



UNIVERSITÀ
DEGLI STUDI
DI BERGAMO

Area
Risorse Umane

Gestione carriere
e concorsi
Assegni di ricerca

CHANCELLOR'S DECREE

Data that can be deduced from the registration in the protocol:
Repertoire Number, Protocol Number, Title,
Class File Attachments and References

Object: Public selection based on qualifications and interview for the awarding of no. 5 Early stage grants lasting 12 months for conducting research pursuant to art. 22 of law no. 240/2010 at the Departments of University of Bergamo within the framework of the 2021 STARS Departmental - CUP: F59C20000390001 - TYPE A - PICA CODE 22AR007

THE CHANCELLOR

GIVEN Law No. 168 of 9 May 1989 laying down rules on the "Establishment of MIUR";
GIVEN Law No. 240 of 30 December 2010 "Norms in terms of organization of universities, of academic personnel and their recruitment, as well as mandate to the Government to subsidize quality and efficiency of academic systems", in particular art. 22 on research grants;
GIVEN the Statute of the University of Bergamo enacted with Chancellor's Decree Index No. 92/2012 of 16 February 2012;
GIVEN the University's current Regulations for awarding grants for conducting research;
GIVEN Ministerial Decree Prot. No. 102 of 09 March 2011, recorded at the Court of Auditors on 13 May 2011, which revalued the minimum gross annual amount of grants for conducting research;
GIVEN Decree-Law No. 192 of 31 December 2014 "Extension of terms provided for by legislative provisions", converted, with amendments, by Law No. 11 of 27 February 2015 and, in particular, Art. 6 paragraph 2 bis which extended by two years the total duration of grants established under Art. 22 of Law No. 240/2010, taking it from four to six years;

Referring also to:

- the University's Code of Ethics issued with Chancellor's Decree. Prot. No. 14405/I/003 of 19.7.2011 and amended with Chancellor's Decree. Rep. No. 262/2018, Prot. No. 60030/I/003 of 12.4.2018;
- the University's Regulations on research integrity and ethics, enacted with Chancellor's Decree Index No. 387/2016 of 18 July 2016;
- the University's Patent Regulations enacted with Chancellor's Decree Index No. 390/2016 of 19 July 2016 and amended with Chancellor's Decree Index No. 158/2018 of 26 February 2018 and with Chancellor's Decree Index No. 421/2020, of 9.9.2020;

GIVEN the resolution of the Academic Senate of 26.10.2020 which approved the design proposals arrived following the notice of the Research Service;
ACQUIRED the resolutions of the Councils of the Structures involved which approved the research projects and resolved on the requirements for candidates' admission to the selection;
ASCERTAINED the financial backing on the Bank account progetto di ricerca di Ateneo STaRs (Supporting Talented Researchers) dipartimentali 2021 (CUP: F59C20000390001 - progetto UGOV: STARS21AZ1JRDIP per i progetti annuali);

DECREES



Article 1 Call for public selection

5 public selections are launched based on qualifications and interview for the awarding of No 5 grants lasting 12 months each for conducting research pursuant to Art. 22 of L. No. 240/2010 with a contract under private law at the research structures of the University of Bergamo as indicated hereafter:

CODE	TYPE	DE-PARTMENT	TITLE	A.R.F.	A.D.	TUTOR
1	A	Engineering and Applied Sciences (deliberation 26.05.2021)	<i>High-order methods for fluid-structure interaction</i>	09/A1 Aeronautical and Aero-space Engineering and Naval Architecture	ING-IND/06 Fluid Dynamics	Prof. Lorenzo Botti
2	A	Letters, Philosophy, Communication (deliberation 24.09.2021)	<i>MULIERUM GRAECARUM QUAE ORATIONE PROSA USAE SUNT FRAGMENTA ET ELOGIA GRAECE ET LATINE by Johann Christian Wolf: study of a collection so far ignored for an inclusive canon of ancient philosophy</i>	11/C5 History of philosophy	M-FIL/07 History of ancient philosophy	Prof.ssa Madalena Bonelli
3	A	Economics (deliberation 26.01.2022)	<i>Machine Learning Approach for Social Sciences</i>	13/A2 Economic policy	SECS-P/02 Economic policy	Prof.ssa Piera Bello
4	A	Law (deliberation 16.12.2021)	<i>Discrimination in the tax system: appropriateness and legal constraints</i>	12/D2 Tax Law	IUS/12 Tax Law	Prof. Gianluigi Bizzioli
5	A	Human and Social Sciences (deliberation 26.01.2022)	<i>A Stepped Care Approach with Routine Outcome Monitoring for Psychological Intervention among Outpatients with Cardiac Diseases</i>	11/E4 Clinical and Dynamic Psychology	M-PSI/08 Clinical Psychology	Prof. Angelo Compare

For each grant the annual gross amount charged to the recipient is equal to € 20.172,00 and is paid to the contract holder in monthly instalments of equal amount.

The research projects are described in Annex A of this call constituting an integral part hereof.

