#### ANNEX A

## SCIENTIFIC DISCIPLINARY AREA: MATHEMATICS AND INFORMATICS

## **RESEARCH PROGRAM NO. 1**

The assessment criteria for the qualifications and the interview will be affixed on 25.9.2018 at 9.00 in Dipartimento di Matematica (DIMA), Via Dodecaneso 35, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 25.9.2018 at 15.00 in Dipartimento di Matematica (DIMA), Via Dodecaneso 35, Genova.

The interview will be held on 26.9.2018 at 9.00 in Dipartimento di Matematica (DIMA), Via Dodecaneso 35, Genova.

## Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Michele Piana on the phone number +39 0103536936 or via the email address: piana@dima.unige.it.

## Scientific coordinator: Prof. Michele PIANA

## NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Computational methods for image and data analysis in biomedicine.

**Description:** This position is concerned with the study of numerical methods for the analysis of functional data and morphological images with applications in oncology and neurology. Skills will be required in the numerical solution of inverse problems, in machine learning, pattern recognition and medical image processing.

## Scientific disciplinary sector: MAT/08 ANALISI NUMERICA

**Place:** Dipartimento di Matematica (DIMA)

## **Required degree:**

Laurea Specialistica delle classi: 20/S Fisica, 23/S Informatica, 26/S Ingegneria biomedica, 45/S Matematica.

Laurea Magistrale delle classi: LM-17 Fisica, LM-18 Informatica, LM-21 Ingegneria biomedica, LM-32 Ingegneria informatica, LM-40 Matematica.

## Subjects of the interview:

- Numerical methods for the solution of inverse problems;
- methods in machine learning;
- methods in pattern recognition and image processing.

The assessment criteria for the qualifications and the interview will be affixed on 25.9.2018 at 9.00 in Dipartimento di Matematica (DIMA), Via Dodecaneso 35, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 25.9.2018 at 17.00 in Dipartimento di Matematica (DIMA), Via Dodecaneso 35, Genova.

The interview will be held on 26.9.2018 at 15.00 in Dipartimento di Matematica (DIMA), Via Dodecaneso 35, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Michele Piana on the phone number +39 0103536936 or via the email address: piana@dima.unige.it.

## Scientific coordinator: Prof. Michele PIANA

## NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Computational methods for image and data analysis in physics.

**Description:** This position is concerned with the study of numerical methods for data analysis and image reconstruction in physics, with specific focus on astrophysics and solar physics. Skills are required in the numerical solution of inverse problems, in pattern recognition and image processing.

## Scientific disciplinary sector: MAT/08 ANALISI NUMERICA

Place: Dipartimento di Matematica (DIMA)

## **Required degree:**

Laurea Specialistica delle classi: 20/S Fisica, 23/S Informatica, 26/S Ingegneria biomedica, 45/S Matematica.

Laurea Magistrale delle classi: LM-17 Fisica, LM-18 Informatica, LM-21 Ingegneria biomedica, LM-32 Ingegneria informatica, LM-40 Matematica.

## Subjects of the interview:

- Numerical methods for the solution of inverse problems;
- methods in machine learning;
- methods in pattern recognition and image processing.

The assessment criteria for the qualifications and the interview will be affixed on 2.8.2018 at 9.00 in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 2.8.2018 at 12.00 in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

**The interview will be held on 2.8.2018** at **12.30** in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

#### Scientific coordinator: Prof. Barbara CATANIA

#### NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Privacy by Design: analysis and redesign of databases according to GDPR.

**Description:** Privacy by Design (Article 25 of GDPR) is a design approach that takes into account the requirements related to the protection of privacy from the beginning of the design phase of data management systems and throughout the entire data life cycle. A deep re-engineering of information systems is therefore required to focus the attention on the protection of personal and sensitive data, starting from the data and service design phase. The objective of the proposed research is to analyze the problems and techniques to guarantee the Privacy by Design of new systems and existing ones. The research will be applied to a concrete case study, represented by the information system related to the teaching management of a University.

## Scientific disciplinary sector: INF/01 INFORMATICA

**Place:** Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS) – the research will be carried out at CeDIA – Centro Dati, Informatica e telematica di Ateneo

#### **Required degree:**

Larea V.O in Informatica Laurea Specialistica delle classi: 23/S Informatica, 35/S Ingegneria informatica Laurea Magistrale delle classi: LM-18 Informatica, o LM-32 Ingegneria informatica.

## Subjects of the interview:

- Access control in database management systems;
- Analysis and design of databases;
- Tuning of databases.

