



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. 6 Experienced grants for conducting research pursuant to art. 22 of law no. 240/2010 at the Departments of University of Bergamo - PICA code 22AR018**

### 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;  
GIVEN the D.L. No. 36/2022, converted, with amendments, into Law no. 79/2022, which in art. 14 paragraph 6-quaterdecies establishes that "for one hundred and eighty days following the entry into force of the decree conversion law, limited to the already programmed resources on the mentioned date, or approved by the respective governing structures within the mentioned term of one hundred and eighty days, universities [...] may call for awarding procedures of research grants pursuant to article 22 of law no. 240, in the current text before the entry into force of this decree conversion law";

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;

ACQUIRED the resolutions of the Councils of the Structures involved which approved the annual research projects and resolved on the requirements for candidates' admission to the selection;

ASCERTAINED the financial backing (tab. 1);

### DECREES



### Article 1 Call for public selection

6 public selections are launched based on qualifications and interview for the awarding of No. 6 grants for conducting research pursuant to Art. 22 of L. No. 240/2010 with a contract under private law as indicated hereafter:

COD E	TYP E	DEPARTMENT	DURATI ON	ANNUAL GROSS AND FUNDS	TITLE	A.R.F.	A.D.	TUTOR
1	A	Management (deliberation of 20.06.2022: re-submission of grant following Call DR 270/2022 of 15.03.2022 concluded without suitable candidates)	36 months	€ 24.216,00 University budget Research project STaRs azione 1 anno 2021 – cod. project: STARS2123AZ1SR - CUP: F59C200003900 01	<i>The role of accountability tools in "governing" Sustainable Developments Goals (SDGs): The eradication of Poverty (SDG1)</i>	13/B1 Business administratio n and accounting studies	SECS-P/07 Business administratio n and accounting studies	Prof.ssa SIGNORI Silvana
2	A	Management (deliberation 20.06.2022: re-submission of grant following Call DR 276/2022 of 15.03.2022 concluded without suitable candidates)	36 months	€ 28.200,00 Department Budget Research project STaRs 2021 Dipartimentali – CUP: F59C200003900 01 – cod. project STARS2123AZ1SR DIP	<i>ESG factors, materiality matrix and stakeholder engagement in management and accountability processes for a sustainable transition</i>	13/B1 Business administratio n and accounting studies	SECS-P/07 Business administratio n and accounting studies	Prof.ssa SIGNORI Silvana
3	A	Management, information and production engineering (deliberation 16.06.2022: re-submission of grant following Call DR 228/2022 of 24.02.2022 concluded without candidates)	24 months	€ 24.216,00 University budget Research project STaRs azione 1 anno 2021 – cod. project: STARS2123AZ1SR - CUP: F59C200003900 01	<i>Advanced optimization approaches for the integrated management of resources in home care services</i>	09/G2 Bioengineerin g	ING-IND/34 Industrial bioengineerin g	Prof. LANZARONE Ettore
4	A	Management (deliberation 20/06/2022: re-submission of grant following Call DR 336/2022 of 29.03.2022 concluded without suitable candidates)	36 months	€ 24.216,00 University budget Research project UGOV STARS2022AZ1S R CUP: 54I19000980001	<i>Social impact as a driver for the innovation of business model, performance management, and accountability in nonprofit organizations</i>	13/B1 Business administratio n and accounting studies	SECS-P/07 Business administratio n and accounting studies	Prof.ssa MARIANI Laura
5	A	Management (deliberation 20/06/2022: re-submission of grant following Call	36 months	€ 24.216,00 University budget CUP: F56C180006700 01	<i>Controversial Advertising: Consumer Behavior and Competitive Responses</i>	13/B2 Management	SECS-P/08 Management	Prof. PEDELIENTO Giuseppe



		494/2019 of 26.07.2019						
6	A	Languages, literatures and cultures (deliberation 21/06/2022)	24 months	€ 20.000,00 Budget of Department 2022 Research project ASSEGNILINGUE2 2	<i>Mono- vs multilingual gloss strategies: effects on attention, on language learning, on content comprehension</i>	10/G1 Historical and general linguistics	L-LIN/02 Educational linguistics	Prof.ssa GRASSI Roberta

