

**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. 8 Early stage grants for conducting research pursuant to art. 22 of law no. 240/2010 at the Departments of University of Bergamo - Pica Code 24AR009

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 current Statute of the University of Bergamo;
- 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";
 - the Legislative Decree n. 198/2022 and art. 6 paragraph 1 establishes that the transitional regulation relating to the possibility of calling for research grants has been extended until 31 December 2023;
 - the Legislative Decree n.215/2023 and art. 6 paragraph 4 establishes that the transitional regulation relating to the possibility of calling for research grants has been extended until 31 July 2024;

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;
- the Legislative Decree n.215/2023 and art. 6 paragraph 4 establishes that the transitional regulation relating to the possibility of calling for research grants has been extended until 31 July 2024;

ACQUIRED the resolutions of the Councils of the Structures involved and the Director's emergency decree of the Department of Letters, Philosophy, Communication Rep. n. 16/2024 of 26.02.2024, referred to in Annex A, which approved the annual research projects and resolved on the requirements for candidates' admission to the selection;

GIVEN the resolutions of the Academic Senate and of the Board of Directors reported in Annex A which approved the research grants activation in various Departments;

ASCERTAINED the financial backing reported in annex A;

DECREES

Article 1

Call for public selection

8 public selections are launched based on qualifications and interview for the awarding of No. 8 grants for conducting research pursuant to Art. 22 of L. No. 240/2010 with a contract under private law as specified in Annex A to this notice which constitutes an integral part thereof.

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:**

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

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 (cycle degree) – 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:

- in the event of qualifications already recognised as valid in the Italian territory, must 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**, in order to ensure the widest participation in the selection, the candidate with a qualification not yet recognised or with the recognition procedure in progress, **must obligatorily attach to the application, under penalty of exclusion, one or more of the following documents:**
 - **a certified copy of the statement of qualification equivalence**, issued by the competent Italian diplomatic and consular authorities abroad;
 - **the diploma supplement or transcript of record**, legalized and written in Italian or in English;
 - **a copy of the qualification** with a translation into Italian or English

In the PICA procedure for forwarding applications to participate in the selection, it is only necessary to indicate the qualification required by the call (master's degree) and insert, where necessary, the required attachments. Qualifications superior or additional to the one valid for admission (e.g., PhD) can be declared in the section referring to other qualifications/titles.

In the event of qualifications not yet recognized, the candidate is admitted with reserve.

If the candidate turns out to be the winner, he must start the procedure above indicated and produce the required documents, within the terms peremptorily established by the Administration following the approval degree, in order to sign the contract.

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.**

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 cannot 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 has to download the pdf file of the application by the system; the PDF file shall not be modified in any way, it is 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 attached annex A, indicating the degree cycle, 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 Annex A;
- 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).

For the abroad qualification, required for the purposes of selection admission, it's also necessary:

- 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 attach to the application **one or more of the following documents**: a certified copy of the statement of qualification equivalence, issued by the competent Italian diplomatic and consular authorities abroad; the diploma supplement or transcript of record, legalized and written in Italian or in English; a copy of the qualification with a translation into Italian or English.

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.

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.

The Commission will evaluate, in particular, what is indicated in Annex A

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.

The interview program is indicated in Annex A

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 Commission reserves the right to verify the knowledge of the Italian language for foreign candidates; in this case, Italian language knowledge will be ascertained under ineligibility penalty and will not compete for the final score, unless otherwise 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. 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 Isabella Arfiero of Personale TA e Collaboratori, Viale Papa Giovanni XXIII, 106 - 24121 Bergamo, phone (+39) 035 2052 594 - 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

"Decongesting Emergency Departments: The Role of Community Healthcare Centers"

Research structure: Department of Management, Information and Production Engineering

Department resolution: 18.01.2024

Resolution of the Academic Senate: 29.01.2024

Resolution of the Board of Directors: 31.01.2024

Gross annual amount: € 22.680,00

Financial coverage:

PRIN PNRR 2022 "Emergency medicine 4.0: an integrated data-driven approach to improve emergency department performances" project code CATT_M_22_RN_PRIN_02, CUP: F53D23009280001

Duration of the grant: 12 months

Scientific area: 09 - Industrial and Information Engineering

Competition sector: 09/B3 - Business and Management Engineering

Scientific disciplinary sector: ING-IND/35 - Business and Management Engineering

Scientific director: Prof. Mattia Cattaneo

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Ingegneria Gestionale (LM-31, LS 34/S) ed equiparati, ovvero Diploma di Laurea (DL) conseguito secondo le modalità precedenti all'entrata in vigore del D.M. 509/1999 e s.m.i. e titoli equipollenti ai fini dell'ammissione ai pubblici concorsi.

Knowledge of the language: English

Additional qualifications evaluated by the Commission:

- Thesis on topics related to those indicated in the project;
- Participation in international conferences in Italy or abroad and/or publications on topics related to those indicated in the project;
- Collaborations with Italian and foreign institutions on topics related to those indicated in the project;
- Experiences at healthcare organizations.

Interview schedule:

- Basic knowledge related to the methodology required for project development (data processing and simulation techniques);
- Knowledge about the functioning of the healthcare sector, specifically in the emergency department;
- English language proficiency.

