matteotti's writings and of the most relevant documents of his public commemoration after 1945, with metadata and linguistic and syntactic analysis.

Co-financing company/body: Fondazione di studi storici Filippo Turati Period abroad: 6 months

Period at the company/institution provided for by Ministerial Decree no. 630/24: 6 months

- **no. 1 position with scholarships co-funded by companies and “Patti territoriali dell'alta formazione per le imprese” – CUP: F61B23000370006**

Scholarship co-funded by GD SERVICES S.r.l Project title: “Puglia in gioco” (topic: Roman History)

Research Activity Description: Historical-themed gaming represents an important resource in various fields of use and development; however, in the phase of video game design, historical sources and scientific studies are largely neglected: thus, we are faced with stories rich in stereotypes and trivializations. Therefore, the research project proposes: 1) the analysis of video games set in Roman history, evaluating in them the possible contribution of ancient sources, studies, and research regarding the themes in question; 2) the creation of an innovative game concept and a demo, centered around a phenomenon from ancient Roman history set in Roman Apulia, resulting from studies and research, and aimed at promoting problem-solving skills applicable in various fields.

Period abroad: 6 months

Period at the company/institution: 6 months

- **no. 1 position with scholarships co-funded by companies and “Patti territoriali dell'alta formazione per le imprese” – CUP: F61B23000370006**

Scholarship co-funded by LEADER s.c.c.

Project title: "Women saints, sacred Paths and the Sea: Women's cults, Christian Traditions, Devotions in Apulia and the Mediterranean. Historical Routes, Religious Tourism and Cultural Routes" (topic: History of Christianity and Church History)

Research Activity Description: The project fosters proposals aimed at promoting historical research on devotions and traditions related to the feminine dimension and the Mediterranean Sea. It encourages research on biblical and extra-biblical saints and cross-religious experiences, including contemporary ones, related to female figures/cults. An expansion on cultural itineraries, in connection with the traditions of the areas involved in the research, is also encouraged.

The project responds to the need for sustainable and seasonal tourism in the Puglia region. Period abroad: 6 months

Period at the company/institution: 6 months

Selection procedure will be different for each curriculum and within this by type of position or project. The final ranking list of each curriculum are dealt with separately and then they will feed into one general ranking list.

For each curriculum, according to the type of position or project, PhD posts will be allocated based on the ranking list. Non allocated posts due to a lack of successful candidates in one curriculum will be attributed to another curriculum, always following the general ranking list of these positions.

Candidates must indicate in attachment A), which represents integral part of this call, the choice of one curriculum. Furthermore, whoever intends to compete for a scholarship on a specific topic must specify the title of the research project for which she/he is competing.

Admission procedures for ordinary places:

The exam procedures will be taken in accordance with art. 6 lett. B) of the call.

Selection of candidates will be based on qualifications, research project (to be sent together with the application), oral examination and on the foreign language skills assessment based on what has been indicated in the application (English, French, German or Spanish).

Procedures for carrying out the tests for foreign candidates:

Foreign candidates can choose to take the entrance examination in Italian or English.

Calendar and location of the entrance exam:

Qualifications Rating: July 31, 2024

Rating of Proposed project: August 1st, 2024

Oral exam: August 2, 2024, Sala Giunta, Palazzo Ateneo, second floor, P.zza Umberto I, 70121 Bari, at 10:30 A.M.

Admission procedures for places reserved for graduates of foreign universities: The selection will take place in accordance with Article 17, procedure 2, of the call. The exam will be based on qualifications and oral examination.

Procedures for carrying out the tests for foreign candidates:

Foreign candidates may choose to take the entrance exam in Italian or English.

Calendar and location of the entrance exam for graduates of foreign universities:

Qualifications Rating: July 31, 2024

Oral exam: August 2, 2024.

Where it is not possible to do it in person, candidates may ask to do it remotely with a motivated request. The motivated letter of request, together with the copy of an identity document, valid to travel abroad, must be uploaded on PICA web platform. It will be the responsibility of the commission to communicate the methods of connection.

For further information, please consult the following Web address:

<https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 20)

PROFILE

PHD PROGRAM IN ANIMAL HEALTH AND ZOOZOSIS

CUN Scientific Areas: 07, 06

Academic disciplines: VET/02, VET/03, VET/04, VET/05, VET/06, MED/44

Coordinator: Prof. Maria TEMPESTA

Administrative Office: Department of VETERINARY MEDICINE

PEC: direttore.dimev@pec.uniba.it

Duration: 3 years

Curricula: NO

Total number of places available: n. 9 n

- with University scholarship: no. 3
- with scholarship pursuant to Ministerial Decree no. 630/24: no. 3
- with scholarship from external sources: no. 1
- without scholarship: no. _2

POSITIONS WITH SCHOLARSHIP

3 positions with University scholarship

D.M.630/24

1. Avviso: D.M.630/24

- **Project title and scholarship theme:** Investigation on *Leishmania tarentolae* of reptiles: hindrances and opportunities for the control of leishmaniases in dogs and humans
- **Research Activity Description:** The PhD student will study the interactions between reptilian *Leishmania tarentolae* and mammalian *Leishmania infantum* from an epidemiological, clinical and molecular perspective. In addition, diagnostic and immunological aspects of cytokine production in in vivo and in vitro models will be investigated.
- **Co-financing company:** Boehringer Ingelheim Animal Health 29 Av Tony Garnier Lyon 69007 France
- **Period abroad:** 6 months
- **Period at the company provided for by Ministerial Decree no. 630/24:** 6 months

2. Avviso: D.M.630/24

- **Project title and scholarship theme:** metodologie analitiche innovative per la gestione integrata della tracciabilità di filiera (DNA INVESTIGATE)
- **Research Activity Description:** The research activity is aimed at the identification and application of molecular analytical methodologies for the implementation of innovative molecular traceability/traceability systems, aimed at enhancing the entire seafood supply chain, protecting the safety and authenticity as well as the sustainability of food chains of animal origin. The research activity is specifically aimed at providing the company with advanced molecular analytical solutions to optimise the integrated management of the data flow and the logistic and product identification processes of the supply chain, as well as the communication between the different business partners, in support of an accurate and advanced supply chain management.
- **Co-financing company:** LEPORE MARE SPA Impresa, Via Dell'Agricoltura, 22/24, Fasano (BR), Italy

- **Period abroad:** 6 months
 - **Period at the company provided for by Ministerial Decree no. 630/24:** 6 months
3. **Avviso: D.M.630/24**
- **Project title and scholarship theme:** Mosquito Alert: an innovative 'citizen science' smart tool to control mosquitoes in Italy by involving the citizen
 - **Research Activity Description:** The PhD student will monitor the population of Culicidae (Insecta: Diptera) in the urban area by capturing eggs, larvae and adults. The use of the MosquitoAlert app will be a tool for the urban 'citizen science' population to report the spread of mosquitoes. In addition, insecticide-resistance phenomena to the main synthetic pyrethroids will be assessed.
 - **Co-financing company:** Ecologic Systems Via Grandi, 38 - 00045 Genzano di Roma (RM) Italy
 - **Period abroad:** 6 months
 - **Period at the company provided for by Ministerial Decree no. 630/24:** 6 months
- **1 position with scholarship** from external source
 - **Project title and scholarship theme:** Exploring the role of wild animals as coronavirus reservoir
 - **Research Activity Description:** The project intends to explore the role of wild animals as reservoirs of coronaviruses by investigating the presence of these viruses in Italian wildlife, analysing the shedding duration, replication sites and prevalence among different animals. Molecular characterisation of the circulating strains is essential for potential cross species transmission.
 - **Financing body:** Istituto Superiore di Sanità, Viale Regina Elena, 299, 00161 Roma, Italy
 - **Period abroad:** 6 months

2 POSITIONS WITHOUT SCHOLARSHIP

Admission procedures for ordinary places:

The selection will take place in accordance with Article 6 procedure B of the call.

The examination will be based on the evaluation of candidate qualification, proposed project written in English, oral interview on curriculum and project, and foreign language knowledge checking (English).

Procedures for carrying out the tests for foreign candidates:

Foreign candidates may choose to take the entrance exam in English language

Calendar and location of the entrance exam:

Qualifications Rating: 31st July 2024:

Rating project: 31st July 2024:

Oral exam: 2nd August 2024 hr 9.30 a.m. (CET) for Italian candidates onsite at the library of the Section of Infectious Diseases of the Department of Veterinary Medicine, sp 62 Casamassima km 3, Valenzano (BARI).

