

# UNIVERSITA' DEGLI STUDI DI PAVIA

**Subject: Public competition for admission to PhD courses - XXXII cycle  
- Academic Year 2016/2017**

## THE RECTOR

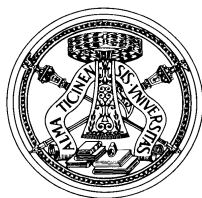
- CONSIDERING** Law n. 210 of July 3, 1998, art. 4;
- CONSIDERING** Law n. 240 of December 30, 2010, art. 19;
- CONSIDERING** the Ministerial Decree n. 45 of February 8, 2013;
- CONSIDERING** the University of Pavia Statute;
- CONSIDERING** the University of Pavia “Regulations for PhD courses” n. 1223 of July 24, 2013;
- CONSIDERING** The Ministerial Decree n. 661 of August 19, 2014 and n. 672 of September 7, 2015, ratifying the five-year accreditation, corresponding to three cycles, of the PhD courses presented by the University of Pavia;
- CONSIDERING** the “Technical report on the activation of the PhD courses – XXXII cycle” issued by the Internal Evaluation Unit;
- CONSIDERING** the resolution of the Administrative Senate of April 18, 2016;
- CONSIDERING** the resolution of the Administrative Council of April 26, 2016;
- CONSIDERING** the need to issue the call for applications for public competitions to be admitted to the PhD courses, XXXII cycle, administered by the University of Pavia

## DECREES

### *Art. 1* *Activation*

1. The University of Pavia hereby announces public competitions for admission to the XXXII cycle (Academic Year 2016/2017) of PhD courses, listed below according to their macro-areas:

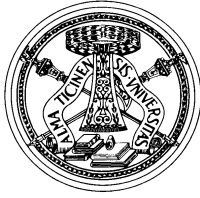
<b><u>MACRO-AREA OF SCIENCE AND TECHNOLOGY</u></b>	
<b>1</b>	PHYSICS
<b>2</b>	MATHEMATICS CIAFM consortium: University of Pavia, University of Milano-Bicocca, Istituto Nazionale di Alta Matematica “Francesco Severi”
<b>3</b>	CHEMICAL AND PHARMACEUTICAL SCIENCES
<b>4</b>	EARTH AND ENVIRONMENTAL SCIENCES



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5	BIOENGINEERING AND BIOINFORMATICS
6	CIVIL ENGINEERING AND ARCHITECTURE in cooperation with Istituto Universitario di Studi Superiori of Pavia (IUSS)
7	ELECTRONICS, COMPUTER SCIENCE AND ELECTRICAL ENGINEERING
8	MICROELECTRONICS
<b><u>MACRO-AREA OF LIFE SCIENCE</u></b>	
9	GENETICS, MOLECULAR AND CELLULAR BIOLOGY
10	EXPERIMENTAL MEDICINE
11	PSYCHOLOGY, NEUROSCIENCE AND MEDICAL STATISTICS
12	BIOMEDICAL SCIENCES
<b><u>MACRO-AREA OF HUMANISTIC AND SOCIAL SCIENCES</u></b>	
13	PRIVATE LAW, ROMAN LAW AND EUROPEAN LEGAL CULTURE
14	PUBLIC LAW, CRIMINAL AND INTERNATIONAL JUSTICE
15	ECONOMICS AND MANAGEMENT OF TECHNOLOGY (DREAMT) in cooperation with the University of Bergamo
16	SCIENCES OF THE LITERARY AND MUSICAL TEXT
17	HISTORY

- In Annex 1 (p. 13 ff.), which forms an integral part of this call, for each course the location, course director, research topics, positions available, scholarships and other funding, name of the cooperating institutions and possible issue of double or joint degrees, selection procedure and qualifications assessed, admission test timetable and programmes offered are specified.
- The PhD courses have a legal duration of three years, starting from October 1, 2016.
- The PhD courses activation is subject to the verification of the requirements conservation by ANVUR. Therefore, the selections will be carried out only for the PhD courses that have received the accreditation confirmation by ANVUR.
- The number of PhD positions mentioned in Annex 1 (p. 13 ff.) may be increased, with subsequent provisions, if additional funding from public institutions or qualified private organisations is made available. In any case, the deadline for applications will remain unchanged.
- The funding provided by external entities will be assigned provided an agreement is reached between the University and the entity involved.
- This call for applications is equivalent to a notification to all intents and purposes. Further modifications, updates or additions to its content will be announced exclusively on the <http://www.unipv.it/dottorati> website.**



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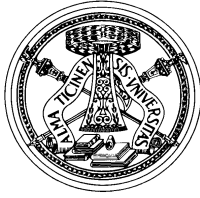
8. The presentation of the application as outlined in art. 5 implies the acceptance by the candidate of the rules contained in this call for applications. Failure to respect these rules will result in the candidate being excluded from the competition.

## Art. 2

### Admission requirements

1. Applications are invited from candidates, regardless of age and nationality:
  - a. who hold an Italian “*diploma di laurea ante D.M. 509/1999 (vecchio ordinamento)/ laurea specialistica/ laurea magistrale*”, or an equivalent second-level degree issued by an AFAM (*Alta Formazione Artistica e Musicale*) institution;
  - b. who hold an academic degree awarded abroad and recognised by the Academic Board as being eligible for the selected PhD competition purposes only. The foreign degree must be comparable to an Italian second-level degree in terms of duration, level and disciplinary field. In respect of these conditions, the Academic Board will decide whether the degree is eligible for the PhD competition. During the application procedure, candidates will be asked to attach as uploads, in addition to the qualifications required for the specific PhD course, the following documents, in order for their foreign degree to be recognised as eligible:
    - i. in case of italian and EU citizens: self-declaration, pursuant to D.P.R. 445/2000 and subsequent modifications, of all their academic degrees, including the courses attended, the marks received and the legal duration of the degree courses;
    - ii. in case of non-EU citizens: certificates of all their university degrees, in Italian or English, including the courses attended, the marks received and the legal duration of the degree courses. In case of certificates in a language different from Italian or English candidates will have to submit, together with the certificates, their sworn and legalized translation into Italian or English.
    - iii. any other document relevant to the assessment of a degree's eligibility, such as a Diploma Supplement or Dichiarazione di Valore in Loco.

The candidate may be required at any time to submit further documents, in order to verify the eligibility of his/her degree.
  - c. who expect to receive the degree mentioned in para. a and b no later than October 31, 2016. **Failure to attain the degree within October 31, 2016 will result in candidates being excluded from the PhD course.** Such candidates, if successful, will be conditionally admitted and enrolled in the PhD course and will be required to submit by e-mail ([concorso-dottorati@unipv.it](mailto:concorso-dottorati@unipv.it)) to the University administration office, no later than October 31, 2016:
    - i. in case of degree attained in Italy: a self-declaration, conforming to the model available at the following link: <http://www.unipv.it/dottorati>, testifying they have attained the degree, together with copy of a valid identity document;
    - ii. in case of degree attained abroad:
      1. in case of italian or EU citizens: a self-declaration, conforming to the model available at the following link: <http://www.unipv.it/dottorati>, testifying they have attained the degree, together with copy of a valid identity document;
      2. in case of non-EU citizens: a certificate in Italian or English language testifying the degree attainment. In case of certificates in a language different from Italian or English candidates will have to submit, together with the certificates, their sworn and legalized translation into Italian or English.



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2. Applications from candidates already enrolled in a PhD course at the University of Pavia will not be accepted.

## Art. 3

### **Additional PhD positions jointly-supervised with companies and additional PhD positions in higher-education apprenticeships**

1. Employees in highly qualified positions may undertake, while keeping their job position and stipend, a PhD course. Such candidates' training objectives and research activities are arranged between the University and the company by means of a specific agreement. A separate ranking list is drawn up for these candidates. The agreement between the University and the company must be formalised no later than August 31, 2016. It will specify, among other things, the conditions and nature of the research to be carried out at the company and the division of the employee's time.
2. If the conditions exist, it is possible to establish PhD positions in apprenticeships with companies. This type of contract allows graduates aged up to 29 years to enrol in a PhD course and get simultaneously employed by a company. A separate ranking list is drawn up for these candidates. A member of the company will take part in the selection procedure for these positions. The Committee will examine, at the end of the interview, also the research topics proposed by the company. These positions will be activated provided that the company identifies a candidate suitable for their needs.
3. Candidates interested in these positions must select the appropriate administrative category during the application procedure, if available for their chosen PhD course.

## Art. 4

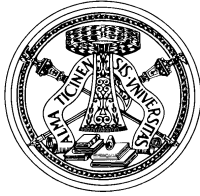
### **Additional positions reserved to candidates with a scholarship from a foreign country and to candidates holding a scholarship from a specific international mobility programme**

1. Candidates holding a scholarship from a foreign country, or candidates holding a scholarship from a specific international mobility programme will be selected through a qualification assessment and, unless otherwise specified in Annex 1 for the specific PhD course, will also undertake an interview via videoconference. This is aimed at verifying candidates' competence, ability and aptitude for research and their knowledge of Italian and/or English.
2. Candidates must select the appropriate administrative category, if available for their chosen PhD course, during the application procedure.
3. The enrolment in the positions reserved to candidates with a scholarship from a foreign country is allowed provided that the University administration verifies the actual availability of the funding whose ownership is declared by the candidate.
4. The examining committee will draw up specific reports and separate ranking lists.

## Art. 5

### **Applications**

1. Candidates who wish to participate in a PhD competition at the University of Pavia have to **apply online** by the deadline of **July 8, 2016 at 17:00 pm (Italian time)**. **Applications can only be made via the online procedure** at the following link: [https://studentionline.unipv.it/esse3/Home.do?cod\\_lingua=eng](https://studentionline.unipv.it/esse3/Home.do?cod_lingua=eng). Applications submitted via any other means will not be considered. Candidates are responsible for ensuring that their application has been completed accurately and in full; complaints related to the malfunctioning of the online procedure will not be accepted. Candidates are highly recommended to complete the online application well in advance of the application deadline. Candidates must **pay the application fee**, amounting to **€ 33.00, by July 8, 2016**. **Failure to pay the**



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**admission fee by the deadline will result in candidates being excluded from the competition.** Under no circumstances will the admission fee be refunded. Candidates applying for the “Additional positions reserved to candidates holding a scholarships from international mobility programmes” are exempted from the application fee.

2. Candidates must be registered on the Esse3 system in order to access the online procedure. Candidates who have yet to register should select the “Registration” tab and insert the requested data; then, by selecting the “Login” item and entering the username and password provided by the system, they will be able to access their Personal Area and apply for the PhD competitions.

Candidates who have already registered on the University of Pavia website must select only the “Login” tab and access the Personal Area by entering the username and password already in their possession. **Candidates are requested to check and update their personal data already present in the database, in particular the e-mail address which will be used for all communications related to the PhD competition.**

In order to submit the application, candidates have to select the “Admissions” item from the left-hand menu, then, from the same menu, the “Admission test” item, and then the PhD competition in which they would like to take part.

During the application procedure, candidates have to:

- enter the information regarding their degree course and the details of a valid identity document; the same identity document will have to be uploaded during the application procedure and also presented on the day of the tests for identity purposes;
- choose the PhD competition, the appropriate administrative category and the foreign language, from those listed in Annex 1 for each PhD course, whose knowledge will be verified during the interview;
- enter the name and e-mail address of the chosen referee/s, in case the reference letter/s is/are included among the qualifications assessed for the selected PhD competition (see Annex 1, p. 13 ff.);
- attach, via an upload, proof of the qualifications required for their chosen PhD competition (see Annex 1, p. 13 ff.) and the identity document whose details were entered during the procedure.

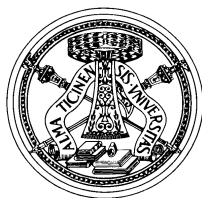
Qualifications and documents must be attached as .pdf files and must not exceed 5MB each. Each file's denomination must bear the candidate's surname e the type of the qualification (e.g. surname\_curriculumvitae).

Candidates will have to prove they are in possession of the qualifications<sup>1</sup> issued by the Public Administration by means of a self-declaration, pursuant to art. 46 of D.P.R. 445/2000. The self-declaration must be duly dated and subscribed. The self-declaration regarding the exams taken must conform to the model available at the following link: <http://www.unipv.it/dottorati> or, if available, it can be downloaded from the website of the institution where the degree was awarded. The self-declaration must bear the exams taken, the marks, the CFU (credits), the average of the marks obtained in the exams (if required), and the final mark, if the degree has already been attained. **Non-EU applicants in possession of qualifications**

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<sup>1</sup> Pursuant to D.P.R. n. 445 of December 28, 2000 and subsequent modifications, Italian and EU citizens must provide a self-declaration attesting the following conditions and facts certified by the Public Administration:

- a) enrolment in professional organisations or on lists managed by Public Administration;
- b) membership of professional associations;
- c) qualifications and exams taken;
- d) professional qualifications, post-graduate qualifications, qualifying exams, training courses, refresher courses and technical qualifications;
- e) student status.



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**awarded abroad cannot submit a self-declaration, but must attach to the application a copy of the relevant certificates.**

With the exception of the degree required for admission (see art. 2, para. 1), all further qualifications must have been obtained by the application deadline.

The examining committee will take into consideration only the qualifications listed in Annex 1 (p. 13 ff.) for each PhD course.

Candidates with a disability (under the provisions of Law n. 104 of February 5, 1992 integrated by Law n. 17 of January 28, 1999) or affected by a Specific Learning Disability (under the provisions of Law n. 170 of October 8, 2010) should make a specific request in their application for the necessary assistance and, if required, for extra time to complete the selection tests. Candidates with disabilities are required to submit, via the medical committees, a medical certificate issued by the competent health authorities. Candidates with Specific Learning Disabilities must submit an appropriate clinical certificate issued no more than three years before by the National Health Service. Regions where it is not possible to diagnose such disorders as part of the specialist treatments carried out by the National Health Service can commit, within the limits of their human, instrumental and economic resources, the same diagnosis to a specialist or accredited structure. The documents testifying the disability must be submitted to the Centro Servizio di Ateneo - Servizio di Assistenza e Integrazione per gli Studenti Disabili e con DSA "SAISD" (Assistance and Integration Service for Students with Disabilities or Special Learning Disabilities) at least 15 days before the test in one of the following ways:

- delivery to the SAISD office during the opening times (available at <http://saisd.unipv.it/contact>);
- e-mail to [disabili@unipv.it](mailto:disabili@unipv.it), together with a copy of a valid identity document;
- fax to +39 (0)382/984954;
- registered letter with acknowledgement of receipt to: Centro Servizio di Ateneo - Servizio di Assistenza e Integrazione per gli Studenti Disabili e con DSA "SAISD" - P.zza Leonardo Da Vinci n. 16 – Pavia – Italy.

