



UNIVERSITÀ
DEGLI STUDI
DI BERGAMO

Area
Risorse Umane

Servizio Personale TA e
collaboratori

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. 28 Early stage grants for conducting research pursuant to art. 22 of law no. 240/2010 at the Departments of University of Bergamo - Pica Code 23AR027

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. 570/2023 of 01.08.2023;
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. 14405/1/003 of 19.7.2011 and amended with Chancellor's Decree. Rep. No. 262/2018, Prot. No. 60030/1/003 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 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

28 public selections are launched based on qualifications and interview for the awarding of No. 28 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 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 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 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 need, 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 Dr. Domenico Panetta, manager of Area risorse umane, Via dei Caniana, 2 - 24127 Bergamo, phone (+39) 035 2052 669 - 583 - 878, e-mail address: assegni.ricerca@unibg.it.

Article 13

Publication

This call is published in the University's Official Registry, on the website of the Conference of the Italian University Chancellors (www.cruai.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*".



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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

"FROB - Family of ROBots for children with disabilities"

Research structure: Department of Humanities and Social Sciences

Department Resolution: 13.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Duration of the grant: 24 months

Gross and funds: € 20.256,00;

BESI_S_22_RN_PRIN_01 CUP F53D23006100006 - MUR 2022287PHF_01

Scientific Area: 11

Academic recruitment field: 11/D2 - Methodologies of teaching, special education and educational research

Academic discipline: M-PED/03 - Methodologies of teaching and special education

Scientific Director: prof.ssa Serenella Besio

Access requirements:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Scienze pedagogiche (classi LM-85 o 87/S) o in Scienze dell'educazione degli adulti e della formazione continua (classi LM-57 o 65/S) o in Psicologia (LM-51 o 58/S) o in Scienze cognitive (classi LM-55 o 63/S) o in Servizio sociale e politiche sociali (classi LM-87 o 57/S Programmazione e gestione delle politiche e dei servizi sociali) o in Sociologia e ricerca sociale (classi LM-88 o 89/S Sociologia o 49/S Metodi per la ricerca empirica nelle scienze sociali) 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;

Foreign language: English

Additional requirements for assessment:

- Quality of the Curriculum Vitae (course of previous studies, degree grade, any publications, professional experiences) and consistency of it with the intended object of study.
- Knowledge of the topics indicated in the project.
- Ability to present concepts in a clear and coherent way.
- Relevance and exhaustiveness of the issues and arguments presented, in relation to the questions posed by the Commission.

Interview program:

- The functional obstacles to play activities encountered by children with motor impairment and with autism spectrum disorders; the environmental obstacles that hinder the development of their play skills.
- The use and application of robotic artifacts to support children with disabilities, with particular reference to the field of play: existing and tested models and tools, with specific reference to the psycho-pedagogical and social aspects, as well as to learning.

Research Project:



FROB (Family of ROBots) aims at developing a methodology and tools to exploit and test autonomous robots to support play with Children with Disabilities, physical and cognitive, overcoming individual limitations and environmental barriers that prevent autonomous play.

These children may meet difficulties in the autonomous development of the abilities necessary to play due to their impairments and to the lack of effective toys as well as of appropriate methodologies and techniques to scaffold their play activities within inclusive contexts.

This may cause deprivation not only to their cognitive development but also to their social relationships, thus preventing them from the full accomplishment of their right recognized by the two main UN Conventions in the field (related to children and to persons with disabilities).

In the last decades multidisciplinary research has addressed critical aspects of play with CwD: designing accessible and adaptable ludic tools, developing methodologies to implement effective and inclusive play activities (as to spaces, affordances, mediators, scenarios) and policies (attitudes, norms). The PNRR (2021) also sustains the need to actively guarantee equal opportunities to persons with disabilities thus overcoming the delays that penalize them in Italy.

This research focuses on the development of a set of educational tools for educators and caregivers including: a) a Family of Robots (FROBs), whose modularity enable to define different types of interaction and play; b) a related repertoire of inclusive play activities that ensure the direct participation of CwD, in particular with Physical Impairment and Autism Spectrum Disorders.

Most of the available robotic toys and prototypes are suitable for a single type of interaction, with a poor ludic potential. The modularity of FROBs will enable different types of play (cognitive side: practice, constructive, symbolic, rule-based; social side: solitary, parallel, collaborative) and will support toy adaptation to the play situation, giving children with disabilities the opportunity to play together at different levels of complexity.

The main challenge will be the definition of a methodology to exploit an affordable, and extremely versatile HW/SW architecture and a set of modules that could be assembled in a plug-and-play way to implement interesting autonomous objects.



RESEARCH PROJECT - CODE 2

"BREAK THE BIAS: new data and methods to investigate the presence and impact of gender stereotypes on economic outcomes"

Research structure: Department of Economics

Department Resolution: 20.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Duration of the grant: 24 months

Gross and funds: € 26.340,00;

PRIN 2022 - **Project Code** BUON_P_22_RN_PRIN_01 - **CUP** F53D23003020006

- **MUR** 2022AE5BCC_01

Scientific Area: 13 - Economics and statistics

Academic recruitment field: 13/A2 - Economic policy

Academic discipline: SECS-P/02 - Economic policy

Scientific Director: Prof. Paolo Buonanno

Access requirements:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) 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;

Foreign language: English

Additional requirements for assessment:

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Interview program:

Presentation of a representative research paper related to the theme of the project with relative discussion.

Research Project:

The project aims to analyze the impact of gender stereotypes and biases on gender inequality in economic outcomes and to understand the origin and mechanisms of these biases.

Specifically, the project has three objectives:

- 1) DETECT the presence of gender bias in the evaluation of labour market candidates, and in the formation of expectations and beliefs over female and male behaviour.
- 2) EVALUATE the impact of gender bias: investigate how it affects female and male opportunities.
- 3) UNDERSTAND the historical determinants and the underlying mechanisms of gender biases.

Developing knowledge on these aspects is key for informed policy suggestions to address gender inequality. The project is designed to achieve these goals by integrating a variety of data and empirical techniques, a frontier theoretical approach and laboratory and lab-in-the-field experiments.

The project is highly skill and data intensive.



RESEARCH PROJECT - CODE 3

"Empirical Evaluation of Historical Policies: Fascist Land Reclamation Program and Human Capital Accumulation in the Long-Run"

Research structure: Department of Economics

Department Resolution: 20.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Duration of the grant: 24 months

Gross and funds: € 24.300,00;

PRIN 2022 - Project Cod. CINN_F_22_RN_PRIN_01 - **CUP:** F53D23002930006 - **MUR** 20227SNASS_01

Scientific Area: 13 - Economics and statistics

Academic recruitment field: 13/A3 - Public economics

Academic discipline: SECS-P/03 - Public economics

Scientific Director: Prof. Francesco Cinnirella

Access requirements:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Scienze dell'economia (classi LM-56 o 64/S) 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;

Foreign language: English

Additional requirements for assessment:

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Interview program:

Presentation of a representative research paper related to the theme of the project with relative discussion. It will be also assessed the knowledge of the econometric tools for causal identification and of the major statistical software for analysing microdata.

Research Project:

The project contributes to the growing research studying the legacy of history for long-term development. A first objective is to study the effect of land policies on economic specialization and long-run development. The project will focus on specific public policies enacted during the Fascist regime in Italy on both historical and modern economic and socio-political outcomes. A second objective is to shed light on the mechanisms through which the Fascist policies might have impacted human capital accumulation in the long run with a focus on local provision of public goods which possibly affected the quality of the supply of infrastructures and services related to education.



RESEARCH PROJECT - CODE 4

“Design of a Model Predictive Control algorithm for the Autonomous Guidance in Narrow-Track vehicles”

Research structure: Department of Management, Information and Production Engineering
Department Resolution: 15.09.2023

Resolution of the Academic Senate: 22.09.2023
Resolution of the Board of Directors: 28.09.2023

Duration of the grant: 24 months

Gross and funds: € 19.367,00 (€ 38.734,00 for 24 months)
PRIN 2022 “AGeNT: leaning toward narrow-track vehicles autonomous guidance” (MUR: 2022FKLTSB_01); project code FERR_A_22_RN_PRIN_01, CUP F53D23000470006

Scientific Area: 09 - Industrial and information engineering
Academic recruitment field: 09/G1 - Systems and Control Engineering
Academic discipline: ING-INF/04 - Systems and Control Engineering

Scientific Director: Prof. Antonio Ferramosca

Access requirements:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Ingegneria Informatica (classi LM-32 o 35/S) 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;

Foreign language: English

Additional requirements for assessment:

Previous experience in the field of automatic control, mainly Model Predictive Control and dynamic system identification from experimental data.