For foreign candidates: Where it is not possible to do it in person, candidates may ask to do it remotely with a motivated request. The motivated letter of request, together with the copy of an identity document, valid to travel abroad, must be uploaded on PICA web platform. It will be the responsibility of the commission to communicate the methods of connection.

The time of the interviews will be published on the webpage of the doctorate at the link:

https://www.uniba.it/it/ricerca/dipartimenti/dipmedveterinaria/didattica-1/dottorato-di-ricerca/dott_ric/phd-presentation-1/xl

For further information, please consult the following Web address:

<https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 21)

PROFILE

PhD PROGRAM IN PUBLIC HEALTH, CLINICAL MEDICINE, AND ONCOLOGY

CUN Scientific Areas: 05 – Biological Sciences / 06 – Medical Sciences / 12 – Legal Sciences

Academic disciplines: BIO/14 - MED/01 – MED/06 - MED/09 - MED/12 – MED/16 – MED/17 - MED/18 – MED/35, MED/38 - MED/40 - MED/42 - MED/46 – MED/49 - IUS/09

Coordinator: Prof. Jean-François Desaphy

Administrative office: Department of Precision and Regenerative Medicine and Ionian Area

PEC: direzione.dimeprej@pec.uniba.it

Duration: 3 years

Curricula: NO

Total number of available positions: n. 8 as follows

- n. 4 positions with University scholarship
- n. 1 position with scholarship pursuant to Ministerial Decree no. 630/24
- n. 1 position with scholarship co-financed by companies
- n. 2 positions without scholarship

POSITIONS WITH SCHOLARSHIP

- ***n. 4 positions with University scholarship***

Candidates must present a research project related to the research topics developed in the Doctorate, as highlighted by the academic disciplines.

- ***n. 1 position with scholarship pursuant to MD 630/24***
 - **Project Title:** Machine Learning-based systems to support the diagnosis and treatment of endometritis and cervical diseases
 - **Research Activity Description:** Diagnoses of endometritis and cervical disease require a great deal of operational expertise and, often, provide clear indications only in the more advanced stages of the disease. The use of Machine Learning techniques has already been shown to provide valuable diagnostic support to anticipate diagnosis at earlier stages, reduce risk margins, and improve clinical outcomes. The need to develop advanced skills in the knowledge and use of these techniques and to initiate data collection and analysis campaigns emerges as a priority for a future obstetrics-gynecology researchers (SSD MED/40).
 - **Co-financing company:** Asclepsyus srl (Lecce)
 - **Period abroad:** minimum 6 months at the University of Medicine of Tirana (Albany)
 - **Period at the company provided for by Ministerial Decree no. 630/24:** minimum 6 months
- ***n. 1 position with scholarship co-financed by companies***
 - **Project Title:** RARE-FMF
 - **Co-financing company:** Associazione Malattie Rare dell'Alta Murgia (A.Ma.R.A.M.), Altamura (BA)
 - **Research activity description:**

The project aims to explore the role of genotype-phenotype interactions in the course of clinical manifestations and in therapeutic outcomes in a group of patients with Familial Mediterranean Fever (FMF), living in the geographical area of the Alta Murgia Barese. The collaboration between universities, international research centers and patient associations will contribute to create interaction paths useful for improving diagnosis, management of disease, therapy and the knowledge of pathophysiological mechanisms able to mediate the effects of environmental variables (e.g., diet, lifestyles) on specific genotypes detected in patients with FMF and living in different geographical areas.

The periods of study at the company and abroad will be aimed at evaluating gene-environment interactions in patients with FMF through environmental, demographic, epidemiological data and laboratory analyses (genotype, inflammasome, inflammation mediators). At the University of Bari, the doctoral student's activity will take place at the Clinica Medica "Augusto Murri" (Director Prof. P. Portincasa), a center characterized by healthcare activities (inpatient and outpatient activities) and by consolidated research experience at a national and international level. The center directed by Prof. Portincasa has developed specific skills in epidemiology, clinical and nutritional management, in preventive medicine and in various pathophysiological aspects in the general field of Internal Medicine. In particular, the Clinica Medica "A. Murri" has developed a relevant expertise in the study of clusters of patients with FMF living in Apulia. This center is currently a reference hub for FMF in Apulia.

The Student will contribute to the implementation of innovative research strategies and will improve linguistic and digital skills, as well as at knowledge of European and international research strategies. A particular relevance will be attributed to the valorization of research results through:

- Specific workshops, to improve the linguistic skills necessary for academic and professional communication, as well as information technology skills for the efficient management of data and for the production of valuable scientific data.

- Research management training sessions, which will include topics as planning and execution of research projects, data management, scientific communication and international collaboration.

- Seminars and meetings with industry experts, to discuss different research funding opportunities, international mobility and collaboration programs, as well as best practices for participating in international research projects.

- **Period abroad:** minimum 6 months in the Laboratory of Medical Immunology, Department of Internal Medicine and Pediatrics, University of Ghent (Belgium). This center, directed by Prof. M. Lamkanfi, has developed particular expertise in the epidemiology, management and pathophysiology of Familial Mediterranean Fever (FMF).

- **Period at the company:** minimum 6 months

POSITIONS WITHOUT SCHOLARSHIP

- *n. 2 positions without University scholarship*

Candidates must present a research project related to the research topics developed in the Doctorate, as highlighted by the academic disciplines.

Admission procedure: The selection will take place in accordance with article 6 letter B of the call.

The selection will be made based on scientific qualifications, examination of an original research project coherent with the PhD topics, and an interview including the discussion of the project.

The research project (max. 10.000 chars including spaces, either in Italian or in English) has to be previously sent by the candidate together with the admission application. This is mandatory: missing of the project will be cause of exclusion from the competition.

The interview will focus on random questions regarding topics of the PhD course and on the discussion of the research project provided for by the candidate, taking in consideration originality, scientific rigor, and relevance to the PhD topics. Knowledge of English language will be also verified.

Specificity for foreign candidates:

Foreign candidates will have the opportunity to take the examination in Italian or English.

Place and schedule of the examination:

Qualification rating: 31/07/2024

Rating of proposed project: 01/08/2024

Interview: 06/08/2024

The interview will take place in the Pharmacology Classroom, Biological Institute, Bari Polyclinic

For more information, please visit the website:

<https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 22)

PROFILE

PHD PROGRAM IN IN CHEMICAL AND MOLECULAR SCIENCE

CUN Scientific Areas: 03 Chemical Science

Academic disciplines: CHIM/01, CHIM/02, CHIM/03, CHIM/06 and CHIM/12

Coordinator: Prof. Pietro Favia

Administrative Office: Department of Chemistry

PEC: direttore.chimica@pec.uniba.it

Duration: 3 years

Curricula:

- 1) Advanced chemical processes (Scientific Subject Codes CHIM/01, CHIM/02, CHIM/03, CHIM/06)
- 2) Chemistry of innovative materials (Scientific Subject Codes CHIM/01, CHIM/02, CHIM/03, CHIM/06)
- 3) Chemistry of biological systems (Scientific Subject Codes CHIM/01, CHIM/02, CHIM/03, CHIM/06 and CHIM/12)

Total number of available positions n. 9:

- n. 5 positions with University scholarship;

POSITIONS WITH SCHOLARSHIP

- ***n.5 positions with University scholarship***

Admission procedures for ordinary places:

The exam procedures will be taken in accordance with art. 6 lett. C.

The selection process will include the evaluation of the titles and oral exams as well as a verification of the knowledge of English language.

The oral examination will deal with the fundamentals of Chemistry from the main topics of the bachelor (Laurea Triennale) degree in Chemistry, the research interests of the candidates related to the PhD in Chemical and Molecular Sciences and the research project submitted by the candidates.

The exams are unique and the ranking list will be unique.

The available positions will be assigned according to the ranking list.

Procedures for carrying out the tests for foreign candidates:

Foreign candidates may choose to take the entrance exam in Italian or in English.

Calendar and location of the entrance exam:

Qualifications Rating: July 31st, 2024;

Oral exam: August 1st, 2024 at 09:00 a.m.

Venue: Dipartimento di Chimica – Aula 1 – Ground floor - Campus Universitario - Via Orabona, 4 – 70125 Bari (Italy)

For further information, please consult the following Web address:

<https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 23

PROFILE

PhD PROGRAMME IN Veterinary Internal, Surgical and Obstetrical Clinical Sciences

CUN Scientific Areas: 07 Agrarian and Veterinary Sciences

Scientific Subject Codes: VET/07, VET/08, VET/09, VET/10

Coordinator: Prof. Andrea Zatelli

Administrative office: Department of Veterinary Sciences, UNIBA

PEC: direttore.dimev@pec.uniba.it

Duration: 3 years

Curricula: NO

Total number of places available: n. 6

- position with University scholarship: n.4;
- position pursuant with scholarship pursuant to ministerial decree n.630/24: n.1;
- without scholarships: n. 1.