Article 2 Requirements for admission to the selection

The selection procedure is open to **scholars in possession of a professional scientific curriculum suitable for conducting the scientific research provided for by this call, as well as of the following requirements:**

- **2nd cycle degree: Diploma di Laurea Specialistica (LS) or Laurea Magistrale (LM)** and equivalent qualifications, **or Diploma di Laurea (DL)** obtained according to the procedures preceding the entry into force of Ministerial Decree 509/1999 and following amendments and integrations and equivalent qualifications for admission to public competitions (**see the following table**).

To establish the equivalence among **Diploma di Laurea (DL)** and **Diploma di Laurea Specialistica (LS) or Laurea Magistrale (LM)**, it is possible to refer to the following link: <http://attiministeriali.miur.it/UserFiles/3160.pdf>



The Decrees that govern the equivalence among Italian academic qualifications for participating in public competitions are available at the following link: <http://hubmiur.pubblica.istruzione.it/web/universita/equipollenze-titoli>

The qualifications obtained abroad must be recognised as valid in the Italian territory.

As regards qualifications obtained abroad that have not already been recognised in Italy with formal procedure pursuant to the applicable laws, the Commission is competent to assess the equivalence – as to the nature, level and subject correspondence (degree cycle or CUN Area for PhD qualifications) – to the qualifications required by this call, for the sole purposes of admission to the present selection. As regards qualifications obtained abroad, required by the call for the purpose of admission to this selection, the applicant is required as follows:

- in the event of qualifications already recognised as valid in the Italian territory, to indicate in the application the details of the provision attesting the occurred recognition pursuant to the applicable laws;
- in the event of qualifications not yet recognised, **to annex to the application a certified copy of the statement of qualification equivalence**, issued by the competent Italian diplomatic and consular authorities abroad, and the certificate of the exams taken or the supplement degree.

In order to ensure the widest participation in the selection, the applicant who is not in possession of the above documentation can annex a copy of the qualification with a translation into Italian or English; the candidate will have to submit the above documents within the terms peremptorily established by the Office under penalty of exclusion.

In the event of qualifications not yet recognised, the candidate is admitted if selected and, if winner, prior to signing the contract, must submit the documents requested by the office within the terms peremptorily established.

- **knowledge of one or more foreign languages (see the following table).**

Moreover, the applicant is also required:

- **to be at least 18 years old;**
- **to be in possession of civil and political rights;**
- **to have no criminal convictions or ongoing criminal proceedings that would prevent, in accordance with the regulations in force, the establishment of an employment relationship.**

For admission to the selections referred to in art. 1 the following specific requirements are also required:

CODE	SPECIFIC REQUIREMENTS	LANGUAGE
1	Diploma di Laurea Specialistica (LS) or Laurea Magistrale (LM) in Mechanical Engineering (classes 36/S or LM-33)	English
2	Diploma di Laurea Specialistica or Magistrale (ed equiparati) in Philosophical Sciences (Classe LM-78) or History of Philosophy (classe 96/S) or Philosophy and history of Science (classe 17/S) or Theoretical, moral, political and aesthetic Philosophy (classe 18/S) or in Philology, literature and history of antiquity (classe LM-15) or Philology and literature of antiquity (classe 15/S) or Laurea V.O. in Letters or V.O. Philosophy	English and French
3	Diploma di Laurea Specialistica o Magistrale (ed equiparati)	English
4	Diploma di Laurea Specialistica o Magistrale (ed equiparati) in Law (Classes LMG/01 or 22/S)	English
5	Diploma di Laurea Specialistica o Magistrale (ed equiparati) in Psychology (Classes LM-51 or 58/S)	English



The selective procedure does not allow admittance to:

- those who have a degree of kinship or affinity, up to and including the fourth degree, with a professor from the relevant structure, or with the Chancellor, the General Manager or a member of the University's Board of Directors;
- those who have been holders, including any renewals, of research grants awarded pursuant to Art. 22 of Law No. 240/2010 for a period which, added to the duration of the contract provided for by this call, exceeds a total of six years, except for the period in which the grant was used in coincidence with the PhD within the maximum legal duration of the relevant course;
- those who were contracted as research fellow or fixed-term researcher as per ss. 22 and 24 of Law 240/2010 at the University of Bergamo or other Italian public, private or online Athenaeums, as well as any other Body indicated in para 1 of s. 22 of Law 240/2010 for a length of time which, if summed to the duration of the contract in this announcement, exceeds 12 years in total, albeit not consecutive; periods of time spent on maternity or sick leaves do not count to the purpose of the duration of the aforementioned relationships, in accordance with current Laws;

The applicant enrolled in a Diploma di Laurea (DL), Diploma di Laurea Specialistica (LS), Laurea Magistrale (LM), PhD with study grant or medical specialisation in Italy or abroad can participate in the selection object hereof; should the applicant be the winner, the research grant will be awarded subject to withdrawal from studies or PhD study grant.

Pursuant to art. 22 paragraph 2 of Law 240/2010 can not be recipient of the grants the regular personnel at universities, institutions and public entities of research and experimentation, the Italian National Agency for new technologies, energy and sustainable economic development (ENEA) and the Italian Space Agency (ASI) and institutions whose scientific specialization diploma was recognised equivalent to a PhD pursuant to the fourth paragraph under article 74 of Presidential Decree of 11 July 1980, No. 382.