Interview program:

Fundamentals of Automatic Control
Fundamentals of systems identification

Research Project:

Autonomous guidance is undoubtedly among the most important innovations leading the transformation of global mobility. Considering ground transportation, it has been applied to several vehicle types, ranging from the more traditional four-wheeled passenger cars up to heavy-duty vehicles such as trucks or tractors. Narrow-track (also referred to as "tilting" or "rolling") vehicles make an exception and remain a highly human-centered transport means. Project AGeNT (Autonomous Guidance for Narrow Track vehicles) aims at making a step forward in narrow-track vehicles autonomous driving. AGeNT aims at providing algorithms and control solutions for autonomous path planning and path tracking tasks, tailored for narrow-track vehicles. Being the real-world applicability a concern, a fully instrumented three-wheeled vehicle will be employed.

The goal of the research grant is to design suitable control algorithm for the trajectory tracking problem of narrow-track vehicles. To this aim, Model Predictive Control (MPC) will be the chosen as a control strategy. The main advantage of MPC over other control methods consists in its ability to easily control multiple-input multiple-output (MIMO) systems that are subject to input, state and output constraints. In the context of this research project, classic real-world constraints like steer



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angle dynamics and lateral longitudinal coupling can be naturally incorporated into the MPC control problem. Within this objective, the research line of this grant is to simultaneously face the trajectory tracking and the vehicle stabilization within a single optimization problem, comparing it with standard solutions based on a two-modules strategy.



RESEARCH PROJECT - CODE 5

"The role of the Higher Education Ecosystem in generating impact through student entrepreneurship: a multi-level perspective"

Research structure: Department of Management, Information and Production Engineering
Department Resolution: 15.09.2023

Resolution of the Academic Senate: 22.09.2023
Resolution of the Board of Directors: 28.09.2023

Duration of the grant: 24 months

Gross and funds: € 21.876,00;
PRIN 2022 "Institutions, Education and Entrepreneurship Studies: a Novel Perspective on University Impact (IEES)" (MUR: 2022AYY9RK_01); project code MINO_T_22_RN_PRIN_01 CUP F53D23003040006

Scientific Area: 09 - Industrial and information engineering
Academic recruitment field: 09/B3 - Business and Management Engineering
Academic discipline: ING-IND/35 - Business and Management Engineering

Scientific Director: Prof. Tommaso Minola

Access requirements:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Ingegneria gestionale (classi LM-31 o 34/S) o in Scienze economico-aziendali (classi LM-77 o 84/S) 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;

Foreign language: English

Additional requirements for assessment:

International scientific collaborations, research experience in multidisciplinary contexts, and specific experiences in the field of new firm creation, especially in academic context and/or high-tech sectors.

Interview program:

Definition of student entrepreneurship and Higher Education Ecosystem; Multi-level analysis of the student entrepreneurship phenomenon;
Assessment of the impact of student entrepreneurship;
The role of entrepreneurship education in new venture creation.
The assessment of the English proficiency will be carried out during the selection according to the modalities established by the Commission.

Research Project:

The project studies the antecedents and impact of student entrepreneurship, defined as entrepreneurial activity undertaken by university students and recent graduates. Specifically, the project focuses on the role played by the university ecosystem in promoting venture creation by students and recent graduates and in facilitating the performance of these ventures. Student entrepreneurship is at the center of a vibrant debate among scholars and policy makers. It represents an important mechanism through which the knowledge acquired by students and recent



graduates in the university context can contribute to the achievement of various objectives (SDGs), such as economic growth, job creation, innovation and the reduction of inequalities.

Despite the growing attention towards the phenomenon of student entrepreneurship, there is a lack of full understanding of how different elements of the Higher Education Ecosystem can act in synergy to promote student entrepreneurship and its impact. To what extent do educational offerings in combination with institutional and cultural elements of the University and its environment facilitate the identification of entrepreneurial opportunities and their realization through business creation? How do these elements explain the success of student entrepreneurship initiatives in terms of innovation, job creation and local development?

To address these research questions, the project will adopt a multi-level perspective, which takes into account individual, social and institutional influences on entrepreneurial phenomena. The project will thus involve the creation and analysis of an original dataset that capture the phenomenon of student entrepreneurship through a multi-level lens.



RESEARCH PROJECT - CODE 6

“Vocational Education and Training (VET) in the post-Covid world. Impacts on individuals, firms and local development.”

Research structure: Department of Economics

Department Resolution: 20.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Duration of the grant: 24 months

Gross and funds: € 22.284,00;

PRIN 2022 – Project code ORIG_F_22_RN_PRIN_01 – CUP F53D23003100006 – PROT MUR 2022KRJR2Z_02

Scientific Area: 13 – Economics and statistics

Academic recruitment field: 13/A2 – Economic Policy

Academic discipline: SECS-P/02 – Economic Policy

Scientific Director: Prof.ssa Federica Origo

Access requirements:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Scienze dell'economia (classi LM-56 o 64/S) o in Scienze economico-aziendali (classi LM-77 o 84/S) o in Scienze statistiche (classi LM-82 o 91/S Statistica economica, finanziaria e attuariale) o in Ingegneria gestionale (classi LM-31 o 34/S) o in Sociologia e ricerca sociale (classi LM-88 o 89/S Metodi per la ricerca empirica nelle scienze sociali) 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

Foreign language: English

Additional requirements for assessment:

The possession of a PhD degree in Economics or Statistics will be positively considered in the evaluation process.

Interview program:

- Knowledge of the socio-economic literature on the topic of the research;
- Knowledge of data collection and data management;
- Motivation and attitude to empirical research, also with a multidisciplinary approach, with particular attention to previous research experiences, earned also in the course of study.

Research Project:

This research project aims at investigating the main features of the vocational education and training (VET) system in Italy in a comparative perspective, and its impact on individuals, firms, local development and the society as a whole.

VET is that part of the education systems that provides young people with skills and knowledge directly related to a specific occupation.

In Italy, after the traditional four-year VET program (Istruzione e Formazione Professionale,



leFP diploma, ISCED 3) students can enroll in an extra year of post-secondary non tertiary education (Istruzione e Formazione Tecnica Superiore, IFTS, ISCED 4) and then enter a short tertiary vocational program (Istituti Tecnici Superiori; ITS, ISCED 5).

In this project specific attention will be paid to tertiary VET, which has been introduced in Italy for the first time in 2010 under the form of Istituti Tecnici Superiori (ITS). The main feature of ITS courses is the combination of work-based and in-class learning, with active involvement of firms in both management and teaching, thus creating a strong link with local skills demand.

The VET system has experienced a number of substantial reforms in recent years and it is now formally embedded in the education system. However, differently from the other tracks of the education system, in Italy VET systems are administered at the regional level. Thus, the reforms have been implemented in different ways and at different dates across regions, based on specific experience and institutional features, leading to extremely different models of region-specific VET systems (INAPP,2019).

The aim of this research project is to study and exploit regional heterogeneity in the creation and development of ITS courses to investigate the impact of tertiary VET on both individuals and firm performance.

More specifically, the project will try to answer the following research questions:

1. What is the impact of attending an ITS course on individual employment and wages?
2. What are the main characteristics of the firms actively involved in ITS courses? Do firms benefit from participating in management or teaching in ITS courses?
3. Is there any association between the presence of ITS courses and local development (such as lower youth unemployment or NEET rates or more job and firm creation)?

The project will require:

- the review of the literature on the impact of post-secondary VET systems on the performance of individuals and firms;
- the collection of new data (e.g., the list of companies involved in ITS courses) and the management of different datasets (e.g., labour force survey data and firm-level accounting data, such as Bureau van Dick's AIDA database). Data collection may also require the use of qualitative methods, such as in-depth interviews and focus groups;
- collaboration in empirical analysis aimed at answering the research questions of the project. Knowledge of the main impact evaluation techniques, such as matching or difference-in-differences techniques, is valuable;
- publication and dissemination of the main results of the analysis.



RESEARCH PROJECT - CODE 7

"The fundamental freedoms within an altered European Union"

Research structure: Department of Law

Department Resolution: 19.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 24.300,00;

Financial coverage: Research project PRIN 2022- Project code BIZI_G_22_RN_PRIN_01 -CUP: F53D23003610006

Duration of the grant: 15 months

Scientific Area: 12 - Law studies

Competition sector: 12/D2 - Tax Law

Scientific disciplinary sector: IUS/12 - Tax Law

Scientific Director: Prof. Gianluigi Bizioli

Entry requirement:

Diploma di laurea Specialistica (LS) o Laurea Magistrale (LM) o Laurea Magistrale a ciclo unico in Giurisprudenza (Classi LMG/01 o 22/S) o in Scienze economico-aziendali (Classi 84/S o LM 77) 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:

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Interview schedule:

The interview will assess the candidate's competence in tax law, EU tax law and EU law, the knowledge relevant for the current research project, and the candidate's attitude to the research. The interview will be conducted in Italian and English.