## SCIENTIFIC DISCIPLINARY AREA: MEDICINE

#### **RESEARCH PROGRAM NO. 4**

The assessment criteria for the qualifications and the interview will be affixed on 3.9.2018 at 9.00 in Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOGMI), Clinica Psichiatrica, Padiglione A, Largo R. Benzi 10, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 3.9.2018 at 12.00 in Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOGMI), Clinica Psichiatrica, Padiglione A, Largo R. Benzi 10, Genova.

The interview will be held on 3.9.2018 at 13.00 in Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOGMI), Clinica Psichiatrica, Padiglione A, Largo R. Benzi 10, Genova.

## Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Mario Amore via the email address: mario.amore@unige.it.

#### Scientific coordinator: Prof. Mario AMORE

#### NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 23.250,00

**Title:** Patterns of functional and structural alterations in the different phases of Bipolar Disorder – A resting state fMRI and diffusion tensor imaging (DTI) follow up study.

**Description:** Bipolar Disorder (BD) is a severe chronic and recurrent disease, characterized by the occurrence of manic and depressive episodes, presenting different clinical symptomatology. Coherently, recent cross-sectional neuroimaging studies have found different patterns of alteration in the functional architecture of brain activity and in white matter in the different phases of BD.

Aim of the study is to investigate these functional and structural brain alterations, and their clinical correlates, in the different phases of BD, in a longitudinal perspective.

We will collect and analyze follow-up clinical and neuroimaging (resting state fMRI and DTI) data of a sample of bipolar patients across the different phases of illness. The identification of specific biomarkers would allow a better understanding of the biological background and pathophysiology of BD.

#### Scientific disciplinary sector: MED/25 PSCHIATRIA

Place: Dipartimento di Neuroscienze, riabilitazione, oftalmologia, genetica e scienze materno-infantili (DINOGMI)

#### **Required degree:**

Specialization in Psychiatry with adequate scientific production, based on research activity at international neuroscience and neuroimaging centers, and publications in scientific journals in English with impact factor, related to the topic of the research grant: resting state fMRI and DTI in Bipolar Disorder

- Resting state fMRI (theoretical basis on technique and specific measures such as functional connectivity, neuronal variability, power law exponent).
- Diffusion tensor imaging, DTI (theoretical basis on technique and specific measures such as fractional anisotropy, mean diffusivity, radial diffusivity, axial diffusivity).
- Neurobiological alterations at a functional (on resting state networks) and structural (on white matter) levels in Bipolar Disorder.

The assessment criteria for the qualifications and the interview will be affixed on 6.9.2018 at 9.00 in Centro Interuniversitario per la Ricerca sull'Influenza e le altre Infezioni Trasmissibili (C.I.R.I.-I.T.), via A. Pastore 1, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 6.9.2018 at 12.00 in Centro Interuniversitario per la Ricerca sull'Influenza e le altre Infezioni Trasmissibili (C.I.R.I.-I.T.), via A. Pastore 1, Genova.

**The interview will be held on 6.9.2018** at **12.30** in Centro Interuniversitario per la Ricerca sull'Influenza e le altre Infezioni Trasmissibili (C.I.R.I.-I.T.), via A. Pastore 1, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Donatella PANATTO

## NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

**Title:** Surveillance of influenza and other acute respiratory infections: epidemiological features and labortory confirmation.

**Description:** Influenza and Acute Respiratory Infections are a serious threat for humans and are the most frequent cause of illness in the world. Several hundred pathogenic bacterial and viral agents related to respiratory infections are known. Some of these micro-organisms are recognized by the WHO as high-risk pathogens for public health on account of their epidemic and pandemic potential. In line with WHO recommendations, the implementation of adequate integrated surveillance systems and diagnoses are considered a priority for Public Health. The project is divided into 3 lines: 1) implementation of an integrated epidemiological and laboratory surveillance system; 2) development of mathematical models to evaluate the clinical-epidemiological, economic and social impact of microorganisms responsible for ARI; 3) development of mathematical / economic models for the implementation of new integrated vaccine strategies.

## Scientific disciplinary sector: MED/42 IGIENE GENERALE E APPLICATA

Place: Centro Interuniversitario per la Ricerca sull'Influenza e le altre Infezioni Trasmissibili (C.I.R.I.-I.T.)

## **Required degree:**

Laurea Specialistica della classe 6/S Biologia. Laurea Magistrale della classe LM-6 Biologia.

- Influenza and vaccination.
- Acute Respiratory Infections and new prevention strategies.
- Surveillance systems: aims and opportunities. Laboratory methodologies for influenza and other acute respiratory infections identification.
- Importance of mathematical models in order to evaluate the impact of preventive strategies.

