



Public Competition for Admission to Doctoral Research Programmes at the University of Milan - a. y. 2024/2025

Public Competition for Admission to Doctoral Research Programmes at the University of Milan - a. y. 2024/2025	2
Art. 1 - Institution of doctoral research programmes	4
Art. 2 - Admission requirements	4
Art. 3 - Application for admission	5
Art. 4 - Applicants with disabilities	6
Art. 5 - Applicants with SLD	6
Art. 6 - Admission exam.....	6
Art. 7 - Admission to the doctoral programmes	7
Art. 8 - Enrolment	8
Art. 9 - Scholarships	9
Art. 10 - Civil servants	10
Art. 11 - Obligations of doctoral students.....	10
Art. 12 - Award of the degree.....	11
Art. 13 - Processing of personal data	11
Art. 14 - Applicable laws and regulations	11
Art. 15 - Person in charge of the procedure and contacts.....	11
Doctoral programme in Industrial Chemistry	12
Doctoral programme in Translational Medicine	14
Doctoral programme in Pharmacological Biomolecular Sciences, Experimental and Clinical	17
Doctoral programme in Food Systems	20
Annex A.....	23
Form 1	24
Form 2 (Italian version)	25
Form 2 (English version)	26
Form 3.....	27



Dir. DF/FTLI

PUBLIC COMPETITION FOR ADMISSION TO DOCTORAL RESEARCH PROGRAMMES AT THE UNIVERSITY OF MILAN - A. Y. 2024/2025

THE RECTOR

- Having regard to Ministerial Decree no. 270, dated 22 October 2004, entitled “Amendments to Regulation no. 509 containing rules governing the educational autonomy of Universities, passed by a Decree of the Ministry for Universities and Scientific and Technological Research on 3 November 1999”;
- Having regard to art. 4 of Law no. 210 dated 3 July 1998, as amended by art. 19, paragraph 1, of Law no. 240 dated 30 December 2010;
- Having regard to Regional Law no. 33, dated 13 December 2004, entitled “Rules governing regional measures to ensure the right to study at university”, which makes provisions for services in favour of students enrolled in doctoral programmes;
- Having regard to Ministerial Decree no. 226 dated 14 December 2021, entitled “Regulations concerning the accreditation methods of doctoral locations and programmes and the criteria for the institution of doctoral programmes by accredited bodies”;
- Having regard to Law no. 33 dated 12 April 2022, entitled “Provisions on simultaneous enrolment in two higher education programmes”, and in particular article 4, paragraph 1;
- Having regard to art. 1 of Ministerial Decree no. 930 dated 29 July 2022, which states that “starting from the academic year 2022/2023, Universities shall include in their academic regulations general provisions to facilitate the simultaneous enrolment of students”;
- Having regard to the Statute of the University of Milan, issued by Rector’s Decree of 15 March 2012, as subsequently amended;
- Having regard to the University Regulation for PhD Programmes and Students, issued by Rector’s Decree of 5 June 2015, as subsequently amended;
- Having regard to Ministerial Decrees protocol no. 808 of 28 November 2018, protocol no. 917 of 15 October 2019 whereby the Ministry of Education University and Research (MIUR), pursuant to Ministerial Decree 45/2013, granted five-year accreditation to the doctoral research programmes proposed by the University of Milan, subject to ongoing compliance with the prescribed requirements and having regard to Directorial Decree protocol no. 1257 of the 9 August 2024 which confirmed the accreditation of doctoral courses pursuant to DM 226/2021;



- Having regard to Ministerial Decrees protocol no. 1194 of 9 August 2024, whereby the Ministry of University and Research (MUR), pursuant to Ministerial Decree 226/2021, granted five-year accreditation to the doctoral research programmes proposed by the University of Milan, subject to ongoing compliance with the prescribed requirements;
- Considering that the University intends to institute a new cycle of doctoral programmes for the academic year 2024/2025;
- Having regard to the note of the Ministry of University and Research of 2 May 2024, protocol no. 8614;
- Having regard to the resolutions adopted by the Academic Senate and the Board of Directors during their meetings of 14 and 28 May 2024, concerning the institution of the 40th doctoral cycle;
- having regard to the public call for applications for admission to doctoral courses at the University of Milan for the academic year 2024/2025 issued by Rectoral Decree no. 3733/24 of 29 May 2024
- having regard to the decrees to increase the number of places and scholarships in the above-mentioned public call for applications for admission to doctoral courses at the University of Milan issued by Rectoral Decrees n. 4084/2024 of 14 June 2024, n. 4211/2024 of 21 June 2024, n. 4377/2024 of 27 June 2024, n. 4584/2024 of 5 July 2024



HEREBY DECREES AS FOLLOWS:

Art. 1 - Institution of doctoral research programmes

The following doctoral research programmes are instituted at the University of Milan for the academic year 2024/2025 (40th cycle - beginning 1st January 2025):

- Industrial Chemistry
- Translational Medicine
- Pharmacological Biomolecular Sciences, Experimental and Clinical
- Food Systems

Public competitions for admission to the above doctoral research programmes, based on qualifications and exams, are hereby announced by the University of Milan; the programme specifications annexed to this decree, which are an integral part of this document, contain a brief description of the programmes and a link to the pages of the University website where applicants can view the proposed research topics for each programme, as identified by the competent Faculty of Instructors based on the objectives of the programme and its research and educational focus. Research topics are selected in the times and manner specified in art. 25 of the University Regulation for PhD Programmes and Students.

The number of scholarships may be increased, should external funding become available before the application deadline specified in this competition for admission.

Foreign applicants who are in receipt of scholarships issued by their country of origin may be admitted in excess of the enrolment quota if they pass the admission exams set out in this decree.

Art. 2 - Admission requirements

Applicants in possession of a second-cycle degree (*Laurea magistrale*), an equivalent qualification or a qualification equivalent to the level of studies (Master's Degree) awarded by a foreign university, may apply for admission to the doctoral research programmes stated in the preceding article.

The suitability of the foreign academic qualifications in terms of content is evaluated by the Admission Committee of each doctoral programme, in compliance with the regulations in force in Italy and in the country in which the academic qualification was issued, and with the international treaties or agreements on the recognition of qualifications for the continuation of studies.

Applicants who have not yet obtained their second-cycle degree (*Laurea magistrale*) may also apply, but they are required to earn the second-cycle degree by the programme starting date (1st January 2025), otherwise they will be excluded from the programme.



Art. 3 - Application for admission

Applicants must apply for admission by 2 pm on 25th November 2024, by following the instructions below:

1. [Register on the University portal](#) (this step is not required for those already registered on the portal or in possession of UNIMI login credentials or a SPID identity);
2. Log in and submit an application for admission via the [Doctoral programme admission services](#);
3. At the end of the online application process, and in any case by the deadline for admission, pay a non-refundable €50.00 application fee;
4. Upload the following documents as .pdf, .rtf or .jpg files, all under 10 MB:
 - A. Diploma Supplement or Bachelor's and Master's diplomas (or equivalent qualification obtained in Italy or abroad), with transcript of records. Applicants who have yet to obtain their Master's degree are required to submit a certificate of enrolment in lieu of the diploma. All documents must be in Italian, English, French, German or Spanish.
Self-drafted affidavits are accepted as and where provided for by the laws in force.
Applicants who have completed or are about to complete their studies at the University of Milan do not need to upload any certificates/diplomas attesting to such studies, as these documents will be acquired internally;
 - B. CV, describing any professional experience and other qualifications held by the applicant;
 - C. Research project (using [Form 1 attached hereto](#));
 - D. Copy of passport (foreign applicants only);
 - E. Publications in Italian or English (if any);
 - F. [Annex A](#);
 - G. Online interview request (if desired; please use [Form 3](#) attached).

Failure to provide even just one of the documents from A to C above will result in the applicant being excluded from the competition.

In addition to the above documents, if so provided for in the programme specification, applicants must provide one or more reference letters from qualified persons who have had a role in their education. Reference letters must be drafted using [Form 2](#) attached hereto and e-mailed directly by said persons, in .pdf format, to the email address indicated in the programme specification, **by the application deadline (25th November 2024)**. In any case, applicants may include reference letters drafted as indicated above in their online application for admission. Reference letters are considered when assessing the applicant's curriculum and no extra point is awarded for them.

Non-EU applicants residing abroad are also required to submit an online application for pre-enrolment through [University](#), in order to obtain a student visa.



The online application cannot be modified or supplemented with further documentation once it has been confirmed.

It is possible to apply for any number of doctoral programmes, provided that the applicant registers properly for each programme, as described above, including payment of the non-refundable fee of €50.00 for each application submitted.

Art. 4 - Applicants with disabilities

In order to ensure equal treatment of applicants, those holding a certificate of disability (*invalidità civile*) and/or handicap pursuant to Law 104/1992 may apply for accommodations by writing to COSP Disability services (ausili.ammissioni@unimi.it) at least 15 days before the interview, and attaching the certificate issued by the competent public health office. Applicants holding outdated certificates are required to apply for an updated certificate, to be submitted after enrolment for the purposes of using disability accommodations as offered by the University.

Art. 5 - Applicants with SLD

In order to ensure equal treatment of applicants, those holding a Specific Learning Disorders (SLD) certificate issued by the National Health Service, a private affiliated centre, or a private specialist (with a compliance certificate from the competent health authority) pursuant to Law 170/2010, are required to email their certificate to COSP SLD Services (ausili.ammissioni@unimi.it) at least 15 days before the interview. If the SLD was diagnosed in childhood, and the certificate is over three years old, students should apply for an updated certificate, to be submitted after enrolment for the purposes of using SLD accommodations as offered by the University.

