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 **21.12.2017** 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 **21.12.2017** at **14.00** in Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS), Via Dodecaneso 35, Genova.

The interview will be held on **21.12.2017** at **14.30** 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. Enrico PUPPO

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

Title: Algorithms for computing geodesics and foliations on polyhedral surfaces.

Description: This research lies in the context of MIUR-PRIN2015 Project DSurf: Scalable Computational Methods for 3D Printing Surfaces. It aims at providing fast computation method to support the design of vector graphics primitives on surfaces in 3D space represented through geometric meshes. To this aim, the study will be primarily concerned with the design and development of algorithms for the computation and tracing of geodesic lines and of foliations of portions of surfaces bounded by geodesic lines. Since many results of classical differential geometry do not hold on polyhedral surfaces, alternative theoretical results shall be established and, on this basis, appropriate algorithms shall be designed, implemented and tested.

Scientific disciplinary sector: INF/01 INFORMATICA

Place: Dipartimento di Informatica, Bioingegneria, Robotica e Ingegneria dei Sistemi (DIBRIS)

Required degree:
Laurea Magistrale delle classi: LM-18 Informatica, o LM-40 Matematica.

Subjects of the interview:
- Riemannian geometry in general and differential geometry of surfaces in particular.
- State of the art in the computation of geodesics and foliations on geometric meshes.

The candidate will need to prove his/her knowledge of the English language.

SCIENTIFIC DISCIPLINARY AREA: PHYSICS

RESEARCH PROGRAM NO. 2

The assessment criteria for the qualifications and the interview will be affixed on **22.12.2017** at **12.00** in Dipartimento di Fisica (DIFI), Via Dodecaneso 33, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **22.12.2017** at **18.00** in Dipartimento di Fisica (DIFI), Via Dodecaneso 33, Genova.

The interview will be held on **8.1.2018** at **10.00** in Dipartimento di Fisica (DIFI), Via Dodecaneso 33, 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. Marco Pallavicini on the phone number +39 3371197510 or via the email address: marco.pallavicini@unige.it.

Scientific coordinator: Prof. Marco PALLAVICINI

NO. 2 research fellowships - Duration 2 years – Annual pre-tax amount: € 23.250,00

Title: Studies of neutrino oscillations with artificial neutrino sources and accelerators.

Description: The project is devoted to neutrino physics and in particular to the study of neutrino oscillations in underground laboratories, by means of artificial neutrino sources and by means of long base line accelerator beams with liquid argon detectors. The candidates will be involved in the design and construction of detectors, on MonteCarlo simulations and on data analysis. The candidates will be required to have experience in underground physics and have knowledge in neutrino physics, nuclear physics and low radioactivity measurements. The candidates will be involved in activities at Gran Sasso and Fermilab near Chicago.

Scientific disciplinary sector: FIS/01 FISICA SPERIMENTALE

Place: Dipartimento di Fisica (DIFI)

Required degree:
Dottorato di ricerca in Fisica.

Subjects of the interview:
- Underground physics.
- Neutrino physics.
- Nuclear physics.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 3

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **16.00** in Dipartimento di Fisica (DIFI), Via Dodecaneso 33, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **21.12.2017** at **19.00** in Dipartimento di Fisica (DIFI), Via Dodecaneso 33, Genova.

The interview will be held on **22.12.2017** at **8.30** in Dipartimento di Fisica (DIFI), Via Dodecaneso 33, 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. Francesco Buatier de Mongeot on the phone number +39 0103536324 or via the email address: buatier@fisica.unige.it.

Scientific coordinator: Prof. Francesco BUATIER DE MONGEOT

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

Title: Self-organised nanopatterning of two dimensional semiconductor films.

Description: The project will develop self-organised techniques for nanopatterning dielectric substrates which are subsequently used for the growth of low-dimensional semiconductor films based on MoS2. Low cost and wide area nanofabrication processes (cm ^ 2 scale) employing defocused ion beam sputtering will be developed.. The modification of the 2-d semiconductor optoelectronic properties induced by nanostructuring and by doping with metallic nanostructures with plasmonic functionality will be studied.

Scientific disciplinary sector: FIS/03 FISICA DELLA MATERIA

Place: Dipartimento di Fisica (DIFI)

Required degree:
Laurea Specialistica della classe 20/S Fisica.
Laurea Magistrale della classe LM-17 Fisica.

Subjects of the interview:
- Physical Principles of ion beam surface nanopatterning.
- Optical and Raman properties of 2-d semiconductors.
- Optical characterization of metallic nanostructures with plasmonic functionality: experimental aspects and physical foundations.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 4

The assessment criteria for the qualifications and the interview will be affixed on **22.12.2017** at **11.00** in Dipartimento di Fisica (DIFI), Via Dodecaneso 33, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **22.12.2017** at **14.00** in Dipartimento di Fisica (DIFI), Via Dodecaneso 33, Genova.

The interview will be held on **22.12.2017** at **17.30** in Dipartimento di Fisica (DIFI), Via Dodecaneso 33, 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. Francesco BUATIER DE MONGEOT

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

Title: Study of Thermal Barrier Coatings with controlled oxygen permeability.

Description: The wear of gas turbine blades is reduced using protective films, the so-called Thermal Bond Coats TBC. To counteract the TBC degradation mechanism, it is proposed to use a thin aluminum interlayer placed at the interface between the TBC and the blade so reducing oxygen permeability. The aim of the project is to identify the optimal deposition conditions of the metal interlayer employing Ion Assisted Deposition in order to reduce oxygen permeability. Accelerated oxidation and aging experiments will then be performed at Ansaldo Energia in order to determine the lifetime of TBC against delamination by using Digital Image Correlation (DIC) techniques.

Scientific disciplinary sector: FIS/03 FISICA DELLA MATERIA

Place: Dipartimento di Fisica (DIFI)

Required degree:
Dottorato di ricerca in Scienza e Tecnologia dei Materiali.

Subjects of the interview:
- Thin film deposition techniques.
- Surface nanostructuring by ion beam sputtering.
- Morphological characterization of surfaces by electron microscopy and scanning probe microscopy.
- Optical characterization of surfaces.

The candidate will need to prove his/her knowledge of the English language.

SCIENTIFIC DISCIPLINARY AREA: CHEMISTRY

RESEARCH PROGRAM NO. 5

The assessment criteria for the qualifications and the interview will be affixed on **15.1.2018** at **18.00** in Dipartimento di Chimica e Chimica Industriale (DCCI), Via Dodecaneso 31, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **17.1.2018** at **18.00** in Dipartimento di Chimica e Chimica Industriale (DCCI), Via Dodecaneso 31, Genova.

The interview will be held on **24.1.2018** at **10.00** in Dipartimento di Chimica e Chimica Industriale (DCCI), Via Dodecaneso 31, 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. Luca Banfi via the email address: banfi@chimica.unige.it.

Scientific coordinator: Prof. Luca BANFI

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

Title: Studies on stereoselective multicomponent reactions using renewable starting materials.

Description: Inside the "Green Chemistry" realm, it is of great importance to develop a new fine chemistry that employs, as starting materials; renewable substances (instead of mineral oil). However, the conversion of such materials into "drug-like" enantiopure heterocycles has been only seldom explored so far. Towards this goal we will take advantage in particular of multicomponent reactions, which are intrinsically endowed of high step- and atom-economy, coupling them with post-MCR cyclization processes, stressing the adherence to green chemistry requisites, such as operational simplicity, limited energy consumption, use of less toxic reagents/catalysts). In order to control enantioselectivity, we will make use of biocatalysis.

