

Please note: This is a courtesy translation. The official version of this call for applications is in Italian and is available on the website of the University of Rome "Foro Italico". This English version is for informational purposes only, is without legal validity and cannot be used for any legal purpose.

**CALL FOR APPLICATIONS FOR ADMISSION TO THE PHD PROGRAMME
IN HUMAN MOVEMENT AND SPORT SCIENCES - UNIVERSITY OF ROME
"FORO ITALICO"
41st CYCLE – ACADEMIC YEAR 2025-2026**

THE RECTOR

HAVING REGARD TO Article 19 of Law 30/12/2010 No. 240;

HAVING REGARD TO Ministerial Decree No. 226 of 14/12/2021;

HAVING REGARD TO the Regulation on PhD programme of the University of Rome "Foro Italico";

HAVING REGARD TO Resolution No. 30 of 29/05/2025 of the Department Council;

HAVING REGARD TO Resolution No. 34 of 06/06/2025 of the Board of Administration;

HAVING REGARD TO Resolution No. 32 of 03/06/2025 of the Academic Senate;

HAVING REGARD TO the agreement concluded with the *Istituto Superiore di Sanità* (ISS), Tax Code No. 8021173058, whereby the latter finances one PhD scholarship for the 41st cycle on a specific topic;

RESERVING the right to make any modifications, updates, or additions to this announcement, which shall be notified exclusively through publication on the website indicated in Article 1 of this announcement

DECREES

Article 1: Announcement

A public competition is hereby announced for admission to the PhD Programme in Human Movement and Sport Sciences at the University of Rome "Foro Italico".

The research areas of the PhD Programme are indicated in **Appendix A** attached to this announcement.

PhD Programme in Human Movement and Sport Sciences	
Administrative and educational headquarters	University of Rome "Foro Italico"
Programme duration	3 years

Programme commencement	1 November 2025		
Available positions	11, of which:	University scholarships	n. 8
		Additional scholarship ISS	n. 1 - with specific topic: "New approaches for hygiene and health control of swimming facilities: application of advanced technologies for innovative management" **
		Without scholarship	n. 2
Programme website, announcement, and related competition documents	https://www.uniroma4.it/index.php/uniroma4-dottorati/dottorato-di-ricerca-in-scienze-del-movimento-umano-e-dello-sport-41-ciclo/		

** The title is in Italian: “*Nuovi approcci per il controllo igienico-sanitario degli impianti natatori: applicazione di tecnologie avanzate per una gestione innovativa*”

In this announcement, designations of titles referring to persons, expressed in the masculine form, refer indistinctly to persons of different genders.

Article 2: Admission procedures to the PhD Programme

The PhD Programme is accessed following successful completion of a competition based on qualifications, research project, and oral examination.

Article 3: Access requirements for selection

- Candidates may access the PhD Programme, without age or citizenship limitations, who by 28 October 2025 possess a degree under the pre-Ministerial Decree 509/99 system (old system) or a specialist/master's degree (Ministerial Decree 509/99 or Ministerial Decree 270/2004 system), second-level academic qualifications issued by institutions within the AFAM sector (*Alta Formazione Artistica e Musicale*), or an official foreign qualification equivalent to a second-cycle degree according to the Bologna Process qualification framework and level 7 according to the European Qualifications Framework (EQF), which permits access to PhD Programmes at academic institutions locally and is recognised as suitable for access to PhD Programmes in Italy (Master's Degree or equivalent qualification, in any case with written final thesis under supervisor guidance), and which presents no "substantial difference" according to the principles of the Lisbon Convention and the national methodology adopted by the Italian ENIC-NARIC centre (CIMEA)¹.

¹ <https://www.cimea.it/pagina-metodologia-valutativa>

- Those who obtain the access qualification referred to in this article between the application submission date and 28 October 2025 shall be admitted "subject to reserve" until obtaining the same. Should they result as winners, they must present to the PhD Office, upon penalty of irrevocable loss of the right to enrolment, the certificate or self-certification relating to the qualification obtained, by and no later than 31 October 2025. For candidates possessing an access qualification obtained abroad, the obligation to produce all documentation required in Article 13 of this announcement remains.

Article 4: Application for participation

The application for participation in the selection and all documents must be submitted **by and no later than Wednesday 3 September 2025 at 11:59** (here and elsewhere reference is made to Italian time).

Applications that are incomplete in compilation and/or lacking mandatory attachments, and that have not been transmitted according to the procedures indicated in the following articles, are not valid for competition participation and shall consequently be excluded ex officio.

Candidates are admitted to the competition subject to verification of possession of the requirements specified in the announcement, which shall be carried out pursuant to current legislation.

Article 5: Mandatory documentation for all candidates

All candidates, upon penalty of exclusion, must submit the following documents:

1a. For candidates who obtained their qualification in Italy: self-certification by means of substitutive declaration, attesting possession of the qualification or being awaiting its conferment; the degree class; the University that issued it; the final grade; the list of examinations taken and related credits acquired with grades, thesis title and supervisor (using **Appendix C**).

1b. For candidates who obtained their qualification abroad:

- i. declaration attesting possession of the qualification or being awaiting its conferment; the University that issued it; the final grade; the list of examinations taken and related credits acquired with grades, thesis title and supervisor (using **Appendix B**);
- ii. official certification of the qualification referred to in Article 3 of this announcement, with list of examinations and related grades translated into Italian or English. Those who have not yet obtained the qualification at the time of application submission must provide official certification of enrolment, including the list of examinations taken and related grades, translated into Italian or English.

