

PUBLIC COMPETITION FOR THE AWARD OF NO. 26 RESEARCH GRANTS FOR COOPERATION IN RESEARCH ACTIVITIES, A2-TYPE, WITH A DURATION OF NO. 24 MONTHS.

Cod. A2-2021

THE RECTOR

HAVING REGARD TO Law no. 168 of May 9, 1989;
 HAVING REGARD TO Rector's Decree prot. no. 0010332/15 of March 03, 2015, and further modifications, concerning the Statute of the University of Milano-Bicocca;
 HAVING REGARD TO Law no. 240 and further modifications, art. 22 of December 30, 2010, which provides for the assignment of research grants for cooperation in research activities, within the available budget;
 HAVING REGARD TO Rector's Decree no. 4694/2020 prot. 0048412/20 of July 31, 2020, concerning the regulation of Research Grant for cooperation in research activities;
 HAVING REGARD TO Ministerial Decree no. 102 of March 9, 2011, fixing the amount of the grant and the comparative assessment methods;
 HAVING REGARD TO University's Official Notice Board regulations, as per the Rector's Decree no. 14405 of June 1, 2006, which guarantees the legal publication of any University documents;
 HAVING ACQUIRED the Boards of Governors' decision taken on July 20th, 2021, according to the indications deliberated by Academic Senate's taken in the July 9th, 2021 and with the budget availability, to allocate no. 57 Research Grants for cooperation in research activities, split up among the different Departments;
 HAVING ACQUIRED the Departments Board's resolutions;
 WHEREAS the Head of Human Resources confirms the regularity and legality of the provision herewith;

DECREES WHAT FOLLOWS:

For the reasons indicated in the preamble to this provision and which are deemed to be fully reported herein:

Art. 1. - The University of Milano-Bicocca hereby announces a public Competition, with assessment of degrees and qualifications, for the assignment of **no. 26 Research Grants for cooperation in research activities, A2-type, with a duration of 24 months, split up among the Departments as follows:**

DEPARTMENT	no. A2 Junior	no. A2 Senior	Tot.	Attachment
Biotechnology and Biosciences	4	0	4	A
Physics "G. Occhialini"	3	0	3	B
Informatics , Systems and Communication (DISCo)	3	1	4	C
Mathematics and its Applications	3	0	3	D
Medicine and Surgery	3	1	4	E
Psychology	5	0	5	F
Materials Science	3	0	3	G
TOT.	24	2	26	

Art. 2. – Applicants holding a doctoral degree (Ph.D) and/or a Postgraduate Medical School degree, can submit their application; when conferred by foreign institutions/Universities, the Ph.D degree has to be validated as equivalent

“equipollente” to an Italian degree. 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.

The kind of research fellowship contracts is as follows:

- **Junior:** reserved for candidates who, within the deadline for submission of applications as indicated in the following art. 3, have obtained a research doctorate or medical specialization degree by no more than four years; this limit is increased by 5 months for each child born before or after the completion of the degree. Moreover, PhD students may apply for admission, provided they have submitted the application for attainment of the title within the deadline of this call: in case this candidate is appointed as the winner, the research grant contract will start on the first day of the month after the PhD degree was obtained.
- **Senior:** reserved for candidates who, in addition to having attained the doctorate title or the medical specialization degree, have carried out at least 4 years of scientific activity relevant to the subject of the grant; the experience must be proven by one or more reports or research collaboration contracts, as well as documented by scientific publications.

Applicants must have the following requisites:

- knowledge of a foreign language as chosen by each Department.

The above requirements must be possessed within the application deadline. Applicants will be admitted to the selection process subject to conditions.

Staff employed in Universities and in other bodies indicated in article 22 of Law no. 240 of December 30, 2010, as well as recipients of other research grants and other scholarships awarded for any reason are not eligible, unless they are renounced, if awarded. This allowance is not compatible with participation, in Italy or abroad, in university degree courses (Laurea Magistrale or Laurea Specialistica), medical specialisation schools or university master's degrees, and entails unpaid leave of absence for employees working for public administrations.

Recipients of research grants may attend PhD courses in academic disciplines related to the research activities associated with the grant, pursuant to the University Regulations for the establishment and operation of PhD courses and PhD schools. The research grant contract is in any case incompatible with a PhD grant.

Throughout the duration of the grant, temporary or continuous employment is prohibited.