## SCIENTIFIC DISCIPLINARY AREA: CIVIL ENGINEERING AND ARCHITECTURE

## **RESEARCH PROGRAM NO. 6**

The assessment criteria for the qualifications and the interview will be affixed on 5.9.2018 at 9.30 in Dipartimento di Architettura e Design (DAD), Stradone Sant'Agostino 37, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 5.9.2018 at 12.30 in Dipartimento di Architettura e Design (DAD), Stradone Sant'Agostino 37, Genova.

The interview will be held on 5.9.2018 at 14.30 in Dipartimento di Architettura e Design (DAD), Stradone Sant'Agostino 37, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

#### Scientific coordinator: Prof. Andrea VIAN

## NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Data driven, algorythmic and parametric design systems for high web customization of graphics, objects and experiences.

**Description:** This research aims to the definition of data driven visual design systems based on parametric 3d modeling and generative designs applied to the definition of highly custimazable graphics, products and experiences.

This research is founded on user centered design methods, social media targeting techniques and participatory design.

#### Scientific disciplinary sector: ICAR/13 DISEGNO INDUSTRIALE

Place: Dipartimento di Architettura e Design (DAD)

## **Required degree:**

Laurea Magistrale della classe LM-12 Design.

#### Subjects of the interview:

- Parametric design;
- 3D print;
- web customization;
- algorythmic design.

## SCIENTIFIC DISCIPLINARY AREA: INDUSTRIAL AND INFORMATION ENGINEERING

## **RESEARCH PROGRAM NO. 7**

The assessment criteria for the qualifications and the interview will be affixed on 4.9.2018 at 8.30 in Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), via Opera Pia 15A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 4.9.2018 at 11.30 in Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), via Opera Pia 15A, Genova.

**The interview will be held on 4.9.2018** at **12.00** in Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), via Opera Pia 15A, Genova.

# Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Matteo ZOPPI on the phone number 0039 3204382160 or via the email address: <a href="mailto:zoppi@dimec.unige.it">zoppi@dimec.unige.it</a>.

## Scientific coordinator: Prof. Matteo ZOPPI

## NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Motion cueing algorithms for virtual reality: implementation on prototype and testing.

**Description:** Implementation of motion cueing algorithms on a prototype of motion simulator for virtual reality. The motion simulator is redundant with seven axes; the cueing algorithms use a model of the human vestibular system. The work comprises parameterization and calibration of the algorithms and testing by experiments.

## Scientific disciplinary sector: ING-IND/13 MECCANICA APPLICATA ALLE MACCHINE

Place: Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME)

## **Required degree:**

Laurea Magistrale delle classi: LM-25 Ingegneria dell'automazione, LM-32 Ingegneria informatica, LM-33 Ingegneria meccanica.

## Subjects of the interview:

- Virtual reality and robotics;
- robot programming;
- software architectures for robotics;
- mechanics of robot and physics

**The assessment criteria for the qualifications and the interview will be affixed on 5.9.2018** at **10.30** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 5.9.2018 at 13.30 in in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, Genova.

**The interview will be held on 5.9.2018** at **14.00** in in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Paolo GASTALDO on the phone number 0039 0103532268 or via the email address: <u>paolo.gastaldo@unige.it</u>.

## Scientific coordinator: Prof. Paolo GASTALDO

## NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Nonlinear signal processing for artificial tactile systems.

#### **Description:**

The research activity is developed within a project that aims at delivering tactile sensation measured by suitable sensors to a user via non-invasive stimulation. The main goal is to deal with the design of the algorithms that should process raw data provided by tactile sensors. On the one hand, the sensors array gives as output a significant number of signals, which characterize the tactile stimulus as a third-order tensor (where time is the third dimension). On the other hand, one has to convey such information by exploiting a few electrodes that lie on the skin surface. Thus, the aim of the research action is develop intelligent algorithms based on nonlinear signal processing that a) can suitably map the information provided by sensors on the available electrodes to preserve sensation feedback, and b) can be implemented on resource constrained digital platform such as low-power embedded systems.

#### Scientific disciplinary sector: ING-INF/01 ELETTRONICA

Place: Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN)

#### **Required degree:**

Laurea Magistrale della classe LM-29 Ingegneria elettronica.

- Tactile sensors;
- embedded systems;
- machine learning;
- nonlinear signal processing

The assessment criteria for the qualifications and the interview will be affixed on 6.9.2018 at 10.30 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 6.9.2018 at 13.30 in in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, Genova.

**The interview will be held on 6.9.2018** at **14.00** in in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Paolo GASTALDO on the phone number 0039 0103532268 or via the email address: <u>paolo.gastaldo@unige.it</u>.

