

PUBLIC COMPETITION FOR ASSIGNMENT NO. 37 RESEARCH GRANTS FOR COOPERATION IN RESEARCH ACTIVITIES, A2-TYPE, WITH A DURATION OF NO. 24 MONTHS.

**THE RECTOR
OF THE UNIVERSITY OF MILANO-BICOCCA**

- CONSIDERING the Law no. 168 of May 9th, 1989;
- CONSIDERING the Rector's Decree no. 0010332/15 of March 3rd, 2015, concerning the Statute of the University of Milano-Bicocca;
- CONSIDERING the Law no. 240 and further modifications, art. 22 of December 30th, 2010 which provides for the assignment of research grants for cooperation in research activities, within the available budget;
- CONSIDERING the Rector's Decree no. 3325/2017, prot. no. 0044970/17 of July 19th, 2017, concerning the regulation of Research Grant for cooperation in research activities;
- CONSIDERING the Ministerial Decree no. 102 of March 9th, 2011, fixing the amount of the grant and the comparative assessment methods;
- CONSIDERING the University's Official Notice Board regulations, as per the Rector's Decree no. 14405 of June 1st, 2006, which guarantees the legal publication of any University documents;
- HAVING ACQUIRED the Boards of Governors' decision taken on May 23rd, 2017, according to the indications deliberated by Academic Senate's taken in the May 19th, 2017 and with the budget availability, to allocate no. 61 Research Grants for cooperation in research activities, split up among the different Departments/Centres;
- HAVING ACQUIRED the Departments Board's resolutions;

DECREES WHAT FOLLOWS:

Art. 1. - The University of Milano-Bicocca hereby announces a public Competition, with assessment of degrees and qualifications, for the assignment of **no. 37 Research Grants for cooperation in research activities, A2-type, with a duration of 24 months, split up among the Departments as follows:**

DEPARTMENT	A2 Junior	A2 Senior	Tot.	Attachment
BIOTECHNOLOGY AND BIOSCIENCES	4	0	4	A
PHYSICS "G. OCCHIALINI"	5	0	5	B
COMPUTER SCIENCE, SYSTEMS AND COMMUNICATIONS	2	2	4	C
MATHEMATICS AND ITS APPLICATIONS	3	0	3	D
MEDICINE AND SURGERY	6	2	8	E
PSYCOLOGY	5	0	5	F
MATERIALS SCIENCE	4	2	6	G
STATISTICS AND QUANTITATIVE METHODS	1	1	2	H
TOTALE	30	7	37	

Art. 2. – Applicants holding a doctoral degree (Ph.D) and/or a Master’s degree (second cycle) and/or a Postgraduate Medical School degree, can submit their application. Applicants must hold an appropriate scientific and professional curriculum, that must be suitable to the research activities.

The activities and research topics of the **A2-type Research Grants** are financed by the Department, and they shall be carried out under the possible supervision of a Scientific Responsible. The tutor can be chosen by the candidate; the amount of the research fellowship contract is financed by the University on the allocated funds. Candidates have to submit a research project with reference to the subjects of one or more scientific disciplinary sectors (SDS) of the chosen Department; the name of one or more Professors of the Department might be indicated by the applicants. The Department will appoint a Professor when no names have been indicated by the applicants or when more than a name has been indicated.

There are two kinds of research fellowship contracts A2, according to candidates requirements and research topics:

- **Junior:** Candidates below **thirty-five years of age**; this contract is not open to anyone who has obtained any of the aforementioned degrees **for more than 4 years**.
- **Senior:** Candidates with a Ph.D degree, (when conferred by foreign institutions/Universities, the Ph.D has to be validated as equivalent “equipollente” to an Italian degree), or with a Postgraduate Medical School degree. Applicants should also have a minimum of **two years’** experience in the scientific activities of the foreseen research topics. When the research topics are not such as to require a Ph.D. degree, candidates are required **six years’** experience in scientific activities, **two of which** have to be related to the research topics; candidates also have to submit proof of the six years’ experience (former research fellowships/grants/contracts; publications).

Applicants must have the following requisites:

- no criminal convictions or pending prosecutions;
- knowledge of a foreign language as chosen by each Department.

The prescribed admission requirements must be satisfied within the application deadline. Candidates will be admitted to the competition conditionally.

As indicated in Art. 22 of Law 240 of December 30th, 2010, employees of the Italian public administration and Universities permanent staff will not be admitted, nor the holders of any other research grants or scholarships, unless they resign if selected for the present competition.