Description of the research project:

Overcrowding in emergency departments (EDs) presents several drawbacks, such as prolonged waiting times, extended patient stays, heightened clinical risks and stress for ED staff, and overall dissatisfaction. Along with clinical-related impact, overcrowding affect resource consumption, thereby having a high economic and social significance. In these regards, governments and health authorities are dedicating a large amount of resources to address this issue. As such, the Italian Government introduced innovative models of local healthcare within the National Recovery and Resilience Plan (PNRR) framework. In terms of territorial

medicine, the Italian PNRR introduced the so called *Case di Comunità* (Community Healthcare Centers – CHCs). These CHCs are facilities designed to offer primary healthcare services.

They have the capability to handle minor cases and, if needed, can appropriately redirect more severe cases to emergency departments (EDs)

For these CHCs to be effective, they need to be utilized primarily by individuals who, under current conditions, would typically visit the ED with a non-urgent Emergency Severity Index (ESI) level (i.e., *codici bianchi* or *codici verdi* – *ESI Level 4* or *ESI Level 5*). This encompasses cases where the ED was not necessary.

The project first aims to assess patients' willingness and propensity to go to CHCs instead of EDs for non-urgent emergencies. This will be accomplished through the application of discrete choice models, where, by means of a stated preference approach to be designed, variables such as distance, waiting time, and the characteristics of the CHCs' facilities will be taken into account.

Secondly, following the identification of the potential proportion and types of patients opting for CHCs instead of EDs, this project seeks to assess the impact of such choices on ED overcrowding. Utilizing simulation approaches and scenario analysis, the project will evaluate the performance of EDs under different circumstances and estimate the specific role of CHCs, in terms of waiting time, resource consumption, and other specific, identified key performance indicators.

RESEARCH PROJECT - CODE 2

“Criticality analysis for supply chain availability and dependency evaluation”

Research structure: Department of Management, Information and Production Engineering

Department resolution: 09.11.2023

Resolution of the Academic Senate: 20.11.2023

Resolution of the Board of Directors: 23.11.2023

Gross annual amount: € 20.000,00

Financial coverage:

fondo 60DIGIP23 - BOFF_A_22_RN_PRIN_CASCADE_01

Duration of the grant: 12 months

Scientific area: 09 - Industrial and Information Engineering

Competition sector: 09/B3 - Business and Management Engineering

Scientific disciplinary sector: ING-IND/35 - Business and Management Engineering

Scientific director: Prof.ssa Albachiara Boffelli

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Ingegneria gestionale (LM-31) ed equiparati, ovvero Diploma di Laurea (DL) conseguito secondo le modalità precedenti all'entrata in vigore del D.M. 509/1999 e s.m.i. e titoli equipollenti ai fini dell'ammissione ai pubblici concorsi.

Knowledge of the language: English

Additional qualifications evaluated by the Commission:

Development of master's thesis and/or research projects on topics related to supply chain management.

Interview schedule:

- Supply chain management.
- The main datasets for supply chain analysis.
- Setting up a research project in the field of supply chain management.

Description of the research project:

Both scientific literature (Kalaitzi et al., 2018; 2019) and outlooks by Institutional agencies (European Commission, 2020) hint that the World Economy will likely face a serious issue of resource scarcity – particularly critical raw materials (CRM) scarcity – over the next few years, which will pose challenges to value chains' fundamental role of ensuring continuous supply. The Covid-19 pandemic, as well as the recent geopolitical crisis, further exacerbated the issue – in the form of substantial commodity price increase and shortages of critical supplies (e.g., semiconductors). With the aim to strengthen its economic competitiveness and secure its strategic autonomy, the EU has identified a list of industries that are key to these objectives, and it has started to delineate a strategy to ensure access to CRM, which are often essential to such industries. Yet it is still unclear (a) how National Governments should adopt and support these general guidelines; (b) which managerial strategies and practices, including circular economy-related practices, could be more effective in tackling scarcity-driven issues and ensuring supply continuity. The research project will contribute to advance knowledge and scholarly management literature on scarcity-driven issues within value chains. Moreover, it will develop an original methodology for identifying, among the strategic supply chains/industries, the associated raw materials that are considered “critical” for a given country in a given period, as well as other possible sources of criticalities/scarcity. Finally, a Delphi Study will be developed to identify the scarcity-driven criticalities of a selected value chain.

RESEARCH PROJECT - CODE 3

"Trust assurance of Digital Twins for medical cyber-physical systems"

Research structure: Department of Management, Information and Production Engineering
Department resolution: 21.02.2024

Resolution of the Academic Senate: 11.03.2024
Resolution of the Board of Directors: 13.03.2024

Gross annual amount: € 19.452,00
Financial coverage:

PRIN 2022 "SAFEST: Trust assurance of Digital Twins for medical cyber-physical systems" (protocollo MUR: 20224AJBLJ_01) project code GARG_A_22_RN_PRIN_01, CUP F53D23004230006

Duration of the grant: 18 months

Scientific area: 09 - Industrial and Information Engineering
Competition sector: 09/H1 - Information Processing Systems
Scientific disciplinary sector: ING-INF/05 - Information Processing Systems

Scientific director: Prof. Angelo Gargantini

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Ingegneria informatica (LM-32) ed equiparati, ovvero Diploma di Laurea (DL) conseguito secondo le modalità precedenti all'entrata in vigore del D.M. 509/1999 e s.m.i. e titoli equipollenti ai fini dell'ammissione ai pubblici concorsi.