The holder of the grant can attend PhD courses whose subjects are related to the research activities connected with the grant, upon prior evaluation of the Structure of reference. However, the research grant is incompatible with the enjoyment of the PhD study grant.

These requirements must be met on the date of expiry of the deadline for submitting the application for the admission to this selection.

This Administration guarantees equality and equal opportunities between men and women as to access to employment and treatment at work.

Article 3 Exclusion from the procedure

The following reasons are causes of exclusion:

- lack of signature on the application form;
- lack of admission requirements as provided for by Art. 2;
- failure to meet the procedures for submitting the application as mentioned under the following Art. 4.

The applicant is admitted if selected; should additional investigations be necessary; the applicant must regularize his/her application within the time peremptorily established.

The Administration may decide to exclude the applicant from the selection launched with this call, at any time, by reasoned Chancellor's Decree.

Article 4 Terms and conditions for submitting application

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/unibg/>



The candidate will be able to register and access the platform using the Public Digital Identity System (SPID - security level 2). In case the candidate does not have one, he or she can request it according to the procedure indicated on the website www.spid.gov.it. Alternatively, the candidate can register and log in using the credentials released directly by the PICA platform.

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. 40 publications and a maximum of no. 40 other titles and qualifications.

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 the submission procedure must be completed by and no later than **12.00 (Italian time) on the thirtieth day** from the notice publication date on the University website. Should the indicated deadline fall on a non-business day, it shall be postponed no later than 12.00 (Italian time) of the next business day.

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

- **no digital signature:** in this case the candidate have to download the pdf file of the application by the system; the PDF file shall not be modified in any way, It is to printed, signed in original, scanned in a pdf file and uploaded again on the website;
- **sign the application on the server using ConFirma service:** in order to sign digitally the application it is necessary to have an hardware (e.g. smart card or USB with digital signature certificate issued by an approved certification body) compatible with ConFirma service; after signing, applicants can download the signed pdf application;
- **sign the application digitally on your PC:** In order to sign digitally the application it is necessary to have an hardware (e.g. smart card or USB with digital signature certificate issued by an approved certification body) and a software for digital signatures in order to create a pdf.p7m file from the pdf file downloaded from this site. The pdf.p7m file must be uploaded in the website again;
- **in case of submission of the application through SPID,** it will not be necessary to sign the application form as it is automatically acquired by the procedure.

The application must contain all the required data by the system and must be signed and accompanied by a valid identification document of the candidate, under penalty of exclusion.

For any technical problems, contact support through the link available in the footer <https://pica.cineca.it/unibg>.

Article 5 Admission application

The applicant, filling the application, must declare, under his/her own responsibility, pursuant to what provided for by Presidential Decree 445/2000 and following amendments and integrations, as follows:

- his/her citizenship;
- to possess the qualifications mentioned in the previous Art. 2, indicating the degree cycle/CUN Area of PhD, the date on which it was obtained, the Institute that issued it and the final vote/assessment achieved; the applicant with qualification(s) obtained abroad must declare to have obtained the relevant recognition indicating in the application the details of the provision or must annex the required documentation according to what specified hereby;
- to possess any other requirements as mentioned in Art. 2;
- to possess other qualifications useful for the assessment;



- to know the foreign language required by this call;
- in case of Italian citizenship: to be enrolled in the electoral lists, specifying the Municipality of belonging and possibly specifying the reasons for non-inclusion or cancellation from the same lists; in case of foreign citizenship: to possess civil and political rights in the Country of belonging or provenance, or the reasons for non-possession of the same;
- not to be excluded from the active political electorate;
- to have no criminal convictions, or declare possible convictions undergone, indicating the details of related sentences, and any pending criminal proceedings;
- to be/not to be a state employee, specifying to be/not to be a regular employee at Universities and other bodies as mentioned in Art. 22 of L. No. 240/2010;
- to have no degree of kinship or affinity, up to and including the fourth degree, with a professor from the relevant structure or with the Chancellor, the General Manager or a member of the University's Board of Directors;
- if enrolled in a Diploma di Laurea (DL), Diploma di Laurea Specialistica (LS), Laurea Magistrale (LM), PhD with study grant or medical specialisation, in Italy or abroad, to be aware that, in the event
- of awarding of the grant, attendance at such courses and the use of the PhD study grant are incompatible with the holding of the contract;
- to hold research grants awarded pursuant to Art. 22 of Law No. 240/2010;
- to hold contracts as fixed-term researcher pursuant to Art. 24 of Law No. 240/2010;
- to have attended a PhD indicating the period, University, date on which the qualification was obtained, cycle, exact title of the course and CUN Area;
- period of enjoyment of any PhD study grant;
- address to which communications concerning this competition are to be sent; it is mandatory to indicate a personal e-mail address as well;
- possible request to conduct the interview via videoconference indicating the phone number and motivation.

In the application for participating in the competition, the applicant, pursuant to Law No. 104 of 5 February 1992, must specify any aid necessary in relation to his/her needs, as well as any need for additional time for the interview.