POSITIONS WITH SCHOLARSHIP

- **N. four positions with University scholarship.**
- **D.M. 630/24**

Notice: D.M.630/24

Project Title: REPRODUCTIVE ANOMALIES AND GENETIC DISORDERS IN DOMESTIC ANIMALS

Scholarship theme: medical, pharmaceutical and veterinary medical sciences

Research activity description: Gentile di Puglia is an autochthonous sheep breed of Southern Italy included among breeds threatened by genetic erosion and extinction risk, which have been given attention by local and international institutions, thus emphasizing the need for conservation actions. Reproductive anomalies and genetic disorders in this species represent a crucial field of study for animal health, welfare, and breed conservation. This project aims to investigate the main reproductive anomalies and genetic disorders, analyzing the causes, consequences and possible management and prevention strategies.

Co-financing company/Body: Azienda Agricola Dr. Giuseppe Bramante.

VAT: 01290770716

Address: Corso Umberto I, n.44 - 71013 San Giovanni Rotondo (FG)

Web site: www.giuseppebramante.it

Country: Italia

Preriod abroad: 6 months

Period at the Company/Institution provided by Ministerial decree n.630/24: 6 months

POSITIONS WITHOUT SCHOLARSHIP

One position

Admission procedures for ordinary places: The selection will be based on titles, the evaluation of the research project regarding the themes of the doctorate, and an oral examination. The research project will be preventively sent by the candidate together with the admission documents. The research project (maximum 3000 words excluding the bibliography) is mandatory for the admission to the oral examination and should include at least the following fields: scientific background, aim of the study, methodology (including the statistical analysis),

expected results, perspectives and possible advantages. The candidate will be admitted to the oral examination only if the evaluation of the titles and research project got a positive evaluation. During the oral examination, the knowledge of the English language, will be also evaluated.

Admission tests for foreigners

Admission exam dates and time:

Qualification: 31/07/2024 at 09.30 am

Proposed project: 31/07/2024 at 03.00 pm

Oral interview: 01/08/2024 at 09.30 am Aula V Anno Campus di Medicina Veterinaria (UNIBA) or Teams

(<https://teams.microsoft.com/l/meetup-join/19%3a-2ZwwBOM->

[mwGrqHtUOM4auSuLFhs1a2rIQG09glhixk1%40thread.tacv2/1718032240169?context=%7b%22tid%22%3a%22c6328dc3-afdf-40ce-846d-326ead86d49%22%2c%22oid%22%3a%225eba3b50-7084-4c56-a069-](https://teams.microsoft.com/join/mwGrqHtUOM4auSuLFhs1a2rIQG09glhixk1%40thread.tacv2/1718032240169?context=%7b%22tid%22%3a%22c6328dc3-afdf-40ce-846d-326ead86d49%22%2c%22oid%22%3a%225eba3b50-7084-4c56-a069-79da77618904%22%7d)

[79da77618904%22%7d](https://teams.microsoft.com/join/mwGrqHtUOM4auSuLFhs1a2rIQG09glhixk1%40thread.tacv2/1718032240169?context=%7b%22tid%22%3a%22c6328dc3-afdf-40ce-846d-326ead86d49%22%2c%22oid%22%3a%225eba3b50-7084-4c56-a069-79da77618904%22%7d)).

Where it is not possible to do it in person, foreign candidates may ask to do it remotely with a motivated request. The motivated letter of request, together with the copy of an identity document, valid to travel abroad, must be uploaded on PICA web platform. It will be the responsibility of the commission to communicate the methods of connection.

For more information see the website:

For further information, please consult the following Web address:

<https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 24)

PROFILE

PHD PROGRAM IN _Pharmaceutical Sciences

CUN Scientific Areas: 03 Chemical sciences; 05 Biological sciences

Academic disciplines: CHIM/08; CHIM/09; CHIM/01; CHIM/06; BIO/14;

Coordinator: Prof. COLABUFO NICOLA ANTONIO

Administrative Office: Department of Pharmacy- Pharmaceutical Science

PEC: direzione.farmacia@pec.uniba.it

Duration: 3 years

Curricula: NO

Total number of places available: n. 8

- *University scholarships: 4 (four)*

- *scholarships funded on international projects:*

n 1 (one) position for: **REACH-XY (Research action for reducing the impact on agricultural and natural ecosystems of the harmful plant pathogen Xilella Fastidiosa. (CUP: B93C22001920001)**

Periodo presso ente estero: 6 mesi

- Scholarship funded by M.D. 630/24: n. 2
- Scholarship funded by “Patti territoriali dell’alta formazione per le imprese” – CUP: **F61B23000370006: n. 1**

POSITIONS WITH SCHOLARSHIP

- **D.M.630/24**
- 1. **1 (one) Position: D.M.630/24**
 - **Project title and scholarship theme:** Preparation and Validation of deuterated standards for food health.
 - **Research Activity Description:** Validation of chemical-pharmaceutical and analytical methods for food health
 - **Co-financing company/body:** Lab.Instruments
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months.
- **D.M.630/24**
- 1 (one) **Position: D.M.630/24**
 - **Project title and scholarship theme:** In vivo and in vitro translational research on the therapeutic potential of neutrophins in the cross-talk between the CNS and skeletal muscle: aging and neurodevelopmental pathologies.

- **Research Activity Description:** Definition of therapeutic and nutraceutical strategies aimed at counteracting the functional and structural decay of skeletal muscle
- **Co-financing company/body:** Dompè Farmaceutici
- **Period abroad:** minimum 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months.
- **1 position (one) for Scholarships co-financed with company**
 1. **Scholarship co-funded: . Territorial pacts**

Project title and scholarship theme: Formulation of modified release systems for biostimulants and fertilizers.

Co-financing company. Timac Agro Italia SPA

- **Period abroad:** 6 months

Research Activity Description: Creation of microparticulates using innovative techniques for the encapsulation of biostimulants and fertilizers.

Admission procedures for ordinary places:

The selection will take place in accordance with Article 6 letter B) of the call.

The exam will be based on the evaluation of qualifications, a research project and an interview on the research topics relating to the Pharmaceutical Sciences Doctorate with simultaneous evaluation of knowledge of the English language.

Procedures for carrying out the tests for foreign candidates:

Foreign candidates may choose to take the oral exam in English. Where it is not possible to do it in person, **foreign candidates** may ask to do it remotely with a motivated request. The motivated letter of request, together with the copy of an identity document, valid to travel abroad, must be uploaded on PICA web platform. It will be the responsibility of the commission to communicate the methods of connection.

Calendar and location of the entrance exam:

Qualifications Rating: 31 July 2024 - 9:30 am

Rating progetto: 1st August 2024 – 10:00 am

Oral exam: 1st August 2024 – 3:00 pm (Pharmacy and Drug sciences Department – Room 6 - via Orabona 4, 70125, Bari)

For further information, please consult the following Web address: For further information, please consult the following Web address:

<https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 25)

PROFILE

PhD PROGRAMME IN SOIL AND FOOD SCIENCE

CUN Scientific Areas:02 - Physical Sciences, 03 – Chemical sciences, 05 – Biological Sciences, 06 – Medical sciences, and 07 – Agriculture and veterinary sciences

Scientific Subject Codes: AGR/01, AGR/02, AGR/04, AGR/09, AGR/13, AGR/15, AGRI/16, AGR/19, BIO/11, BIO/12, CHIM/01, CHIM/06, CHIM/10, FIS/07, MED/09, MED/12 e MED/38

Coordinator: Prof. Fabio MINERVINI

Administrative office: Dipartimento di Scienze del Suolo, della Pianta e degli Alimenti

PEC: disspa@pec.uniba.it

Duration: 3 years

Curricula:

- 1) Food microbiology, technology, safety and chemistry (Scientific education sectors AGR/01, AGR/04, AGR/09, AGR/15, AGRI/16, AGR/19, BIO/11, BIO/12, CHIM/01, CHIM/10, FIS/07, MED/09, MED/12, and MED/38);
- 2) Agricultural chemistry (Scientific education sectors: AGR/01, AGR/02, AGR/13, and CHIM/06).