Knowledge of the language: English

Additional qualifications evaluated by the Commission:

Thesis on topics relating to the quality of the software, for example its robustness.

Interview schedule:

- Software testing and verification with particular reference to medical software;
- Use of digital twins in the medical field;
- Principles for the design and validation of ventilator software with emphasis on adaptive features.

Description of the research project:

This grant aims at showing a real application of the techniques developed in other WPs of the SAFEST project and at validating the objectives of SAFEST through the case study. The scenario concerns a mechanical ventilator system, whose design and development is related to the world-wide COVID-19 pandemic. We will develop and deploy DTs representing the ventilator itself, the operators (doctors and nurses), and the artificial lung (with its respiratory cycle), which can be used to test and validate the system in a safe environment without the need (and the associated risks) of a real human involved. For this task, all the notations and tools developed in WP2 will be employed. We will apply the methodologies studied in WP3 to the case study. First, we will work on methodologies for checking that the DT conforms to the real ventilator. This is a strong prerequisite for any trust analysis to be carried out on the DT. In case of inconsistencies, due to possible evolution of the ventilator, repairing techniques can be used to correct the DT. Second, methodologies and techniques for functional and non-functional analysis are applied to the ventilator. In particular, if-what and what-if scenarios will be considered, also possibly in a virtual environment for training. In this WP the collaboration with the MVM manufacturer and our MD colleagues will be sought. This package will start from the preliminary results obtained in the FISIR project MVM-Adapt, approved and founded by MIUR in 2021 with the scope of studying an adaptive version of the ventilator MVM.

RESEARCH PROJECT - CODE 4

"Making Sense of the Energy Transition: Political Framing and Social Conflicts Across Multiple Crises"

Research structure: Department of Letters, Philosophy, Communication
Department resolution: 14.11.2023

Resolution of the Academic Senate: 20.11.2023
Resolution of the Board of Directors: 24.11.2023

Gross annual amount: € 21.600,00

Financial coverage:

PRIN 2022 - codice progetto: CARU_L_22_RN_PRIN_01 - MIUR code: 20222RFRZR_02 - CUP: F53D23012510006

Duration of the grant: 18 months

Scientific area: 14 - Political and Social Sciences

Competition sector: 14/C3 - Political Sociology, Sociology of Law

Scientific disciplinary sector: SPS/11 - Political Sociology

Scientific director: Prof. Loris Caruso

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Scienze politiche e delle relazioni internazionali (L-36), Sociologia (L-40) e Informazione e sistemi editoriali (LM-19) ed equiparati ovvero Diploma di Laurea (DL) conseguito secondo le modalità precedenti all'entrata in vigore del D.M. 509/1999 e s.m.i. e titoli equipollenti ai fini dell'ammissione ai pubblici concorsi.

Knowledge of the language: English

Additional qualifications evaluated by the Commission:

- Phd in CUN AREA 14 (Political and social sciences).
- Qualifications, publications and research products relevant for the scientific sector of this research project.

Interview schedule:

In the interview, candidates will be asked to illustrate their familiarity with the topics on which the research project is based on, referring to their study and research path and their theoretical and methodological skills.

Description of the research project:

The project investigates the topic of energy transition - the passage from the use of fossil fuels to green energy - from a political and social perspective. The energy transition is not an exclusively technical process, and requires social, cultural and institutional adaptations; nonetheless, the dimensions of political competition and distributive conflicts associated with it remain under-analysed. Starting from these premises, the project investigates the level of politicisation of the issue in the Italian political debate, along a diachronic dimension and according to both a top-down and a bottom-up perspective.

RESEARCH PROJECT - CODE 5

“ETHICS (ElecTronic Health In ContextS). The alliance and cooperation between telemedicine and home therapies towards personalized socio-technical treatments”

Research structure: Department of Letters, Philosophy, Communication

Emergency decree: Rep. n. 16/2024 del 26/02/2024

Resolution of the Academic Senate: 11.03.2024

Resolution of the Board of Directors: 13.03.2024

Gross annual amount: € 30.000,00

Financial coverage:

PRIN PNRR 2022, SENA_B_22_RN_PRIN_01 - CUP: F53D23011060001

Duration of the grant: 18 months

Scientific area: 14 - Political and Social Sciences

Competition sector: 14/C1 - General Sociology

Scientific disciplinary sector: SPS/07 - General Sociology

Scientific director: Prof.ssa Barbara Sena

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) ed equiparati ovvero Diploma di Laurea (DL) conseguito secondo le modalità precedenti all'entrata in vigore del D.M. 509/1999 e s.m.i. e titoli equipollenti ai fini dell'ammissione ai pubblici concorsi.

Knowledge of the language: English.

The Commission reserves the right to verify knowledge of the Italian language for foreign candidates.

Additional qualifications evaluated by the Commission:

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Interview schedule:

- The interview will focus on the topic of the research project, the candidate's research experiences and his/her methodological skills.
- Knowledge of the English language will also be tested during the interview.

