

NOTICE OF PUBLIC SELECTION FOR THE ADMISSION TO THE PH. D. PROGRAMMES WITH ADMINISTRATIVE SEAT AT THE UNIVERSITÀ DEGLI STUDI MAGNA GRÆCIA DI CATANZARO A.Y. 2023/24

PLEASE NOTE: THE OFFICIAL VERSION OF THIS CALL IS IN ITALIAN AND IS AVAILABLE ON THE MAGNA

GRÆCIA UNIVERSITY WEBSITE (D.R. 841/2023)

THIS TRANSLATION CANNOT BE USED FOR LEGAL PURPOSES AND IS ONLY MEANT TO PROVIDE

INFORMATION IN ENGLISH ON THE CALL FOR APPLICATION

DEADLINE: AUGUST 7TH 2023 – 12 P.M. (Italian time)

THE DEAN DECLARES

Art. 1 - Accreditation

In accordance with the provisions pursuant to Decree MUR n. 226 of 14.12.2021, pending the issuance of the Ministerial Decree of accreditation with the assent of ANVUR, the University Magna Græcia of Catanzaro intends to establish and activate for the a.a. 2023/24 (XXXIX cycle) the PhD courses, of triennial duration, indicated below:

BIOTECHNOLOGY FOR MOLECULAR MEDICINE

A.I., BIOMEDICAL AND COMPUTER ENGINEERING

MOLECULAR AND TRANSLATIONAL ONCOLOGY

PSYCHOLOGY

CLINICAL AND EXPERIMENTAL BIOMEDICAL SCIENCES

Curricula:

- Endocrine-metabolic sciences and molecular profiles associated with the intestinal microbiome
- Pathophysiology and clinic of cardiovascular diseases and systems medicine

EXERCISE AND SPORT SCIENCES

LIFE SCIENCES

Curricula:

- Basic life sciences
- Applied life sciences.

MEDICAL, PREVENTIVE AND NUTRITIONAL SCIENCES FOR HEALTH AND LONGEVITY.

Curricula:

- Innovative technologies, nutraceuticals and functional foods



- Clinical, translational, predictive and precision medicine

TECHNICAL SCIENCES AND HEALTH PROFESSIONS APPLIED TO PUBLIC HEALTH

DIGITAL TECHNOLOGIES APPLIED TO MEDICINE

Curricula:

- Innovation in basic and clinical research for rare and non-communicable chronic diseases
- Innovative technologies for digital medicine and advanced therapies

Art. 2 - Public Selection Announcement

We hereby announce the public selection, through competitive examinations, for admission to the 2023/24 Ph.D. programmes listed in the above art. 1 of the present Call for Applications.

The effectiveness of the selections carried out pursuant to this call is subject to the accreditation by the MUR of the relevant doctoral courses.

The award of scholarships on the DD.MM. 117 and 118 of March 3rd 2023, listed in Annex A, is subject to the admission to funding of the relevant project proposals by the MUR following the verification of the consistency of the research projects on the National Recovery and Resilience Plan, NRRP (NRRP) with the requirements of D.M. 117/2023 and D.M. 118/2023 by ANVUR.

The award of scholarships under D.M. 117/2023 is also subject to the completion of the financing itself by September 12th 2023.

Candidates who have graduated from foreign universities can request to participate in reserved positions by submitting a specific request when completing the application form with the online procedure referred to in the following art. 4. If the reserved positions for candidates who have graduated from foreign universities are not assigned due to lack of suitable candidates, these positions will be made available for the admission procedures for ordinary positions.

Residents in training, in addition to competing for ordinary places, have a reserve of places of at least 50% of the positions without a scholarship in each course, it being understood that they cannot compete for positions financed by the NRRP.

The present Call for Applications acts as official notification. Amendments, updates or additions will be published exclusively on the website of the University at the address https://web.unicz.it/it/category/bandi-ateneo.

The University reserves the right to modify, to extend, to suspend this selection notice, in relation to the new provisions of law or for proven reasons of public interest, without raising any claim or right for the aspirants. In Annex A – details of the PhD Courses in the Biomedical-Pharmacological Area - a.a. 2023/24, an integral part of this call, are indicated the PhD Courses and training objectives, possible curricula, Consistency with the NRRP, Eligibility criteria, the duration of the course, the name of the Coordinator and their e-mail address, degrees required for admission, the places and the number of scholarships put in competition for each curriculum where present and for each type of scholarship, the proposed research projects (contained in Annexes A/1 to A/10, an integral part of this call), the date of the interview, the calendar of publication of the results of the evaluation of qualifications, the foreign language required.

Each winner, according to the order of the ranking list of merit, at the time of enrolment must choose one of the projects provided for in Annex A to this call that has not already been selected by the candidate/s preceding/are in the ranking, until the places assigned to each curriculum have been filled. To this end, the



winners must express the order of priority of the projects of interest in the model available at https://web.unicz.it/it/category/bandi-ateneo . Winners are required to select all projects financed or co-financed by the NRRP except the residents in training.

<u>In any case, it is **strongly recommended**</u> to <u>select in addition to all NRRP projects also all projects</u> <u>with a University grant / Without a scholarship</u>

All positions funded under the NRRP pursuant to D.M. n.117 and DM. n.118/2023 must be accepted with a scholarship for all three years of the PhD. course.

The NRRP scholarships can be awarded to civil servants and employees under public law on condition that they obtain unpaid leave or extraordinary leave for study reasons for the entire three-year period of the Ph.D. course.

Due to the obligations imposed by the funding agency the allocation of places with scholarship funded ex D.M. 117/2023 and D.M. 118/2023 is subject to the verification of the eligibility for support on funds of the NRRP ex D.M. 1117/2023 and D.M. 118/2023 performed by of the MUR.

The courses will be activated only on condition that there is the availability of at least n. 3 scholarships for each Ph.D. course.

Art. 3 – Admission requirements

They can apply for participation in the selections for admission to the PhD courses listed in Annex A-Details of PhD Courses a.a. 2023/24, without restrictions on age or citizenship, those who have a master's degree (D.M. n.270/2004) belonging to one of the classes indicated in the respective tables, or a master's degree (D.M. n.509/1999), or an old degree system (D.M. n.509/1999) equivalent to the D.I. of 9 July 2009, or a suitable foreign qualification, as well as those who obtain at an Italian University the qualification required for admission, on pain of forfeiture from admission in the event of successful selection, by the date of enrolment in the doctoral course and, in any case, by 31.10.2023 at the latest.

Foreign qualification suitability will be established by the Ph.D. committee following the guidelines and current regulations in Italy and in the qualification issuing Country, as well as of treaties or international agreements on qualification recognition for further study and will have to be confirmed by the Academic Senate.

In the case of a qualification obtained abroad, candidates must attach to their application in appropriate section "RICONOSCIMENTO TITOLO ESTERO" the request for recognition of the qualification (exclusively for purpose of participating in the competition) and any document which might be relevant to the assessment, translated and certified by the relevant Italian bodies in the country of origin, and following current regulations for the admission of foreign students to Italian University post-graduate programmes.

The fac simile of the request is available on the website https://web.unicz.it/it/category/bandi-ateneo. Anyone expected to obtain their Italian degree in the period between application and the and the date of enrolment in the course will be admitted conditionally and will be expected to present to Area Affari Generali, University Magna Graecia of Catanzaro, within five (5) days from the obtainment of the qualification, a statement in lieu of the certificate, containing the name of the qualification issuing University, the date of obtainment, the type of diploma (vecchio ordinamento, specialistica/ magistrale) and relative marks, accompanied by a valid piece of ID, exclusively via PEC (certified electronic mail) at protocollo@cert.unicz.it.



The PEC must be sent by the personal account of PEC and a copy of a valid identity document must be attached. Institutional PEC accredited to public bodies are not allowed. In the event that the candidate is not the holder of a PEC but makes use of the power of representation referred to in Article 38, c. 3 bis of Presidential Decree no. 445 of 28 December 2000 and subsequent amendments, it is necessary to transmit, in addition to the substitutive declaration of certification of the qualification, also the delegation conferred on the holder of the PEC. The proxy must be accompanied by the valid identity documents of both parties who sign the proxy (delegator and delegate).

The subject of the PEC must include: Declaration Laureando SURNAME PhD 39______ (indicate the doctoral course).

The PEC must be sent by a certified e-mail personal user and a copy of a valid identity document must be attached. Institutional PECs accredited to public bodies are not allowed. In the event that the candidate does not have a certified e-mail address but makes use of the power of representation pursuant to art. 38, c. 3 bis of the Presidential Decree 28 December 2000, n. 445 and subsequent amendments, it is necessary to transmit, in addition to the substitutive declaration of certification of the qualification, also the delegation conferred to the holder of the PEC. The valid identity documents of both parties signing the proxy (delegating and delegated) must be attached to the proxy.

The following must be strictly indicated in the subject of the PEC: Declaration for Graduating SURNAME Doctorate 39_____ (indicate the doctoral course).

Art. 4 – Applications procedures

Candidates may apply separate applications, one for each PhD course for which they intend to compete.

Candidates wishing to apply for more than one Ph.D. programme must present separate applications, one for each Ph.D. programme they are applying for.

In case of application to more than one Ph.D. programme, it is necessary to <u>declare in each application the</u> <u>order of priority of the Ph.D. programmes applied for; such order must be identical in each of the application forms; In the case in which the requests for participation were given a different order of priority, the order of priority expressed in the first application for participation submitted in chronological order shall be taken into account.</u>

Should the candidate result suitable for more than one Ph.D. programme, the order of priority expressed in their application will, trough declaration *in lieu* of *affidavit*, be considered a binding criterion for programme admission.

<u>Applicants can submit their application</u> (including the documentation shown below) <u>exclusively using the online form</u> available at https://unicz.esse3.cineca.it/Home.do, Italian time).

The submission of the application takes place automatically with the definitive closure of the electronic procedure. The validity of the application is subject to takes place with the payment of the participation fee in the competition within 07.08.2023 (see below). The date and time of submission of the application are provided by the computer system.

<u>Candidates with qualifications obtained abroad</u> who intend to participate in <u>reserved positions</u> must choose this option when completing the online application and must attach the relevant <u>request in pdf format, duly signed, in the appropriate section</u>. The facsimile of the request is available at https://web.unicz.it/it/category/bandi-ateneo.



The procedure involves an initial registration, after which you print the memo containing username and password for login to the Web portal.

However username and password will also sent via email from the email address "helpesse3@unicz.it".

N.B. It is required indicate a valid email address in order to recover the credentials in Esse3 System and for any communications.

For online application is available a Short Guide for admission to PhD announcement a.y. 2023/24 on the website at the following address https://web.unicz.it/it/category/bandi-ateneo.

When completing the online application, it is necessary to declare the order of priority of the courses in which you intend to participate. N.B. The completion of the "DOCTORAL QUESTIONNAIRE" in the section "LIST OF QUESTIONNAIRES", in which the order of priority is declared, is also mandatory for those who intend to submit a single application form.

For those who submit a single application form: the only choice made appears in the print of the application.

When completing the online application, it is necessary to upload documents in PDF (each file no larger than 20 megabytes):

- 1) copy of passport;
- 2) *curriculum vitae et studiorum* (the format of which must be the same as the *facsimile* available online https://web.unicz.it/it/category/bandi-ateneo;
- 3) the **declaration of certification exams** containing the indication of the grade, the date, **the grading system**, with the analytical indication of the exams taken during **the entire university career** (minimum 4 years), and non-approximate arithmetic average;
- 4) eventually, the publications, relating to the topics of the Doctorate including the degree thesis or the abstract;
- **Post-graduate specialization course, research fellows, research grant** relating to the topics of the Doctorate;
- 6) any qualifications relating to the topics of the Doctorate;
- 7) eventually, "Request to participate for reserved positions for candidates with qualifications obtained abroad";
- eventually, "Request for recognition of the foreign qualification exclusively for purpose of participating in the competition and any document and related documents (e.g. declaration of value, Diploma supplement, etc.): compulsory for candidates with qualifications obtained abroad;
- 9) eventually, "Reasoned request to conduct the interview electronically";
- 10) a list of all documents provided.

The fac simile indicated nr. 7, 8, and 9 are available on the website https://web.unicz.it/it/category/bandiateneo.

When completing the online application it is necessary to specify in "GESTIONE TITOLI E DOCUMENTI PER LA VALUTAZIONE", in field "TITOLO" for all documents you want to upload a meaningful name (e.g. curriculum_vitae, project, passport).



Until the application is completed - but always within the deadline of the call - it is possible to integrate or modify the attachments by canceling the process.

N.B. When you finish filling out online procedure and click on "COMPLETA AMMISSIONE AL CONCORSO" the application can not be modified, and you can not cancel the process.

After completing the application for admission - <u>only in the case of incorrect or incomplete upload of the attachments during the online procedure</u> – **foreign candidates residing abroad** <u>can send exclusively by email to the address affarigenerali@cert.unicz.it within the deadline **07.08.2023, 12:00** (Italian time) any requests <u>for changes / additions</u>, indicating the changes and / or additions to be made. A copy of passport must be attached to the aforementioned request.</u>

The subject of the e-mail must indicate: Integrazione e/ o modifica Domanda SURNAME DOTTORATO 39 ______ (indicate, in abbreviated form, the PhD course to which the integration / modification refers).

Requests will not be considered if transmitted after deadline.

Online applications will automatically close at at 12:00 (Italian time) August 7th 2023.

After completing the application for admission - <u>only in the case of incorrect or incomplete upload of the attachments during the online procedure</u> – **foreign candidates residing abroad** <u>can send exclusively by email to the address affarigenerali@cert.unicz.it within the deadline **07.09.2023, 12:00** (Italian time) any requests <u>for changes / additions</u>, indicating the changes and / or additions to be made. A copy of passport must be attached to the aforementioned request.</u>

The subject of the e-mail must indicate: Integrazione e/ o modifica Domanda SURNAME DOTTORATO 39 ______ (indicate, in abbreviated form, the PhD course to which the integration / modification refers).