Description of the research project:

The international tax competition has brought changes in the traditionally applied taxing rules and has introduced new instruments of taxation. More specifically, at the international level, the OECD has elaborated the so-called Pillar One and Pillar Two, which many States will implement. Then, the European Union approved the so-called ATAD Directive and – more recently – the Directive on global minimum taxation.

All these regulations have a common characteristic, i.e. they favour the application of the so-called single tax principle. Although such a principle prevents international double taxation and double non-taxation, its compatibility with the EU internal market is unclear.

In light of such premises, the research project aims to assess whether the single tax principle and the EU legislation that seem to implement it comply with fundamental freedoms guaranteed by the EU Treaties and – more generally – with the internal market. Also, the project has to focus on the compatibility of such legislation with the fundamental and common principles of the EU.



RESEARCH PROJECT - CODE 8

"An investigation on Problematic Social Media use among Italian mid-Adolescents (SMART Project)"

Research structure: Department of Human and Social Sciences

Department Resolution: 13.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 20.256,00;

Financial coverage: BRUG_A_22_RN_PRIN_01 CUP F53D23004790001 - PROT MUR 2022LC4FT_03

Duration of the grant: 15 months

Scientific Area: 11 - History, philosophy, pedagogy and psychology

Competition sector: 11/E4 - Clinical and Dynamic Psychology

Scientific disciplinary sector: M-PSI/08 - Clinical Psychology

Scientific Director: Prof. Agostino Brugnera

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea magistrale in Psicologia (classi LM-51 o 58/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:

- Research experience, especially if related to the project's topic.
- Scientific publications and other research products, especially if related to the project's topic.
- Participation in conferences or seminars as a speaker, especially if on topics related to the project.
- Other qualifications or licenses, especially if related to the project's topic.

Interview schedule:

The interview will assess the candidate's qualifications, language skills and knowledge related to the topic of the project.

Description of the research project:

Social media (SM) use constitutes a large portion of mid-adolescents' daily lives as a way of peer interaction. A significant percentage of adolescents experience intense or problematic social media use (PSMU), an aetiologically-complex behaviour potentially associated with psychological distress. To date, studies longitudinally testing for risk/protective factors of PSMU, including objective measures on SM use, and collecting qualitative data on adolescents' perspectives are still scarce among mid-adolescents. Self-help interventions specifically targeting PSMU in this population and involving mid-adolescents in co-creation are also needed.

Four Units from northern, central and southern Italy will integrate their expertise for the so-called "SMART project". This two-year multicentre project aims to: (i) advance knowledge on PSMU; (ii) co-design an unguided self-help app for promoting awareness and functional SM use, (iii) test feasibility and provide preliminary findings on its effectiveness to further improve and adapt the app.



Around 1000 mid-adolescents (14-17 years) will be recruited to investigate the potential intra- and inter-personal psychological and biological risk and protective factors for PSMU, define specific PSMU profiles and test for its association with psychological distress. Objective (log-based) and subjective (self-report) measures of PSMU will be assessed at 3 different time points together with Ecological Momentary Assessment (EMA). Moreover, focus groups will be performed in a subsample of mid-adolescents to collect the adolescents' unique point of view on PSMU and experiences.

Theoretical psychological models on PSMU, a review of evidence-based e-health interventions for PSMU, and preliminary quantitative and qualitative data collected during the first part of the project will inform the self-help app, which will be co-designed through working groups with adolescents. During the second part of the project, the app will be deployed and adapted, after testing its feasibility and potential effectiveness in a pilot study.

The innovative aspects of the SMART project will deepen the conceptualization of PSMU and of its bio-psycho-social antecedents among mid-adolescents. The advancement of knowledge and the developed self-help app for PSMU will timely respond to mid-adolescents' increased loneliness and psychological burden due to COVID-19 pandemic.



RESEARCH PROJECT - CODE 9

"TRAFFIC - Tracing American and Foreign Funds in Italian Cinema (1945-1962): Geographies of films 'of American interest' in Italy"

Research structure: Department of Letters, Philosophy, Communication

Department Resolution: 19.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 20.256,00;

Financial Coverage: PRIN 2022: AVEZ_G_22_RN_PRIN_01 CUP: F53D23007430001 - MIUR 20228BA393

Duration of the grant: 12 months

Scientific Area: 10 – Antiquities, philology, literary studies, art history

Competition sector: 10/C1 - Cinema, music, performing arts, television and media studies

Scientific disciplinary sector: L-ART/06 - Cinema, Photography and Television

Scientific Director: Prof. Giorgio Avezù

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea magistrale (LM) in Scienze dello spettacolo e produzione multimediale (classi LM-65 o 73/S) o in Metodologie informatiche per le discipline umanistiche (classi LM-43 o 24/S Informatica per le discipline umanistiche) o in Scienze geografiche (classi LM-80 o 21/S Geografia) o in Scienze storiche (classi LM-84 o 94/S Storia contemporanea) o in Scienze economiche per l'ambiente e la cultura (classi LM-76 o 83/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:

- Study and research experience in the area of film geographies (representation and consumption).
- Study and research experience in the field of Italian film history with special reference to economic, production and industrial aspects.
- Experience in data production and analysis of audiovisual content and consumption from data.
- Experience in archival research.
- Ph.D. with subject matter in audiovisual media and relevant to the project themes.

Interview schedule:

The interview will assess the candidates' prior knowledge about the subject of the research activities envisaged by the project, as well as their methodological competence. Foreign language proficiency will be tested.

Description of the research project:

The research grant is part of the PRIN project "TRAFFIC - Tracing American and Foreign Funds in Italian Cinema (1945-1962)," which involves the University of Bologna, the University e-Campus of Novedrate (CO) and the University of Bergamo. Overall, the PRIN project studies the relevance of U.S. capital in the Italian film scene after World War II, taking into consideration the period between 1945



and 1962, i.e., between the year in which the Italian branches of the majors reopened and the year in which U.S. investments were released from the special frozen funds.

The activities of the figure recruited by the unit of the University of Bergamo involve the study of films "of American interest" made in Italy between 1945 and 1962. The work will be carried out mainly from sources in the Central State Archives in Rome and the Italian and U.S. trade press. The recruited figure will be in charge of source retrieval and systematization and will focus especially on films of American nationality produced in Italy by U.S. studios and on films of Italian nationality produced with contributions from American studios. Activities will involve the analysis of production and textual aspects of the films surveyed (genres, actors, directors, styles), as well as the analysis of distribution and consumption aspects. Fundamental importance will have the analysis of geographical aspects concerning both production and representation, distribution and consumption, and thus locations, landscapes, geography of distribution and consumption (between different major cities, between major cities and total market, between cities and the province).



RESEARCH PROJECT - CODE 10

"Automation and Artificial Intelligence: Labor Market Effects and Implications for Global Value Chains"

Research structure: Department of Economics

Department Resolution: 19.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 19.452,00;

Financial coverage: CRIN_R_22_RN_PRIN_01 - CUP: F53D23003060006 - MUR: 2022FLBY7J_04

Duration of the grant: 14 months

Scientific Area: 13 - Economics and statistics

Competition sector: 13/A1 - Economic Policy

Scientific disciplinary sector: SECS-P/01 - Economic Policy

Scientific Director: Prof. Rosario Crinò

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Scienze dell'economia (classi LM-56 o 64/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:

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Interview schedule:

The interview will assess the candidate's knowledge of the recent scientific literature on the determinants and effects of the adoption of automation and artificial intelligence (AI) technologies by firms, of the econometric tools for causal identification, and of the major statistical software for analyzing microdata. Additionally, the candidate's familiarity with techniques for managing large datasets and the main challenges related to constructing complex databases at the firm, firm-worker (matched employer-employee data), and local labor market levels will also be evaluated. 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.

Description of the research project:

The grant is part of the project 'AUTOMation, PROductivity, and Wage INequality (AUTOPROWIN): Firms and Workers in Times of Economic Turmoil,' funded by the Ministry of University and Research under the PRIN 2022 call.

The researcher will be part of the local unit based at the University of Bergamo and coordinated by Prof. Rosario Crinò. The project aims to analyze the effects of adopting industrial automation technologies (robots) and artificial intelligence (AI) on:

- the labor market, with particular attention to the impact on overall employment levels and wage inequalities.



- The participation firms in global value chains (GVC), with a specific focus on the analysis of the relationship (complementarity/substitutability) that exists between GVCs and automation/AI technologies.