Description of the research project:

The proposal aims to explore the possibilities of a socio-technical and patient-centered interpretation of telemedicine, within a systemic approach to health. The proposal is in line with the interventions envisaged by the National Recovery and Resilience Plan (or PNRR) which, in coherence with the reform of territorial care, aims at reducing territorial inequalities and improving the integration between regional health services and national platforms through innovative solutions.

The development of telemedicine is one of the strategic interventions envisaged to 'make the home the first place of care'. Further, beside contributing to the cluster "Health" of Horizon Europe, the proposal concerns many key activities featured in the 2021-27 Italian NRP (National Research Plan - PNR in Italian), because they require a higher understanding and development of telemedicine. Currently, a technical and biomedical approach still prevails in telemedicine practices. This approach frames technologies as mere (and neutral) tools to support care and holds a reductionist view of illness as biological accidents or biochemical imbalances.

However, for some time now, complementary approaches have been developed. They consider health and illness as a property of the social system rather than individual conditions, pointing to the role of the communities of practice (Lave & Wenger 1991) of doctors, patients, their families, nurses, administrators, volunteers, paramedical and psychological support associations (Mol 2002). All these interrelated social worlds contribute to individual patients' health, illness, and recovery. In this perspective, the performance and effectiveness of e-health technologies depend on their embeddedness in enabling contexts. Drawing on a socio-technical and patient personalized approach, commonly adopted in Science and Technology Studies (STS) and Sociology of Health and Medicine (SHM), the proposal aims to study some innovative cases of implementation of remote therapies related to two diseases: oncological and COVID-19. The study will apply a mixed-and-multi-methods approach, using three different methodologies: • a web survey (on attitudes and practices towards telemedicine) addressed to the whole population of the Italian General Practitioners - GPs • case studies • a Delphi group, with experts in public health and telemedicine. Besides the academic communities, the proposal aims at stimulating the creation/aggregation of clinical and healthcare-centred communities, dealing with single morbidities. One of the outcomes of the proposal stands as a community of practice, sharing experiences of successful e-health practices.

RESEARCH PROJECT - CODE 6

“Rethinking, Understanding Modal particles (RUM)”

Research structure: Department of Foreign Languages, Literature and Cultures

Department resolution: 20.02.2024

Resolution of the Academic Senate: 11.03.2024

Resolution of the Board of Directors: 13.03.2024

Gross annual amount: € 20.244,00

Financial coverage:

Protocollo Mur 2022YACK2L_02 – Project code IRIS-AP CARO_G_22_RN_PRIN_01 – CUP F53D23004890006

Duration of the grant: 14 months

Scientific area: 10 – Antiquities, Philology, Literary Studies, Art History

Competition sector: 10/M1 – Germanic Languages, Literatures and Cultures

Scientific disciplinary sector: L-LIN/14 – Language and Translation – German

Scientific director: Prof. Carobbio Gabriella

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) ed equiparati ovvero Diploma di Laurea (DL) conseguito secondo le modalità precedenti all'entrata in vigore del D.M. 509/1999 e s.m.i. e titoli equipollenti ai fini dell'ammissione ai pubblici concorsi.

Knowledge of the language:

Proficiency in German and Italian is required

Additional qualifications evaluated by the Commission:

- Excellent MA thesis in German linguistics and preferably on a topic related to the research project
- Research experience in the field of German linguistics also in a comparative perspective with Italian
- Aptitude for scientific research related to German linguistics;
- Study experience abroad (e.g. double degree or Erasmus)

Interview schedule:

German linguistics, contrastive linguistics German-Italian, translation studies, corpus linguistics. The interview will be held in Italian and German.

Research project:

Objective: The project aims at building and analysing a multimodal corpus for the study of German modal particles (henceforth MPs) and at creating a database of dictionary entries for each MP.

Theoretical framework:

MPs have been at the top of the agenda in German linguistic research for more than five decades. With MPs (also: *Abtönungspartikeln*) we refer to special usages of words such as *auch*, *bloß*, *denn*, *doch*, *eben*, *ja*, *mal*, *schon*, in which the words i) are used with a presuppositional (thus the label “modal”) content like in (1), and ii) are unstressed and subject to the syntactic restrictions of clitic/weak elements (Cardinaletti/Starke 1999; thus the label “particle”).

(1) a. Es wird schon gut gehen ('It will be okay')

b. Das ist ja Klasse ('That's great indeed')

Work on MPs started in the 1960/1970 with the communicative-pragmatic turn and the analysis of spontaneous-speech data in the first corpora of spoken German; since then MPs have been a classic topic for descriptive and formal linguistics, from both synchronic and diachronic perspectives (Weydt 1979, Diewald 1997, Coniglio 2011, Waltereit 2006). The identification of this class was made difficult by the fact that all MPs are special usages of words belonging to other word or functional classes. For instance, some German MPs, for instance *denn*, have a homonymous counterpart in the class of conjunctions or connective adverbs (see Meibauer 1994), and in some cases they also function like conjunctions (2b, Helbig 1994: 63).