2. Curriculum vitae, preferably in European format.

3. Two reference letters from university professors external to the Programme's Academic Board (in Italian called "*Collegio dei docenti*") referred to in this announcement, or experts in the field (see appendix "Instructions for completing reference letters").

The candidate must indicate in the relevant appendix, referred to in points 1a and 1b above, the names of the reference letter writers.

4. An original research project coherent with one of the fourteen doctoral programme themes indicated in **Appendix A** attached to this announcement,

or:

a research project on the specific topic of the additional ISS scholarship

"New approaches for hygiene and health control of swimming facilities: application of advanced technologies for innovative management"

5. The research project form (to be completed in accordance with the template available on the website specified in Article 1).

All documentation must be attached through the upload procedure during online competition registration.

The project may be written in Italian or English and must be between 12,000 and 34,000 characters (spaces included) and clearly contain: **1.** Research theme; **2.** Current state of studies on the project topic; **3.** Objectives and working hypotheses; **4.** Methods and reasons for method choice; **5.** Indication of innovative project elements; **6.** Bibliography. **The candidate must NOT indicate their name on the research project in any way, upon penalty of exclusion from the competition, but only on the research project form.**

Article 6: Additional qualifications

Candidates may optionally submit additional qualifications. The following are considered additional qualifications:

1. Other academic qualifications obtained in Italy or abroad such as Advanced Professional Courses (in Italian called "*master universitario*"), specialist schools, advanced courses, PhD, research scholarships, university teaching activities (this information is provided by self-certification in the relevant appendix C or B);
2. Scientific publications and works in press with publisher or journal editor attestation (publications and any attestations must be attached to the application in electronic format), to be attached through the upload procedure during online competition registration.

Article 7: Exclusions regarding scholarship positions

Neither PhD students enrolled in the same PhD nor Research Doctors from another PhD may access scholarship positions.

Article 8: Selection admission procedures

The competition application must be submitted exclusively online by **3 September 2025 – 11:59**, completing a form accessible from the University website:

To complete registration, candidates must perform the following operations:

- **Connect** to the University website: <https://www.uniroma4.it>

- **Click** in the menu **Link utili > Servizi on line ESSE3 Cineca > Accesso all'area riservata ESSE3 Cineca** (if already registered to the ESSE3 portal) otherwise, click in the menu **Link utili > Servizi on line ESSE3 Cineca > Registrazione ai servizi on line ESSE3 Cineca** and complete initial registration by entering all required data;

It is important to **remember** and **preserve** one's institutional credentials (**username and password**) as they will be required for each access to one's personal profile.

- **Log in** and access the **Segreteria** section, then click on **Test di Ammissione**.

Provide the necessary information for competition registration.

- **Attach** the mandatory documents required (see Article 5) and optionally those that are facultative (see Article 6) through the **upload** procedure using the **"Browse"** option. Candidates may proceed with upload until the announcement deadline. By this date, it is possible to **delete and/or add** attached documents.
- **Complete** the procedure by paying attention to entered data, checking and confirming their accuracy. After this operation, until the application submission deadline, modification of only personal data and attachments is permitted.

Claims due to possible IT system malfunctions near the deadline shall not be accepted; **candidates are therefore invited to complete the competition application with sufficient advance notice of the deadline** to enable University offices to guarantee due assistance.

During the entire competition procedure, in lists intended for online publication, candidate identification shall occur through the PRE-REGISTRATION number (in Italian called "PREMATRICOLA") assigned by the IT system.

Candidates with disabilities or Specific Learning Disorders (SLD), according to current legislation, may explicitly request the aids and/or interventions necessary to take the oral examination. The request must be sent via email to tutorato.specializzato@uniroma4.it by the application submission deadline, attaching certification that attests, respectively, one's disability/invalidity situation (pursuant to Law 104/92) complete with diagnosis (necessary to judge the appropriateness of the request), or diagnostic certification (DSA - Article 3 Law 170/2010). Furthermore, this email must contain a declaration, made according to law, that the attached certificates conform to the original.

The University reserves the right to evaluate received requests based on current legislation and indications from the Rector's Delegate for disability-related problems, as well as to request any additional documentation and verify the truthfulness of produced certifications.

Article 9: Oral examination

1. Following evaluation of qualifications and research project by the Examining Committee, those obtaining a score equal to or above 17/25 points are admitted to the oral examination. The list of those admitted to the oral examination, as indicated in **Appendix A**, shall be published **from 16 September 2025** on the website indicated in Article 1.
2. The oral examination characteristics are indicated in **Appendix A**. The oral examination shall begin on **23/09/2025** at 10:00 and, if necessary, may continue on following days.

3. Foreign residents may request to take the oral examination in telematic mode (Teams platform) by completing the appropriate section in **Appendix B** or **C**. The link shall be communicated from 16.09.2025 on the announcement website.

Article 10: Examining Committee for PhD Programme admission

The Committee, appointed by the Rector after consultation with the Academic Board, comprises a minimum of three members identified among university professors and researchers belonging to macro-sectors coherent with the Programme's educational objectives.

Article 11: Ranking list

1. The evaluation of qualifications and research project provides for attribution of a maximum score of 25 points according to criteria specified in Appendix A and by the Committee during the preliminary meeting:
 - a. up to a maximum of 10 points for qualifications;
 - b. research project (up to a maximum of 15 points).

Obtaining at least 17/25 points is necessary to access the oral examination.