Scientific disciplinary sector: CHIM/06 CHIMICA ORGANICA

Place: Dipartimento di Chimica e Chimica Industriale (DCCI)

Required degree:
Laurea V.O. in: Chimica, o Chimica e Tecnologie Farmaceutiche o Chimica e tecnologia farmaceutiche, o Chimica Industriale, o Farmacia.
Laurea Specialistica delle classi: 14/S Farmacia e farmacia industriale, o 62/S Scienze chimiche, o 81/S Scienze e tecnologie della chimica industriale.
Laurea Magistrale delle classi: LM-13 Farmacia e farmacia industriale, o LM-54 Scienze chimiche, LM-71 Scienze e tecnologie della chimica industriale.

Subjects of the interview:

- Diversity-oriented synthesis.
- Synthesis of heterocycles.
- Asymmetric syntheis.
- Multicomponent reactions.
- Biocatalysis.

The candidate will need to prove his/her knowledge of the English language.

SCIENTIFIC DISCIPLINARY AREA: EARTH SCIENCES

RESEARCH PROGRAM NO. 6

The assessment criteria for the qualifications and the interview will be affixed on **8.1.2018** at **10.00** in Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV), Corso Europa 26, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **8.1.2018** at **13.00** in Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV), Corso Europa 26, Genova.

The interview will be held on **8.1.2018** at **16.00** in Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV), Corso Europa 26, 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.ssa Elisabetta Rampone on the phone number +39 335224890 or via the email address: betta@dipteris.unige.it.

Scientific coordinator: Prof.ssa Elisabetta RAMPONE

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

Title: Melt intrusion and melt-rock reaction in the extending lithospheric mantle.

Description: The research project concerns microstructural and geochemical investigations on pyroxenite layers in the Mt. Maggiore (Alpine Corsica) and Erro-Tobbio, (Ligurian Alps, Italy) peridotitic bodies. These studies aim to define: i) the composition and magmatic affinity of parental melts, ii) the thermal conditions of melt intrusion, iii) the structural and temporal relations with the reactive percolation stages documented in the host peridotites. The research program is developed in the context of a funded project PRIN-MIUR 2015 (Principal Investigator: Elisabetta Rampone) titled: "Melt-rock reaction and melt migration in the MORB mantle through combined natural and experimental studies" (project n. 2015C5LN35).

Scientific disciplinary sector: GEO/07 PETROLOGIA E PETROGRAFIA

Place: Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV)

Required degree:
Laurea Specialistica della classe 86/S Scienze geologiche.
Laurea Magistrale della classe LM-74 Scienze e tecnologie geologiche.

Subjects of the interview:
- Mantle petrology.
- Magmatic processes originating the oceanic lithosphere.
- Analytical methods for "in-situ" mineral geochemistry (SIMS, LA-ICP-MS) and microstructural analysis (EBSD): principles and applications.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 7

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **8.30** in Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV), Viale Benedetto XV/5, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **21.12.2017** at **13.30** in Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV), Viale Benedetto XV/5, Genova.

The interview will be held on **21.12.2017** at **16.30** in Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV), Viale Benedetto XV/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. Massimo VERDOYA

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

Title: Geothermal flow, log term rheology and seismicity of central-northern Italy.

Description: The project is aimed at the revision of the thermo-rheological models and their extension to the whole sector of central-northern Italy, by using heat flow data recently collected, further thermal information that can be extracted from boreholes located in the Po basin and in the Alpine sector and a new structural model of the lithosphere, derived from new seismic tomography analyses. Moreover, the rheological and thermal structure will be analyzed in relation n to the seismic activity as deduced from the most recent databases.

Scientific disciplinary sector: GEO/10 GEOFISICA DELLA TERRA SOLIDA

Place: Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV)

Required degree:
Dottorato di ricerca in Geofisica.

Subjects of the interview:
- Processing of borehole thermal data.
- Methods for measuring the rock thermal conductivity.
- Thermal modelling of the lithosphere by means of analytical and numerical techniques.
- Measurements of terrestrial heat flow.
- Relation between seismicity and rheological stratification (long-term rheology).

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 8

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **12.00** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **21.12.2017** at **18.00** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

The interview will be held on **22.12.2017** at **9.00** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 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.

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. Massimiliano Burlando on the phone number +39 0103532509 or via the email address: massimiliano.burlando@unige.it.

Scientific coordinator: Prof. Massimiliano BURLANDO

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

Title: Analysis of turbulence measurements within the urban canopy layer of Livorno City.

Description: In the context of project "Wind monitoring, simulation and forecasting for the smart management and safety of port, urban and territorial systems", funded by the Compagnia di San Paolo, an experimental anemometric campaign will be held from November 2017 for about 6 months to measure the wind field within the urban fabric of the City of Livorno. In this framework, a study is required for the analysis of mean wind speed and turbulence recorded by triaxial ultrasonic anemometers within the urban canopy layer and their correlation with measurements of vertical wind profiles acquired in the neighboring port area, in an extra-urban context, using a LiDAR wind profiler.

Scientific disciplinary sector: GEO/12 OCEANOGRAFIA E FISICA DELL'ATMOSFERA

Place: Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA)

Required degree:
Laurea V.O. in: Fisica, o Ingegneria Civile, o Ingegneria per l'ambiente e il territorio, o Scienze Ambientali, o Scienze Geologiche.
Laurea Specialistica delle classi: 20/S Fisica, o 28/S Ingegneria civile, o 38/S Ingegneria per l'ambiente e il territorio, o 50/S Modellistica matematico-fisica per l'ingegneria, o 66/S Scienze dell'universo, o 82/S Scienze e tecnologie per l'ambiente e il territorio, o 85/S Scienze geofisiche, o 86/S Scienze geologiche.
Laurea Magistrale delle classi: LM-17 Fisica, o LM-23 Ingegneria civile, o LM-24 Ingegneria dei sistemi edilizi, o LM-26 Ingegneria della sicurezza, o LM-35 Ingegneria per l'ambiente e il territorio, o LM-44 Modellistica matematico-fisica per l'ingegneria, o LM-58 Scienze dell'universo, o LM-74 Scienze e tecnologie geologiche, o LM-75 Scienze e tecnologie per l'ambiente e il territorio, o LM-79 Scienze geofisiche.

Subjects of the interview:
- Fundamentals of atmospheric physics and wind engineering.
- Basic knowledge of computer programming, the Linux operating system and Matlab programming language.
- Analysis and management of anemometric databases and post-processing of meteorological measurements.

The candidate will need to prove his/her knowledge of the English language.

SCIENTIFIC DISCIPLINARY AREA: BIOLOGY

RESEARCH PROGRAM NO. 9

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **8.30** in Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV), primo piano, Viale Benedetto XV/5, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **21.12.2017** at **11.30** in Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV), primo piano, Viale Benedetto XV/5, Genova.

The interview will be held on **21.12.2017** at **15.00** in Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV), primo piano, Viale Benedetto XV/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.

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.ssa Simona Candiani on the phone number +39 0103538051 or via the email address: candiani@unige.it.

Scientific coordinator: Prof.ssa Simona CANDIANI

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

Title: Zebrafish as a model to study Alexander disease.