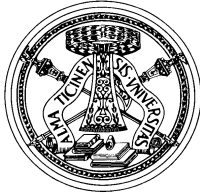
Based on the documents submitted by the candidate, the Vice-Rector for Sports, Disabilities and Special Needs, in coordination with the examining committee, will decide on the possible assistance and the extra time granted for the tests.

After the completion of the online application and before the deadline for applications, candidates will be able to:

- modify the data previously entered. The modifications will be permanently saved provided that the candidate bring the full application again to a conclusion. At the end of the application procedure, candidates will have to reprint the application form;
- add, cancel or modify the documents uploaded (qualifications and identity document) by using the "Enter/modify qualifications" button;
- add, cancel or modify the data of the chosen referee/s, in case the reference letter/s is/are included among the qualifications assessed for the selected PhD competition (see Annex 1, p. 13 ff.), and possibly send a reminder to the referee/s already inserted. The modifications will be permanently saved provided that the candidate bring the full application again to a conclusion.

After the deadline for applications, modification or addition to the data or to the documents will be no longer allowed.

At the end of the procedure, candidates have to print the application form together with the MAV (Payment against notice) of € 33.00, which **must be paid by July 8, 2016**. Failure to pay the application fee by the deadline will result in candidates being excluded from the competition. The MAV can be paid, commission free, at any branch of the "Banca Popolare Commercio e Industria" or across the counter at any credit institution in Italy. The payment can also be made through internet banking (only in case of Italian banks) or using a PagoBANCOMAT payment card at any "Gruppo Unione di Banche Italiane" bank ATM.



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No payments other than MAV (Payment against notice) can be accepted, except in cases where candidates are resident outside Italy. Candidates resident abroad are allowed to pay the application fee via bank transfer to UNIVERSITÀ DEGLI STUDI DI PAVIA – SERVIZIO TESORERIA c/o UBI Banca Popolare Commercio e Industria – IBAN IT 32 I 05048 11302 000000046566, SWIFT: BLOPIT22XXX; BIC: POCIITM1XXX, account n. 46566. The costs of the bank operation will have to be charged entirely by the candidate; therefore, while making the bank transfer the candidate will have to select the OUR code instead of the SHARE one. The name of the candidate must be specified in the “reason for payment” field. In case of payment via bank transfer, copy of the payment receipt must be sent to [concorso-dottorati@unipv.it](mailto:concorso-dottorati@unipv.it) by the deadline of July 8, 2016.

- 3. The application form must be printed and submitted to the examining committee on the day of the first on-site test. Candidates who will not take any on-site test have to send the signed application form, together with a copy of a valid identity document, to [concorso-dottorati@unipv.it](mailto:concorso-dottorati@unipv.it) by the date of the interview.**
4. After the deadline for applications, the University administration will check the validity of the applications received and verify that the application fee of € 33.00 has been paid within the deadline. In cases of invalid applications, or where the payment has not been made within the deadline, **the candidate will be excluded from the competition.** On the <http://www.unipv.it/dottorati> website the list of the candidates admitted to the selection procedure will be published for each PhD course.
5. Candidates who wish to take part in more than one competition will have to submit a separate application for each, together with the qualification certificates requested, and pay a participation fee for each PhD competition selected.
6. All applicants are conditionally admitted to the PhD competitions while the University administration office checks that they actually possess the requirements provided in this call for applications, pursuant to D.P.R. n. 445/2000, artt. 43 and 71. The University administration reserves the right, at any time, to exclude candidates from the selection procedure. The University Administration will also check the veracity of candidates' self-declarations: candidates found to have made false declarations may face criminal proceedings and administrative sanctions, pursuant to art. 76 of D.P.R. 445/2000.

## Art. 6

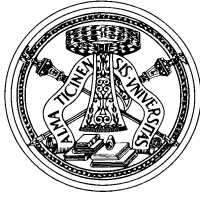
### EDISU benefits

1. PhD students, pursuant to D.P.C.M. of April 9, 2001, are entitled to enjoy, under the same conditions of the other University students, the benefits offered by the University of Pavia's EDiSU (Institution for the Right to Study).
2. Candidates who wish to enjoy these benefits (scholarships, accommodation, reduced meal prices at canteens etc.) should consult the <http://www.edisu.pv.it/> website where the call for applications for the relative benefits will be advertised. Candidates are allowed to apply for the EDiSU benefits before the PhD competition and before their possible enrolment on the PhD course.

## Art. 7

### Examining Committee

1. The Committees in charge of the PhD competitions are appointed by the Rector in accordance with the University of Pavia's “Regulations for PhD courses”.
2. The composition of the examining committees will be published, after the announcement deadline has passed, on the <http://www.unipv.it/dottorati> website.



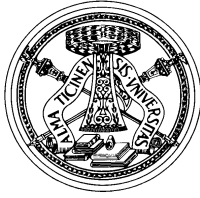
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## Art. 8

### Selection procedure

1. Admission to the PhD courses is subject to the passing of a selection procedure aimed at assessing candidates' competence, ability and aptitude for research. In Annex 1 the tests dates and locations, selection procedures and notes for each PhD competition are listed.
2. *Selection procedure by qualifications assessment and tests (written test and interview)*  
The selection procedure by qualifications assessment and tests consists of a comparative assessment of the qualifications submitted by candidates, as well as two tests. The admission tests consist of a written test and an interview, including a verification of candidates' knowledge of a foreign language, selected from those listed for each PhD courses and indicated in the application.  
The examining committee can assign up to 30 points per test for the evaluation of each candidate. The written test may consist of examinations, exercises and essays on topics related to the PhD course. Candidates who have passed the written test with a score of 21 points or more are admitted to the interview. The interview is deemed to have been passed if a candidate obtains a score of 21 points or more. Unless otherwise specified in Annex 1, the examining committee can assign up to 10 points for candidates' qualifications for each PhD course, divided as indicated in Annex 1. The qualifications assessment takes place after the written test and before the correction of the papers. The results of the qualifications assessment will be announced before the interview.
3. *Selection procedure by qualifications assessment and interview*  
Unless otherwise specified in Annex 1, the examining committee can assign up to 10 points for candidates' qualifications, divided as specified in Annex 1 for each PhD course. For each PhD course, a minimum threshold may be set for admittance to the interview, as indicated in Annex 1. The results of the qualifications assessment will be announced before the interview, with the instructions and timing indicated in Annex 1. The interview includes a verification of candidates' knowledge of a foreign language, selected from those listed for each PhD course. The examining committee may assign up to 30 points as an interview points scale. The interview is deemed successful if a candidate obtains a score of 21 points or more.
4. *Selection procedure by qualifications assessment only*  
Unless otherwise specified in Annex 1, the examining committee can assign up to 10 points to candidates' qualifications for each PhD course, divided as indicated in Annex 1. Candidates who have obtained at least 7 points are admitted to the ranking list.
5. The examining committee will draw up specific reports. Candidates will be ranked in descending order by totalling the scores obtained by each candidate in the scheduled tests and the qualifications assessment.
6. If candidates have an identical score on the ranking list, the positions with scholarship will be awarded on a means basis, pursuant to D.P.C.M. of April 9, 2001 and subsequent modifications and additions; for positions without a scholarship, the youngest candidate will have priority.
7. The President of the Examining Committee will submit to the Rector the competition reports.
8. **The admission tests schedule, indicated in Annex 1 of this call, is equivalent to a notification to applicants. Possible modifications in the dates and locations of the tests will be announced on the <http://www.unipv.it/dottorati> website. Candidates will not receive any further communication from the University administration office.**
9. **On the day of the on-site tests, candidates will be asked to present the valid identity document whose details were entered during the application procedure. Candidates will also have to sign the printed application form which must then be handed in to the Committee.**
10. **Failure to take part in the admission tests will be considered as constituting a withdrawal from the application process.**





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## Art. 9

### Admission to the PhD courses

1. The Rector, by Rectoral Decree, acts to verify the validity of the competition records and approves the ranking lists. Candidates who have placed highly on each ranking list are declared winners, provided they meet the admission requirements for access to the PhD competition and enrolment onto a PhD course.
2. Candidates are admitted to the PhD courses in the ranking list order until all positions for the given PhD course are taken. Should a candidate decide not to take up his/her place before the start of the course, their place may be taken by other candidates following the ranking list order. Should a candidate win more than one competition, he/she will have to choose only one PhD course and communicate this choice in writing.

## Art. 10

### Public Administration employees

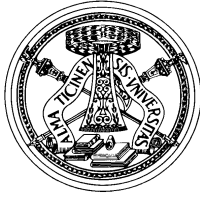
1. Prevailing laws regarding time off work or special leave will apply to any public administration employees admitted onto a PhD course.

## Art. 11

### PhD course enrolment

1. The ranking lists will be published on the University's official noticeboard <http://www-5.unipv.it/alboufficiale/> and on the [https://studentonline.unipv.it/esse3/Home.do?cod\\_lingua=eng](https://studentonline.unipv.it/esse3/Home.do?cod_lingua=eng) website. In order to check their results, candidates have to login by entering the username and password provided at the end of the registration procedure, click on "Admissions" from the left-hand menu and then on "Admission test". **Candidates will not be informed personally: the publication of the ranking list is equivalent to an official notice to applicants.**
2. Candidates can appeal against the approval of the ranking list to the TAR (Regional Administrative Tribunal) within 60 days from the publication of the results on the University's official noticeboard, or make a special appeal to the President of the Republic within 120 days; in the absence of an appeal, the provision shall be incontrovertible.
3. **Successful applicants must enrol** in the PhD course by following the instructions provided on the <http://www.unipv.it/dottorati> website.
4. Successful applicants who do not yet hold the second-level degree necessary to enrol onto a PhD will be conditionally admitted. By the deadline of October 31, 2016 they will have to provide the University Administration office with proof of graduation by following the procedure described in Art. 2, para. 1.
5. Candidates in possession of an academic degree obtained in a non-EU country, if successful, will have to provide the University Administration, within a deadline agreed with the office, the following documents:
  - a. a legalized degree certificate, bearing the list of the exams taken during their academic career and the marks obtained;
  - b. the original "Dichiarazione di Valore in Loco", issued by the competent Italian diplomatic representative in the country where the academic qualification has been attained.

In case of documents in a language different from Italian or English candidates will have to submit, together with the original documents, their sworn and legalized translation into Italian or English. The University administration reserves the right to ask students to provide additional documents if necessary to carry out the appropriate checks on the degree. The Administration office also reserves the right to ask students holding a foreign degree obtained within the EU to provide the "Dichiarazione di Valore in Loco" in cases where its validity is doubted.



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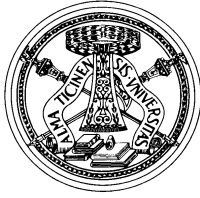
6. Upon enrolment, non-EU citizens resident abroad must submit to the Administration office, no later than December 31, 2016, a photocopy of their visa/residence permit/application for the residence permit.
7. Competition winners will have to pay, through MAV (Payment against notice), the amount of € 296.69, which includes the accident insurance during the PhD activities.
8. Successful candidates with scholarship, **who do not enrol and pay the enrolment fee by the deadline of 5 days from the day following the publication online** ([https://studentionline.unipv.it/esse3/Home.do?cod\\_lingua=eng](https://studentionline.unipv.it/esse3/Home.do?cod_lingua=eng)) of the ranking list, will be considered as having **forsaken** their position.  
Successful candidates without scholarship, **who do not enrol and pay the enrolment fee by the deadline of 7 days from the day following the publication online** ([https://studentionline.unipv.it/esse3/Home.do?cod\\_lingua=eng](https://studentionline.unipv.it/esse3/Home.do?cod_lingua=eng)) of the ranking list, will be considered as having **forsaken** their position.
9. The University Administration reserves the right to check the validity of winners' declarations. Any applicants found to have made false statements will lose the benefits deriving from these declarations.

## Art. 12 Scholarships

1. Unless otherwise specified in Annex 1, the annual gross amount of a PhD scholarship is € 13638.47, including the I.N.P.S. contribution that is at the expense of the scholarship holder. PhD scholarships are regulated by the provisions of Law n. 476 of August 13, 1984, art. 4.
2. The Rector, by Rectoral decree, awards the scholarships to the successful candidates following the order of the ranking lists and until all scholarships for the given PhD have been assigned.
3. Scholarships have a duration of one year and are confirmed annually, provided that the student has been admitted to the following year by the Academic Board.
4. The scholarships are paid in monthly deferred instalments.
5. The scholarship amount is increased by 50% for any research periods carried out at foreign institutions, duly authorized in advance by the Academic Board. The research periods abroad must not exceed a maximum of 18 months in total.
6. PhD scholarships cannot be combined with apprenticeship contracts, research grants or other scholarships awarded for any reason whatsoever. The only exceptions are grants and scholarships assigned by national or international bodies to support with internships abroad the research activities.
7. Students who have already benefited from a PhD scholarship, even partially, are not eligible for a second one.
8. Starting from the 2<sup>nd</sup> year, to each PhD student, with or without scholarship, a budget for research activity in Italy and abroad is awarded, amounting to 10% of the scholarship, in accordance with the provisions of the Ministerial Decree n. 45 of February 8, 2013.

## Art. 13 PhD students' obligations

1. Admission onto a PhD course entails full-time and dedicated commitment. Course activities are mandatory and are organised and structured by the Academic Board of each PhD course. The Academic Board may set specific rules for PhD courses jointly supervised with companies, students of medical specialisation schools or public administration employees attending PhD courses.



# UNIVERSITA' DEGLI STUDI DI PAVIA

## Art. 14

### PhD students' teaching activity

1. The PhD student, if authorised by the Academic Board, may act as a tutor as well as fill a supplementary teaching role up to a maximum of 40 hours per academic year. PhD students in the medical area are allowed to take part in clinical and assistance activities.

## Art. 15

### Joint attendance with medical specialisation schools

1. Final-year students of the University of Pavia's medical specialisation school, who have successfully passed the PhD competition, are allowed to enrol onto a PhD course provided that the joint attendance has been approved by the specialisation school Committee.
2. The joint attendance must be requested to the University Administration at the same time as the enrolment onto the PhD course, enclosing the following documents:
  - a. written authorization issued by the specialisation school Committee, testifying that the attendance to the PhD course is compatible with the activity and the commitment requested by the specialisation school;
  - b. list of the publications and self-declaration on the research activity carried out during the specialisation school.
3. During the year of joint attendance, the student is not entitled to receive a PhD scholarship.

