

RECTOR'S DECREE N. 9202

Selection procedures to assign no. 18 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 6301 of April 17, 2020, entitled “Operational provisions for conducting competition procedures for the awarding of research grants and the recruitment of professors and researchers telematically”;
- having regard to Rector's Decree 6764 of September 30, 2020, governing <<Modifications to the “Code of Conduct of Università Cattolica del Sacro Cuore”>>;
- having regard to Rector's Decree 9122 of October 10, 2022, 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 from July to September 2022;
- having regard to the resolutions adopted by the University Senate (September 19, 2022) and University Steering Committee (October 10, 2022);

ORDAINS

Art. 1

Opening

The opening of selection procedures for the assignment of no. 18 research grants in the following Faculties of Università Cattolica del Sacro Cuore, for the following scientific-disciplinary sectors:

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

FACOLTÀ DI ECONOMIA

**n. 1
position.**

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

TEACHER IN CHARGE OF RESEARCH ACTIVITY: Prof. Claudio LUCIFORA.

TITLE OF THE RESEARCH PROJECT: *The post-COVID-19 syndrome: evaluation of the indirect effects of the epidemic on the health system.*

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: *Micro-econometric evaluations of the effects of the COVID-19 epidemic in terms of contraction and changes in the provision of health-care services. The candidate should analyze large micro-data, drawn from administrative sources, with a special emphasis on longitudinal data. The candidate will develop with autonomous ability micro-econometric models and empirical strategies for event type analyses. The analysis of health data and of topics in the economics of ageing are also of interest for the position. Scientific requirements set up by the Faculty for the recruitment of this position will be linked to the call and must be fulfilled. Link to Requisiti economici: <https://milano.unicatt.it/facolta/economia-facolta-docenti-requisiti-partecipazione-procedure>.*

CAMPUS: Milano.

FINANCING: Fondazione Cariplo - progetto di ricerca “La sindrome *post-COVID*: far fronte a una nuova emergenza di sanità pubblica con una gestione innovativa e il *network building*”.

FACOLTÀ DI SCIENZE AGRARIE, ALIMENTARI E AMBIENTALI

**n. 13
positions.**

ACADEMIC DISCIPLINE: <u>AGR/11 GENERAL AND APPLIED ENTOMOLOGY</u>	n. 1 position.
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DURATION: 6 months, can be renewed.

TEACHER IN CHARGE OF RESEARCH ACTIVITY: Dott.ssa Ilaria NEGRI.

TITLE OF THE RESEARCH PROJECT: *MitoMicro: Mitochondrial MicroRNAs, a new perspective for mitochondrial function and their role in Eukaryotic evolution.*

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: *This research project aims at expanding our knowledge on the mechanisms of interaction between mitochondrial small non-coding RNAs and the nuclear genome in insects of agricultural relevance. Zyginidia pullula specimens (Hemiptera, Cicadellidae) will be collected and reared, and Wolbachia-infected and uninfected isofemale lines isolated. Feminized phenotypes, infected and uninfected males and females will be selected to preliminary characterise mechanisms responsible of Wolbachia RNA interference.*

CAMPUS: Piacenza.

FINANCING: Progetto di ricerca: MitoMicro: *Mitochondrial MicroRNAs, a new perspective for mitochondrial function and their role in Eukaryotic evolution.* Responsabile: Dott.ssa Negri. Ente finanziatore: Ministero dell'Università e della Ricerca (M.U.R.), PRIN: progetti di ricerca di rilevante interesse nazionale - bando 2020 - CUP assegnato al progetto: J35F22000170001. Centro di costo: R2094300276

ACADEMIC DISCIPLINE: <u>M-PSI/06 WORK AND ORGANIZATIONAL PSYCHOLOGY</u>	n. 1 position.
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DURATION: one year, can be renewed.

TEACHER IN CHARGE OF RESEARCH ACTIVITY: Prof.ssa Guendalina GRAFFIGNA.

TITLE OF THE RESEARCH PROJECT: *Consumer food & health engagement monitor.*

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: *The project aims to monitor food consumption trends and health behaviors of Italians over time, also in light of the variation in historical, social and economic phenomena. The research will also make it possible to profile different groups of consumers on the basis of their psychological and socio-demographic characteristics. Furthermore, the study will investigate the emotional determinants underlying the different consumption trends and their variation according to the emerging factors in the socio-economic context and to consumers' level of engagement. The project involves the application of qualitative and quantitative analytical methodologies and the main explanatory theories of the psychology of consumption. Monitoring will be the basis for the publication of quarterly research reports and for a presentation event to be held in Cremona.*

CAMPUS: Cremona.