Requests will not be considered if transmitted after deadline.

Online applications will automatically close at at 12:00 (Italian time) August 7th 2023.

The closing date is peremptory and it is responsibility of the candidate to check the correct conclusion and sending off of the online application.

No complaints are accepted for late applications.

Candidates are strongly advised not to wait until the last few days for application. The University declines any responsibility due to technical problems, overload, or other, in its application and communication systems which may cause a delay in applications.

After filling out the online application form for selection must be printed but it is not necessary to send it within the deadline.

Application forms will be automatically excluded which:

- a. sent by PEC not in the name of the candidate or not accompanied by a delegation given to the holder of the PEC together with valid identity documents of both parties signing the delegation (delegate and delegate);
- b. sent by institutional PEC accredited to public bodies;
- c. Will not be taken into account the requests of candidates of foreign nationality residing abroad transmitted after 12:00 (Italian time) of 07.08.2023.



The procedure for receiving applications online will be automatically closed at 12:00 P.M. (Italian time) of 07.08.2023. The deadline indicated is mandatory and it is the candidate's responsibility to verify the correct conclusion of the electronic application procedure and the correct insertion of all annexes. Therefore, complaints will not be accepted for possible malfunctions of the computer system.

Applicants are therefore invited not to wait for the last days before the deadline for submitting their applications; The University assumes no responsibility for any malfunctions due to technical problems and/ or overload of the communication line, and/ or the application systems or for any errors attributable to third parties, the event, force majeure.

Please note that for any technical and/or operational problems during the online application process, students must open a special ticket at the following link: http://www.asi.unicz.it/helpdesk/.

At the end of the online application procedure, the candidate must print the application.

Candidates must pay € 50.00 for the selection process participation fees made by "Pago PA payment" by 07.08.2023. For each application a partecipation fee must be paid. Applicants failing to pay within the deadline shall be excluded from the competition. The fee is non-refundable.

<u>Pay with PagoPA (online mode):</u> allows you to choose between the payment instruments available: credit or debit card or prepaid card on the main circuits. Payment can be made with any credit card by selecting one of the banks that appear in the mask even if the credit card was issued by a bank other than those indicated.

The application form must be submitted exclusively through online procedure described above: therefore, no delivery or shipment of paper documents to the Offices must be made by the deadline. The application for participation in paper format, duly signed, must be submitted during the enrollment phase, for all legal purposes, with a copy of passport, exclusively from the winners of the competition, according following art. 8 of this announcement.

In their application form, candidates must state clearly and truthfully, under their own responsibility:

- their personal details, date and place of birth, tax payer number, citizenship, home and contact addresses;
- the title of the Ph.D. programme applied for and the chosen *curriculum*;
- to have an adequate knowledge of the Italian language;
- the degree possessed, stating the result, date and issuing University, or the academic qualification obtained from a foreign University, or to be graduating, with the commitment to send to the University, penalty forfeiture, no later than 5 days after obtaining the title, substitute declaration relating to the achievement of the degree;
- that they undertake the Ph.D. on a full-time basis, without prejudice to art. 12, c.1, of D.M. 226/2021;
- not to be handicapped or to be handicapped and to have need of aids or of additional times; the handicapped candidates, according to law 5/02/1992, n. 104, will have to ask in relation to the own handicap, the necessary aid, and any need for additional time to be able to take the selection tests;
- that they have read and accepted all clauses of the call for applications, and in particular that they are aware that the selection procedures will follow the calendar set out in Annex A Details of PhD Courses, which acts as official convocation for the exams themselves without further notice, and that any changes to such calendar will be communicated exclusively through publication on the University website https://web.unicz.it/it/category/bandi-ateneo;
- the order of priority in case of useful placement for several programmes; in case of application for more than one Ph.D. Programme, it is necessary to declare in the online application the order of priority for the chosen programmes; the order must be identical in each of the application forms



received, In the case in which the requests for participation were given a different order of priority, the order of priority expressed in the first application for participation submitted in chronological order shall be taken into account; For those with a single application form: in the printing of the application appears the only choice you make;

- that they are aware that the scholarships cannot be cumulated with research grants or other scholarship of any kind, except those granted by national or foreign institutions aiming at integrating the educational and research activity of the scholarship holder with trips and stays abroad;
- to undertake to notify in a timely manner any change of residence or address for the purpose of selection;
- to be aware that the University of Magna Graecia Studies of Catanzaro (P.I. 02157060795 C.F. 97026980793), based in Viale Europa 88100 Catanzaro (tel. 0961 3694001- PEC: proto cert@unicz.it), processes the data provided by candidates in accordance with current legislation on the protection of personal data, as best described in the extended information available at the University, which has been viewed on the institutional website https://web.unicz.it; the Data Protection Officer (DPO) can be contacted at dpo@unicz.it.

Any alternative form of application is excluded.

The verification of the validity of the applications and the payment of the contribution of € 50,00 within the deadline will be carried out by the Administration after the end of the call.

Applications will not be considered valid for the purposes of selection:

- a. not completed online in accordance with the electronic procedure described above;
- b. presented in any other form and manner;
- c. without a double copy of a valid ID / passport online;
- d. of candidates who have not paid the "Contribution selection participation" of € 50,00 by the deadline of the call;

The exclusion from the selection, for the aforementioned reasons, will be notified to the interested parties exclusively by PEC, or by ordinary e-mail (in the case of failure to communicate a PEC address), to the address chosen as the address for the purposes of the selection.

Candidates will be expected to give proof of Public Administration-issued qualifications by means of a declaration in lieu of certification (or self-certification) as set out by art. 46 of D.P.R.445/2000 and subsequent amendments. All self-certifications must contain the date and authentic signature.

The same procedures should also be followed by:

- EU citizens;
- citizens of non-EU states who are settled in Italy, limited to the verifiability of status, personal
 qualities and achievements from Italian public bodies (for example, if they obtained a degree from
 an Italian University).

Non EU candidates who have studied abroad must attach the original certificates and their relative translations (see art. 3 above). Such candidates will be admitted to selection conditionally, and will be excluded from the Ph.D. programme should it emerge, upon verification, that the title held does not correspond to the requisites listed by the present call for applications and therefore does not allow for enrolment in the Ph.D. programme.

Candidates must attach the adequate declaration in lieu of affidavit, in accordance with art. 47 of D.P.R. 445/2000 and subsequent amendments, in which they certify compliance to the original of the publications presented. Further, candidates must declare under their own responsibility and in accordance with D.P.R. n. 445/2000 the truthfulness of the data and information in the *curriculum vitae et studiorum*.



It is necessary to specify, for all qualifications and all information included in the *curriculum vitae et studiorum*, all elements which may aid the process of verification by the Administration (*e.g. Start/end date, institution/company, duration of grant/contract, marks, position filled, etc.*)

All candidates are admitted to selection upon condition of verification that they fulfil the requisites set out by the call for applications.

For reasons linked to organization of workload and timeliness, effectiveness, and efficiency of administrative action, the Administration will only carry out checks on those applicants who will have taken and passed the admission tests.

The University may, at any time during the process and following the start of the Ph.D. programme, carry out checks on the truthfulness of the information provided, in accordance with law DPR n. 445/2000 and its subsequent amendments.

Should motives for exclusion be determined after the start of the programmes, the University may arrange, through a provision justified by the Dean, for the exclusion of the candidate from the selection process or the Ph.D. programme and the revoking of any related benefits, with no prejudice to the penal responsibilities for falsification of documents and false/untrue/fraudulent statement as set out in art. 76 DPR 445/2000, as may apply.

Art. 5 - Judging Committees

The Judging Committee is appointed with an ordinance issued by the dean upon consultation with the coordinator of the Ph.D. programme; it is composed normally of the coordinator himself, President of the Committee, and the *curricula* coordinators, always guaranteeing an odd number of components through the appointment, where necessary, of an extra component taken from the teaching body.

The commission may be integrated with other College professors appointed by the Department.

For Ph.D. courses not articulated in curricula, the Commission is appointed by Rector's Decree, after consulting the Coordinator of the doctorate, and normally is constituted by the Coordinator of the doctoral course, as President, and two members of the College of Teachers.

The same decree appoints the alternate members appointed from among the members of the College of Teachers.

The composition of each commission will be published, after the call for applications deadline, on the website of the University at https://web.unicz.it/it/category/bandi-ateneo.

Art. 6 - Selection Process

Admission to the PhD programme is based on a selection procedure aimed at ascertaining the candidate's preparation and aptitude for scientific research.

The selection procedure consists of the evaluation of qualifications and an interview that will focus on the discussion of qualifications, previous scientific experience and knowledge of a foreign language.

For the evaluation of the titles 50 points are reserved as follows:

- a maximum of 35 points for the Curriculum vitae et studiorum (CV);

The candidates will be evaluated on the basis of the **entire university career**, that is, on the basis of the arithmetic average of the marks obtained during the three-year degree together with the votes of the two-year master's degree. For this purpose it is necessary to self-certify the Master's Degree (or equivalent) with the analytical indication of the exams taken, the date and the vote and declare the relative arithmetic average; in the case of a non single cycle degree, it is necessary to self-certify the exams taken during the



three-year period and during the two-year specialist/ master's degree course, date and vote and declare the relative arithmetic average;

- a maximum of 12 points for any publications relevant to the Doctoral themes, including the thesis;
- a maximum of 3 points for any Master's, scholarships and research grants relevant to the Doctoral themes. Typewritten or printing works not yet accepted by scientific journals will not be considered.

For the admission to the interview the candidate is considered eligible if he reaches a vote of not less than 30/50.

The interview is awarded a maximum score of 50 points.

The minimum threshold for passing the interview is 30/50.

The knowledge of the foreign language, according to the specifications indicated for each doctoral course in the aforementioned Annex A, will be ascertained during the interview.

The candidate may decide whether to take the interview in English or Italian.

The results of the evaluation of qualifications will be published by the Selection Boards through publication on the University's website at https://web.unicz.it/it/category/bandi-ateneo according to the calendar indicated in Annex A for each doctoral course.

The publication of the scores reported in the evaluation of the titles constitutes, for those who have obtained a vote of at least 30/50, convocation for the interview without further notice and/or communications.

The interview will normally take place face-to-face, in a room open to the public unless otherwise specified in the annex A. Subject to the option to carry out electronically, on specific request, for candidates graduates abroad and residing abroad and for any cases of compulsory quarantine. Exceptionally, justified and documented requests to carry out the interview in videoconference by candidates may be authorized. To this end, the candidate must submit in the manner described in art. 4 (p.5), reasoned request to the Rector who will authorize, if the conditions are met, the conduct of the interview at a distance. Only in cases of mandatory quarantine, the candidate in the days before the date of the interview may submit to the PEC protocollo@cert.unicz.it appropriate request to the Rector. Only candidates of foreign nationality residing abroad can send this request by ordinary e-mail to affarigenerali@cert.unicz.it, configured to accept ordinary e-mails.

In case it becomes necessary to adopt the modality of carrying out the interview electronically for all candidates and in case of any change in the schedule of the interviews will not be given any personal communication to the candidates.

Applicants are therefore responsible for checking any updates on the University's website at https://web.unicz.it/it/category/bandi-ateneo; These notices will have the effect of notifying all applicants. The date of completion of the interview, set for each doctoral course in Annex A, is a notification for all intents and purposes.

Candidates who have not received notice of exclusion pursuant to the previous article 4 and who have obtained a score of at least 30/50, following the evaluation of qualifications, are required to present themselves, without further notice, at the office, on the day and time indicated.

Only candidates of foreign citizenship and/ or resident abroad, candidates in compulsory quarantine and candidates of Italian nationality working abroad with regular employment relationship, which have been authorized by the Rector pursuant to the previous paragraphs, and have been admitted following the verification of applications pursuant to Article.4 above and have obtained a score of at least 30/50, following the evaluation of the titles, are required to connect electronically on the day and time that will be indicated



by notice published at https://web.unicz.it/it/category/bandi-ateneo together with the virtual classroom access link. The timetable may be subject to increasing variations.

To take the test, candidates must present a valid identification document.

The interviews in telematic mode will be carried out in public session through the Meet Gmail platform. The Meet Gmail platform allows the public access to the virtual classroom where the session takes place. In any case, the interviews must be publicized.

Applicants are required to connect on the day and time that will be published in the aforementioned notice for the conduct of the interview on the MeetGmail platform. The commission will ask you to identify the student by asking him to bring the valid ID closer to the camera. The Commission can silence the microphone of all candidates, so that the other candidates can listen (both the Commission and the candidate questioned), making the test de facto public. At the end of the interview, the Commission will silence the microphone of the interviewed candidate and ask the next candidate to reactivate his microphone (the microphone cannot be reactivated directly by the Commission).

The candidate must be available to the account indicated in the application form on the day and time set for the interview. The Commission may agree with the applicant on a specific time for the start of the interview. The Commission may ask the candidate, before starting the interview, to frame the room and frame the table, on which there must be nothing outside the computer (it is not possible to keep books and notes, unless authorized by the Commission).

Excluded from the competition are candidates who have not indicated a valid e-mail address for the electronic link, who are unavailable on the day or time established, which do not provide a valid identity document or where the link of the candidate does not work.

The University of Magna Græcia Studies of Catanzaro declines any responsibility in the event that technical problems prevent the smooth conduct of the interview. Please note that the University of Magna Græcia Studies of Catanzaro does not provide technical assistance to candidates and that it remains the responsibility of the participants to verify both the functionality of their telematic link and that the device used is suitable and functional to the connection.

The committee shall draw up minutes for each meeting. At the end of each interview session, which will be held in public, the Commission shall draw up a list of the candidates examined, indicating the votes recorded by each candidate in the interview. The list, signed by the President and the Secretary of the Commission, shall be posted on the same day at the place where the test will be carried out and, in the case of an interview conducted electronically, the Selection Board will inform the candidates who have taken the interview of the score assigned electronically.

