

RECTOR'S DECREE N. 6223

Selection procedures to assign no. 6 research collaboration grants at Università Cattolica del Sacro Cuore

THE RECTOR

- having regard to the Statute of Università Cattolica del Sacro Cuore, issued by Rector's Decree of October 24, 1996, and subsequent modifications and integrations;
- having regard to the general regulatory norms of Università Cattolica del Sacro Cuore, issued by Rector's Decree of October 26, 1999, and subsequent modifications and integrations;
- having regard to Law 240 of December 30, 2010, in particular Art. 22;
- having regard to Ministerial Decree 102 of March 9, 2011;
- having regard to Rector's Decree 2778 of september 13, 2016, governing <<Modifications to the “Code of Conduct of Università Cattolica del Sacro Cuore”>>;
- having regard to Rector's Decree 4553 of July 11, 2018, governing the “Norms on the conferment and discipline of research grants in accordance with Art. 22 of Law 240 of December 30, 2010”;
- having regard to the resolutions adopted by the Boards of the Faculties;
- having regard to the resolutions adopted by the University Senate and University Steering Committee;

ORDAINS

Art. 1

Opening

The opening of selection procedures for the assignment of no. 6 research grants in the following Faculties of Università Cattolica del Sacro Cuore, for the following scientific-disciplinary sectors:

**A) Research grants announced in accordance with Art. 22,
Subparagraph 4, Letter A, of Law 240/2010**

FACOLTÀ DI SCIENZE MATEMATICHE, FISICHE E NATURALI

ACADEMIC DISCIPLINE: <u>ING/INF/05 INFORMATION PROCESSING SYSTEMS</u>	n. 1 position
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DURATION: one year; can be renewed.

TUTOR: Prof. Marco Luigi della Vedova.

TITLE OF THE RESEARCH TOPIC: Quantitative analysis of hate speech online in Italy through machine learning techniques and sentiment analysis.

BRIEF DESCRIPTION OF THE RESEARCH TOPIC: The object of the research is online hatred in Italy. The main goals of the project are twofold: the study of the phenomenon on the main social networks; the fight of the phenomenon through the social network analysis and the development of a shared culture promoted by the Media Vox observatory. As regards the first goal, the study of the phenomenon, the social network of reference is Twitter because it is the only one, among the most widespread social networks, that allows extensive access to data through special APIs. The study will use sentiment analysis methods to identify hate in tweets and machine learning techniques to distinguish between different types of hate and violent language. The training process of these algorithms will require a close collaboration with experts in various fields, particularly history and pedagogy researchers. In this perspective, we intend to analyse some interesting case studies submitted by experts and to create an automatic tool for real-time monitoring of trending topics. In addition, we will try to identify the different types of haters and the presence of organized groups. Concerning the second goal, the fight against online hatred, it is intended to develop tools for the analysis of social networks to support the online communication of some of the main catholic movements. In particular, we will study how they interact with each other on social media through an analysis of the dynamics of their Twitter information network and to measure the effect of their published content. There will be proposed some methods to make this network more cohesive, consolidating the reputation of the main catholic pages in order to facilitate the spread of the proposed content, in order to counteract the diffusion of messages containing hatred and provide a clear counter-narrative. At the same time, the extensive monitoring of online hate speech phenomena could provide useful elements to understand how to regulate the system from a legislative point of view and then evaluate what would be the consequences related to the application of regulatory measures.

SEDE: Brescia.

FACOLTÀ DI SCIENZE POLITICHE E SOCIALI

ACADEMIC DISCIPLINE: <i>SECS-P/01 ECONOMICS</i>	n. 1 position
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DURATION: one year; can be renewed.

TUTOR: Prof. Giovanni Marseguerra

TITLE OF THE RESEARCH TOPIC: Credit rationing and export: Theoretical and empirical analysis.