FINANCING: Progetto Cremona Agri Food-Lab (n. 10 mensilità) WBE R2094300243, EngageMinds HUB – R2094400279 (2 mensilità). Responsabile: Prof.ssa Graffigna.

ACADEMIC DISCIPLINE: <u>M-PSI/06 WORK AND ORGANIZATIONAL PSYCHOLOGY</u>	n. 1 position.
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DURATION: one year, can be renewed.

TEACHER IN CHARGE OF RESEARCH ACTIVITY: Prof.ssa Guendalina GRAFFIGNA

TITLE OF THE RESEARCH PROJECT: *Patient engagement and food involvement role in preventing inflammatory bowel diseases*

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: *Today measuring and promoting patient and citizen health engagement is considered a crucial asset in order to improve the care experience of patients. This research project will be part of a broader European funded project (MiGut Project - Personalised blueprint intestinal health). The researcher will participate and coordinate the following research activities: 1) a cross-cultural survey will be conducted on a broad sample of high-risk citizens and patient aimed at profiling participants according to their sociodemographic characteristics (e.g., gender, age, socioeconomic status), clinical status (comorbidities etc.), lifestyle (dietary habits, healthy behaviours, etc.), and psychological factors identified as possible risk factors; 2) based on this survey advanced statistical analysis will allow the definition of Personas characterized by peculiar psychological characteristics, levels of engagement, educational needs, and food involvement factors; 3) thanks to these Personas, personalized information packages will be developed in order to improve each target's health and quality of food consumption; 4) finally, a series of 7 interactive webinars (one in each country of the consortium) will be organized and held with the purpose of raising the awareness and sharing evidence-based knowledge with patients and high-risk individuals about key topic regarding health engagement.*

CAMPUS: Cremona.

FINANCING: Progetto di ricerca: WBE MIGUT. Responsabile: Prof.ssa Graffigna.

ACADEMIC DISCIPLINE: <u>AGR/07 AGRICULTURAL GENETICS</u>	n. 1 position.
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DURATION: one year, can be renewed

TEACHER IN CHARGE OF RESEARCH ACTIVITY: Prof. Matteo BUSCONI.

TITLE OF THE RESEARCH PROJECT: *Rediscovered landraces: alternative cultivation strategies for a sustainable and resilient agriculture (VALORE).*

BRIEF DESCRIPTION OF THE RESEARCH PROJECT : *VALORE is an information and demonstration project focused on some local varieties of maize, potato and bean of particular interest to the Lombardy region. The main objectives of the project are: to provide an improved knowledge on traditional cultivation practices and their advantages*

for the cultivation of landraces in a context of marginal areas; to inform farmers on the importance of agrobiodiversity and landraces for the valorisation of marginal areas; to demonstrate, through the setting up of ad hoc demonstration fields, how to implement these alternative cultivation strategies and the advantages deriving from their application. The project will provide the interested farmers with the necessary technical tools and appropriate genetics and agronomic knowledge to achieve an economically advantageous qualitative-quantitative production through the use of appropriate cultivation techniques of traditional landraces and ancient cultivars of maize, potato and beans.

CAMPUS: Piacenza.

FINANCING: Regione Lombardia. FEASR - Programma di Sviluppo Rurale 2014-2020; Misura 1. - Trasferimento di conoscenze e azioni di informazione; Sottomisura 1.2 - Sostegno a attività dimostrative e azioni di informazione. CUP: J33C22002650009. Responsabile: Prof. Busconi.

<i>ACADEMIC DISCIPLINE: <u>AGR/18 ANIMAL NUTRITION AND FEEDING</u></i>	n. 1 position.
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DURATION: one year, can be renewed.

TEACHER IN CHARGE OF RESEARCH ACTIVITY: Prof. Antonio GALLO.

TITLE OF THE RESEARCH PROJECT *Animal nutrition and feed evaluation*

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: The project will regard research activity in the field of animal nutrition, with specific connection to physico-chemical-biological and nutritional characterizations of animal feeds, to the digestive and metabolic utilizations of nutrients, and to the study of nutritional and feed manufacturing technologies that have an influence on animal production efficiency and welfare as well as on safety of animal derived-products for the consumer. The candidate should be able to plan, develop and finalize experimental trials with the final aim to publish scientific papers on international Journals with high impact factor. Experiences in feed analysis with GC-MS/LC-MS instrumentations and knowledge of statistical analysis software will also be evaluated.

