

## PUBLIC COMPETITION FOR ASSIGNMENT NO. 30 RESEARCH GRANTS FOR COOPERATION IN RESEARCH ACTIVITIES, A2-TYPE, WITH A DURATION OF NO. 24 MONTHS. Cod. A2-2020

#### THE RECTOR

CONSIDERING	the Law no. 168 of May 9 <sup>th</sup> , 1989;
CONSIDERING	the Rector's Decree no. prot. 0010332/15 of March 3 <sup>rd</sup> , 2015, concerning the Statute of the
	University of Milano-Bicocca;
CONSIDERING	the Law no. 240 and further modifications, art. 22 of December 30 <sup>th</sup> , 2010 which provides
	for the assignment of research grants for cooperation in research activities, within the available budget;
CONSIDERING	
CONSIDERING	the Rector's Decree no. 4694/2020, prot. 0048412/20 of July 31 <sup>th</sup> , 2020, 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 1 <sup>st</sup> , 2006, which guarantees the legal publication of any University documents;
HAVING ACOUIRED	the Boards of Governors' decision taken on June 30 <sup>th</sup> , 2020, according to the indications
	deliberated by Academic Senate's taken in the June 29th, 2020 and with the budget
	availability, to allocate no. 30 Research Grants for cooperation in research activities, split up
	among the different Departments;
HAVING ACOUIRED	the Departments Board's resolutions;
ACKNOWLEDGED	that Manager of the Personnel Department confirms the regularity and legality of the
	provision herewith;

#### **DECREES WHAT FOLLOWS:**

Based on the grounds set out in the recitals of the provision herewith and hereafter fully quoted:

**Art. 1.** - The University of Milano-Bicocca hereby announces a public Competition, with assessment of degrees and qualifications, for the assignment of no. 30 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	6	0	6	А
PHYSICS "G. OCCHIALINI"	3	0	3	В
INFORMATICS, SYSTEMS AND COMMUNICATION	1	0	1	С
MATHEMATICS AND ITS APPLICATIONS	3	0	3	D
MEDICINE AND SURGERY	5	1	6	Е
PSYCHOLOGY	6	0	6	F
MATERIALS SCIENCE	5	0	5	G
тот.	29	1	30	

**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, not more than 4 years after obtaining the first qualification (research doctorate or medical specialization); 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.
- <u>Senior</u>: 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 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 30<sup>th</sup>, 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, 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.

The selection procedure does not admit those who are excluded from the active political electorate and those who have been dismissed or released from a public administration for consistently inadequate performance, or have been declared lapsed by a state employment, pursuant to art. 127, first paragraph, letter d) of the Consolidation Act of the provisions concerning the statute for civil servants of the State, approved by the Presidential Decree. 10.1.1957, n. 3 and those who have been dismissed for having obtained employment through the production of false documents and in any case by fraudulent means.

The recipients of convicted sentences, including judgments pronounced as a result of plea bargaining, or irrevocable criminal convictions for crimes against the Public Administration are also not admitted to the selection process.

In case of applicants with outstanding criminal proceedings for crimes against the Public Administration, the University will evaluate their admission to the selection process. In accordance with art. 22, paragraph 3, of Law 240 of December 30<sup>th</sup>, 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 30<sup>th</sup>, 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 30<sup>th</sup>, 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.** - <u>Under penalty of exclusion applications</u> for participation in the competition, along with the relevant qualifications held and the relevant scientific publications, <u>shall be submitted online through the following online</u> **application procedure**: https://pica.cineca.it/unimib/bando-assegno-di-ricerca-a2-2020.

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;
- 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 <u>November 20<sup>th</sup>, 2020, not later than 13.00</u> (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 <u>JUNIOR</u> candidate will be evaluated as follows:

- a) **DEGREES and QUALIFICATIONS** (up to 45 points):
  - up to **5** points for final grade and 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 **<u>SENIOR</u>** 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 <u>https://www.unimib.it/assegni-ricerca</u> within January 12<sup>th</sup>, 2021 (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 1<sup>st</sup>, 2021 (unless otherwise indicated), at the following link: <u>https://www.unimib.it/assegni-ricerca</u>, 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 performed remotely. In the application procedure Candidates must communicate their e-mail address/the details of their video conference tools to set up video conferencing.

**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 <u>www.unimib.it</u>, 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 1<sup>st</sup>, 2021.