## Art. 16

### Incompatibility

1. Enrolment onto a PhD course is incompatible with a simultaneous enrolment on a degree course, Italian "Master" course, non-medical specialisation school, TFA (Tirocinio Formativo Attivo - Active Educational Training) or other PhD course (except in cases of joint-supervision agreements with a foreign institution) both in Italy and abroad.

## Art. 17

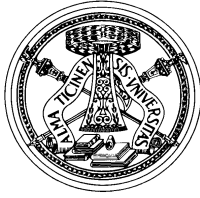
### Ethical Code

1. PhD students will have to abide by the provisions of the University of Pavia Ethical Code, available at the following link: <http://www.unipv.eu/site/home/ateneo/statuto-e-regolamenti/codice-etico.html>

## Art. 18

### Final exam and attainment of the PhD degree

1. The title of PhD ("Dottore di ricerca"), is attained following a positive assessment of a research thesis which contributes to the progress of knowledge or methodology in the research field chosen by the PhD student. The thesis is publicly discussed in front of a committee appointed by the Rector. Unless otherwise specified in Annex 1, the PhD degree is awarded by the Rector of the University of Pavia.
2. The attainment of the PhD degree will be certified by the University administration after the upload of the complete version of their PhD theses in the University's electronic archives by the PhDs. The University will take care of depositing the theses, according with the current Italian laws, at the National Libraries of Roma and Firenze where they will be conserved and made available for public consultation.



# UNIVERSITA' DEGLI STUDI DI PAVIA

## Art. 19

### Use of personal data

1. Pursuant to Law n. 196 of June 30, 2003 (“Personal data protection code”), the information supplied by candidates will be gathered by the University of Pavia’s Research and Third Mission Unit and used for the management of the admission competitions and the candidates’ eventual academic career. Granting consent for the handling of personal data is therefore obligatory and failure to do so will result candidates’ exclusion from the competition.
2. The information provided by the candidates will be communicated to the University of Pavia’s administrative offices and to the departments directly concerned with the legal and financial positions of the successful candidates.
3. Candidates are entitled to the rights stated in art. 7 of the Law 196 of June 30, 2003, including access to their personal data, its modification, updating, integration, cancellation etc., and likewise reserve the right to oppose any use of the data other than the institutional purposes stated above.

## Art. 20

### Head of Administrative Procedures

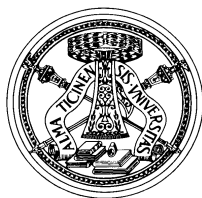
1. The Head of Administrative Procedures, under Law no. 241 of 7 August 1990 and subsequent modifications and additions, is Claudia Morini, Research and Third Mission Unit. For information please contact the Research and Third Mission Unit – Via Ferrata n. 5 – Pavia (Italy), tel. +39 (0)382 985983/84, e-mail [concorso-dottorati@unipv.it](mailto:concorso-dottorati@unipv.it).

## Art. 21

### Final regulations

1. In relation to any issues not explicitly specified in this announcement, the provisions of existing Italian legislation on PhDs and of the University of Pavia’s “Regulations for PhD courses” n. 1223 of July 24, 2013 apply.
2. Only the Italian version of this call for applications will be binding in case of controversies.

**Pavia, June 7, 2016**



## ANNEX 1

### MACRO-AREA OF SCIENCE AND TECHNOLOGY

#### PHD COURSE IN PHYSICS

**LOCATION:** DEPARTMENT OF PHYSICS

**DIRECTOR:** Prof. LUCIO ANDREANI

**DURATION:** 3 years

**RESEARCH TOPICS:** Nuclear and subnuclear physics, theoretical and mathematical physics, condensed matter physics (including experimental and theoretical solid-state physics, optics and photonics, quantum information), interdisciplinary and applied physics (biomedical physics, energy, ICT-Information and communication technology)

<b>POSITIONS WITH SCHOLARSHIP</b>	<b>8</b>	6 scholarships funded by the University of Pavia; 1 scholarship funded by the National Institute of Nuclear Physics; 1 scholarship funded by ERC to undertake research on "Theoretical study of the partonic structure of nucleons"
<b>POSITIONS WITHOUT SCHOLARSHIP</b>	<b>2</b>	
<b>TOTAL POSITIONS</b>	<b>10</b>	

**ADDITIONAL POSITIONS RESERVED TO CANDIDATES HOLDING A SCHOLARSHIP FROM THE H2020-MSCA-ITN-2014 PROGRAMME "MEDICIS-Produced Radioisotope Beams for Medicine (MEDICIS-PROMED)": 1**

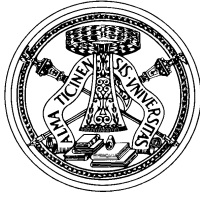
Candidates applying for this position will be selected through qualifications assessment and interview. The committee will draw up a specific report and a separate ranking list.

**ADMISSION PROCEDURE: qualifications assessment and interview:** candidates are allowed to take the interview in English.

Candidates resident abroad and, if they have a justifiable need, subject to the approval of the examining committee, candidates resident in Italy are allowed to take a web-based interview via videoconference, provided a written e-mail request to [concorso-dottorati@unipv.it](mailto:concorso-dottorati@unipv.it) is made by the deadline of July 8, 2016 at 17:00 pm (Italian time). The PhD office will confirm the receipt of such request.

The candidates' qualifications must, in the judgement of the examining committee, meet the standards of a solid application story. Subsequently, the preparation of the applicants is evaluated in an interview, whose purpose is to demonstrate a comprehensive knowledge of basic Physics and to assess the student's analytic ability, creativity, and potential for successful completion of the PhD course in Physics.

**LINGUISTIC KNOWLEDGE:** candidates' knowledge of English will be verified during the interview.



# UNIVERSITA' DEGLI STUDI DI PAVIA

## QUALIFICATIONS ASSESSMENT: 10 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES' QUALIFICATION, DIVIDED AS FOLLOWS:

- a) exams taken during the candidate's degree courses, bearing the marks (up to **4** points);
- b) Master's degree thesis, publications and professional. A 2-page abstract of the thesis must be attached to the application. Publications and similar documents must be attached to the application in their complete version experience (up to **2** points);
- c) outline of the research project (max 2 pages), in Italian or English. This will not be binding if the candidate is admitted onto the PhD course (up to **2** points);
- d) a maximum of 2 reference letters, issued and submitted directly by professors from the university where the degree was awarded or by other professors/researchers who have had direct contact with the applicant. The candidate, during the online application, will enter the personal data of the chosen referees who, through a specific online procedure, will have to submit the reference letter directly to the University administration by July 8, 2016 at 17:00 pm (Italian time). Unlike the other qualifications, these letters must not be uploaded in the website during the online application procedure (up to **2** points).

The qualifications must be submitted according to the procedure indicated in art. 5, para. 2 of this call for applications.

The results of the qualifications assessment will be published online no later than **September 8, 2016**.

The results will be posted on the Physics Department noticeboard and in the Personal Area of the University website. This can be accessed using the login information provided at the end of the registration procedure.

**INTERVIEW: September 15, 2016, at 9:00 (Italian time)**, Physics Department, Via Bassi n. 6, Pavia.

The interview will concern the main topics covered by the PhD course and the research project.

The interview by videoconference, where required, will start at 14:00 pm (Italian time) of **September 15, 2016**. Before the interview, candidates will be asked to show the same valid identity document whose details were entered during the application procedure. The University of Pavia does not accept any responsibility for a candidate's failure to take the interview due to technical difficulties.

**INFORMATION:** [http://www-2.unipv.it/dottorati/scienzeetecnologie/fisica/n/web\\_PhD/](http://www-2.unipv.it/dottorati/scienzeetecnologie/fisica/n/web_PhD/)

The following programmes are scheduled:

1. Physics of Fundamental Interactions (Nuclear and Subnuclear Physics, Theoretical and Mathematical Physics);
2. Condensed Matter, Optical Physics, Quantum Information;
3. Interdisciplinary and Applied Physics.

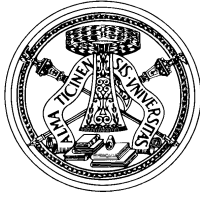
**PLEASE NOTE:** Candidates who are interested in the scholarship funded by ERC, to undertake research within the topic "Theoretical study of the partonic structure of nucleons", must state their interest to the examining committee before the interview; these candidates' interviews will therefore also include a discussion of the project topics. The examining committee will draw up a specific ranking list.

## **COOPERATIVE PHD COURSE IN MATHEMATICS**

**LOCATION:** "F. CASORATI" DEPARTMENT OF MATHEMATICS

**DIRECTOR:** Prof. ROBERTO PAOLETTI - University of Milano-Bicocca

**CIAFM COOPERATING INSTITUTIONS:** University of Milano-Bicocca, Istituto Nazionale di Alta Matematica "Francesco Severi"



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The PhD degree will be jointly conferred by the Rector of the University of Pavia and the Rector of the University of Milano-Bicocca.

**DURATION:** 3 years

The following programmes are scheduled:

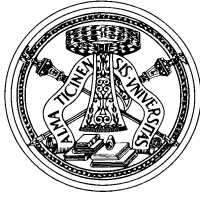
- Algebra and Geometry;
- Mathematical Analysis;
- Numerical Analysis and Mathematical Modelling;
- Mathematical Physics, Probability and Statistics.

**RESEARCH TOPICS (with indications of the location where they are developed):**

- Algebra: group theory, theory of Lie algebras and their representations (MILANO-BICOCCA); category theory (PAVIA). Geometry: algebraic geometry (PAVIA), real and complex differential geometry (PAVIA and MILANO-BICOCCA), symplectic geometry (MILANO-BICOCCA) and hyperbolic geometry (PAVIA).
- Mathematical Analysis: partial differential equations, control and optimization theory, nonlinear and functional analysis (MILANO-BICOCCA and PAVIA); harmonic and geometric analysis (MILANO-BICOCCA); variational models and techniques, calculus of variations (PAVIA).
- Numerical Analysis and Mathematical Modelling: study of numerical methods (such as finite elements, isogeometric and virtual techniques) aimed at solving partial differential equations in the context of solid mechanics, fluid dynamics, interaction between fluids and structures, electromagnetism, and finalized to applications in engineering and biomathematics; computer aided design, approximations of data and functions, numerical linear algebra (MILANO-BICOCCA and PAVIA).
- Mathematical Physics: special materials, fluid mechanics and kinetic theory (PAVIA); geometric theory of integrable systems and dynamical systems (MILANO-BICOCCA). Probability and statistics: Bayesian statistics, quantum probability, convergence of probability measures, finitely additive probability measures (PAVIA); statistical mechanics (MILANO-BICOCCA and PAVIA); financial mathematics and stochastic control theory (MILANO-BICOCCA).

A more in-depth description of the research interests of the members of the PhD Academic Board and of the research topics carried out by the two participating departments is available at the website <http://phdmat.unipv.eu/site/en/home.html>, as well as at the websites of the departments.

<b>POSITIONS WITH SCHOLARSHIP</b>	<b>11</b>	4 scholarships funded by the University of Pavia; 4 scholarships funded by the University of Milano-Bicocca; 2 scholarships funded by the Istituto Nazionale di Alta Matematica "Francesco Severi"; 1 scholarship funded by the Alma Mater Ticinensis Foundation, to undertake research in "Calculus of Variations and Partial Differential Equations"
<b>POSITIONS WITHOUT SCHOLARSHIP</b>	<b>2</b>	
<b>TOTAL POSITIONS</b>	<b>13</b>	



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**ADMISSION PROCEDURE: qualification assessment and interview.** Candidates are allowed to take the interview in English.

Candidates residing abroad are allowed to take a web-based interview via videoconference, provided a written e-mail request to [concorso-dottorati@unipv.it](mailto:concorso-dottorati@unipv.it) is made by the deadline of July 8, 2016 at 17:00 pm (Italian time); the same possibility will be offered to candidates residing in Italy, in the presence of a justifiable need and subject to the approval of the selection committee. The PhD office will confirm the receipt of such request.

**LINGUISTIC KNOWLEDGE:** candidates' knowledge of English will be verified during the interview;

**QUALIFICATION ASSESSMENT: 15 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES' QUALIFICATION, DIVIDED AS FOLLOWS:**

- a) *curriculum vitae* (up to **3** points);
- b) exams taken during the candidate's degree courses, bearing the marks, their weighted mean and their arithmetic mean. The honours must not be included in the calculation of the weighted and arithmetic means (up to **5** points);
- c) at least one reference letter issued and submitted directly by professors from the university where the degree was awarded or by other professors/researchers who have had direct contact with the applicant. The candidate, during the online application, will enter the personal data of the chosen referees who, through a specific online procedure, will have to submit the reference letter directly to the University administration by July 8, 2016 at 17:00 pm (Italian time). Unlike the other qualifications, these letters must not be uploaded by the candidate during the online application procedure (up to **4** points);
- d) abstract of the Master thesis, preprints and publications. Concerning publications and preprints, candidates may also send an abstract and indicate a DOI (Digital Object Identifier), or else provide a link to a web repository (up to **3** points).

In addition to the above-mentioned qualifications, candidates will have to submit a motivation letter, specifying which of the two participating departments they find most suited to their scientific interests (Department of Pure and Applied Mathematics at the University of Milano Bicocca, or "F. Casorati" Department of Mathematics of the University of Pavia). Such choice must be scientifically motivated. The motivation letter will not be assessed, but it will be used as a starting point for the interview.

The qualifications must be submitted according to the procedure indicated in art. 5, para. 2 of this call for applications.

The results of the qualification assessment will be published online no later than **July 29, 2016**.

The results will be posted on the noticeboard of the "F. Casorati" Department of Mathematics of the University of Pavia, and in the Personal Area of the University website. This can be accessed using the login information provided at the end of the registration procedure.

**INTERVIEW: September 5, 2016, at 10:00 (Italian time)** – Dipartimento di Matematica "F. Casorati" - via Ferrata n. 1 – Pavia.

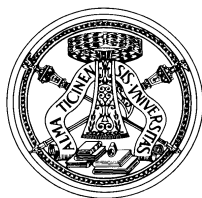
The interview will concern the research topics covered by the PhD course and will also refer to the motivation letter submitted by the candidate during the application procedure.

The interview by videoconference, where required, will start at 14:00 (Italian time) of September 5, 2016. Before the interview, candidates will be asked to show the same valid identity document whose details were entered during the application procedure. The University of Pavia does not accept any responsibility for a candidate's failure to take the interview due to technical difficulties.