## Scientific coordinator: Prof. Paolo GASTALDO

## NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Low-power embedded systems for artificial tactile systems.

#### **Description:**

The research activity is developed within a project that aims at delivering tactile sensation measured by suitable sensors to a user via non-invasive stimulation. The goal is the design of the embedded system that tackles –in real-time- the following tasks: 1) to receive raw measures from tactile sensors; 2) to process such data by exploiting algorithms that can properly remap measures into tactile sensation; 3) to drive the stimulation accordingly. The eventual device should address the trade-off between computational resources and power consumption, which is a major constraint in the application at-hand. In this regard, the research action will be focused on design approaches that can conveniently implement the most computationally demanding module, i.e., the intelligent algorithms that should support the mapping from raw measures to a tactile sensation that can be conveyed via stimulation.

## Scientific disciplinary sector: ING-INF/01 ELETTRONICA

Place: Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN)

#### **Required degree:**

Laurea Magistrale della classe LM-29 Ingegneria elettronica.

- tactile sensors;
- embedded systems;
- FPGA;
- programmable device;
- nonlinear signal processing.

**The assessment criteria for the qualifications and the interview will be affixed on 2.8.2018** at **9.30** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 2.8.2018 at 13.00 in in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, Genova.

**The interview will be held on 2.8.2018** at **16.00** in in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Opera Pia 11A, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call), promptly contacting Prof. Micaela LIBERTI on the phone number 0039 0644585353 or via the email address: <u>micaela.liberti@uniroma1.it</u>.

Scientific coordinator: Prof. Micaela LIBERTI

## NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Numerical and Experimental Studies of Electroporation for vegetable juice sanitization

## **Description:**

The objective of the research activity is to establish an effective protocol for the treatment with pulsed electric fields (PEF) for the sanitization of vegetable juices, in particular of carrot juice. This objective will specifically require: the determination of the electrical properties of carrot juice and the setting of microdosimetric models of single cells and of scattered cells, for the determination of the optimal parameters of PEF exposure for an effective bacterial inactivation. Controlled electroporation experiments will be carried out. Carrot juice with a known concentration of bacteria (quantity and type) will be exposed to PEF using the optimal configuration determined by the microdosimetric study.

## Scientific disciplinary sector: ING-INF/02 CAMPI ELETTROMAGNETICI

**Place:** Centro Interuniversitario sulle Interazioni tra Campi Elettro-magnetici e Biosistemi (ICEmB) – at the following seat: Università degli Studi di Roma "La Sapienza" - Dipartimento di Ingegneria dell'Informazione, Elettronica e Telecomunicazioni - DIIET

## **Required degree:**

Dottorato di ricerca in Ingegneria Elettronica, o Elettronica delle alte Frequenze ed Optoelettronica, o Ingegneria Biomedica.

- Electroporation mechanisms;
- electromagnetic microdosimetry;
- design criteria for electroporation applicators.

## SCIENTIFIC DISCIPLINARY AREA: ECONOMICS AND STATISTICS

## **RESEARCH PROGRAM NO. 11**

The assessment criteria for the qualifications and the interview will be affixed on 3.8.2018 at 10.00 in Dipartimento di Economia (DIEC), Via Vivaldi 5, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 3.8.2018 at 14.00 in Dipartimento di Economia (DIEC), Via Vivaldi 5, Genova.

The interview will be held on 3.8.2018 at 15.00 in Dipartimento di Economia (DIEC), Via Vivaldi 5, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Marcello MONTEFIORI

#### NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 34.898,00

**Title:** Study and development of methodologies for analysing the economic impact of ageing and chronical conditions: Liguria as predictor of future healthcare needs.

**Description:** The project aims at producing quantitative and economic analyses to support new organizational models for the healthcare system, in relation to changes in the demographic structure and to the socio-economic impact of chronic conditions.

The project will be developed as follows:

- 1. recognition and synthesis of the main scientific publications on the topic of ageing and chronicity;
- 2. research and predisposition of data useful for the study from various data sources (in particular, administrative and health flows of the Liguria Region and official statistical sources);
- 3. application of proper economic-quantitative methodologies to simulate possible scenarios and propose solutions and models able to reconcile the goals of universalism, equity and economic sustainability.

#### Scientific disciplinary sector: SECS-P/03 SCIENZA DELLE FINANZE

**Place:** Dipartimento di Economia (DIEC)

#### **Required degree:**

Dottorato di ricerca in Economia pubblica.

#### Subjects of the interview:

- Health Economics;
- Public Economics;
- Statistics and Econometrics.