The results of the colloquium will be published at https://web.unicz.it/it/category/bandi-ateneo at a later date.

Any changes and updates to the call, including any changes to the dates and methods of conducting the interview will be disclosed exclusively through publication on the University website at https://web.unicz.it/it/category/bandi-ateneo.

Candidates are responsible for checking any updates on the University's website, even close to the scheduled dates for the interviews.

At the end, the Commission forms, in descending order, the general ranking of merit by adding the votes attributed to each candidate in the evaluation of qualifications and the score assigned to the interview.

The general ranking lists will be published on the University's website at https://web.unicz.it/it/category/bandi-ateneo.



The President of the Selection Board **promptly** sends the minutes of the selection operations to the Rector who, normally within 15 days., from the date of receipt of the above-mentioned minutes, it shall, by its own decree, approve the acts of the selection or postpone them for any regularization. **From the day following** the date of publication of the Rector's Decree approving the selection documents on the website https://web.unicz.it/it/category/bandi-ateneo, they run, under penalty of forfeiture, the deadlines for the submission of the application for registration pursuant to art. 8.

Art. 7 - Rankings

The Commission forms the general ranking of merit on the basis of the scores obtained by the candidates in the assessment of qualifications and in the interview.

Admission to the courses with **the provisional allocation of the scholarship** will take place by Rector's Decree, on the basis of the general ranking of merit, within the limits of the availability of the places fixed by the call for applications, and on the basis of the priority order of the projects of interest expressed by the winning candidates.

Admission to the courses without a scholarship will be by Rector's Decree, on the basis of the general ranking of merit, within the limits of the availability of the places fixed by the call and on the basis of the order of priority of the projects expressed by the winning candidates. The winners of a place without a scholarship at the time of registration can choose only projects labeled "Without scholarship" or if not explicity indicated "University/ without scholarship".

In the event that the results of the admission tests lead to an ex aequo situation for a post with scholarship, the assessment of the economic situation determined pursuant to D.P.C. 9/04/2001 prevails.

To this end, candidates in an ex aequo position are required to submit, online, the request for the ISEE Model the day following the date of publication of the merit ranking; In any case, candidates in an ex aequo position must transmit the ISEE model to the University Administration (at the address affarigenerali@cert.unicz.it or affarigenerali@unicz.it) no later than September 18, 2023 in order to allow the award of NRRP scholarships by the ministerial deadline; to this end, candidates admitted to the interview are invited to check in advance the documentation and the time necessary for the issuance of the ISEE.

In case of further parity, the youngest candidate of age prevails pursuant to art. 3, c. 7 of law 127/1997, as supplemented by art. 2 of Law 191/1998.

In the event that the results of the admission tests lead to an ex aequo situation for a post without scholarship, the youngest candidate shall prevail.

If posts reserved for foreign graduates are not allocated for lack of suitable candidates, these posts will be made available for admission procedures for ordinary posts.

In the case of placement in a position useful in several doctoral courses, the order of priority expressed in the application for participation, by means of a declaration in lieu of the document of notoriety, will be a binding criterion for admission to the courses.

Therefore, only the curricula for which there are in the general ranking of merit winning candidates who had chosen those particular curricula will be activated.

Courses start on November 2nd 2023.

In the event that one or more scholarships financed or co-financed by the NRRP (ex D.M. 117/2023 and D.M. 118/2023) are not admitted to funding following verification by ANVUR, we will proceed - even after the start of the courses - to reassign according to the order of the merit ranking the scholarships actually available and the places without scholarships. Candidates who, on the basis of the merit ranking, as a result of any aforementioned reassignment, were no longer entitled to the scholarship will continue the doctoral



course without a scholarship within the limit of places without a scholarship and without prejudice to the ratio of n.1 place without scholarship every n.3 places with scholarship, pursuant to Ministerial Decree 226/2021.

Candidates who, on the basis of the ranking list of merit, will no longer be entitled to the scholarship will continue the doctoral course without a scholarship.

Candidates who on the basis of the ranking list of merit, following the aforementioned reassignment, will no longer be placed in a useful position in the ranking list will be declared forfeited; in this case, candidates will be entitled to the refund of \leqslant 360,00, relating to the registration fee and frequency, and \leqslant 150.00 relating to the fee for the right to study, in accordance with the procedures that will be communicated later.

The availability of at least No. 3 scholarships for each doctoral course for its activation remains limited.

Art. 8 – Required action for successful candidates

Upon enrolment, the winners must express the order of priority of the projects of interest **listed in Annex** A to this call by filling in the form available at https://web.unicz.it/it/category/bandi-ateneo . Winners must select all projects financed or co-financed by the NRRP except the residents in training.

<u>In any case, it is **strongly recommended**</u> to <u>select in addition to all NRRP projects also all projects</u> with a University grant / Without a scholarship

The winning candidates will have to fill in the application online for the first year.

The winners must connect to the University's website on the https://unicz.esse3.cineca.it/Home.do page, choose the 'Login' item and, using the username and password assigned by the system when registering for the competition (or in the possession of the student if student of the University of Catanzaro), follow the following path: "Segreteria-Immatricolazione/Scelta tipologia Corso di studio" (in case of loss of username and password, open a ticket to the following link https://www.asi.unicz.it/helpdesk/).

N.B. The conclusion of the online procedure alone does not complete the enrolment.

The winners, after completing online the application for registration in the first year by entering all the required data, will have to print the same application.

The application for registration for the first year must be accompanied by:

- **The application for participation in the selection** (printed exclusively by the online filling procedure) signed in original;
- Form, drawn up according to the facsimile that will be made available at https://web.unicz.it/it/category/bandi-ateneo, duly completed, containing the choice of projects with the indication of the order of priority;
- receipt of the payment, made by PagoPA payment, of the first installment of the registration fees and frequency of € 526.00 (euro five hundred twenty six/00) including "Tuition fee and PhD course attendance I installment I year of € 360.00, Fee for the right to the PhD study of € 150.00 (subject to balance) and virtual stamp of € 16.00".
- photocopy of a valid identification document;
- photocopy of the tax code (CODICE FISCALE);

<u>The successful candidates, under penalty of forfeiture, must send by PEC</u> or by hand delivery, even by courier, the application for registration in the following prescribed terms:



The application for registration accompanied by the aforementioned annexes must be received no later than 3 (three) days starting from the day following the date of publication of the Rector's Decree approving the selection documents on the website https://web.unicz.it/it/category/bandi-ateneo in one of the following ways:

- sent by PEC to the certified e-mail address protocollo@cert.unicz.it.	
The PEC must include in the subject: Enrolment I year PhD in	_ (specify the PhD course).

- delivered by hand, even by courier, no later than the aforementioned deadline at the Protocol Office of the University of Magna Græcia Studies of Catanzaro located on the ground floor - Office Building, University Campus, Viale Europa, Loc. Germaneto, 88100 Catanzaro, in the following opening hours:

from Monday to Friday, from 9.00 to 12.00 Monday and Tuesday from 15.00 to 16.00

No complaints are allowed for late applications. Registration requests received by priority mail are not allowed.

The address of the application for registration remains at the sole risk of the sender if, for whatever reason, the application itself does not reach its destination in due time.

If the expiry date indicated falls on a public holiday, the deadline shall be extended to the first working day. Applicants are also required to complete and attach to the application for registration the presumptive declaration of gross personal income available on the University website https://web.unicz.it/it/category/bandi-ateneo for the purpose of awarding the scholarship.

These declarations are subject to the verification of the veracity of their content by the University Administration, also in collaboration with the Tax Police Bodies.

Those who have not regularised their registration within the above terms will be considered as renouncers and the vacancies will be assigned, within two months from the beginning of the courses, to the suitable candidates according to the order of the ranking, without prejudice to a lower deadline for places with NRRP scholarships. In case of renunciation of the winners or availability of additional resources by the deadline of this call, it is possible to admit eligible candidates placed in a useful position in the ranking within two months from the beginning of the courses, without prejudice to a lower deadline for places with NRRP scholarships. The communication to the next candidate will be sent by registered letter, or other equivalent means, to the address indicated in the application for the participation in the selection and the candidate must produce the application form according to the procedures provided, in the previous paragraphs, for the winning candidates.

Those who are already enrolled in another doctoral course will not be taken into account in the phase of any ranking step after the beginning of the courses.



The University Administration assumes no responsibility for the case of dispersion of communications depending on incorrect indications of residence and delivery by the aspirant, or by failure or late notification of the change thereof, nor for any postal or telegraphic errors not attributable to the Administration itself.

In the case of winners who are civil servants, enrollment is subject to verification, by the administrative offices of the University, of the release of the leave/extraordinary leave for the period of the normal duration of the course, envisaged by current legal provisions from part of the relevant administration.

Art. 9 – Scholarships

The scholarships are assigned by Rector's Decree according to the order defined in the general ranking of merit within the limits and with the modalities referred to in art. 7.

Candidates who will be awarded a scholarship under the NRRP (pursuant to Ministerial Decrees nn.117 and 118/2023) will have to send, in the same manner indicated in the previous art. 8 for sending the application for enrollement, without fail within the following 2 days from the communication by the offices of the successful assignment of the NRRP scholarship on the basis of the preferences expressed by the winners, the declaration of commitment to comply with the obligations deriving from the implementation of the DD.MM. no. 117 and no. 118/2023.

The aforementioned communication will be sent to the NRRP scholarship assignees by PEC, or by ordinary email to the address chosen as the address for selection purposes.

The facsimile of the declaration of commitment will be made available on the website https://web.unicz.it/it/category/bandi-ateneo.

All positions funded under the PNRR pursuant to D.M. 117 and 118/2023 must be accepted with a scholarship for all three years of the doctoral programme. Those who are awarded scholarships funded under the NRRP projects pursuant to DM 117/2023 and D.M. 118/2023 cannot renounce the scholarship and at the same time continue the doctoral course. Therefore, the candidate will not be able to continue his Ph.D. course in the event that situations of incompatibility arise or occur which provide for the suspension and/or renunciation of the doctoral scholarship (e.g. joint attendance of medical specialization school, exceeding the income, etc.), except for different ministerial provisions.

All grants funded under the NRRP are not compatible with the salary of an employee (temporary/ indefinite) of a private company, in order to avoid the occurrence of State aid hypotheses.

The yearly amount of the scholarship, before taxes, is of € 16,243.00; this is paid in monthly deferred instalments. This amount is increased by a maximum of 50 percent for a total period of no more than 12 months, if the PhD student is authorized by the College of Teachers to carry out research activities abroad.

For the scholarship, the limit of total gross annual personal income is set at € 15.000,00. The income refers to the year of disbursement of the scholarship.

Income of property origin and emoluments of any other nature, whether recurrent or occasional, personal income from work with the exclusion of the amount of the grant or any income support benefits paid on the basis of the grant (maternity allowance).

The Ph.D. student is required to return, even in case of cancellation of the course, the accruals of the scholarship already received in cases where it exceeds the aforementioned income limit.

The scholarships have an annual duration and are renewed on condition that the PhD student has completed the program of the activities planned for the previous year according to the procedures provided for in art. 12 of the University Regulations on Ph.D. It remains the obligation to award the scholarship after passing the examination.



The scholarship cannot be combined with other scholarships for any title awarded, except those granted by national or foreign institutions useful to complement, with stays abroad, the training or research activities of PhD students.

The scholarship of the PhD is subject to the payment of the INPS social security contributions under separate management pursuant to Article 2, paragraph 26, of Law August 8, 1995, n. 335, and subsequent amendments, two thirds to be borne by the administration and one third by the grant holder. Doctoral students enjoy the protection and related rights.

Each PhD student is assured, within the existing financial resources in the budget of the University "Magna Græcia" of Catanzaro, a budget, determined annually by the Board of Directors, for research activities in Italy and abroad.

Those who have already received a scholarship for a doctoral course even for a single year, or a fraction of it, cannot benefit from it a second time.

The provisions of Article 4 of Law No. 476 of 13 August 1984 shall apply to the grant for the attendance of doctoral courses in tax matters.

The payment of the scholarships to the candidates winners of scholarships financed by D.M. 117/2023 and D.M. 118/2023 will be made after the confirmation of eligibility for the additional scholarship by the competent ministerial offices and the final awarding of scholarships to the winners.

Art. 10 - Ph.D. students Rights and Duties

Admission to the doctorate involves an exclusive and full-time commitment, without prejudice to the possibility of a specific discipline in relation to the provisions of art. 1, paragraph 6, from art 7 of the Regulations in the matter of doctoral studies pursuant to D.M. 226/2021.

The PhD students, as an integral part of the training project, can carry out, after approval of the College of Teachers and without this entailing any increase in the scholarship, tutoring activities, students of the degree and master's degree programmes and, in any case, up to a maximum of forty hours in each academic year, supplementary teaching activities. For the activities referred to in this paragraph, doctoral students are paid the allowances referred to in art.1, paragraph 1, letter b) of DL 105/2003 converted into law n.170/2003.

The interventions foreseen by D.L. n. 68/2012 are extended to PhD students, with the modalities regulated therein.

The provisions on maternity protection set out in the decree of the Minister of Labour and Social Security of 12 July 2007, published in the Gazzetta Ufficiale No. 247 of 23 October 2007, apply to doctoral students.

The increase of the scholarship is established in the amount of 50%, for a total period not exceeding twelve months, for the conduct of research activities abroad authorized by the college of teachers, as established in art.9 of the D.M. 226/2021.

Students enrolled in the Ph.D. program can carry out periods of training at Italian or foreign universities or research institutes. All Ph.D. students have the obligation to carry out, during the three-year period, a research period abroad of at least 3 months (90 days) and not more than 18 months.