When submitting the application for participating in the selection, the applicant must annex the following documents:

1. a photocopy of the applicant's identity document in course of validity;
2. *curriculum vitae* in European format, dated and signed;
3. a list, signed by the applicant, of the publications and other research products, and other titles considered appropriate for the purposes of the selection such as specialisation degrees, certificates of attendance to postgraduate courses, obtained in Italy or abroad, contracts, study grant or research assignments both in Italy and abroad (cf. Annex B);
4. any publications, other research products or other titles that the candidate wishes to assert to the purpose of the procedure, numbered in progressive order matching the relating numbered list;
5. in the event of foreign applicant, it is necessary to annex: a copy of the residence permit (if the applicant is already in its possession).

As regards qualifications obtained abroad, for admission to the selection, the applicant is required as follows:

- if recognised as valid in the Italian territory, the applicant must indicate in the application the details of comparability/equivalence of the qualifications obtained abroad;
- if not recognised as valid in the Italian territory, the applicant must annex copy of the qualification obtained abroad (obligatory annex) with a declaration translated in Italian or in English



language and a certified copy of the declaration of equivalent qualification (obligatory annex), issued by the competent Italian diplomatic and consular authorities abroad, with the certificate of the exams taken or the diploma supplement.

As regards all other qualifications obtained abroad which the applicant intends to provide for the selection as required by the call, it is necessary to annex to the application a copy of the qualifications. Each annex must be in PDF format and must not be larger than 30 MB.

Pursuant to Law No. 183/2011, the Administration cannot accept or request certificates, but only declarations in lieu of certifications or affidavits submitted in substitution of the actual certificates signed by the applicant and submitted together with an unauthenticated photocopy of the applicant's valid identify document. The Administration has the right to carry out suitable controls on the truthfulness of the contents of the declarations in lieu pursuant to what provided for by Presidential Decree No. 445/2000.

The requirements and the qualifications must be owned on the date of the expiry of the call.

It is mandatory to indicate a personal e-mail address to which the communications concerning this selection will be sent. Any variation of said address must be promptly communicated to the Selections Office (Servizio Assegni di ricerca).

Article 6 Examining Commission

The Examining Commission is appointed with Chancellor's decree, upon proposal of the Structure's Council, at the expiry of the deadline for submitting the application.

Article 7 Selection

During its first meeting, the Examining Commission will establish the assessment criteria and procedures explicitly, according to what provided for by the call, fixing a minimum score for admission to the interview.

The overall assessment is expressed in hundredths, as indicated hereafter:

- up to a maximum of 60 points for qualifications and scientific-professional curriculum; to that end, the following will be object of assessment:
 - graduation vote;
 - PhD (if not already provided for as requirement for admission);
 - specialisation degrees and certificates of attendance to postgraduate courses, obtained in Italy or abroad;
 - publications and other research products;
 - documented research activities – as long as the beginning date and duration of the activities are duly certified – carried out at the premises of public and private subjects with contracts, study grants or assignments, both in Italy and abroad;
- up to 40 points for the interview.

Within the context of its autonomy, the Commission can integrate the above, depending on the research project and on what provided for by this call.

In particular will be evaluated:

CODE	
1	Experience in the development and implementation of high-order methods for computational continuum mechanics. Experience with nonlinear elasticity problems featuring large deformations and convection dominated fluid flow problems.
2	University Master of I and II level in Italy and abroad, which have ancient philosophy as their subject; publications on women philosophers in antiquity
3	-
4	-



5	A Master's Degree in "Clinical Psychology"; Final grade; English level B2; attendance of advanced and/or master courses in areas related to the research project; Previous curricular experiences and/or internship and/or research experiences in areas related to the research project (cognitive/psychological assessment, neuropsychology, aging); Master's thesis in areas related to the research project (cognitive/psychological assessment, neuropsychology, aging).
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The applicants will be informed before the interview on the results of the assessment of the qualifications.

The Commission reserves the right to carry out the interview via videoconference, through the use of IT and digital tools, guaranteeing the adoption of technical solutions that ensure the publicity of the same, the identification of the participants, as well as the security of communications, and their traceability. Failed connection at the time established or late connection, unless due to force majeure, will be considered as a renunciation to participate in the selection.

During the interview, the Commission will verify the applicant's ability to cover the topics and themes related to the research project and his/her knowledge of at least one foreign language, according to what provided for by the call.

CODE	PROGRAMME OF THE INTERVIEW
1	The discussion will focus on computational modelling tools for structural mechanics and fluid mechanics and will inquire specific aspects related to the implementation of high-order accurate methods. The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates
2	The interview will focus on the verification of the qualifications, linguistic competence and knowledge of the subject of the project. The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates
3	Questions related to the theme of the project. The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates
4	The interview aimed at ascertaining the candidate's competence related to the general principles of tax law, the knowledge of the topics of the research and the candidate's ability for research. The interview will be held in Italian and in English.
5	The interview will be aimed at verifying the aptitude and experience to collaborate in the research project. It will be focused on the theoretical and methodological knowledge of psychological/cognitive treatments in elderly patients affected by heart diseases.

The assessment of the knowledge of the foreign language (or foreign languages) as provided for by this call will be carried out during the selection according to the modalities established by the Commission.