Each grant 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:**

#### **3rd cycle degree: PhD (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 recognized, 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	PhD in CUN Area 13 - Economics and statistics	English
2	PhD in CUN Area 13 - Economics and statistics	English
3	PhD in CUN Area 09- Industrial and information engineering or in CUN Area 01 - Mathematics and informatics	English
4	PhD in CUN Area 13 - Economics and statistics	English
5	PhD in CUN Area 13 - Economics and statistics	English (fully proficient level)
6	PhD in CUN Area 10 - Antiquities, philology, literary studies, art history	Italian and 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](http://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 communication, 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 has to download the pdf file of the application by the system; the PDF file shall not be modified in any way, it is to be 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 a 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 a 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, 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 and Legal Management (Sevizio 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.

The Commission is authorized to carry out the on line procedure, in the understanding that such method can be adopted until the conclusion of the relevant works, guaranteeing the security and traceability of communications.

### **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	PhD which has focused on "Accounting for Sustainable Development"
2	- subject of PhD thesis related to SSD SECS-P/07 - Business economics; - participation in schools or training courses on scientific research methodology; - participation in national or international networks.
3	PhD in topics related to operational research and / or engineering and industrial bioengineering.
4	-
5	- a proven track record of publications in well-reputed international journals; - a proven track record of participation to international and national academic conferences; - a proven ability to use software used in social sciences research and to use data scraping software are a plus.
6	- Phd in SSD L-LIN/02 - Educational linguistics o L-LIN/01 - Historical and general linguistics or foreign equivalents; - Specializations in Italian as L2 teaching.

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 interview is aimed at verifying the candidate's aptitude for research and his / her knowledge of the topics of the research project, i.e. accounting and accountability for sustainable development, accounting for SDGs and accounting and poverty. In particular, the interview will focus on the research project, on the qualifications of the candidate, with particular attention to his / her publications, as well as on the knowledge of the English and / or Italian language in case of foreign candidates.
2	The interview is aimed at verifying the candidate's aptitude for research and his / her knowledge of the topics of the research project, i.e. corporate sustainability and the related management and reporting tools, risk assessment and impact evaluation in business activities. In particular, the interview will focus on the research project, on the qualifications of the candidate, with particular attention to his / her publications, as well as on the knowledge of the English and / or Italian language in case of foreign candidates.
3	Discussion on candidate's previous experiences. Discussion on the relevance of the experiences to the research program. Technical discussion on stochastic and robust optimization topics. Verification of English language knowledge. The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates.
4	Management and governance of nonprofit organizations; Fundamentals of performance measurement. The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates.
5	During the interview, besides assessing English proficiency, candidates will be required to discuss and provide further details about their previous research experiences and about the publications





	and other scientific outputs presented for the initial screening. Motivation and the individuals' fit with the research project will also be considered. The Commission reserves the right to verify the knowledge of the Italian language for foreign candidates.
6	Second language acquisition and teaching (SLA), with reference to Italian as a TL and plurilingual acquisition; elements of psycholinguistics: implicit and explicit learning, attention and memory in language acquisition; vocabulary learning. Methodological aspects: eye-tracking methodology; elements of statistical analysis for social sciences.

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.

The research fellow may participate in activities performed on behalf of third parties pursuant to art. 66 of Presidential Decree 382/80, in the context of issues related to its project, and the distribution of related proceeds, in accordance with the current University Regulations on the subject.

### **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 Protection Officer, who can be contacted through the university website (Privacy and Personal Data Protection section), e-mail [dpo@unibg.it](mailto: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](mailto: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](http://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](http://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.