The grant holder can not be enrolled, in Italy or abroad, in a Degree Course (Laurea Magistrale or Laurea Specialistica) or Specialization course in the field of medicine or University Master.

Throughout the duration of the grant it is prohibited to perform temporary or permanent employment relationships.

Relatives and in-laws within the fourth degree included, or spouse, of a professor member of the Department requiring the institution of the Research Grant, or of the Rector, the General Manager or a member of the Boards of Directors cannot participate in the competition for the assignment of the Research Grant.

In accordance with art. 22, paragraph 3, of Law 240 of December 30th, 2010, as indicated in the preliminary remarks and as stated in Art. 1 of the present Competition, the Research Grant has a duration of no. **24** months, it may be renewed once, but not accumulable with other grants or scholarships, except for scholarships awarded by either an Italian or a foreign institution, useful to integrate, while abroad, the holder's research activity. The total duration of the collaboration, including possible renewals, cannot exceed six years, except for the period in which the grant fruition coincides with the doctoral programme, within the limits determined by the legal duration of the course.

Holders of Research Grants assigned according to the law in force will be excluded from the present competition, as they cannot guarantee the full coverage of the research period provided.

The total duration of the relationship established with grant holders as per the present article and of the contracts as specified in art. 24 of the Law no. 240 of December 30th, 2010, with one or more public, private, or telematic Universities, and with all the institutions listed in art. 22, paragraph 1, of the Law no. 240 of December 30th, 2010, cannot exceed the total duration of 12 years, even non-continuous, with the same subject. As per the regulations in force, maternity and sick leave periods do not count in the duration of the above mentioned relationships.

Art. 3. - Under penalty of exclusion applications for participation in the competition, along with the relevant qualifications held and the relevant scientific publications, **shall be submitted online through the following online application procedure**: <https://pica.cineca.it/unimib/bando-assegno-di-ricerca-a2-2017/>.

It is of utmost importance to provide a valid email address in order to enable the registration process on the electronic procedure.

Applicants shall upload all personal and professional data as requested by the application procedure; all documents must be uploaded in PDF format (.pdf). Each applicant can produce a maximum of no. 30 publications and a maximum of no. 30 other titles and qualifications.

All fields in the online application form must be filled out. Under penalty of exclusion, the application must contain:

- **research project (English language), concerning the Scientific Subject listed in the Department attachment;**
- **the curriculum vitae with the complete list of the scientific and professional activities;**
- **valid ID of the candidate to be uploaded in electronic format.**

Failure to comply with the online application procedure will result in exclusion of the applicant.

Prior to final submission, and within the given deadline for applications submission, the online application procedure allows to modify and save the inserted information in a draft copy.

Confirmation of final submission date will be certified by an automatic notification email.

Submissions after the given deadlines will not be accepted by the system, as the online application procedure won't be accessible.

Each application will be given a registration number. For all further communications, the registration number shall be quoted along with the code of the research grant competition.

The online application and submission procedure shall be completed **by August 31st, 2017, not later than 12.00 (Rome time).**

The submission of the online application must be completed and finalized:

- **with the digital signature of the candidate**, by means of smart card, USB token or remote digital signature, for digitally signing electronic documents with a software using a PC or a web portal for Remote Signature provided by a Certification Service Provider (CSP). Candidates with a smart card or an USB token for digital signature should check the compatibility with the Digital Signature system embedded in our server. In case of compatibility, candidates shall sign the application on the server (i.e. ConFirma);
- **holders of server-incompatible Digital Signature and holders of Remote Digital Signature** who can access a web portal for digitally signing electronic documents, shall save the PDF file generated by the system on their PC; the PDF file shall not be modified in any way, and it shall be digitally signed in CADES format: the system will generate a file with .p7m extension. The candidate shall upload the .p7m file on the system. No changes are to be made to the file by the candidates before the Digital Signature, on pain of exclusion from the competition
- **in case the two above-mentioned options do not apply**, candidates shall save the PDF file generated by the system on their PC. The PDF file shall not be modified in any way, on pain of exclusion from the competition.

The PDF shall then be printed out, signed on the last page, scanned in PDF format and uploaded on the system.

The University will verify that all the statements made in the application and accompanying documentation comply with the provisions of Presidential Decree n. 445/2000.

Each applicant is allowed to present one single project for each Department.