Description: Alexander disease (AxD) is a rare disorder of the nervous system belonging to the leukodystrophies. This disorder is an inherited demyelinating disease that primarily inflicts upon the white matter of the central nervous system, and is caused by mutation in a gene encoding glial fibrillary acidic protein (GFAP). Mutations in this gene lead to the production of altered GFAP protein leading to impair the formation of normal intermediate filaments. As a result, the abnormal GFAP protein likely accumulates in astroglial cells, causing the formation of Rosenthal fibers, which impair cell function. In this project, we plan to develop a zebrafish model that will be useful for molecular diagnosis of AxD and then study the effects of particular pharmacological treatments for AxD.

Scientific disciplinary sector: BIO/06 ANATOMIA COMPARATA E CITOLOGIA

Place: Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV)

Required degree:
Laurea Magistrale della classe LM-6 Biologia.

Subjects of the interview:
- Developmental biology of teleosts.
- Neurogenesis and nervous system development in vertebrates.
- Recombinant technologies for expression vectors.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 10

The assessment criteria for the qualifications and the interview will be affixed on **22.12.2017** at **9.30** in Laboratorio di Ecologia del Benthos, Polo Didattico San Martino, primo piano, Viale Benedetto XV/5, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **22.12.2017** at **12.30** in Laboratorio di Ecologia del Benthos, Polo Didattico San Martino, primo piano, Viale Benedetto XV/5, Genova.

The interview will be held on **22.12.2017** at **14.00** in Laboratorio di Ecologia del Benthos, Polo Didattico San Martino, primo piano, Viale Benedetto XV/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.ssa Mariachiara CHIANTORE

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 27.133,00

Title: Conservation and restoration of priority species endangered by anthropization within Natura 2000 sites and Marine Protected Areas: the gastropod mollusk *Patella ferruginea* and the canopy forming macroalgae of *Cystoseira genus*.

Description: The recuited researcher will take part to two LIFE projects: the RE-LIFE project, aimed at restoring the population of *P. ferruginea* within the Ligurian Marine Protected Areas through the transfer of adults from Tavolara MPA (Sardinia) and introduction of juveniles obtained by laboratory-controlled reproduction; the ROC-POP-LIFE project, aimed at reintroducing *Cystoseira* spp. in the Cinque Terre and Miramare MPAs from donor populations of Portofino MPA and Landscape Park Strunjan, Slovenia. The research fellow will assess the ecological compatibility of sites, will follow the various phases of restocking and assess their effectiveness, both in terms of number and health of reintroduced organisms and restoration of ecosystem services.

Scientific disciplinary sector: BIO/07 ECOLOGIA

Place: Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV)

Required degree:
Dottorato di ricerca in Scienze Ambientali (Scienza del Mare).

Subjects of the interview:
- Fundamentals of marine ecology and benthic ecology.
- Sampling techniques.
- Reproduction techniques of marine invertebrates in a controlled environment.
- Cultivation techniques of micro and macroalgae.
- Analysis of ecological data.
- European Directives concerning protected species and Marine Strategy.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 11

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **9.30** in Laboratorio di Ecologia del Benthos, Polo Didattico San Martino, primo piano, Viale Benedetto XV/5, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **21.12.2017** at **12.30** in Laboratorio di Ecologia del Benthos, Polo Didattico San Martino, primo piano, Viale Benedetto XV/5, Genova.

The interview will be held on **21.12.2017** at **14.00** in Laboratorio di Ecologia del Benthos, Polo Didattico San Martino, primo piano, Viale Benedetto XV/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.ssa Mariachiara CHIANTORE

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

Title: Restoration of macroalgal priority species (i.e. *Cystoseira* spp.) within Natura 2000 sites and Marine Protected Areas through innovative cultivation and reforestation techniques.

Description: This research grant is part of the ROC-POP-LIFE project, which aims at the reintroduction of *Cystoseira* spp., species of great ecological interest, along the coasts where anthropogenic impact caused their regression, in order to promote biodiversity within Marine Protected Areas and Natura 2000 sites. In this context, the research fellow will develop non-destructive and eco-compatible protocols, which include the production of juveniles in the laboratory to be introduced in the areas to be restored (MPAs of Cinque Terre and Miramare), starting from small portions of macroalgae fertile apexes, thus causing no harm to donor populations (from MPAs of Portofino and Landscape Park Strunjan, Slovenia).

Scientific disciplinary sector: BIO/07 ECOLOGIA

Place: Dipartimento di Scienze della Terra, dell'Ambiente e della Vita (DISTAV)

Required degree:
Laurea V.O. in Scienze Ambientali.
Laurea Magistrale della classe LM-75 Scienze e tecnologie per l'ambiente e il territorio.

Subjects of the interview:
- Fundamentals of marine ecology and benthic ecology.
- Sampling techniques.
- Cultivation techniques of micro and macroalgae.
- Analysis of ecological data.
- European Directives concerning protected species and Marine Strategy.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 12

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **9.30** in Laboratorio di Medicina Rigenerativa – Centro di Biotecnologie Avanzate (CBA), Torre C, 3° piano, Largo Rosanna 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 **21.12.2017** at **12.30** in Laboratorio di Medicina Rigenerativa – Centro di Biotecnologie Avanzate (CBA), Torre C, 3° piano, Largo Rosanna Benzi 10, Genova.

The interview will be held on **21.12.2017** at **14.30** in Laboratorio di Medicina Rigenerativa – Centro di Biotecnologie Avanzate (CBA), Torre C, 3° piano, Largo Rosanna 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.

Scientific coordinator: Prof.ssa Chiara GENTILI

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 27.133,00

Title: Biological validation of the stem cells product into bioreactor to use in clinical therapy.

Description: The mesenchymal stem cells (MSCs) are in advance clinical testing for a number of indications and are entering clinical use for the repair and regeneration of a range of damage tissue and organs. The expansion of MSC to clinical therapy need of a scalable, automated and fully closed process. The overall objective of our project is to develop and validate a closed, aseptic automated system for the manufacture of therapeutic stem cells.
In this project we will implement the:

- in vitro characterization of the cell product to determine identity, purity, potency;
- in vitro investigation of the cell secretome for verification of trophic therapeutic factors and their therapeutic potential;
- in vivo ectopic validation of cell product in a subcutaneous mouse model and diabetic mouse fracture repair mode, respectively.

Scientific disciplinary sector: BIO/13 BIOLOGIA APPLICATA

Place: Dipartimento di Medicina Sperimentale (DIMES)

Required degree:
Dottorato di ricerca in Biologia.

Subjects of the interview:

- Stem cell culture.
- Cell therapy and connective tissue engineering.
- Animal model: diabetic mice.
- Circadian cycle in stem cells.

The candidate will need to prove his/her knowledge of the English language.

SCIENTIFIC DISCIPLINARY AREA: MEDICINE

RESEARCH PROGRAM NO. 13

The assessment criteria for the qualifications and the interview will be affixed on **2.3.2018** at **9.00** in Dipartimento di Medicina interna e Specialità mediche (DIMI), Amministrazione, Viale Benedetto XV/6, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **2.3.2018** at **12.00** in Dipartimento di Medicina interna e Specialità mediche (DIMI), Amministrazione, Viale Benedetto XV/6, Genova.