Total number of positions with scholarship: **14**, as follows:

- n. 5 PhD scholarships funded by D.M. n. 630/24 - Mission 4, component 2 "From Research to Business" - Investment 3.3 "Introduction of Ph.D. course that respond to the innovation needs of companies and promote the recruitment of researchers from companies" for curriculum 1).
- n. 4 PhD scholarships co-funded by companies.
- n. 1 PhD scholarship funded by project MARV.E.L., reserved to graduates at foreign Universities, for curriculum 1).
- n. 1 PhD scholarship funded by project MARV.E.L., reserved to graduates at foreign Universities, for curriculum 2).
- n. 2 PhD scholarships of the University of Bari Aldo Moro for curriculum 1).
- n. 1 PhD scholarship of the University of Bari Aldo Moro for curriculum 2).

Short descriptions for the projects funded by D.M. n. 630/2024 – Mission 4, component 2 "From Research to Business" - Investment 3.3 "Introduction of Ph.D. course that respond to the innovation needs of companies and promote the recruitment of researchers from companies".

PhD scholarship n.1

- **Project:** Technological developments for the sustainable production of functional ingredients from legumes and minor cereals to high degree innovation application in foods (**curriculum 1: Food microbiology, technology, safety and chemistry**).
- **Description of research activity:** The project involves the research, development and optimization of technological solutions for obtaining "green" protein ingredients, with nutritional, technological and sensorial characteristics suitable for use in innovative food products. The activities will follow the principles of green economy and circular economy, promoting the use of local resources (legumes, cereals and pseudocereals) and protein by-products of the food industry.
- **Company:** Innovaprot s.r.l., Gravina in Puglia
- **Period of study and research abroad:** 6 months (VTT Technical Research Centre, Finland).
- **Period of study and research in the company:** 6 months.

PhD scholarship n.2

- **Project:** Development of advanced analytical techniques and reference materials in the study of the potential release of chemical compounds from innovative bioactive food packaging (**curriculum 1: Food microbiology, technology, safety and chemistry**).
- **Description of research activity:** The proposed research project involves the evaluation of the potential release of volatile organic compounds from films made for bioactive and sustainable food packaging (obtained, for example, from agri-food waste). The increase in the shelf life of foods can also be achieved using essential oils with antimicrobial character which, appropriately functionalized in the material that constitutes the film, are food grade and suitable for the type of food, in order not to significantly alter its organoleptic characteristics. To this end, the films created require analytical characterization and evaluation of the residues potentially released on the food.
 - **Company:** Lab Instruments, Putignano-Alberobello (BA)
 - **Period of study and research abroad:** 6 months (University of Almeria Alba, Spain).
 - **Period of study and research in the company:** 18 months.

PhD scholarship n.3

- **Project:** Baked products with a high nutritional profile: from design with alternative ingredients to the effects on health (**curriculum 1: Food microbiology, technology, safety and chemistry**).
- **Description of research activity:** The Ph.D. project aims to train a figure of high scientific qualification who can support the formulation of traditional and innovative baked products with a high nutritional profile, also thanks to the collaboration with doctors and nutritionists. The aim of the Ph.D. project will therefore be to train a professional figure with solid knowledge and skills in food technologies who, together with corporate experience and experience in foreign research facilities, can be a reference for innovation and research needs.
 - **Company:** Laurieri s.r.l., Matera
 - **Period of study and research abroad:** 6 months (Universitat Politècnica de València, Spain).
 - **Period of study and research in the company:** 6 months.

PhD scholarship n.4

- **Project:** Biotechnological innovations for the reduction of microbiological risk in the dairy supply chain (**curriculum 1: Food microbiology, technology, safety and chemistry**).
- **Description of research activity:** The research project aims to develop and transfer innovation to the dairy industry, supporting it in the creation of innovative solutions that can reduce the microbiological risk and/or counteract the development of deteriorating microorganisms that lead to obtaining of cheeses of unacceptable quality and which as such become waste.
 - **Company:** Caseificio Malù, Martina Franca (TA)
 - **Period of study and research abroad:** 6 months (UMR SayFood, INRAE, AgroParisTech, Université Paris-Saclay, France).
 - **Period of study and research in the company:** 6 months.

PhD scholarship n.5

- **Project:** Innovative functional foods: Set-up of biotechnological processes, design and marketing strategies (**curriculum 1: Food microbiology, technology, safety and chemistry**).
- **Description of research activity:** The research project aims to develop and transfer innovation to the bakery products industry, supporting it in the creation of innovative solutions that can improve the nutritional and functional profile and prolong the shelf life of baked products without the addition of additives. Furthermore, the project aims to detect the attitudes and preferences of Italian consumers regarding the consumption of alternative baked products, which are healthier and achieved through a sustainable baking technological process, and with a digital traceability system.
 - **Company:** Vallefiorita s.r.l., Ostuni (BR)
 - **Period of study and research abroad:** 6 months (to be defined).
 - **Period of study and research in the company:** 6 months.

Short descriptions for scholarships co-funded by companies.

PhD scholarship n.6

- **Project:** Study for the formulation of innovative baked products from durum wheat semolina and increase in their shelf life (**curriculum 1: Food microbiology, technology, safety and chemistry**).
- **Description of research activity:** The Ph.D. project aims to train a figure of high scientific qualification who can translate company problems, mainly the stability of oils during cooking, into suitable and coherent research activities aimed at satisfying of the needs highlighted. The aim of the doctoral project will therefore be to train a professional figure with solid knowledge and skills in food technologies who, together with corporate experience and experience in foreign research facilities, can be a reference for innovation and research needs.
- **Company:** Panbiscò s.r.l., Altamura (BA)
- **Period of study and research abroad:** 6 months (University of Agricultural Sciences and Veterinary Medicine, Romania).
- **Period of study and research in the company:** 6 months.

PhD scholarship n.7

- **Project:** Innovative applications of essential oils for the sanitization of environments and surfaces using advanced technologies (**curriculum 1: Food microbiology, technology, safety and chemistry**).
- **Description of research activity:** The research project aims to select essential oils already classified as Food grade that can be used for their therapeutic, antimicrobial and phytotherapeutic properties to replace synthetic organic compounds for formulation as exosomes within the “Chemicals Strategy for Sustainability” (Css), a regulatory framework included in the European Green Deal which provides for the reduction of toxic substances in consumer products.
- **Company:** Sensosan Società Benefit s.r.l., Rome
- **Period of study and research abroad:** 6 months (Germany).
- **Period of study and research in the company:** 12 months.

PhD scholarship n.8

- **Project:** Development of sustainable strategies for effective delivery of probiotics and bioactive compounds (**curriculum 1: Food microbiology, technology, safety and chemistry**).
- **Description of research activity:** Both probiotics and bioactive compounds have to overcome, during gastro-intestinal transit, several hurdles in order to benefit human health. Therefore, the project aims to develop sustainable formulations that allow probiotics/bioactive compounds to be optimally effective.
- **Company:** Giuliani, Milano
- **Period of study and research abroad:** 6 months (to be defined).
- **Period of study and research in the company:** 6 months.

PhD scholarship n.9

- **Project:** Application of vacuum prior to the centrifugal separation of oils from olives, avocados, and other agri-food processes (**curriculum 1: Food microbiology, technology, safety and chemistry**).
- **Description of research activity:** The proposed scientific research, in addition to consolidating the results in the sector of olive oil extraction in all its applications (first and second extraction), plans to explore the application of the method in oil extraction of avocado and other agri-food processes (juices, vegetable and animal proteins).
- **Company:** Alfa Laval Italy Srl, Poggibonsi (SI)
- **Period of study and research abroad:** 6 months (Alfa Laval Copenhagen A/S, Copenhagen).
- **Period of study and research in the company:** 6 months.

PhD scholarship n. 10 of the University of Bari Aldo Moro (**curriculum 2: Agricultural chemistry**).

PhD scholarship n. 11 of the University of Bari Aldo Moro (**curriculum 1: Food microbiology, technology, safety and chemistry**).

PhD scholarship n. 12 of the University of Bari Aldo Moro (**curriculum 1: Food microbiology, technology, safety and chemistry**).

PhD scholarship n. 13 funded by project MARV.E.L. reserved to graduates at foreign Universities (**curriculum 1: Food microbiology, technology, safety and chemistry**).

PhD scholarship n. 14 funded by project MARV.E.L. reserved to graduates at foreign Universities (**curriculum 2: Agricultural chemistry**).

Application Requirements:

The selection will be made following the art. 6 letter B of the call.