The project addresses both themes empirically. To this end, there is an intensive activity planned to collect new micro-data at the firm, firm-worker (matched employer-employee data), and local labor market levels. The analysis of these data is carried out through the application of advanced econometric techniques and the use of statistical software such as R and Stata. It is expected that the project will produce valuable results for the design of effective industrial policies, taking into account potential adjustment costs due to the adoption of new automation and AI technologies. A qualifying activity for the researcher is the dissemination of research methods and results through presentations at seminars and workshops. The researcher also actively participates in the activities envisaged within the AUTOPROWIN project.



RESEARCH PROJECT - CODE 11

"The languages of virtual reality and forms of immersive rhythm"

Research structure: Department of Letters, Philosophy, Communication

Department Resolution: 19.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 20.256,00;

Financial coverage: PRIN 2022 MIUR 2022MRWN2K Project code: DALO_A_22_RN_PRIN_01 CUP: F53D23007840006

Duration of the grant: 12 months

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

Competition sector: 10/C1 - Cinema, Music, Performing Arts, Television and Media Studies

Scientific disciplinary sector: L-ART/06 - Cinema, Photography and Television

Scientific Director: Prof. Adriano D'Aloia

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea magistrale in Design (classi LM-12 o 103/S Teorie e metodi del disegno industriale) o in Filologia moderna (classi LM-14 o 16/S o 40/S Lingua e cultura italiana) o in Informazione e sistemi editoriali (classi LM-19 o 13/S Editoria, comunicazione multimediale e giornalismo) o in Musicologia e beni culturali (classi LM-45 o 51/S) o in Psicologia (classi LM-51 o 58/S) o in Scienze della comunicazione pubblica, d'impresa e pubblicità (classi LM-59 o 59/S o 67/S Scienze della comunicazione sociale e istituzionale) o in Scienze dello spettacolo e produzione multimediale (classi LM-65 o 73/S) o in Scienze filosofiche (classi LM-78 o 17/S Filosofia e storia della scienza o 18/S Filosofia teoretica, morale, politica ed estetica o 96/S Storia della filosofia) o in Tecniche e metodi per la società dell'informazione (classi LM-91 o 100/S) o in Teorie della comunicazione (classi LM-92 o 101/S Teoria della comunicazione) 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:

The commission evaluates the eligibility of the candidate based on the possible holding of the following qualifications and their relevance to the theme and methods of the research project:

- Topic and grade of the thesis;
- Doctoral degree or enrollment in the final year of a doctoral program with a scheduled thesis defense date in the CUN 10 or 11 areas;
- Specialization diplomas and attendance certificates for postgraduate courses, whether obtained in Italy or abroad;
- Scientific publications or other research products;
- Participation in research activities, with detailed documentation, at public and/or private institutions through contracts, scholarships, or assignments, carried out in Italy or abroad;
- Methodological skills in the psychological and/or neurological field, duly specified.



Interview schedule:

The interview will focus on the candidate's curriculum vitae, qualifications, and publications, as well as his/her relevant experiences related to the research project's theme and the respective research methodologies. The interview also includes an assessment of the candidate's proficiency in the foreign language.

Description of the research project:

The research is part of the PRIN 2022 project "Movement Experience Through Rhythmic Organization in Audiovisual Representational Texts (METRO_ART)", aimed at studying the embodied experience of rhythm in audiovisual media with a transdisciplinary approach and methodologies that integrate the tools of film and audiovisual aesthetics and semiotics with experimental testing conducted using psychological and neurological methods. The research consists of three phases: 1) mapping the literature on language forms and the production of virtual reality content (VR cinema, VR games, VR documentaries, immersive journalism, etc.); cataloging and analyzing a sample of VR works; 2) designing and supporting the creation of functional VR clips for phase 3) conducting experimental tests on the rhythmic aspects of the VR experience.



RESEARCH PROJECT - CODE 12

“Developing robust and reliable AI methods for the automatic analysis of images from ADPKD patients”

Research structure: Department of Management, Information and Production Engineering
Department Resolution: 15.09.2023

Resolution of the Academic Senate: 22.09.2023
Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 19.367,00;

Financial coverage: PRIN 2022 “AI-based methods to improve stratification of patients affected by Polycystic Kidney Disease using multi-parametric MRI – AI4PKD” (prot MUR: 2022B23JT5_02); project code: DELL_M_22_RN_PRIN_01, CUP F53D23000530001

Duration of the grant: 18 months

Scientific Area: 09 - Industrial and information engineering

Competition sector: 09/G2 - Bioengineering

Scientific disciplinary sector: ING-IND/34 - Industrial Bioengineering

Scientific Director: Prof. Ettore Lanzarone

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Ingegneria biomedica (classi LM-21 o 26/S) o in Ingegneria gestionale (classi LM-31 o 34/S) o in Ingegneria informatica (classi LM-32 o 35/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:

Previous works on the specific problems addressed in the project; general knowledge of artificial intelligence approaches for image segmentation and radiomics.

Interview schedule:

Verification of the candidates' skills on the general themes of the call; verification of the candidates' skills on the specific application theme of the call; discussion of the works previously developed and how they relate to the themes of the call; knowledge of English.

Description of the research project:

The project aims at developing robust and reliable AI-based methods for the automatic analysis of abdominal images from patients with Autosomal Dominant Polycystic Kidney Disease (ADPKD). Ad-hoc stratification models will be designed, based on the multi parametric and multi-organ radiomic characterization of renal and hepatic components, starting from accurate and explainable segmentation techniques. The specific objectives are: i) to develop an automatic image segmentation method based on Bayesian neural networks for the identification of the main organs and their cystic and non-cystic components, starting from MRI images; ii) to develop techniques for deep neural network explainability, that will be also assessed and enhanced through the quantification of classification uncertainties and visualization of activation maps; iii) to develop a reliable radiomic model for ADPKD patient stratification, starting from the structures automatically segmented, with a particular attention to radiomic features stability.



RESEARCH PROJECT - CODE 13

"Learning math in prison"

Research structure: Department of Human and Social sciences

Department Resolution: 13.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 20.256,00;

Financial coverage: GIBE_C_22_RN_PRIN_01 CUP F53D23006120001 - MUR 20223F9SRE_04

Duration of the grant: 12 months

Scientific Area: 01 - Mathematics and informatics

Competition sector: 01/A1 - Mathematical Logic, Mathematics Education and History of Mathematics

Scientific disciplinary sector: MAT/04 - Mathematics Education and History of Mathematics

Scientific Director: Prof.ssa Giberti Chiara

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Matematica (classi LM-40 o 45/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 language: English

Additional qualifications evaluated by the Commission:

- Suitability of the scientific-professional curriculum for carrying out the research activity (university degree, PhD, specialisation diplomas and certificates of attendance at postgraduate and/or master's courses on topics consistent with the project.
- Publications and other research products, the relevance of which will be also considered in relation to the project topics;
- Documented study and/or research experience in areas similar to those of the project - provided that the starting date and duration are properly declared - with public and private entities with contracts, scholarships or assignments, both in Italy and abroad;
- The completion of a degree and/or doctoral thesis on areas similar to those of the research project;
- Skills in research methodology verified through attendance of summer schools, courses and specific seminars;
- Documented experience in teaching mathematics in secondary schools - provided that the starting date and duration are properly documented - with public and private subjects, both in Italy and abroad.
- Qualification to teach Mathematics and Science in Secondary School (competition class A28)

Interview schedule:

The interview will focus on the topics of mathematics education related to the research project subject of this call. Previous experience in the topics of the call and the candidate's propensity to collaborate also with researchers from sectors other than mathematics education will be verified, also through a discussion of the candidate's qualifications, research and professional experience. Knowledge of the English language will be ascertained.



Description of the research project:

Learning Math in Prison is an interventionist “educational design research” project. Its aim is twofold, both theoretical and practical. Learning Math in Prison responds to the needs expressed by mathematics teachers in prison to have adequate training and to have teaching materials suitable for the context in which they are working.

A response to such needs requires theoretical elaboration since research about the teaching/learning of mathematics in prison is very scarce at the international level and almost nonexistent in Italy. First, descriptive research is needed to frame the specificity of the development of mathematical literacy within the context of Italian prisons. Then, design principles and didactical recommendations still need to be developed and tested on the field.

Within Learning Math in Prison, organized sets of mathematical tasks are co-constructed by researchers and teachers collaborating together. Researchers will inform teachers about possible solutions available in literature (e.g., UDL); teachers will contribute with their experience of teaching mathematics in the specific context of prisons. Along the process of design, the researchers will develop design principles to be used for the production of further materials and for teachers training. Through the repetition of several cycles of context-analysis, design, and evaluation of products, the project will provide design principles for mathematics education in the prison context (as theoretical outcome) and examples of such principles in various learning units (as practical outcome).