The interview will be held on **2.3.2018** at **12.30** in Dipartimento di Medicina interna e Specialità mediche (DIMI), Amministrazione, Viale Benedetto XV/6, 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. Alessio NENCIONI

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

Title: Study of the role of NAMPT in mammary tumorigenesis.

Description: The candidate should apply to the study of the role of the enzyme nicotinamide phosphoribosyltransferase (NAMPT) in a murine breast cancer model (MMTV-PyMT), evaluating the effect of NAMPT's heterozygous deletion on latency of tumor development, tumor multiplicity, survival of the animals and on the metastatic process.

Scientific disciplinary sector: MED/09 MEDICINA INTERNA

Place: Dipartimento di Medicina interna e Specialità mediche (DIMI)

Required degree:
Dottorato di ricerca in Oncologia ed Ematologia Clinica e Sperimentale.

Subjects of the interview:
- Role of NAMPT in breast cancer.
- Epithelial-to-mesenchymal transition mechanisms.
- Murine breast cancer models.

RESEARCH PROGRAM NO. 14

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **9.00** in Dipartimento di Medicina interna e Specialità mediche (DIMI), Viale Benedetto XV/10, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **21.12.2017** at **12.00** in Dipartimento di Medicina interna e Specialità mediche (DIMI), Viale Benedetto XV/10, Genova.

The interview will be held on **21.12.2017** at **14.00** in Dipartimento di Medicina interna e Specialità mediche (DIMI), Viale Benedetto XV/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.

Scientific coordinator: Prof. Maurizio CUTOLO

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

Title: Systemic sclerosis: immune-vascular aspects and clinical correlations.

Description: Aim of the study will be to evaluate through an in vitro study, the influence of alteration of immune system cells (classically activated/alternatively activated macrophages: M1/M2 ratio) and vascular cells (endothelial circulating cells) on systemic sclerosis (SSc) pathogenesis and phenotypes. The cited parameters will therefore be correlated with clinical parameters and organ involvement, especially with microvascular damage analysed through nailfold videocapillaroscopy.
At least sixty patients affected by SSc according to EULAR/ACR criteria and 30 healthy volunteers (matched for age and sex) will be clinically and instrumentally evaluated.

Scientific disciplinary sector: MED/16 REUMATOLOGIA

Place: Dipartimento di Medicina interna e Specialità mediche (DIMI)

Required degree:
Specializzazione in Allergologia e Immunologia Clinica con adeguata produzione scientifica riguardante la sclerosi sistemica ed in particolare gli aspetti immuno-patogenetici, il coinvolgimento d'organo e il follow up della patologia tramite lo sviluppo dell'analisi del microcircolo e di biomarkers umorali (ENA, D hormone).

Subjects of the interview:
Immune-inflammatory and microvascular damage mechanisms in systemic sclerosis.

RESEARCH PROGRAM NO. 15

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **9.00** in Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate (DISC), Sezione Odontostomatologia, Padiglione 4, Largo Rosanna 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 **21.12.2017** at **12.00** in Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate (DISC), Sezione Odontostomatologia, Padiglione 4, Largo Rosanna Benzi 10, Genova.

The interview will be held on **21.12.2017** at **13.00** in Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate (DISC), Sezione Odontostomatologia, Padiglione 4, Largo Rosanna 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.

Scientific coordinator: Prof. Stefano BENEDICENTI

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

Title: Effect of photobiomodulation by 980 nm diode laser on osteoblasts.

Description: The problem of bone regeneration in dentistry is performed, at date, with bone substitutes that require long osteointegration. Such timing leads often to different degrees of patient suffering and high cost of therapies.
It has long been known that low energy and power laser therapy, also known as the photobiomodulation, is able to interact with organic molecules present in the cell, energizing and modifying their activity. The energized cell is able to modify its metabolism and physiology. This cascade of physiological and metabolic effects results in an improvement in wound healing, bone regeneration, inflammatory state and tissue death, and a reduction in pain. The aim of this project will be to test the efficacy of diode laser therapy, 980 nm - 60 J/cm2, on murine osteoblast cultures.

Scientific disciplinary sector: MED/28 MALATTIE ODONTOSTOMATOLOGICHE

Place: Dipartimento di Scienze Chirurgiche e Diagnostiche Integrate (DISC)

Required degree:
Laurea V.O. in Scienze biologiche.

Subjects of the interview:
- Review of the literature on the effects of photobiomodulation at cellular level.
- Cellular biology and cell culture preparation.
- Report of the scientific production of the candidate on the topic of laser light interaction and cellular activities (photobiomodulation).

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 16

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **9.30** in Dipartimento di Scienze della Salute (DISSAL), 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 **21.12.2017** at **12.30** in Dipartimento di Scienze della Salute (DISSAL), Via A. Pastore 1, Genova.

The interview will be held on **21.12.2017** at **13.00** in Dipartimento di Scienze della Salute (DISSAL), 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. Giancarlo ICARDI

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

Title: Ecological scenarios of various healthcare settings defined through a surveillance system based on sentinel microorganisms.

Description: In recent years there has been a growing spread of healthcare associated infections (HAI) caused by sentinel microrganisms, defined in this manner because of their high pathogenicity and diffusibility, present in both hospital and primary care setting. HAI's active surveillance includes various activities, targeted on one hand to promptly identify individual case and on the other to quantify the frequency of endemic infections, in order to perform comparisons and describe trends. The main objective of the project is to implement the detection system of sentinel microorganisms through the monitoring of the specific microbial ecology in different healthcare settings, as a cognitive basis for planning strategies to prevent and control HAI diffusion.

Scientific disciplinary sector: MED/42 IGIENE GENERALE E APPLICATA

Place: Dipartimento di Scienze della Salute (DISSAL)

Required degree:
Laurea V.O. in Scienze Biologiche
Laurea Specialistica delle classi: 6/S Biologia, o 69/S Scienze della nutrizione umana
Laurea Magistrale delle classi: LM-6 Biologia, o LM-61 Scienze della nutrizione umana

Subjects of the interview:
- Classification methods of sentinel microorganisms (Alert).
- Italian and international types of surveillance systems.
- Strategies for preventing and controlling the spread of hospital infections.
- Sampling methods and ecological monitoring.
- Molecular methodologies for detecting microorganisms.

RESEARCH PROGRAM NO. 17

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **9.00** in Dipartimento di Scienze della Salute (DISSAL), 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 **21.12.2017** at **12.00** in Dipartimento di Scienze della Salute (DISSAL), Via A. Pastore 1, Genova.

The interview will be held on **21.12.2017** at **13.00** in Dipartimento di Scienze della Salute (DISSAL), 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. Alberto IZZOTTI

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

Title: Tertiary prevention of lung cancer through the study of calixpyrrole molecules.

Description: Lung cancer is one of the main causes of death in industrialized countries including Italy, for which AIRTUM estimates 38,200 new diagnoses per year, corresponding to 11% of all cancer diagnoses in the population. Surgery, especially in cases of non-small cell lung cancer, is often unresolved for the healing of the patient, leading to the metastases and local recurrences. This project is part of tertiary prevention, proposing to reduce the risk of recurrence by in vitro and in vivo evaluation of the efficacy of calixpyrrole molecules, new molecules characterized by low toxicity and high pharmacodynamic characteristics.