**INFORMATION:** <http://phdmat.unipv.eu/site/en/home.html>

**PLEASE NOTE:** Candidates who are interested in the scholarship funded by the Alma Mater Ticinensis Foundation to undertake research in "Calculus of Variations and Partial Differential Equations" must state their





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interest to the examining committee before the interview; these candidates' interviews will therefore also include a discussion of the project topics. The examining committee will draw up specific ranking lists.

## **AMOUNT OF THE SCHOLARSHIPS AND PhD STUDENTS MEMBERSHIP TO A DEPARTMENT**

Each scholarship funded by the University of Pavia or by INdAM has a gross annual amount of € 13638.47.

Each scholarship funded by the University of Milano-Bicocca has a gross annual amount of € 16238.47.

The scholarships funded by the University of Pavia will be awarded to PhD students with a membership to the "F. Casorati" Department of Mathematics of the University of Pavia.

The scholarships funded by the University of Milano-Bicocca will be awarded to PhD students with a membership to the Department of Mathematics and its Applications of the University of Milano-Bicocca.

The scholarships funded by INdAM are compatible with either membership, according with the provisions below.

## **DETERMINATION OF THE MEMBERSHIP TO A DEPARTMENT**

Once the ranking list of the scholarship grantees has been determined, the PhD Academic Board will attribute to each of them the membership to one of the two departments involved, based upon the preference expressed in the motivation letter, and using the ranking order as a priority criterion, fino a esaurimento delle borse di una delle due sedi. This procedure will determine the membership of each winner, unless the four fellowships of the chosen Institution have already been attributed to other winners with higher rankings. To the first winner, in descending order in the ranking list, who is unable to obtain a scholarship from his/her preferred institution, an INdAM scholarship will be assigned; this candidate will be allowed to choose his/her membership. To the second winner, in descending order in the ranking list, who is unable to obtain a scholarship from his/her preferred institution, an INdAM scholarship will be assigned; this candidate will be attributed to the department not chosen by the previous winner. Once the four scholarships of either one of the two departments and the two INdAM scholarships have all been attributed, the remaining winners will be assigned to the other department, irrespective of their indicated preference.

## **POSITIONS WITHOUT SCHOLARSHIP**

One of the winners of the two positions without scholarship will be assigned to the Department of Mathematics and its Applications of the University of Milano-Bicocca, and the other to the "F. Casorati" Department of Mathematics of the University of Pavia. This assignment will follow the general criterion based on preferences and ranking described for the positions with scholarship. Nonetheless, for the positions without scholarship the PhD Academic Board may choose to depart from this general criterion, in light of the research interests of the candidates and of the possible existence of external funding sources.

## **MOTIVATION LETTER AND RESEARCH ACTIVITY**

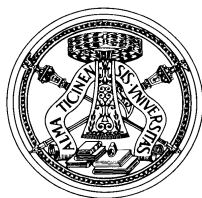
The Academic Board will assign a supervisor to each PhD student, based on the motivation letter presented for the selection process and on the information collected during the interview. The supervisor will be in charge of the supervision and guidance of the initial phase of the PhD career of the student. However, the motivation letter, the information collected during the interview and the supervisor choice will not be strictly binding for the following and final choice of a research theme and dissertation topic by the student him/herself. The topic of the dissertation may be chosen within the research interests of the members of the Academic Board or, upon prior authorization by the Board itself, of other external scholars.

## **PHD COURSE** **IN CHEMICAL AND PHARMACEUTICAL SCIENCES**

**LOCATION:** DEPARTMENT OF CHEMISTRY

**DIRECTOR:** Prof. MAURO FRECCERO

**DURATION:** 3 years



# UNIVERSITA' DEGLI STUDI DI PAVIA

**RESEARCH TOPICS:** Design, synthesis and development of bioactive compounds. Drug discovery from natural sources; study of glycopeptide vaccines. Computational methods in bioorganic systems. Organocatalysis; biocatalysis; green chemistry; photochemistry; structures and properties of metalloenzymes. Synthesis, structural and functional characterization of materials and nanomaterials for applications in energetics, sensing, tissue engineering and nanomedicine. Functionalised solid phases for analytical applications. Molecular and supramolecular sensors. Materials and techniques for cultural heritage. Study of drug/macromolecule interaction via bio-chromatography and molecularly imprinted polymers. Novel modified and site-specific delivery systems, scaffolds and hemoderivatives for tissue repairing, stem cells encapsulation.

<b>POSITIONS WITH SCHOLARSHIP</b>	<b>9</b>	7 scholarships funded by the University of Pavia;  1 scholarship funded by Istituto di Ricerche Chimiche e Biochimiche "G. Ronzoni" to undertake research in "Use of Heparan sulfate oligosaccharides obtained by chemoenzymatic synthesis, as models for studying protein-ligand interactions by NMR spectroscopy";  1 scholarship funded by Istituto di Ricerche Chimiche e Biochimiche "G. Ronzoni" to undertake research in "Physico-chemical characterization of polysaccharides and their interactions"
<b>POSITIONS WITHOUT SCHOLARSHIP</b>	<b>2</b>	
<b>TOTAL POSITIONS</b>	<b>11</b>	

**ADDITIONAL PHD POSITION JOINTLY-SUPERVISED WITH COMPANIES:** 2 – ACS Dobfar S.p.A , set in Tribiano (MI), via Addetta 4/12;

**ADDITIONAL PHD POSITION JOINTLY-SUPERVISED WITH COMPANIES:** 1 – Istituto Scientifico Romagnolo per lo Studio e la Cura dei Tumori (IRST) S.r.l. – IRCCS – set in Meldola (FC), via Piero Maroncelli 40;

**ADMISSION PROCEDURE: qualifications assessment and tests (written test and interview):** candidates are allowed to take the tests in English.

**LINGUISTIC KNOWLEDGE:** candidates' knowledge of English will be verified during the interview.

**QUALIFICATIONS ASSESSMENT: 10 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES' QUALIFICATION, DIVIDED AS FOLLOWS:**

- arithmetic mean of the marks obtained in the exams taken during the candidate's degree courses (up to 8 points). In case of degree attained in a foreign institution, the committee will use the ECTS grading tables;
- post-graduate research activity (research scholarships or grants and/or internships) carried out in the field of chemical and pharmaceutical sciences, within 18 months from the date of the degree attainment (up to 2 points).

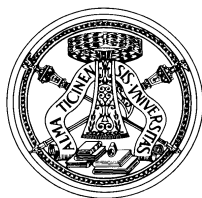
The qualifications must be submitted according to the procedure indicated in art. 5, para. 2 of this call for applications.

**WRITTEN TEST: September 26, 2016, at 14:00 pm (Italian time),** at the Department of Chemistry – Aula I (Organic Chemistry Section) – Viale Taramelli n. 10 – Pavia

**INTERVIEW: September 29, 2016, at 10:00 (Italian time),** at the Department of Chemistry – Aula I (Organic Chemistry Section) – Viale Taramelli n. 10 – Pavia.

The interview will concern the topics covered by the PhD course and may include a discussion on the candidates' experimental thesis and/or on the post-graduate experimental activities.

**INFORMATION:** <http://phdscchim.unipv.eu/site/en/home.html>



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The following programmes are scheduled:

- a) Chemical Sciences;
- b) Pharmaceutical Sciences.

**PLEASE NOTE:** Candidates who are interested in one of the scholarships funded by the Istituto di Ricerche Chimiche e Biochimiche “G. Ronzoni” to undertake research in “Use of Heparan sulfate oligosaccharides obtained by chemoenzymatic synthesis, as models for studying protein-ligand interactions by NMR spectroscopy” or in “Physico-chemical characterization of polysaccharides and their interactions” must state their interest to the examining committee before the interview; these candidates’ interviews will therefore also include a discussion of the project topics. The examining committee will draw up specific ranking lists.

## PHD COURSE IN EARTH AND ENVIRONMENTAL SCIENCES

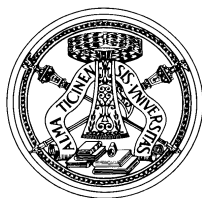
**LOCATION:** DEPARTMENT OF EARTH AND ENVIRONMENTAL SCIENCES

**DIRECTOR:** Prof. ANNA MARIA PICCO

**DURATION:** 3 years

**RESEARCH TOPICS:** *Curriculum Terra:* Methodology for the assessment of liquefaction hazard, The role of groundwater in nutrient mass balances for river basins, Elastic Geobarometry, Active buried faults and surface deformations, SAR interferometry analysis on alpine terrains, Broadband applications for geo-hydrological instabilities analysis and monitoring; *Curriculum Ambiente:* Molecular detection of alien cryptic invasions, Invasive peracarid crustaceans in marinas of the Iberian region, Bioacoustics and Ecoacoustics applied to environmental management, Macrofungi with medicinal properties, Soil beneficial fungi in agroecosystem, Seed germination and longevity studies of alpine plants, Mammals in a changing planet: using camera trapping data with hierarchical modelling to assess and monitor populations and communities from local to global scales.

<b>SCHOLARSHIPS</b>	<b>10</b>	<p>5 scholarships funded by the University of Pavia;</p> <p>1 scholarship funded by the Department of Earth and Environmental Sciences (funds from the Royal Botanic Gardens, Kew, UK) to undertake research in “Comparative Seed Germination and Longevity Studies of Alpine Plants in the context of climate change”;</p> <p>2 scholarships funded by the Department of Earth and Environmental Sciences (MIUR-SIR funds, PI. M. Alvaro) to undertake research in “Elastic geobarometry methods: validation through synthesis and characterization of host-inclusion pairs by means of single-crystal X-ray diffraction” and in “Elastic geobarometry methods: calibration of the Raman shifts in terms of deviatoric stresses and test on synthetic host-inclusion pairs”;</p> <p>1 scholarship funded by the Department of Earth and Environmental Sciences (EURAC funds) to undertake research in “Slow movements in alpine terrains analyzed combining different technologies: SAR interferometry, UAV-based remote sensing and GPS measurements”</p> <p>1 scholarship funded by the Museo delle Scienze di Trento, MUSE, to undertake research in “Mammals in a changing planet: using camera trapping data with hierarchical modelling to assess and monitor populations and communities from local to global scales”</p>
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<b>POSITIONS WITHOUT SCHOLARSHIP</b>	<b>2</b>	
<b>TOTAL POSITIONS</b>	<b>12</b>	

## **ADDITIONAL POSITIONS RESERVED TO CANDIDATES HOLDING A SCHOLARSHIP FROM A FOREIGN COUNTRY TO UNDERTAKE RESEARCH IN "INTEGRATED RESERVOIR STUDIES OF SEDIMENTS FROM THE NIGER DELTA BASIN": 1**

Candidates applying for this position will be selected through qualifications assessment and interview in person or via videoconference/webcam. The Committee will draw up specific reports and a separate ranking list. This PhD position will be activated provided that a specific agreement is signed between the Department of Earth and Environmental Sciences and the Federal University of Petroleum Resources, Nigeria, for the funding of the scholarship.

### **ADMISSION PROCEDURE: qualifications assessment and interview.**

Candidates resident abroad are allowed to take a web-based interview via videoconference, provided a written e-mail request to [concorso-dottorati@unipv.it](mailto:concorso-dottorati@unipv.it) is made at the same time as the application submission. The PhD office will confirm the receipt of such request.

**LINGUISTIC KNOWLEDGE:** candidates' knowledge of English will be verified during the interview.

### **QUALIFICATIONS ASSESSMENT: 10 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES' QUALIFICATION, DIVIDED AS FOLLOWS:**

- arithmetic mean of the marks obtained in the exams taken during the candidate's degree courses (up to 5 points);
- a research project (max. 5000 characters, spaces included) in Italian or English. The project must concern one of the research topics included in the PhD course. The project is meant to verify the candidate's aptitude towards research. It will not be binding if the candidate is admitted onto the PhD course (up to 3 points);
- other qualifications, publications, reference letters (max. 2). The reference letters must be issued and submitted directly by professors from the university where the degree was awarded or by other professors/researchers who have had direct contact with the applicant. The candidate, during the online application, will enter the personal data of the chosen referees who, through a specific online procedure, will have to submit the reference letter directly to the University administration by July 8, 2016 at 17:00 pm (Italian time). Unlike the other qualifications, these letters must not be uploaded in the website during the online application procedure (up to 2 points).

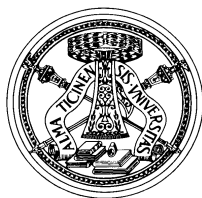
The qualifications must be submitted according with the procedure indicated in art. 5, para. 2 of this call for applications.

### **The minimum score to be called for interview is 7/10.**

Candidates should include a brief summary of their Master thesis (max. 2000 characters, spaces included). The results of the qualifications assessment will be announced no later than **September 14, 2016**. The results will be posted on the Department of Earth and Environmental Sciences noticeboard and in the Personal Area of the University website. This can be accessed using the login information provided during registration.

**INTERVIEW: September 21, 2016, at 9:30 (Italian time),** Room B6 - Dipartimento di Scienze della Terra e dell'Ambiente, via Ferrata n. 9 - Pavia.

The interview will be held in Italian or English and will be an opportunity to verify the candidate's knowledge of English. The interview will consist in a short presentation of the research project (max 15 minutes; the use of



# UNIVERSITA' DEGLI STUDI DI PAVIA

technologic support such as slides is strongly encouraged) that is designed to verify the candidate's aptitude towards research. The research project presented by the candidate will not, in any way, be binding if the candidate is admitted onto the PhD course. More details on programmes and research projects are available at the following website: <http://phdsta.unipv.eu/site/en/home.html>.

The interview by videoconference, where required, will start at 15:00 (Italian time) of September 21, 2016. Before the interview, candidates will be asked to show the same valid identity document whose details were entered during the application procedure. The University of Pavia cannot be held responsible for a candidate's failure to take the interview due to technical difficulties.

The following programmes are foreseen:

- 1) Earth;
- 2) Environment;
- 3) MARES;
- 4) NASSTEC.