CAMPUS: Piacenza-Cremona..

FINANCING: Fondi privati. Responsabile: Prof. Gallo.

<i>ACADEMIC DISCIPLINE: <u>AGR/18 ANIMAL NUTRITION AND FEEDING</u></i>	n. 1 position.
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DURATION: one year, can be renewed.

TEACHER IN CHARGE OF RESEARCH ACTIVITY: Prof. Antonio GALLO.

TITLE OF THE RESEARCH PROJECT: *CRIME AND POLITICS: Modeling in Animal science.*

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: The project will involve research activities

in the area of modeling biological and management systems related to the agro-livestock sector. In particular, the candidate is required to have knowledge regarding the modeling of complex systems and in linear programming for the development of models to be applied at the animal or barn level. Knowledge of appropriate modeling and simulation software is required. Knowledge of technical concepts related to the specific area of interest that will involve animal science will also be assessed.

CAMPUS: Piacenza-Cremona.

FINANCING: Fondi privati. Responsabile: Prof. Gallo.

ACADEMIC DISCIPLINE: <u>AGR/01 AGRICULTURAL ECONOMICS AND RURAL APPRAISAL</u>	n. 2 positions.
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DURATION: one year, can be renewed.

TEACHER IN CHARGE OF RESEARCH ACTIVITY: Prof. Daniele RAMA.

TITLE OF THE RESEARCH PROJECT: *Analysis of the structure and performance of agro-food firms in the Cremona province.*

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: *The project aims to study the structure of agro-food firms in Cremona territory (companies' size, concentration, scale economies, barriers to entry) and to evaluate their performance, taking into account the competitive environment.*

CAMPUS: Cremona.

FINANCING: Progetto Cremona Agri Food-Lab (n. 10 mensilità), Ricerche Osservatorio latte (n. 2 mensilità). Responsabili del progetto di ricerca: Prof. Lorenzo MORELLI, Prof. Rama. Centri di costo: Cremona Agri Food-Lab WBE R2094300243, Ricerche Osservatorio latte WBE R2094400017.

ACADEMIC DISCIPLINE: <u>AGR/02 AGRONOMY AND FIELD CROPS</u>	n. 1 position.
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DURATION: one year, can be renewed.

TEACHER IN CHARGE OF RESEARCH ACTIVITY: Dott. Andrea FERRARINI.

TITLE OF THE RESEARCH PROJECT: *Developing and testing a scalable MRV protocol to monitor, report, and verify changes in SOC stocks in arable soils.*

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: *Carbon farming (CF) is the agriculture's answer to climate change and includes agricultural practices able to capture and store C in soils through photosynthesis as soil organic carbon (SOC). Unlocking the potential for CF to scale relies on the establishment of robust protocols to monitor, report, and*

verify (MRV) changes in SOC stocks. However, the added value provided by remote and proximal sensing data for scaling soil C credit generation at farm scale has not been fully explored yet. In the project, the candidate will operationalize, using a TIER approach, a hybrid SOC sampling-modelling MRV approach that integrates components: 1) proximal soil sensing (PS); 2) smart soil sampling; 3) remote sensing (RS)-based soil C modelling. Crop and soil data from several lighthouse farms will be gathered to train and validate advanced algorithms, using multiple satellite imageries, able to estimate plant C inputs data needed to run SOC models. To enable faster and accurate initialization and validation of SOC model simulations, a SOC stock accounting methodology based on vis-NIR PS will be developed. Altogether, it is expected from the candidates that are able to interconnect these MRV components into a spatial modelling toolbox where SOC sequestration maps are generated at field scale. For this, the candidate must have competences in the field of soil proximal sensing, soil C modelling (Roth-C model) and a PhD with research experience on the adoption of these technologies to CF practices.

CAMPUS: Piacenza.

FINANCING: Progetto Europeo *Farms4Climate*. Centro di costo R2094300279. CUP J33C21000160006. Responsabile: Dott. Ferrarini.

ACADEMIC DISCIPLINE: <u>AGR/01 AGRICULTURAL ECONOMICS AND RURAL APPRAISAL</u>	n. 1 position.
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DURATION: one year, can be renewed.

TEACHER IN CHARGE OF RESEARCH ACTIVITY: Prof. Paolo SCKOKAI.