The examination will be based on the evaluation of candidate qualification, proposed research project on the specific selected thematic and oral interview (on submitted documentation and research project) and foreign language knowledge checking (English).

Admission tests for foreigners:

Foreign candidate may choose to use English or Italian language during the oral interview. In case a foreign candidate would choose to use English during the oral interview, the Committee will evaluate the knowledge of Italian language during the oral interview.

Admission exam date and time:

Evaluation of qualifications: July, 31st, 2024

Evaluation of research project: August, 1st, 2024

Oral interview: August, 2nd, 2024 at 9:00 am (CEST), in the room "Aula Fazio" (*alias* Aula XI) of the Department of Plant, Soil and Food Sciences, Via Amendola 165/A. 70126, Bari

ON-LINE oral interviews (ONLY UPON MOTIVATED REQUEST BY THE CANDIDATE):

<https://meet.google.com/nub-xorg-cwm>

Application Requirements for PhD scholarships reserved to graduates at foreign Universities:

The selection will be made following the art. 17 of the call.

The examination will be based on the evaluation of candidate qualification, proposed research project on the specific selected thematic and oral interview (on submitted documentation and research project) and Italian language knowledge checking.

Admission exam date and time:

Evaluation of qualifications: July, 31st, 2024

Evaluation of research project: August, 1st, 2024

Oral interview: August, 2nd, 2024 at 4:00 pm (CEST), in the room "Aula Fazio" (*alias* Aula XI) of the Department of Plant, Soil and Food Sciences, Via Amendola 165/A. 70126, Bari

ON-LINE oral interviews (ONLY UPON MOTIVATED REQUEST BY THE CANDIDATE):

<https://meet.google.com/qjg-phkq-bcq>

For further information, please consult the following Web address:

<https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 26)

PROFILE

PHD PROGRAM IN HUMAN RELATIONS' SCIENCES

CUN Scientific Areas: 11a, 11b, 10, 13, 6

Academic disciplines: L-ART/05, L-LIN/03, L-LIN/04, L-LIN/10, L-LIN/12, M-FIL/01, M-GGR/02, M-PED/01, M-PED/02, M-PED/03, M-PED/04, M-PSI/01, M-PSI/02, M-PSI/03, M-PSI/04, M-PSI/05, M-PSI/06, M-PSI/08, MED/43, M-FIL/05, SECS-S/01, SECS-P/08

Coordinator: Prof. Alessandro Oronzo Caffò (pro tempore)

Administrative Office: Department of Educational Sciences, Psychology,
Communication PEC: direttore.forpsicom@pec.uniba.it

Duration: 3 years

Curricula: YES

1. LINGUISTIC AND INTERCULTURAL DYNAMICS OF COMMUNICATION (Scientific Disciplinary Sectors: L-ART/05, L-LIN/03, L-LIN/04, L-LIN/10, L-LIN/12, M-GGR/02, M-FIL/05)
2. TRAINING DYNAMICS AND POLITICAL EDUCATION (Scientific Disciplinary Sectors: M-PED/01, M-PED/02, M-PED/03, M-PED/04, SECS-S/01, SECS-P/08)
3. PSYCHOLOGY: COGNITIVE, EMOTIONAL AND COMMUNICATIVE PROCESSES (Scientific Disciplinary Sectors: M-FIL/01, M-PSI/01, M-PSI/02, M-PSI/03, M-PSI/04, M-PSI/05, M-PSI/06, M-PSI/08, MED/43)

Total number of places available: n. 6

- o with University scholarship: n. 3
- o with scholarship pursuant to Ministerial Decree no. 630/24: no. 2
- o with scholarship *granted by University and deriving from* "Patti territoriali dell'alta formazione per le imprese" – CUP: F61B23000370006 : n. 1

POSITIONS WITH SCHOLARSHIP

Places with University scholarship

- n. 1 place with scholarship on non-restricted topics CURRICULUM 1

Project: free theme

Scholarship topic title: free topic

Description of research activity:

free topic.

1. place with scholarship on non-restricted topics CURRICULUM 2

Project: free theme

Scholarship topic title: free topic

Description of research activity:

free topic.

- n. 1 place with scholarship on non-restricted topics CURRICULUM 3

Project: free theme

Scholarship topic title: free topic

Description of research activity:

free topic.

- **D.M.630/24**
 1. **Avviso: D.M.630/24** - Mission 4, component 2 "From Research to Business" - Investment 3.3 "Introduction of innovative doctorates that respond to the innovation needs of companies and promote the hiring of researchers by companies"
 - **CURRICULUM 3 PSYCHOLOGY: COGNITIVE, EMOTIONAL AND COMMUNICATIVE PROCESSES**
 - **Project title and scholarship theme:** Digital Society and Phubbing: Analysis of the Impact of Digital Technologies on Social Interactions and Proposals for Conscious Use - Topic: PNRR - Innovative Research Doctorates with Industrial Connotations
 - **Research Activity Description:** The research project "Digital Society and Phubbing: Analysis of the Impact of Digital Technologies on Social Interactions and Proposals for Conscious Use" explores how the pervasive use of digital devices negatively influences interpersonal relationships, a phenomenon known as phubbing (phone + snubbing). Through observational studies and questionnaires administered to different samples (adolescents, adults, elderly people), the project investigates the frequency of phubbing and its emotional and psychological consequences, such as isolation and relational dissatisfaction. At the same time, intervention strategies will be developed to promote an informed use of technologies, through educational campaigns and specific programs, with the aim of improving the quality of social interactions.
 - **Co-financing company/body:** Macroscopio Association - Psychopedagogical Center for Research and Training in Active Learning/Change, Via Mottola km 2.2 Martina Franca industrial area 74015 TA
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 18 months

- **D.M.630/24**
 2. **Avviso: D.M.630/24** - Mission 4, component 2 "From Research to Business" - Investment 3.3 "Introduction of innovative doctorates that respond to the innovation needs of companies and promote the hiring of researchers by companies"
 - **CURRICULUM 3 PSYCHOLOGY: COGNITIVE, EMOTIONAL AND COMMUNICATIVE PROCESSES**
 - **Project title and scholarship theme:** Equity and Resilience: models for evaluating the effectiveness and impact of psycho-social interventions, inclusion and combating marginality, fragility and vulnerability - Topic: PNRR - Innovative Research Doctorates with Industrial Connotations
 - **Research Activity Description:** The Project has as its macro-objectives: a) creating a metric system to measure changes in terms of psycho-social well-being, the quality of life of people (in areas of psycho-physical, social and economic vulnerability) who benefit from psycho-social services social and work inclusion programs, b) evaluate the cause - effect relationship of policies for socio-work inclusion on the reduction of social spending, c) analyze the changes in the community's perception on the issues of inclusion of groups weak of the population. These objectives must be achieved through the testing of a system of indicators useful for measuring psycho-social, economic and community data.
 - **Co-financing company/body:** Società Cooperativa Sociale EQUAL TIME Onlus, via Giosuè Carducci n. 11/13, Bitonto (BA)
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 18 months

- **University scholarship funded by "Patti territoriali dell'alta formazione per le imprese" – CUP: F61B23000370006 ;**
 - **CURRICULUM 1 LINGUISTIC AND INTERCULTURAL DYNAMICS OF COMMUNICATION**
 - **Project title and scholarship theme:** A Mediterranean approach to the social impact assessment of cultural activities and community participatory processes. Practical application in the cases of Community Libraries and Community Cooperatives

- **Research Activity Description:** The project's macro-objective is to define a methodology for generating and measuring the social impacts generated by cultural activities and participatory processes. The methodology will have a focus on social sustainability, with the aim of promoting inclusion and social cohesion. This will allow public intervention in these specific sectors to be justified as an investment with a concrete return. The management of public libraries and the experience of community cooperatives as a tool for people's emancipation and as places of inclusion contributing to the economic, social and cultural development of the region were identified as cases of experimentation and application of the impact assessment method.
- **Co-financing company/body:** Legacoop Puglia, via Capruzzi 228, Bari
- **Period abroad:** 6 mesi

- **Period at the company/institution provided for by Territorial Agreements for higher education for businesses:** 18 mesi

The exam tests will be separate for each project and the respective rankings will merge into a single final ranking which will give entitlement to access.

Candidates must indicate in Annex A), which is an integral part of this competition notice, the choice of a single project and curriculum, under penalty of exclusion from the competition. In the case of positions with scholarship on an unrestricted topic, candidates will present the project on a topic of their choice but will still have to indicate the curriculum for which they are applying. For the purposes of assigning scholarships, in the event that there are no candidates considered suitable in a given curriculum in the ranking, it is possible to select candidates from other curricula if they are found to be suitable and obviously in order of the general ranking.