(2) a. Ich gehe nicht schwimmen, weil das Wasser noch viel zu kalt ist
(‘I won’t go swimming, because the water is still much too cold’)

b. Ich gehe nicht schwimmen. Das Wasser ist ja noch viel zu kalt
(‘I won’t go swimming. The water is still much too cold, as you know’)

In (2) the conjunction *weil* and the MP *ja* link two propositions together. MPs typically connect an utterance to the context and contribute to the interpersonal level of conversation by relating the proposition to speaker’s and hearer’s information source/background (Diewald 2013). Traugott/Dasher (2002) argue that the indexical-grammatical function of MPs develops through a three-stage grammaticalization process affecting some words, i.e. (i) referential function, (ii) text integrative/connective function and (iii) speaker-based indexical function. This functional shift is accompanied by a change in syntactic status, syntactic position and word class.

Linguistic research has helped identify the class of MPs and set it apart from similar elements, such as adverbs. One important clue to identify MPs is prosody: MPs are, unlike adverbs, typically unstressed (Blühdorn 2019, but see Meibauer 1994) and they also exhibit a series of morphological and syntactic restrictions which are fully absent from their usages as non-MPs. Moreover, MPs cannot be inflected (3a’), cannot appear in isolation (3b’), cannot be coordinated (3c’) or be fronted (3d’). These properties are illustrated in Table 1 with the word *eben* in its modal and non-modal usages.

Properties	Non-MP usages of <i>eben</i>	MP usages of <i>eben</i>
inflected	yes (3a) Die ebene Landschaft des Niederrheins hat mir immer gut gefallen. ‘I have always liked the flat landscape of Niederrhein.’	no (3a’) Mit Kindern ist es eben /*ebener so ‘With children it is like this (you cannot change it).’
isolated	yes (3b) Wie ist die Landschaft des Niederrheins? Eben. ‘How is Niederrhein’s landscape? Flat.’	no (3b’) Wie ist es mit Kindern? *Eben ‘How is it with children? Like this.’
coordinated	yes (3c) Die Landschaft des Niederrheins ist eben und grün. ‘Niederrhein’s landscape is flat and green.’	no (3c’) *Mit Kindern ist es eben und immer so. ‘With children it is like this and always.’
in sentence-initial position	yes (3d) Eben ist die Landschaft des Niederrheins, nicht gebirgig. ‘Niederrhein’s landscape is flat not mountainous.’	no (3d’) *Eben ist es mit Kindern so. ‘With children it is like this (you cannot change it).’

Table 1

Syntactically, the only position available for the MP is within the sentence in the so-called Mittelfeld position, where MPs precede the sentence focus, i.e. the pragmatically most prominent constituent bearing the main pitch accent (Hentschel 1986, Moroni 2010). Unlike adverbs, MPs are specialized for a sentence’s illocutionary type (Thurmair 1989). Finally, MPs are special in that they do not interfere with a sentence’s truth value; however, they do express the speaker’s evaluation on the proposition like modal verbs and speaker oriented adverbs (such as unfortunately, frankly, etc.) which scope over the whole proposition (high adverbs in Cinque 1999, cf. Blühdorn/Ravetto 2014). One last property setting MPs apart from adverbs is the fact that MPs can be understood as parts of “multimodal” constructions, i.e. there exists a systematic connection between single MPs and gestures (Schoonjans 2018). With gestures we mean “the visible movement of any body part consciously or unconsciously made with the intention of communicating while speech is being produced” (Calbris 2011:6). MPs correlate with two main types of gestures: illocutionary gestures and hedging gestures (intersubjektive/abtönende Gesten) which are produced simultaneously to MPs. The former are connected with a specific illocutionary type, for instance the “Palm Up Open Hand” gesture correlates with the giving of new information (Schoonjans 2018:186, “Assertiv-bietende Geste”), whereas the asking of new information

involves a “palm open hand” gesture with the palms towards the centre. Hedging gestures, on the contrary, correlate with certain MPs and reinforce their meaning. The MP *ja* correlates with nodding; *doch* co-occurs with nodding, stick gesture (Taktstock), pinching hand/pinched finger (senkrechter Ring/Börsenhand), *eben* correlates with nodding, „horizontal palm”, *einfach* is supported by head shaking and shrug (Achselzucken).

Description of the research project:

The researcher will organize the data collected for each German MP in the format of dictionary entries (as in Métrich/Faucher 2009) and will indicate for each MP i) its semantic meaning; ii) its grammatical description, iii) its pragmatic description, iv) the multimodal features associated with it and v) the possible translations of the MP into Italian. Based on these results, single comprehensive dictionary entries for each MP will be organized in a single searchable Database, which will constitute the output of the project together with research papers on the topic.

Data collection:

The researcher will search for the occurrences of the most important MPs (*ja*, *doch*, *eben*, *halt*, *schon*, *bloss*, *nur*, *denn*, *auch*, *mal*) in political speeches for which both audio and video are available. Potential sources of data to be extracted are i) the FOLK-corpus (Forschungs- und Lehrkorpus Gesprochenes Deutsch, https://dgd.ids-mannheim.de/dgd/pragdb.dgd_extern.welcome) where audio and video material is available (a plenary session of the German Parliament; committee meetings); ii) speeches in German held by German politicians at the plenary sessions of the European Parliament

(<https://www.europarl.europa.eu/plenary/en/vod.html?mode=chapter&vodLanguage=EN&playerStartTime=20181113-15:05:17&playerEndTime=20181113-17:28:45#>); iii) Sessions of the German Parliament available on the German Parliament TV channel (<https://www.bundestag.de/en/press/tv>) and of TV Channels of the regional "Landtage" (cfr. the Youtube channel of the Schleswig-Holsteinischer Landtag, <https://www.youtube.com/channel/UCIN8-CM770nmDZKSvf16RTA>).