Art. 4. - For the present Competition, the **JUNIOR** candidate will be evaluated as follows:

a) DEGREES and QUALIFICATIONS (up to 45 points):

- up to **5** points for Degree thesis, masters and post-degree courses;
- up to **10** points for Doctoral thesis and related mark or specialization program in the field of medicine;
- up to **20** points for scientific publications;
- up to **10** points for research activities, other titles and qualifications duly documented, patents, conference proceedings;

b) INTERVIEW and RESEARCH PROJECT (up to 55 points):

- up to **35** points for the research project;
- up to **20** points for the interview.

Instead the **SENIOR** candidate will be evaluated as follows:

c) DEGREES and QUALIFICATIONS (up to 45 points):

- up to **5** points for masters and post-degree courses
- up to **5** points for Doctoral thesis and related mark or specialization program in the field of medicine, or professional experience, which must be evidenced by reports or research collaboration agreements in the field of the research;
- up to **30** points for scientific publications;
- up to **5** points for research activities, other titles and qualifications duly documented, patents, conference proceedings;

d) INTERVIEW and RESEARCH PROJECT (up to 55 points):

- up to **35** points for the research project;
- up to **20** points for the interview.

Art. 5 – The Evaluation Commission is appointed by the Rector of the University of Studies of Milano-Bicocca. Each Evaluation Commission will be formed by three to seven members (at least one from the Department) to be chosen from Assistant Professors, Professors and Lecturers of the same scientific disciplinary sector (SDS) as the Research Projects which have been submitted by the candidates.

The composition of the Evaluation Commission and the date and place of the interview will be posted to the web page <http://www.unimib.it/go/40854913> within October 5th, 2017 (unless otherwise indicated).

At its first meeting, the Evaluation Commission appoints its President and predetermines, according with the Department Board's resolution, the **Guidelines** to assess the TITLES, the PUBLICATIONS, the RESEARCH PROJECTS and the INTERVIEWS.

The Commission evaluates TITLES and PUBLICATIONS, expresses an overall judgement for each Candidate and assigns an overall score.

Before undergoing any assessments the Evaluation Commission will check for any incompatibilities by ensuring that all submissions are in compliance with the laws in force (artt. 51 e 52 del Codice di Procedura Civile; D.P.R. 62/2013).

Candidates failing to attain at least **50%** of the total score that the Commission can assign for TITLES and PUBLICATIONS (22,50 points) will not be admitted to the assessment procedure of their RESEARCH PROJECT and to the INTERVIEW, therefore they will be considered excluded from the RANKING.

The list of the Candidates admitted to the assessment of their **RESEARCH PROJECT** and to the **INTERVIEW** will be posted to the Official Notice Board as legal notification to candidates. **The preselection result will be also published** on the University official website within **October 25th, 2017 (unless otherwise indicated)**, at the following link: <http://www.unimib.it/go/40854913>, no other communication options will be considered.

Art. 6. - In order to award the research grant as per Art. 1, candidates should undergo an interview to ascertain their suitability to the research program and the knowledge of a foreign language.

Foreign Candidates can apply for a telematic/videoconference interview.

For this option foreign candidates should send an e-mail to bandi.assegni_borse@unimib.it, not later than October 27th, 2017.

Art. 7. - At the end of the interviews, the Evaluating Committee shall draw up a report with a ranking for each candidate. Candidates who have not earned at least **50 points** are excluded from the competition.

Art. 8. - At the end of the interviews, the Evaluation Committee shall formulate a ranking, formally approved by a University Director's Decree. The same ranking will be posted at the Official Notice Board and on the University official website www.unimib.it, as legal notification to candidates.

In case of parity, precedence is given to the youngest candidate.

The University will notify the awarded candidates.

The contract will start **on January 1st, 2018.**

For non-EC subjects the contract will enter into effect after obtaining the stay permit (Permesso di Soggiorno).

Art. 9. - **In order to avoid exclusion**, within the final date of **20 days** from notification, the grantee has to draw up a specific self-employed contract with clear indication of the terms and conditions of the employment relationship to be settled.

In case of forfeiture or renunciation, or failure to sign the contract within **20 days** by the selected candidate, the research grant shall be assigned to the candidate ranking next to the renouncing applicant. The ranking will stay in force for **120 days** after its formal approval.

If the grantee decides to withdraw from the contract, he/she is obliged to send a written notification at least **15 days** in advance to the Rector, to the Scientific Responsible and to the Director of the involved Department. In case of late or lack of notice, the amount corresponding to the missing notice period will be deducted.