RESEARCH PROJECT - CODE 14

“NetWork - Business networks and employment support”

Research structure: Department of Law

Department Resolution: 19.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 21.240,00;

Financial coverage: Research project PRIN 2022 - Project code IMBE_L_22_RN_PRIN_01 - CUP: F53D23003710006

Duration of the grant: 16 months

Scientific Area: 12 - Law studies

Competition sector: 12/B2 - Labour Law

Scientific disciplinary sector: IUS/07 - labour Law

Scientific Director: Prof. Lucio Imberti

Entry requirement:

Diploma di Laurea Specialistica (Ls) o Laurea Magistrale (LM) o Laurea Magistrale a ciclo unico in Giurisprudenza (Classi LMG/01 o 22/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:

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Interview schedule:

The interview will assess the candidate's competence in Labour Law, the knowledge relevant for the current research project, and the candidate's attitude to the research. The interview will be conducted in Italian and English.

Description of the research project:

The project is focused on the study of the phenomenon of business networks in an organic and innovative way, from the specific perspective of rebuild (and design) the tools that companies can use to exploit entrepreneurial aggregation: as an instrument for employment growth; as a path to encourage growth, updating and restructuring occupational skills of employees in the contemporary context affected by the transformations due to the digital, ecological and energetic transition; as a method for dealing with situations of economic and financial distress, also with a view to safeguarding employment. The research proposes to carry out a thorough and exhaustive analysis of the articulated regulatory framework that governs labour relations in the context of various kind of business crises, which can lead to negotiated solutions or bankruptcy procedures. This is with the aim of reconstructing the tools that are made available to small and "very small" businesses to deal with situations of economic and financial distress.



RESEARCH PROJECT - CODE 15

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

Research structure: Department of Management, Information and Production Engineering
Department Resolution: 15.09.2023

Resolution of the Academic Senate: 22.09.2023
Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 19.452,00

Financial coverage: PRIN 2022 "SAFEST: Trust assurance of Digital Twins for medical cyber-physical systems" (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 Michele Gargantini

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Ingegneria informatica (classi LM-32 o 35/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 relating to the quality of the software, for example its robustness.

Interview schedule:

The interview will focus on these topics:

- 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



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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 FISR 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 16

"Discrete holomorphicity: reproducing kernel Hilbert spaces, interpolation and sampling"

Research structure: Department of Management, Information and Production Engineering
Department Resolution: 15.09.2023

Resolution of the Academic Senate: 22.09.2023
Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 19.452,00;

Financial coverage: PRIN 2022 "Time-varying signals on Graphs: REal and COmplex methods - TIGRECO" (MUR: 20227TRY8H_03); project code MONG_A_22_RN_PRIN_01 CUP F53D23002630001

Duration of the grant: 18 months

Scientific Area: 01 - Mathematics and informatics

Competition sector: 01/A3 - Mathematical Analysis, Probability and Statistics

Scientific disciplinary sector: MAT/05 - Mathematical Analysis

Scientific Director: Prof. Alessandro Monguzzi

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Matematica (classi LM-40 o 45/S) o in Modellistica matematico-fisica per l'ingegneria (classi LM-44 o 50/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:

Master or PhD thesis and publications in complex and harmonic analysis.

Interview schedule:

Discussion on the previous research activity of the candidate in complex and harmonic analysis with emphasis on the investigation of reproducing kernel function spaces.

Description of the research project:

The classical theory of signal processing has strong and deep connections with complex function theory. For instance, the space of functions of finite energy and bandlimited can be identified with a space of functions which are holomorphic in the whole complex plane and have an exponential growth. Once this equivalence is established, it is possible to translate, for instance, a sampling problem for bandlimited functions in a problem of existence of frames of reproducing kernels in a holomorphic function space. In this context, we would like to investigate a definition of discrete holomorphicity introduced in the '50s of the last century, but recently back in vogue, we investigate discrete holomorphic function spaces and possible connections with the sampling theory on graphs.



RESEARCH PROJECT - CODE 17

"Eco Design for Additive Manufacturing (EcoDAM): a framework to support the lightweight design"

Research structure: Department of Management, Information and Production Engineering

Department Resolution: 15/09/2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Duration of the grant: 18 months

Gross annual amount: € 21.600,00;

Financial coverage: PRIN 2022 "Eco-Design for Additive Manufacturing (EcoDAM): a framework to support the lightweight design" (MUR: 2022FKLTSB_01); project code SPRE_C_22_RN_PRIN_01, CUP F53D23001740001

Scientific Area: 09 - Ingegneria industriale e dell'informazione

Academic recruitment field: 09/A3 - Industrial Design, Machine Construction and Metallurgy

Academic discipline: ING-IND/15 - Design Methods for Industrial Engineering

Scientific Director: Prof. Christian Spreafico

Access requirements:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Ingegneria Meccanica (classi LM-33 o 36/S) o in Ingegneria Gestionale (classi LM-31 o 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.

Foreign language: English

Additional requirements for assessment:

- Knowledge of environmental sustainability
- Knowledge of eco-design
- Knowledge of additive manufacturing and design for additive manufacturing.

Interview program:

- Environmental sustainability
- Eco-design
- Additive manufacturing and design for additive manufacturing
- Mechanical characterization of a component

Research Project:

Additive Manufacturing (AM) technology is gaining rapid development in several industrial fields, allowing lightweight structures and tool-free processes, flexible production planning, complex parts design and reducing fuel consumption, emissions, cost, time-to-market and waste reductions. The market provides a wide choice of software to analyse and predict not only the physical and mechanical behaviour of components, but also the ecological and the cost estimation. This extensive range of tools can overshadow the definition of the fundamental methodological steps for a high-performance and eco-sustainable design.

The research project involves the study of a method to integrate the principles of eco design with those of design for AM. In particular, the design methods that allow the reduction of the mass of the



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components and the use of recycled materials will be sought. The expected result consists in an increased knowledge of the correlations between eco-design and additive manufacturing in the aspects related to design, technologies and choice of material. The project will be carried out in collaboration with other researchers from other universities who have experience in eco-design, design for AM, AM and mechanical characterization of the pieces made.



RESEARCH PROJECT - CODE 18

“Participating experiments between anthropology and art in the Bergamo borderscapes: Theoretical and conceptual approaches, action-research and applied research practices”

Research structure: Department of Human and Social Sciences

Department Resolution: 13.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 19.452,00;

Financial coverage: Progetto PRIN bando 2022 “BorderArt(E)Scapes. Arte contemporanea, antropologia e “paesaggi di confine”: dalla fine dell’Ottocento agli anni Duemila, leggere la contemporaneità e sperimentare nuove pratiche di ricerca” U-GOV BRAM_C_22_RN_PRIN_01; CUP F53D23007460006; COD PROT. MUR 2022987EAH_02

Duration of the grant: 12 months

Scientific Area: 11 - History, philosophy, pedagogy and psychology

Competition sector: 11/A5 - Demography, Ethnography and Anthropology

Scientific disciplinary sector: M-DEA/ 01 - Demonology, Ethnology and Anthropology

Scientific Director: Prof.ssa Chiara Brambilla

Entry requirement:

Diploma di Laurea Magistrale (LM) o Laurea Specialistica (LS) in Antropologia culturale ed etnologia (classi LM-1 o 1/S) o in Storia dell’Arte (classi LM-89 o 95/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:

- Master’s degree thesis falling within the topics covered by the research.
- Propensity for research and research interests relevant to the themes of the project.
- Previous theoretical and/or applied research experiences, also abroad, related to the themes of the project.

Interview schedule: The interview aims at ascertaining theoretical and methodological competencies of an applicant, concerning the implementation of a research project as well as the candidate’s aptitude for research. Furthermore, the interview aims at checking relevancy and consistency of an applicant’s previous experiences, concerning the developments of this research project.

The assessment of the knowledge of the foreign language as provided for by this call will be carried out during the interview 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.

Description of the research project:

The research is part of the PRIN research project “BorderArt(E)Scapes. Contemporary Art, Anthropology and Borderscapes: from the late nineteenth century to the 2000s, reading



contemporaneity and experimenting with new research practices” that addresses the complex issue of borders, from an anthropological, historical-artistic and geo-political point of view, as well as from a methodological and disciplinary one, with the aim of developing new applied research methodologies, in which anthropological approaches will profitably interact with the tools of an art history approach.