**UNIVERSITÀ  
DEGLI STUDI  
DI BERGAMO**

Area  
Risorse Umane

Gestione carriere  
e concorsi  
Assegni di ricerca

#### **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

#### ***“The role of accountability tools in “governing” Sustainable Developments Goals (SDGs): The eradication of Poverty (SDG1)”***

**Research structure:** Department of Management

**Duration of the grant:** 36 months

**Scientific Area:** 13 - Industrial and information engineering

**Academic recruitment field:** 13/B1 - Business administration and accounting studies

**Academic discipline:** SECS-P/07 - Business administration and accounting studies

**Scientific Director:** Prof.ssa SIGNORI Silvana

The present project aims to examine the methods, processes and techniques through which poverty alleviation interventions are governed, hence, measured, controlled and managed (Miller & O'Leary, 1987). The analysis of the modes of "governance" of these interventions is relevant if we consider the severity of the problem of poverty.

As stated by United Nations, the identification of appropriate models of "poverty alleviation interventions management" is becoming a priority (UN, 2020). The pursuit of this objective requires an active partnership between the political-operational levels of the various economic/social actors involved. It is also important, in this process, to recognize the heterogeneity, complexity and multidimensionality of poverty.

As outlined in the Millennium Goals final report (2015), some initiatives which have been implemented to reduce poverty have led to conflicting results. There is therefore a need to review the ways through which the strategic decisions underlying the design of anti-poverty proposals are undertaken, considering the interconnections between poverty and other SDGs (Erisken & O'Brien, 2015). This decision-making process requires SDGs-oriented accounting information. Information, and the accounting systems from which they derive, must be integrated, holistic and balanced (Bebington & Unerman, 2018; Contrafatto & Burns, 2013). This project contributes to the Social and Environmental Accounting literature and in particular to the area that studies the role that accounting-based information, and accounting & accountability systems, play in the planning, implementation, management and control of the SDGs.

The project involves both a theoretical and an empirical analysis. The theoretical analysis intends to investigate the conceptual foundations of accounting for poverty, through the study of the models, tools and techniques used in the management and reporting of the phenomenon. The empirical analysis, based on the case study methodology, will enable to investigate the practices adopted by the socio-economic actors involved in the poverty governance. The empirical case is expected to be based on an organizational reality (e.g., NGO) operating in the context of poverty alleviation. The study of this organization would enable to better grasp the complex dynamics through which different social actors interact in the design and management of poverty alleviation interventions.

The project will be developed as follows:

**1st YEAR:** theoretical analysis and preliminary collection of empirical data. The 1st semester will be focused on the study, through a literature review-based methodology, of the accounting tools used in the poverty governance. The analysis aims to map the state of the art and the expected output is a paper. The 2nd semester will be dedicated to the study of the theory to be used for the empiric analysis, with particular attention to the translation theory (Callon, 1986).

**2nd YEAR:** collection and analysis of empirical data. During the 1st semester empirical data will be analysed using the coding protocol (O'Dwyer, 2004). The 2nd semester will be dedicated to data theorization and the preparation of a working paper which will be presented at international conferences.



3rd YEAR: finalization of the analysis of empirical data, advancement and dissemination of the results achieved through presentations at international scientific conferences. The submission of at least two papers is expected for publication in 4 and 3 stars international scientific journals.

The main result of the theoretical analysis will be a paper which intends to map the accounting & accountability tools used in the context of poverty alleviation. The paper will be sent for publication in an international 3\* stars journal. A further output of the project will be a monograph focused on the analysis of the theoretical-methodological aspects of accounting in the management of poverty alleviation interventions. Finally, as a result of the empirical analysis, one/two articles will be produced to be sent for publication in 4 and/or 3 stars journals.

The project addresses a particular topic, that is, the management of poverty alleviation interventions, which is central to the Sustainable Development Goals (SDGs) Agenda, released by the UN in 2015. The relevance of the proposed project is supported by the declarations of the SDGs progress report (2019), which recognized a limited trend in the achievement of the SDGs. Some of the main reasons behind this trend concern the lack of consideration of the interdependences between the different SDGs and the lack of coordination between political, social and economic choices. The absence of information and related accounting systems, which are ad-hoc, focused and SDGs oriented, represents one of the main impediments to the integration of the SDGs in decision-making/strategic processes.