The following applicants are not eligible for selection:

- Applicants who have a relationship or a kinship, up to and including the IV degree, with a professor of the recruiting Department, the Rector, the Director General, or a member of the Board of Directors,
- Applicants who are excluded from the enjoyment of civil and political rights, who have been dismissed or disqualified from employment with a Public Administration for persistent inadequate performance, who have been declared debarred from another state job, pursuant to Article 127 letter d) of the Decree of the President of the Republic No. 3 of January 10, 1957, or who have been dismissed for having obtained employment by producing false documents or by fraudulent means,
- Recipients of convictions that have become final, including convictions following plea bargaining, or irrevocable criminal sentences for offences against the Public Administration.

In case of applicants with outstanding criminal proceedings for crimes against the Public Administration, the University will evaluate their admission to the selection procedure.

With reference to art. 22, paragraph 3 of Law no. 240 of December 30, 2010 mentioned above, and to the provisions of art. 1 of this call, the grant has an effective duration of no. 24 months, possibly renewable, and cannot be cumulated with scholarships of any kind, except for those granted by national or foreign institutions useful to integrate, with stays abroad, the research activity of the recipients. The total duration of the relationships established in accordance with art. 22 of Law no. 240 of December 30, 2010, including any renewals, cannot in any case exceed

6 (six) years, excluding the period in which the grant was used in conjunction with the PhD, within the maximum legal duration of the relative course.

Applicants who, having already been awarded research grants based on the regulations in force, cannot guarantee full coverage of the period of research envisaged will therefore be excluded from this selection procedure.

The total duration of the relationships established with the recipients of the grants referred to in the present article and of the contracts referred to in art. 24 of Law no. 240 of December 30, 2010, also with other state, non-state, or online Universities, as well as with the bodies listed in paragraph 1 of art. 22 of Law dated December 30, 2010, with the same subject, cannot in any case exceed twelve (12) years, even if not continuous. In compliance with the law in force, any period of maternity or health leave are not relevant to calculate the duration of the above-mentioned relationship.

Art. 3. - The submission of the application, together with the qualifications, documents and publications considered useful for the procedure, **must be made exclusively online, under penalty of exclusion, by accessing the following link:** <https://pica.cineca.it/unimib/bando-assegno-di-ricerca-a2-2021>.

The applicant may register and access the platform by using the *Sistema Pubblico di Identità Digitale* (SPID – Public System of Digital Identity - security level 2), selecting Università degli Studi di Milano-Bicocca. If the applicant does not have one, he/she may apply according to the procedures indicated on the website www.spid.gov.it.

Alternatively, applicants may register and log in using the credentials issued directly by the platform or authenticate themselves with their LOGINMIUR, REPRISSE or REFEREEES account, if available.

The online platform will necessarily require an e-mail address in order to be able to register with the system.

The applicant shall enter all the data required to produce the application and attach the documents in PDF format.

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;**
- **declaration concerning having or not having received criminal convictions and of having or not having pending criminal proceedings; in the affirmative case, specify the crime, and whether the sentence has become final, or if the criminal proceedings are in progress and if there have been any additional penalties imposed, specify which ones.**

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 November 23rd, 2021, not later than 13:00 (Rome time).**

In case of access by SPID, the application may be submitted without any need for a signature and will be automatically acquired by the system. In case of access with other credentials accepted by the system, the submission of the application must be completed and concluded as follows:

- **by digital signature**, using smart cards, USB tokens or remote signatures, which allow the holder to sign generic documents by using a PC-based signature software or a web portal for Remote Signature made available by the Certifying Authority. In case of a smart card or a USB token for Digital Signature, it is possible to check its compatibility with the Digital Signature system integrated in the server system. In case of positive result, the holder can sign the application directly on the server (e.g. Con Firma – With signature);

- **those who do not have compatible digital signature devices and Remote Digital Signature Holders** who have access to a portal for signing generic documents, shall save the PDF file generated by the system on their PC and, without modifying it in any way, digitally sign it in CADES format: a file with .p7m extension will be generated and shall be uploaded again on the system. Any modification made to the file, before the Digital Signature is affixed, will prevent the automatic verification of correspondence between the content of the aforesaid document and the original, and this will result in the exclusion from the selection;
- **if it is not possible to use one of the above options**, the applicant must save the PDF file generated by the system on his/her PC and, without modifying it in any way, print it out and affix a complete handwritten signature on the last page of the printout. This complete document must be produced in PDF format by scanning, and the file thus obtained must be uploaded to 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 grade and 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:

a) 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;

b) 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 <https://www.unimib.it/assegni-ricerca> within January 14th, 2022 (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 **February 1st, 2022 (unless otherwise indicated)**, at the following link: <https://www.unimib.it/assegni-ricerca>, 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.