During the period of stay abroad of PhD students without a scholarship and with an ISEE of less than €22,000.00, the University undertakes to pay €5,000.00 for the entire year as reimbursement of expenses.

The specific obligations for beneficiaries of grants financed under D.M. 117/2023 and D.M. 118/2023 remain unchanged.

Upon submission of the application, the candidate is aware and accepts of the need to carry out, in case of awarding the doctoral grant, the planned research periods in the company and abroad, and that failure to



respect the performance of even one of the two periods of research will lead to the revocation of the scholarship and the loss of status of Ph.D. student.

The Ph.D. student beneficiary of the NRRP scholarship, accepting the scholarship, must submit a declaration with which:

- a. formally undertakes to carry out the planned research periods in the company and abroad, at the same time certifying that he is aware that failure to comply with the minimum period in the company and/or failure to comply with the minimum period abroad will result in the scholarship being revoked of study, the forfeiture of the doctoral course and the return of any amounts already received in the semester in which the revocation took place
- b. certifies that they are aware that the modification of the project objectives and expected results (if it has not been previously authorized by the MUR) involves the revocation of the scholarship, the forfeiture of the doctoral course and the return of any amounts already received in the semester in which the revocation took place;
- c. certify that they are aware that any negative judgment from the Academic Board will result in the revocation of the scholarship, the forfeiture of the doctoral course and the return of any amounts already received in the semester in which the revocation took place;
- d. certifies that he/she is aware that the withdrawal from the course entails the return of the monthly salaries received in the semester in which the withdrawal was presented, without prejudice to the accruals received in relation to the six-month periods of activity already carried out, unless otherwise ministerial provisions;
- e. certifies that he is aware and accepts that the use of a PNRR scholarship cannot be renounced in any case (for example due to simultaneous enrollment in a medical specialization school, use of another scholarship, etc.) and that a request for renunciation of the mere use of a PNRR scholarship entails the forfeiture of the doctoral student status and the return of the months received in the semester in which the renunciation was presented, unless otherwise provided by ministerial provisions. In any case, without prejudice to the periods of suspension referred to in art. 8 c. 8 of the Ministerial Decree 226/2021 and the suspension for compulsory maternity leave;
- f. certifies not to benefit at the moment from other scholarships awarded for any reason, and undertakes, for the entire duration of the scholarship, not to benefit from other scholarships awarded for any reason, except for those admissible pursuant to current national legislation. In the above cases of withdrawal of the grant University of Catanzaro will be entitled to recover the amounts received from the beneficiary.

At the end of each year, Ph.D. students present a report of their research to the Ph.D. College. This report is accompanied by an explanatory report by the Lecturer and is discussed by the candidate with the Ph.D. College.

It is expected the forfeiture from the status of Ph.D. student, with a rectoral decision, following a reasoned decision of the College of the Ph.D., after consulting the interested party, in the case of:

- a) negative opinion of the Doctoral College at the end of the year of attendance;
- b) unjustified and prolonged absences;
- c) conduct contrary to the rules of incompatibility.

In the event of suspension lasting more than thirty days, or exclusion from the course, no scholarship may be awarded.

It is responsibility of the Board of Lecturers to authorize the Ph.D. student to work. The College of Teachers, upon request for authorization from the Ph.D. student, accompanied by a statement from the supervisor certifying the compatibility of the work activities with the successful conduct of the training activities - may authorize, by means of a reasoned resolution, Ph.D. students with or without a scholarship to carry out paid activities, verifying their compatibility with the profitable full-time development of training, teaching and



research activities relating to the doctoral course. Compatibility is to be understood in the sense that the work activity is similar to the themes of the doctorate and is in any case completely compatible with the respect of the commitment required for the training activities of the course itself.

The Ph.D. student must annually ask the College of teachers for permission to carry out the work and transmit the decision of the College to the competent Office. In case of authorization, the PhD student can carry out, at the same time, the work and the doctoral training.

In the event of refusal of authorization, the Ph.D. student will have to choose whether to continue to attend the doctorate or give up for the benefit of work.

Failure to use the scholarship, which also occurred during the year, does not result in exemption from the payment of tuition and tuition fees for the whole year.

The use of the scholarship for the attendance to the doctorate is compatible with other income, even received continuously in the calendar year in which the grant is received, provided that they do not exceed the maximum amount established. If the income limit is exceeded, the grant is considered withdrawn for the whole year. The person concerned must declare his income annually and report any exceeding of the prescribed limit.

The tuition fees and attendance at the Ph.D. courses are determined for a.y. 2032/24, in the amount of € 1.124,45 to be paid in three installments according to the following table, and the Tax for the right to study determined by the Regione Calabria:

Category	Income	Annual amount university tax	I installment	II installment	III installment	Stamp duty paid virtual system	Tax for the right to study PhD programme
PhD student with grant	N.A.	€ 1.124,45	€ 360,00 at the time of enrolment	382,23 by 31.12.2023	382,22 by 30.04.2024	€ 16,00 at the time of enrolmen t	To be paid in the amount established by Regione Calabria,
PhD student without grant		exoneration				€ 16,00	To be paid in the amount established by Regione Calabria,

Ph.D. students who do not use a doctoral grant must pay the annual university fee for the entire academic year, the regional fee for the right to study and the stamp fees.

The registration fees and attendance to Ph.D. courses for the following academic years are determined according to the aforesaid prospectus, unless otherwise determined at the time of approval of the regulations on student contribution of the University.

Registrations shall be made by 4 October 2023.

The provisions of Law 12 April 2022, n. 33 concerning the simultaneous enrollment in two higher education courses and the D.M. no. 930 of 29 July 2022.

It is allowed the joint attendance of the doctoral course and a course of medical specialization in accordance with art.7 paragraph 1 letter a) of D.M. 226/21 except for NNRP fellows.

It is up to the Academic Board to authorize the PhD student to enroll in or continue attending a Master's. At the request of the doctoral student, accompanied by a declaration from the supervisor - certifying the



compatibility of the Master's activities with the successful performance of the training activities - the Academic Board, with a motivated resolution, can authorize the doctoral student, with or without a scholarship, to enroll or continue attendance at the Master, verifying its compatibility with the fruitful full-time performance of training, teaching and research activities relating to the doctoral course. Compatibility is to be understood in the sense that the activity is fully consistent with compliance with the commitment required for the training activities of the course itself.

The Ph.D. student is obliged to respect, as far as compatible with the precepts expressed by the D.P.R. 16.04.2013, n. 62 bearing the "Code of conduct of civil servants, pursuant to art. 54 of Legislative Decree 165/2001" and the "Code of Conduct of the Magna Græcia University, issued with D.R. n. 370/2016". It is expected the forfeiture of the PhD course in case the PhD student fails to comply with the provisions of the aforementioned Codes of Conduct.

The above-mentioned Codes of Conduct are available on the University's website at http://web.unicz.it/it/page/codice-disciplinarye-codice-di-condotta.

Art. 11 - Attainment of the title

The title of Ph.D., abbreviated in Italian with "Dott. Ric." (PhD) is awarded by the Rector following the public discussion of a thesis that contributes to the advancement of knowledge and methodologies in the chosen field of research.

The procedures for obtaining the title are governed by Article 10 of the University Regulations in PhD topics mentioned in the introduction.

Art. 12 - Treatment of personal data

The personal data provided by the candidates will be collected and processed by the University of Magna Græcia Studies of Catanzaro (P.I. 02157060795 - C.F. 97026980793), based in Viale Europa - 88100 Catanzaro (Phone: 0961 3694001- PEC: protocollo@cert.unicz.it) for the purposes of managing this selection in accordance with current legislation on the protection of personal data (EU Regulation 2016/679 and d.lgs 30 June 2003, n. 196 as best described in the extended information available on the institutional site of the University https://web.unicz.it; the data protection officer (DPO) can be contacted at dpo@unicz.it.

Art. 13 - Ph.D. application procedure Manager

In accordance with the provisions of art. 5 of the law 7 August 1990, n. 241, dott.ssa Eleonora Consoli is responsible for the procedure, with exclusion of the selective phases.

The competent Organizational Unit is the General Affairs Area - Università Magna Græcia di Catanzaro - Campus Universitario - V.le Europa, Loc. Germaneto, Catanzaro, tel. + 39 0961/3696075 - 0961/3696083 - affarigenerali1@unicz.it, - tel. + 39 0961/3696075, e-mail affarigenerali1@unicz.it.

Art. 14 – Norms of reference

For anything not expressly provided for in this call, the laws and regulations on PhD apply.

Art. 15 - Publicity

This call, drawn up in Italian and English, will be published on the website of the University of Studies Magna Græcia of Catanzaro in the sections https://web.unicz.it/it/category/bandi-ateneo and https://web.unicz.it/it/gory/dottorati-Research on the European Euraxess site and the MUR site.

In case of litigation, the text of reference will be exclusively the original text in Italian.



Annex A – Details of PhD Courses in Biomedical and Pharmacological Area - a.a. 2023/2024

BIOTECHNOLOGY FOR MOLECULAR MEDICINE Training objectives The PhD course is aimed at graduates in biomedical, bioinformatics, biotechnological and pharmaceutical disciplines. The objective of the doctorate is to train a professional figure with solid interdisciplinary competence in biomedical research, with autonomy in the planning, execution and interpretation of experiments, in the definition of research projects and in the drafting of scientific articles. The doctoral program will provide candidates with scientific and technological support for the study and resolution of biomedical problems through the acquisition of a robust background in the basic disciplines, and the ability to develop innovative project proposals, with a strong connotation to the transfer of research products in the industrial and clinical fields. Considerable emphasis will be placed in particular on molecular and cellular approaches to fundamental problems in the research areas covered by the participating departments as well as to the most innovative aspects of surgical disciplines. The multidisciplinary training to which the PhD students will undergo during the course of study will allow them to develop research projects whose results can contribute to a better understanding of the molecular basis of diseases, through programs that are at the interface between the basic sciences and clinical medicine. The training program will include the acquisition of knowledge of the standards that regulate technology transfer both in operational and formal terms, in order to create new research actors, fully competitive in modern academic or industrial realities. The multidisciplinary nature of the program promotes, in fact, an ideal collaborative environment for the training of doctoral students, favoring a wide interaction between different skills, a characterizing element of the study courses of the Magna Graecia University of Catanzaro. **Curricula** provided N/A **Coherence with PNRR** The National Recovery and Resilience Plan (PNRR) has allocated, with Decrees 351 and 352 of April 2022, a significant number of scholarships for PhD students. This effort, which involves a commitment of about 300 million euros by the government, is aimed at enhancing the

The National Recovery and Resilience Plan (PNRR) has allocated, with Decrees 351 and 352 of April 2022, a significant number of scholarships for PhD students. This effort, which involves a commitment of about 300 million euros by the government, is aimed at enhancing the quality of higher education of Italian graduates, through specific programs, aimed at implementing the critical mass of young people engaged in research. This PhD course in Biotechnology for Molecular Medicine appears to be fully consistent with the PNRR's M4C1 (Enhancing the Provision of Education Services from Kindergartens to University) and M4C2 (From Research to Enterprise) missions. It, in fact, introduces an original dual training path: the first, more traditional, characterized by basic research activities aimed at studying the molecular mechanisms of diseases, which uses multidisciplinary skills and advanced tools available within the Germaneto Campus; the second highly innovative, with a strong technological vocation, aimed at design, creation and production of advanced bioengineering solutions for health technologies. The ultimate goal is to provide PhD students with not only robust tools and knowledge that can be useful for the continuation of their career in academia, private research institutions or industry, but to train a new generation of researchers capable of producing original ideas that find repercussions in the market of technologies for human health, encouraging the creation of spin-offs and innovative startups.

Area Affari Generali - Campus Universitario -Viale Europa - 88100 Catanzaro
Tel. (+39) 0961 369 6075-6083 - PEC affarigenerali@cert.unicz.it - e-mail affarigenerali1@unicz.it



	A model thus conceived will be a driving force for the development of the regional economy,
	for the increase of qualified employment and for the reduction of brain emigration, which is
	so damaging to the South and Calabria in particular.
	Finally, it is important to underline a further element of coherence of this PhD course with
	the PNRR, and in particular with Mission 6 (Health). The M6C2 component is, in fact, focused
	on the domains of training, scientific research and technology transfer. The PhD in
	Biotechnology for Molecular Medicine aims to create modern professional figures, whose
	technical, professional, digital and managerial skills will find employment in the National
	Health System.
Course duration	3 anni
Coordinator	Prof. Giuseppe Viglietto
Coordinator e-mail	viglietto@unicz.it
A	
Acceptance conditions	LM-6 Biologia
and procedures	LM-7 Biotecnologie agrarie
	LM-8 Biotecnologie industriali
	LM-9 Biotecnologie mediche, veterinarie e farmaceutiche
	LM-13 Farmacia e farmacia industriale
	LM-18 Informatica
	LM-21 Ingegneria biomedica
	LM-41 Medicina e chirurgia
	LM-42 Medicina veterinaria
	LM-54 Scienze chimiche
	LM-61 Scienze della nutrizione umana
	LM-70 Scienze e tecnologie alimentari
	LM-71 Scienze e tecnologie della chimica industriale
Places with a scholarship	n. 6 scholarships including:
n. 6	
(including n. 1 reserved for	• n. 4 with University scholarship (including n. 1 reserved for graduates in foreign
graduates in foreign	universities)
universities)	• n.2 with PNRR Research DM 118 funds
,	
Places without	n. 2 (Included n. 1 reserved for medical specialists)
scholarship	
Proposed research	At the following link you can view Annex A/1 containing the proposed research projects
projects	https://drive.google.com/file/d/1rDGsoLCMI66hObPo4vws-Xns-
	<u>lyruVMi/view?usp=drive_link</u>
CUP	F63C23000330002



Publication of evaluation	No	later	than	07	September	2023	on	the	University's	website	at
results	http	s://web.	unicz.it/	/it/cate	egory/bandi-at	<u>eneo</u>					
Interview	08 S	eptemb	er 2023,	11.00	a.m., Room N,	Building	Η, liv.	. 0 Cam	pus Universitar	io, V.le Euro	opa,
	Loc.	German	ieto, Cat	tanzar	o, <u>any updates</u>	at the l	link ht	tps://w	/eb.unicz.it/it/c	ategory/ba	ndi-
	aten	ieo				-		•			
Foreign language	Engl	ish									



ARTIFICIAL INTELLIGENCE, BIOMEDICAL ENGINEERING AND INFORMATICS

Training objectives

The PhD in ARTIFICIAL INTELLIGENCE, BIOMEDICAL ENGINEERING AND COMPUTER SCIENCE is a multidisciplinary PhD aimed at the theoretical-practical learning of the most advanced methodologies and techniques in the fields of information engineering, industrial engineering and applied physics, with particular reference to artificial intelligence, bioinformatics, bioengineering, automation, electronics and nanotechnology, applied to the modelling and simulation of complex systems in biology and medicine, as well as applied to the analysis of biomedical data, biosignals, bioimages, supporting the solution of problems in life sciences, biology and medicine.