The project (and its related outputs) contributes to the research on the role of accounting tools in governing poverty alleviation interventions. Understanding how accounting techniques are involved and how accountability mechanisms regulate the relations between the different social/economic actors involved at different operational levels is essential to propose innovative solutions and methods for the management of poverty alleviation interventions.



## RESEARCH PROJECT - CODE 2

### ***“ESG factors, materiality matrix and stakeholder engagement in management and accountability processes for a sustainable transition”***

**Research structure:** Department of Management

**Duration of the grant:** 36 months

**Scientific Area:** 13 - Economics and statistics

**Academic recruitment field:** 13/B1 - Business administration and accounting studies

**Academic discipline:** SECS-P/07 - Business administration and accounting studies

**Scientific Director:** Prof.ssa SIGNORI Silvana

In April 2021 the European Commission published the proposal for a new Corporate Sustainability Reporting Directive (CSRD) which update the Non Financial Disclosure Regulation (NFDR) broadening its application. The Non Financial Disclosure Directive, in fact, currently applies exclusively to the so-called "public interest entities", essentially to large listed companies, banks and insurance companies, while the Corporate Sustainability Reporting Directive will require all European companies with more than 250 employees and to all SMEs listed on European markets to provide a range of information on ESG risks and impacts. The scope of application therefore extends considerably.

Furthermore, the disclosure obligations will follow the so-called "double relevance" or "double materiality" principle and will therefore include both the impact of a company's activities on the environment, on people and on society (inside-out perspective), and the operational and financial risks faced by a firm due to its exposure to sustainability (outside-in perspective). According to this vision, ESG (Environmental, Social and Corporate Governance) issues create, in fact, risks and opportunities that are material from a double point of view: the financial one and the impact one. As the proposed Directive mentions, a significant number of companies must therefore "be required to disclose information about their business strategy and the resilience of the business model and strategy to risks related to sustainability matters, any plans they may have to ensure that their business model and strategy are compatible with the transition to a sustainable economy" from an economic, environmental and social point of view.

The research project aims to investigate how companies are organizing to respond to this important challenge in order to:

- Identify and map best practices in terms of ESG strategies, risks assessment and impacts measurement systems, double materiality matrix and reporting of the related issues;
- Monitor how companies engage with stakeholders in assessing and measuring risks, opportunities and ESG impacts;
- Outline processes and models of stakeholder engagement and accountability to support the transition towards sustainable business models.

The research project will extend the scope of investigation also to small and medium-sized enterprises. In fact, although the proposed Directive does not aim to regulate this category of companies (if not listed), many SMEs are already facing a growing demand for non-financial information - typically from banks and financial companies. The transition to a sustainable economy is likely to mean that collecting and sharing ESG information becomes a common practice for *all businesses, regardless of their size*.



### RESEARCH PROJECT - CODE 3

#### ***“Advanced optimization approaches for the integrated management of resources in home care services”***

**Research structure:** Department of Management, information and production engineering

**Duration of the grant:** 24 months

**Scientific Area:** 09 - Industrial and information engineering

**Academic recruitment field:** 09/G2 - Bioengineering

**Academic discipline:** ING-IND/34 - Industrial bioengineering

**Scientific Director:** Prof. LANZARONE Ettore

The high complexity of home care services requires an optimal management of human (doctors, nurses, ...) and material (devices, consumables, ...) resources involved in service provisioning. In particular, new types of service (e.g., complex rehabilitation therapies, diagnostic tests, patient monitoring) require careful management of the material resources involved in the service, which can represent a relevant cost item, and their management may influence the scheduling of visits. Unfortunately, devices and materials are not considered in the models available in the literature and in the practice of several home service providers, as well as the technical staff necessary to use them. Therefore, the project addresses the integrated management of material resources in home care services, considering two levels. The main level is the organizational one, for which we aim to enrich the available models with a component dealing with material resources, focusing on stochastic and robust optimization models in order to include the management of the uncertainty typical of home care services. This will be accompanied by a technical level, with the evaluation the existing devices that are most suitable for use in home care services, and with the definition of technical specifications for the future development of devices specifically optimized for home use.