Art. 6 - Admission exam

Admission to the doctoral programmes is through a public selection procedure involving the evaluation of qualifications and tests for the comparative assessment of applicants. Applications are vetted by Admission Committees appointed in compliance with current regulations.

Selection stages:

- assessment of the CV (max. 20 points) and research project (max. 10 points);
- interview (max. 70 points).

Only applicants who obtain at least 10 points for the CV and at least 5 points for the research project are called for the interview.

The selection process aims to ascertain the applicants' prior knowledge, skills, aptitude for scientific research and personal motivations. Applicants are selected based on an **assessment of their CV and a research project**, which may or may not be inspired by the work of the second-cycle degree thesis, as well as on an **interview held either in person or online**, as stated in the programme specification.



The research project, which must be drafted using [Form 1 attached hereto](#), is only for selection purposes and does not limit the choice of the doctoral thesis in the case of admission.

The applicant's CV and research project are assessed before the interview. Applicants will be able to see the result of this assessment on the [University portal](#), on the programme webpage.

When assessing the CV, the Committees take into account the applicant's university studies, publications, professional experience and other qualifications, if any. In assigning points for the CV, the Committees consider the statistical distribution of exam grades for the study programme courses, as well as the conditions and the period over which the applicant has obtained his/her qualifications.

The interview is public; interview dates will be posted on the University portal following the assessment of qualifications. The aim of the interview is to verify the applicant's knowledge of topics germane to the educational and scientific contents of the doctoral programme. The interview includes a seminar-style presentation of the proposed research project, followed by a general discussion to verify the applicant's expertise, scientific qualities and motivations.

The interview is conducted in the language indicated in the programme specifications; in any case, applicants may ask to be interviewed in English.

To take the interview, applicants must present one of the following identity documents:

- Identity card;
- Passport;
- (Italian) driving licence.

The outcome of the interview process will be communicated by the Committee at the end of the interviews.

At the end of the interviews, the Committee draws up a general ranking list according to the total score assigned to each applicant for their CV, research project and interview.

The minimum pass score is 70/100.

The general ranking is published on the [Postgraduate admission rankings page](#) within a few days after the interviews.

The Committees must conclude their work by the **9th December 2024**.

Art. 7 - Admission to the doctoral programmes

Applicants are admitted to the programmes according to their position in the ranking list, until all places available for each doctoral programme are filled. Where applicants achieve the same score, preference will be given to the younger applicant, with the exception of the priority criterion for doctoral scholarships set forth in art. 9 of this call for applications. The rankings of eligible applicants will be published within a few days of the interviews, on the [Postgraduate admission rankings page](#) of the University website.



Such ranking posted on the University website constitutes notification to the interested parties, who will not receive any written notice.

Admitted applicants who do not enrol by the deadline lose their right to enrol in the programme. Their place is then given to the next applicant in the ranking list. This also applies if an admitted applicant withdraws from the programme during the first three months. If the withdrawing student has already received any monthly scholarship payments, he/she is required to return them. Takeover applicants will be contacted personally by email by the Student Office for PhD Programmes (*Segreteria Dottorati*), which will provide instructions and deadlines for enrolment.

Applicants who rank high enough for admission into multiple programmes may only matriculate into one.

Simultaneous enrolment in two academic programmes is allowed within the limitations provided for by current regulations, and must be assessed and approved by the competent bodies.

More specifically, simultaneous enrolment in a doctoral programme and a postgraduate medical school is subject to the provisions of Ministerial Decree no. 226 of 14 December 2021.

For information on how to apply for simultaneous enrolment in two programmes, please visit the following link: [Simultaneous enrolment in two higher education programmes | University of Milan \(unimi.it\)](#)

Art. 8 - Enrolment

Applicants admitted to doctoral programmes can enrol online **from the 12th December 2024 till the 17th December 2024 at 2 pm** using the [SIFA enrolment services](#) and following the instructions published on the [University website](#).

Those who have yet to obtain their Master's degree must notify this to the University by writing to [InformaStudenti](#) > Postgraduate > Doctoral research (PhD).

Applicants are admitted conditionally and may be excluded from the programme if they are found not to meet the requirements.

Those enrolled in doctoral programmes must pay the annual regional tax for the Education Incentive Programme in the amount of €140.00, plus a €16.00 stamp duty and a €15.50 insurance premium.

Students with a disability at or above 66% and/or a recognised handicap pursuant to Law no. 104/92 will have the regional tax and insurance premium waived, provided that they submit an application for exemption; these students are only required to pay the €16.00 stamp duty.