2. The oral examination provides for attribution of a maximum score of 25 points, as described in Appendix A.
3. The minimum overall score of 30/50 points (given by the sum of scores obtained for qualifications, research project, and oral examination) is necessary to be considered suitable and access the final ranking.
4. The Examining Committee, following evaluation of qualifications, research projects, and oral examinations, draws up **two separate final merit rankings** of suitable candidates. **The first ranking** is allocated 8 scholarship positions and 2 positions without scholarship; **the second ranking** 1 position with additional ISS scholarship relating to the specific topic research project.
5. In case of equal scores in the individual ranking, the younger candidate prevails.
6. PhD scholarships are awarded according to ranking order based on achieved scores.
7. Positions not covered by scholarships are assigned to suitable candidates until exhaustion.
8. Winners who do not proceed with enrolment within the terms indicated at the bottom of the ranking - or according to procedures communicated by competent Offices, shall be considered as having withdrawn. Following withdrawal by a winner, the relative position, with or without scholarship, shall be assigned to the candidate placed in a useful position in the same ranking. In this case, enrolment must be completed within the peremptory term of 5 working days from the date indicated in the replacement communication from the PhD Office via email to the interested party. Candidates who do not intend to proceed with enrolment must give immediate written notice so that position reassignment may proceed. Winning candidates and/or suitable replacement candidates who do not proceed with enrolment within established times and methods shall be considered as having tacitly withdrawn.

9. Competition results shall be published on the website indicated in Article 1.

In case of access qualification referred to in Article 3, obtained/to be obtained abroad, candidates shall obtain a score based on a grade conversion system summarised by the following formula:

EXAMINATION EVALUATION:

$$\text{Voto} = \frac{V - V_{\min}}{V_{\max} - V_{\min}} * (I_{\max} - I_{\min}) + I_{\min}$$

V = Grade to be converted

V_{min} = Minimum grade for sufficiency in the University of origin

V_{max} = Maximum grade in the University of origin

I_{min} = Minimum grade for sufficiency in Italian Universities (= 18/30)

I_{max} = Maximum grade in Italian Universities (= 30/30)

DEGREE GRADE EVALUATION:

$$\text{Voto} = \frac{V - V_{\min}}{V_{\max} - V_{\min}} * (I_{\max} - I_{\min}) + I_{\min}$$

V = Grade to be converted

V_{min} = Minimum grade for sufficiency in the University of origin

V_{max} = Maximum grade in the University of origin

I_{min} = Minimum grade for sufficiency in Italian Universities (= 66/110)

I_{max} = Maximum grade in Italian Universities (= 110/110)

Should candidates possess qualifications - or for graduating students, have obtained examinations - with evaluations not convertible pursuant to the above, conversion methods and related scores shall be established by the Examining Committee for PhD Programme admission.

Article 12: Public employees

Public employees admitted to the PhD programme, are placed, upon request, on leave, compatibly with administration requirements, according to Article 12, paragraph 4, of Ministerial Decree 45/2013 pursuant to Article 2 of Law 13 August 1984, No. 476, as modified by Article 19 of Law 30 December 2010 No. 240 and in compliance with current legislation.

Article 13: Enrolment

1. Winning candidates must enrol as indicated in a notice following publication of the final ranking on the website indicated in Article 1.
2. Doctoral admission involves exclusive and full-time commitment (Ministerial Decree 226/2021, Article 12, paragraph 1), except as provided by this University's PhD Regulations and current legislation.
3. Simultaneous enrolment in multiple PhD Programmes, in Italy and abroad, is not permitted, except in any other situation in conformity with current legislation.

4. Enrolment and registration in the PhD Programme is incompatible with stipulating a research contract pursuant to Article 22 of Law 30/12/2010, No. 240.
5. Candidates not yet in possession of the access qualification required by Article 3 at the time of application submission, if admitted to the PhD Programme, must present required documentation to the PhD Office within terms established by the same article.
6. Winning candidates possessing a qualification obtained abroad (or who shall obtain the qualification within terms specified by this announcement) referred to in Article 3, and who shall have accepted the position by paying the regional tax and stamp duty, **upon penalty of forfeiture from the PhD Programme and restitution of any scholarship instalments received**, within 90 days from the start date of the academic year, i.e., 1 November 2025, must produce the following documentation for enrolment purposes:
 - a. **certificate of the qualification and examinations** and related grades (*transcript of records*), referred to in Article 3 of this announcement, authenticated through *Apostille*² of The Hague (5 October 1961), or, if the country is not a member of The Hague Convention, legalised³ by the Italian Diplomatic Representative (Embassy or Consulate) in the country to whose system the qualification refers;
 - b. **official Italian translation** of the aforementioned certificate(s) referred to in letter a) of this paragraph, if the aforementioned certificate(s) are not already issued in Italian or English. The above must be legalised (or with *Apostille*);
 - c. **comparability attestation**⁴ of the aforementioned qualification, issued by the Italian ENIC-NARIC centre (CIMEA)⁵:
or:
 - **declaration of value**⁶ in Loco issued by the Italian Diplomatic Representative (Embassy or Consulate) in the country to whose system the qualification refers:
or:

² <https://www.hcch.net/en/instruments/conventions/specialised-sections/apostille>

³ <https://www.esteri.it/it/servizi-consolari-e-visti/italiani-all-estero/traduzione-e-legalizzazione-documenti/legalizzazione-documenti/>

⁴ For signatory countries of the Lisbon Convention listed in the Automatic Recognition Database (ARDI) <https://ardi.cimea.it/it>, developed by CIMEA experts, it is possible to download the Certificate of Correspondence for the type of qualification from the country to whose educational system the qualification itself refers. The correspondence indicated in a Certificate generated by the aforementioned ARDI platform constitutes the outcome of a mere comparative opinion, and does not entitle the holder of the foreign qualification to any right to have the equivalence of the doctoral access qualification required under Article 3 of this call for applications recognised. The assessment of the academic qualification for the purposes of admission to the PhD is the exclusive responsibility of the University, which reserves the right not to recognise qualifications that do not conform to the requirements set out in the aforementioned Article 3, even at a stage subsequent to the conclusion of the competitive procedures, with consequent exclusion from the PhD. The University also reserves the right to request additional documentation deemed useful for the purposes of assessing the academic qualification, in order to verify compliance with the doctoral access requirements.