Scientific disciplinary sector: MED/42 IGIENE GENERALE E APPLICATA

Place: Dipartimento di Scienze della Salute (DISSAL)

Required degree:
Laurea Specialistica della classe 6/S Biologia
Laurea Magistrale della classe LM-6 Biologia

Subjects of the interview:
- In vitro evaluation of the efficacy of anti-tumor drugs in cell cultures: cytological and molecular endpoints.
- In vivo evaluation of the efficacy and safety of anti-tumor drugs through the analysis of intermediate molecular biomarkers.

RESEARCH PROGRAM NO. 18

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **11.30** in Dipartimento di Scienze della Salute (DISSAL), 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 **21.12.2017** at **14.30** in Dipartimento di Scienze della Salute (DISSAL), Via A. Pastore 1, Genova.

The interview will be held on **21.12.2017** at **14.45** in Dipartimento di Scienze della Salute (DISSAL), 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. Paolo DURANDO

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

Title: Epidemiological survey about occupational injuries in the healthcare setting in order to improve training programs in health and safety at work toward students and postgraduates residents at the University of Genoa.

Description: The aim of the project is to perform an epidemiological analysis of the occupational injuries in the healthcare setting, carrying out, both at the nationally and internationally level, using systematic review of the extant literature, compared with available data. This evaluation is essential to determine its impact, identifying the main associated determinants potentially different according to target population and sub-populations investigated.
Evaluation of the data and their main associated variables as a cognitive element will be followed by a comparative analysis of the results obtained.

Scientific disciplinary sector: MED/44 MEDICINA DEL LAVORO

Place: Dipartimento di Scienze della Salute (DISSAL)

Required degree:
Dottorato di ricerca in Prevenzione Vaccinale.

Subjects of the interview:
- Biological risk prevention.
- Risk factors in healthcare setting.
- Protection and prevention measures in relation to the specific risks identified in the sector.

SCIENTIFIC DISCIPLINARY AREA: CIVIL ENGINEERING AND ARCHITECTURE

RESEARCH PROGRAM NO. 19

The assessment criteria for the qualifications and the interview will be affixed on **8.1.2018** at **9.00** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **8.1.2018** at **12.00** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

The interview will be held on **8.1.2018** at **15.00** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 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.

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. Marco Colombini via the email address: col@dicca.unige.it.

Scientific coordinator: Prof. Marco COLOMBINI

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 27.133,00

Title: Morphodynamics and equilibrium tendency of rivers.

Description: In the basin-level planning it is of great interest to consider the aspects related to the evolutionary trends of the river channels in response to the stresses of the liquid current. This project aims to analyze the morphological equilibrium of the focial branch of the Roia river, through a numerical model with mobile bottom compared with field and historical observations.
The main objective of the study will be to highlight the factors controlling the altitude equilibrium profile of the bottom and the free surface to better understand the current state and its evolutionary trends as a function of future hydrological scenarios. The activity of this project is part of the objectives of the INTERREG-ALCOTRA CONCERT'EAUX project.

Scientific disciplinary sector: ICAR/01 IDRAULICA

Place: Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA)

Required degree:
Dottorato di ricerca in Fluidodinamica o Processi dell'Ingegneria Ambientale.

Subjects of the interview:
- Fundamentals in fluid.
- Fluvial mechanics.
- Sediment transport.

RESEARCH PROGRAM NO. 20

The assessment criteria for the qualifications and the interview will be affixed on **22.12.2017** at **9.15** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via all'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 **22.12.2017** at **12.15** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via all'Opera Pia 15A, Genova.

The interview will be held on **22.12.2017** at **12.30** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via all'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.

Scientific coordinator: Prof.ssa Francesca PIRLONE

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

Title: Towards the realization of a Transnational (IT-FR) Accelerator for startups to valorise the territory - Project MARITTIMOTECH.

Description: The research aims at realizing an Accelerator for startups in the green topic as sustainable tourism and renewable energy, and blue fields as yachting and biotechnology, to valorise the transnational territory between Italy and France. Among the foresee activities, in particular, we can remember the definition and the realization of training in the Transnational Accelerator to support economic development of new enterprises ideas and existing startups.

Scientific disciplinary sector: ICAR/20 TECNICA E PIANIFICAZIONE URBANISTICA

Place: Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA)

Required degree:
Dottorato di ricerca in Luoghi e Tempi della Città e del Territorio.

Subjects of the interview:
- Community programming.
- Sustainability, green and blue fields.
- Land planning, land management.

SCIENTIFIC DISCIPLINARY AREA: INDUSTRIAL AND INFORMATION ENGINEERING

RESEARCH PROGRAM NO. 21

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **8.45** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Montallegro 1, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **21.12.2017** at **11.45** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Montallegro 1, Genova.

The interview will be held on **21.12.2017** at **12.00** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Montallegro 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.

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.ssa Paola Gualeni on the phone number +39 3204247860 or via the email address: paola.gualeni@unige.it.

Scientific coordinator: Prof.ssa Paola GUALENI

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

Title: Integration of different electrical power generation systems on board passenger ships.

Description: The aim of the activity is to integrate on a passenger ship several technologies, already identified, for the distributed electrical power generation onboard. In particular the activity is focused on Fuel Cells distributed systems, standing alone and together with micro-turbines. This implies specific criticalities in relation with the hydrogen supply and the relevant need to study appropriate design solutions for a passenger ship, due to the presence of pressurized tanks (and also cryogenic tanks in case of hydrogen supply by means of LNG+reformer). Due to the innovative issue and the lack of suitable reference rules, the several solutions are going to be assessed applying of risk analysis approach. At the end, a cost benefit analysis of distributed electrical power generation will be carried out in relation with weights, volumes, stability and energy supply.

Scientific disciplinary sector: ING-IND/01 ARCHITETTURA NAVALE

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

Required degree:
Laurea V.O. in Ingegneria Navale.
Laurea Specialistica della classe 37/S Ingegneria Navale.
Laurea Magistrale della classe LM-34 Ingegneria Navale.

Subjects of the interview:
- Passenger ship design.
- Safety rules in the maritime field.
- Ship energy efficiency.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 22

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **13.30** in in Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), Sez. TEC, Via all'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 **21.12.2017** at **16.30** in in Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), Sez. TEC, Via all'Opera Pia 15A, Genova.

The interview will be held on **21.12.2017** at **17.00** in in Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti (DIME), Sez. TEC, Via all'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.

Scientific coordinator: Prof. Corrado SCHENONE

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

Title: Port noise modelling.

Description: The activity will deal with the modeling of port noise, whose impact affects many urban areas near the ports. Actions to control this kind of noise are currently ineffective given the lack of specific forecasting models. The ability of current numerical simulators to adequately assess the noise sources present in ports (ships at quay or in motion, loading/unloading operations, shipyards, railway lines, road traffic) and their propagation, in order to evaluate the sound impact on the nearby receivers. It will be then analyzed the possibility of improving the currently available forecasting models, adapting them to the specificity of the port noise.

Scientific disciplinary sector: ING-IND/11 FISICA TECNICA AMBIENTALE

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

Required degree:
Laurea V.O. in: Ingegneria meccanica, o Ingegneria industriale.
Laurea Specialistica della classe 36/S Ingegneria meccanica.
Laurea Magistrale della classe LM-33 Ingegneria meccanica.

Subjects of the interview:
- Acoustical measurements.
- Modelization of acoustical phenomena.
- Aeroacoustics.

The candidate will need to prove his/her knowledge of the French language.