The Interviews will be held exclusively online. When submitting their application, candidates shall enter their e-mail/telematic contact (Skype, Cisco Webex Meetings, Google Hangouts or Google Meet) for the configuration of the online interview.

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 for each kind (Junior and Senior), 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 March 1st, 2022**.

In the case of a foreign winner, the starting date is postponed until the acquisition of the residence permit (Permesso di Soggiorno).

The University will notify the winner of the award of the research grant.

Art. 9. - **In order to avoid exclusion**, within **20 (twenty) days** from the notification of the award, the recipient has to sign a specific self-employment contract, specifying terms and conditions of the relationship to be established.

If the selected candidate fails to make any communication within the time limit or decides to withdraw, or does not sign the contract within 20 days, the research grant shall be awarded to the applicant following the winner in the ranking list. The ranking list will be valid 120 (one hundred and twenty) days after the approval of the acts.

If the recipient decides to withdraw from the contract, he/she must send a 15 days' notice to the Rector, the Scientific Project Head, and the Director of the recruiting Department. The payment related to the last month shall be commensurate with the period of the activity carried out. Failure to give notice or late notice will result in the deduction of one month's allowance as indemnity for lack of notice.

In cases of serious non-compliance reported by the Scientific Project Head and/or upon request of the recruiting Department Board, the contract may be terminated by the Rector, after consultation with the person concerned.

The contract is automatically terminated in the following cases:

- unjustified failure to start or delay of the activity;
- early termination of the research activities
- suspension and/or absence, even if not continuous, that continues for a period exceeding one-sixth of the duration established in the contract;
- serious violation of the regime of incompatibilities established by Article 2;
- negative evaluation expressed by the Department Board on the research activity;
- violation of the obligations arising from the Code of Conduct for public employees according to the Decree of the President of the Republic 62/2013 and the Code of Conduct of Università degli Studi di Milano-Bicocca.

The award of the Grant involves the realization of the research program as indicated by the candidate, chosen among

the Scientific Subjects listed above, under the supervision of the correspondent Scientific Responsible.
Grant entitlement does not constitute a subordinate employment relationship and does not give rise to rights in order to access university teaching positions.

This relationship is not part of the institutional configuration of university teaching and of the role of university researchers, and therefore cannot be useful for admittance to university tenure.

Art. 10. - Research grant recipients not complying with the provisions of this call shall be declared ineligible by Rector's decree, subject to written objection.

Art. 11. – **The gross amount of the research grant payable** to the collaborator, net of charges to be borne by the Administration, shall be € **39.708,00** and **shall be split into deferred monthly payments.**

The grant is exempt from IRPEF (tax on personal income) pursuant to art. 4 of Law no. 476 of August 13, 1984, and is subject, with regard to social security, to the provisions of art. 2, paragraphs 26 et seq. of Law no. 476 of August, 8, 1995, of Law no. 335 of August 8, 1995, as amended; with regard to compulsory maternity leave, to the provisions of the decree of the Minister of Labour and Social Security of July 12, 2007, published in the Official Journal no. 247 of October 23, 2007; and, with regard to sick leave, Article 1, paragraph 788, of Law no. 296 of December 27, 2006, as amended. During the period of compulsory maternity leave, the allowance paid by INPS pursuant to article 5 of the aforementioned decree of July 12, 2007, shall be supplemented by the University up to the full amount of the research grant. All additional amounts will be borne by the recruiting Department.

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.

Each year the University provides insurance coverage for accidents and third-party liability for the recipients of research grants as part of their research activities.

The grant holder's mission expenses shall be paid from the funds of the Scientific Project Head or of the recruiting Department, in accordance with the provisions of the University regulations on missions.

Art. 12. - Pursuant to Law no. 241 of August 7, 1990, the person responsible for this selection procedure is Alessandro Cava, Head of the Recruitment Sector, Ed. U6, P.zza Ateneo Nuovo 1, 20126 - Milan.

Pursuant to Legislative Decree no. 196 of June, 30, 2003 and EU Regulation 679/2016, the processing of personal data provided or otherwise acquired by the University is aimed solely at carrying out this selection and it will be carried out by authorised personnel, using procedures, including IT procedures, in the manner and within the limits necessary to pursue the aforementioned purposes. The data will be stored in accordance with the rules on the conservation of administrative documentation. The data controller is Università degli Studi di Milano-Bicocca in the person of the Rector, Legal Representative, with registered office in Piazza dell'Ateneo Nuovo, 1 – 20126 Milano.