BRIEF DESCRIPTION OF THE RESEARCH TOPIC: In general terms, the purpose of this research project is to analyse the link between financing conditions and performance of a production system. Specifically, the project seeks to study the relation between credit rationing and firms' export activities. In particular, the aim is to focus on the following issues: 1) Is the link between credit constraint and export different across countries in Europe? 2) Is the closeness between firms and banks relevant for firms to be less constrained and thus able to contract more credit for their exporting activities? 3) Is the impact of credit rationing on export participation weaker for firms that export to multiple foreign markets than for those that serve a single foreign market? From the empirical standpoint, the econometric and statistical analysis will be carried out by using Italian firm level data from, e.g., AIDA Bureau van Dijk and country level data from, e.g., Compnet database. SEDE: Brescia.

SEDE: Milano.

FACOLTÀ DI ECONOMIA E GIURISPRUDENZA

ACADEMIC DISCIPLINE: <i>SECS-P/07 BUSINESS ADMINISTRATION AND ACCOUNTING STUDIES</i>	n. 1 position
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P.H.D is required for the admission.

DURATION: one year; can be renewed.

TUTOR: Prof. Emanuele Vendramini.

TITLE OF THE RESEARCH TOPIC: Innovation of performance measures financial and non-financial: determinants and innovation process.

BRIEF DESCRIPTION OF THE RESEARCH TOPIC: Management: with a specific focus on innovation of performance measures in complex environment characterized by increasing attention on environmental and social sustainability. The research will have a theoretical and actionable impact: internal and external, financial and non-financial dimensions of performance will be analyzed. The research model requires a knowledge of econometric tools.

SEDE: Piacenza.

**B) Research grants announced in accordance with Art. 22,
Subparagraph 4, Letter B, of Law 240/2010**

FACOLTÀ DI SCIENZE DELLA FORMAZIONE

ACADEMIC DISCIPLINE: <i>M-PSI/05 SOCIAL PSYCHOLOGY</i>	n. 1 position
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P.H.D is required for the admission.

DURATION: one year; can be renewed.

TUTOR: Prof. Camillo Regalia

TITLE OF THE RESEARCH PROJECT: Frail elderly, intergenerational solidarity and age-friendly communities: design and implementation of effective caring networks.

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: This study analyses the different strategies that families, intergenerational and neighbourhood networks adopt due to a deterioration in the living conditions of the elderly person or to a critical event such as the death of a spouse or a separation. Such coping strategies are also compared across two markedly different Italian geographical areas (north: Lombardy and Veneto; south: Molise and Puglia) to identify the most effective social programs for each specific socio-economic context. Key topics: 1) The frailty of the elderly condition is interpreted starting from socio-structural markers: a) economic frailty (minimum pensions or inadequate income); b) frailty of health (beginning/onset of incapacitating factors); c) frailty in the use of new technologies (first- and second-level digital divide) and from psycho-relational and engagement markers, such as: d) relational frailty (isolation/loneliness/absence of significant ties/primary social capital); e) frailty of activity (people living in premature withdrawal); f) frailty in the perception of oneself as elderly. 2) Solidarity between generations is understood as the ability/possibility to exchange material aid, assistance, emotional support, money, but also recognition for what the older generation has given. 3) The ageing profiles refer to the different ways in which people face the transition and choose new lifestyles, relationships, commitments that enable them to continue to feel well (relative well-being) also where there are forms of partial reduction in autonomy. 4) The different attending strategies identify the presence/absence of a repositioning of family networks and of their planning/strategic ability to organize networks of protection for the elderly person, both by drawing on their own internal resources and by including informal and formal outside support (public and/or third sector). 5) By innovative interventions we mean those practices available in the different areas, which cope with social problems by creating new