## RESEARCH PROJECT - CODE 4

### ***“Social impact as a driver for the innovation of business model, performance management, and accountability in nonprofit organizations”***

**Research structure:** Department of Management

**Duration of the grant:** 36 months

**Scientific Area:** 13 - Economics and statistics

**Academic recruitment field:** 13/B1 - Business administration and accounting studies

**Academic discipline:** SECS-P/07 - Business administration and accounting studies

**Scientific Director:** Prof.ssa MARIANI Laura

Social impact is the long-term effect of an organization's activities on both individual beneficiaries and their communities. In recent years, the measurement of social impact has become increasingly important for third sector organizations, and the production of reliable information on expected and past outcomes as well as the use of results-based effectiveness logics are, more and more often, necessary conditions for the access to public and private resources (Lumley et al., 2011).

If on the one hand impact measurement creates several operational difficulties, on the other it opens up to new scenarios that can be investigated under the twofold intra-organizational and inter-organizational perspective.

With regard to the first perspective, this project aims to investigate whether and how the measurement of social impact is helping to innovate nonprofit organizations' business models, forging their performance measurement systems, and influencing the communication of to external actors - potential financiers in particular (Objective 1).

With reference to the second perspective, the research to be carried out aims to understand if and under which conditions social impact reporting affects individuals' decision making concerning donation, provision of financial resources, or purchasing behaviors toward nonprofit organizations (Objective 2).

The neo-institutional literature provides the theoretical framework for the project (Greenwood and Hinings 1996). In particular, a framework that integrates the notion of institutional work and emotional aspects, particularly relevant among third sector's actors, will be developed to pursue the first research objective. Legitimacy theory combined with literature relating to decision and cognitive styles will instead be used as a theoretical framework for the second research objective.

The objectives will be pursued simultaneously, according to the temporal scan described below and using two different methodologies.

Objective 1: Analysis of multiple case studies (12/14). The joint analysis of the cases will take place by adopting a configurational approach - Qualitative Comparative Analysis (Ragin 2000)

- aimed at identifying the combinations of forms of institutional work and other organizational conditions that favor the orientation towards social impact.

Phase 1: Literature review and research framework development (6 months).

Phase 2: Selection of case studies and preliminary interviews (6 months).

Phase 3: Interviews and complete reconstruction of the selected case studies (18 months)

Phase 4: Data analysis and preparation of research outputs with presentation of the same at international conferences (9 months, partially overlapping with phase 3).

Objective 2: Experimental research design. In particular, artifactual survey experiments (Morton & Williams 2010) will be conducted with different categories of actors - potential donors and customers of social enterprises, in particular - aimed at verifying individual responses to different types of social impact reporting practices.

Phase 1: Literature review and research framework development (6 months).

Phase 2: Operationalization of the variables to be tested, design of the experiments, creation of the sample and of the mailing list. Pre-tests of each experiment and consequent adaptations (12 months).

Phase 3: Implementation of the experiments (9 months).

Phase 4: Data analysis and preparation of research outputs for international conferences (9 months).



From a theoretical point of view, the project will contribute:

- to the debate on social impact measurement in the third sector, with particular attention to the little-investigated topics of organizational learning and the response of financiers to different forms of impact communication;
- to develop the neo-institutional theory by widening the perspective of analysis to the role, rarely considered, of feelings and emotions of institutional workers.

From an empirical point of view, the project differs from previous works by helping to understand:

- what are the combinations of conditions that favor the assimilation of a social impact approach within nonprofit organizations' business models, measurement systems and reporting;
- how social impact communication can contribute to the fundraising process. The analysis will consider, in particular, the response of different categories of potential financiers to different stimuli.

From a methodological point of view, the project will use rarely used collection and analysis techniques. In fact, both the configuration analysis and the experimental research find little application in the context of nonprofit and impact measurement.

From a managerial perspective, the project will provide indications for the implementation of impact measurement systems and will encourage the spread of an impact-oriented managerial culture. At the same time, new evidence on the relationship between reporting and donor behavior can be used to support the development of new fundraising campaigns in nonprofit organizations.