During the last decades, between the end of the 19th and the beginning of the 20th centuries, researchers have shown growing interest in borders. Interests have progressively moved from borders as divisive territorial lines and political institutions, to borders as socio-cultural and discursive practices. Research on borders has thus become detached from being just a branch of political science or part of the area studies devoted to international relations, proposing itself as a field of reflection capable of arousing interest across various disciplines. To seize these opportunities, the opening of an interdisciplinary dialogue between art, anthropology and more generally the human and social sciences appears to be particularly desirable and fruitful.

In this context, the research will contribute to the Bergamo Unit’s work within the BorderArt(E)scapes project on the cognitive level with regard to the conceptual reflection on the meaning of borderscape/ing and on the methodological and applicative level through an action-research using participatory ethnographic methods for implementing artistic actions aimed at the revaluation and enhancement of urban areas and peripheral valleys. The fieldwork will examine two case studies - the Celadina district of the city of Bergamo and the Alta Val Seriana - with the intention of enhancing anthropological and artistic knowledge and practices in public spaces and in society. In this way the relationship between anthropology, art and aesthetic languages will be enhanced, with an emphasis on the opportunities that this dialogue can offer for education on active and responsible citizenship, diversity and interculture, not only on the level of knowledge, but also regarding the development of effective application tools for a virtuous communication of these reflections to civil society. During the research period, participatory workshops on the theme of borders and crossings will be activated with the inhabitants. The laboratory activities in the field of “action research” will involve the use of collaborative and participatory approaches and methods and, in particular, narrative and visual aesthetics, together with other methods of applied anthropological research and contemporary ethnographic practices based on “participating experiments” between anthropology and art.

Research activities will be subdivided as follows:

- First phase: “construction of the field” for the second phase of action-research; bibliographical research to implement theoretical and conceptual points of departure in the project and collection of documents and materials about the two case studies.
- Second phase: action-research.
- Third phase: revision and a systematization of data and collected materials, while preparing a paper and some interventions to international conferences in order to contribute to a research feedback report and dissemination of project results.



RESEARCH PROJECT - CODE 19

“Just transition in the factory: Workers’ mobilizations and participatory innovation in emergent Italian experiences”

Research structure: Department of Letters, Philosophy, Communication

Department Resolution: 19.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 20.256,00;

Financial coverage: PRIN2022 - project code PERR_D_22_RN_PRIN_01 - CUP: F53D23006390006 - MIUR 2022S2Y4PC

Duration of the grant: 12 months

Scientific Area: 14 - Political and social sciences

Competition sector: 14/D1- Economic Sociology, Sociology Of Work, Urban And Environmental Sociology

Scientific disciplinary sector: SPS/09 - Economic Sociology And Sociology Of Work And Organizations

Scientific Director: Prof.ssa Domenico Perrotta

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea magistrale in Sociologia e ricerca sociale (classi LM-88 o 89/S Sociologia) o in Servizio sociale e politiche sociali (classi LM-87 o 57/S Programmazione e gestione delle politiche e dei servizi sociali) o in Scienze della politica (classi LM-62 o 70/S) o in Antropologia culturale ed etnologia (classi LM-01 o 1/S) o in Scienze geografiche (classi LM-80 o 21/S. Geografia) o in Informazione e servizi editoriali (classi LM-19 o 13/S Editoria, comunicazione multimediale e giornalismo) o in Progettazione e gestione dei sistemi turistici (classi LM-49 o 55/S) o in Scienze per la cooperazione allo sviluppo (classi LM-81 o 88/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: PhD in social sciences (Area CUN 14)
Research experience with qualitative methodologies.

Interview schedule: Discussion on the topics of the research project, on the candidates' methodological skills and previous experiences in qualitative empirical studies.

Description of the research project:

Transition to a more sustainable way of living has come to the fore as a no longer deferrable task, as testified by the recent acceleration in political action at European and national level (Next Generation EU/PNRR) and confirmed once more by the 2022 IPCC report on climate change. The key drivers of transition remain however controversial. In ideal-typical terms one can distinguish between a top-down, elite-driven, and a bottom up, social mobilizations-based, understanding. The former takes for granted the continuity of the industrial model in force, and the related division of labour between public and corporate actors, scientists and technicians, workers and the public of citizens/consumers, assuming the unavoidability of social, especially occupational, costs. The latter



is inspired by a “prefigurative” approach, aimed at enacting change at societal level by reorganizing social and socio-material relations in the here and now of everyday life. This often entails alternative ways of doing science, a repurposing of technologies, and in general more horizontal decision-making processes.

The factory seems the preserve of an elite-driven approach to transition, particularly in the key economic sectors led by large industrial groups. However, some cases have been recently emerging in Italy where workers, in cooperation with technical staffs and external professionals, unions and other local/translocal social actors and institutions, try to take over the transition process by elaborating alternatives that point to refashioning at once the relations and the means of production, saving jobs and skills while rethinking the purposes of production. We might talk in this case of a participatory or “co-production” approach.

In the context of a wider “Prin” project, that involves research units at the Scuola Normale Superiore (Florence), University of Bologna and University of Ferrara, the project of the University of Bergamo research unit will carry out an in-depth study of a case. The method adopted is comparative, and based on a fourfold qualitative technique of inquiry: secondary analysis of media and grey literature, interviews, focus groups and participant observation.



RESEARCH PROJECT - CODE 20

“Biological validation of structured organ-on-chip for kidney modeling”

Research structure: Department of Management, Information and Production Engineering

Department Resolution: 15.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 19.367,00;

Financial coverage: PRIN 2022 “Micro-manufacturing technologies for structured organ-on-chip (MITO)” (MUR: 2022ATZTBS_02); project code QUAR_M_22_RN_PRIN_01 cup F53D23001680006

Duration of the grant: 12 months

Scientific Area: 09 - Industrial and information engineering

Competition sector: 09/B1 - Manufacturing Technology and Systems

Scientific disciplinary sector: ING-IND/16 - Manufacturing Technology and Systems

Scientific Director: Prof.ssa Mariangela Quarto

Entry requirements:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Ingegneria biomedica (classi LM-21 o 26/S) o in Ingegneria gestionale (classi LM-31 o 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:

- Bachelor degree in Industrial Engineering belonging to Class L-09
- Proven knowledge of data processing and analysis methodologies (e.g., statistical techniques)
- Proven knowledge of cell behavior analysis methodologies.
- It is an advantage, but not necessary, to have publications in the disciplinary sector ING-IND/16 – Tecnologie e sistemi di produzione and/or ING-IND/34 – Bioingegneria industriale

Interview schedule: The interview will be aimed at evaluating the candidate’s knowledge and skills in the context of the research projects topics. During the interview, the level of knowledge of the English language will also be assessed.

Description of the research project:

In the field of the funded project “*Micro-manufacturing technologies for structured organ-on-chip (MITO)*”, the candidate will be in charge of the mechanical and biological validation of the produced device.

In particular, the developed and produced OoC prototypes will be analysed for evaluating the respect of the base requirements; in addition, it will be used for biological evaluations of cellular growth and functions. The cell membrane support, mimicking the basement membrane, will be reconstructed by collagen type IV and elastin to mimic the glomerular membrane. The physical properties of these hydrogel membranes will be investigated for optimizing the geometry of the micro-grids. Differentiated kidney cells (glomerular or tubular cells) will be seeded on these membranes and their growth and function will be investigated. Different culture conditions will be used to mimic the physiological condition, with fluid flow and transmembrane pressure applied to the glomerular



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membrane. The aim is to investigate cell morphology (at optical and electron microscopy), protein and gene expression to assess cellular functions. Different experimental conditions will be adopted to optimize the culture conditions and establish the best configuration of the OoC and the perfusion system.

The project presents transversal topics, considering the evaluation not only from the point of view of the disciplinary sector ING-IND/16, but also the bioengineering aspects typical of the ING-IND/34.