networks that increase the social capital of those involved and promote shared participation and co-planning. The project intends to achieve the following aims: 1) To identify the role played by the resources (economic, relational, health, engagement, skill in the use of technologies, the availability in the informal and formal networks of services to the person and of support of various nature) that the elderly person and his/her network have at their disposal and can effectively activate to cope with critical situations; 2) To find out which are the markers of frailty in the different geographical areas being considered; 3) To propose a unit of measurement for the ageing-friendly level of the different areas, which can amount to a new proposal for the local administrations to redefine the support to the ageing of the population; 4) To rebuild the coping networks, when a new frailty situation occurs (invalidating event, loss of partner, separation/divorce); 5) To bring to the fore the value of solidarity between generations, paying special attention to the monetary costs, the value of the time resource, and to the mechanisms leading to the wearing out of natural care givers; 6) To understand whether bereavement and the grieving process or illnesses can lead to a growth in identity for the elderly person and the relatives; 7) To offer elements to promote innovative interventions according to the relational perspective. The investigation methods used belong to different disciplines (sociology, psychology, economics) (see experimental plan) and their purpose is to carry out an empirical social research on a target group of elderly people, selected on the basis of frailty indicators, living in areas with different endowments of resources and involved in innovative support projects. The data will be collected through face to face tandem interviews (elderly person and second-generation reference figure) undertaken using original and specially designed questionnaires (intergenerational interview) adopting tested measurement scales.

SEAT: Milano.

FINANCING Cariplo.

FACOLTÀ DI SCIENZE MATEMATICHE, FISICHE E NATURALI

ACADEMIC DISCIPLINE: <i>MAT/07 MATHEMATICAL PHYSICS</i>	n. 1 position
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DURATION: one year; can be renewed.

TUTOR: Prof. Giulia Giantesio.

TITLE OF THE RESEARCH PROJECT: modeling of steel processes using continuum mechanics.

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: Steel materials are complex and difficult to be described, so that several continuum models will be considered which can take care of the fluid, plastic and viscoelastic behaviour. The constitutive and balance equations that describe these materials will be taken into consideration, focusing also on the interaction with the surrounding environment. Moreover, the influence of the heat or

the presence of an electromagnetic field could be included in the model. Since these phenomena are quite complex, in order to test the goodness of the proposed models, some numerical simulations using finite elements or volumes can be useful. The obtained results will be compared to the corresponding measurements on the production plant of the factory Travi e profilati di Pallanzeno (BS).

SEAT: Brescia..

FINANCING: Progetto *SMART TWIN LMF 4.0*.

FACOLTÀ DI ECONOMIA E GIURISPRUDENZA

ACADEMIC DISCIPLINE: <i>SECS-P/07 BUSINESS ADMINISTRATION AND ACCOUNTING STUDIES</i>	n. 1 position
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DURATION: one year; can be renewed.

TUTOR: Prof. Fabio Antoldi.

TITLE OF THE RESEARCH PROJECT: The competitiveness of Italian firms in the musical instruments industry: Strategies and performance.

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: Italy is one of the most important manufacturers of musical instruments globally, with significant shares in the international competitive arena, especially for what concerns pianos, wind and stringed instruments as well as accessories. It boasts high-level production quality, frequently based on artisan manufacturing techniques and realized within internationally-oriented small- and medium-sized enterprises that in some cases are co-located within clusters. While being a relatively less visible segment compared to other Italian productions, the musical instruments industry actually represents a fully-fledged component of the Made in Italy. The research project aims at exploring the strategies and performance of Italian firms operating in this industry, with a focus on the resources (tangible and intangible) and the competencies upon which firms create a sustainable competitive advantage. The research will also investigate both the vertical and the horizontal relationships at industry supply chain level that contribute to the success of Italian products on the international markets. Furthermore, the research activity will delve into the ongoing transformations in downstream activities, especially in distribution channels (wholesale, retail, online), that are shaping the distribution of value across the supply chain. The research project requires the adoption of both qualitative and quantitative empirical methodologies. The candidate must be able to perform teaching activities at any level, also in english, related to the reference scientific area.

SEAT: Piacenza.

FINANCING: CERSI.

Art. 2
Admission requirements

Application for participation in the competition is open to Italian and foreign candidates holding a four-year university degree* or a Master's degree obtained in an Italian, EU or foreign university.

A PhD or equivalent qualification obtained abroad, if not otherwise specified, are preferential qualifications for participation in the selection procedures.

Applicants subject to any of the causes of incompatibility set forth in the Code of Conduct of the University cannot participate in the public competition.