Admission procedures for ordinary places:

The selection will take place in accordance with Article 6 letter B) of the call.

Regarding the criteria for carrying out the exam tests, the test will be taken in the form of a verification of qualifications, presentation of an original research project to be attached to the application for participation and an oral interview on the theoretical and methodological insights inherent to the contents of the project presented. The text of the project will be a maximum of 15,000 characters, including spaces and bibliography. The project must include four sections: 1) state of the art / rationale and objectives of the project, 2) Method, 3) expected results, 4) potential threats to project success.

The oral interview will be held in person and includes the simultaneous verification of knowledge of the foreign language: English.

You are admitted to the oral interview subject to the positive outcome of the evaluation of the research project.

Procedures for carrying out the tests for foreign candidates:

Foreign candidates may choose to take the entrance exam in Italian or in English language.

Calendar and location of the entrance exam:

Qualifications Rating: 01 08-2024 and 02-08-2024

Rating Progetto 01 08-2024 and 02-08-2024

Oral exam: 05-08-2024 time 9.30, at Aula Mandela, I floor Chiaia-Napolitano building, Via Crisanzio, 42 –70121 Bari for further information, please consult the following Web address:

<https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 27)

PROFILE

PHD PROGRAM IN POLITICAL AND SOCIAL SCIENCES FOR SECURITY AND DEVELOPMENT

CUN Scientific Areas: Area 10 - Antiquities, philology, literary studies, art history; Area 11 - History, philosophy, pedagogy and psychology; Area 12 – Law studies; Area 13 - Economics and statistics; Area 14 - Political and social sciences.

Academic fields: IUS/01 Private Law; IUS/07 Labour Law; IUS/11 Ecclesiastical And Canon Law; IUS/12 TAX LAW; IUS/14 European Union Law; IUS/17 Criminal Law; IUS/20 Philosophy of law; L-LIN/04 Language And Translation – French; L-LIN/12 Language And Translation - English; M-PED/01 Pedagogy, Theories Of Education And Social Education; M-PSI/04 Developmental And Educational Psychology; M-STO/04 Contemporary History; SECS-P/06 Applied Economics; SECS-S/04 Demography; SPS/01 Political Philosophy; SPS/02 History Of Political Thought; SPS/06 History Of International Relations; SPS/07 General Sociology; SPS/08 Sociology Of Culture And Communication; SPS/09 Economic Sociology And Sociology Of Work And Organizations; SPS/11 Political Sociology; SPS/12 Sociology Of Law, Deviance And Social Change.

Coordinator: Prof. Giuseppe Campesi.

Administrative Office: Department of Political Sciences.

PEC: direzione.scienzepolitiche@pec.uniba.it

Duration: 3 years

Curricula: YES

1) Politics, Institutions, and Rights (Academic fields: IUS/11; IUS/14; IUS/17; IUS/10; L-LIN/04; L-LIN/12; M-STO/04; SPS/01; SPS/02; SPS/06).

2) Social Policies and Inclusion (Academic fields: M-PED/01; M-PSI/04; SPS/07; SPS/08; SPS/11; SPS/12).

3) Policies for Employment, Development, and Innovation (Academic fields: IUS/01; IUS/07; IUS/12; SECS-P/06; SECS-S/04; SPS/09).

Total number of PhD positions available: No. 10

- Of which No. 4 with fellowship from the University of Bari.
- Of which No. 6 with fellowship pursuant to Ministerial Decree no. 629/24.

Four PhD positions with open theme fellowship from by the University of Bari.

The candidate is required to submit a research project within the thematic and disciplinary areas of interest of the PhD program.

Six PhD positions with themed fellowship pursuant to Ministerial Decree No. 629/24: Investment 4.1: Public Administration.

Themed Fellowship No. 1

Project Title and Fellowship Topic: Narrative and Postcolonial Narratives: Between Indigenous Epistemology, Transmediality, and World Literature (Curriculum 1; Academic Field: SPS/01).

Research Activity Description: The research proposal considers the new transmedial forms of indigenous storytelling as a powerful tool for analysis and for a more inclusive and participatory reformulation of the contemporary literary canon of the so-called World Literature. The project aims to use literature and

comparative philosophy as methodological anchors for research, and literary and political semiotics as a theoretical-practical basis for a re-signification of world literature, a canon capable of extracting arts, sciences, philosophies, and ongoing mass media novelties into an integrated and integral dimension. The methodological approach will be that of political theory, within the framework of post-colonial geopolitics.

Period Abroad: University of Birmingham, School of English, Drama, and Creative Studies; Duration: 6 months.

Period at Entity/Company: Il sogno di don Bosco SCS; Duration: 6 months.

Themed Fellowship No. 2

Project Title and Fellowship Topic: Antigeopolitics and Internationalism: Identification and Digitization of Cartographic Archival Heritage of Social-Liberalism Between the Two World Wars (Curriculum 1; Academic Field: SPS/02).

Research Activity Description: The project aims to identify and protect archival heritage related to socialist and liberal thought between the two world wars, focusing on reconstructing the debate on neutrality and anti-imperialism in major socialist and social-liberal journals and archives held by the Filippo Turati Foundation for Historical Studies. Through the analysis of cartographic material and texts on foreign policy, the aim is to contribute theoretically and practically to the safeguarding of cultural heritage, with particular attention to unrecognized archives. In line with EU Regulation 2021/241, the project aims to identify and digitize cultural heritage, contributing to its protection and accessibility. The initiative focuses on intangible heritage that includes political history and processes that have favored the formation of open and democratic communities, in accordance with Article 1 of the UNESCO 2003 Convention.

Period Abroad: Modern Record Centre - University of Warwick; Duration: 6 months.

Period at Entity/Company: Filippo Turati Foundation for Historical Studies; Duration: 6 months.

Themed Fellowship No. 3

Project Title and Fellowship Topic: Suspended Parenthood and Co-parenthood: Risk Factors, Protective Factors, and Interventions related to the Care, Protection, and Well-being of Minors (Curriculum 2; Academic field: MPSI/04).

Research Activity Description: The research aims to analyze parenthood support interventions implemented by Territorial Services. The objective is to deepen the role of psychologists and social workers in family counseling centers and parenting services, focusing on promoting positive and responsive parenting styles, supporting parenthood, preventing psychological and social distress in families, and recovering dysfunctional parenting functions. The research aims to improve or implement parenthood support interventions in situations of risk and to support existing interventions at the family and extra-family levels (such as foster care and adoption).

Period Abroad: ISCTE, Instituto Universitário de Lisboa; Duration: 6 months.

Period at Entity/Company: Office of the Ombudsman for Minors, Regional Council, Puglia Region; Duration: 6 months.

Themed Fellowship No. 4

Project Title and Fellowship Topic: Equity, Inclusion, and Active Citizenship: Innovative Strategies and Methodologies to Monitor and Counter Adolescent Deviance (Curriculum 2; Academic Field: SPS/07).

Research Activity Description: In recent decades, research on adolescent deviant behaviors has become interdisciplinary, yet an integrated approach to define the phenomenon and effective strategies to counter it in relation to different territorial contexts is still lacking. These behaviors, which violate ethical or sociocultural norms, have negative impacts on both adolescents and society in terms of cohesion, development, and security. In light of these considerations, the research project aims to promote the development of a space for social innovation and the enhancement of connections between monitoring tools, innovative interventions, and evaluative research. The project has a dual objective: firstly, it aims to develop innovative methodologies to monitor adolescent deviance (Objective I); secondly, to develop new strategies to intercept, prevent, and counteract it (Objective II).

Period Abroad: Queen Margaret University of Edinburgh; Duration: 6 months.

Period at Entity/Company: Office of the Ombudsman for Minors, Regional Council, Puglia Region; Duration: 6 months.

Themed Fellowship No. 5

Project Title and Fellowship Topic: Political-Administrative Decentralization and Regional Development (Curriculum 3; Academic Field: SECS/P-06).

Research Activity Description: The main objective of the project is to analyze the impact of fiscal decentralization on the availability of resources for the implementation of policies at the regional and sub-regional levels, and the consequences in terms of redistribution of inter-regional funding. Furthermore, the effects of public policies on the territorial provision of services and the productive structure will be investigated, as well as the implications for the labor market and the emergence of new professions in the perspective of the green and digital transition.

Period Abroad: Universitat de les Illes Balears; Duration: 6 months.