The aim of the PhD programme is the advanced training of computer engineers, bioengineers, data scientists, bioinformaticians, biologists, physicians, mathematicians and biostatistics, able to apply their know-howhow methodological and technological in systems modeling in biology and medicine and in the analysis of data originating in the life sciences, putting themselves at the interface between life sciences and engineering.

An emerging approach in the discovery of knowledge in biology and medicine involves the collection of often heterogeneous data and the use of various learning and analysis techniques, which requires specialist skills throughout the data management and analysis supply chain.

Such computer approaches are complemented by methods of bioengineering, nanotechnology, automation and electronics, which allow, among others, the modeling and simulation of complex systems in biology and medicine, up to their analysis from macro to micro and nano dimensions.

One of the objectives of the PhD is to train researchers capable of meeting these challenges by proposing innovative solutions and using a multidisciplinary Faculty College.

In this regard, the PhD program aims to train researchers able to model the complexity of data and systems in biology and medicine, and to develop methodologies and systems for their simulation and analysis, focusing on applications in biomedical research and clinical practice.

Another objective of the PhD program is to enable PhD students to quickly integrate into multidisciplinary research groups in which the integration and analysis of biomedical data, as well as the modeling and analysis of complex systems, play a central role.

A further objective of the PhD is to prepare PhD students to develop scientific research projects capable of addressing complex problems at different levels of detail, from the nano-micro, molecular and cellular level in living organisms, computer systems supporting diagnosis and therapy, up to bioengineering, biomedical and sensor systems.

Upon completion of the PhD, candidates will be able to design and implement innovative research projects in the field of artificial intelligence, bioengineering and nanotechnology applied to life sciences, proposing new methodological and technical solutions and appropriately assessing their impact in health, life sciences and biomedical industry.

The Doctorate therefore proposes the post-graduate training of new highly specialized professional figures who, for their interdisciplinary skills, can have new and more qualified job opportunities in the



Universities, in the Research Centers, IT and Biomedical Companies, Service Companies, Hospital Companies or Biomedical Industry.

On this basis, the PhD in ARTIFICIAL INTELLIGENCE, BIOMEDICAL ENGINEERING AND COMPUTER SCIENCE addresses theoretical and experimental activities in the following research areas and in their applications to biology, medicine and life sciences:

- computer engineering, artificial intelligence, bioinformatics, medical informatics, health information systems;
- electronic and computer bioengineering, systems biology, biospherics and bioimages;
- industrial bioengineering, organ modelling, fluid dynamics and biomaterials;
- automatic, robotic and mechatronic;
- advanced electronics and sensors;
- nanotechnologies applied to biology and medicine.

More specific areas include, but are not limited to: Parallel Computing, Machine Learning; Data Mining, Text Mining, Natural Language Processing; Artificial Intelligence; Network Analysis; Pathways Analysis; Omic Data; Bioinformatics; Genomics; Interattomics; Ontologies; Preprocessing and analysis of biosignals and bioimages with particular reference to the neurological and cardiovascular system; Interfaces and bio-artificial devices. Motion analysis. Biomechanics. Computational fluid dynamics. Nanotechnologies. Biomaterials. Bio-inspired sensors. Robotics.

Curricula provided

N/A

Coherence with PNRR

The PhD in ARTIFICIAL INTELLIGENCE, BIOMEDICAL ENGINEERING AND COMPUTER SCIENCE is fully consistent with the PNRR. In particular, the educational project of the Doctorate and its objectives are in conformity and consistent with MISSION 6: HEALTH of the PNRR and in particular with the following components/articulations:

M6C1: PROXIMITY NETWORKS. FACILITIES AND TELEMEDICINE FOR TERRITORIAL HEALTH CARE.

In this context, the doctorate provides research and innovation skills related to the technological infrastructure necessary to implement telemedicine and territorial assistance, as well as sensor skills that allow you to remotely acquire biomedical signals and on the related platforms for their collection, storage and analysis, possibly on the Cloud.

M6C2: INNOVATION, RESEARCH AND DIGITISATION OF THE NATIONAL HEALTH SERVICE

In this context, the PhD provides research and innovation skills related to the application of modelling and data analysis techniques in medicine and in the national health service.

In addition, the PhD training project and its objectives are in line with and consistent with MISSION 4: EDUCATION AND RESEARCH of the PNRR and in particular with the following components/articulations:



FUEL	
	M4C1 (Enhancing the provision of education services from kindergartens to university) and M4C2 (From research to business).
	It, in fact, introduces an original training course that combines a solid training and basic research activities aimed at the study of computer and bioengineering methods, that uses multidisciplinary skills and advanced tools available within the Germaneto Campus, with a strong technological vocation, aimed at design, creation and production of advanced IT and bioengineering solutions for health technologies.
	The training project, therefore, has the dual objective of providing PhD students with robust methods and knowledge that can be useful for the continuation of their career in the academic environment and in private research institutions or in industry, and also to train a new generation of researchers capable of producing original ideas that have repercussions in the life sciences and in the field of technologies for human health, facilitating the creation of spinoffs and innovative startups.
	Such an approach will be able to favour the development of the regional economy, for the increase of qualified employment and for the reduction of the emigration of the brains that so much damages the South and the Calabria in particular.
Course duration	3 anni
Coordinator	Prof. Mario Cannataro
Coordinator e-	cannataro@unicz.it
mail	
Acceptance	LM-6 Biologia
conditions and	LM-8 Biotecnologie industriali
procedures	LM-9 Biotecnologie mediche, veterinarie e farmaceutiche
	LM-13 Farmacia e farmacia industriale
	LM-17 Fisica
	LM-18 Informatica
	LM-19 Informazione e sistemi editoriali
	LM-21 Ingegneria biomedica
	LM-22 Ingegneria chimica
	LM-25 Ingegneria dell'automazione
	LM-26 Ingegneria della sicurezza
	LM-27 Ingegneria delle telecomunicazioni
	LM-29 Ingegneria elettronica
	LM-31 Ingegneria gestionale
	LM-32 Ingegneria informatica
	LM-33 Ingegneria meccanica
	LM-40 Matematica
	LM-41 Medicina e chirurgia
	LM-44 Modellistica matematico-fisica per l'ingegneria
	LM-54 Scienze chimiche
	LM-66 Sicurezza informatica LM-82 Scienze statistiche
	LIVI-OZ JUIETIZE SLALISLIUTE



	LM-91 Tecniche e metodi per la società dell'informazione
	LM/SNT1 Scienze infermieristiche e ostetriche
	LM/SNT2 Scienze riabilitative delle professioni sanitarie
	LM/SNT3 Scienze delle professioni sanitarie tecniche
	LM/SNT4 Scienze delle professioni sanitarie della prevenzione
	LM DATA Data science
Places with a	n. 7 scholarships including:
scholarship n.	
7	• n. 1 with University scholarship (including n. 1 reserved for graduates in foreign universities)
(including n. 1	n. 2 with PNRR Research DM 118 funds
reserved for	n. 3 PNRR Digital and environmental transitions DM 118
graduates in	n. 1 PNRR Cultural Heritage DM 118
foreign	
universities)	
Places without	n. 2 included n. 1 reserved for medical specialists
scholarship	
Proposed	At the following link you can view Annex A/2 containing the proposed research projects:
research	https://drive.google.com/file/d/1aam4f5oyU5x29ZoX4pVz_wQqZkTbmNUd/view?usp=drive_link
projects	
CUP	F63C23000290002
	5535333333333333
	F63C23000300002
	F63C23000310002
5 11: .: 6	
Publication of	No later than 07 September 2023 on the University's website at https://web.unicz.it/it/category/bandi-atanas
evaluation results	<u>ateneo</u>
	08 September 2023, 11.00 a.m. , Room P, Building H, Liv. O, "Edificio Bioscienze", Campus Universitario,
Interview	
	V.le Europa, Loc. Germaneto, Catanzaro, <u>any updates</u> at the link https://web.unicz.it/it/category/bandiateneo
	aterieu
Foreign	English
language	



MOLECULAR AND TRANSLATIONAL ONCOLOGY

Training objectives

The course is divided into a single curriculum. This curriculum is characterized by a common vision and methodology, despite the diversity of knowledge of translational medicine at the basis of different projects. The objectives are aimed at the achievement by the PhD student of an operational autonomy for experimental research on advanced technologies and/or for the programming of the formal phases of prototype development, through original and highly innovative research through clearly defined programs in terms of tasks, milestones and final goals. This path will be essential for the enhancement of the innovation of the diagnostic/therapeutic offer, proceeding from the proof-of-concept to the actual phase of pre-competitive and competitive product development. To this end, PhD students will be provided with the necessary skills for the preparation of formal procedures such as, for example, the preparation of an "Investigational Medicinal Product Dossier" (IMPD) to be submitted to regulatory bodies. The present PhD programme therefore sets itself an ambitious objective, which is not simply that of a pure addition of the procedures for the transfer to the clinic or to the market of specific knowledge in the field, but rather the training of highly qualified professionals who know how to shape their own path in every single phase to achieve the final objectives of technology transfer in translational oncology.

Curricula provided

N/A

Coherence with PNRR

This PhD programme appears to be fully consistent with the objectives of the National Recovery and Resilience Plan (PNRR), which significantly supports higher education, including PhD programmes. The PNRR devotes considerable resources to the empowerment of technological and knowledge networks for a drastic increase in innovation proposals on operational know-how issues, including in the biomedical field. Referring to the PhD course in Experimental and Translational Oncology, the PNRR missions that are recalled are the following: a) M4C1 (Strengthening the provision of education services from kindergartens to university), b) M4C2 (From research to business), c) M6C2 (Training, scientific research and technology transfer in human health). This PhD, in line with these objectives, is aimed at building the professionalism to make fully operational the system configured by the PNRR. A network, in fact, although highly technological, must make use of people with skills in the formal and operational paths to achieve a growth in the healthcare supply, its economic and social sustainability and for the strengthening in terms of innovation and originality of Italian industry. This, in fact, requires not only innovative ideas but also the construction of new paths aimed at the validation and approval of prototypes in the biomedical field. Therefore, in full coherence with the PNRR, the PhD course i in Molecular and Translational Oncology has been configured to ensure, thanks to its multidisciplinary character, that the acquisition of the field skills by the PhD student takes place in parallel with the growth of skills of transfer and validation of project ideas by the medical-scientific community and regulatory agencies.

Course duration

3 anni

Coordinator Coordinator

Prof. Pierosandro Tagliaferri

e-mail

tagliaferri@unicz.it



Classes of	LM-6 Biologia
Bachelor	LM O Dietaspalaria madisha yatarinaria a farmasaytisha
required for	LM-9 Biotecnologie mediche, veterinarie e farmaceutiche
admission	LM-13 Farmacia e farmacia industriale
	LM-41 Medicina e chirurgia
	LANGUETA C.
	LM/SNT1 Scienze infermieristiche e ostetriche
Places with a	n. 5 scholarships including:
scholarship n. 5	• n. 4 with University scholarship (including n. 1 reserved for graduates in foreign universities)
(including n. 1	• n. 1 with PNRR Research DM 118 funds
reserved for	- III I WICH I WAN NESCAICH DIVI IIO MINGS
graduates in	
foreign	
_	
universities)	
Places without	n. 1 reserved for medical specialists
scholarship	
Proposed	At the following link you can view Annex A/3 containing the proposed research projects:
research	https://drive.google.com/file/d/1lex1I-JzMKe2D_vxtntAsy-BzU9Xwu1_/view?usp=drive_link
projects	
CUP	F63C23000320002
Publication of	No later than 05 September 2023 on the University's website at https://web.unicz.it/it/category/bandi-
evaluation	<u>ateneo</u>
results	
Interview	06 September 2023, 02.00 p.m., Room G1, Building G, level O, Campus Universitario, V.le Europa, Loc.
	Germaneto, Catanzaro, <u>any updates</u> at the link https://web.unicz.it/it/category/bandi-ateneo
Foreign	English
language	
	l .



PSYCHOLOGY

Training objectives

The main objectives of the Course are: to provide in-depth knowledge in the field of basic and applied psychological research, with particular attention to the aspects of relevance of clinical and evolutionary-educational; to train scholars able to analyze psychological processes in a multidisciplinary and interdisciplinary perspective and to address application problems with adequate and non-sectoral scientific skills of a systemic type. In line with the latest scientific evidence, in fact, it is considered appropriate to use an integrated approach, of a bio-psychosocial nature, both for prevention and for intervention on psychological discomfort. The integration between the latest developments in neuroscience and beaviour analysis, Among other things, it represents a scientific challenge that proves increasingly valid for a wider and complete understanding of processes and to make easier and more effective the task of psychologists working in the clinical and educational field.