⁵ <https://www.cimea.it/pagina-attestatati-di-comparabilita-e-verifica-dei-titoli>

⁶ <https://www.mim.gov.it/dichiarazione-di-valore>

- **diploma supplement**⁷ (if conform to the European model developed on the initiative of the European Commission, Council of Europe, and UNESCO) issued by the competent institution, legalised (or with Apostille).

In addition to the aforementioned documentation referred to in paragraph 6 of this article, for enrolment purposes the following must be produced within the same term:

- passport** or, for EU citizens, **identity card** in course of validity;
- visa** of type "D" for "postgraduate"⁸ STUDY, issued by the Italian Diplomatic Representative - Embassy or Consulate (only for non-EU citizens requiring entry visa to Italy for long-term stays for enrolment purposes at higher education institutions);
- tax code** issued by the Revenue Agency;
- receipt of application for residence permit** for study purposes (only for non-EU country citizens possessing Type "D" visa for "postgraduate" STUDY);
- residence permit** in course of validity allowing enrolment in postgraduate courses, i.e., in the PhD Programme; if expired, also receipt of renewal application submission (only for non-EU country citizens regularly residing in Italy).

N.B. Candidates admitted to the PhD Programme requiring a Visa for "postgraduate" STUDY must access the UNIVERSITALY⁹ portal and complete the "**pre-enrolment application**". This application, following competent verifications, must be validated by competent Offices of the University of Rome "Foro Italico" and subsequently must be presented by the candidate to the diplomatic-consular representative of the place of residence. The aforementioned validation by the Offices does not confer any right to obtaining the Visa or consequent Residence Permit, as the issue of such documents is the exclusive competence of individual diplomatic-consular representatives and the Ministry of the Interior, respectively.

Article 14: Contributions

Winning candidates, upon enrolment, are required to pay €16,00 for stamp duty and the regional tax for the Right to University Study amounting to €140,00.

Article 15. Scholarships and research activity budget

- Scholarships have a determined annual amount (not less than that provided by Ministerial Decree 25 January 2018), equal to €16.243.00 (Ministerial Decree No. 247 of 23 February 2022) and are subject to INPS social security contribution - Separate Management pursuant to Article 2, paragraphs 26 and following, of Law 8 August 1995, No. 335 and subsequent modifications and additions.
- Scholarships are disbursed, as a rule, in monthly instalments in arrears; the first instalment is disbursed following declaration of regular commencement of attendance issued by the PhD Programme Coordinator.

⁷ <https://education.ec.europa.eu/it/education-levels/higher-education/inclusive-and-connected-higher-education/diploma-supplement>

⁸ In accordance with current regulations and the provisions contained in the "PROCEDURES FOR ENTRY, RESIDENCE, ENROLMENT OF INTERNATIONAL STUDENTS AND THE RELATED RECOGNITION OF QUALIFICATIONS, FOR HIGHER EDUCATION COURSES IN ITALY", published annually by the MUR in conjunction with the relevant ministries.

⁹ <https://www.universitaly.it/studenti-stranieri>

3. **The disbursement of the scholarship, funded by the ISS (*Istituto Superiore di Sanità*), is subject to the payment of the amounts due by the ISS to the University of Rome "Foro Italico", including for the years following the first.**
4. Scholarships cannot be accumulated with other scholarships conferred for any reason, except those granted by national or foreign institutions, useful for integrating the PhD student's research activity with foreign stays and except as provided by current legislation on the possibility of carrying out remunerated supplementary teaching activities.
5. The scholarship amount is increased by 50% for possible periods abroad of no less than one month duration. The increase may be recognised for up to a maximum of six months. Any additional months may be authorised by competent University bodies, within limits of available and approved resources.
6. From the first year, each PhD student is assured, within existing financial resources in the budget of accredited subjects according to current legislation, a budget for research activity equal to 10% of the scholarship amount. If the PhD student is not evaluated positively for scholarship renewal purposes, the unused 10% amount remains available to the institution for the same purposes.
7. PhD students enrolled in positions not covered by scholarships may benefit from scholarships or other forms of support financed by third parties or university research grants on topics relevant to the Doctoral theme.
8. In case of supervening incompatibility for scholarship enjoyment, the scholarship amount relating to the period for which it was received must be returned.
9. The scholarship is confirmed for the following academic year, provided that the doctoral student has completed the programme of activities envisaged for the previous year and has been evaluated positively, according to applicable legislation.
10. Withdrawal from study continuation or from the scholarship alone entails the obligation to return amounts received in the academic year to which the withdrawal refers.

Article 15 bis: PhD students' rights and duties - Degree conferment procedures

Regarding aspects indicated in this article, reference is made to provisions of the PhD Regulation of the University of Rome "Foro Italico", with particular reference to Article 22 and Title IV degree conferment procedures.