PLEASE NOTE: Candidates who intend to apply for the scholarship funded by the Department of Earth and Environmental Sciences to undertake research in "Comparative seed germination and longevity studies of alpine plants in the context of climate change", "Elastic geobarometry methods: validation through synthesis and characterization of host-inclusion pairs by means of single-crystal x-ray diffraction", "Elastic geobarometry methods: calibration of the Raman shifts in terms of deviatoric stresses and test on synthetic host-inclusion pairs" or "Slow movements in alpine terrains analyzed combining different technologies: SAR interferometry, UAV-based remote sensing and GPS measurements", or for the scholarship funded by Museo delle Scienze di Trento (MUSE) to undertake research in "Mammals in a changing planet: using camera trapping data with hierarchical modelling to assess and monitor populations and communities from local to global scales", must state their interest to the examining committee before the interview; these candidates' interviews will therefore also include a discussion of the project topics. The examining committee will draw up specific ranking lists.

## **PHD COURSE** **IN BIOENGINEERING AND BIOINFORMATICS**

**LOCATION:** DEPARTMENT OF ELECTRICAL, COMPUTER AND BIOMEDICAL ENGINEERING

**DIRECTOR:** Prof. RICCARDO BELLAZZI

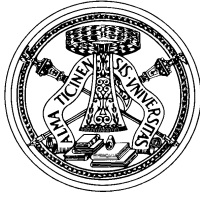
**DURATION:** 3 years

**RESEARCH TOPICS:** Bioinformatics, Health Informatics, Modeling of Biological Systems, Biomedical Engineering, Biomedical Technology, Computational Biomechanics, Regenerative Medicine, Tissue engineering, Synthetic Biology.

<b>POSITIONS WITH SCHOLARSHIP</b>	<b>4</b>	4 scholarships funded by the University of Pavia
<b>POSITIONS WITHOUT SCHOLARSHIP</b>	<b>2</b>	
<b>TOTAL POSITIONS</b>	<b>6</b>	

**ADDITIONAL POSITIONS RESERVED TO CANDIDATES HOLDING A SCHOLARSHIP FROM THE H2020-MSCA-ITN-2015 PROGRAMME "Optimization of Medical Accelerator (OMA)": 2**

Candidates applying for this position will be selected through qualifications assessment only. The committee will draw up specific reports and a separate ranking list.



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## ADDITIONAL POSITIONS RESERVED TO CANDIDATES WITH SCHOLARSHIP FROM A FOREIGN COUNTRY: 1

Candidates applying for the “Additional positions reserved to candidates with scholarship from a foreign country” will be selected through qualifications assessment and interview in person or via videoconference/webcam. The Committee will draw up specific reports and a separate ranking list.

**ADMISSION PROCEDURE: qualifications assessment and interview:** candidates are allowed to take the interview in English.

Candidates resident abroad are allowed to take a web-based interview via videoconference, provided a written e-mail request to [concorso-dottorati@unipv.it](mailto:concorso-dottorati@unipv.it) is made by the deadline of July 8, 2016 at 17:00 pm (Italian time). The PhD office will confirm the receipt of such request.

**LINGUISTIC KNOWLEDGE:** candidates’ knowledge of English will be verified during the interview

## QUALIFICATIONS ASSESSMENT: 15 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES’ QUALIFICATION, DIVIDED AS FOLLOWS:

- a) motivation letter in Italian or English language (max 500 words) (up to **1** point);
- b) research project either in Italian or in English (max. 1500 words), related to PhD research topics. The project’s structure should be as follows: short general introduction about the state of the art relative to the chosen topic; presentation of the research’s objectives; discussion of the expected results; evaluation of the theoretical and/or practical implications (up to **5** points);
- c) exams taken during the candidate’s degree courses, bearing the mark (up to **5** points);
- d) scientific publications (up to **2** points);
- e) *curriculum vitae* (up to **2** points).

The qualifications must be submitted according to the procedure indicated in art. 5, para. 2 of this call for applications.

### **The minimum score to be called for interview is 8/15.**

The results of the qualifications assessment will be published online no later than **September 9, 2016**.

The results will be posted on the Department of Electrical, Computer and Biomedical Engineering noticeboard and in the Personal Area of the University website. This can be accessed using the login information provided at the end of the registration procedure.

**INTERVIEW: September 19, 2016, at 9:00 (Italian time)**, “Aula Seminari” of the Department of Electrical, Computer and Biomedical Engineering (ex “Aula Dipartimento di Informatica e Sistemistica”) - Floor D - Via Ferrata n. 5 - Pavia

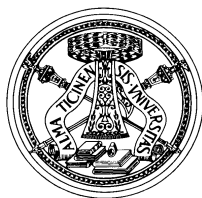
The research project will be discussed during the interview and is meant to verify the candidate’s aptitude towards research. It will not be binding if the candidate is admitted onto the PhD course.

The interview by videoconference, where required, will start at 14:00 pm (Italian time) of September 19, 2016. Before the interview, candidates will be asked to show the same valid identity document whose details were entered during the application procedure. The University of Pavia does not accept any responsibility for a candidate’s failure to take the interview due to technical difficulties.

**INFORMATION:** <http://phdbb.unipv.eu/site/en/home.html>

The following programmes are scheduled:

- a) Bioinformatics, Health Informatics, Modeling of Biological Systems;
- b) Biomedical Engineering, Biomedical Technology, Biomechanics;
- c) Regenerative Medicine, Tissue engineering, Synthetic biology.



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## PHD COURSE IN CIVIL ENGINEERING AND ARCHITECTURE

**LOCATION:** DEPARTMENT OF CIVIL ENGINEERING AND ARCHITECTURE

**DIRECTOR:** Prof. FERDINANDO AURICCHIO

**COOPERATING UNIVERSITY:** Istituto Universitario di Studi Superiori of Pavia (IUSS). The PhD degree will be jointly issued by the Rector of University of Pavia and the Rector of the Istituto Universitario di Studi Superiori of Pavia (IUSS)

**DURATION:** 3 years

**RESEARCH TOPICS:** Civil Engineering, Hydraulic Engineering, Architecture, Computational Mechanics, Industrial Engineering, Applied Mathematics, Biomechanics, Chemistry and Materials

<b>POSITIONS WITH SCHOLARSHIP</b>	<b>5</b>	4 scholarships funded by the University of Pavia; 1 scholarship funded by A.S. Mare S.r.l. to undertake research in “ Innovative solutions for sewage sludge management”
<b>POSITIONS WITHOUT SCHOLARSHIP</b>	<b>2</b>	
<b>TOTAL POSITIONS</b>	<b>7</b>	

**ADDITIONAL POSITIONS RESERVED TO CANDIDATES HOLDING A SCHOLARSHIP FROM THE “SEED” (Simulation in Engineering and Entrepreneurship Development) INTERNATIONAL MOBILITY PROGRAMME: 1**

Candidates applying for this position will be selected through qualifications assessment only. The committee will draw up a specific report and a separate ranking list. The candidate selected for this position will receive a three-year research grant funded by the Educational, Audiovisual and Culture Executive Agency (EACEA) within the SEED programme.

**ADDITIONAL POSITIONS RESERVED TO CANDIDATES WITH A SCHOLARSHIP FROM A FOREIGN COUNTRY: 1**

Candidates applying for the “Additional positions reserved to candidates with a scholarship from a foreign country” will be selected through qualifications assessment and interview in person or via videoconference/webcam. The Committee will draw up specific reports and a separate ranking list.

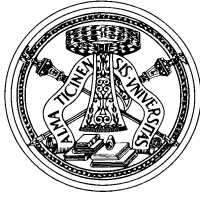
**ADMISSION PROCEDURE: qualifications assessment and interview:** candidates are allowed to take the interview in English.

Candidates resident abroad and, if they have a justifiable need, subject to the approval of the examining committee, candidates living in Italy are allowed to take a web-based interview via videoconference, provided a written e-mail request to [concorso-dottorati@unipv.it](mailto:concorso-dottorati@unipv.it) is made by the deadline of July 8, 2016 at 17:00 pm (Italian time). The PhD office will confirm the receipt of such request.

**LINGUISTIC KNOWLEDGE:** candidates’ knowledge of English will be verified during the interview.

**QUALIFICATIONS ASSESSMENT: 10 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES’ QUALIFICATION, DIVIDED AS FOLLOWS:**

- exams taken during the candidate’s degree courses, bearing the marks (up to **5** points);
- abstract of the master thesis, scientific publications, preprints (up to **2** points);



# UNIVERSITA' DEGLI STUDI DI PAVIA

c) *curriculum vitae* (up to 3 points).

**The minimum score to be called for interview is 7/10.**

The qualifications must be submitted according to the procedure indicated in art. 5, para. 2 of this call for applications.

The results of the qualifications assessment will be published online no later than **September 7, 2016**. The results will be posted on the Department of Civil Engineering and Architecture noticeboard and in the Personal Area of the University website. This can be accessed using the login information provided at the end of the registration procedure.

**INTERVIEW: September 19, 2016, at 10:00 (Italian time)**, Aula MS1 of the Department of Civil Engineering and Architecture – Via Ferrata n. 3, Pavia.

The interview will concern the main topics covered by the PhD course.

The interview by videoconference, where required, will start at 12:00 (Italian time) of **September 19, 2016**. Before the interview, candidates will be asked to show the same valid identity document whose details were entered during the application procedure. The University of Pavia does not accept any responsibility for a candidate's failure to take the interview due to technical difficulties.

**INFORMATION:** <http://www.unipv.eu/site/en/home/research/phd-courses/articolo11787.html>

The following programmes are scheduled:

- a) Building Engineering;
- b) Hydraulic, Environment & Energy Engineering;
- c) Structural Engineering;
- d) Computational Mechanics and Advanced Materials.

**PLEASE NOTE:** Candidates who are interested in the scholarships funded by A.S. Mare S.r.l., to undertake research in “ Innovative solutions for sewage sludge management” must state their interest to the examining committee before the interview; these candidates’ interviews will therefore also include a discussion of the project topics. The examining committee will draw up specific ranking lists.

**PHD COURSE**  
**IN ELECTRONICS, COMPUTER SCIENCE**  
**AND ELECTRICAL ENGINEERING**

**LOCATION:** DEPARTMENT OF ELECTRICAL, COMPUTER AND BIOMEDICAL ENGINEERING

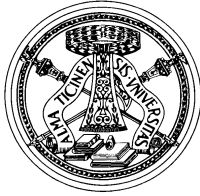
**DIRECTOR:** Prof. PAOLO DI BARBA

**DURATION:** 3 years

**RESEARCH TOPICS:** Photonics and Space Communications Systems, Computer Engineering and Automation, Electrical Engineering

<b>POSITIONS WITH SCHOLARSHIP</b>	<b>8</b>	<p>6 scholarships funded by the University of Pavia;</p> <p>1 scholarship funded by 7Pixel S.r.l. to undertake research in “Data modelling e machine learning techniques for knowledge management”;</p> <p>1 scholarship funded by the Department of Electrical, Computer and Biomedical Engineering to undertake research in “Automation systems for semiconductor production”</p>
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# UNIVERSITA' DEGLI STUDI DI PAVIA

POSITIONS WITHOUT SCHOLARSHIP	2	
TOTAL POSITIONS	10	

**ADDITIONAL POSITIONS JOINTLY SUPERVISED WITH COMPANIES: 1** – A2A Trading S.r.l. – set in Milano, Corso di Porta Vittoria 4;

**ADDITIONAL POSITIONS RESERVED TO CANDIDATES WITH SCHOLARSHIP FROM A FOREIGN COUNTRY: 1;**

Candidates applying for the “Additional positions reserved to candidates with a scholarship from a foreign country” will be selected through qualifications assessment and interview in person or via videoconference/webcam. The Committee will draw up specific reports and a separate ranking list.

**ADMISSION PROCEDURE: qualifications assessment and interview.** Candidates are allowed to take the interview in English.

Candidates resident abroad and, if they have a justifiable need, subject to the approval of the examining committee, candidates living in Italy are allowed to take a web-based interview via videoconference, provided a written e-mail request to [concorso-dottorati@unipv.it](mailto:concorso-dottorati@unipv.it) is made by the deadline of July 8, 2016 at 17:00 pm (Italian time). The PhD office will confirm the receipt of such request.

**LINGUISTIC KNOWLEDGE:** candidates’ knowledge of English will be verified during the interview.

**QUALIFICATIONS ASSESSMENT: 10 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES’ QUALIFICATION, DIVIDED AS FOLLOWS:**

- exams taken during the candidate’s degree courses, bearing the marks (up to **6** points);
- publications (up to **1** point);
- curriculum vitae* (up to **1** point);
- a maximum of 2 reference letters, issued and submitted directly by professors from the university where the degree was awarded or by other professors/researchers who have had direct contact with the applicant. The candidate, during the online application, will enter the personal data of the chosen referees who, through a specific online procedure, will have to submit the reference letter directly to the University administration by July 8, 2016 at 17:00 pm (Italian time). Unlike the other qualifications, these letters must not be uploaded in the website during the online application procedure (up to **2** points).

The qualifications must be submitted according to the procedure indicated in art. 5, para. 2 of this call for applications.

**The minimum score to be called for interview is 7/10.**

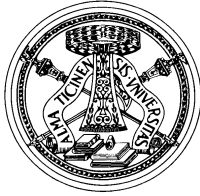
The results of the qualifications assessment will be published online no later than **September 9, 2016**.

The results will be posted on the Department of Electrical, Computer and Biomedical Engineering noticeboard and in the Personal Area of the University website. This can be accessed using the login information provided at the end of the registration procedure.

**INTERVIEW: September 16, 2016, at 9:30**, at the Engineering Faculty - Via Ferrata n. 5 – Pavia (candidates are advised to refer to the Dean’s secretary to find out the class room where the exam will take place)

The interview by videoconference, where required, will start at 14:00 pm (Italian time) of September 16, 2016. Before the interview, candidates will be asked to show the same valid identity document whose details were entered during the application procedure. The University of Pavia does not accept any responsibility for a candidate’s failure to take the interview due to technical difficulties.

**INFORMATION:** [http://www-3.unipv.it/dottIEIE/index\\_en.php?pag=English/welcome.html](http://www-3.unipv.it/dottIEIE/index_en.php?pag=English/welcome.html)



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The following programmes are scheduled:

- a) Photonics and Space Communications Systems;
- b) Computer Engineering and Automation;
- c) Electrical Engineering.

**PLEASE NOTE:** Candidates who are interested in the scholarship funded by 7Pixel S.r.l. to undertake research in “Data modelling e machine learning techniques for knowledge management” or in the scholarship funded by the Department of Electrical, Computer and Biomedical Engineering to undertake research in “Automation systems for semiconductor production” must state their interest to the examining committee before the interview; these candidates’ interviews will therefore also include a discussion of the project topics. The examining committee will draw up specific ranking lists.