RESEARCH PROGRAM NO. 23

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **9.00** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via all'Opera Pia 15, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **21.12.2017** at **12.00** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via all'Opera Pia 15, Genova.

The interview will be held on **21.12.2017** at **12.30** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via all'Opera Pia 15, 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.ssa Elisabetta ARATO

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

Title: Design and validation of a prototype to produce active silica from the controlled incineration of rice straw.

Description: The study is framed within the LIFE LIBERNITRATE project whose aim is to reduce nitrates in the comprehensive water cycle through the use of active silica beds. Specifically, the aim of this study will be the design of a prototype to carry out a controlled incineration of rice straw to produce silica rich ash. The optimization of the prototype operational parameters will be studied in order to obtain a maximized quantity and quality of silica. At the same time, the analysis and monitoring of all the environmental parameters related to each of the stages of the project will be conducted.

Scientific disciplinary sector: ING-IND/24 PRINCIPI DI INGEGNERIA CHIMICA

Place: Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA)

Required degree:
Dottorato di ricerca in Fluidodinamica e Processi dell'Ingegneria Ambientale.

Subjects of the interview:
- Process analysis and simulation.
- Chemical thermodynamics and kinetics.
- Chemical reactor theory.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 24

The assessment criteria for the qualifications and the interview will be affixed on **9.1.2018** at **8.00** in Dipartimento di Ingegneria Civile, Chimica e Ambientale, Via all'Opera Pia 15 A.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **9.1.2018** at **10.30** in Dipartimento di Ingegneria Civile, Chimica e Ambientale, Via all'Opera Pia 15 A.

The interview will be held on **9.1.2018** at **11.00** in Dipartimento di Ingegneria Civile, Chimica e Ambientale, Via all'Opera Pia 15 A.

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.ssa Patrizia PEREGO

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

Title: Innovative functionalization of electrospun bioprostheses for vascular surgery.

Description: The aim of this research grant is the fabrication and the functionalization with bioactive compounds of electropsun vascular prostheses that are able to counteract the post-implantation inflammation. The bioprostheses will be synthetized using a mixture of two biodegradable polymers, poly (caprolactone) (PCL) and poly (glycerolsebacate) in which free or nanoencapsulated natural compounds with anti-inflammatory activity will be directly added. The functionalized scaffolds will be characterized in terms of biocompatibility using endothelial cells and fibroblasts (MTT and LDH assay) and it will be studied if they could modulate the expression of inflammatory markers (matrix metalloproteinases, ICAM and VCAM). Furthermore, the functionalized scaffolds were characterized evaluating their morphological (SEM and TEM analysis), physico-chemical (FTIR, DSC analysis etc.) and mechanical properties.

Scientific disciplinary sector: ING-IND/25 IMPIANTI CHIMICI

Place: Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA)

Required degree:
Laurea Magistrale delle classi: LM-22 Ingegneria chimica, o LM-9 Biotecnologie mediche, veterinarie e farmaceutiche, o LM-13 Farmacia e farmacia industriale.

Subjects of the interview:
- Strategies for engineering polymeric materials with bioactive compounds.
- Micro- and nanoencapsulation techniques.
- Analytical techniques for the determination of physico chemical and mechanical properties of polymers.
- Modeling of release kinetic of entrapped molecules from bioprostheses and of their degradation rate.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 25

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **9.30** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via all'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 **21.12.2017** at **13.00** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via all'Opera Pia 15A, Genova.

The interview will be held on **21.12.2017** at **14.00** in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via all'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.

Scientific coordinator: Prof.ssa Adriana DEL BORGHI

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

Title: Monitoring and reporting of the environmental, ethics and social positive impacts of the University of Genoa actions towards sustainability according to the Goal no.12 of the "Piano Triennale dell'Università di Genova 2017-2019".

Description: Development of a methodology for monitoring and reporting of the environmental, ethics and social positive impacts of the University of Genoa actions towards sustainability. Assessment of the environmental sustainability of the University of Genoa and definition of sustainability indicators.

Scientific disciplinary sector: ING-IND/26 TEORIA DELLO SVILUPPO DEI PROCESSI CHIMICI

Place: Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA)

Required degree:
Laurea Magistrale delle classi: LM-35 Ingegneria per l'ambiente e il territorio, o LM-22 Ingegneria chimica.

Subjects of the interview:
- Sustainability.
- Sustainable development goals.
- Greenhouse gas inventory.
- Circular economy.

RESEARCH PROGRAM NO. 26

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **9.00** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via all'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 **21.12.2017** at **13.00** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via all'Opera Pia 11A, Genova.

The interview will be held on **21.12.2017** at **14.30** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via all'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. Riccardo Bozzo on the phone number +39 0103532725 or via the email address: riccardo.bozzo@unige.it.

Scientific coordinator: Prof. Riccardo BOZZO

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

Title: Analysis of the usefulness of the blockchain within the logistics chain and the logistics efficiency of maritime transport.

Description: Blockchain is an evolving area of technology with potential for huge benefits in terms of security, reliability and cost efficiency in the exchange of information. Blockchain offers the advantage of a shared "end to end" record of information related to transaction history, which because it exists across a network rather than as single or multiple copies, cannot be corrupted. The research aims to understand the blockchain usefulness in the field of sustainable development and, namely, in the field of logistics chain management and port and ship energy management. E.g.: how can blockchain-based services support transparency and efficiency in the shipment and handling of containers in international trade or, support the increasing of energy efficiency of operation along the good chain?

Scientific disciplinary sector: ING-IND/32 CONVERTITORI, MACCHINE E AZIONAMENTI ELETTRICI

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

Required degree:
Laurea Magistrale delle classi: LM-28 Ingegneria elettrica, o LM-33 Ingegneria meccanica, o LM-34 Ingegneria navale.

Subjects of the interview:
- Blockchain.
- Sustainable development.
- Circular economy.
- Logistics corridor management.
- Port and ship energy management.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 27

The assessment criteria for the qualifications and the interview will be affixed on **23.1.2018** at **9.30** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via all'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 **23.1.2018** at **13.00** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via all'Opera Pia 11A, Genova.

The interview will be held on **23.1.2018** at **14.30** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via all'Opera Pia 11A, Genova.

Scientific coordinator: Prof. Daniele CAVIGLIA

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 27.133,00

Title: Study of detailed space-time rainfall maps, estimated via a network of microwave rain sensors.

Description: The activity will concern the study of detailed space-time rainfall maps, estimated via a network of microwave rain sensors located in a mountain environment. The final goal will be the characterization of such a system which, on the basis of the detection of the attenuation suffered by microwave links (earth or satellite), will provide an estimate of the rain intensity present in the survey territory. Such an activity will comprise the analysis of the quality of such data in relation to the specificity of the phenomena and the development of methods for improving the measurement through an experimental campaign of comparison with the data provided by traditional systems already deployed. The activity will be carried out under the INTERREG V-A France-Italy research project ALCOTRA 2014-2020 CONCERT-EAUX.

Scientific disciplinary sector: ING-INF/01 ELETTRONICA

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

Required degree:
Dottorato di Ricerca in Ingegneria Elettronica, Informatica, della Robotica e delle Telecomunicazioni, o Dottorato di Ricerca in Monitoraggio dei Sistemi e Gestione dei Rischi Ambientali, o Dottorato di Ricerca in Fluidodinamica e Processi dell'Ingegneria Ambientale

Subjects of the interview:
- Sensor networks for rainfall intensity measurement.
- Data quality control procedures.
- Methods of comparative analysis of areal and punctual measurements obtained from sensors with different technologies.