Article 16: Personal data processing

BRIEF INFORMATION PURSUANT TO ARTICLES 13 AND 14 OF EU REGULATION No. 679/2016 (HEREINAFTER "GDPR")

This information provides the main information on personal data processing carried out by the University of Rome "Foro Italico" (University).

Personal data, provided by candidates with the participation application, are processed by the University, in paper and electronic form, lawfully and correctly, protecting privacy, in contexts that do not prejudice personal dignity and shall be preserved in line with the most advanced levels of security and protection and for the time provided by applicable legislation.

Data provision is necessary for managing the purposes indicated in the information on personal data processing in its extended version at the following link: <https://www.uniroma4.it/index.php/informazioni-e-trasparenza/trattamento-dati-e-informative-gdpr/> (Information for participants in competitions and access selections for courses activated by the University), which we invite you to read for further information.

The Data Controller is the University of Rome "Foro Italico" - Piazza Lauro de Bosis, 15 - 00135 ROME - privacy@uniroma4.it - rettorato@pec.uniroma4.it. The University has designated Ing. Ingrid Cristina Giuli Bicescu as Data Protection Officer, reachable at the email address: dpo@uniroma4.it - privacy.uniroma4@pec.it.

Interested parties may in any case and at any time, pursuant to Articles 15-22 of the GDPR, verify their collected personal data and have them corrected, updated, or deleted, as well as appeal to the Supervisory Authority for any complaints (Data Protection Authority, Piazza Venezia 11, Rome, protocollo@gpdp.it <https://www.garanteprivacy.it>).

Article 17: Applicable Provisions

For matters not provided for in this announcement, reference is made to current legislation, PhD regulation published on the University website, and the scholarship financing agreement referred to in this announcement.

Article 18: Publicity

This announcement is published on the University website, on the European Euraxess site, and on the Ministry of University and Research (MUR) website.

Article 19: Procedure manager

Pursuant to Article 5 of Law No. 241 of 7 August 1990, the Procedure Manager for this announcement is Dr. Edmond Kola, PhD Office - Research and Doctoral Area, University of Rome "Foro Italico" - Piazza Lauro de Bosis, 15, 00135, Rome - email address: edmond.kola@uniroma4.it.

Rome, 16.07.2025

THE RECTOR

Prof. Attilio Parisi

APPENDIX A

The research areas of the PhD programme for the 41st cycle are indicated below. For each research line, the available methodologies and reference faculty members of the Academic Board are listed. The candidate shall indicate in the research project form (downloadable from the website) to which area their project pertains and shall prepare it on a specific topic, well-defined with respect to the many topics listed within each area. The project serves to assess the candidate's scientific competencies and, should the candidate be selected, is not binding for the laboratory that will host them.

PhD Programme	Human Movement and Sport Sciences
PhD Programme Coordinator	Prof. Maria Francesca Piacentini
Application Deadline	Wednesday, 3 September 2025 (11:59)
Assessment results for qualifications and research project	From 16 September 2025
Commencement of orale examination	Tuesday, 23 September 2025 – 10:00
<p>1. Functional Assessment and Sports Performance Analysis</p> <p><i>Academic Board Representatives: Prof. Laura Capranica, Prof. Maria Francesca Piacentini;</i></p> <p>Study of theoretical and applied aspects in the sporting domain, physical exercise, and ergonomics across different phases of an individual's life, with particular reference to the study of determinants, performance models, training methodology, and the dissemination and organisation of motor and sporting practice.</p> <p>Research themes include:</p> <ol style="list-style-type: none">1. Study of biological, motor, cognitive, socio-cultural, technical and tactical, and organisational determinants for sporting practice and performance across different ages through the development of trans-disciplinary knowledge and the strengthening of bidirectional translational connections between laboratory and field assessments;2. Training methods for maintaining and improving the health of athletes and the general population, in relation to age, gender, and activity level;3. Assessment of the development of sporting practice, its principles, policies, and organisations;4. Study of determinants of endurance performance;	

5. Study of strength training (with particular emphasis on VBT - Velocity-Based Training).

These themes are developed through the identification of key factors for sporting performance, functional assessment of different populations (athletes, women, elderly, children), and sporting policies. Specific study topics will be conducted both in controlled environmental conditions (laboratory) and ecological conditions (field).

Methodologies: Multi-disciplinary field and laboratory measurement approaches, including individual, inter-individual, and environmental variables. Analysis of motor and technical-tactical performance models from official and simulated competitions and training, with particular reference to the level of motor/sporting competence, gender, and age of the individual. Analysis of sporting policies and organisations at national, European, and international levels.

2. Exercise Physiology

Academic Board Representatives: Prof. Ilenia Bazzucchi, Prof. Francesco Felici, Prof. Massimo Sacchetti; Tutor: Prof. Paola Sbriccoli

The research lines concern the physiological mechanisms of adaptation of the human organism to exercise. Particular attention is devoted to metabolic and neuromuscular adaptations, with a significant portion of research focusing on interdisciplinary themes also concerning the development of innovative investigation techniques. The main research lines are detailed below:

- Motor control and neuromuscular adaptations to physical exercise in adults, sedentary and sporting subjects, healthy individuals and special populations (elderly, individuals with orthopaedic, metabolic, and neurological pathologies)
- Characterisation of motor unit activity
- Neuromuscular control in non-stationary activity
- Non-invasive assessment of muscle damage and recovery
- Effects of nutritional interventions on neuromuscular function and sporting performance
- Ventilatory control during exercise
- Effect of exercise protocols on metabolic control in diabetic patients
- Diabetes and neuromuscular function
- Physiological aspects and performance in cycling
- Neuromuscular control in combat activities
- Performance optimisation during endurance activities in different exercise modalities
- Physiological determinants of human performance in different exercise modalities
- Use of wearable sensors for monitoring vital parameters and physical activity

Laboratory methodologies and instruments available: Isometric and isokinetic dynamometry, surface, depth, and high-resolution spatial electromyography (HDsEMG), percutaneous nerve stimulation, calorimetry, movement analysis, posturography, laboratory and field tests for assessment and monitoring of physiological adaptations to physical exercise, body composition analysis, analysis of blood energy substrates, muscle biopsies.