For these reasons, the course aims to train scholars able to analyze the systemic relationships of the main cognitive and emotional-motivational processes with biological and social processes and to monitor their development throughout the life cycle, providing knowledge and skills useful for understanding the processes and testing of integrated intervention protocols, of a biopsycho-social nature, both preventive and clinical, aimed at the prevention and treatment of discomfort and diseases and the consolidation of psycho-physical well-being and quality of life.

Finally, the course aims to provide PhD students with the knowledge and skills necessary for an adequate integration in the international scientific-academic world, in line with the requirements of Italian and European regulations.

The training program is available in the specific link:

https://sites.google.com/unicz.it/phdinpsicologia/home-page/programma-formativo

Curricula provided

N/A

Coherence with PNRR

The Doctorate in Psychology was established and activated with the participation of Biologists, Doctors, Pedagogists and Psychologists, with the primary objective of providing graduates with a different basic education, knowledge and skills that make them suitable, not only to the realization of scientifically valid research projects, but to do so in a transdisciplinary and multidisciplinary perspective.

The main objective of the course is to create training opportunities that can foster the connection between the world of research, development and the productive fabric and innovative services in many areas of Psychology. Already from the first year of activation, the PhD has awarded 4 research grants on PON funds "Research and Innovation" 2014-2020, Axis IV - Action IV.4 and 1 scholarship funded under Action IV.5 "Doctorates on green issues".

The PhD programme aims to increase the stock of human capital capable of responding to the needs of innovation of companies and, in particular, of social cooperatives, focusing in particular



on the promotion of health and well-being and the inclusion and social cohesion of children with special psychological needs and their families.

Collaboration with social enterprises has been essential since the 37th Cycle. In particular, the collaboration with the Tice Social Cooperative has allowed the activation of an "Industrial" Exchange. In the 38th Cycle, the Cooperative co-financed a grant from the PNRR, Mission 4, component 2 - Investment 3.3 "Introduction of innovative doctorates that meet the needs of innovation of enterprises and promote the recruitment of researchers from enterprises".

This collaboration was certainly effective: therefore, the Cooperative proposed for the 39th cycle to co-finance a grant referred to in DM 117 (Investment 3.3) - "Introduction of innovative doctorates that meet the needs of innovation in enterprises and promote the recruitment of ric. by companies".

The activities of the Cooperative Social tice (type a), in line with the objectives of the course, are aimed at the design and implementation of innovative and evidence-based psychological interventions that can respond to the needs and psychological needs of children, adolescents and young adults.

The co-financed research project aims to promote innovation and the dissemination of scientific technologies mainly in the psycho-educational and educational fields. In particular, it is proposed to carry out research aimed at verifying the long-term effectiveness of a psychological intervention in telematic mode aimed at groups of subjects of school age and their families.

The collaboration with the Centre for Scientific, Economic and Social Information (CISES - Società S.r.l.) will allow the PhD student/student who should be the winner/recipient of the scholarship of which DM 118 (Investment 4.1 P.A.) - funded by the University of Messina - to acquire solid scientific bases for the realization of innovative psychological interventions aimed at promoting the health protection of workers and workers in public administrations. The Company CISES srl has for several years been involved in the prevention of work-related stress, which, as is known, represents a particularly significant risk, both in terms of impact on health and on individual and organizational performance. The research project will therefore be aimed at verifying the effectiveness of the application of new technologies with a view to improving organizational well-being and developing performance. In particular, the PhD student must develop and implement a research project aimed at verifying the effectiveness of online interventions and/ or conducted with the support of technological tools such as virtual reality headsets and/ or biofeedback aimed at prevention and control of work-related stressThe European Commission has also been active in the field of education.

In summary, in line with the PNRR and the objectives of the PhD, the definition of a psychological intervention protocol or at least of guidelines with solid scientific bases, in both projects, could have a significant impact in terms of "e-health" evidence-based, in the field of psychoeducational one, and in terms of health and safety at work and improvement of organizational effectiveness, the other.

Course duration

3 anni



Coordinator	Prof.ssa Francesca Cuzzocrea				
Coordinator e-mail	fcuzzocrea@unicz.it				
Classes of Bachelor	All classes of Master's Degree				
required for admission					
Places with a	n. 9 scholarships including:				
scholarship n. 9 (including n. 1 reserved for graduates in foreign universities)	 n. 4 with University of Catanzaro scholarship (including n. 1 reserved for graduates in foreign universities) n. 3 with University of Messina scholarship n.1 PNRR Public Administration DM 118 (co-financed by the University of Messina) n.1 PNRR Tice DM 117 				
Places without	n. 1 reserved for medical specialists				
scholarship	II. 1 reserved for medical specialists				
Proposed research projects	At the following link you can view Annex A/4 containing the proposed research projects: https://drive.google.com/file/d/1CPIpOb93qB5VcD4GYXOvHKp RaIUCaC /view?usp=drive link				
CUP	F63C23000400002				
	F63C23000410002				
Publication of	No later than 06 September 2023 on the University's website at				
evaluation results	https://web.unicz.it/it/category/bandi-ateneo				
Interview	08 September 2023, 09:00 a.m. , the interview will take place in telematic mode on the platform				
	Meet Gmail with the modalities established in art.6 of the notice at https://web.unicz.it/it/category/bandi-ateneo the virtual classroom access link will be published.				
Foreign language	English				



CLINICAL AND EXPERIMENTAL BIOMEDICAL SCIENCES

Training objectives

The objectives that the PhD program aims to achieve relate to higher education on the clinical and biomolecular fundamental issues of the medical endocrine-metabolic, cardiovascular, and inflammatory and immunomediated diseases of the digestive system, encouraging the maturation of translational skills that allow each participant, concrete opportunities for occupational integration in public or private research and health care facilities. In particular, full-time attendance is provided at the Research Laboratories and the Operational Units of the Department of Health Sciences and other affiliated locations. During this period, the PhD students will be supported by tutors in the medical or biomedical area defined by the College of Doctoral Teachers and by the Host Bodies who periodically verify the work done, follow the training process and the preparation of the thesis. There will also be theoretical lessons and seminars on topics related to cardiovascular, metabolic, digestive and immune system pathophysiology, together with the One Health approach and the consequences on chronic noncommunicable diseases of emerging and re-emerging zoonoses. The training activity will also be aimed at learning basic research methodologies, epidemiological and experimental clinical and preclinical, as well as regulations, legal provisions, code of ethics and advanced techniques of health and laboratory data analysis "high-throughput omics" (e.g. genomics, transcriptomics, proteomics, metabolomics, and microbiomics) or from new wearable technologies (e.g. wearable devices and biosensors for ECG, EEG, glucose levels, etc.) useful to interpret and define new disease models in the specialized branches of medicine, carried out by internal teachers, experts or external scholars and by the PhD students themselves called to discuss the results obtained gradually during their training period. The University "Magna Græcia" of Catanzaro is the main teaching center of the PhD Course and the formative activity carried out by the PhD student.

However, as part of the individual training courses aimed at the pursuit of research and the improvement of specific techniques (e.g. studies on transgenic and knock-out animal models, improvement of genetic and biochemical techniques for the purification and characterisation of proteins and metabolites, comparative studies of microbiome and parasite with ecological and biotechnological implications, immunophenotyping and study of mechanisms effectors of immune response and cytokine profiling, clinical and preclinical design and testing), as well as the development and enhancement of scientific collaborations with other research bodies, will be organized of the Fellowships near Foreign University (e.g. University of California San Francisco - San Francisco, CA, USA; Charité Universitätsmedizin - Berlin, Germany; Instituto Maimónides de Investigación Biomédica IMIBIC - Cordoba, Spain; Queens Medical Research Institute, University of Edinburgh, UK; Duke University - Durham, NC, USA, University of Medicine and Pharmacy "Iuliu Haţieganu" - Cluj Napoca, Romania).

Curricula provided

- Endocrine-metabolic sciences and molecular profiles
- Pathology and clinical physiology of cardiovascular diseases and systems medicine

Coherence with PNRR

This PhD course is fully consistent with the objectives of the National Recovery and Resilience Plan (PNRR). Mission 4 of the PNRR devotes considerable resources to strengthening the conditions for the development of a knowledge-intensive and competitive economy by strengthening the provision of education services, including advanced university skills and research doctorates (Mission M4C1), and the expansion of the biomedical technology infrastructure (Mission M4C2).



	The PhD course in "Clinical and Experimental Biomedical Sciences" participates in the training and mobility of new highly qualified researchers, able to contribute to the economic and social sustainability of the National Health System, through the identification of new models of prevention, diagnosis and treatment for chronic diseases, highly prevalent in the general population (e.g. obesity, type 2 diabetes mellitus, metabolic syndrome, hypertension, cardiovascular disease, inflammatory pathologies)often interlinked (multi-chronic), and whose current welfare path constitutes the largest chapter of health care expenditure. In addition, the PhD course supports technological enhancement in research and technology transfer in human health, and contributes to the validation of innovative high-throughput methods (e.g. proteomics, microbiomics, transcriptomics, genomics)biosensors and wearable technologies in the clinical-specialist field. Finally, the PhD course in "Clinical and Experimental Biomedical Sciences", with administrative headquarters in Catanzaro, contributes significantly to the relaunch of the Mezzogiorno, the primary objective of the PNRR, and has been configured to ensure a multidisciplinary character to the training of each PhD student, such as to make it highly competitive at the National and International level, as well as in Southern Italy itself.
Course	3 years
duration	
	Prof. Antonio Brunetti
	brunetti@unicz.it
mail	
Classes of	LM-6 Biologia
Bachelor	LM-9 Biotecnologie mediche, veterinarie e farmaceutiche
required for	LM-13 Farmacia e farmacia industriale
admission	LM-21 Ingegneria biomedica
	LM-25 Ingegneria dell'automazione
	LM-29 Ingegneria elettronica
	LM-41 Medicina e chirurgia
	LM-42 Medicina veterinaria
	LM-61 Scienze della nutrizione umana
Places with a	n. 5 scholarships including:
scholarship n. 5	in 3 seriorarships merading.
(including n.1	
University	
Scholarship	• n. 3 with University scholarship (including n.1 reserved for graduates in foreign universities)
reserved for	n. 2 with PNRR Research DM 118 funds
graduates in	
foreign	
universities)	
	n. 1 reserved for medical specialists
scholarship	·
	At the following link you can view Annex A/5 containing the proposed research projects:
research	
	https://drive.google.com/file/d/1NSGfY514ol1UxGKiruZA_hdr3AXHUXyz/view?usp=drive_link



CUP		F63C23000240002
Publication	of	No later than 06 September 2023 on the University's website at https://web.unicz.it/it/category/bandi-
evaluation		<u>ateneo</u>
results		
Interview		07 September 2023, 10:00 a.m., Room D2, Building D, level. 0, Campus Universitario, V.le Europa, Loc.
		Germaneto, Catanzaro, any updates at the link https://web.unicz.it/it/category/bandi-ateneo
Foreign		English
language		



PHYSICAL EXERCISE AND SPORT SCIENCES

Training objectives

The PhD in Physical Exercise and Sport Science aims to train experts with high scientific knowledge and skills, able to use advanced cultural tools, methodological and technical practical intended for the scientific development of the motor sciences in the academic and business field. The primary objectives identified are the following: (1) knowledge of the different paradigms and methodological approaches to research and intervention, useful for the study and improvement in relation to the areas of exercise and sports; (2) interdisciplinary knowledge synthesis skills; (3) design and implementation of application and innovative projects inspired by the principles of research based on hypotheses and scientific evidence.

Research topics include: 1) biological, motor, cognitive, technical and tactical aspects for the analysis and improvement of sports performance and the prevention of overtraining; 2) training methods for the maintenance-improvement of the health of athletes and the general population, in relation to age, gender, level of activity and health condition; 3) evaluation of sports development and its principles; 4) the study of changes in organs and tissues induced by physical exercise; 5) the techniques of prevention of injury in sports practice; (6) the treatment of acute and chronic trauma in motor activity. In particular, musculoskeletal diseases constitute a heterogeneous group of pathologies of the osteoarticular system, associated with painful symptoms and functional limitations with possible systemic manifestations. In this group are included diseases with acute onset often to post-traumatic etiology, chronic diseases such as osteoarthritis, outcomes of congenital deformities that have repercussions on the social life of the individual such as to lead to a condition of disability and incapacity for work.