Period at Entity/Company: ARTI Puglia - Regional Agency for Technology and Innovation; Duration: 6 months.

Themed Fellowship No. 6

Project Title and Fellowship Topic: Territorial Economies, Industrial Development, Competitiveness, and Innovation (Curriculum 3; Academic Field: SECS/P-06).

Research Activity Description: The research project will be based on the introduction of an integrated analysis perspective of industrial, territorial, and urban innovation policies (including those of the PNRR). It aims to increase knowledge and identify monitoring and evaluation tools of the impacts of territorial industrial policies. Furthermore, it will aim to refine territorial analysis techniques at the local level and increase knowledge exchange on industrial policies among European countries.

Period Abroad: Universitat de les Illes Balears; Duration: 6 months.

Period at Entity/Company: ARTI Puglia - Regional Agency for Technology and Innovation; Duration: 6 months.

Selection criteria and procedures:

The selection will take place in accordance with Article 6, letter B) of the call.

The selection will include the evaluation of:

1. Candidates' Qualifications.
2. Submitted Research Project: The research project, written in either Italian or English, must not exceed 15,000 characters (including spaces and bibliography). It should be relevant to one of the thematic and disciplinary areas of the Doctorate or to a topic related to the themed fellowships pursuant to Ministerial Decree no. 629/24.
3. Oral Interview: The interview will assess the candidate's theoretical and methodological skills necessary for the effective implementation of the proposed project, as well as their proficiency in the English language.

Procedure for Foreign Candidates

Foreign candidates may choose to take the oral interview in English.

Schedule and Venue for the Admission Exam

Evaluation of Candidates' Qualifications: July 31, 2024.

Projects Evaluation: August 1, 2024.

Oral Interviews: August 2, 2023, at 9:00 a.m., Room I, Palazzo Del Prete, Piazza Cesare Battisti.

For further information, please visit the website

<https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 28)

PROFILE

PHD PROGRAM IN SUSTAINABLE TECHNOLOGIES FOR THE INDUSTRIAL DEVELOPMENT OF MEDICINAL AND DIAGNOSTICS – TeSSMeD – XL cycle

CUN Scientific Areas: 03 Scienze Chimiche, 05 Scienze Biologiche, 06 Scienze Mediche, 02 Scienze fisiche

Academic disciplines: CHIM/09, CHIM/08, CHIM/06, CHIM/01, BIO/15, BIO/14, BIO/10, MED/42, MED/07, FIS/07.

Coordinator: Prof. Nunzio Denora

Administrative Office: Department of Pharmacy - Pharmaceutical Sciences, University of Bari “Aldo Moro

PEC: direzione.farmacia@pec.uniba.it

Duration: 3 years

Curricula: NO

Total number of places available: no.11 of which:

- with University scholarship: **no. 1;**
- with scholarship pursuant to Ministerial Decree no. 630/24: **no. 3;**
- with scholarship position covered by a advanced education and research apprenticeship contract funded by Farmalabor srl (Canosa Di Puglia, BAT, Italy): **no.2;**
- with scholarship financed by ISTITUTO PER LA SINTESI ORGANICA E LA FOTOREATTIVITA' del CONSIGLIO NAZIONALE DELLE RICERCHE (ISOF-CNR): **no.1;**
- with scholarship co-financed by ISTITUTO PER LA SINTESI ORGANICA E LA FOTOREATTIVITA' del CONSIGLIO NAZIONALE DELLE RICERCHE (ISOF-CNR): **no.1;**
- with scholarship co-financed by PRIN 2022 PNRR, Project Title: “NATURE-INSPIRED STRUCTURES: FUNGAL METABOLITES FOR A SUSTAINABLE SEMISYNTHETIC APPROACH TO THE DISCOVERY OF NEW MULTI-TARGET ANTI-ALZHEIMER'S DRUGS (NInFA)”CUP H53D23007940001: **no.1;**
- with scholarship co-financed by PRIN-PNRR 2022, Project Title “Biocatalytic units based on enzyme crystals for efficient and continuous CO₂ conversion into chemicals” CUP: H53D23008800001: **no.1;**
- with scholarship co-financed by PE-INF-ACT One Health Basic and Translational Research Actions addressing Unmet Needs on Emerging Infectious Diseases” (INF-ACT) CUP: H93C22000640007: **no.1.**

POSITIONS WITH SCHOLARSHIP

- **Places with University scholarship: no. 1;**
- **D.M.630/24: no.3**
- 1. **Avviso: D.M.630/24**
- **Project title and scholarship theme:** Development of Drug Delivery Systems for Enteric Delivery of Synthetic Large Molecules Using Prilling Technique.
- **Research Activity Description:** The research will focus on the development of drug delivery systems using the prilling technique, with the specific goal of enhancing the enteric delivery of synthetic large molecules. The research centers on optimizing this microencapsulation technique to create particles that can protect drugs from the acidic conditions of the stomach and release them in a controlled manner in the intestine. The study includes the design and characterization of the delivery systems, analysis of the stability of the encapsulated molecules, and evaluation of their effectiveness in reaching the desired absorption site, with potential innovative therapeutic applications.

- **Co-financing company/body:** MONTERESEARCH SRL, Bollate (MI)
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months
2. **Avviso: D.M.630/24**
- **Project title and scholarship theme:** Formulative Studies of Natural Extracts.
 - **Research Activity Description:** The research will focus on exploring and optimizing formulations based on extracts derived from natural sources. After identifying and characterizing the bioactive compounds present in these extracts by evaluating their physicochemical properties, stability, and efficacy, the primary goal will be to develop and test various formulations to optimize the bioavailability and effectiveness of the active ingredients. Part of the research activities will also include studying the compatibility of the extracts with different excipients and evaluating the sensory and preservation properties of the final formulations. The ultimate aim is to create innovative natural products for applications in the pharmaceutical, cosmetic, or nutraceutical fields, with particular attention to sustainability and consumer safety.
 - **Co-financing company/body:** Indena Viale Ortles, Milano
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months
3. **Avviso: D.M.630/24**
- **Project title and scholarship theme:** Development of Enzymatic Biosensors Integrated into E-Textiles for Ultrasensitive Detection of Metabolites.
 - **Research Activity Description:** Development of enabling point-of-care (POC) technologies based on wearable enzymatic biosensors to allow for ultrasensitive determination of metabolites through self-monitoring technologies.
 - **Co-financing company/body:** DirectSens, Vienna Austria
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months
- **No.2 scholarships covered by advanced Education and Research Apprenticeship contracts**
 - **No. 2 advanced Education and Research Apprenticeship contracts funded by FARMALABOR srl (Canosa Di Puglia, BAT, Italy)**
 - The theme of the advanced education apprenticeship project shared with Farmalabor srl focuses on technology transfer and the co-development of technologies, know-how, and solutions, in which the apprentice plays a proactive role in the processes of creation and invention, starting from clear company needs, in order to support and accelerate the company's innovation and growth processes, strengthening the ties and synergies with the applied research system.
- **No.1 scholarship financed by *ISTITUTO PER LA SINTESI ORGANICA E LA FOTOREATTIVITA' del CONSIGLIO NAZIONALE DELLE RICERCHE (ISOF-CNR)***
 - **Project title and scholarship theme:** New Enabling Technologies to Support the Development of Synthetic Methodologies for the Use of CO₂ Dedicated to the Synthesis of APIs and Building Blocks for Medicinal Chemistry.
 - **Research Activity Description:** The candidate will be responsible for developing synthetic processes useful in pharmaceutical development. The research activity will focus on the use and implementation of modern chemical technologies such as photo-electrocatalysis and nebulization conditions. The use and conversion of CO₂ will be one of the key points of the project.
 - **Period at the company/institution:** 18 months
- **No.1 scholarship co-funded by *ISTITUTO PER LA SINTESI ORGANICA E LA FOTOREATTIVITA' del CONSIGLIO NAZIONALE DELLE RICERCHE (ISOF-CNR)***
 - **Project title and scholarship theme:** New enabling technologies to support the development of synthetic methodologies dedicated to the synthesis of APIs and building blocks for medicinal chemistry.