## PHD COURSE IN MICROELECTRONICS

**LOCATION:** DEPARTMENT OF ELECTRICAL, COMPUTER AND BIOMEDICAL ENGINEERING

**DIRECTOR:** Prof. GUIDO TORELLI

**DURATION:** 3 years

**RESEARCH TOPICS:** Study and design of integrated circuits

<b>POSITIONS WITH SCHOLARSHIP</b>	<b>4</b>	3 scholarships funded by the University of Pavia; 1 scholarship funded by the Department of Electrical, Computer and Biomedical Engineering
<b>POSITIONS WITHOUT SCHOLARSHIP</b>	<b>1</b>	
<b>TOTAL POSITIONS</b>	<b>5</b>	

**ADDITIONAL POSITIONS RESERVED TO CANDIDATES WITH A SCHOLARSHIP FROM A FOREIGN COUNTRY: 1**

Candidates applying for these positions will be selected through qualifications assessment and interview in person or via videoconference/webcam. The Committee will draw up specific reports and a separate ranking list.

**ADMISSION PROCEDURE: qualifications assessment and interview.** Candidates are allowed to take the interview in English.

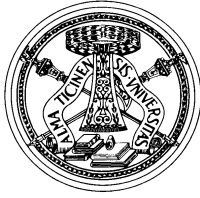
Candidates resident abroad are allowed to take a web-based interview via videoconference, provided a written e-mail request to [concorso-dottorati@unipv.it](mailto:concorso-dottorati@unipv.it) is made by the deadline of July 8, 2016 at 17:00 pm (Italian time). The PhD office will confirm the receipt of such request.

**LINGUISTIC KNOWLEDGE:** candidates’ knowledge of English will be verified during the interview.

**QUALIFICATIONS ASSESSMENT: 20 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES’ QUALIFICATION, DIVIDED AS FOLLOWS:**

- a) exams taken during the candidate’s degree courses, bearing the marks (up to **10** points);
- b) publications (up to **5** points);
- c) other qualifications (up to **5** points).

The qualifications must be submitted according to the procedure indicated in art. 5, para. 2 of this call for



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applications.

The results of the qualifications assessment will be published online no later than **September 19, 2016**. The results will be posted on the Department of Electrical, Computer and Biomedical Engineering noticeboard and in the Personal Area of the University website. This can be accessed using the login information provided at the end of the registration procedure.

**INTERVIEW: September 26, 2016, at 10:00 (Italian time)**, at the Engineering Faculty - Via Ferrata n. 5 – Pavia (candidates are advised to refer to the Dean's secretary to find out the class room where the exam will take place).

The interview by videoconference, where required, will start at 14:00 (Italian time) of September 26, 2016. Before the interview, candidates will be asked to show the same valid identity document whose details were entered during the application procedure. The University of Pavia does not accept any responsibility for a candidate's failure to take the interview due to technical difficulties.

**INFORMATION:** <http://www-3.unipv.it/dottMICR/index.php>

The following programmes are scheduled:

- a) Microwave integrated circuits and telecommunication systems;
- b) Analog and digital integrated circuits, integrated sensors and microsystems, integrated electronic instrumentation, and power electronics;
- c) Radio-frequency and millimeter-wave integrated circuits.

## MACRO-AREA OF LIFE SCIENCES

### PHD COURSE

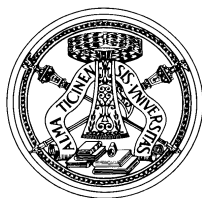
#### IN GENETICS, MOLECULAR AND CELLULAR BIOLOGY

**LOCATION:** "LAZZARO SPALLANZANI" DEPARTMENT OF BIOLOGY AND BIOTECHNOLOGY

**DIRECTOR:** Prof. ANTONIO TORRONI

**DURATION:** 3 years

**RESEARCH TOPICS:** Study of hereditary disorders using molecular and bioinformatics approaches. Genome instability mechanisms; identification and functional characterization of markers relevant for tumor development and progression. Hemolymphoproliferative disorders: mechanisms of lymphomagenesis and identification of biomolecular markers; pulmonary and head and neck neoplasms: study of prognostic and predictive molecular markers. Molecular imaging with radiotracers in malignant glioma: *in vitro* and clinical study with PET-TC and RM imaging. Studies of the correlation between biological activity and oxygen dependent or independent action mechanism of natural or synthetic molecules for prevention and therapy of human diseases. Genome plasticity in evolution and cancerogenesis: centromeres, telomeres and transposable elements. Genetics and genomics of human and animal populations. Biotechnological and molecular approaches for the improvement of crop species. Functional and population genomics of harmful insects for tracking the invasion processes and for the development of control methods. Study of the symbiotic and pathogenic interactions between prokaryotes and eukaryotes using microscopy, genomics and bioinformatics. Replication and gene expression regulation in eukaryotic and prokaryotic cells. Cytochemical and ultrastructural studies of the nuclear processes of transcript maturation under different experimental conditions, and of the cell alterations induced by bioactive peptides. Cellular and molecular studies of the effects induced by platinum compounds and metabolic diseases on the development of the central nervous system. *In vivo* and *in vitro* study and characterization of cellular and molecular mechanisms of adult somatic, pluripotent and germinal cells in physiological and pathological



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conditions. Fluorescence analysis as a tool for investigating biological processes. Gene cloning, functional characterization and structural biology of enzymes, antibodies and proteins, potential targets of pharmacological drugs. Synthesis of new antiviral drugs; determination of the mechanisms of activity and resistance to new antitubercular drugs; identification of new compounds with antiproliferative and/or pro-apoptotic activity. Resistance mechanisms, persistence and clinical impact of emerging Gram negative pathogens; the environment as a potential reservoir of multi-drug resistant (MDR) isolates. Role of gut microbiome in the developing of colorectal cancer.

<b>POSITIONS WITH SCHOLARSHIP</b>	<b>11</b>	9 scholarships funded by the University of Pavia; 1 scholarship funded by the Department of Molecular Medicine to undertake research in "Gene therapy for long QT syndrome: models <i>in vivo</i> and <i>in vitro</i> "; 1 scholarship funded by the Alma Mater Ticinensis Foundation to undertake research in "Preventing Zika by genetically fighting the mosquito that vectors the virus"
<b>POSITIONS WITHOUT SCHOLARSHIPS</b>	<b>3</b>	
<b>TOTAL POSITIONS</b>	<b>14</b>	

## **ADDITIONAL POSITIONS RESERVED TO CANDIDATES WITH A SCHOLARSHIP FROM A FOREIGN COUNTRY: 1**

Candidates applying for this position will be selected through qualifications assessment and interview in person or via videoconference/webcam. The Committee will draw up specific reports and a separate ranking list.

**ADMISSION PROCEDURE: qualifications assessment and tests (written test and interview).** Candidates are allowed to take the tests in English.

**LINGUISTIC KNOWLEDGE:** candidates' knowledge of English will be verified during the interview.

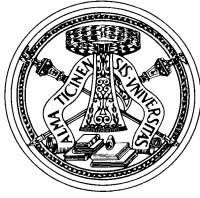
## **QUALIFICATIONS ASSESSMENT: 10 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES' QUALIFICATION, DIVIDED AS FOLLOWS:**

- 1) reference letter (no more than one) in Italian or English, issued and submitted directly by professors from the university where the degree was awarded or by other professors/researchers who have had direct contact with the applicant. The candidate, during the online application, will enter the personal data of the chosen referee who, through a specific online procedure, will have to submit the reference letter directly to the University administration by July 8, 2016 at 17:00 pm (Italian time). Unlike the other qualifications, the reference letter must not be uploaded in the website during the online application procedure (up to **1** point);
- 2) scientific publications. Only publications from the last 5 years that are congruent with the research topics of the PhD course will be considered (up to **1** point);
- 3) arithmetic means of the marks obtained in the exams taken during the candidate's degree courses (up to **8** points).

The qualifications must be submitted according to the procedure described in art. 5, para. 2 of this call for applications.

**WRITTEN TEST: September 7, 2016, at 9:30 (Italian time),** Aula "Arturo Falaschi" of the CNR Institute of Molecular Genetics - Via Ferrata n. 1 – Pavia;

**INTERVIEW: September 9, 2016, at 9:30 (Italian time),** Aula "Arturo Falaschi" of the CNR Institute of Molecular Genetics - Via Ferrata n. 1 – Pavia.



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**INFORMATION:** <http://phdsgb.unipv.eu/site/en/home.html> - see the “Admission procedures” section.

The following programmes are scheduled:

- a) Cell biology;
- b) Medical and molecular genetics;
- c) Molecular microbiology and virology;
- d) Experimental pathology and pathological anatomy;
- e) Genetic and molecular sciences.

**PLEASE NOTE:** Candidates who intend to apply for the scholarships funded by the Department of Molecular Medicine to undertake research in “Gene therapy for long QT syndrome: models *in vivo* and *in vitro*” or for the scholarship funded by the Alma Mater Ticinensis Foundation, to undertake research in “Preventing Zika by genetically fighting the mosquito that vectors the virus” must state their interest to the examining committee before the interview; these candidates’ interviews will therefore also include a discussion of the project topics. The examining committee will draw up specific ranking lists.

## PHD COURSE IN EXPERIMENTAL MEDICINE

**LOCATION:** DEPARTMENT OF CLINICAL-SURGICAL, DIAGNOSTIC AND PEDIATRIC SCIENCES

**DIRECTOR:** Prof. PAOLO DIONIGI

**DURATION:** 3 years

**RESEARCH TOPICS:** General Medicine, Medical Therapy, Experimental Surgery and Microsurgery, Molecular Medicine, Anesthesiology, Biomedical Technologies, Infectious Diseases

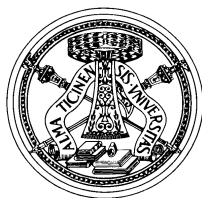
<b>POSITIONS WITH SCHOLARSHIP</b>	<b>7</b>	4 scholarships funded by the University of Pavia; 2 scholarships funded by the Department of Molecular Medicine to undertake research in the following fields: “Disease Mechanisms and Models, Development of New Methods for Diagnosis and New Therapeutics”; 1 scholarship funded by the Department of Clinical-Surgical, Diagnostic and Pediatric Sciences to undertake research in “Infectious Diseases of Poverty”
<b>POSITIONS WITHOUT SCHOLARSHIP</b>	<b>1</b>	
<b>TOTAL POSITIONS</b>	<b>8</b>	

**ADMISSION PROCEDURE:** qualifications assessment and tests (written test and interview). Candidates are allowed to take the tests in English.

**LINGUISTIC KNOWLEDGE:** candidates’ knowledge of English will be verified during the interview.

**QUALIFICATIONS ASSESSMENT: 10 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES’ QUALIFICATION, DIVIDED AS FOLLOWS:**

- a) *curriculum vitae* (up to 4 points);



# UNIVERSITA' DEGLI STUDI DI PAVIA

- b) former periods of proven research activity at Italian or foreign scientific institutions (up to **3** points);
- c) published full papers in peer reviewed medical journals (up to **3** points).

The qualifications must be submitted according to the procedure indicated in art. 5, para. 2 of this call for applications.

**WRITTEN TEST: September 22, 2016, at 9:00 (Italian time),** Aula 3 (1<sup>st</sup> floor) – DEA - “S. Matteo” General Hospital – Pavia

In the written test candidates will have to address one of the topics proposed by the examining committee.

**INTERVIEW: September 23, 2016, at 9:00 (Italian time),** Aula 3 (1<sup>st</sup> floor) – DEA - “S. Matteo” General Hospital – Pavia

**INFORMATION:** <http://phdms.unipv.eu/site/en/home.html>

The following programmes are scheduled:

- a) Internal medicine and medical therapeutics;
- b) Experimental surgery and microsurgery.

**PLEASE NOTE:** Candidates who are interested in one of the scholarships funded by the Department of Molecular Medicine or in the scholarship funded by the Department of Clinical-Surgical, Diagnostic and Pediatric Sciences will have to address, during the written test, a subject that is pertinent to these scholarships' topics. These candidates' interviews will anyway also include a discussion of the project topics. The admissions committee will draw up specific ranking list.

## PHD COURSE IN PSYCHOLOGY, NEUROSCIENCE AND MEDICAL STATISTICS

**LOCATION:** DEPARTMENT OF BRAIN AND BEHAVIORAL SCIENCES

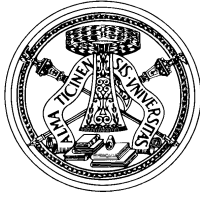
**DIRECTOR:** Prof. GABRIELLA BOTTINI

**DURATION:** 3 years

**RESEARCH TOPICS:** Psychology, Neuroscience, Biostatistics, Public Health

<b>POSITIONS WITH SCHOLARSHIP</b>	<b>8</b>	6 scholarships funded by the University of Pavia; 2 scholarships funded by the Department of Public Health, Experimental and Forensic Medicine to undertake research in the following topics: “Promotion of psychophysical well-being and lifestyle through physical activity protocols in patients with Multiple Sclerosis” and “Evaluation of the effects of an industrial plant on health: a longitudinal study on resident population”
<b>POSITIONS WITHOUT SCHOLARSHIP</b>	<b>1</b>	
<b>TOTAL POSITIONS</b>	<b>9</b>	

**ADDITIONAL POSITIONS RESERVED TO CANDIDATES WITH SCHOLARSHIP FROM A FOREIGN COUNTRY: 1**



# UNIVERSITA' DEGLI STUDI DI PAVIA

Candidates applying for this position will be selected through qualifications assessment and interview in person or via videoconference/webcam. The examining committee will draw up specific reports and a separate ranking list.

## **ADMISSION PROCEDURE: qualifications assessment and interview**

Candidates resident abroad are allowed to take a web-based interview via videoconference, provided a written e-mail request to [concorso-dottorati@unipv.it](mailto:concorso-dottorati@unipv.it) is made by the deadline of July 8, 2016 at 17:00 pm (Italian time). The PhD office will confirm the receipt of such request.

**LINGUISTIC KNOWLEDGE:** candidates' knowledge of English will be verified during the interview.

## **QUALIFICATIONS ASSESSMENT: 10 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES' QUALIFICATION, DIVIDED AS FOLLOWS:**

- a) motivation letter in Italian or English (max 500 words) mentioning the name of two referees the Committee may contact for a presentation of the candidate (up to **2** points);
- b) research project in Italian or English (max. 3000 words), related to PhD research topics. The project's structure should be as follows: general introduction about the state of the art relative to the chosen topic; presentation of the research objectives; description of the methods (procedure, data analysis); discussion of the expected results; evaluation of the theoretical and/or practical implications (up to **5** points);
- c) arithmetic mean of the marks obtained in the exams taken during the candidate's degree courses (up to **3** points).