The date and place of the interview will be communicated with at least a 20-day notice through a communication published on the website of University of Bergamo <http://www.unibg.it>, under the section "Concorsi e selezioni-Assegni. Borse e contratti di ricerca-Assegni di ricerca" supervised by the Servizio Assegni di ricerca.

This notice is to all intents and purposes an official communication. Any changes related to the date of the interview will be communicated to the admitted applicants with at least a 20-day notice through the publication of a communication on the University's website under the section "Concorsi e selezioni-Assegni. Borse e contratti di ricerca-Assegni di ricerca".

Failure to show up at the interview will be considered as a renunciation to participate in the competition for all practical purposes.

At the end of the works, the Commission draws up the list of the applicants examined, indicating the votes obtained during the interview.

The Commission will draft the merit list in descending order according to the overall final score, which is obtained by adding the score of the qualifications and the score of the interview.



Applicants will be inserted in the merit list if they obtain at least 30 out of the 40 points available for the interview.

In the event of equal score, the PhD or equivalent qualification obtained abroad will constitute a preferential qualification, if not required for admission; in the event of equal merit, the younger applicant will be preferred.

The merit list is approved, under the condition precedent of verifying the requirements provided for by the call, with Chancellor's Decree and published on the website under the section "*Concorsi e selezioni-Assegni. Borse e contratti di ricerca-Assegni di ricerca*". The term for submitting any appeals will run from the date of publication.

Should the winning applicant renounce to or withdrawal from the contract, the grant can be awarded to successful applicants according to the order of the merit list, upon prior resolution of the Research Structure.

Article 8

Signing of the contract and withdrawal

The winning applicant, in possession of the mentioned requirements, will sign an autonomous work contract under private law with effect, normally, on the first day of the month following the month in which the acts are approved.

As regards foreign applicants needing a residence permit, the date of beginning of the contract will be postponed and subject to the completion of the issuing procedure of said permit.

In the event of admission with reservation for qualifications obtained abroad not recognized as valid in the Italian territory, the winner, prior to signing the contract must submit the documents requested by the office within the terms peremptorily established.

The winner of the selection, convoked by the Administrative Office to sign the contract, will lose the right to the grant for collaboration in research activities if he/she does not state to accept the contract or does not begin the activity within the established term, without prejudice to health reasons or causes of force majeure duly and promptly documented.

Each grant as mentioned under Art. 1 can be renewed, under the terms and conditions provided for by the above mentioned Regulations; in any case, the relationship established pursuant to Art. 22 of Law No. 240/2010, including the possible renewal, cannot last more than six years, including the possible renewal, with the exclusion of the period in which the grant was used in coincidence with the PhD within the maximum limit of the legal duration of the relevant course.

Article 9

Rights and obligations of the grant holder

The employment relationship is governed by an individual contract, according to what provided for by the applicable laws and by the University's Regulations.

The research activity is flexible, it has a continuous nature, not merely occasional, and is carried out under the leadership of the Scientific Director, with autonomous conditions as to the research programme and its realisation, without any predetermined working hours.

The grant holder must refer to the Research structure that requested the activation of the contract.

The research activity of the grant holder is carried out within the context of the relevant Structure and in other Structures of the University on the basis of the research programme. Any research activities conducted outside of the University must be approved by the Council of the Research structure.

A period of permanence abroad is allowed at one or more qualified universities or research institutes, upon prior authorisation of the Council of the Research structure. During the period spent abroad, the amount of the grant will be increased by fifty percent to be charged to the Structure of reference or to the funds assigned to the Research structure.

The grant holder can participate in all the activities programmed by the Research structure for the promotion of researches and the dissemination of relevant results; he/she can be a member of the profit exams commissions, in quality of expert.



The Research structure must provide the grant holder all necessary support for realising his/her research programme, guaranteeing access to the equipment, the necessary resources and the use of the technical-administrative services.

The grant holder must comply with what provided for by the University's applicable Regulations on research integrity and ethics.

The winner of the selection who is entitled to the grant, at the time of the signature of the individual contract, should be committed, under penalty of forfeiture of the right to the research grant, to confidentiality and preventive transfer to the University of all intellectual property rights relating to the results produced and/or achieved during the research activities carried out at the University and she/he has the right to be recognized as the author of the his/her results achieved and/or products. The University recognizes the application of the same economic conditions that the University Patent Regulation grants to its Professors/Researchers.

Article 10

Taxes, welfare, insurance and mission

With reference to taxes, the grants are subject to what provided for under Art. 4 of Law No. 476/1984, while as regards welfare, they are subject to what provided for under Art. 2, paragraph 26 and following, of Law No. 335/1995, and following amendments. With reference to mandatory maternity leave, they are subject to what provided for by the Decree of the Ministry of Labour and Welfare of 12 July 2007, published in the Official Gazette No. 247 of 23 October 2007, and, as regards sickness leave, they are subject to what provided for by Art. 1, paragraph 788, of Law No. 296 of 27 December 2006, and following amendments.

In the period of mandatory maternity leave, the bonus paid by INPS pursuant to Art. 5 of the mentioned Decree of 12 July 2007 is integrated by the University up to the payment of the total amount of the research grant.

The University will cover the grant holder's accident insurance and civil liability toward third parties insurance within the scope of his/her research activity.