The following candidates cannot participate in the public competition either:

- those who had contracts as research grant holders, in accordance with Art. 22 of Law 240 of December 30, 2010, for a period which, added to the expected duration of the contract announced, exceeds four years on the whole, with the exclusion of the period in which the grant was enjoyed while doing a PhD without scholarship, to the maximum extent of the legal duration of the corresponding programme;
- those who had contracts as research grant holders/fixed-term researchers, in accordance with Articles 22 and 24 of Law 240 of December 30, 2010, with the University or the bodies referred to in the first line of the following paragraph, for a period that, added to the expected duration of the contract announced, exceeds twelve years on the whole, even if not on a continuing basis. For the purposes of the duration of the aforementioned relations, the periods spent on maternity leave or on health leave are not considered according to current legislation.

The following positions are incompatible with the awarding of contracts:

- permanent staff of universities, institutions and public research and experimental bodies, of the National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) and the Italian Space Agency (ASI), and of institutions whose degree of scientific specialisation is recognised as equivalent to the qualification of Doctor of Philosophy, in accordance with Art. 74, fourth Paragraph, of Presidential Decree 382 of July 11, 1980;

* As obtained before the below-mentioned reference frames. For EU citizens the frame of reference is constituted by the Bologna process and in Italy it is regulated by Ministerial Decree 509 of November 3, 1999.

- holders of scholarships awarded for any purpose, with the exception of those awarded by national or foreign institutions with the aim of integrating research activity with stays abroad;
- students enrolled in university programmes, Master's degree programmes, Postgraduate programmes, or doctoral programmes with scholarship or medical specialisations, in Italy or abroad.

Exclusion due to lack of admission requirements shall be ruled by Rector's justified provision.

Art. 3 Submission of application

Applicants must submit documented application on unstamped paper, as indicated in **Annex A**.

A signed copy of the application form must be delivered:

- by hand (by 5pm on the expiry date **april 9, 2020**)
- sent by registered mail, or express mail, with return receipt to the following address: Università Cattolica del Sacro Cuore, Servizio personale docente e tecnico amministrativo (Ufficio Amministrazione Concorsi) - Largo Gemelli, 1 - 20123 Milano, **by april 9, 2020**. Receipt of applications shall be validated by post office date stamp
- sent by certified mail at risorse.umane@pec.ucsc.it **by april 9, 2020**.

This public announcement is published on the official notice board of Università Cattolica del Sacro Cuore, on the MIUR website at <http://bandi.miur.it>, and on the website of Università Cattolica del Sacro Cuore at <http://progetti.unicatt.it/progetti-ateneo-milano-brescia-piacenza-e-cremona-assegni-di-ricerca-legge-240-2010-art-22#content>

Art. 4 Contents of the application

In the application form, candidates shall precisely indicate:

- 1) surname and name;
- 2) place and date of birth;
- 3) fiscal code (the University shall determine the fiscal code of foreign candidates that cannot indicate it);

- 4) place of residence;
- 5) citizenship;
- 6) for Italian citizens: registration in the electoral roll stating the municipality of registration, otherwise, the reasons for non-registration or cancellation; for non-Italian citizens: declaration of the enjoyment of civil and political rights in their country of belonging or origin;
- 7) to have no criminal record; otherwise, any convictions (specifying the details of the relative sentences) and any pending criminal proceedings;
- 8) to have been neither dismissed from employment at any Public Administration due to persistent poor performance, nor declared no longer entitled to public employment in accordance with Art. 127, Letter d) of Presidential Decree 3 of January 10, 1957, and subsequent modifications and integrations;
- 9) not to be subject to any of the causes of incompatibility referred to in Art. 2 of the public announcement;
- 10) not to be subject to any of the causes of incompatibility set forth in the Code of Conduct of the University;
- 11) the competition of application (specifying Faculty, scientific-disciplinary sector and **research project** presented relative to the topics covered by the public announcement (**only for grants referred to in Art. 1, Letter**)).

In the application form, candidates may elect a special domicile for communications from the University Administration. Any changes in the above-stated domicile must be promptly notified to Servizio personale docente e tecnico amministrativo (Ufficio Amministrazione Concorsi) of Università Cattolica del Sacro Cuore - Largo Gemelli, 1 - 20123 Milano.

Candidates with recognised disabilities must specify in their application the aid required in relation to their disability and (if any) the need for additional time for test completion in accordance with Law 104 of February 5, 1992.