The project will make it possible to strengthen UNIBG's internal expertise on the third sector and social impact and to strengthen collaborations with other scholars, both Italian and foreign, with whom the proposer is carrying out research activities.



## RESEARCH PROJECT - CODE 5

### ***“Controversial Advertising: Consumer Behavior and Competitive Responses”***

**Research structure:** Department of Management

**Duration of the grant:** 36 months

**Scientific Area:** 13 - Economics and statistics

**Academic recruitment field:** 13/B2 - Management

**Academic discipline:** SECS-P/08 - Management

**Scientific Director:** Prof. PEDELIENTO Giuseppe

Engaging consumers through communication is getting increasingly difficult for brands due to the lower rate of attention customers pay to traditional media advertisements, and to a generalized consumers' tendency to approach advertisements in a more critical and suspicious way (Scott, 2015). To provide an active response to these trends, many brands are now pursuing a communication strategy that leverages on controversial advertising or on controversial branded contents (Lyons, 1996; McIntyre, 2000; Pope et al., 2004). Controversial advertising (CA) has been defined as “advertising that, by the type of product or execution, can elicit reactions of embarrassment, distaste, disgust, offence, or outrage from a segment of the population when presented” (Waller, 2005). CA may involve the advertising of products perceived as controversial in their own right, the usage of advertising appeals such as sex and fear (Camenisch, 1991; Henthorne and LaTour, 1995; Waller, 2006), and execution styles which are perceived as controversial or ethically contentious (Waller, 2006; Nebenzahl and Jaffe, 1998).

CA can be somehow considered as a double-edged sword. It has the benefits of dramatically increasing consumers' brand awareness and to generate active discussion around a brand (Waller, 2006; Eckler and Bolls, 2011). But, it can also be detrimental for the corporate or for the product brand image resulting in negative publicity, complaints to advertising regulatory bodies, falling sales, and product boycotts (Crosier and Erdogan, 2001; Fam and Waller, 2004). Calvin Klein for example has been fiercely criticized for running campaigns with explicit sexual images, and had to publicly apologize after the outrage caused by a campaign that was alleged to use images of child pornography. Similar sort took to McDonald's that, in 2017, was obliged to pull a CA that featured a boy asking his mother about his dead father after it was criticized for exploiting child bereavement.

Yet, despite CA is now increasingly pursued by brands, this form of brand communication has received limited scholars' attention (Moraes and Michaelidou, 2017). The few empirical studies available to date have mainly focused on how consumers perceive and process controversial commercial messages (e.g. Waller, 1999; Theodorakis and Painesis, 2018; Huhmann and Mott-Stenerson, 2008), on which subjective attributes of consumers mostly affect their attitude toward CA (e.g. Fam et al., 2004, 2008), on cross-cultural difference that impact on the degree of perceived inappropriateness of CA (Fam and Waller, 2004b), on what makes an advertising a controversial one (Waller, 2004), or the different perception of CA across media channels (Sabri, 2017).

Two main gaps are identified. First, despite we know that CA creates social debate involving primarily consumers but also other audiences, we still do not know the nature of the debate that forms around CA. We know that CA determines different (more or less favorable or unfavorable) attitudinal and behavioral responses to brands featured in CA (Sabri, 2012), but we have very limited knowledge about the reasons why consumers are more or less supportive of the specific advertisement deemed to be controversial. Second, no study to date have focused on competitors or other brands' reactions to CA. It is in fact quite common that when an advertisement is considered controversial, this could lead competitors or other brands to act as parasites on carrions, i.e. to exploit the debate forming around the CA to gain advantages for themselves by gaining massive visibility through smart responses to others' mistakes or ad failures.

The main research questions this research project aims at answering are the following:



- 1) What are the motives that prompt consumers to support or to condemn brands that make use of CA?
- 2) Is there any common profile of CA's supporters or antagonists?
- 3) What are the competitors' reaction to CA made by brands?