The covering of the grant holder's mission expenses is financed through the funds of the Scientific Director in charge or the Research structure, according to the modalities provided for by the University's regulations as to missions.

Article 11

Processing of personal data

In accordance with articles 13 and 14 of Regulation (EU) 2016/679 (GDPR), on the protection of personal data, and with D. Lgs. n. 196 /2003 and subsequent amendments, it is made known that data is controlled and managed by the legal representative of the University of Bergamo, via Salvecchio 19, - 24129 Bergamo.

Data will be collected exclusively for the present bid purposes and will be kept only for the necessary time to complete the relevant procedures. The data treatment controller will be appointed within the managing unit in charge of bidding procedure, who will carry out the treatment with all due respect of propriety, legitimacy, scope, transparency and confidentiality of the treatment; and data will be used exclusively for purposes connected to the selection and further conferment of the role and possible contract drafting, as well as management of the following employment position, in compliance with current regulations. Data will be kept for the necessary time to accomplish the selection purposes, subject to the application of norms on document retention, and will be transferred uniquely to public administration bodies directly concerned with the juridical and economic position of the selected applicant, treated in compliance with current regulations and used for personal, welfare, insurance and fiscal position management. Data will be handled by appointed staff through the acquisition of printed and electronic documents and using, even digitalised, filing procedures, to guarantee confidentiality; data treatment will be carried out through a coordinated organization and processing system, applying elevated safety standards. Furthermore, data will not be used for profiling. Applicants who have provided their personal data will be able to access it and exercise their rights as by art. 16 to 22 of GDPR UE 2016/679. Any safeguard request can be addressed to the University Data Protec-



tion Officer, who can be contacted through the university website (Privacy and Personal Data Protection section), e-mail dpo@unibg.it. In addition to the right of complaint which can be presented to the Italian Data Protection Authority, Piazza Venezia 11, 00187 Roma.

By presenting their application, candidates thereby authorise and fully consent to publication on the University institutional website of all information concerning the current bid, their own data and the contents of their CV in accordance with 111-bis of D.Lgs.196/2003 stating that, within the scope limits defined by art. 6, par. 1, letter b), of the Regulation, consent is not due for personal data present in a submitted CV.

Article 12 **Person in charge of the procedure**

The Person in charge of the selection procedure within this call is Dr. Domenico Panetta, manager of Area risorse umane, Via dei Caniana, 2 - 24127 Bergamo, phone (+39) 035 2052 669 - 583 - 878, e-mail address: assegni.ricerca@unibg.it.

Article 13 **Publication**

This call is published in the University's Official Registry, on the website of the Conference of the Italian University Chancellors (www.cru.it), on the website of the Ministry of Education, Research and University (MIUR) at the link <http://bandi.miur.it>, and on the website of the European Union at the link <http://ec.europa.eu/euraxess> in the form of a notice.

The full competition and related annexed forms are available on the website of the University of Bergamo www.unibg.it under the specially devoted section "*Concorsi e selezioni-Assegni. Borse e contratti di ricerca-Assegni di ricerca*".

The call is also published on "*Piattaforma Integrata Concorsi Atenei*" (PICA) - link <http://pica.cineca.it/unibg/> from which it is possible to fill the application online for participation at the selection.

Article 14 **Final provisions**

For all matters not provided for by this call, the following will be applied: Law No. 240/2010 and following amendments and integrations, the University's Regulations on the awarding of research grants, the University's Regulations in force, and the Regulations on employment relationships in the public administration.

Bergamo, as per protocol registration

THE CHANCELLOR

(Prof. Sergio Cavalieri)

Documento firmato digitalmente ai sensi
dell'art. 24 del D. Lgs. 82/2005



ANNEX A

RESEARCH PROJECT - CODE 1

“High-order methods for fluid-structure interaction”

Research structure: Department of Engineering and Applied Sciences

Duration of the grant: 12 months

Scientific Area: 09 - Industrial and information engineering

Academic recruitment field: 09/A1 - aeronautical and aerospace engineering and naval architecture

Academic discipline: ING-IND/06 - Fluid Dynamics

Scientific Director: Prof. Lorenzo Botti

The project proposes to exploit the increased computing power of modern parallel architectures and the availability of high-order accurate numerical strategies for the approximate solution of Partial Differential Equations (PDEs) to enable modeling of complex physical phenomena featuring fluid-structure interaction. The computational model relies on structural mechanics and computational fluid dynamics to solve an elasticity problem, describing the response of an elastic solid to external solicitations, and a flow problem, describing the motion of a fluid that interacts with the elastic body. Among the applications of interest, we mention stretch blow molding, widely employed to produce rigid containers for the food and drink industry, and hemodynamics of stenotic aortic valves, one of the most frequent pathologies in developed countries.

In order to guarantee the stability of the fluid-structure formulation in the case of large deformations, a monolithic approach based on a fully coupled solution strategy is required. To date, most modeling approaches are based on low-order accurate numerical methods. The extension to high-order accurate schemes involves further research efforts. The crucial aspects are:

- 1) the geometric representation of the interface and the imposition of kinematic and dynamic constraints that ensure fluid-structure interaction.
- 2) the Lagrangian formulation of the elasticity problem with finite deformations.
- 3) the Arbitrary Lagrangian Eulerian (ALE) formulation of the Navier-Stokes equations, which allows to combine the Eulerian description of fluid motion with the Lagrangian description of the deformation occurring in the fluid domain;
- 4) the effectiveness of the solution strategy.