The University Administration shall not be responsible for unavailability of applicants and loss of communications due to incorrect contact information provided by applicants or to absent or delayed notification of any changes in the address indicated in the application form.

The University Administration shall not be responsible for any failed or late delivery of communications concerning the selection procedure due to reasons not attributable to the Administration itself, but to postal or telegraph service errors, third parties, unforeseeable circumstances or force majeure.

Art. 5

Attachments to the application form

The application must include:

- scientific and professional *curriculum*, and list of publications if any;
- qualifications and publications (if any) that candidates wish to present for evaluation;
- **research project** relative to the topic covered by the public announcement (**only for grants referred to in Art. 1, Letter A**)
- photocopy of an identification document;
- photocopy of fiscal code.

Candidates with Italian or EU citizenship may submit qualifications in original or certified copy; otherwise, where allowed by Articles 46 and 47 of Presidential Decree 445 of December 28, 2000, by substitutive declarations of certification or substitutive declarations of affidavit attesting conformity of the copies on unstamped paper to the original.

Non-EU citizens legally residing in Italy may use the substitutive declarations referred to in the above mentioned Articles 46 and 47 as limited to personal qualities and status and to facts certifiable or attestable by Italian public bodies.

Non-EU citizens authorised to stay in Italy may use the substitutive declarations referred to in the above mentioned Articles 46 and 47 in those cases in which they are submitted under the application of international conventions between Italy and the country of origin of the registrant.

In the remaining cases, non-EU citizens shall document personal qualities and status and facts through certificates or statements issued by the competent authority of the foreign State.

Certificates and statements referred to in the preceding paragraph written in a foreign language must be accompanied by a translation into Italian certified by the Italian consular authority, stating that it conforms to the original.

The Administration reserves the right to carry out appropriate checks on the veracity of the contents of the substitutive declarations.

Documents, qualifications and publications already submitted to the University may not be referred back to.

Art. 6

Examination Panel

The Examination Panel is appointed by the Rector. It consists of three members:

- a teacher, selected by the Faculty Board of the Faculty concerned, and two (associate or full) professors selected respectively by
 - the Dean of the Faculty concerned;
 - the Director of the Department/Institute at which research activity shall be conducted

Art. 7

Evaluation of candidates

The selection procedure evaluates candidates' submitted qualifications, and includes an interview.

The Examination Panel evaluates candidates on a one-hundred-point scale; available points are to be assigned as follows:

- a) [redacted] for research grants referred to in Art. 1, Letter A)**, max. sixty points for qualifications and research project; max. forty points for the interview;
- b) [redacted] for research grants referred to in Art. 1, Letter B)**, at least forty points for qualifications; the remaining points for the interview.

In its first meeting, the Examination Panel determines the criteria for candidates' evaluation complying with the provisions of the public announcement and what follows below.

The Examination Panel may also set a minimum score for admission to the interview.

In compliance with the above indicated criteria, published at <http://milano.unicatt.it/concorsi-assegni-di-ricerca-legge-240-2010-art-22>, the Examination Panel evaluates each candidate's

- scientific and professional *curriculum*;
- qualifications and publications submitted, and their pertinence to the scientific-disciplinary area and/or scientific-disciplinary sectors covered by the public announcement;
- research project relative to the topic covered by the public announcement, only for grants referred to in Art. 1, Letter A of this public announcement.

If the date of the interview is not specified in this public announcement, candidates are summoned for interview by registered mail with return receipt not less than twenty days prior to the scheduled date for their interview on the scientific activity conducted.

Under the same terms outlined in the preceding paragraph, candidates who have not reached the minimum score required by the public announcement are given notice of

non-admission to the interview.

During the interview, knowledge of the language or languages required (if any) is also ascertained; foreign candidates' (at the least) instrumental knowledge of Italian, if required, is ascertained.

At the end of its activity, the Examination Panel compiles a ranking based on the sum of the scores obtained by each candidate in the evaluation of qualifications and the interview. In the case of a tie, the younger candidate prevails.

The Examination Panel's files consist of the minutes of each meeting.

The files of the evaluation procedure are approved by Rector's decree.