RESEARCH PROJECT - CODE 21

"Governance for a Reticular Mountain: Co-design and "contratto d'abitare" as tools for the territorial regeneration in Seriana Valley"

Research structure: Department of Law

Department Resolution: 19.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 21.060,00;

Financial coverage: MORZ_R_22_RN_PRIN_01 - CUP: F53D23003310006

Duration of the grant: 24 months

Scientific Area: 08 - Civil Engineering and Architecture

Competition sector: 08/F1 - Urban and Territorial Planning and Design

Scientific disciplinary sector: ICAR/21 - Urban Design and Landscape

Principal investigator: Prof. Remo Morzenti Pellegrini

Scientific Director: Prof. Fulvio Adobati

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) o Laurea magistrale a ciclo unico in Filologia moderna (classi LM-14 o 16/S o 40/S Lingua e cultura italiana) o in Pianificazione Territoriale Urbanistica e Ambientale (classi LM-48 o 54/S) o in Scienze Geografiche (classi LM-80 o 21/S Geografia) o in Giurisprudenza (classi LMG/01 o 22/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:

//

Interview schedule: Territorial governance, knowledge related to the topics covered by the research project and the candidate's research aptitude. The interview will be held in Italian and English language

Description of the research project:

The mountain environment is subjected to remote regressive pressures (depopulation, depletion of the variety of settled economic activities, reduction of biodiversity, etc.) that add up to new instances (global warming, need to rethink forms of life, work and movement, related to COVID19). The observation of the exacerbation of the vulnerabilities of mountain contexts in an era of "polycrisis" (Morin, 2020), which takes on the characteristics of a real "syndemic" (Horton, 2020), makes it necessary to imagine new processes and unprecedented projects of infrastructuring and re-infrastructuring mountains in the service of living. These actions must address these fragilities by applying to three main areas: mobility, education, and health. This effort is necessary to rethink the forms of living within these territories and ensure greater quality of life, healthiness and well-being. The research activity covered by the grant aims to reflect around renewed forms of planning and participatory governance, starting from a method of co-design within which different skills are at the



service of the construction of actions for the reuse of existing heritage that are complex, relevant and appropriate to the context.

These interventions must be implemented starting with the 'identification and experimentation of new legal forms of urban regeneration and partnerships between institutions, associations, territorial stakeholders and design modalities that are framed within the proposed innovative forms.

The research grant candidate is required to have:

- Experience in activating and conducting participatory processes aimed at new forms of interaction with the policy-community and stakeholders and the enhancement of the identity landscape network, within a perspective of defining effective inter-institutional and multi-actor governance.
- The capacity for geo-historical reading of places, particularly of the Orobic mountain context, in order to identify the constitutive historical-landscape and socio-economic texture of the Bergamo mountains.
- The ability to analyze the structural invariants, both material (of the built heritage) and immaterial, of places.
- Collaboration in the preparation of the products of the research, including functional dissemination of results at different levels.



RESEARCH PROJECT - CODE 22

"The philosophy in the universities. Digital edition of the statutes of the "studia" of the Regnum Italiae"

Research structure: Department of Letters, Philosophy, Communication
Department Resolution: 19.09.2023

Resolution of the Academic Senate: 22.09.2023
Resolution of the Board of Directors: 28.09.2023

Duration of the grant: 12 months

Gross and funds: € 20.256,00;

Financial coverage: PRIN 2022 Project code MIUR 20224WA39R Project code:
SACC_R_22_RN_PRIN_01 - CUP: F53D23007340001

Scientific Area: 11 - History, philosophy, pedagogy and psychology

Academic recruitment field: 11/C5 History of philosophy

Academic discipline: M-FIL/08 History of Medieval Philosophy

Scientific Director: Prof. Riccardo Saccenti

Access requirements:

Diploma di Laurea Specialistica (LS) o Laurea magistrale in Scienze filosofiche (classi LM-78 o 17/S Filosofia e storia della scienza o 18/S Filosofia teoretica, morale, politica ed estetica o 96/S Storia della filosofia) 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

Foreign language: Latin, English

Additional requirements for assessment:

The commission evaluates the eligibility of the candidate based on the possible holding of the following qualifications and their relevance to the theme and methods of the research project:

- Topic and grade of the thesis
- Doctoral degree or enrollment in the final year of a doctoral program with a scheduled thesis defense date in the CUN 10 or 11 areas
- Specialization diplomas and attendance certificates for postgraduate courses, whether obtained in Italy or abroad
- Scientific publications or other research products
- Participation in research activities, with detailed documentation, at public and/or private institutions through contracts, scholarships, or assignments, carried out in Italy or abroad
- Methodological skills in the psychological and/or neurological field, duly specified.
- University career showing skills in and knowledge in the field of medieval culture and history.

Interview program: The interview will focus on the candidate's curriculum vitae, qualifications, and publications, as well as his/her relevant experiences related to the research project's theme and the respective research methodologies. The interview also includes an assessment of the candidate's proficiency in the foreign language.

Research Project:



The research is part of the PRIN 2022 “Teaching and Learning Philosophy in the *Regnum Italiae* (1250–1450): from Exception to European Heritage”. The research activity will focus on the social and historical development of the teaching institutions (*studia* and *universitates*) in the *Regnum Italiae* between the second half of the 13th century and the first half of the 15th century. Within this activities the research will contribute to understand the process of institutional development through the study and digital edition of the statutes of both *studia* and *universitates*, as well as to the tracking of the intellectual and social careers of the masters of the arts who taught in center and northern Italy in this period. The results of these research activities will be the publication in the digital database of the project: 1. statutes and university documents collected from existing catalogs and editions; 2. a detail repertory concerning the masters of philosophy between the mid-13th and mid-15th centuries, including the collection of the biographical data of the masters and a list of their known works.



RESEARCH PROJECT - CODE 23

“A social history of horses in the age of Italian communes (HISTHOR). Recognition of medieval equine evidence from archaeozoological literature”

Research structure: Department of Letters, Philosophy, Communication
Department Resolution: 19.09.2023

Resolution of the Academic Senate: 22.09.2023
Resolution of the Board of Directors: 28.09.2023

Duration of the grant: 12 months

Gross annual amount: € 20.256,00;

Financial coverage: PRIN 2022 - MUR 2022E9RTH8_02 - project code RAO_R_22_RN_PRIN_01 - CUP: F53D23000170006

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

Competition sector: 10/A1 - Archaeology

Scientific disciplinary sector: L-ANT/01 - Prehistory and Early History

Scientific Director: Prof. Riccardo Rao

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea magistrale in Archeologia (classi LM-2 o 2/S) o Conservazione e restauro dei beni culturali (classi LM-11 o 11/S Conservazione dei beni scientifici e della civiltà industriale o 12/S Conservazione e restauro del patrimonio storico-artistico) 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 or French

Additional qualifications evaluated by the Commission:

Educational and research experience in the field of archaeozoology.

Interview schedule:

The candidate is expected to illustrate the project. The interview will test the candidate's knowledge on topics related to archaeozoology in general and particularly on the historical archaeological contextualization of the data.

Description of the research project:

The HISTHOR project aims to study the multiple facets of the relationship between men and horses between the 12th and 14th centuries, in its social, political, economic, ethological and environmental aspects, in order to better understand a fundamental junction in human and equine history. Zooarchaeological analyses, albeit used increasingly frequently in the study of northern Italy, have focused almost exclusively on bovines, pigs and ovicaprids. Horses, on the other hand, have mostly been neglected due to their more modest presence: the candidate will carry out a reassessment of existing research will therefore be necessary to re-evaluate the role of horses in this geographical area. Besides, the candidate will focus some case-studies from Italian Alps.



RESEARCH PROJECT - CODE 24

"Biomedical discourse and communication in multicultural societies"

Research structure: Department of Foreign languages, literatures and cultures

Department Resolution: 19.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 20.256,00;

Financial coverage: MUR 20227FWEZ5_02 project code GARO_G_22_RN_PRIN_01 - cup F53D23004620006

Duration of the grant: 12 months

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

Competition sector: 10/11 - Spanish and latin american languages, literatures and cultures

Scientific disciplinary sector: L-LIN/07 - Language and translation - spanish

Scientific Director: Prof. Giovanni Garofalo

Entry requirement: Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) 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;

Knowledge of the language: Spanish (C2 or native), English (C2)

Additional qualifications evaluated by the Commission:

- Native Spanish speaker, Spanish variant from Spain;
- Engaged in scientific activities (supported by relevant publications) in the fields of Computational Linguistics / Corpus Linguistics or Corpus-Assisted Discourse Analysis (CADS)
- Experience in compiling extensive corpora - including the use of specific tools (BootCat) and programming languages for web text extraction (Python) - as well as in cleaning, tokenization, parsing, and corpus annotation.
- Membership in scientific associations promoting computational research methodologies on lexical data."

Experience gained by the candidate in data mining and in compiling and annotating extensive corpora.

Interview schedule:

General outlines of Discourse Analysis in the context of Biosanitary Communication, methodological principles of Corpus-Assisted Discourse Analysis and Sociopragmatics of Communication. The interview will be conducted in both Spanish and English. Proficiency in the English language will be also assessed through an on-the-spot oral translation from English into Spanish of a text relevant to the proposed research.

Description of the research project:

Objective:

The project pursues a twofold objective:

1. Compilation of a corpus of electronically formatted texts related to biosanitary communication, with a particular focus on informative texts concerning conditions capable of generating social stigma or ethical / gender censorship, thus consolidating stereotypes and



inequalities. The corpus will encompass texts in the Spanish language issued by socio-sanitary institutions, news articles as well as spontaneous interactions drawn from health blogs, social networks, and web forums dedicated to health. The compilation involves extracting texts from the web, to be collected in XML format, and their cleaning, tokenization, parsing, diachronic, and pragmatic annotation. Additionally, the subdivision of the main corpus into subcorpora is also planned, distinguished by sender, textual genre, and primary function. The research also involves developing regular expressions and CQL search strings, useful for data analysis.