Enrolment fees are non-refundable, even if a student withdraws from the doctoral programme.

Applicants holding a foreign qualification are required to upload the following documents when completing the online enrolment process:

- original degree certificate legalised by the competent authorities of the issuing country, with an official translation into Italian;



- Declaration of Value (*Dichiarazione di Valore in loco*) issued by the Italian Embassy in the country where the degree was obtained, or Statement of Comparability issued by the Italian ENIC-NARIC centre (CIMEA), or another ENIC-NARIC centre. Instead of the CIMEA Statement of Comparability, applicants may provide a Statement of Correspondence downloaded from ARDI (Automatic Recognition Database Italia) along with a CIMEA Statement of Verification.

During the online enrolment process, **non-Italian citizens** must also upload the following:

- Italian tax ID (*codice fiscale*, for both EU and non-EU citizens)
- valid residence permit (only for non-EU citizens);
- [University](#) pre-enrolment application receipt (only for non-EU citizens residing abroad);
- student visa (only for non-EU citizens residing abroad).

Applicants who are not in possession of one or more of these documents when enrolling online must produce the missing documents by **28th February 2025**, via [the Enrolment documents integration service](#).

The validity of foreign qualifications is verified upon submission of the official documents. Until then, applicants are admitted to the programme conditionally, and may be excluded from the ranking if they are found not to meet the requirements.

Art. 9 - Scholarships

Scholarships are awarded in accordance with and by the methods established by the laws in force, based on the student's ranking. The gross amount of the scholarship is **€16,350.00** per year.

The scholarship is not subject to IRPEF (personal income tax) in accordance with art. 4 of Law no. 476 of 13 August 1984, and is subject to the social security provisions set forth in art. 2, paragraph 26 et seq., of Law no. 335 of 8 August 1995, as subsequently amended.

Working students falling into the categories appearing in art. 26 of the University Regulation for PhD Programmes and Students will be eligible to apply, provided their working income does not exceed the scholarship amount. Income under the limitation is defined as gross earnings during the year to which the scholarship is principally allocated.

In the event of applicants ranked equally, scholarships are awarded by assessing the applicant's economic situation according to the ISEE (Equivalent Economic Situation Indicator).

Scholarships have a yearly duration and are renewed if the Faculty of Instructors promotes the student to the following year, after ascertaining that he/she has correctly and successfully completed the programme of activities in the previous year.

Starting from the first year, in addition to the scholarship and depending on the University's financial resources, each doctoral student is given a budget for research activity in Italy and abroad suited for the type of programme, and in any case amounting to no less than 10% of the amount of the scholarship itself.



Art. 10 - Civil servants

Pursuant to art. 12, paragraph 5, of Ministerial Decree 226/21, civil servants admitted to a doctoral programme may be granted a leave as contemplated by the applicable collective agreement, or, for those employed under public law, an extraordinary leave for study purposes, for the standard duration of the programme – provided that such leave does not conflict with the needs of the employing administration, as per art. 2 of Law no. 476 dated 13 August 1984 – but only if this is the first time that they enrol in a doctoral programme, independently of the programme subject area; the leave may be paid or unpaid, subject to the civil servant's right to explicitly forego the scholarship. This does not affect their right to receive a budget for research activities in Italy and abroad, as per art. 9, paragraph 4, of Ministerial Decree 226/21.

Art. 11 - Obligations of doctoral students

The rights and obligations of doctoral students are regulated by **articles 26 and 27** of the [University Regulation for PhD programmes and Students](#). Please bear in mind the following:

- Doctoral research programmes entail **1,500 hours of training-education and research activities** per year. A full-time commitment is required of each student for the whole duration of the programme.
- In order to obtain their PhD, doctoral students **are required to demonstrate English proficiency at level B2** of the Common European Framework of Reference for Languages (CEFR).

To meet the language proficiency requirement, doctoral students must submit an English certificate from one of the certifying bodies recognised by the University (see <https://www.unimi.it/en/study/language-proficiency/placement-tests-and-english-courses/accepted-language-certificates>), at B2 level or above, **by the end of the first programme year**.

An exemption from submission of a language certificate is granted only to:

- those who, by the beginning date of the course, have earned a Master's degree featuring an English-language specialisation in one of the following Master's degree classes: LM-37 Modern American and European languages and literature, LM-38 Modern languages for communication and international cooperation, LM-39 Linguistics, LM-94 Interpreting and specialised translating, or equivalent Master's degree;
- those who, by the beginning date of the course, have earned a Master's degree in a programme taught entirely in English;
- those who, during their prior study programme, have earned a B2 English language statement issued by SLAM - University of Milan Language Centre.

No other exemptions will be granted.