In case of serious non-fulfilment reported by the Scientific Responsible and/or upon request of the Council of the requiring Structure, the contract can be cancelled by means of a Rector's provision, after verifying with the party concerned.

The contract is automatically terminated in the following cases:

- winner's undue delay or failure to initiate the activity;
- anticipated end date of research activities;
- winner's suspension and/or absence even if not permanent that lasts for a period exceeding one-sixth of the contract length;
- serious breach of the incompatibility regulations as provided by Article 2;
- negative performance evaluation of the winner's research activity expressed by the Department Council;
- violation of D.P.R. 62/2013.

The Awarded Research Fellow shall personally carry out the required activities laid down in the Research Activity Programme, under the supervision of the proposed (or assigned) Scientific Responsible.

Grant entitlement does not imply a subordinate work relationship and does not give cause to any admittance rights to University tenure.

Art. 10. - Research Grant holders not complying with the regulations provided by this competition will lose every right to the research grant by means of a Rector's Act, upon written notification.

Art. 11. – The total remuneration/payment is settled at € **38.734,00**, including social security (INPS - National Institution of Social Security) dependent on the employee, and **will be split into deferred monthly payments**.

The grant is not subject to income tax contribution (IRPEF), as per Art. 4 of Law no. 476 of August 13th, 1984, and it is subject to social security regulations, as per Art. 2, paragraphs 26 and fol., of Law no. 335 of August 8th, 1995.

Grantees' tasks, formalized by means of individual contracts, are carried out under the supervision of the Project Responsible, who will monitor the developed activities.

Any other amount due for **business trip** refund - for which specific regulations apply - should be charged to the relevant allowances of the authorizing Department.

Art. 12. - Pursuant to the Law no. 241 of August 7th, 1990, the Competition Manager for the present competition procedures is: Dr. Alessandro Cava, Recruitment Manager.

With regards to the provisions in accordance with the Legislative Decree no. 196 of June 30th, 2003, the University is committed in respecting the confidential nature of the personal data provided by the candidates: “the personal data provided will be handled only for the purposes connected to the present competition, to the possible drawing up of the contract and the relationship with the University”.

Art. 13. - For anything not included in the present Competition, shall apply all laws and regulations in force in Italy about public competitions and the Regulation of Research Grant for cooperation in research activities.

Art. 14. - This Notice of Competition shall be published and posted to the Official Notice Board of the University of Milano-Bicocca.

THE RECTOR
Prof.ssa Maria Cristina Messa

Attachment A

DEPARTMENT OF BIOTECHNOLOGY AND BIOSCIENCES - Research grants allocated no. 4

Candidate profile	Curricular requirements	Interview
Junior	Research experience (at least two years) in fields related to the topic of the project. The attendance of PhD courses related to the research topic will be positively evaluated	Evaluation of titles. Discussion on the project, past research experiences and skills acquired. English evaluation

Topics of the Department:

Yeasts as cell factories: learning how to leverage cellular potential for matching industrial requirements	(CHIM/11)
Mechanism of R-loops formation and their role in neuronal cell homeostasis	(BIO/11)
The endocannabinoid system as new therapeutic approaches for Alzheimer disease	(BIO/14)
Identification of NFAT-responsive genes involved in cancer initiating cells biology	(MED/04)
Functional identification of a Sox2-dependent transcriptional program controlling the self-renewal of neural stem cells	(BIO/18)
Study of antibody-dependent cellular cytotoxicity in 3D glioblastoma cell culture mediated by targeted antibody nanoconjugates	(BIO/10)
In silico modelling of the inter- and intra-molecular interactions of the MRX complex in DNA double-strand break repair	(BIO/11)
Metabolic markers for development of personalized medicine approaches for breast cancer	(BIO/10)

Attachment B

DEPARTMENT OF PHYSICS "G. OCCHIALINI" - Research grants allocated no. 5

Candidate profile	Curricular requirements	Interview
Junior	Master degree on the field of Physics or Science of the Universe or Mathematics or Electrical engineering	The colloquium will evaluate the candidate's experience and aptitude for research, through a discussion on the proposed research topics to assess their scientific validity and coherence with the research topics active in the Department. A post-graduate research experience of at least two years will be positively evaluated

Attachment C DEPARTMENT OF COMPUTER SCIENCE, SYSTEMS AND COMMUNICATIONS - Research grants allocated no. 4