The qualifications must be submitted according to the procedure indicated in art. 5, para. 2 of this call for applications.

The candidates will make sure to include their *curriculum vitae*.

### **The minimum score to be called for interview is 7/10.**

The results of the qualifications assessment will be published online no later than **September 16, 2016**. The results will be posted on the Department of Brain and Behavioral Sciences (Psychology section) noticeboard (P.zza Botta n. 11, Pavia) and in the Personal Area of the University website. This can be accessed using the login information provided at the end of the registration procedure.

**INTERVIEW: September 21, 2016, starting from 10:00 (Italian time)**, Sala Riunioni, Department of Brain and Behavioral Sciences (Psychology section), Piazza Botta n. 11, Pavia.

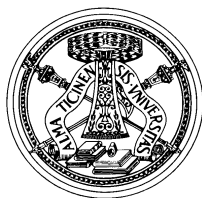
The interview will be held in Italian or English and will verify the candidate's knowledge of English. The interview will consist of a short presentation of the research project meant to verify candidates' aptitude for the PhD course research topics, offering candidates the chance to develop it according with the disciplinary approach they prefer. The research project presented by the candidate will not, in any way, be binding if the candidate is admitted onto the PhD course.

The interview by videoconference, where required, will start at 14.00 pm (Italian time) of September 21, 2016. Before the interview, candidates will be asked to show the same valid identity document whose details were entered during the application procedure. The University of Pavia does not accept any responsibility for a candidate's failure to take the interview due to technical difficulties.

**INFORMATION:** contact prof. Gabriella Bottini at: [gabriella.bottini@unipv.it](mailto:gabriella.bottini@unipv.it)

The following programmes are scheduled:

- 1) Experimental Psychology and Cognitive Neuroscience;
- 2) Applied and Developmental Psychology;
- 3) Biostatistics, Public Health and Education.



# UNIVERSITA' DEGLI STUDI DI PAVIA

**PLEASE NOTE:** Candidates who are interested in one of the scholarships funded by the Department of Public Health, Experimental and Forensic Medicine to undertake research in “Promotion of psychophysical well-being and lifestyle through physical activity protocols in patients with Multiple Sclerosis” or in “Evaluation of the effects of an industrial plant on health: a longitudinal study on resident population” must state their interest to the examining committee before the interview; these candidates’ interviews will therefore also include a discussion of the project topics. The examining committee will draw up specific ranking lists.

## **PHD COURSE IN BIOMEDICAL SCIENCES**

**LOCATION:** DEPARTMENT OF BRAIN AND BEHAVIORAL SCIENCES

**DIRECTOR:** Prof. EGIDIO UGO D’ANGELO

**DURATION:** 3 years

### **RESEARCH TOPICS:**

#### BIOCHEMISTRY PROGRAMME:

Biochemical and immunologic characterization of bacterial proteins, their role in infective process and possible vaccinal use; molecular bases of diseases associated to aging and amyloidosis;

Analysis of connective matrix in normal and pathological conditions; proteins of biomedical interest: functional and structural studies; biochemical mechanisms of platelet function;

Biochemistry of human erythrocyte; biochemical mechanisms of platelet production; pathogenetic mechanisms of diseases related to protein-misfolding; disease biochemical markers.

#### PHARMACOLOGY PROGRAMME:

Receptor pathology, metabolism and cellular kinetic study; environmental toxicology; gastrointestinal pharmacology; clinical pharmacology of active drugs on the central nervous system;

Antineoplastic drugs pharmacology; transplant pharmacology; pharmacoepidemiology and pharmacoconomics of active drugs on the central nervous system, the cardiovascular system and gastrointestinal system;

Pharmacology and molecular mechanisms associated to neurodegenerative diseases;

Environmental effects on the immune system; Pharmacology of the signaling transduction systems in the neurologic, oncologic and immune system diseases.

#### PHYSIOLOGY PROGRAMME:

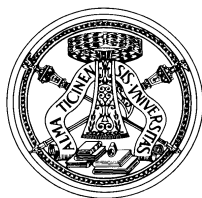
Molecular and cellular physiology of the nervous system; cellular communication and plasticity in the cerebral circuits; physiology and biophysics of sensory, motor and cognitive functions; cellular communication in the cardiovascular system; physiology of the skeletal and cardiac muscles; physiology of the gastrointestinal system.

#### NEUROSCIENCE PROGRAMME:

Neurobiology, neuroendocrinology and functional neurology; neurophysiopatology; neuroepidemiology and research methodology; general neurology; child neuropsychiatry; physiopathology, diagnosis and therapy of primary cephalalgia and adaptive disorders; neurodegenerative diseases, brain aging and dementia.

<b>POSITIONS WITH SCHOLARSHIP</b>	<b>9</b>	8 scholarships funded by the University of Pavia; 1 scholarship funded by the Prima Spes Onlus Foundation to undertake research in “Aicardi syndrome: clinical, genetic and therapeutic aspects”
<b>POSITIONS WITHOUT</b>	<b>3</b>	





# UNIVERSITA' DEGLI STUDI DI PAVIA

SCHOLARSHIP		
TOTAL POSITIONS	12	
Following the ranking order successful candidates will be offered, instead of the scholarship funded by the University of Pavia, a three-year scholarship amounting to € 6.000 pre-tax per year funded by the Almo Collegio Borromeo of Pavia, dedicated to the memory of Prof. Cesare Casella, former Director of the Physiology Institute of the University of Pavia. Such scholarship includes an accommodation at the Almo Collegio Borromeo ("C. Ferrini" graduates section) for the same duration as the scholarship. In accordance with the ranking order, the chance to be granted the Casella scholarship and the linked accommodation will be offered to the PhD students without scholarship as well.		

## **ADDITIONAL POSITIONS RESERVED TO CANDIDATES HOLDING A SCHOLARSHIP FROM THE H2020-MSCA-ITN-2015 PROGRAMME "RELEVANCE – Regulation of Red Cell Life-Span, Erythropoiesis, Survival, Senescence and Clearance": 1**

Candidates applying for this position will be selected through qualifications assessment only. The committee will draw up a specific report and a separate ranking list.

**ADMISSION PROCEDURE: qualifications assessment and interview:** candidates are allowed to take the interview in English.

Candidates resident abroad are allowed to take a web-based interview via videoconference, provided a written e-mail request to [concorso-dottorati@unipv.it](mailto:concorso-dottorati@unipv.it) is made by the deadline of July 8, 2016 at 17:00 pm (Italian time). The PhD office will confirm the receipt of such request.

**LINGUISTIC KNOWLEDGE:** candidates' knowledge of English will be verified during the interview.

## **QUALIFICATIONS ASSESSMENT: 10 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES' QUALIFICATION, DIVIDED AS FOLLOWS:**

- exams taken during the candidate's degree courses, bearing the marks (up to **4** points);
- curriculum vitae et studiorum* (up to **2** points);
- scientific publications (up to **2** points);
- research project in Italian or English (max 3000 words), related to the PhD research themes. The project will have to be structured according with the specimen available at the following link: <http://phdsb.unipv.eu/site/en/home/admission-procedures.html> (up to **2** points).

The qualifications must be submitted according to the procedure indicated in art. 5, para. 2 of this call for applications.

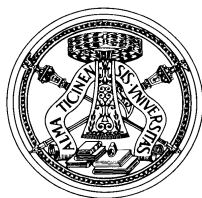
### **The minimum score to be called for interview is 7/10.**

The results of the qualifications assessment will be published online no later than **September 8, 2016**. The results will be posted on the noticeboard of the Department of Brain and Behavioral Sciences and in the Personal Area of the University website. This can be accessed using the login information provided at the end of the registration procedure.

**INTERVIEW: September 16, 2016 at 9:00 (Italian time)** - Department of Brain and Behavioral Sciences – Room of the ex Institute of General Physiology – Via Forlanini n. 6 – Pavia

The interview will concern the main topics covered by the PhD course and in particular the research project submitted by the candidate. The research project will not be binding if the candidate is admitted onto the PhD course.

The interview by videoconference, where required, will start at 14:00 pm (Italian time) of **September 16, 2016**. Before the interview, candidates will be asked to show the same valid identity document whose details were entered during the application procedure. The University of Pavia does not accept any responsibility for a



# UNIVERSITA' DEGLI STUDI DI PAVIA

candidate's failure to take the interview due to technical difficulties.

**INFORMATION:** <http://www.unipv.eu/site/en/home/research/phd-courses/life-sciences/articolo8056.html>

The following programmes are scheduled:

- c) Biochemistry;
- d) Pharmacology;
- e) Physiology;
- f) Neuroscience.

**PLEASE NOTE:** Candidates who are interested in the scholarship funded by the Prima Spes Onlus Foundation, to undertake research in "Aicardi syndrome: clinical, genetic and therapeutic aspects", must state their interest to the examining committee before the interview; these candidates' interviews will therefore also include a discussion of the project topic. The examining committee will draw up a specific ranking list.

## MACRO-AREA OF HUMANISTIC AND SOCIAL SCIENCES

### PHD COURSE

#### IN PRIVATE LAW, ROMAN LAW AND EUROPEAN LEGAL CULTURE

**LOCATION:** DEPARTMENT OF LAW

**DIRECTOR:** Prof. DARIO MANTOVANI

**DURATION:** 3 years

**RESEARCH TOPICS:** Civil Law; Labour Law and Employment Relations; Intellectual Property and Unfair Competition; Roman Law; European Legal Culture

<b>POSITIONS WITH SCHOLARSHIP</b>	<b>5</b>	5 scholarships funded by the University of Pavia
<b>POSITIONS WITHOUT SCHOLARSHIP</b>	<b>1</b>	
<b>TOTAL POSITIONS</b>	<b>6</b>	

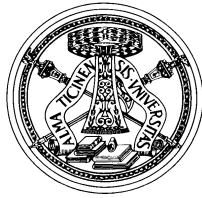
**ADDITIONAL POSITIONS RESERVED TO CANDIDATES WITH A SCHOLARSHIP FROM A FOREIGN COUNTRY: 1;**

Candidates applying for this position will be selected through qualifications assessment and interview in person or via videoconference/webcam. The Committee will draw up specific reports and a separate ranking list.

**ADMISSION PROCEDURE: qualifications assessment and tests (written test and interview):** candidates are allowed to take the tests in English or French. According to the choice of candidates, the written test will be focused on one of the following topics: Civil Law; Labour Law and Employment Relations; Intellectual Property and Unfair Competition; Roman Law; Legal History.

**LINGUISTIC KNOWLEDGE:** candidates' knowledge of English, German, French or Spanish will be verified during the interview.

**QUALIFICATIONS ASSESSMENT: 10 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES' QUALIFICATION, DIVIDED AS FOLLOWS:**



# UNIVERSITA' DEGLI STUDI DI PAVIA

- a) arithmetic mean of the marks obtained in the exams taken during the candidate's degree courses (up to 5 points);
- b) scientific publications, excluding the master's degree thesis (up to 2 points);
- c) other relevant qualifications (up to 3 points).

The qualifications must be submitted according to the procedure indicated in art. 5, para. 2 of this call for applications.

**WRITTEN TEST: September 21, 2016 at 10:00 (Italian time)**, Department of Law – C.so Strada Nuova n. 65 – Pavia

For the topics concerning the programme in “Private Law, Labor Law and Intellectual Property”, during the written test candidates will be allowed to consult codes without comments by scholars and without case law.

**INTERVIEW: September 22, 2016 at 11:00 pm (Italian time)**, Department of Law – C.so Strada Nuova n. 65 – Pavia

**INFORMATION:** contact prof. Mantovani at [dario.mantovani@unipv.it](mailto:dario.mantovani@unipv.it)

The following programmes are scheduled:

- a) Private Law, Labour Law and Intellectual Property;
- b) Roman Law and European Legal Culture.

## PHD COURSE IN PUBLIC LAW, CRIMINAL AND INTERNATIONAL JUSTICE

**LOCATION:** DEPARTMENT OF LAW

**DIRECTOR:** Prof. CRISTINA CAMPIGLIO

**DURATION:** 3 years

**RESEARCH TOPICS:** general theory, structure and dynamics of Italian and comparative public law; relationships between legal systems (international, European and national systems); administrative law; fundamental rights; constitutional law; citizenship and immigration law; environmental law; domestic and international criminal law; criminology; criminal procedure and enforcement; public and private international law; international organization; institutions of the European Union; judicial cooperation

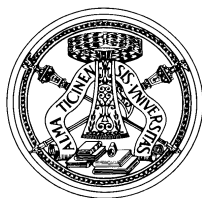
<b>POSITIONS WITH SCHOLARSHIP</b>	<b>5</b>	5 scholarships funded by the University of Pavia
<b>POSITIONS WITHOUT SCHOLARSHIP</b>	<b>1</b>	
<b>TOTAL POSITIONS</b>	<b>6</b>	

**ADDITIONAL POSITIONS RESERVED TO CANDIDATES WITH A SCHOLARSHIP FROM A FOREIGN COUNTRY: 1**

Candidates applying for this position will be selected through qualifications assessment and interview in person or via videoconference/webcam. The commission will draw up specific reports and a separate ranking list.

**ADMISSION PROCEDURE: qualifications assessment and tests (written test and interview)**

**LINGUISTIC KNOWLEDGE:** candidates' knowledge of English, German, French or Spanish will be verified during the interview. Foreign candidates will also have to demonstrate adequate knowledge of Italian.



# UNIVERSITA' DEGLI STUDI DI PAVIA

**QUALIFICATIONS ASSESSMENT: 10 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES' QUALIFICATION, DIVIDED AS FOLLOWS:**

- a) arithmetic mean of the marks obtained in the exams taken during the candidate's degree courses (up to 6 points);
- b) scientific publications (up to 4 points).

The qualifications must be submitted according to the procedure indicated in art. 5, para. 2 of this call for applications.

**WRITTEN TEST: September 14, 2016 at 9:30 am (Italian time)**, at the Department of Law – Aula I - Corso Strada Nuova n. 65 – Pavia

During the written test candidates will be allowed to consult codes without comments by scholars and without case law.

**INTERVIEW: September 16, 2016 at 9:30 am (Italian time)**, at the Department of Law – Aula III - Corso Strada Nuova n. 65 - Pavia

**INFORMATION:** <http://dottorati.unipv.eu/on-dip/phddpgpi/Home.html>

The following programmes are scheduled:

- a) Public law;
- b) Criminal and international justice.