Methodologically, the fulfilment of the project requires automatic extraction of user generated contents (e.g. online comments to CAs) published in online social media platforms by means of 'data scraping' software. Once extracted comments will then content analyzed through a mixed method approach that combines descriptive qualitative and quantitative methods (see Krippenroff, 2012).

Once created, categories of contents can then be further analyzed on the basis of different ontological, epistemological and methodological approaches: positivist (by using software like NVivo or R) or post-positivist, e.g. critical discourse analysis (Fairclough, 1992). The research protocol this research relies on has been already previously applied and tested on a large database composed by about 7,000 comments (Pedeliento et al., 2018).

The project has the following deadlines.

1st year: development of the scraping method, data extraction, analysis and systematic literature review.

2nd and 3rd year: articles' writing, dissemination and publication.



## RESEARCH PROJECT - CODE 6

### ***"Mono- vs multilingual gloss strategies: effects on attention, on language learning, on content comprehension"***

**Research structure:** Department of Languages, literatures and cultures

**Duration of the grant:** 24 months

**Scientific Area:** 10 - Antiquities, philology, literary studies, art history

**Academic recruitment field:** 10/G1 - Historical and general linguistics

**Academic discipline:** L-LIN/02 - Educational linguistics

**Scientific Director:** Prof.ssa GRASSI Roberta

#### 1) Objectives

The project aims to evaluate the effect of mono- vs plurilingual glosses, the latter with varying degrees of intercomprehensibility with the target language (TL), Italian, on the reading comprehension of content, on the one hand, and on language learning, on the other, by multilingual subjects with Italian as L2. These phenomena will be induced in the experimental context through the use of captions as follows, respectively: in a known but not (with respect to the TL) intercomprehensible language, in an unknown but intercomprehensible language, and in TL. These strategies will be monitored at the process (level of attention) and product level. Both the learning of new targeted vocabulary in the TL and the effectiveness of plurilingual strategies and skills (Council of Europe 2020) for content comprehension will be assessed.

The use of technologies such as eye tracking and tests for implicit knowledge will allow a psycholinguistic evaluation of the processes, contributing on the one hand to research on the effectiveness of plurilingual strategies for academic purposes and on the other to advancement of knowledge on the relationship between the level of attention and learning.

#### 2) Research scope

The study is in line with research on plurilingualism and pluralistic approaches, adopting a psycholinguistic perspective in relation to language and content learning.

International research has investigated plurilingualism from numerous perspectives, including sociolinguistic and psycholinguistic ones. Literature has overcome the idea that the different languages known to a speaker constitute discrete and isolated systems, in favor of a holistic view in which they are constantly in contact, interacting and influencing each other (e.g., Ollerhead et al 2017; Piccardo 2014, 2018; Riehl 2021). This prompts plurilingual speakers to use their linguistic resources in a peculiar way compared to monolingual speakers, applying different strategies in learning (e.g., Psaltou-Joyce & Kantaridou 2009). To these cognitive considerations are added the identity implications linked to plurilingualism. A speaker's languages are necessarily connected to his or her life and learning experiences in emotional and cultural terms. Consequently, enhancing them is essential if, as indicated in the CEFR, individuals are considered as social actors, who operate through language in different communication contexts, drawing on all their resources (Piccardo & Galante 2017).

Given the above, this study assumes the importance of including and enhancing plurilingualism in learning contexts. From this follows the need for an experimental investigation of the effects that multilingual practices and strategies have on psycholinguistic mechanisms related to language acquisition. To this end, the project proposes an empirical study that investigates multilingual strategies, measuring their effects during and after the didactic treatment. These strategies will be induced through the use of glosses, implementing the experimental procedures recommended by the international literature in this area (Yanagisawa et al 2020).

Thanks to the measurements of cognitive processes and the knowledge created, this survey will also allow the collection of relevant data for the existing debate on the relationship between levels of attention and learning (Schmidt 2010; Tomlin & Villa 1994). More precisely, it will be possible to verify how attention levels above or below the awareness threshold influence the creation of implicit and explicit knowledge.