TITLE OF THE RESEARCH PROJECT: **BRIGHTSPACE**: *Designing a roadmap for effective and sustainable strategies for assessing and addressing the challenges of EU agriculture to navigate within a safe and just operating space.*

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: *In the context of the BrightSpace project, we investigate the impact of several CAP tools targeting the potential negative environmental impact of agriculture, considering both compulsory programmes (greening payments, nutrient management policies) and voluntary programmes [agri-environmental measures (AEMs); low-input agriculture, organic farming, other voluntary programmes]. For each programme, we will adopt state of the art quantitative methods in order to evaluate the ex-post impact of such policies on specific safe indicators (nutrient cycle (N and P), chemical input use, land use, water use, biodiversity...), and just indicators (farm income distribution, farm employment...). In addition, we will focus on the potential trade-offs between these safe/just indicators and the economic performances of farms (farm efficiency/productivity, farm income).*

CAMPUS: Piacenza.

FINANCING: Progetto di ricerca *Horizon Europe* “**BRIGHTSPACE**: *Designing a roadmap*

for effective and sustainable strategies for assessing and addressing the challenges of EU agriculture to navigate within a safe and just operating space (2022-2027). CUP: J33C22001250006. Responsabile: Prof. Sckokai. Centro di costo: R2094300284.

<i>ACADEMIC DISCIPLINE: <u>AGR/01 AGRICULTURAL ECONOMICS AND RURAL APPRAISAL</u></i>	n. 1 position.
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DURATION: one year, can be renewed.

TEACHER IN CHARGE OF RESEARCH ACTIVITY: Prof. Claudio SOREGAROLI.

TITLE OF THE RESEARCH PROJECT: Closing the loop: Green process for transforming highly heterogeneous biomasses into novel bio-based vitrimer composites.

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: In the context of the Cyclevit project, we explore the economic feasibility of vitrimer composites production using a Cost-Benefit Analysis (CBA) and a market analysis. Early capital cost estimates will be performed to derive direct and indirect investment costs, working capital, and start-up expenses. Operational expenditures will be itemized based on the processing streams monitored in the LCA, input prices, and other assumptions (e.g., average distance to harvest biomass). Using a mathematical linear programming model and net present value calculation, the minimum selling price for the novel product will be determined. Due to the inevitable uncertainty of a low TRL configuration, a sensitivity analysis will be performed. The economic indicators for vitrimers will be compared to those of conventional alternatives to assess the actual and potential market performance. Such activity will be also based on expert involvement and will form the basis to frame an outlook on future market scenarios.

CAMPUS: Cremona.

*FINANCING: Fondazione Cariplo, Economia circolare 2021 - CYCLEVIT (2021-0757).
Responsabile: Dott. Andrea BASSANI*

<i>ACADEMIC DISCIPLINE: <u>AGR/18 ANIMAL NUTRITION AND FEEDING</u></i>	n.1 position.
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DURATION: 6 months, can be renewed.

TEACHER IN CHARGE OF RESEARCH ACTIVITY: Prof. Maurizio MOSCHINI.

TITLE OF THE RESEARCH PROJECT: Sustainability and environmental assessments in livestock breeding.

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: The project will develop models for assessing environmental performance in ruminant livestock farms and sustainable mitigation actions. The research activity consists of primary data collection, creation of emission inventories, and evaluation of impacts on multiple indicators using specific software. The candidate should have expertise in herd management, animal feeding,

manure management, and crop plan management. The candidate should be able to conduct product life cycle studies. The purpose of the research is to create a sustainable livestock model to disseminate results in relevant scientific publications.

CAMPUS: Piacenza-Cremona.

FINANCING: Fondi privati. Responsabile: Prof. Moschini.

ACADEMIC DISCIPLINE: <u>AGR/13 AGRICULTURAL CHEMISTRY</u>	n.1 position.
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DURATION: one year, can be renewed.

TEACHER IN CHARGE OF RESEARCH ACTIVITY: Prof. Luigi LUCINI.

TITLE OF THE RESEARCH PROJECT: SIRAM

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: Sustainable Innovation for Regenerative Agriculture in the Mediterranean area (SIRAM) will provide a comprehensive integration and implementation of sustainable solutions for regenerative agriculture across different Mediterranean areas, addressing at the same time issues of low incomes at smallholder farm level. A multidisciplinary team will tackle from different perspectives issues related to soil degradation, over-use of chemical inputs, climate change, desertification, environmental risks and low-incomes at smallholder farms level. The candidate will be responsible for evaluating with metabolomics techniques and biochemical approaches the effects of applying microorganisms with plant biostimulation and biodefence activities, and for studying microbiome-plant interactions.