3. Biochemistry and Molecular Biology - Movement Biochemistry

Academic Board Representatives: Prof. Guglielmo Duranti; Tutor: Prof. Roberta Ceci

Research lines:

- a) Cellular and molecular mechanisms underlying muscle cell differentiation;
- b) Redox state homeostasis both in "in vitro" studies on muscle cell models and "in vivo" in response to exercise and/or oxidative stress;
- c) Study of polyamine metabolism in skeletal muscle under physiological and atrophic conditions both "in vitro" and "in vivo" on murine models;
- d) Effect of supplementation with Moringa Oleifera Lam. extracts and/or other natural antioxidant molecules on energy metabolism and modulation of redox state also in response to oxidative stress in "in vitro" and "in vivo" models;
- e) Identification of natural protease inhibitors (Kunitz-like inhibitors KTPI) expressed by two species of meloidae insects, *Lydus trimaculatus* and *Mylabris variabilis*, and validation of their pharmacological use as anticoagulant agents and NET inhibitors (Neutrophil Extracellular Traps).

Methodologies:

Maintenance of primary and stabilised cell cultures; Purification of PBMCs from blood samples; Extraction, purification, and analysis of proteins, DNA, and RNA (electrophoresis, western blot, PCR); Spectrophotometry; Enzyme kinetics; Chromatography (column and HPLC).

4. Biology and Genetics of Movement

Academic Board Representatives: Prof. Maria Paola Paronetto; Prof. Ivan Dimauro; Tutor: Prof. Daniela Caporossi

Cellular and molecular mechanisms of control, response, and adaptation to movement, and their involvement in ageing and non-communicable diseases, such as diabetes, cardiovascular diseases, cancer, and neuromotor pathologies. Our studies involve the application of experimental methodologies and innovative biotechnologies on "in vivo" protocols, both on humans and murine models, and "in vitro" on different cellular models (tumour, neuronal, muscle). Specific competencies of the group include: a) functional "omics" of movement and non-communicable diseases; b) co- and post-transcriptional regulation of gene expression and its modulation in response to intra- and extracellular signalling; c) role of redox homeostasis (antioxidant systems, redox-sensitive signalling molecules, oxidative stress response proteins) in maintaining cellular homeostasis and tissue or systemic response to exercise.

Methodologies: Primary and stabilised cell cultures; Extraction, purification, and analysis of DNA, RNA, and proteins (electrophoresis, western blot, conventional and quantitative PCR); Cytofluorimetry; Conventional and confocal microscopy (cytogenetics, immunohistochemistry, comet assay); Cloning; Expression and purification of recombinant proteins.

5. Endocrinology

Academic Board Representatives: Prof. Paolo Sgrò;

Assessment and characterisation, in healthy subjects or those affected by endocrine-metabolic pathologies, of endocrine, immunological, and metabolic parameters involved in adaptation phenomena to different motor and sporting activities, relating to specific endocrine organs (e.g., hypothalamic-pituitary-gonadal, -thyroid, -adrenal axes) and target tissues (e.g., bone, muscle, adipose); across different phases of an individual's life and also following administration of exogenous substances (e.g., use and abuse of non-prohibited and prohibited substances, nutritional supplements). The above, also in collaboration with external research structures, with particular attention to preventing alterations of the endocrine system (e.g., reproductive apparatus, metabolism) and maintaining and/or restoring individual wellbeing in non-communicable endocrine-metabolic pathologies. Understanding the role of physical exercise in controlling/correcting hormonal (i.e., endocrine and paracrine) and inflammatory mechanisms involved in the pathogenesis of endocrine-metabolic diseases, also related to sedentary lifestyle and motor activities. Assessment and characterisation in experimental cellular models (e.g., skeletal muscle, etc.), also with translational purposes, of possible biomediators and cellular and molecular mechanisms (e.g., endocrine-metabolic, inflammatory, etc.) involved in adaptive processes to motor and sporting activities and/or in the aetiology of non-communicable pathologies related to sedentary lifestyle and some pathologies of the musculoskeletal system.

Principal instruments and methodologies available in the Endocrine Research Laboratory: Cycle ergometer, Metabolimeter, Body composition analysis (e.g., impedance measurement, adipometry), Extraction, purification, and analysis of DNA, RNA, and Proteins (e.g., electrophoresis, western blot, PCR); Analytical tests using ELISA and Luminex Multiplatform (BIOPLEX).