Art. 8 Conferment

For the purposes of the awarding of the research grant, the Ecclesiastical Assistant General verifies, through a dedicated interview, the adherence of the first candidate in the ranking to the guiding principles of the University.

The grant is awarded by the Rector through the stipulation of a specific contract.

In case of non-acceptance, the grant is awarded to the following candidate in the ranking.

Art. 9 Obligations

Grant holders are required to conduct a research programme or a phase thereof under the guidance of a tutor.

Grant holders are also required to comply with the guiding principles of the University Statute and the Code of Conduct of the University.

Grant holders shall not:

- have other employment contracts;
- engage in self-employed activity, project-related or freelance;
- carry out occasional work that, upon the opinion of the tutor, has not been authorised in advance and communicated to the Dean of the Faculty concerned by the Director of the Department / Institute at which the grant recipient conducts research activity.

Grant holders operate at their tutor's facility of belonging, or at the facility specified in the public announcement (if any), making use of the equipment and services available. Subject to the approval of the tutor, research activity may be conducted at other University facilities or at qualified Italian and foreign research facilities.

Art. 10

Assessment of conducted activity

Within 60 days from the end of each year of activity, the tutor shall submit the Board of the Department / Institute at which the grant holder is carrying out research activity a report containing a detailed and justified assessment of the results of activity conducted.

Upon this occasion, in the case of grant expiration, the tutor may propose its renewal.

Art. 11

Grant renewal

Within 30 days before the date of grant expiration, the Board of the Faculty concerned, on the basis of the tutor's report and the opinion of the Board of the Department / Institute, approves its renewal, if any.

Research grants shall not be renewed for less than a year.

Art. 12

Economic conditions

The annual gross amount of the grants is determined by resolution of the Board of Directors, on the basis of the minimum amount established by Ministerial Decree.

Grants are paid out monthly, and for the predetermined amount after the cost of the appropriate compulsory personal insurance policy stipulated by the University against accidents that may occur during presence at the University venues.

The grants are exempt from *IRPEF* (income tax) in accordance with applicable law, and subject, for what concerns social security, to the laws in force.

Art. 13

Contract termination

The grant is withdrawn and the related contractual relation is terminated before expiration by Rector's decree:

- in cases of non-observance of the obligations referred to in Article 9;
- in case there arises any of the reasons for inadmissibility referred to in Article 2;
- in the event of negative assessment of activity conducted.

Subject to attested notification to the person concerned, the Rector's decree is issued upon the resolution of the Board of the Faculty on proposal of the tutor or Dean, and after consultation with the Board of the Department / Institute at which the grant holder carries out research activity.

Art. 14

Patenting

Any realisation, during the activity, of an innovation, on the part of the holders of the contracts referred to in the norms, that may be patentable is governed in accordance with current legislation and regulations adopted by Università Cattolica.

Art. 15 Transitory norms

With their consent, grant holders may be assigned integrative and curricular didactic activities. These activities are assigned by the Faculty concerned, subject to the approval of the Director of the Department / Institute at which the grant holder carries out research activity. The integrative and curricular didactic activities assigned shall not exceed 30 hours per year, and are covered by the grant emoluments.

The conferment of grants does not constitute any form of employment nor awards rights of access to university positions.

To grants awarded prior to the entry into force of the Norms on the conferment and discipline of research grants in accordance with Art. 22 of Law 240 of December 30, 2010 continue to apply the laws and regulations in force at the time of their conferment.

Art. 16 Responsibility for procedure

The person in charge of the procedure of this public announcement, in accordance with Articles 4, 5 and 6 of Law 241 of August 7, 1990, is Dr. Cristian COLNAGHI - Servizio personale docente e tecnico amministrativo (Ufficio amministrazione concorsi) - Largo A. Gemelli, 1 - 20123 MILANO (phone no. 02/7234.3813 – fax no. 02/7234.2972 – email address: uff.concorsi@unicatt.it).

Art. 17 Final provisions

For any matters not covered by this public announcement, the current university legislation applies as compatible.

Milano, march, 9 2020

IL RETTORE
(Prof. Franco Anelli)