CAMPUS: Piacenza.

FINANCING: Progetto di ricerca: SIRAM - M.U.R. - PRIMA - CUP: J33C22000510008.
Responsabile: Prof. Edoardo PUGLISI - WBE R2094300283.

FACOLTÀ DI SCIENZE BANCARIE, FINANZIARIE E ASSICURATIVE

**n. 1
position.**

ACADEMIC DISCIPLINE: <u>SECS-P/11 FINANCIAL MARKETS AND INSTITUTIONS</u>	n. 1 position.
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DURATION: 7 months.

TEACHER IN CHARGE OF RESEARCH ACTIVITY : Prof. Alberto FLOREANI.

TITLE OF THE RESEARCH TOPIC: Merger and acquisition in insurance industry. Hospital self-insurance programs.

BRIEF DESCRIPTION OF THE RESEARCH TOPIC: The grant is aimed at carrying out two distinct research projects in the insurance field. The first project, which is broader in scope and co-funded by the Centro di Formazione in campo finanziario (CFF), aims to investigate the processes of aggregation in the insurance field, with particular attention to the value creation of these deals and to their evaluation issues. The second project, co-financed by the Research Centre Enterprise risk lab (ERiL), is aimed at investigating the self-insurance of healthcare companies as a possible alternative to insurance coverage, also in the light of recent regulatory innovations (e.g. Gelli Law).

CAMPUS: Milano.

FINANCING: Milliman, CFF, ERiL.

FACOLTÀ DI PSICOLOGIA

**n. 2
positions.**

<i>ACADEMIC DISCIPLINE: <u>M-PSI/05 SOCIAL PSYCHOLOGY</u></i>	n. 1 position.
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DURATION: one year, can be renewed.

TEACHER IN CHARGE OF RESEARCH ACTIVITY : Prof.ssa Elena MARTA.

TITLE OF THE RESEARCH PROJECT: Evaluation of the impact of Public employment services supports on the engagement and employability of rural NEETs.

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: This study aims to provide a model for evaluating the effectiveness of Public Employment Services (PES) in improving the employability of rural NEETs aged 25-29. In particular, this project has a threefold objective. The first consists in carrying out a transnational comparative assessment of policies influencing the monitoring of NEETs in rural areas in some European countries, with quantitative, qualitative, and secondary analyses. The second consists in mapping and validating the way employment centers work through interviews with operators and young rural NEETs. The third consists of identifying the variables that may influence the behaviour of young people NEETs in terms of using PES and actively participating in the proposed programmes. The exploration of these issues will follow a mixed-method research approach, through the integration of qualitative and quantitative data collection and analysis methodologies. In particular, textual analysis and multivariate statistical analysis techniques will be used, based on the use of specific software such as MAXQDA, SPSS and Mplus.

FOREIGN LANGUAGES: English, Spanish.

CAMPUS: Brescia.

FINANCING: Progetto TR@CK-IN: *Public employment services tracking effectiveness to support rural needs - eea and Norway grants fund for youth employment (CALL 2020-1 "UNLOCKING YOUNG POTENTIAL") - CUP J85F21003850004.*

ACADEMIC DISCIPLINE: <u>M-PSI/01 GENERAL PSYCHOLOGY</u>	n. 1 position.
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QUALIFICATION REQUIRED: Phd.

DURATION: one year, can be renewed.

TEACHER IN CHARGE OF RESEARCH ACTIVITY: Prof. Giuseppe RIVA.

TITLE OF THE RESEARCH PROJECT: *The power of touch. Randomized, double-blind, sham-controlled crossover trial of interoceptive non-invasive tactile stimulation for the treatment of osteoarthritis chronic associated pain.*

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: *The research project will study the longitudinal effectiveness of interoceptive stimulation as a complementary treatment for chronic pain in osteoarthritis with a double-blind, fully cross-over RCT also collecting behavioral measures, autonomic measures, and biological markers as well. Specific expertise in collecting and analyzing autonomic measures (i.e., heart rate variability), EEG (ERP, HEP) and behavioral data is highly regarded. Specific expertise in randomized control trials, longitudinal studies, and behavioral experimental protocols is preferred, along with specific experience in the use of psycho-physiological analysis tools (R, python) for experimental research in psychology. Moreover, previous experience in clinical assessment and research is preferred. Previous experience in the interoceptive related topics is preferred but not mandatory.*

FOREIGN LANGUAGES: English.

CAMPUS: Milano.