6. Sports Medicine

Academic Board Representatives: Prof. Chiara Fossati; Tutor: Prof. Paolo Borrione

The physiological mechanisms of adaptation to physical exercise, hormonal and cellular, with particular reference to maintaining health and wellbeing. The promotion of health, individual wellbeing, and improvement of quality of life through correct lifestyle. Health aspects related to sporting activity practice, with particular reference to prevention and therapy of pathological or parapsychological conditions related to sporting activity itself or incorrect lifestyles. Echocardiographic and functional assessment of athletes for screening pathologies predisposing to sudden cardiac death. Prevention of the doping phenomenon and behaviours potentially risky for health in the sporting context. New frontiers in anti-doping research. The application of physical activity in prevention and treatment of chronic non-communicable diseases. The role of physical exercise in musculoskeletal pathologies. The effects of physical exercise in the elderly and its role in preventing frailty and successful

ageing. Physical exercise, brain ageing, and neurodegenerative pathologies. Oxidative stress and physical exercise.

Methodologies: Clinical assessment; Electrocardiography (baseline; under stress; dynamic according to Holter); Echocardiography; Spirometry; Haematological monitoring; Use of growth factors; Multidimensional assessment of the elderly; Cognitive screening.

7. General Pedagogy and Special Pedagogy

Academic Board Representatives: Prof. Emanuele Isidori; Tutor: Prof. Angela Magnanini

Qualitative and quantitative research methods in sport education (including for special populations); sport pedagogy; education, sport, and values; training of physical education teachers and coaches; sport and cultural studies; tourism, sport, and leisure; Olympic studies; philosophy, epistemology, and ethics of sport; physical-sporting activity and lifelong learning; pedagogy of the body; pedagogy of bodily and expressive mediation; special pedagogy of sport; autism and motor and sporting activity; inclusive sport; body, sport, and school.

8. Bioengineering and Neuromechanics of Human Movement

Academic Board Representatives: Prof. Giuseppe Vannozzi; Tutor: Prof. Valentina Camomilla, Prof. Andrea Macaluso, Prof. Valeria Belluscio

Advanced methodologies and protocols for human movement analysis, using optoelectronic systems or wearable inertial devices, to provide accurate description of human movement and mechanisms underlying motor activity in physiological or pathological conditions, during activities of daily living, work, and sport.

Motion capture. Algorithms and models for high-resolution movement analysis. Monitoring systems for health and wellbeing. Models of the human skeletal-muscular system in movement for motor function assessment.

Gait analysis and motor capacity assessment in special populations. Assessment of motor competence in children with typical development and in motor disorders. Sports biomechanics for performance analysis and injury prevention. Ergonomics.

Motor control and neuromuscular adaptations to physical exercise in special populations (elderly, orthopaedic and neurological patients). Neuromechanics applied to sport and rehabilitation. Postural adjustments in healthy and pathological subjects. Kinematics, dynamics, and metabolic cost of human locomotion.

Integrated neurophysiological approaches for assessment of motor and cognitive interference in human gait.

Methodologies: Stereophotogrammetry, dynamometry, electromyography, wearable inertial sensors, calorimetry, electrical neuromuscular stimulation, functional near-infrared spectroscopy.

9. Psychology and Social Processes in Sport

Academic Board Representatives: Prof. Federica Galli; Tutor Prof. Arnaldo Zelli, Prof. Luca Mallia, Prof. Francesca Romana Lenzi

The Laboratory focuses on the study of motivational, cognitive, and emotional processes that characterise and contribute to a scientific explanation of individual differences in sporting experience and performance, as well as in lifestyle choices and effectiveness related to physical activity.

The aforementioned interests are pursued according to established theoretical models in personality psychology, social psychology, sport psychology, and health psychology, with particular attention to contextual differences (e.g., individual and team sports).

The Laboratory also focuses on the social processes associated with sport as a “total social fact.”

These include: gender issues in sport, from violence to non-binary identities; violence in the context of sports; the role of sport and physical activity in fostering social inclusion; sport in the digital age; physical activity as a tool to reduce health inequalities and promote a culture of prevention in sports; the role of sport in marginal contexts (such as prisons, urban peripheries, and migration); sport, war, and peacebuilding; and creative methods for sport research.

10. Cognitive and Action Neurosciences

Academic Board Representatives: Prof. Francesco Di Russo; Tutor: Prof. Sabrina Pitzalis

The laboratory (www.researchgate.net/lab/Francesco-Di-Russo-Lab) deals with:

- Neural bases of human action in interaction with the environment (perceiving to act).
- Brain correlates of proactive cognitive and motor processes (preparation, anticipation, and prediction) and reactive processes (perception, attention, execution, sensory feedback, and error management).
- Cognitive, behavioural benefits and brain indicators of physical exercise effects throughout the life cycle and in pathological conditions.
- Brain plasticity and effects of sport on the athlete's brain.

Research methodologies used in the laboratory:

- Behavioural (response time and accuracy).
- Brain electrophysiological: electroencephalogram (EEG), event-related potentials (ERP), brain rhythms, and brain source localisation.
- Neuroimaging: anatomical and functional magnetic resonance imaging (MRI, fMRI).
- Combination of EEG/ERP and MRI/fMRI (spatio-temporal mapping of brain processes).

11. Public Health – Epidemiology and Biotechnology

Academic Board Representatives: Prof. Vincenzo Romano Spica; Tutor: Prof. Federica Valeriani

Integrating physical activity into community-based prevention strategies: perspectives from different healthcare systems, also considering new health challenges posed by emerging pathogens or new pandemics, such as COVID-19. Sedentary behavior, nutrition, and environmental risk factors from a Global Health and One Health perspective. Physical activity and Health Promotion: the role of the National Health Service. Environmental microbiology and human microbiota in wellness, sport and prevention. Legionellosis, infectious risks, vaccinations, and sport activity. Safety and quality issues related to sports facilities: gyms, swimming pools, thermal plants, and mass gatherings, especially in light of emerging infectious risks and sustainability issues. Hygiene of recreational and medicinal waters: guidelines and innovations for surveillance, treatments, disinfection, consensus documents for hygiene management. Research and monitoring of chemical, physical, and biological indicators. Health policy in sports, physical activity, and wellness. A.I. for bioinformatics, health data management, decision making and personalized prevention.