Candidate profile	Curricular requirements	Interview
Junior	Two years of scientific activity relevant to the area of computer science, or related fields	Discussion of the research project presented by the candidate and assessment of the experience in the required scientific areas
Senior	Ph.D in computer science or related fields; two years of scientific activity relevant to the area of the project	Discussion of the research project presented by the candidate and assessment of the experience in the required scientific areas

Attachment D

DEPARTMENT OF MATHEMATICS AND ITS APPLICATIONS - Research grants allocated no. 3

Candidate profile	Curricular requirements	Interview
Junior	Master degree, Ph. D. in Mathematics, Physics or Engineering, post-doctoral fellowships	The interview will concern the applicant's scientific activity and her/his research project. The applicant will be asked to give a brief (some 15 minutes) presentation of her/his scientific activity and project, possibly by means of slides. Her/his knowledge of the English language will be tested

Attachment E DEPARTMENT OF MEDICINE AND SURGERY (School of Medicine and Surgery) - Research grants allocated no. 8

Candidate profile	Curricular requirements	Interview
Junior	Possession of the research doctoral degree or enrollment last year of PhD	Knowledge and experience related to the presented project. Attitude to conduct research projects. Abilities to discuss in english about the topics related to the research project
Senior	Candidates with a Ph.D degree, (when conferred by foreign institutions/Universities, the Ph.D has to be validated as equivalent "equipollente" to an Italian degree), or with a Postgraduate Medical School degree. Applicants should also have a minimum of two years' experience in the scientific activities of the foreseen research topics. When the research topics are not such as to require a Ph.D. degree, candidates are required six years' experience in scientific activities, two of which have to be related to the research topics; candidates also have to submit proof of the six years' experience (former research fellowships/grants/contracts; publications).	Knowledge and experience related to the presented project. Attitude to conduct research projects. Abilities to discuss in english about the topics related to the research project

Attachment F

DEPARTMENT OF PSYCHOLOGY - Research grants allocated no. 5

Candidate profile	Curricular requirements	Interview
Junior	PhD; Knowledge of English language	Discussion, also in English, of the research project presented by the candidate; evaluation of its relevance to active research lines in the Department; evaluation of the experience of the candidate in the relevant subject areas

Attachment G

DEPARTMENT OF MATERIALS SCIENCE - Research grants allocated no. 6

Candidate profile	Curricular requirements	Interview
Junior	Master degree, PhD; research activity and experience in the following fields: Highly porous molecular materials for methane storage and CO2 capture, defect simulation in oxides and oxide surfaces by first principle calculations, growth and physical properties of organic molecular nanostructures and thin films, organic synthesis in micellar nanoreactors, interaction between tear film and contact lenses for the release of bioactive molecules, first principles atomistic simulations of materials for microelectronic and energy applications, optical spectroscopy of semiconductors for optoelectronics and spintronics, development of solution processed growth of inorganic chalcogenide solar cells and related tandem cells, modification of natural macromolecules by polymer grafting via controlled polymerization, molecular materials and nanomaterials for photovoltaic applications.	Interview on the research project and evaluation of experience on the in the field; knowledge of the English language
Senior	Master degree, PhD; research activity and experience in the following fields: Highly porous molecular materials for methane storage and CO2 capture, defect simulation in oxides and oxide surfaces by first principle calculations, growth and physical properties of organic molecular nanostructures and thin films, organic synthesis in micellar nanoreactors, interaction between tear film and contact lenses for the release of bioactive molecules, first principles atomistic simulations of materials for microelectronic and energy applications, optical spectroscopy of semiconductors for optoelectronics and spintronics, development of solution processed growth of inorganic chalcogenide solar cells and related tandem cells, modification of natural macromolecules by polymer grafting via controlled polymerization, molecular materials and nanomaterials for photovoltaic applications.	Interview on the research project and evaluation of experience on the in the field; knowledge of the English language

Attachment H

DEPARTMENT OF STATISTICS AND QUANTITATIVE METHODS - Research grants allocated no. 2

Candidate profile	Curricular requirements	Interview
Junior	Master's degree and research experience on the subject of the project. The research projet that the candidate proposes must deal with topics within the research areas of the department.	The interview will be a discussion on the candidate's research project proposed and his/her knowledge and acquired experiences. Test of English language
Senior	Master's degree and research experience on the subject of the project. The research projet that the candidate proposes must deal with topics within the research areas of the department	Interview about qualifications, research activity of the candidate and research project proposed. Test of English language.