### 3) Research project outline:

The study methodology will be guided by the following research questions:

- 1) What are the effects of monolingual vs plurilingual gloss strategies on content comprehension?
- 2) What are the effects of monolingual vs plurilingual gloss strategies on vocabulary learning?
- 3) What are the effects of monolingual vs plurilingual gloss strategies on the level of attention?
- 4) What is the relationship between the level of attention, comprehension and vocabulary learning, in relation to the different strategies?
- 5) What is the relationship between the level of attention and consciously implemented cognitive processes, in relation to the different strategies?

For the implementation of the project, multilingual subjects will be selected, in particular speakers of at least two languages in addition to the target one (Italian), of which one typologically distant (i.e. not intercomprehensible) from Italian and the other one a romance language.

The participants, already tested for linguistic background and, reading comprehension in L1, L2 and L3 as well as in their working memory, will be divided into experimental groups and control group, and will read an identical text, to which different types of glosses will be added based on the experimental condition.

- Group 1: glosses in L1
- Group 2: glosses in target language (Italian)
- Group 3: glosses in Romance languages other than L1 and Italian, not known to learners (L2)
- Control group: no glosses

The experimental procedures will be as follows.

According to the procedures for tracking eye movements, the treatment will be administered to the participants individually. Before the reading activity, the subjects will have to answer a questionnaire on their linguistic background. They will also carry out tests to measure competence in L1, L2 and working memory. The subjects will then read from a computer screen a disciplinary text containing an unknown lexicon, enriched with glosses based on the assigned experimental condition.

The effects of the different strategies will be measured at both the process and product level.

To evaluate the learning process, two types of data will be compared. The eye movements of learners during reading will be recorded and analyzed in order to measure the attention (even unconscious) paid to the different types of glosses. At the same time, at the end of the treatment, participants will carry out a retrospective interview, in which they will provide information on cognitive processes that occurred consciously during learning.

As regards the measurements of the effects of the didactic treatment, at the end of the reading the comprehension of the text will be assessed. This measurement will take place both in L1 and in L2. The vocabulary learning created by the different didactic treatments will also be measured. Based on the recommendations of international research (e.g., Rebuschat et al 2015), both explicit knowledge (through a timeless test) and implicit knowledge (priming protocol) will be assessed, via immediate and delayed post-tests. The data will then be analyzed according to the international standards of inferential statistics.

Keywords: Plurilingual strategies - Second language acquisition - Eye tracking - Vocabulary learning - Glosses

### 4) Timeline

The project has a two-year duration.

- During the first year, the didactic and evaluation material will be prepared. This also implies the use of software and digital tools such as those necessary for the creation of interactive glosses, the programming of a test with a priming protocol, and the tracking of eye movements. In order to verify the experimental procedures, the validity of the tests and the appropriateness of the teaching material, it will be necessary to conduct a collection of pilot data. A sufficient number of study participants will be found, and data collection will begin.

- During the second year, the collection of data will be completed, which will then be statistically analyzed and disseminated through participation in conferences.

### 5) Originality and impact

Recent literature relating to the use of glosses in language learning has shown that the cognitive involvement necessary to interpret them can be a determining variable in predicting their effectiveness. In other words, glosses in the target language, which require greater cognitive effort,



may be more useful for learning the corresponding lexicon in LT than those in L1, according to the level of competence of the learners (Boers 2022). These considerations open up significant potential in relation to the effects of glosses in L2 other than the target language, or which involve a process of intercomprehension, both on learning aspects of the LT and on the understanding and retention of the contents themselves. However, these potentials have not yet been investigated despite the repercussions for language teaching, especially in multilingual contexts. The present study aims to contribute to research in this sense.

To these didactic purposes is added the psycholinguistic relevance of the triangulation between the level of attention during the task, conscious processes and the creation of implicit and explicit knowledge. This area has been the subject of study and debate in recent years, given its important implications for the knowledge of the cognitive processes underlying language learning (Long 2017). In this sense, however, there is a lack of investigations aimed at plurilingual subjects, whose aptitudes for conscious metalinguistic reflection have been well attested and which therefore constitute a significant area of research.

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