Art. 12 - Award of the degree

The degree of Doctor of Philosophy, abbreviated as “Dott. Ric.” or “Ph.D.”, is awarded in accordance with the provisions of art. 27 of the University Regulation for PhD Programmes and Students.

Art. 13 - Processing of personal data

Pursuant to Legislative Decree no. 196 of 30 June 2003, as amended by Legislative Decree no. 101 of 10 August 2018, as well as Regulation (EU) 2016/679 (General Data Protection Regulation, GDPR), the University undertakes to respect the confidential nature of the information provided by applicants. All data provided will be processed solely for purposes related and instrumental to the competition and to manage the applicant’s relationship with the University, where necessary, in compliance with current laws.

Art. 14 - Applicable laws and regulations

Any items for which no specific provision has been made in this call for applications shall be regulated in accordance with the Italian laws and regulations governing doctoral programmes.

Art. 15 - Person in charge of the procedure and contacts

Pursuant to Law no. 241 of 7 August 1990, the person in charge of the procedure set forth in this call for applications is Ms Monica Delù (Head of the Post-Graduate Programmes and International Students Services Sector).

For further information or clarifications please use the [InformaStudenti](#) service, selecting the category: Postgraduate > Doctoral research (PhD).

Milan, 21st October 2024

THE RECTOR
(Marina Brambilla)

Filed as record no. 6486/24 of 24 October 2024



Doctoral programme in Industrial Chemistry

Learning objectives

The general theme of the doctoral programme relates to the extensive field of application of chemistry to industrial processes. It aims to train students in understanding theoretical and practical problems, as well as economic, environmental and safety issues. Graduates will possess considerable scientific expertise and be able to organise and manage research activities, as well as analyse the aspects pertaining to variations in scale. The main research areas are: physical chemistry and catalysis in industrial processes; industrial electrochemistry and corrosion; synthesis, properties and structure of polymers; synthesis and processes of fine chemistry; synthesis, processes and control in primary chemistry; chemical biotechnology; innovative chemical processes; new structural and functional materials; innovative energy technologies; nanotechnologies.

An important aspect of the programme is that students meet foreign researchers and come into contact with internationally renowned research institutes. To this end, some teaching activities are assigned to foreign lecturers and students are given the opportunity to spend time in research institutions abroad.

The doctoral programme is entirely in English.

Academic disciplines

03/A (Analytical and physical chemistry)

03/B (Inorganic chemistry and applied technologies)

03/C (Organic, industrial and applied chemistry)

09/D (Chemical and materials engineering)

Research topic

“Organic electrochemical synthesis of iodinated contrast media”

Duration

3 years

Starting date

1st January 2025

Places available

1



Scholarships

1 scholarship funded by Bracco Imaging SpA for the research project: “Organic electrochemical synthesis of iodinated contrast media”

Doctoral programme coordinator

Prof. Dominique Roberto, full professor in scientific-disciplinary sector CHIM/03

dominique.roberto@unimi.it

Admission requirements

Master’s degree of any class

Reference letters

The Faculty of Instructors requires that 2 reference letters, drawn up according to [Form 2](#) attached hereto, be sent by email to the coordinator, dominique.roberto@unimi.it.

Selection stages – Doctoral programme in Industrial Chemistry

Submission of applications

By 2 pm on 25th November 2024

Qualification assessment date

The assessment will take place on **27th of November 2024**.

The assessment outcome will be posted to the [University website](#), on the study programme page, by the interview start date.

Interviews

Interviews will be held on 4th December 2024, at 09:30 am.

The interview schedule, showing each candidate's interview slot (name, date, time, and project presented), will be posted to the [University's website](#), on the phd programme's webpage.

Interviews will be held in person, in the Department of Chemistry, room Malatesta, via Camillo Golgi 19 - 20133 Milano.

Candidates who cannot attend the interview in person for justified reasons may take the interview remotely. To this end, they must submit a request using [Form 3](#).

The interview can be in Italian or English, at the applicant's choice. English proficiency will be assessed anyway.

This posting is equivalent to a notice to the persons concerned.



Doctoral programme in Translational Medicine

Learning objectives

The doctoral programme aims to train researchers who are able to develop research projects that bridge the gap between laboratory activity and clinical sciences, facilitating the translational process in both directions.

Aims:

1. understand and study biological structures in the different levels of organisation, their physiological and pathological modifications in the framework of interactions between people and the environment, exploring diagnostic and therapeutic interventions and facilitating their application in clinical practice;
2. learn a scientific translational research approach which can favour points of contact between biological and clinical-behavioural discoveries and preventive, therapeutic and rehabilitation practices in order to improve health and lifestyles, also considering the global increase in life expectancy;
3. develop a solid base in the methodological disciplines required to properly formulate experimental hypotheses, define experimental designs and critically interpret results;
4. promote communication between biological and clinical-behavioural research, particularly in relation to processes underlying movement and physical activity, in the areas of prevention, mental and physical wellbeing, sport and professional performance, in conditions of health, illness and disability, in a unified perspective;
5. understand the ethical implications of biological and clinical research.