These sources will be integrated with iv) political talk shows (such as: Anne Will, Maybrit Illner, Hart aber fair) available on German TV channels websites (Mediatheken). The collected speech data will be transcribed according to the GAT2 conventions (Selting et al. 2009) on ELAN (<https://archive.mpi.nl/tla/elan>) and tagged manually. For every MP occurrence, the following information will be collected: i) syntactic context, ii) lexico-semantic aspects, iii) type of communicative activity, iv) multimodal and v) prosodic aspects.

Data analysis and interpretation:

The data collected will be organized into a single comprehensive dictionary entry for each German MP and will follow the model of Métrich/Faucher (2009) including its semantic meaning; its grammatical description, its pragmatic description, the multimodal features associated with it, functional equivalents/possible translations. Possible translations for MPs will be taken first

from the monograph on MPs by Cognola/Moroni (2022), in which an Italian/German contrastive description of German MPs and their Italian counterparts is given. Cognola/Moroni (2022) offer an updated view on the possible translations of MPs basing on previous studies and on the analysis of a novel corpus for the direction Italian-German and German-Italian. They detect the following strategies for the translation of German MPs:

- 1) Germ. MP = It. MP (see for instance *mica* as an equivalent of Germ *doch nicht*, see Masi 1996, Soffritti 2008);
- 2) Germ. MP = It. discourse marker (see for instance *beh/insomma*, for Germ *halt*, see Cognola/Moroni 2022 and Sansò 2020 for the class of discourse markers);
- 3) Germ. MP = It. verb-based pragmatic marker (Ghezzi/Molinelli 2014), for instance German *doch* can be translated with It. *guarda/dai* (Cognola/Moroni 2022);
- 4) Germ. MP = It. syntactic construction, like left/right-dislocation (see Cardinaletti 2015);
- 5) Germ. MP = It. morphological strategy, for instance: (*mach mir mal die Tür zu/mi chiuderesti la porta?*).

This systematization of the empirical data will serve to provide an answer to the following questions: i) does the novel German spoken corpus data confirm the abstract description of German MPs available in the literature? ii) are there privileged morphosyntactic, lexico-semantic and conversational environments for the use of specific German MPs? iii) to what extent

does sociolinguistic variation play a role in the formal properties of MPs in German? iv) is it possible to draw a line between colloquial and less colloquial/more formal contexts of use of the MPs? v) do multimodal features correlate with MPs? vi) do multimodal features interact with prosody?

Key words:Modality.

Multimodality.
spoken German.
Multimodal corpora.
Gestuality.

Time:

- Bibliographic research and familiarization with methodological tools (corpus analysis, transcription software): 2 months
- Creation of the data sheet, search for occurrences of PMs in the corpora: 4 months
- Description of the PMs according to the formal and functional parameters indicated in the project: 5 months
- Exploratory investigation of functional equivalents/possible translations into Italian (2 months)
- Data systematization and update with PRIN project partner units (1 month)
- Dissemination of research results (oral papers/publications)

Expected results:

The project aims at reaching a new description of German MPs, which also considers corpus-data and the multimodal dimension. The description will be available in a database of dictionary entries. The integration of an interactional/pragmatic/multimodal approach with the results of formal linguistics and of the analysis of elicited data of previous research is particularly promising for an advancement of our understanding of MPs, bridging a methodological gap, whereby these two approaches have never been combined so far.