## PHD COURSE IN ECONOMICS AND MANAGEMENT OF TECHNOLOGY (DREAMT)

**LOCATION:** DEPARTMENT OF ECONOMICS AND MANAGEMENT

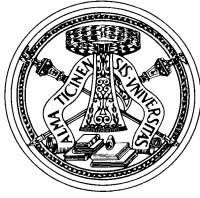
**DIRECTOR:** Prof. GIANMARIA MARTINI – University of Bergamo

**COOPERATING UNIVERSITY:** University of Bergamo. The PhD degree will be jointly issued by the Rector of the University of Pavia and the Rector of the University of Bergamo

**DURATION:** 3 years

**RESEARCH TOPICS:** *Applied economics and management of technology and innovation:* Data analysis, Business and entrepreneurship; Logistics; Production management; Innovation and patents; Mobility and infrastructures; Experimental design; Corporate strategy and governance; International business; Agri-food sectors; Production engineering, Health economics and management.

<b>POSITIONS WITH SCHOLARSHIP</b>	<b>8</b>	3 scholarships funded by the University of Pavia; 3 scholarships funded by the University of Bergamo; 1 scholarship funded by SIRTI S.p.A. to undertake research in “Big Data Analysis for Predictive Maintenance on Technological Infrastructures”; 1 scholarship funded by the Alma Mater Ticinensis Foundation to undertake research in “Factors Affecting Hospital Mobility in the Lombard Regional System”
<b>POSITIONS WITHOUT SCHOLARSHIP</b>	<b>2</b>	



# UNIVERSITA' DEGLI STUDI DI PAVIA

TOTAL POSITIONS	10	
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**ADDITIONAL PHD POSITION JOINTLY-SUPERVISED WITH COMPANIES:** 1 – Electrolux – Forcia

**ADMISSION PROCEDURE: qualifications assessment and interview:** candidates will have to take the interview in English.

Candidates resident abroad are allowed to take a web-based interview via videoconference, provided a written e-mail request to [concorso-dottorati@unipv.it](mailto:concorso-dottorati@unipv.it) is made by the deadline of July 8, 2016 at 17:00 pm (Italian time). The PhD office will confirm the receipt of such request.

**QUALIFICATIONS ASSESSMENT: 30 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES' QUALIFICATION, DIVIDED AS FOLLOWS:**

- a) GPA of exams taken during the candidate's degree courses (up to **4** points);
- b) "Europass CV", including possible list of scientific publications (up to **5** points);
- c) up to two reference letters, issued and submitted directly by professors from the university where the degree was awarded or by other professors/researchers who have had direct contact with the applicant. The candidate, during the online application, will enter the personal data of the chosen referees who, through a specific online procedure, will have to submit the reference letter directly to the University administration by July 8, 2016 at 17:00 pm (Italian time). Unlike the other qualifications, these letters must not be uploaded in the website during the online application procedure (up to **6** points);
- d) research project written in English (max 5000 characters including spaces). More information about the writing of the project can be found at <http://phdemd.unipv.eu/site/en/home.html> (up to **12** points);
- e) motivation letter written in English (reasons for choosing this PhD course, expectations on future employment, readiness to spend research periods abroad, etc.) (up to **3** points).

The qualifications must be submitted according to the procedure indicated in art. 5, para. 2 of this call for applications.

**The minimum score to be called for interview is 21/30.**

The results of the qualifications assessment will be published online no later than **July 15, 2016**.

The results will be posted on the Department of Economics and Management noticeboard and in the Personal Area of the University website. This can be accessed using the login information provided at the end of the registration procedure.

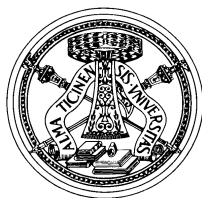
**INTERVIEW: starting from August 30, 2016, at 10:00 (Italian time)**, at the Department of Economics and Management, via San Felice n. 5, Pavia.

The research project will be discussed during the interview and is meant to verify the candidate's aptitude towards research. It will not be binding if the candidate is admitted onto the PhD course. The interview will take place in English. It will verify and assess the candidate's knowledge of the English language. The interview will deal with the research project (max 5 minutes), as well as with the contents of the PhD course.

The interview by videoconference, where required, will start at 15.00 pm (Italian time) of **August 30, 2016**. Before the interview, candidates will be asked to show the same valid identity document whose details were entered during the application procedure. The University of Pavia does not accept any responsibility for a candidate's failure to take the interview due to technical difficulties.

**INFORMATION:** <http://phdemd.unipv.eu/site/en/home.html>

**PLEASE NOTE:** Candidates who are interested in the scholarship funded by SIRTI S.p.A. to undertake research in "Big Data Analysis for Predictive Maintenance on Technological Infrastructures", or in the



# UNIVERSITA' DEGLI STUDI DI PAVIA

scholarship funded by the Alma Mater Ticinensis Foundation to undertake research in “Factors Affecting Hospital Mobility in the Lombard Regional System” must state their interest to the examining committee before the interview. These candidates’ interviews will therefore also include a discussion of the project topics. The examining committee will draw up specific ranking lists.

## PHD COURSE IN SCIENCES OF THE LITERARY AND MUSICAL TEXT

**LOCATION:** DEPARTMENT OF HUMANITIES

**DIRECTOR:** Prof. CARLA RICCARDI

**DURATION:** 3 years

**RESEARCH TOPICS:** Textual Criticism from the Middle Ages to the Present; Critical Editions of Texts and Literary Criticism from the Middle Ages to the 21st Century; History of Italian Language; History of Theatre and Cinema, Modern Foreign Languages and Literatures, Musicology

<b>POSITIONS WITH SCHOLARSHIP</b>	<b>6</b>	5 scholarships funded by the University of Pavia; 1 scholarship funded by the “Maria Corti” Foundation
<b>POSITIONS WITHOUT SCHOLARSHIP</b>	<b>1</b>	
<b>TOTAL POSITIONS</b>	<b>7</b>	

**ADDITIONAL POSITIONS RESERVED TO CANDIDATES WITH A SCHOLARSHIP FROM A FOREIGN COUNTRY: 1**

Candidates applying for this position will be selected through qualifications assessment and interview in person or via videoconference/webcam. The Committee will draw up a specific report and a separate ranking list.

**ADMISSION PROCEDURE: qualifications assessment and tests (written test and interview)**

**LINGUISTIC KNOWLEDGE:** candidates’ knowledge of English, French, German, Spanish or Russian will be verified during the interview.

**RESEARCH PROJECT: candidates must submit a research project** either in Italian or in English (max. 3000 words, bibliography not counted), related to research topics pertaining to the programmes listed below. The project’s structure should be as follows: general introduction about the state of the art relative to the chosen topic; presentation of the research objectives; description of the methods and the sources the candidate intends to use; discussion of expected results.

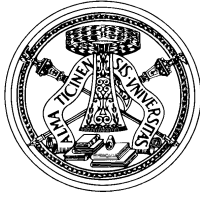
**QUALIFICATIONS ASSESSMENT: 4 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES’ QUALIFICATION, DIVIDED AS FOLLOWS:**

- synthesis of the second-level degree thesis in Italian or English (max. 1000 words) (up to **2** points);
- curriculum vitae*, including possible list of scientific publications. The publications must be submitted in digital format (abstract or summaries) (up to **2** points).

The qualifications must be submitted according to the procedure indicated in art. 5, para. 2 of this call for applications.

**WRITTEN TEST: September 20, 2016, at 9:00 (Italian time),** Aula L2, Palazzo San Tommaso, Piazza del Lino n. 2 - Pavia

The written test will consist of:



# UNIVERSITA' DEGLI STUDI DI PAVIA

1. for the Modern Philology programme: discussion of philological-critical issues referred to crucial texts of Italian literature *or* stylistic analysis (linguistic, syntactic, metrical) of a poetic text;
2. for the Foreign Languages and Literatures programme: discussion in the chosen language of either philological-literary or linguistic issues pertaining to authors, texts, textual genres, specific periods of the language and culture, *or* historical-literary/stylistic/linguistic analysis with commentary on a text;
3. for the Musicology programme: historical, analytical and stylistic discussion of at least two musical pieces chosen among three different periods and genres proposed by the Committee.

The list of candidates admitted in the interview will be published according to a procedure that will be communicated the day of the written test.

**INTERVIEW: September 28, 2016, at 9:00 (Italian time)**, Department of Humanities, Literature Section – Corso Strada Nuova n. 65 – Pavia.

The oral test will be in either Italian or the foreign language chosen by the candidate among the ones listed above and will concern:

- 1) a thorough discussion of the research project;
- 2) the assessment of the candidate's competence related to the chosen programme;
- 3) the assessment of the knowledge of one of the following languages: English, French, German, Spanish, Russian.

**INFORMATION:** [carla.riccardi@unipv.it](mailto:carla.riccardi@unipv.it)

The following programmes are scheduled:

## **MODERN PHILOLOGY**

Research areas:

1. Genetic criticism and textual tradition; critical editions of texts from the origins to the 20<sup>th</sup> century;
2. History of literary criticism;
3. Theory of literature;
4. Renaissance and Modern literature and culture. Mass literatures;
5. Italian linguistics;
6. Theatre texts and spaces. Film language: analysis and criticism;
7. Metrical theory and analysis;
8. Reception of Greek and Latin texts;
9. Classical philology;
10. Greek literature;
11. Latin literature.

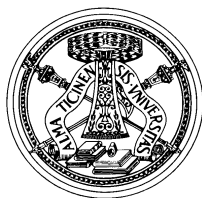
## **MODERN FOREIGN LANGUAGES AND LITERATURES**

Research areas:

The programme covers 6 areas, interacting also on a comparative basis: English studies; Germanic philology; French studies; German studies; Spanish studies; Slavonic studies.

Within these linguistic areas, the following fields are foregrounded:

1. Critical edition and analysis of Medieval Germanic texts;
2. Ancient book studies;



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3. Criticism of the European and American novel;
4. Textual analysis and criticism (theory and practice);
5. Literary translation;
6. History of the language;
7. Film studies (transcriptions/re-writings, screen-adaptations of literary texts, cinema language and subtitles);
8. History of theatre and drama (script and performance).

## MUSICOLOGY

Research areas:

1. Critical edition of scores from the Middle Ages to the 21<sup>st</sup> century;
2. Music theories and analysis from the Middle Ages to the 21<sup>st</sup> century;
3. Musical theatre from the 17<sup>th</sup> to the 21<sup>st</sup> century;
4. Music and literature;
5. Music and media;
6. Organology and music iconography;
7. Ethnomusicology;
8. Contemporary popular music.

## PHD COURSE IN HISTORY

**LOCATION:** DEPARTMENT OF POLITICAL AND SOCIAL SCIENCES

**DIRECTOR:** Prof. MARINA TESORO

**DURATION:** 3 years

### RESEARCH TOPICS:

“Civilization of the Mediterranean Area in the Preclassical, Classical and Medieval Ages” programme: Pre-classical ancient Near East; Ancient history and historiography; Greek, Etruscan-Italic and Roman archaeology, topography and art; History and civilization of Greek and Latin Middle Age;

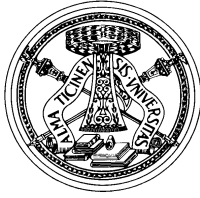
“Society, Politics and Institutions in the Modern and Contemporary Ages” programme: Modern and Contemporary History; Constitutional and Administrative History; History and Politics of European Integration; History of Asia and Africa.

For further informations on the research topics please visit the PhD course website:

<http://phdstoria.unipv.eu/site/home.html>

<b>POSITIONS WITH SCHOLARSHIP</b>	<b>5</b>	5 scholarships funded by the University of Pavia
<b>POSITIONS WITHOUT SCHOLARSHIP</b>	<b>0</b>	
<b>TOTAL POSITIONS</b>	<b>5</b>	





# UNIVERSITA' DEGLI STUDI DI PAVIA

**ADMISSION PROCEDURE: qualifications assessment and interview:** candidates are allowed to take the interview in English.

Candidates resident abroad are allowed to take a web-based interview via videoconference, provided a written e-mail request to [concorso-dottorati@unipv.it](mailto:concorso-dottorati@unipv.it) is made by the deadline of July 8, 2016 at 17:00 pm (Italian time). The PhD office will confirm the receipt of such request.

**LINGUISTIC KNOWLEDGE:** candidates' knowledge of English will be verified during the interview.

**QUALIFICATIONS ASSESSMENT: 10 POINTS ARE ASSIGNED TO THE ASSESSMENT OF CANDIDATES' QUALIFICATION, DIVIDED AS FOLLOWS:**

- a) exams taken during the candidate's degree courses, bearing the marks (up to **2** points). The certificate/self-declaration submitted by the candidate must bear the arithmetic mean of the marks obtained in the exams.
- b) post lauream diplomas (specialization schools, Italian Master courses), participation in archaeological excavation campaigns (up to **1** point);
- c) certified publications and conference papers dealing with the subjects of the PhD course (up to **2** points);
- d) research project in Italian or English (max 16000 characters, spaces included; bibliography, sources and figures not counted), related to one of the above-mentioned PhD research topics. The research project is to be structured as follows: short background introduction on the literature on the subject chosen by the candidate; presentation of the conceived research project and its goals; discussion of the expected outcomes with evaluation/indication of the contribute added to the disciplinary fields involved; preliminary statement on the carrying out of the research during the 3 years of the PhD course (up to **5** points).

Candidates must enclose their *Curriculum Vitae* to the application together with the above-listed qualifications.

The qualifications must be submitted according to the procedure indicated in art. 5, para. 2 of this call for applications.

**The minimum score to be called for interview is 6/10.**

The results of the qualifications assessment will be announced no later than **September 13, 2016**.

The results will be posted on the Department of Humanities and in the Department of Political and Social Sciences noticeboards, and in the Personal Area of the University website. This can be accessed using the login information provided at the end of the registration procedure.

**INTERVIEW: September 15, 2016, at 10:00 am (Italian time)**, Department of Political and Social Sciences, C.so Strada Nuova n. 65, Pavia.

The interview will be held in Italian or English and will verify the candidate's knowledge of the English language. The interview will deal with the research project in order to verify the candidate's aptitude towards research and his/her background in the research project field of studies. The research project will not be binding if the candidate is admitted onto the PhD course.

The interview by videoconference, where required, will start at 14:00 pm (Italian time) of **September 15, 2016**. Before the interview, candidates will be asked to show the same valid identity document whose details were entered during the application procedure. The University of Pavia does not accept any responsibility for a candidate's failure to take the interview due to technical difficulties.

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