FINANCING: Istituto Auxologico italiano.

FACOLTÀ DI ECONOMIA E GIURISPRUDENZA

**n.1
position.**

ACADEMIC DISCIPLINE: <u>SECS-S/03 ECONOMIC STATISTICS</u>	n. 1 position.
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DURATION: one year, can be renewed.

TEACHER IN CHARGE OF RESEARCH ACTIVITY: Prof. Enrico FABRIZI.

TITLE OF THE RESEARCH PROJECT: *Statistical methods for the analysis of new data sources in the forecasting of agricultural production.*

BRIEF DESCRIPTION OF THE RESEARCH PROJECT: The main purpose of the research is to propose and estimate a set of predictive models aimed at the economic and financial evaluation of farms. The proposed models will then be translated into algorithms and codes that will allow their use in practice, also through IT tools implemented on web platforms. The first part of the research will focus on forecasting agricultural yields. The input data will be both standard, i.e. data routinely collected in sample surveys conducted on agricultural enterprises (e.g. RICA sample survey), and “new” data of different origins, such as weather data, remote sensing, satellite imaging data and data collected by means of ground sensors. This will involve creating databases with a new architecture, in which to integrate data from different sources with linkage operations at the level of each company or cultivated portion. The use of new data will require that the models currently used in the literature for the prediction of yields be revisited in the light of the new information and possibly modified. Moreover, newly developed predictive models, involving the use of machine learning and artificial intelligence techniques, will be tested as possible alternatives capable of capturing complex, recursive and non-linear relationships.

CAMPUS: Piacenza.

FINANCING: Centro di costo R2094400353 (Impiego delle nuove rilevazioni nella previsione delle produzioni agricole). CUP: E92C21001370009.

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/benefited of 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 six years on the whole;
- 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

*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.

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.

For the purposes of the duration of the aforementioned relations are not considered PhD without scholarship period within the maximum limit of the legal duration of the PhD course.

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;
- 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:

- 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 December 12, 2022.** Receipt of applications shall be validated by post office date stamp
- sent by certified mail at risorse.umane@pec.ucsc.it **by December 12, 2022.**

This public announcement is published on the official notice board of Università Cattolica del Sacro Cuore, 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 A**).

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 e Segreteria Docenti) 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 through a special decree. It consists of three members (consisting of a balanced composition of men and women, if possibile):

- a teacher, selected by the Faculty Board of the Faculty concerned in charge of research project manager , 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

The teacher acting as project manager is in charge of convene the meeting and start the procedure within 30 days depending on the receiving of the Examination Panel decree.

In case of failure of the Commission and no establishment within 30 days as before mentioned, the Rector may appoint a new Commission as previously described.

The President and the Secretary are selected by the Examination Panel.

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) **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) 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 on our website <http://progetti.unicatt.it/progetti-ateneo-milano-brescia-piacenza-e-cremona-assegni-di-ricerca-legge-240-2010-art-22#content>, 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.

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.

The procedure must be carried out by the Examination Panel within 90 days from the establishment. The Rector may extend this term no more than 90 days just once and in case of proven reasons established by the President Panel. In case the procedure don't come to an end by the term, the Rector, may appoint a new Panel according to the rule mentioned in art. 6.

The rectoral decree regarding the act approval will be published on our institutional

website.

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.

The activation of the contract and research activity can be effective only in case the candidate didn't had any of the following positions:

- those who had/benefited of 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 six years on the whole;
- 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.

For the purposes of the duration of the aforementioned relations are not considered PhD without scholarship period within the maximum limit of the legal duration of the PhD course.

In case of non-acceptance, the grant is awarded to the following candidate in the ranking and only after Ecclesiastic Assistants interview.

Art. 9 Obligations

Grant holders are required to conduct a research programme or a phase thereof under the guidance of a teacher in charge of the management of the research.

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 teacher in charge of the management of the research, 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 teacher'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 teacher in charge of the management of the research, 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 teacher in charge of the management of the research 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 teacher 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 teacher'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 teacher in charge of the management of the research 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.

L'informativa relativa al trattamento dei dati personali forniti in occasione della procedura concorsuale è disponibile sul sito web dell'Ateneo all'indirizzo

<https://www.unicatt.it/privacy>.

Art. 16
Responsibility for procedure

The person in charge of the procedure of this public announcement, is Dr. Federico Liotta - Capo Servizio Personale Docente e Tecnico Amministrativo - 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.

Milan, November 11, 2022

IL RETTORE
(Prof. Franco Anelli)