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 loose 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  $\in$  39.708,00, 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 13<sup>th</sup>, 1984, and it is subject to social security regulations, as per Art. 2, paragraphs 26 and fol., of Law no. 335 of August 8<sup>th</sup>, 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 7<sup>th</sup>, 1990, the Competition Manager for the present competition procedures is: Dr. Alessandro Cava, Recruitment Manager.

Pursuant to Italian Legislative Decree 30/06/2003 no. 196 and to European Regulation no. 2016/679, the processing of your personal Data (received from you or otherwise acquired by the University) is carried out specifically for the purposes connected to the present selection procedure. For the proper performance of the Data Processing referred to in this Privacy Information Notice, your Data will be only handled by authorized employees of the University of Milano-Bicocca by means of suitable electronic tools, with logic strictly related to the aforementioned purposes. The Data will be stored in accordance with the relevant Regulations on administrative documentation storage and retention. The Data Controller for the University of Milano-Bicocca is the Rector, Legal Representative, with registered office in Piazza dell'Ateneo Nuovo 1, Milano.

**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 Giovanna Iannantuoni

UOR: Personnel Department - Head of Human Resources Elena La Torre Competition Manager: Alessandro Cava Treated by: Alessandro Cava



#### DEPARTMENT OF BIOTECHNOLOGY AND BIOSCIENCES - Research grants allocated no. 6

(	Candidate profile	Curricular requirements	Interview
		at least two vears in tonics / methodologies relevant to the tonic of the call A	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:

Role of calcineurin in affecting the tumor microenvironment and the response to immune checkpoint inhibitors

Development of small molecular activators of SERCA2a: towards a new generation of therapeutics

Investigating the contribution of the DNA damage repair pathway to neurodegeneration in ALS/FTD models

Brain gene regulation in 3D: long-range promoter-enhance functional interaction networks in mouse brain-derived neural stem cells, and their relevance for neurodevelopmental disease

Development of anticancer druggable compounds from a chemically liable potent lead FR054

Urban functional agrobiodiversity to support pollinators and human diet quality

Unrevealing the anti-aging and anti-obesity properties of the cyanobacterium Spirulina (Arthrospira) platensis

Computational investigation of the molecular determinants responsible for enzymatic electron bifurcation: towards the design of molecular devices for biotechnological applications

Depicting the conformational ensemble of a-synuclein and its response to ligands by native mass spectrometry and single-molecule spectroscopy.

Geneless optomodulation for the treatment of cardiac arrhythmias.

Crosstalk between neuroinflammation and disruption of metabolism and redox homeostasis in models of Parkinson disease

Exploiting DNA damage response protein O-glycosylation to enhance chemotherapy in pancreatic cancer



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. 1

Candidate profile		Curricular requirements	Interview
	Junior		discussion of the research project presented by the candidate and assesment of the experience in the required



## Attachment 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. 6

Candidate profile	Curricular requirements	Interview
Junior	Degree, PhD and research experience	<ul> <li>Knowledge and experience related to the presented project</li> <li>Attitude to conduct research projects</li> <li>Abilities to discuss in english about the topics related to the research project</li> </ul>
Senior	Degree, PhD and research experience	<ul> <li>Knowledge and experience related to the presented project</li> <li>Attitude to conduct research projects</li> <li>Abilities to discuss in english about the topics related to the research project</li> <li>Past experience in the context of research</li> </ul>



#### Attachment F

## DEPARTMENT OF PSYCOLOGY - Research grants allocated no. 6

Candidate profile	Curricular requirements	Interview
Junior	PhD, Khowledge 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. 5

Candidate profile	Curricular requirements	Interview
Junior	Master's degree and PhD degree; research activities and previous skills and experience in the following fields: gas capture in porous flexible frameworks; DFT modeling of oxide semiconductors for photo-assisted conversion of CO2 to liquid fuels; materials for thermoelectric applications; modeling of metal oxide nanoparticles for energy, environment and health; thin films of organic molecular semiconductors; Atomic Layer Deposition of thin films and coatings for energy harvesting and conversion; filters for atmospheric water harvesting; colloidal nanomaterials for photovoltaic applications; chirality in the non-equilibrium dynamics of low-dimensional topological systems; organic materials for photo(electro)catalytic devices for reduction of water and CO2; bioplastics in a circular economy	Interview on the research project and evaluation of experience in the field, knowledge of the English language