2. Analysis of the corpus using the qualitative and quantitative methodology of Corpus-Assisted Discourse Studies (CADS), in light of the existing scientific literature on communication in the biosanitary field.

Theoretical framework:

From a methodological perspective, the research triangulates different theories, methods and tools. Corpus-Assisted Discourse Analysis (CADS) will be combined with other methodologies which generally use qualitative tools, namely, frame semantics, the theory of argumentation and the sociopragmatics of communication.

Research project description:

The project focuses on biomedical discourse with a particular emphasis on conditions frequently associated with a social stigma or an implicit moral judgment, such as well-known and wide-spread infectious diseases (like AIDS, hepatitis or syphilis) or those that have recently emerged (like long Covid or monkeypox), or female-specific conditions (e.g., fibromyalgia, vulvodynia) often with prolonged and highly debilitating outcomes, within the 2020-23 timeframe. The main focus of the study will be the communication of the set of information, recommendations and technical guidelines relating to these diseases issued by the institutions responsible for the protection of public health (at national, regional and local level), as well as the reception and processing of such information flow by citizens in Spain and in Italy.

Firstly, the research aims at assessing the efficacy of the top-down flow of institutional information. Secondly, it aims at identifying the role of (social) media in disseminating the information flow, namely the importance of blogs and social forums as a privileged observatory of the dynamics of decoding and processing the biomedical techno-discourses, as well as the strategies of discursive self-empowerment by the web users (e.g., the trend towards self-diagnosis on the web). Thirdly, the project aims to evaluate the above-mentioned processes from the perspective of contemporary multicultural societies, since there is mounting evidence that minority and racialized groups are usually disproportionately affected by these conditions all over the world, as the COVID-19 pandemic demonstrated.

A purpose-built electronic corpus, the DISBIOCOM corpus, comprising three subcorpora will be collected and analyzed: 1) the institutional subcorpus will include the top-down flow of institutional documents 2) the traditional media subcorpus 3) the social media subcorpus.

Key words:

biomedical discourse, social stigma, top-down biomedical information flow, bottom-up biomedical information processing, patients' self-empowerment

Time:

The first 5 months will be dedicated to compiling the corpus and studying relevant literature, while the remaining 7 months will be allocated to data analysis and results dissemination (participation in conferences and writing scientific articles)

Expected results:

In terms of expected results, we aim to demonstrate that the interaction of different communication sources requires a new discursive model which overcomes the top-down / bottom-up approach in favor of a more suitable multilayered and multidimensional approach designed to investigate simultaneous communication practices in contemporary societies.

In terms of applications, the project will provide research-informed guidelines and innovative educational material both for secondary and tertiary-level education, thus contributing to the training of competent and effective health communicators.



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RESEARCH PROJECT - CODE 25

"Developing an Extended Reality learning app for ESP"

Research structure: Department of Foreign languages, literatures and cultures

Department Resolution: 19.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 20.256,00;

Financial coverage: MUR 2022R9K3AR_01 project code 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) 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;

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.

Description of the 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.

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RESEARCH PROJECT - CODE 26

"Immersive experiences in ELT: Developing and testing teaching materials"

Research structure: Department of Foreign languages, literatures and cultures

Department Resolution: 19.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 20.256,00;

Financial coverage: MUR 2022R9K3AR_01 project code 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) 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;

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 teaching materials for 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

- ESP learning and teaching
- ELT
- Materials design and evaluation
- Teacher training

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.



Description of the research project:

Objective:

The activities have both theoretical and practical goals which are functional to the development of the PRIN 2022 project *“Enhancing ESP competence in educational and professional contexts via Augmented Reality”*. The main goals include:

- To offer a longitudinal account of linguistic and educational issues in ESP (English for Specific Purposes) teaching and training of adults via new technologies and in particular via AR
- To develop an interdisciplinary model on how AR can be implemented in ESP teaching and training, based on the gaps identified in the research literature
- To create materials for an AR learning app in the field of ESP
- To evaluate such materials with selected groups of students

Theoretical framework:

The use of AR in ESP is still largely lacking in tertiary education endeavors, professional training, and vocational life-learning programs. In this respect, studies in AR and learning often seem to lack specific and thorough theoretical grounding (Parmaxi & Demetriou 2020). The technicalities of a tool are often presented without a reflection on their use in the light of a given theoretical framework. This is often the consequence of approaches which are determined by the desire to focus on the novel affordances of a technology without reflecting on how these affordances are functional to precise pedagogical decisions. Thus, the project aims to fill this theoretical gap and, in this respect, sociocultural, experiential and constructivist learning theories will be taken into account within the overarching learning-by-doing approach, and in line with the communicative language teaching approach.

Research project description:

The project focuses on materials preparation and lessons design for immersive learning by using Extended reality technologies. The materials will be based on a common definition of the key principles of instructional design in order to create comparable modules. The research fellow will identify the types of materials to be selected, evaluated, adapted and/or designed, in relation to the research objectives. A strong focus will be on the reconsideration and refinement of instructional design in ESP using AR.

Key words

ESP, materials design, extended reality, ELT

Time:

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

1. Development of materials in English to be implemented for the development of an augmented reality application for teaching ESP
2. Testing the app in ESP lessons
3. Participation as a speaker in a national or international conference or seminar
4. Preparation of an essay to be published in a national or international scientific journal.

Expected results:

The candidate is expected to:

- develop the necessary materials for the ESP-ARA app within the twelfth month of the activity
- test the materials developed with groups of students within the EPS
- present the results of their research in a national or international conference/seminar, e
- with a view to promoting scientific productivity, write a book chapter or essay to be published in a volume or in a scientific journal, indicating PRIN 2022 as the source of funding in the acknowledgments.

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RESEARCH PROJECT - CODE 27

"Rethinking, Understanding Modal particles (RUM)"

Research structure: Department of Foreign languages, literatures and cultures
Department Resolution: 19.09.2023

Resolution of the Academic Senate: 22.09.2023
Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 20.256,00;

Financial coverage: MUR 2022YACK2L_02 project code 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.ssa Gabriella Carobbio

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) 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;

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.

Description of the 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).

Research project description:

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

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- Schoonjans 2018: Modalpartikeln als multimodale Konstruktionen. Berlin/Boston
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- Traugott/Dasher 2002: Regularity in Semantic Change. Cambridge
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- Weydt 1979 (ed): Die Partikeln der deutschen Sprache. Berlin



RESEARCH PROJECT - CODE 28

"Synthesis and structural characterization of nanostructured metal oxides"

Research structure: Department of Engineering and applied sciences

Department Resolution: 19.09.2023

Resolution of the Academic Senate: 22.09.2023

Resolution of the Board of Directors: 28.09.2023

Gross annual amount: € 19.500,00;

Financial coverage: PRIN 2022 Advanced materials for reversible solid oxide cells (AMARILLO)"
codice progetto NATA_I_22_RN_PRIN_01, CUP F53D23002570006

Duration of the grant: 18 months

Scientific Area: 03 chemical science

Competition sector: 03/B2 - Principles of chemistry for applied technologies

Scientific disciplinary sector: CHIM/07 - Principles of chemistry for applied technologies

Scientific Director: Prof.ssa Isabella Natali Sora

Entry requirement:

Diploma di Laurea Specialistica (LS) o Laurea Magistrale (LM) in Scienze chimiche (classi LM-54 o 62/S) o in Scienza e ingegneria dei materiali (classi LM-53 o 61/S) o in Scienze e tecnologie della chimica industriale (classi LM-71 o 81/S) o in Ingegneria chimica (classi LM-22 o 27/S) 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;

Knowledge of the language: English

Additional qualifications evaluated by the Commission:

Scientific publications in the chemical area.

Previous grants in the chemical area.

Previous research related to the themes of the project.

Interview schedule:

The interview will focus on the following topics: knowledge of inorganic synthetic methods, chemical foundations of technology for materials, materials chemistry.

Description of the research project:

The aim of the project is to prepare oxide compounds for applications in electrochemical cells. Three kinds of synthetic methods will be investigated: i) solid state reactive firing, ii) citrate-nitrate auto-combustion and iii) co-precipitation in aqueous medium. After a pre-assessment of the obtained compounds, both in terms of microstructure (grain size, particle size, surface area), composition (actual vs nominal stoichiometric composition) and structure (phase purity, crystal structure), the best synthetic method will be chosen for the preparation of the final electrode materials.