The doctoral programme is entirely in English.

Academic disciplines

02/D (Applied physics, physics teaching and history of physics)

05/D (Physiology)

05/E (Experimental and clinical biochemistry and molecular biology)

05/F (Experimental biology)

05/H (Human anatomy and histology)

06/A (Pathology and laboratory medicine)

06/B (General clinical medicine)

06/C (General clinical surgery)

06/D (Specialised clinical medicine)

06/E (Specialised clinical surgery)

06/F (Integrated clinical surgery)



06/G (Paediatrics)

06/I (Radiology)

06/L (Anaesthesiology)

06/N (Healthcare, applied medical technologies, physical exercise and sports science professions)

09/G (Systems engineering and bioengineering)

Research topic

“Immuno-signatures as biomarkers in mitochondrial diseases: from clinical trials to new therapeutic prospectives”

Duration

3 years

Starting date

1st January 2025

Places available

1

Scholarships

1 scholarship funded by Fondazione IRCCS Istituto Neurologico Carlo Besta for the research project: “Immuno-signatures as biomarkers in mitochondrial diseases: from clinical trials to new therapeutic prospectives”

Doctoral programme coordinator

Prof. Mario Salvatore Clerici, full professor in scientific-disciplinary sector MEDS-02/A

mario.clerici@unimi.it

Admission requirements

Master’s degree of any class

Selection stages – Doctoral programme in Translational Medicine

Submission of applications

By 2 pm on 25th November 2024

Qualification assessment date

The assessment will take place on **28th of November 2024**.

The assessment outcome will be posted to the [University website](#), on the study programme page, by the interview start date.

Interviews

The interview will be held online on 4th December 2024,



at 10:00 a.m.

The interview schedule, showing each candidate's interview slot (name, date, time, and project presented), will be posted to the [University's website](#), on the phd programme's webpage.

The interview will be in English.

This posting is equivalent to a notice to the persons concerned.



Doctoral programme in Pharmacological Biomolecular Sciences, Experimental and Clinical

Learning objectives

The doctoral programme, positioned as the third level of University education, makes the most of the multidisciplinary knowledge of the teaching staff to train biomedical experts in the most modern aspects of pharmacological research. In particular, the areas of interest are:

- Basic research: the study of key mechanisms and molecules in physiopathological processes to identify new pharmacological targets and/or new markers predictive of disease and therapeutic effectiveness. Research involves: 1) the analysis of molecular and cellular aspects of complex physiological processes, 2) the study of pathogenic mechanisms in diseases, 3) the study of biological markers that can be of use in the translation of preclinical research to humans.
- Research applied to the pharmacological-toxicological study of active ingredients: 1) analysis of the activity of active principles, including biological drugs under development or in clinical use, 2) analysis of foods, food supplements and therapeutic plant derivatives, 3) analysis of xenobiotic activity.
- Research applied to the creation of innovative systems for studying pathologies and developing drugs and evaluation of their effects on the population. Research is based on: 1) the development of cellular and animal models also through genetic engineering methodologies, 2) optimising preclinical protocols for simple and complex diseases, including co-morbidities, 3) in silico approaches to the study of new drug-toxicology targets, 4) the use of databases and population studies also to assess drug use and outcomes in terms of clinical events.
- Technical-scientific collaboration with other clinical centres, for revising documentation on active compounds and plant protection products, as well as for pharmacovigilance.

In conclusion, students will develop competencies applicable to various areas of academic and industrial research, allowing effective bench-to-bedside translation and a multidisciplinary approach essential for public health, with a significant socio-economic impact on health.

The doctoral programme is entirely in English.

Academic disciplines

05/D (Physiology)

05/E (Experimental and clinical biochemistry and molecular biology)

05/F (Experimental biology)

05/G (Experimental and clinical pharmacology)

05/H (Human anatomy and histology)

05/I (Genetics and microbiology)

06/A (Pathology and laboratory medicine)

06/D (Specialised clinical medicine)



Research topic

“Interactions between type-1 trace amine receptors and metabotropic glutamate receptors in the pathophysiology and treatment of stress-related disorders and neurodevelopmental disorders”.