The spatial discretization of the elasticity problem and the flow problem will be carried out by means of non-conforming finite element methods. In particular: for the elastic problem we will employ a Hybrid High-Order formulation while for the flow problem we will rely on discontinuous Galerkin (DG) formulations.



RESEARCH PROJECT - CODE 2

"MULIERUM GRAECARUM QUAE ORATIONE PROSA USAE SUNT FRAGMENTA ET ELOGIA GRAECE ET LATINE by Johann Christian Wolf: study of a collection so far ignored for an inclu- sive canon of ancient philosophy"

Research structure: Department of Letters, Philosophy, Communication

Duration of the grant: 12 months

Scientific Area: 11 – History, Philosophy, Pedagogy and Psychology

Academic recruitment field: 11/C5 – History of philosophy

Academic discipline: M-FIL/07 – History of ancient philosophy

Scientific Director: Prof.ssa Maddalena Bonelli

The ancient women philosophers are mostly absent from the manuals of the history of philosophy. Nevertheless, we have several testimonies of their philosophical activity, unfortunately however fragmentary and subject to serious gender bias that devalue them. One of the very few documents that tried to highlight female philosophers is a volume published in the Enlightenment period and which has remained substantially ignored until today: the volume by J. Ch. Wolf *Mulierum Graecarum quae oratione prosa usae sunt Fragmenta et Elogia Graece et Latine*, (1735). The one-year project aims to provide the first translation in a modern language (Italian) and analysis of this volume, which is the first real attempt to establish a canon of ancient intellectual women. This work will help reconstitute, an unprecedented way, the traditional philosophical canon which also includes women.



RESEARCH PROJECT - CODE 3

“Machine Learning Approach for Social Sciences”

Research structure: Department of Economics

Duration of the grant: 12 months

Scientific Area: 13 – Economics and Statistics

Academic recruitment field: 13/A2 – Economic Policy

Academic discipline: SECS-P/02 – Economic Policy

Scientific Director: Dott.ssa Piera Bello

This project has the main objective of investigating how machine learning (ML) techniques can improve the conventional empirical approach applied by social scientists. While there is a growing number of researchers in economics, political science, and sociology that use tools that are standard to computer scientists, there is not yet a clear understanding of what are the areas of research that could benefit from this methodological revolution. This is partially due to the inherited conceptual difference between ML and empirical social science. Indeed, while ML approaches are typically used to predict the value of specific outcomes based on a set of observable features, applied social scientists usually have a different objective, identifying causal effects. Within this project's scope, we will emphasize the main contribution that ML can provide to empirical social scientists. In particular, we will exploit the incredible opportunity created by ML tools to provide new measures (variables) related to human activities/behaviors/sentiment, which are often hidden in the interactions of multiple variables. The research activity comprises different tasks. Initially, the grant holder will be required to identify a set of data sources to exemplify the potential use of ML with social science data. For instance, standard sources are political speeches, media contents, social media interaction, or survey data. Once these sources are recognized, it will start the acquisition task. Next, the grant holder will be involved in the actual exploration of how the acquired data could be analyzed using ML approaches. We expect the grant holder to test the reliability of novel Natural Language Processing (NLP) methodologies to decoding text into data. Similarly, unsupervised machine learning models, such as Latent Dirichlet Allocation (LDA), will be tested as a method to enhance a better understanding of individual-level data from survey responses. The final step of the project is to select a series of existing causal applications and observe how the results might be affected by the use of ML generated outcome variables.



RESEARCH PROJECT - CODE 4

“Discrimination in the tax system: appropriateness and legal constraints”

Research structure: Department of Law

Duration of the grant: 12 months

Scientific Area: 12 – Law Studies

Academic recruitment field: 12/D2 – Tax Law

Academic discipline: IUS/12 – Tax Law

Scientific Director: Prof. Gianluigi Bizioli

The research program is aimed at an investigation on the issue of discrimination operating in the tax system: according to the evolution of tax legislation, it is necessary to understand what are the opportunities and limits to the introduction of differentiated tax treatments in relation to certain individuals and certain income categories.

Although the doctrine has dealt with the subject from several points of view, there is a gap in the literature in relation to the methodological issues to be resolved in advance in terms of the methods of adopting legislative choices. This gap deserves to be filled, especially, in relation to the issue of qualitative income discrimination in the light of the most recent constitutional case law. In fact, a careful examination of the current disharmonies existing in the tax system between the treatment of employee and pension income (subject to progressivity) and other income (taxed at proportional rates) is necessary. A crisis of progressivity has been underway for some time now, given that various income categories escape progressive taxation. However, this "escape from progressivity" turns out to be chaotic and not very rational in the eyes of scholars. Therefore, the state of research on this point requires systematic reorganization work to be carried out through valid principles for evaluating the relationships between the various tax cases and in light of the current differences in treatment.