RESEARCH PROGRAM NO. 28

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **10.00** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via all'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 **21.12.2017** at **13.00** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via all'Opera Pia 11A, Genova.

The interview will be held on **21.12.2017** at **16.00** in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via all'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.

Scientific coordinator: Prof. Matteo PASTORINO

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

Title: Inversion methods for ultra-wideband through-the-wall imaging.

Description: The present project is devoted to study numerical methods for the inversion of data in ultra-wide band (UWB) "through-the-wall" imaging for security applications. The target is to develop innovative methods for inverting the electromagnetic field dara received by the antenna system in the presence of a stratified medium and allowing to image the scenario behind the wall. The project to be developed will include an analysis of the state of the art in the field of microwave imaging and a phase in which the optimal solutions for the above mentioned problem are defined. Finally, the most interesting methods will be implemented and the obtained results will be properly validated.

Scientific disciplinary sector: ING-INF/02 CAMPI ELETTROMAGNETICI

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

Required degree:
Laurea V.O. in: Ingegneria Elettronica, o Ingegneria delle Telecomunicazioni, o Ingegneria Informatica, o Ingegneria Biomedica, o Ingegneria medica.
Laurea Specialistica delle classi: 26/S Ingegneria biomedica, o 29/S Ingegneria dell'automazione, o 30/S Ingegneria delle Telecomunicazioni, o 32/S Ingegneria elettronica, o 35/S Ingegneria informatica.
Laurea Magistrale delle classi: LM-21 Ingegneria biomedica, o LM-25 Ingegneria dell'automazione, o LM-26 Ingegneria della sicurezza, o LM-27 Ingegneria delle Telecomunicazioni, o LM-29 Ingegneria elettronica, LM-32 Ingegneria informatica.

Subjects of the interview:
Propagation and radiation of electromagnetic waves.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 29

The assessment criteria for the qualifications and the interview will be affixed on **22.12.2017** at **8.00** in Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via all'Opera Pia 13, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **22.12.2017** at **11.00** in Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via all'Opera Pia 13, Genova.

The interview will be held on **22.12.2017** at **11.10** in Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via all'Opera Pia 13, 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. Antonio Sgorbissa on the phone number +39 0103532706 or via the email address: antonio.sgorbissa@unige.it.

Scientific coordinator: Prof. Antonio SGORBISSA

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

Title: Development, system level integration and testing in the CARESSES project.

Description: The project focusses on the integration of the cultural knowledge base developed in the CARESSES project in the overall systems' architecture, using the universAAL framework for coordination and communication among the main system's components and the NaoQi APIs for the sensorimotor control of the humanoid robot Pepper.
The activity will be focussing not only on development and integration, but also on the technical coordination of the CARESSES technological partners, to the end of developing a number of demonstration setups with increased complexity through the usage of tools for collaborative software development.

Scientific disciplinary sector: ING-INF/05 SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI

Place: Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS)

Required degree:
Laurea Specialistica della classe 35/S Ingegneria Informatica.
Laurea Magistrale della classe LM-32 Ingegneria Informatica.

Subjects of the interview:
- Software integration in the universAAL framework.
- Sensorimotor control of a robot using NaoQi.
- Cloud systems for speech recognition.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 30

The assessment criteria for the qualifications and the interview will be affixed on **22.12.2017** at **13.30** in Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via all'Opera Pia 13, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **22.12.2017** at **16.30** in Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via all'Opera Pia 13, Genova.

The interview will be held on **22.12.2017** at **16.40** in Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via all'Opera Pia 13, 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. Antonio Sgorbissa on the phone number +39 0103532706 or via the email address: antonio.sgorbissa@unige.it.

Scientific coordinator: Prof. Antonio SGORBISSA

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 27.133,00

Title: Implementation and testing of a cultural knowledge base in CARESSES for robot sensorimotor control.

Description: The project focusses on the implementation in CARESSES of the cultural knowledge base that will be used to encode the knowledge produced by experts in Transcultural Nursing, and the usage of such knowledge for the robot's sensorimotor control. To this end, it will be required to implement software modules and libraries allowing the system to interact with the most popular frameworks for knowledge representation, such as OWL-2 ontologies, SWRL rules, Bayesian networks implemented in Netica (or with similar tools), and make such software modules easy to be integrated in the overall system's architecture for the acquisition and processing of sensor data, and their usage in control algorithms. A particular attention will be payed to the testing phase in view of the following deployment and testing phase in a real environment, that is due in the second half of the project.

Scientific disciplinary sector: ING-INF/05 SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI

Place: Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS)

Required degree:
Dottorato di ricerca nelle seguenti aree: Ingegneria Elettronica, o Informatica, o Robotica, o Ingegneria dei Microsistemi, o Meccatronica.

Subjects of the interview:
- Java and Python programming.
- Development of ontologies through OWL-2 APIs and SWRL rules.
- Implementation of Bayesian networks.
- Sensorimotor control of a robot with NaoQi.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 31

The assessment criteria for the qualifications and the interview will be affixed on **8.1.2018** at **8.00** in Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via all'Opera Pia 13, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **8.1.2018** at **11.00** in Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via all'Opera Pia 13, Genova.

The interview will be held on **8.1.2018** at **11.10** in Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via all'Opera Pia 13, 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. Antonio Sgorbissa on the phone number +39 0103532706 or via the email address: antonio.sgorbissa@unige.it.

Scientific coordinator: Prof. Antonio SGORBISSA

NO.1 research fellowship - Duration 1 year – Annual pre-tax amount: € 27.133,00

Title: Culturally-competent Human-Robot Interaction in CARESSES.

Description: The project focusses on the extraction of information from the guidelines produced by Transcultural Nursing experts, and the investigation of different methodologies that are available for encoding such information in a formalism that can be used by the robot. To this end, it will be necessary to consider the most popular frameworks for knowledge representation, such as ontologies with rules as well as Bayesian and fuzzy representation and reasoning. Finally, it will be required to investigate how relevant information might be acquired by the robot itself in real-time, possibly by using distributed and wearable sensors within a smart environment.

Scientific disciplinary sector: ING-INF/05 SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI

Place: Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS)

Required degree:
Dottorato di ricerca nelle seguenti aree: Ingegneria Elettronica, o Informatica, o Robotica.

Subjects of the interview:
- Cultural factors in robotics.
- Pros and cons of different frameworks for knowledge representation.
- Test and validation of technologies for Human-Robot Interaction.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 32

The assessment criteria for the qualifications and the interview will be affixed on **22.12.2017** at **8.00** in Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via all'Opera Pia 13, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **22.12.2017** at **14.00** in Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via all'Opera Pia 13, Genova.

The interview will be held on **22.12.2017** at **16.00** in Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via all'Opera Pia 13, 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.ssa Maura CASADIO

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

Title: Development and validation of devices and methods to evaluate and treat sensory deficits in subjects with neurological diseases.

Description: Many neurological diseases impair the somatosensory and the motor systems. The impairment of the ability to perceive a sensory stimulation has a very important impact on daily-life activity. While several different technologies are used in the clinical practice to investigate motion, the evaluation and rehabilitation of sensory function have received less attention and is tested with qualitative clinical scales. Nevertheless, several studies highlighted that the training of the somatosensory system and the proprioceptive sense is also a therapy for improving impaired motor function. This project will aim at filling this gap by designing developing and testing new devices and protocols to evaluate and treat sensory ability with a special focus on tactile perception and deep sensitivity.