An inadequate lifestyle - in particular obesity and reduced physical activity - and advancing age contribute to increasing the prevalence of many of these diseases, and in the coming years, due to the gradual aging of the population and the spread of progressively more sedentary habits, a significant increase in diseases of the locomotor system is expected. This doctoral course sets itself the ambitious goal of bridging the gap between the basic sciences and the clinical aspects applied in research training, promoting a strong interdisciplinary exchange. The study programme of this doctoral course is organized in order to provide PhD students with the optimal tools for learning the most modern disciplines and technologies (motor sciences, biology, orthopaedics, physical medicine, neurophysiopathology, sports medicine and athletic training, pharmacology applied to sport, clinical nutrition). The PhD students will be required to carry out a high-profile research project in one of these disciplines, over a period of 3 years. The objective of the doctorate is the formation of professional figures with a solid interdisciplinary competence in research, autonomy in the planning, execution and interpretation of experiments, formulation of research projects and writing of scientific articles. During the course, PhD students will be supported by rigorous and continuous supervision, which will give them the opportunity to reach qualified levels of professionalism that can be exploited for the continuation of their academic career, in the public-private research system, in the world of sports activities



Curricula provided	N/A
Coherence with PNRR	The PhD course, in line with the priorities of the PNRR, aims to contribute to the scientific
	growth in the field of physical exercise and sports sciences and to bring a significant
	development of knowledge. The course, in a transdisciplinary and international perspective,
	aims to train experts with high scientific knowledge and skills able to use advanced cultural,
	methodological and technical tools for the scientific development of the motor sciences. The
	PhD course is therefore fully consistent with Mission 4/Education and Research, Component
	1, Investment 4.1 2 "Extension of the number of innovative PhD and PhD programmes for
	P.A. and cultural heritage". The number of doctoral degrees obtained in Italy is among the
	lowest in the EU, so the measure is aimed at implementing the number of doctorates,
	reducing the gap compared to other European states and also between the north and the
	south of the nation.
	The doctorate is also consistent with Mission 4/Education and Research, Component 1,
	Investment 3.4 "Teaching and advanced university skills" by virtue of a doctoral course
	characterized by a strong multidisciplinary and technological value in the approach to health
	issues, both at the level of the individual and the community, also with regard to the
	prevention of disability conditions.
	The course is also consistent with the intervention line of Mission 6/Health, Component 2
	"Innovation, research and digitization of health care"by training health professionals capable
	of carrying out scientific research in the biomedical and health fields, contributing to the
	strengthening of the skills and human capital of the NHS, including by enhancing staff training.
	In particular, the PhD results corresponding with the investment line 2.1 "enhancement and
	enhancement of NHS biomedical research" and with line 2.2 "development of technical,
	professional, digital and managerial skills of healthcare system personnel".
Course duration	3 anni
Coordinator	Prof. Olimpio Galasso
Coordinator e-mail	galasso@unicz.it
Classes of Bachelor	LM-6 Biologia
required for admission	LM-9 Biotecnologie mediche, veterinarie e farmaceutiche
	LM-13 Farmacia e farmacia industriale
	LM-18 Informatica
	LM-21 Ingegneria biomedica
	LM-25 Ingegneria dell'automazione
	LM-31 Ingegneria gestionale
	LM-32 Ingegneria informatica
	LM-33 Ingegneria meccanica
	LM-41 Medicina e chirurgia
	LM-47 Organizzazione e gestione dei servizi per lo sport e le attività motorie LM-61 Scienze della nutrizione umana
	LM-67 Scienze e tecniche delle attività motorie preventive e adattate LM-68 Scienze e tecniche dello sport
	Livi-00 Scienze e tecinicile dello sport

Area Affari Generali - Campus Universitario -Viale Europa - 88100 Catanzaro
Tel. (+39) 0961 369 6075-6083 - PEC affarigenerali@cert.unicz.it - e-mail affarigenerali1@unicz.it



Foreign language	English					
	https://web.unicz.it/it/category/bandi-ateneo					
	Europa, Loc. Germaneto, Catanzaro, <u>any updates</u> at the link					
Interview	08 September 2023, 09:00 a.m., Room Q, Building H, level 1, Campus Universitario, V.le					
100010	inteps, j westernozing to eutergot y surfact atence					
results	https://web.unicz.it/it/category/bandi-ateneo					
Publication of evaluation	No later than 07 September 2023 on the University's website at					
CUP	F63C23000340002					
	Vv83RxQL/view?usp=drive_link					
projects	https://drive.google.com/file/d/1K1hvSZwQtIATm2OhKOByySu-					
Proposed research	At the following link you can view Annex A/6 containing the proposed research projects:					
scholarship						
Places without	n. 2 including n. 1 reserved for medical specialists					
foreign universities)	n.1 with PNRR Research DM 118 funds					
reserved for graduates in	·					
n. 7 (including n.1	• n. 6 with University scholarship (including n.1 reserved for graduates in foreign					
Places with a scholarship	n. 7 scholarships including:					
	LM-68 Scienze e tecniche dello sport					
	LM/SNT4 Scienze delle professioni sanitarie della prevenzione					
	LM/SNT3 Scienze delle professioni sanitarie tecniche					
	LM/SNT2 Scienze riabilitative delle professioni sanitarie					
	LM-85 Scienze pedagogiche					



LIFE SCIENCES

Training objectives

The aim of the Doctoral Course in Life Sciences is to propose a path of Higher Doctoral Education in Life Sciences to a large group of graduates belonging to different master's degree classes ranging from Pharmacy and Industrial Pharmacy, Nutrition Sciences, Chemical Sciences, Biology and Industrial Biotechnology, Physics, Engineering, Medicine and Surgery, Dentistry and dental prostheses. The aim is to train PhD students of all curricula to do research at a high scientific level, favoring interdisciplinarity, the opportunities that arise from interaction with companies through specific projects (PON, POR and PNRR) complete the application experiences of students and periods of international internships at qualified public or private bodies, mainly in the European Community. The course is also very suitable for foreign students, who find in the laboratories of the research groups of the members of the Faculty College excellent opportunities for integration and scientific cooperation. In addition, the PhD in Life Sciences, thanks to the collaboration of the Magna Græcia University with local research bodies, such as the CRISEA center in Condoleo di Belcastro and the university spinoff Net4Science, born in 2018 by professors and former-students of this course, offers its PhD students unique professional opportunities in the Calabrian territory also projected to technology transfer.

The PhD research activities will also benefit from the spaces and equipment of the IRC-FSH Research Centre, equipped with cutting-edge equipment in the field of pre-clinical bioimaging on pathology models in the field of dysmetabolic diseases, cardiovascular and neurodegenerative diseases (the Centre has VEVO Ecolaser, MRI and CT imaging methods for small animals and ultra-high resolution Optical Imaging). In addition, the IRC-FSH Centre is linked to the Nutramed High Technology District, where researchers from various research bodies such as the IRCCS San Raffaele in Rome, the CIRM Consortium, and companies such as Alpiflor, Salix and HEAD, all operating in the nutraceutical sector. The Centre also has a Clinical Nutraceutical Unit.

Curricula provided

- Basic life sciences
- Applied life sciences

Coherence with PNRR

The PhD in Life Sciences includes in its College of Lecturers several research groups that make use of methodologies strongly linked to innovation issues, enabling technologies and the broader theme of digital and issues oriented to ecosystem conservation, biodiversity, and the reduction of climate change impacts and the promotion of sustainable development. Taking into account scientific collaborations in Italy and abroad, they are consistent with the lines of the National Strategy of Smart Specialization, with particular reference to the thematic area "Health, nutrition, quality of life" involving the following development trajectories:

- E-health, advanced diagnostics, medical devices and mini invasiveness;
- Regenerative, predictive and personalized medicine;
- Biotechnology, bioinformatics and pharmaceutical development;
- Development of precision agriculture and agriculture of the future;
- Systems and technologies for packaging, storage and traceability and safety of food production;
- Nutraceuticals, Nutrigenomics and Functional Foods.

In relation to the provisions of the National Recovery and Resilience Plan, these methodologies are consistent with the following trajectories:

- Health;



13	ALC: N	- Food, natural resources, agriculture and the environment.					
Course dura	ation	3 anni					
Coordinator		Prof. Vincenzo Mollace					
Coordinator		mollace@unicz.it					
mail		inolitace & armoz.re					
Classes	of	LM-6 Biologia					
Bachelor		LM-7 Biotecnologie agrarie					
required	for	LM-8 Biotecnologie industriali					
admission		LM-9 Biotecnologie mediche, veterinarie e farmaceutiche					
		LM-13 Farmacia e farmacia industriale					
		LM-17 Fisica					
		LM-21 Ingegneria biomedica					
		LM-22 Ingegneria chimica					
		LM-29 Ingegneria elettronica					
		LM-41 Medicina e chirurgia					
		LM-42 Medicina veterinaria					
		LM-46 Odontoiatria e protesi dentaria					
		LM-53 Scienza e ingegneria dei materiali					
		LM-54 Scienze chimiche					
		LM-60 Scienze della natura					
		LM-61 Scienze della nutrizione umana					
		LM-67 Scienze e tecniche delle attività motorie preventive e adattate					
		LM-68 Scienze e tecniche dello sport					
		LM-69 Scienze e tecnologie agrarie					
		LM-70 Scienze e tecnologie alimentari					
		LM-71 Scienze e tecnologie della chimica industriale					
		LM-73 Scienze e tecnologie forestali ed ambientali					
		LM-75 Scienze e tecnologie per l'ambiente e il territorio					
		LM-86 Scienze zootecniche e tecnologie animali					
		LM/SNT1 Scienze infermieristiche e ostetriche					
		LM/SNT2 Scienze riabilitative delle professioni sanitarie					
		LM/SNT3 Scienze delle professioni sanitarie tecniche					
		LM/SNT4 Scienze delle professioni sanitarie della prevenzione					
		LM-67. Scienze e tecniche delle attività motorie preventive e adattate					
		LM-68. Scienze e tecniche dello sport					
		LM/GASTR Scienze economiche e sociali della gastronomia					
Places wit	h a						
scholarship	n. 9	n. 9 scholarships including:					
(including n.		• n. 5 with University scholarship (including n.1 reserved for graduates in foreign universities)					
reserved for		n. 2 with PNRR DM 118 funds – Cultural heritage DM 118					
graduates in	۱	n.1 PNRR Herbal &Antioxidant Derivatives DM 117					
foreign		n. 1 PNRR HP Ingredients Corps DM 117					
universities))						



Places without	n. 2 including n.1 reserved for medical specialists
scholarship	
Proposed	At the following link you can view Annex A/7 containing the proposed research projects
research	https://drive.google.com/file/d/1Uid9Og4M3CxWgXmbI8wi3DCsEII8Xd-F/view?usp=drive_link
projects	
CUP	F63C23000250002
	F63C23000420002
Publication of	No later than 05 September 2023 , on the University's website at
evaluation	https://web.unicz.it/it/category/bandi-ateneo
results	
Interview	06 September 2023, 01.00 p.m., Room A, Building "Preclinico", Level 0, Campus Universitario, V.le
	Europa, Loc. Germaneto, Catanzaro, any updates at the link https://web.unicz.it/it/category/bandi-
	ateneo
Foreign	English
language	



MEDICAL, PREVENTIVE AND NUTRITION SCIENCES FOR HEALTH AND LONGEVITY

Training objectives

The PhD Course aims mainly to promote advanced research activities and the acquisition of skills to enhance the transformation of the results obtained from basic research in applications that allow to improve and implement prevention methods, diagnosis and therapy in order to promote health and delay the appearance of fragility in the elderly by promoting longevity in good physical shape and autonomy. Integrating classical clinical data with other individual risk factors allows for a much more accurate stratification of risk and potentially compromised biological aspects, so as to treat the person on the basis of their own characteristics and not according to valid standards at the population level. This covers every aspect of health, from the risk (or protection) of a particular disease, to individual responses to a given therapy.

The training objectives will be oriented towards making the link between basic research and medicine even closer, shortening the time needed to bring the results of research into practice, making full use of the hypotheses suggested by science. It will give ample space to laboratory research (benchside), to the application of the results of the research "to the patient's bed" (bedside) and to the dialogue with the community (community) and which has the aim of combining skills, innovative technologies and infrastructure to improve key aspects of medicine, such as prevention, diagnosis and therapy, with the aim of studying and proposing solutions that improve prognosis, prevention, screening and patient care and improve, large-scale, population health by postponing the psychophilic decay of the elderly.

Particular attention will also be paid to training in the research area of increasingly indicative biological models for predictive parameters and biomarkers, providing for the retrospective evaluation and continuous refinement of the preclinical model through critical review and the correct and considered use of the health result. Therefore, the PhD course will be aimed at training figures of PhD students who have a complete understanding of the medical, preventive and nutrition sciences with application in different specialties, medical, surgical and public health areas that are capable of producing new evidence with a view to facilitating the transition from the "cure of the disease" to the "maintenance of health". A specific focus will be on nutraceuticals and functional foods.

The acquisition of skills for a "precision assessment" will be promoted in order to accurately verify the risk factors and susceptibility against physiological changes, which predispose to the development or maintenance of a certain disorder. It is also intended to stimulate an increasing attention to the global understanding and consideration of the individual, which will allow young participants to acquire the ability to cope, so that they can face the current challenges of sustainability of health systems, carrying out clinical, preclinical and/or translational research projects in the fields of medical, surgical and public health sciences.

There will also be in-depth studies on activities in the field of basic research management, epidemiological and experimental, with a specific focus on innovative study designs (e.g. umbrella trial and basketball trial) management of knowledge of European and international research systems, exploitation and dissemination of results, open access to research data and products, the fundamental principles of ethics, gender equality and integrity.