Methodologies: epidemiology and meta-analysis; traditional and molecular microbiology: bacterial cultures, serotyping, genotyping (Real-Time PCR, MLST, NGS), characterization of mfDNA with high-throughput sequencing of microbiota from various matrices.

12. Sport Strategy & E-Sports Management (SSEM)

Academic Board Representatives: Prof. Francesca Vicentini

The research activity of the Sport Strategy and E-Sports Management Laboratory focuses on promoting and developing the sport research area from a managerial perspective, as well as the new E-sport reality, at national and international levels. Additional research areas include: Marketing management, Corporate governance (Governance role), Organisational Behaviour and career management, Business Models in E-sports, Sport Management, Sustainability, inclusion and sport management, Event Management.

Methodologies: Qualitative analysis and quantitative analysis.

13. Physical Exercise Adapted to Different Pathologies

Academic Board Representatives: Prof. Attilio Parisi

The activities of the Laboratory of Physical Exercise and Sport Sciences concern the study of new physical activity protocols adapted to special populations. Current research lines are particularly directed towards cancer patients, patients with chronic kidney disease, patients with multiple sclerosis, subjects with osteoporosis, and subjects who have undergone transplantation. Regarding these pathologies, functional assessment tests and training protocols are experimented with, aimed at improving the physical efficiency and quality of life of patients affected by them.

Methodologies used: Upper limb dynamometry, body composition analysis, analysis of oxygen consumption at rest and under stress, basal metabolism calculation, non-invasive static and dynamic analysis system of the spine and pelvis (Rasterstereography),

Electrocardiography (baseline; under stress), training assessment and control instruments, field and laboratory measurements.

14. Laboratorio di Sport e Scienze Tecniche Mediche Applicate

Academic Board Representatives: Prof. Antonio Tessitore Tutor: Prof. Clara Crescioli

Cultural Mission

Deals with the main themes relating to physical exercise (standardisation methods, metabolic and psycho-affective responses, energy cost assessment) and physical and sporting activity in subjects of all age groups, including those with metabolic pathologies and/or disabilities.

Principal research lines and methodologies

Research in the field of monitoring and recovery strategies for training and competition, with particular reference to team sports, combat sports, and rapid environmental adaptation; Performance monitoring in difficult environmental conditions; Performance analysis and match analysis; Technology and innovation in sport and at the service of sport coaching; Management and analysis of training and competition data.

Research in the field of applied medical techniques. Epidemiological studies on injuries and diseases, with particular reference to motor and sporting activities. Study of biological mediators involved in adaptation to physical activity.

Evaluation criteria for qualifications and research project

Maximum score: 25 points

Minimum score for admission to oral examination: 17/25 points

The score relating to the evaluation of qualifications shall be attributed as follows::

- Up to 7 points for mandatory qualifications, of which: up to 4 points for degree grade (average of marks in the case of graduands); up to 3 points for curriculum vitae
- Up to 3 points for additional qualifications, of which: up to 2 points for publications up to 1 point for other academic qualifications
- Up to 15 points for the research project, comprising: knowledge of the context (maximum 6.5 points); clarity of experimental hypotheses and motivations that determine methodological choices (maximum 6.5 points); originality and relevance of hypotheses (maximum 2 points)

Date and time of oral examination

The oral examination shall commence on 23 September 2025 at 10:00, at the University of Rome "Foro Italico", Piazza Lauro de Bosis No. 6. Should the number of candidates not permit the completion of the oral examination in a single day, the examination shall continue on subsequent days; the timetable shall be published on the website indicated in Article 1.

Candidates shall not receive any summons or communication regarding the results, which shall be published on the aforementioned website.

	<p>Candidates admitted to the oral examination are required to present themselves, without any further notice, at the time and on the day specified in this Call at the venue of the oral examination (or to connect remotely for candidates referred to in Article 9, paragraph 3) equipped with a valid identity document.</p> <p>The link to the remote oral examination for residents abroad, who have made an explicit request as provided for in this Call, shall be accessible at the same web address indicated above. Candidates who cannot be contacted shall be considered absent.</p>
<p>Description of oral examination</p>	<p>The oral examination may be conducted in Italian or English and shall cover:</p> <ul style="list-style-type: none"> - Presentation and discussion of the research project (up to a maximum of 14 points); - Previous research experience (up to a maximum of 2 points) - Motivations for the specific educational pathway of the doctoral research programme (up to a maximum of 4 points); - Knowledge of the English language (up to a maximum of 5 points). <p>Regarding the project, the following shall be evaluated: knowledge and discussion of scientific literature on the subject (maximum 5 points); ability to discuss one's hypotheses, expected results, and possible practical applications/developments (maximum 5 points); ability to discuss the reasons for the selection of method and techniques (maximum 4 points).</p> <p>During the oral examination on the research project, the examining Committee may avail itself of the contribution of lecturers and tutors from the Academic Board of the PhD programme who, whilst not forming part of the Committee itself, possess specific expertise in the research area chosen by the candidate.</p> <p>The oral examinations, including those conducted remotely, are public.</p> <p>A maximum of 25 points is attributed to the oral examination.</p>