- **Research Activity Description:** The candidate will be responsible for developing synthetic processes aimed at exploring new chemical space. The research activity will focus on the use and implementation of modern chemical technologies such as continuous flow technology and photocatalysis. Sustainable processes will be developed for the preparation of molecules of pharmaceutical interest.
- **Period abroad:** 6 months
- **No.1 scholarship co-funded by PRIN-PNRR 2022 "NINFA" CUP H53D23007940001**
- **Project title and scholarship theme:** A SAR study on new Multi-Target Directed Ligands (MTDLs) for the treatment of Alzheimer's disease
- **Research Activity Description:** The activities will concern the design, synthesis, chemical and biological characterization of new molecules with multi-target action potentially useful in the therapy of Alzheimer's disease. Part of the work will be specifically dedicated to the topics of the project with the acronym NInFA, funded through PRIN 2022 PNRR call.
- **Period abroad:** 6 months
- **No.1 scholarship co-funded by PRIN-PNRR 2022 "Biocatalytic units based on enzyme crystals for efficient and continuous CO₂ conversion into chemicals" CUP: H53D2300880001**
- **Project title and scholarship theme:** Computational approaches for the 3D modelling of formate dehydrogenase (and other structurally related dehydrogenases) for the set-up of biocatalytic units for the conversion of CO₂ into chemicals
- **Research Activity Description:** 3D modelling approaches allow us to build trustworthy 3D comparative models of proteins for the study of protein-ligand and protein-protein interactions. The construction of a protein 3D model also allows for performing virtual screening of in-house developed chemical libraries to predict ligands with high affinity for the investigated proteins. In this project formate dehydrogenase, and other structurally related dehydrogenases, will be investigated with the aim to identify dehydrogenases able to convert CO₂ into other chemicals. The cDNA coding for the investigated proteins will be cloned and expressed as recombinant proteins. The binding affinity of the predicted best binders will be estimated through binding affinity assays and other in vitro assays.
- **Period abroad:** 6 months
- **No.1 scholarship co-funded by "PE-INF-ACT", CUP: H93C22000640007**
- **Project title and scholarship theme:** Computational approaches for the 3D modelling of protein-ligand and protein-protein interactions for preventing/contrasting infective diseases.
- **Research Activity Description:** 3D modelling approaches allow to build trustworthy 3D comparative models of proteins for the study of protein-ligand and protein-protein interactions. The construction of a protein 3D model also allows for performing virtual screening of in-house developed chemical libraries to predict ligands or to design antibodies and nanobodies with high affinity for the investigated proteins. In this project, proteins involved in infective diseases, such as flavoproteins, neuraminidases, transporters, and other virus/bacterial surface proteins, will be investigated with the aim of identifying high affinity small molecules and/or to design/engineer high-affinity antibodies/nanobodies. The cDNA coding for the investigated proteins will be cloned and expressed as recombinant proteins. The binding affinity of the predicted best binders and antibodies/nanobodies will be estimated through in vitro assays.
- **Period abroad:** 6 months

Admission procedures for ordinary places:

The selection will take place in accordance with Article 6 letter B) of the call.

The exam will be based on the evaluation of qualifications, an oral test including verification of English language proficiency, and the presentation of a project related to the themes of the aforementioned scholarships. For the open scholarship, the project must still be consistent with the objectives of the TeSSmed PhD program.

Procedures for carrying out the tests for foreign candidates:

Foreign candidates may choose to take the entrance exam in Italian or English. Where it is not possible to do it in person, candidates may ask to do it remotely with a motivated request. The motivated letter of request, together

with the copy of an identity document, valid to travel abroad, must be uploaded on PICA web platform. It will be the responsibility of the commission to communicate the methods of connection.

Calendar and location of the entrance exam:

Qualifications Rating: July 31, 2024 - 10:00 a.m.;

Rating Progetto: August 1, 2024 - 10:30 a.m.

Oral exam: August 2, 2024 - 09:30 a.m.

Department of Pharmacy - Pharmaceutical Sciences, E. Quagliariella Campus, via E. Orabona 4, Bari

For further information, please consult the following Web address: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>

ANNEX 29)

PROFILE

PhD PROGRAMME IN ORGANS AND TISSUES TRANSPLANTATION AND CELLULAR THERAPIES

CUN Scientific Area: 06 Medical Sciences, 07 Agrarian and Veterinary Sciences, 05 Biological Sciences

Scientific Disciplinary Sectors: AGR/18, BIO/13, BIO/17, VET/09, MED/15, MED/13, MED/14, MED/19, VET/01, MED/41, MED/08, MED/23

Coordinator: Prof. ANTONIO CROVACE

Administrative Office: Department of Precision Medicine and Regenerative and Ionic Area

PEC: direzione.dimeprej@pec.uniba.it

Duration: 3 years

Curricula: NO

Total number of places available: n. .8. of which no. .1. reserved for graduates of universities abroad

- with University scholarship: n. 4
- with scholarship pursuant to Ministerial Decree no. 630/24: no. 2
- without scholarship no. 2 of which no. 1 reserved for graduates of universities abroad

POSITIONS WITH SCHOLARSHIP

- ***Positions with University scholarship***
 - a. ***N. 4 SCHOLARSHIPS***
- **D.M.630/24**
- 1. **Avviso: D.M.630/24**
 - **Project title and scholarship theme:** Porous titanium scaffold as support in Achilles tendon rupture repair in animals and humans
 - **Research Activity Description:** The Project involves the development of porous titanium scaffolds as support in the repair of Achilles tendon rupture in animals and humans. The study involves the development of an experimental animal model and subsequent application in the clinical field in humans.
 - **Co-financing company/body:** BIOSURGEX SL
 - **Period abroad:** 6 months
 - **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months
- **D.M.630/24**
- 2. **Avviso: D.M.630/24**
 - **Project title and scholarship theme:** Functional chest wall reconstruction with three-dimensional biomechanical implants
 - **Research Activity Description:** The Project involves the development of prosthetic implants aimed at the reconstruction of the distal portion of the rib cage in the cartilage connection using dynamic 3D titanium prostheses. The study involves the development of an experimental animal model and subsequent clinical application in humans.

- **Co-financing company/body:** OSTEOBIONIX SL
- **Period abroad:** 6 months
- **Period at the company/institution provided for by Ministerial Decree no. 630/24:** 6 months

POSITIONS WITHOUT SCHOLARSHIP

n. 2

Admission procedures for ordinary places:

The selection will take place in accordance with Article 6 letter B) of the call.

Selection will be by titles, evaluation of the research project and an oral test with discussion of the research project. The research project will be sent in advance by the candidate, together with the application, under penalty of exclusion. The research project, with a maximum length of 3,000 words (excluding bibliography), must necessarily include the following areas: scientific background of the project, purpose of the study, methodology (including statistical considerations), expected results, prospects and possible spin-offs.

Admission to the oral test is subject to the successful evaluation of the assessment of the qualifications and the research project. Knowledge of English as a foreign language will also be tested during the oral test.

Procedures for carrying out the tests for foreign candidates:

Foreign applicants can choose to take the entrance exam in Italian or English.

Calendar and location of the entrance exam:

Qualifications Rating: JULY 31ST

Rating progetto JULY 31ST

Oral exam: AUGUST 1ST

The examination tests will be held in the veterinary clinics and animal production section of DIMEPRE-J at 9:30 a.m.

WHERE RESERVED SEATS ARE PROVIDED. or delete this reference

Admission procedures for places reserved for graduates of foreign universities:

The selection will take place in accordance with Article 6 letter B) of the call.

The selection will be made on the basis of the evaluation of the qualifications and an oral test including a research project related to the topics of the Ph.D., sent in advance by the candidate together with the application, under penalty of exclusion. The research project, of a maximum length of 3000 words (excluding bibliography), must necessarily include the following areas: scientific background of the project, purpose of the study, methodology (including statistical considerations), expected results, prospects and possible spin-offs. The oral test may be conducted electronically via Microsoft Teams platform, according to the procedures stipulated in the announcement. A separate ranking list will be formulated, it being understood that the places, if not used, will be awarded to candidates usefully placed in the ordinary ranking list

Procedures for carrying out the tests for foreign candidates:

Foreign applicants can choose to take the entrance exam in Italian or English.

Calendar and location of the entrance exam:

Qualifications Rating: JULY 31ST

Rating project: JULY 31ST

Oral exam: AUGUST 1ST The examination tests will be held in the veterinary clinics and animal production section of DIMEPRE-J at 9:30 a.m.

For foreign candidates: Where it is not possible to do it in person, candidates may ask to do it remotely with a motivated request. The motivated letter of request, together with the copy of an identity document, valid to travel abroad, must be uploaded on PICA web platform. It will be the responsibility of the co

For further information, please consult the following Web address: <https://www.uniba.it/en/phd-courses/phd-1/40th-cycle/call-phd-selection-a-y-2024-2025>