Coordinator

mail

Coordinatore e-

Prof.ssa Aida Bianco

a.bianco@unicz.it

	The PhD students will be involved in third mission activities oriented to public engagement with a view
	to the enhancement and transfer of scientific evidence, in a more current concept that includes
	initiatives of socio-valuecultural and educational through the use of new social media, waiting for the
	growing awareness of the opportunity to operate, even in academia, with an approach and a vision
	inspired by innovation. This change in perception of the models of exploitation of research and
	technology transfer, which aims at the establishment of a real chain of open innovation, is the basis of
	a new model of economic development. Applying the open innovation paradigm means promoting
	research, creating the opportunity to transfer it to the real world.
Curricula	 Innovative Technologies, Nutraceuticals and Functional Foods
provided	Clinical, Translational, Predictive and Precision Medicine
Coherence with	The topics covered in the doctorate are in line with and consistent with the PNRR and in particular with:
PNRR	
	MISSION 4 (Education and Research), Component 2: FROM RESEARCH TO ENTERPRISE, by expanding
	the offer of doctorates and strengthening research, encouraging the dissemination of innovative models
	for basic and applied research, supporting innovation and technology transfer processes and enhancing
	research and innovative infrastructures, capital and innovation support skills. The technology transfer
	system will also be enhanced in terms of patents;
	MISSION 6 (HEALTH), Component 2: INNOVATION, RESEARCH AND DIGITISATION OF THE NATIONAL
	HEALTH SERVICE. The training activity, in fact, aims to strengthen the system of biomedical research,
	strengthening research programs on highly disabling diseases (e.g. prevention strategies and early
	diagnosis of chronic non-communicable diseases with a high impact on health and social care systems).
	Scientific progress and technological innovation require that professionals are regularly updated and
	trained to ensure the effectiveness, adequacy, safety and efficiency of the assistance provided by the
	SSN, ensuring the strengthening of the managerial and digital skills of healthcare personnel.
	Necessity emerged in all its evidence coinciding with the pandemic crisis. A process of acquisition of
	skills for healthcare professionals and others will be activated, in order to prepare them to face current
	and future challenges in an integrated, sustainable, innovative, flexible, always result-oriented
	perspective. Technical, digital and managerial skills will be enhanced through the provision of specific
	training courses in perfect consistency with the objectives of the PNRR. They will also be oriented to the
	development and definition of guidelines for local and national policies related to food consumption
	and research on novel foods capable of improving diets and the nutritional status of the person to
	prevent multifactorial diseases. Research activities will be developed to increase the adoption of
	sustainable nutrition and improve the quality of the diet and nutrition of consumers, so as to make
	available a wealth of skills oriented to the promotion of food welfare, and to carry out actions aimed at
	improving the diet also in harmony with a sustainable "environment".
	F = 0 = 1 = 0 = 0 = 0 = 0 = 0 = 0 = 0 = 0
Course duration	3 anni



Classes of	LM-6 Biologia
Bachelor	LM-8 Biotecnologie industriali
required for	LM-9 Biotecnologie mediche, veterinarie e farmaceutiche
admission	LM-13 Farmacia e farmacia industriale
	LM-17 Fisica
	LM-18 Informatica
	LM-21 Ingegneria biomedica
	LM-25 Ingegneria dell'automazione
	LM-26 Ingegneria della sicurezza
	LM-27 Ingegneria delle telecomunicazioni
	LM-29 Ingegneria elettronica
	LM-31 Ingegneria gestionale
	LM-32 Ingegneria informatica
	LM-33 Ingegneria meccanica
	LM-40 Matematica
	LM-41 Medicina e chirurgia
	LM-44 Modellistica matematico-fisica per l'ingegneria
	LM-51 Psicologia
	LM-54 Scienze chimiche
	LM-61 Scienze della nutrizione umana
	LM-67 Scienze e tecniche delle attività motorie preventive e adattate
	LM-68 Scienze e tecniche dello sport
	LM-82 Scienze statistiche
	LM-91 Tecniche e metodi per la società dell'informazione
	LM/SNT1 Scienze infermieristiche e ostetriche
	LM/SNT2 Scienze riabilitative delle professioni sanitarie
	LM/SNT3 Scienze delle professioni sanitarie tecniche
	LM/SNT4 Scienze delle professioni sanitarie della prevenzione
Places with a	n. 7 scholarships including:
scholarship n. 7	• n. 5 with University scholarship (including n.1 reserved for graduates in foreign universities)
(including n. 1	n. 2 with PNRR Research DM 118 funds
reserved for	
graduates in	
foreign	
universities)	
Places without	N/A
scholarship	
Proposed	At the following link you can view Annex A/8 containing the proposed research projects
research	https://drive.google.com/file/d/1glPd7nUkgTyJjEEYvwrM-ZYy_0H-DK-S/view?usp=drive_link
projects	
CUP	F63C23000270002



Publication	of	No	later	than	06	September	2023,	09.00	a.m.	on	the	University's	website	at
evaluation		http	s://web	unicz.i	t/it/c	ategory/bandi	i-ateneo							
results														
Interview		06 S	eptemb	oer 202	3, 11.	00 a.m. , Rooi	m T, Buil	ding H, L	evel 2,	Camp	ous Un	niversitario, V.l	e Europa, I	Loc.
		Gerr	maneto	, Catanz	aro, <u>a</u>	any updates a	t the link	https://	web.un	icz.it/	it/cate	egory/bandi-ato	eneo	
Foreign		Engl	ish											
language														



TECHNICAL SCIENCES AND HEALTH PROFESSIONS APPLIED TO PUBLIC HEALTH

Training objectives

The PhD program in Technical Sciences and Health Professions applied to Public Health, through a multidisciplinary approach and with reference to the complexity of the individual, provides training in research activities within the various articulations of health care, in line with the mission of Public Health.

The course aims to train the PhD student to the knowledge of scientific methodologies for the analysis of biological phenomena, to solve the scientific questions that he will face in his future career. To this end, the doctorate must:

- prepare researchers capable of designing, conducting and critically interpreting research projects in the fields of health assessment and prevention of communicable and chronic degenerative diseases;
- foster the acquisition of multidisciplinary skills to implement effective health promotion strategies at both individual and community level and to transmit relevant scientific culture and research methodologies;
- provide the basic scientific tools to participate effectively in the organisation and management of public health activities for fragile and complex patients;
- to provide in-depth knowledge and operational and design skills in the field of micro-organism/host interaction, antimicrobial drug resistance mechanisms and the role of micro-organisms in chronic and degenerative inflammatory diseases;
- provide appropriate multidisciplinary and multifunctional assessment tools for patients of surgical interest in general, cardiac and oropharyngeal surgery.

Within individual projects, students will acquire specific skills in relation to the peculiarity of the professional profile, however, since many of the research activities have a strongly clinical imprint, the basis necessary to achieve the objectives cannot be separated from a solid clinical training in the specific field of the research project in which the PhD candidate will participate.

Curricula provided

N/A

Coherence with PNRR

In line with the transversal priorities of the PNRR and, in particular, the desire to achieve the territorial rebalancing and development of the Mezzogiorno, the PhD training course aims to maximise the lines of action of Mission 6/Health, both in component 1/C1 "Proximity networks, structures and telemedicine for territorial health care"aimed at strengthening and reorienting SSN towards overcoming the fragmentation between hospital and local health services and the global care of the patient, which in component 2/C2 "Innovation, research and digitalisation of healthcare"through the training of health professionals able to master and thus implement the use of health information systems and digital tools but also to carry out scientific research at all levels of NHS.

In addition, the PhD course responds to the aims of Mission 4, component 1/C1, Investment 3.4 "Teaching and advanced university skills" by virtue of the activation of training courses characterized



	by a strong multidisciplinary and technological value in the approach to health issues, both at the level							
	of the individual and the community.							
Course	3 anni							
duration								
Coordinator	Prof.ssa Claudia Pileggi							
Coordinatore e-	<u>claudiapileggi@unicz.it</u>							
mail								
Classes of	LM-6 Biologia							
Bachelor	LM-9 Biotecnologie mediche, veterinarie e farmaceutiche							
required for	LM-13 Farmacia e farmacia industriale							
admission	LM-21 Ingegneria biomedica							
	LM-41 Medicina e chirurgia							
	LM-46 Odontoiatria e protesi dentaria							
	LM/SNT1 Scienze infermieristiche e ostetriche							
	LM/SNT2 Scienze riabilitative delle professioni sanitarie							
	LM/SNT3 Scienze delle professioni sanitarie tecniche							
	LM/SNT4 Scienze delle professioni sanitarie della prevenzione							
Places with a	n. 7 scholarships including:							
scholarship n. 7	• n. 6 with University scholarship (including n.1 reserved for graduates in foreign universities)							
(including n. 1 • n. 1 with PNRR Research DM 118 funds								
reserved for								
graduates in								
foreign								
universities)								
Places without	n. 2 (including n.1 reserved for medical specialists							
scholarship								
Proposed	At the following link you can view Annex A/9 containing the proposed research projects							
research	https://drive.google.com/file/d/1fnGDt0ImjP3PZSDBXmVnAJqE76Z-nubX/view?usp=drive_link							
projects								
CUP	F63C23000260002							
Publication of	No later than 06 September 2023, 09.00 a.m. on the University's website at							
evaluation	ion https://web.unicz.it/it/category/bandi-ateneo							
results								
Interview	06 September 2023, 12.00 p.m. , Room O, Building H, Level O, Campus Universitario, V.le Europa, Loc.							
	Germaneto, Catanzaro, any updates at the link https://web.unicz.it/it/category/bandi-ateneo							
Foreign	English							



DIGITAL TECHNOLOGIES APPLIED TO MEDICINE

Training objectives

The PhD in "Digital Technologies Applied to Medicine" is a multidisciplinary PhD aimed at the theoreticalpractical learning of the most advanced technologies in the field of bio-medical, bio-technological, and bio-engineering and artificial intelligence, for the application development of integrated research programmes in the fields of medical surgery, regenerative medicine and the planning and conduct of experimental clinical studies through the implementation of digital medicine and telemedicine. Due to its characteristics, the Doctoral Course aims at the high training of doctors, psychologists, engineers in the field of health, biologists, biotechnology, physicists, bio-informatics, and bio-statistics, able to transfer and integrate the know-howtechnology in the field of medical-surgical applications and, at the same time, to learn the use of advanced technologies for new diagnostic-therapeutic strategies and improvement of the quality of life of patients. The main objective of the PhD is to prepare PhD students to develop scientific research projects that address a complex problem that can be at different scales, from the molecular and cellular level to living organisms to biomedical systems. They investigate original methods, devices and systems with different purposes: to increase knowledge, to propose innovative methods for diagnosis and therapy, and to improve the structures of health and daily life services. The Doctorate aims to develop engineering skills of high level problem solving in biomedical, health and life sciences, within research groups or in private/public industrial or clinical contexts, through a strong interdisciplinary training that combines advanced technologies with medical/biological know-how.

At the end of the PhD, candidates must be able to carry out innovative projects and research development in the field of digital medicine and advanced medical therapies, proposing new methodological and technical solutions and appropriately assessing the technological impact in healthcare, life sciences and biomedical industry. The Doctoral Course aims, therefore, the post-graduate training of new highly specialized professional figures who, for their interdisciplinary skills, may have new and more qualified job opportunities in universities, in public or private research institutes, in hospitals or in the pharmaceutical and biomedical industry.

Curricula provided

Innovation in Basic and Clinical Research for Rare and Non-Communicable Chronic Diseases

Innovative Technologies for Digital Medicine and Advanced Therapies

Coherence with PNRR

The experience of the pandemic has highlighted the importance of being able to rely on the appropriate exploitation of the most advanced technologies, high digital, professional and managerial skills, new processes for the delivery of services and care and a more effective link between research, data analysis, care and system-wide programming.

The strategy pursued with mission 6 of the PNRR is aimed at addressing in a synergistic way all these critical aspects. A significant effort in terms of reforms and investments is aimed at aligning services to patient care needs in every area of the country. A large part of the resources is destined to improve the infrastructural and technological equipments, to promote the research and the innovation and to the development of technical-professional, digital and managerial competences of the staff.



On this basis, the Doctorate of "Digital Technologies Applied to Medicine" is fully consistent with Mission 6 (Health) of the PNRR. In particular, the PhD training project and its objectives are in line with component 2 of Mission 6 (M6C2):

• Innovation, research and digitisation of the National Health Service: the measures included in this component are aimed on the one hand at the renewal and modernisation of existing technological and digital facilities, and scientific research and technology transfer, as well as strengthening the skills and human capital of the NHS. Within the M6C2, Investment 2.1 "Enhancement and enhancement of biomedical research of the NHS" aims to strengthen the system of biomedical research in Italy, strengthening the response capacity of the centres of excellence in Italy by funding research programmes or projects in the field of rare diseases and highly disabling diseases. The Curriculum 1 of the Doctorate of "Digital Technologies Applied to Medicine" aims precisely at the innovation of basic and clinical research for rare and non-communicable chronic diseases with high impact.

Finally, the Doctorate of "Digital Technologies Applied to Medicine" for its definition and highly innovative purposes is consistent with Mission 4 ("Education and Research") - Component 1 ("Enhancing the Provision of Education Services: from Kindergartens to University"), Investment 4.1 ("Extension of the number of PhD and innovative doctorates for public administration and cultural heritage").

Course duration 3 anni		3 anni						
Coordinator		Prof.ssa Donatella Paolino						
Coordinatore e-		paolino@unicz.it						
mail								
Classes	of	LM-6 Biologia						
Bachelor		LM-8 Biotecnologie industriali						
required	for	LM-9 Biotecnologie mediche, veterinarie e farmaceutiche						
admission		LM-13 Farmacia e farmacia industriale						
		LM-17 Fisica						
		LM-18 Informatica						
		LM-21 Ingegneria biomedica						
		LM-25 Ingegneria dell'automazione						
		LM-26 Ingegneria della sicurezza						
		LM-27 Ingegneria delle telecomunicazioni						
		LM-29 Ingegneria elettronica						
		LM-31 Ingegneria gestionale						
		LM-32 Ingegneria informatica						
		LM-33 Ingegneria meccanica						
		LM-40 Matematica						
		LM-41 Medicina e chirurgia						
		LM-44 Modellistica matematico-fisica per l'ingegneria						
		LM-51 Psicologia						
		LM-54 Scienze chimiche						
		LM-61 Scienze della nutrizione umana						



	LAA 92 City on the Building
	LM-82 Scienze statistiche
	LM-91 Tecniche e metodi per la società dell'informazione
Places with a	n. 7 scholarships including:
scholarship n. 7 (including n. 1 reserved for	 n. 6 with University scholarship (including n.1 reserved for graduates in foreign universities) n. 1 with PNRR Research DM 118 funds
graduates in foreign universities)	
Places without scholarship	n. 2 (including n.1 reserved for medical specialists)
Scholarship	
Proposed	At the following link you can view Annex A/10 containing the proposed research projects
research	https://drive.google.com/file/d/1nEcMdsCchP57ZccwGfsQHW4BnaYAae1_/view?usp=drive_link
projects	
CUP	F63C23000280002
Publication of evaluation results	No later than 06 September 2023 on the University's website at https://web.unicz.it/it/category/bandiateneo
Interview	07 September 2023, 10.00 a.m., Room C, Building "Preclinico", Level O, Campus Universitario, V.le
	Europa, Loc. Germaneto, Catanzaro, <u>any updates</u> at the link https://web.unicz.it/it/category/bandiateneo
Foreign language	English