Initial foundational bibliography

- Calbris 2011: Elements of Meaning in Gesture. Amsterdam.
- Cardinaletti 2015: What do you do if you don't have modal particles? In: Brandner et al. (ed): Charting the landscape of linguistics on the scope of Josef Bayer's work. Uni Konstanz, 16-21.
- Cardinaletti/Starke1999: The Typology of Structural Deficiency. A Case Study of the Three Classes of Pronouns. In: Van Riemsdijk(ed): Clitics in the Languages of Europe. New York, 145-233.
- Cinque 1999: Adverbs and functional heads. Oxford.
- Cognola/Moroni 2022: Le particelle modali del tedesco. Caratteristiche formali, proprietà pragmatiche ed equivalenti funzionali in italiano. Roma.
- Coniglio 2011: Die Syntax der deutschen Modalpartikeln: Ihre Distribution und Lizenzierung in Haupt- und Nebensätzen. Berlin.
- Diewald 1997: Grammatikalisierung. Tübingen.
- Diewald 2013: "Same same but different" – Modal particles, discourse markers and the art (and purpose) of categorization. In: Degand et al.(ed): Discourse markers and modal particles. Amsterdam, 19-46.
- Ghezzi/Molinelli 2014: Italian guarda, prego, dai. Pragmatic markers and the left and right periphery. In: Beeching/Detges (ed): Discourse functions at the left and right periphery. Leiden, 117- 150.
- Helbig 1994: Lexikon deutscher Partikeln. Leipzig.
- Hentschel 1986: Funktion und Geschichte deutscher Partikeln. Tübingen.
- Masi 1996: Deutsche Modalpartikeln und ihre Entsprechungen im Italienischen. Frankfurt.
- Meibauer 1994: Modaler Kontrast und konzeptuelle Verschiebung. Studien zur Syntax und Semantik deutscher Modalpartikeln. Tübingen.
- Métrich/Faucher 2009: Wörterbuch deutscher Partikeln. Unter Berücksichtigung ihrer französischen Äquivalente. Berlin.
- Moroni 2010: Modalpartikeln zwischen Syntax, Prosodie und Informationsstruktur. Frankfurt am Main.
- Sansò 2020: I segnali discorsivi. Roma.
- Schoonjans 2018: Modalpartikeln als multimodale Konstruktionen. Berlin/Boston.
- Selting et al. 2009: Gesprächsanalytisches Transkriptionssystem 2 (GAT2) Gesprächsforschung 10, 353-402
- Soffritti 2008: Deutsche Entsprechungen zu mica: eine Analyse anhand FORLIXT 1 und anderer Corpora der gesprochenen Sprache. L'analisi linguistica e letteraria 16, 191-202.
- Thurmair 1989: Modalpartikeln und ihre Kombinationen. Tübingen.
- Traugott/Dasher 2002: Regularity in Semantic Change. Cambridge.
- Waltereit 2006: Abtönung. Zur Pragmatik und historischen Semantik von Modalpartikeln und ihren Funktionalen Äquivalenten in romanischen Sprachen. Tübingen.
- Weydt 1979 (ed): Die Partikeln der deutschen Sprache. Berlin.

RESEARCH PROJECT - CODE 7

“Developing an Extended Reality learning app for ESP”

Research structure: Department of Foreign Languages, Literature and Cultures
Department resolution: 20.02.2024

Resolution of the Academic Senate: 11.03.2024
Resolution of the Board of Directors: 13.03.2024

Gross annual amount: € 20.000,00

Financial coverage:

Protocollo MUR 2022R9K3AR_01 – Project code IRIS-AP ANES_P_22_RN_PRIN_01 – CUP
F53D23004810006

Duration of the grant: 12 months

Scientific area: 10 – Antiquities, Philology, Literary Studies, Art History

Competition sector: 10/L1 – English and Anglo-American Languages, Literatures and Cultures

Scientific disciplinary sector: L-LIN/12 – Language and Translation – English

Scientific director: Prof.ssa Patrizia Anesa

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) ed equiparati ovvero Diploma di Laurea (DL) conseguito secondo le modalità precedenti all'entrata in vigore del D.M. 509/1999 e s.m.i. e titoli equipollenti ai fini dell'ammissione ai pubblici concorsi.

Knowledge of the language: Italian, English

Additional qualifications evaluated by the Commission:

- 1) Portfolio including: the candidate's previous projects (if any) to be attached to the application as well as the candidate's publications (if any);
- 2) an essay (max 2000 words) illustrating how the candidate intends to develop an AR app for ESP. It will be discussed during the interview (it does not need to be attached to the application and can be presented during the interview).

Interview schedule:

The interview will focus on topics such as:

- Virtual, Augmented and Mixed reality.
- Extended reality technologies in English language education.
- Development and update of AR applications.
- Immersive experiences in language learning, teaching, and training.
- Digital humanities.
- Natural Human Interfaces.
- Programming languages.

The commission will evaluate competences such as collaboration skills and previous experience in fields related to the content of the project, also through the discussion of qualifications, research and professional experiences carried out by the candidate. The theoretical and practical skills related to the key aspects of the project and the knowledge of the Italian and English languages will be ascertained.

The interview will be conducted both in Italian and in English.

Research project:

Objective:

The project is profoundly interdisciplinary by nature and lies at the intersection between English studies and IT engineering. It aims to develop an Augmented Reality mobile application for the enhancement of ESP competence across specialized fields. The project has clear applied goals, such as: To highlight potential problematic areas in the application of AR in educational and professional ESP contexts; To develop and launch ESP-ARA; testing ESP learning with adults in immersive contexts.

Theoretical framework:

AR technologies allow for the superimposition of virtual elements upon the real world (Diegmann et al. 2015). Sophisticated and expensive devices are no longer a requirement for its usage and everyday devices such as smartphones and tablets can favor the use of AR to leverage the needs of learners and users across disciplines and can potentially revolutionize learning approaches (Hockly 2019). Research shows that AR can effectively support users with special needs (Quintero et al. 2019) and can enhance motivation, engagement, collaboration, faster learning and increased memorization of content (Saltan & Arslan 2017; Moreno-Guerrero et al. 2020). However, ESP language learning practices have only sporadically (and often superficially) embraced AR technology.

Drawing on Saltan and Arslan (2017)'s scoping review of AR, the objective is to discuss and evaluate the implementation of AR in English language learning within a wider curriculum according to purposeful and meaningful pedagogical frameworks. The development of the AR app will be placed within this theoretical framework.

Research project description:

This project focuses on the potentialities of Augmented Reality in English for Specific Purposes and will result in the development of ESP-ARA (English for Specific Purposes Augmented Reality Application) for the enhancement of ESP language skills, computational thinking and 21st-century skills using AR. This learning app is a multifaceted global hub which serves as a virtual classroom gathering teachers, learners, and professionals from all over the world.