Art. 13. - For anything not included in this notice concerning the selection procedure, reference is made to all Italian laws on public competitions and to the Regulation for the activation of research grants mentioned above.

Art. 14. - This Call for Application shall be published and posted on the Official Notice Board of Università degli Studi di Milano-Bicocca and on the Ministry and European Union websites.

THE RECTOR
Giovanna Iannantuoni

UOR: Head of Human Resources: Maria Bramanti

Selection Manager: Alessandro Cava

Treated by: Roberta Montingelli

DISCLAIMER: The English version is a translation of the original in Italian and is intended for information purposes only. In case of discrepancies, the Italian version prevails.

Attachment A

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

Candidate profile	Curricular requirements	Interview
Junior	Proven research experience of at least two years in topics / methodologies relevant to the topic of the call. A PhD degree consistent with the research topic will also be positively considered	Discussion and assessment of candidate's scientific skills and career, discussion of the project presented by the candidate. Assessment of the English language

Topics of the Department:

1. BIO/09 - Physiological mechanisms underlying neuronal differentiation induced by scalable thermal stimulation
2. BIO/10 - Design and synthesis of nonviral nanovectors for breast cancer targeting by microfluidics technology
3. BIO/10 - Exploiting biodiversity of organisms from cold environments to obtain biocatalysts and molecules of relevance in biotechnology
4. BIO/10 - Biochemistry of cadmium neurotoxicity in differentiated neuronal cells and in a neuronal-astrocytes-microglial co-culture model
5. BIO/10 - Studying the role of protein O-glycosylation in DNA damage response and cancer chemoresistance
6. BIO/10 - Deciphering the role of neuroinflammation and metabolic dysfunction in Parkinson's disease for new therapeutic perspectives
7. BIO/11 - Unrevealing the anti-aging and anti-obesity properties of the cyanobacterium *Spirulina (Arthrospira) platensis*
8. BIO/11 - Computational methods applied to the investigation of complex molecular mechanisms

8. BIO/11 - Bioactive compounds and longevity: evaluation of the effects of flavonols and stilbenes through the model of chronological aging in yeast
10. BIO/12 - Synthesis and characterization of nano- and micro-formulations for the microplastic substitution for cosmetics and agritech
11. BIO/18 - Study of chromatin remodeling in the DNA damage response
12. BIO/19 - Design, characterization and modulation of defined intestinal microbial communities to model host-microbiota interactions in the presence of prebiotics and probiotics
13. CHIM/06 - Multifunctional modulators of enzyme activity: towards multi-target drugs
14. CHIM/10 - Development of mass spectrometry-based metabolomics methods as foodomics tool in food safety, quality and traceability
15. INF/01 - Development and application of multi-omics data integration methods and predictive modeling for industrial and biomedical biotechnologies
16. MED/04 - Deciphering the dynamic cross-talk between cancer stem cells and the tumor immune microenvironment

**Attachment
B**

DEPARTMENT OF PHYSICS "G. OCCHIALINI" - Research grants allocated no. 3

Candidate profile	Curricular requirements	Interview
Junior	The graduation mark and the research experience in Physics will be evaluated	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 assesment of the candidate's experience in the considered research field
Junior	Four years of scientific activity relevant to the area of computer science, or related fields	Discussion of the research project presented by the candidate, and assesment of the candidate's experience in the considered research field

**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. 4

Candidate profile	Curricular requirements	Interview
Junior	As indicated in the University bylaws	<ul style="list-style-type: none"> • 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	As indicated in the University bylaws	<ul style="list-style-type: none"> • 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 • Past experience in the context of research

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. 3

Candidate profile	Curricular requirements	Interview
Junior	<p>"Master's degree and PhD degree; research activities and previous skills and experience in the following fields: growth and study of the physical properties of organic thin films and heterostructures; organic materials for photo(electro)catalytic devices for generation of green H₂ and other solar fuels; modeling of oxide semiconductors photocatalysts for the conversion of CO₂ and H₂O to solar fuels; porous nanostructured materials responsive to chemical and light stimuli; novel materials for thermoelectric applications; recovery and reuse of rare earths from e-waste; flexible membranes for controlled ion transport; machine learning strategies applied to the design and management of batteries; tear fluid biomarkers in ocular and systemic diseases; tears and contact lenses from a tribological/rheological viewpoint and in vivo performance; optical spectroscopy of nanomaterials for green-energy applications</p>	<p>Interview on the research project and evaluation of experience in the field, knowledge of the English language</p>