Duration

3 years

Starting date

1st January 2025

Places available

1

Scholarships

1 scholarship funded by Department of Pharmacological and Biomolecular Sciences for the research project: “Interactions between type-1 trace amine receptors and metabotropic glutamate receptors in the pathophysiology and treatment of stress-related disorders and neurodevelopmental disorders”

Doctoral programme coordinator

Prof. Giuseppe Danilo Norata, full professor in scientific disciplinary sector BIOS-11/A

danilo.norata@unimi.it

Admission requirements

Degree obtained in one of the following classes under Ministerial Decree 270/2004, or in one of the corresponding classes under Ministerial Decree 509/99:

LM-6 Biology

LM-7 Agrarian Biotechnologies

LM-8 Industrial Biotechnologies

LM-9 Pharmaceutical, Veterinary and Medical Biotechnologies

LM-13 Pharmacy and Industrial Pharmacy

LM-17 Physics

LM-18 Computer Science

LM-21 Biomedical Engineering

LM-41 Medicine

LM-42 Veterinary Medicine

LM-54 Chemistry

LM-55 Cognitive Sciences

LM-60 Natural Sciences

LM-61 Nutrition



LM-69 Agriculture

LM-70 Food Science

LM-75 Environmental and Land Sciences

LM-82 Statistics

LM/SNT1 Nursing and Midwifery

LM/SNT2 Health Professions for Rehabilitation

LM/SNT3 Health Professions for Technical Assistance

LM/SNT4 Health Professions for Preventive Care

Reference letters

The Faculty of Instructors requires that 2 reference letters, drawn up according to [Form 2](#) attached hereto, be sent to the email address dottorato.sfsc@unimi.it.

Selection stages – Doctoral programme in Pharmacological Biomolecular Sciences, Experimental and Clinical

Submission of applications

By 2 pm on 25th November 2024

Qualification assessment date

The assessment will take place on **28th November 2024**.

The assessment outcome will be posted to the [University website](#), on the study programme page, by the interview start date.

Interviews

Interviews will be held on 5th December 2024, at 10:00 am.

The interview schedule, showing each candidate's interview slot (name, date, time, and project presented), will be posted to the [University's website](#), on the phd programme's webpage.

Interviews will be held in person, in Department of Pharmacological and Biomolecular Sciences "Rodolfo Paoletti", in room Sala Consiglio- Via Balzaretti 9, 20133 Milano.

Candidates who cannot attend the interview in person for justified reasons may take the interview remotely. To this end, they must submit a request using [Form 3](#).

The interview will be in English.

This posting is equivalent to a notice to the persons concerned.



Doctoral programme in Food Systems

Learning objectives

The aim of this doctoral programme is to prepare researchers and scholars specialised in nutrition with international standard methodological know-how, autonomy and specific skills in scientific research on food systems. With these learning objectives, the doctoral programme in Food Systems envisages many cross-sector research topics:

- food technologies, process control and innovation;
- microbiology of foods and bioprocesses;
- food chemistry and biochemistry;
- human nutrition;
- ecology of agri-food and agri-environmental systems.

The doctoral programme is entirely in English.

Academic disciplines

03/A (Analytical and physical chemistry)

03/D (Medicinal and food chemistry and applied technologies)

05/D (Physiology)

05/E (Experimental and clinical biochemistry and molecular biology)

06/D (Specialised clinical medicine)

07/A (Agricultural economics and appraisal)

07/C (Agricultural, forest and biosystems engineering)

07/D (Plant pathology and entomology)

07/E (Agricultural chemistry, agricultural genetics and pedology)

07/F (Food science and technology)

07/I (Agricultural microbiology)

Research topics

“Studio esplorativo sull’effetto delle frazioni polifenoliche ottenute da prodotti della dieta mediterranea in modelli in vitro collegati alla - frailty in aging”

Duration

3 years

Starting date

1st January 2025



Places available

1

Scholarships

1 scholarship funded by Department of Food, Environmental and Nutritional Sciences for the research project: “Exploratory study on the effect of polyphenolic fractions obtained from Mediterranean diet products in in vitro models related to frailty in aging”

Doctoral programme coordinator

Prof. Diego Mora, full professor in scientific-disciplinary sector AGRI-08/A

diego.mora@unimi.it; food-systems@unimi.it

Curricula

1. Chemistry and biochemistry
2. Agri-environment
3. Food science and nutrition

Admission requirements

Master’s degree of any class

Selection stages – Doctoral programme in Food Systems

Submission of applications

By 2 pm on 25th November 2024

Qualification assessment date

The assessment will take place on **29th November 2024**.

The assessment outcome will be posted to the [University website](#), on the study programme page, by the interview start date.

Interviews

Interviews will be held on 5th December 2024, at 09:00 am.

The interview schedule, showing each candidate's interview slot (name, date, time, and project presented), will be posted to the [University's website](#), on the phd programme's webpage. .

Interviews will be held in person, in fifth floor, building 21500 DeFENS via Mangiagalli 2 - 20133 Milano

Candidates who cannot attend the interview in person for justified reasons may take the interview remotely. To this



UNIVERSITÀ DEGLI STUDI DI MILANO

end, they must submit a request using [Form 3](#).