ESP-ARA enables users to work together from different remote locations using Mobile/PC/VR or AR. Thus, ESP-ARA allows educational institutions to provide online training and communication between students and tutors at any place and time. ESP-ARA will be mobile based and some of its affordances will be: ease of use, portability, flexibility, interactivity, context sensitivity, connectivity, accessibility and customizability.

It is designed to be used by non-programmers, although customization can be achieved and personalization enhanced (e.g. via HTML and JavaScript). ESP-ARA also supports the main Social XR features & Edu-Service templates, runs on the public/private cloud, and supports cross-platform usage (PC, Mobile, VR device, Smart Glasses).

Key words:

Extended reality.
Augmented reality.
Virtual Reality.
Language learning.
ELT

Time:

The project, which will take place over a period of 12 months, includes a series of activities:

1. Development of the first ESP-ARA prototype.
2. Update of the app based on the results of the testing phase.
3. Creation and updating of the project website.
4. Participation as a speaker in a national or international conference or seminar,
5. Preparation of an essay to be published in a national or international scientific journal or as a book chapter.

Expected results:

The successful candidate of the grant is expected to:

- Develop the ESP-ARA app within one year
- Develop the project website
- Present the results of the research in a national or international conference/seminar
- With the aim to promote scientific productivity, write a book chapter or journal article, acknowledging PRIN 2022 as the funding source.

Bibliography

- Bower, M., Howe, C., McCredie, N., Robinson, A., & Grover, D. (2014). Augmented reality in education—cases, places and potentials. *Educational Media International*, 51,1, 1–15.
- Deb, S. & Bhattacharya, P. (2018). Augmented sign language modeling (ASLM) with interaction design on smartphone—an assistive learning and communication tool for inclusive classroom. *Procedia Computer Science*, 125, 492–500.
- Diegmann, P., Schmidt-Kraepelin, M., Eynden, S., & Basten, D. (2015). Benefits of augmented reality in educational environments - a systematic literature review. *Proceedings of the 12th International Conference on Wirtschaftsinformatik (WI)*, 1542–1556.
- Hamilton, D., McKechnie, J.; Edgerton, E, Wilson, C. (2021) Immersive virtual reality as a pedagogical tool in education: A systematic literature review of quantitative learning outcomes and experimental design. *J. Comput. Educ.*, 8, 1–32.
- Hockly, N. (2019). Augmented reality. *ELT Journal*, 73,3, 328–334.
- Lee, S. M., & Park, M. (2019). Reconceptualization of the context in language learning with a location-based AR app. *Computer Assisted Language Learning*, 33,8, 1–24.
- Moreno-Guerrero, A.-J., Alonso García, S., Ramos Navas-Parejo, M., Campos-Soto, M.N., Gómez García, G. (2020). Augmented Reality as a Resource for Improving Learning in the Physical Education Classroom. *International Journal of Environmental Research and Public Health*, 17, 3637.
- Saltan, F. & Arslan, Ö. (2017). The Use of Augmented Reality in Formal Education: A Scoping Review. *Eurasia Journal of Mathematics, Science and Technology Education*, 13,2, 503–520.

RESEARCH PROJECT - CODE 8

"Psycho-promotion interventions for healthy longevity by using new technologies"

Research structure: Department of Social and Human Sciences

Department resolution: 18.10.2023

Resolution of the Academic Senate: 23.10.2023

Resolution of the Board of Directors: 25.10.2023

Gross annual amount: € 24.300,00

Financial coverage: MORG_F_22_RN_PRIN_01 - CUP F53D23004820006 - ID MUR 2022RAESSJ_01

Duration of the grant: 18 months

Scientific area: 11/E - Psychology

Competition sector: 11/E1 - General Psychology, Psychobiology and Psychometrics

Scientific disciplinary sector: M-PSI/01 - General Psychology

Scientific director: Prof.ssa Francesca Morganti

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Psicologia (LM-51) ed equiparati ovvero Diploma di Laurea (DL) conseguito secondo le modalità precedenti all'entrata in vigore del D.M. 509/1999 e s.m.i. e titoli equipollenti ai fini dell'ammissione ai pubblici concorsi.

Knowledge of the language: English

Additional qualifications evaluated by the Commission:

- Research and teaching experience on the topics of Health Psychology, Psychology of Aging and Clinical Neuropsychology of Older Adults.
- Participation in national and international research projects on the topic of technologies, wellness, and aging.
- Ability to develop and use new technologies for health.

Interview schedule:

- Verification of the qualifications indicated by the applicant with particular attention to those relevant to the proposed research topic.
- Motivation and skills of the candidate for participation in the research project (including aptitude for teamwork).
- Methodological and technical-scientific skills for conducting the research project.
- Knowledge of the English language.

Description of the research project:

The project aims to assess through quantitative and qualitative measurements the risk and opportunity factors for healthy aging in the over-55 population. Such monitoring will be used to track participants' lifestyle trends in order to orient them toward protective choices for healthy longevity. Both monitoring and lifestyle orientation will make use of specific technological tools usable on applications developed ad hoc within the research project.