The academic discussion on this point will become even more lively taking into account the prospects for reform reported by the delegation for tax reform presented by the Italian Government to the Camere (AC 3343/2021). On that occasion, the revision of the tax system is identified among the key actions identified in the National Recovery and Resilience Plan precisely to address the main critical issues of the Country. Among those initiatives, the growth of the economy is expected, by increasing the efficiency of the tax structure and reducing the tax burden on income deriving from the use of production factors. In this regard, the Government proposes to reform the income tax discipline through a progressive evolution of the current system towards a dual taxation model. In fact, the application of the same proportional rate of taxation is assumed both on income deriving from the use of capital (including in the real estate market), and on income directly deriving from the use of capital in business and self-employment activities carried out by subjects other than those to whom corporate income tax (IRES) is applied. In the same delegated law proposal, it is also envisaged that the reform will be animated by compliance with the principle of progressivity of IRPEF, by the gradual reduction of the effective average rates deriving from its application, mainly in order to encourage the offer of work and participation to the labor market by young people and second income earners, as well as to promote entrepreneurial activity and the emergence of taxable income. In addition, the reform must ensure the gradual reduction of excessive variations in the effective marginal rates resulting from the application of IRPEF.

However, the purposes identified by the above proposal must deal with other legislative initiatives aimed at taxing incremental income (AC 1061, 3 August 2018; AC 1501, 15 January 2019), which start from the overcoming of progressivity, being considered an element a disincentive for the production of additional income and an incentive for tax evasion. On the basis of these premises, a system would be envisaged in which the higher income with respect to the previous tax period would not discount a progressive but proportional taxation, subjecting that portion of "additional income" to a substitute tax.



These proposals deserve an examination through a systematic approach to the premises from which they start. First of all, it is necessary to investigate the validity of the starting points (e.g., role of progressivity in the light of the modern economic system and in the framework of the more developed economies). This will require a study of the main guidelines developed by the OECD and by the various international organizations. On this point, the study can have a huge magnitude on the legislative choices to be implemented in the framework of the PNRR and, for this reason, it is indefectible, taking into account the wide debate that will open in relation to the methods of implementation of the principles and guiding criteria of the tax reform.

It is clear that the identification of the methodological premises of the contribution is the starting point necessary to develop an adequate research question with respect to the issues to be addressed.

As for the specific issue of the dual taxation model, this is a system already implemented by other European states, such as Denmark, Sweden, Norway, Finland and Austria. Comparative research of the regulations of the aforementioned states, where the dual income tax system is already operational, would also be useful to fuel the scientific discussion on this point. In this regard, the research is required to be carried out abroad at the main centers of tax law existing in these countries.

In addition to this first step of the research program, an area of study must be reserved for the method of appreciation of those fiscal measures (additional taxes, overtaxes, etc.) which provide for a tax treatment in peiusto be paid by certain individuals. In this regard, it is worth recalling the additional charges set up by large capitalization companies operating in the oil and energy sectors (Article 3, Law N° 7/2009) or by companies producing-distributing pornographic material and incitement to violence, as well as solicitation television burden of popular credulity (art.1, par. 466, Law N° 266/2005) or credit and financial institutions (art.2, par. 2, of decree N° 133/2013) or activities carried out under concession (art. 1, parr. 716-718, Law N° 160/2019).

In this context, it is necessary to investigate the methods of appreciating the adequate justifications on which differentiated tax treatments must be based. The case law of the Italian Constitutional Court has elaborated some fundamental principles on this point, but recently it has proved inconsistent in their elaborate articulation. Also on this profile, a systematic study of the matter is necessary in order to identify the fundamental guidelines in the review of the constitutional legitimacy of legislative choices in the tax field.



RESEARCH PROJECT - CODE 5

“A Stepped Care Approach with Routine Outcome Monitoring for Psychological Intervention among Outpatients with Cardiac Diseases”

Research structure: Department of Human and Social Sciences

Duration of the grant: 12 months

Scientific Area: 11 - History, Philosophy, Pedagogy and Psychology

Academic recruitment field: 11/E4 - Clinical and Dynamic Psychology

Academic discipline: M-PSI/08 - Clinical Psychology

Scientific Director: Prof. Angelo Compare

This research project aims to evaluate the feasibility and effectiveness of a Stepped Care assessment and intervention program for the treatment of elderly outpatients with a diagnosis of heart disease. Given the impact of psychological variables (e.g., coping styles, well-being, quality of life) and cognitive reserve in improving the long-term outcomes - including drug compliance- of cardiovascular diseases, the project aims to:

- 1) assess the baseline's psychological functioning and the level of cognitive reserve among elderly outpatients diagnosed with a cardiovascular disease and recruited in the divisions of cardiology of Bergamo's and Monza's hospitals.
- 2) to administer psychoeducation or unguided self-help treatments to enhance dysfunctional psychological/cognitive areas and evaluate their effectiveness through questionnaires (or specific tests) administered session-by-session.
- 3) to evaluate the effectiveness of a second, more intensive step of treatment for those patients who do not respond to the interventions described in point (2), using questionnaires (or specific tests) administered session-by-session. Depending on the specific need(s) detected, patients will be treated by psychotherapists and/or neuropsychologists already recruited in the study.