The interview will be in English.

This posting is equivalent to a notice to the persons concerned.



Annex A

DICHIARAZIONE SOSTITUTIVA DI ATTO NOTORIO

Self drafted affidavit (art. 47 del DPR n° 445/2000)
(art. 47 Presidential Decree n. 445/2000)

Il sottoscritto/the undersigned

cognome/surname _____ nome/name _____

nato a/born in _____ il/on _____

consapevole delle sanzioni penali richiamate dall'articolo 76 del Dpr 445/2000 in caso di dichiarazioni non veritiere e falsità in atti

aware that providing false data and using fake documents are crimes punishable by law (art. 75 and 76 of the Presidential Decree no. 445/2000)

**dichiara sotto la propria personale responsabilità
declares under his/her own responsibility**

che le pubblicazioni/ i titoli sotto elencati, prodotti in copia tramite upload, sono conformi all'originale.

that the publications and the qualifications listed below, produced as copies, comply with the originals.

Milano, _____

Data/date

Firma/Signature

Ai sensi dell'art. 3 del DPR 445/2000 l'autocertificazione può essere utilizzata solo dai cittadini appartenenti all'Unione europea. I cittadini non europei devono produrre documenti originali o in copia autenticata secondo la normativa vigente.

According to the art. 3 of the Presidential Decree no. 445/2000, only Eu citizens are entitled to use this form. Non Eu citizens must submit the original documentation or photocopies authenticated in compliance with the law in force.



Form 1

PROGETTO DI RICERCA / PROJECT

Cognome e nome del candidato Applicant's Name	
Corso di dottorato PhD	

1) Titolo del progetto / Project title

2) Sommario / Abstract

3) Obiettivi e rilevanza dei risultati ottenibili nel contesto dello stato dell'arte / Project aims and their relevance in the context of the state of the art

4) Descrizione del progetto / Project description

5) Bibliografia / References

Il progetto dovrà avere almeno 2.000 e non più di 4.000 parole, bibliografia esclusa. The project should have at least 2,000 and not more than 4,000 words, excluding references.



Form 2 (Italian version)

LETTERA DI REFERENZA

Cognome e nome del candidato		Corso di dottorato	
------------------------------	--	--------------------	--

Da compilare in tutte le parti

Cognome e nome del		Ruolo	
Università/Ente			
Indirizzo		Città	
CAP		Paese	
Telefono		Email	
Data			

Come valuta la qualità del candidato rispetto ad altri studenti di pari livello formativo (studenti di un corso, laureandi, ecc...)?

Sotto la media(50%)	Top 50%	Top 25%	Top 10%	Top 5%	Top 2%

Come valuta l'attitudine del candidato alla attività di ricerca?

Inabilitato arispondere	Sotto la media	Media	Buona	Ottima	Eccezionale

Commento (Giudizio personale sul candidato)



Form 2 (English version)

REFEREE FORM

Applicant's Name		PhD	
------------------	--	-----	--

To be completed in all areas

Referee's name		Position/Title	
Institution/Comp			
Address		City	
Zip code		Country	
Phone contact		Email	
Date			

On the following scale, please rank the applicant against other students in comparable fields and indicate the comparison group used.

Bottom 50%	Top 50%	Top 25%	Top 10%	Top 5%	Top 2%

Please rate this applicant in overall promise for the doctorate (check one)

Unable to evaluate	Below Average	Average	Good	Outstanding	Exceptional

Give your comments here
(Your personal evaluation about the candidate)



Form 3

RICHIESTA COLLOQUIO TELEMATICO - ONLINE INTERVIEW

DA COMPILARSI SOLO SE IL COLLOQUIO PER L'AMMISSIONE È PREVISTO IN PRESENZA DAL BANDO E IL CANDIDATO È IMPOSSIBILITATO A PRESENTARSI

THIS FORM MUST BE FILLED ONLY BY APPLICANTS WHO ARE UNABLE TO SIT THE INTERVIEW ON THE UNIVERSITY PREMISES AS REQUIRED BY THE PHD ADMISSION CALL

IL/LA SOTTOSCRITTO/A - THE UNDERSIGNED

(COGNOME/SURNAME) _____

(NOME/NAME) _____

PASSAPORTO O CARTA D'IDENTITÀ/PASSPORT OR IDENTIY CARD n° _____

EMAIL _____

RICHIEDE DI SOSTENERE L'ESAME DI AMMISSIONE AL DOTTORATO IN MODALITÀ TELEMATICA/

REQUESTS TO TAKE THE PHD ADMISSION EXAM REMOTELY

PER I SEGUENTI MOTIVI /FOR THE FOLLOWING REASONS:

DATA/DATE

FIRMA DEL RICHDENTE /
SIGNATURE OF THE APPLICANT