Scientific disciplinary sector: ING-INF/06 BIOINGEGNERIA ELETTRONICA E INFORMATICA

Place: Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS)

Required degree:
Laurea Magistrale della classe LM-21 Ingegneria biomedica.

Subjects of the interview:
- Robotics, signal processing, biomedical data analysis.
- Neurophysiology, Stroke, Multiple Sclerosis.
- Sensory deficits, sensory substitution.

The candidate will need to prove his/her knowledge of the English language (minimum level B2).

RESEARCH PROGRAM NO. 33

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **9.00** in Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Opera Pia 13, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **21.12.2017** at **12.00** in Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Opera Pia 13, Genova.

The interview will be held on **21.12.2017** at **12.30** in Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Opera Pia 13, 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 Massobrio on the phone number: +39 0103532761 oppure via the email address: paolo.massobrio@unige.it.

Scientific coordinator: Prof. Paolo MASSOBRIO

NO.2 research fellowships - Duration 1 year – Annual pre-tax amount: € 19.367,00

Title: Advanced software tools for data analysis of multi-well high-density MEA system.

Description: The research is part of wider project for the development of a multi-well device for non-invasive in-vitro drug discovery. The tool will consist of 24 wells, each integrating the 3Brain's high-resolution chip featuring 4096 microsensors capable to record spiking activity from thousands of neurons. Wells will host neuronal networks obtained from human-derived iPS cells and forming a so-called "mini-brain", a simplified model of the brain that can be studied to find treatments for neurodegenerative diseases. The current research package focuses on developing sophisticated software tools to acquire electrophysiological data from neurons and to provide statistical and data reduction methods that extrapolate meaningful information.

Scientific disciplinary sector: ING-INF/06 BIOINGEGNERIA ELETTRONICA E INFORMATICA

Place: Dipartimento di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS)

Required degree:
Laurea Magistrale delle classi: LM-17 Fisica, o LM-18 Informatica, o LM-21 Ingegneria biomedica, o LM-32 Ingegneria informatica, o LM-44 Modellistica matematico-fisica per l'ingegneria.

Subjects of the interview:
- Multi-channels acquisition systems.
- Methods and software techniques for data management and neural signal analysis.
- Information theory and statistical inference.

The candidate will need to prove his/her knowledge of the English language.

SCIENTIFIC DISCIPLINARY AREA: LAW

RESEARCH PROGRAM NO. 34

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **9.00** in Dipartimento di Giurisprudenza, Sezione di Diritto Internazionale e della Navigazione, 3° piano, scala B, Via Balbi 22/7B, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **21.12.2017** at **12.00** in Dipartimento di Giurisprudenza, Sezione di Diritto Internazionale e della Navigazione, 3° piano, scala B, Via Balbi 22/7B, Genova.

The interview will be held on **21.12.2017** at **15.00** in Dipartimento di Giurisprudenza, Sezione di Diritto Internazionale e della Navigazione, 3° piano, scala B, Via Balbi 22/7B, 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.ssa Paola Ivaldi on the phone number: +39 0102099976 oppure via the email address: paola.ivaldi@unige.it.

Scientific coordinator: Prof.ssa Paola IVALDI

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

Title: Private International Law and the Internet: state of the art and development prospects.

Description: The present research aims at analyzing the application of private international law rules in the context of cyberspace, with specific reference to the issues raised by the de-territorialisation of such "space" as well as to its impact upon the functioning of the connecting criteria employed by conflict-of-law rules based on the localization of one or more elements of the case. In this view, the assegnista (1) will first be engaged in a preliminary survey of the relevant case-law both national and of the European Court of Justice, with a view to (2) assessing the consistency of the solutions thereby accepted with the need for foreseeability of the applicable law and of the competent jurisdiction, as well as to (3) identifying possible normative and/or interpretative solutions capable of ensuring an effective and satisfactory coordination between different legal systems in the matter at issue.

Scientific disciplinary sector: IUS/13 DIRITTO INTERNAZIONALE

Place: Dipartimento di Giurisprudenza

Required degree:
Laurea V.O. in Giurisprudenza.
Laurea Specialistica delle classi: 22/S Giurisprudenza, o 102/S Teoria e tecniche della normazione e dell'informazione giuridica.
Laurea Magistrale della classe LMG/01 Giurisprudenza.

Subjects of the interview:
- Private International Law.
- International Law and the Internet.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 35

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **9.00** in Dipartimento di Scienze Politiche (DISPO), Sezione di Diritto Internazionale, torre ovest, 2° piano, Piazzale Emanuele Brignole 3A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **21.12.2017** at **12.00** in Dipartimento di Scienze Politiche (DISPO), Sezione di Diritto Internazionale, torre ovest, 2° piano, Piazzale Emanuele Brignole 3A, Genova.

The interview will be held on **21.12.2017** at **15.00** in Dipartimento di Scienze Politiche (DISPO), Sezione di Diritto Internazionale, torre ovest, 2° piano, Piazzale Emanuele Brignole 3A, 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.ssa Ilaria Queirolo on the phone number: +39 01020951186 oppure via the email address: ilaria.queirolo@unige.it.

Scientific coordinator: Prof.ssa Ilaria QUEIROLO

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

Title: Best interests of the child in international abduction cases with particular attention to the German experience. The Voice Of the Child in international child abductions in Europe (VOICE) JUST-JCOO-CIVI-AG-2016-764206.

Description: Within the EU Project The Voice Of the Child in international child abductions in Europe (VOICE) JUST-JCOO-CIVI-AG-2016-764206, the "assegnista" will conduct research activity concerning the notion of "best interests of the child" by collecting and analyzing the relevant international case law, with particular reference to German and UK law. The "assegnista" will also participate in the other project's activities, particularly focusing on the organization of training modules for legal professionals, in the field of best interests of the child. To this purpose, the "assegnista" will study the needs of legal professionals, also interviewing German judges, and will cooperate in drafting guidelines for the training modules.

Scientific disciplinary sector: IUS/13 DIRITTO INTERNAZIONALE

Place: Dipartimento di Scienze Politiche (DISPO)

Required degree:
Laurea V.O. in: Giurisprudenza, o Scienze internazionali e diplomatiche
Laurea magistrale delle classi: LMG/01 Giurisprudenza, o LM-52 Relazioni internazionali, o LM-90 Studi europei.

Subjects of the interview:
- European private and procedural international law in civil and commercial matters.
- Regulation EC 2201/2003.
- 1980 Hague Convention on civil aspects of international child abduction.
- Directive EC 2008/52.
- Family law.
- Fundamental rights of the child.

The candidate will need to prove his/her knowledge of the English and German languages.

RESEARCH PROGRAM NO. 36

The assessment criteria for the qualifications and the interview will be affixed on **22.12.2017** at **9.00** in Dipartimento di Scienze Politiche (DISPO), Sezione di Diritto Internazionale, torre ovest, 2° piano, Piazzale Emanuele Brignole 3A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on **22.12.2017** at **12.00** in Dipartimento di Scienze Politiche (DISPO), Sezione di Diritto Internazionale, torre ovest, 2° piano, Piazzale Emanuele Brignole 3A, Genova.

The interview will be held on **22.12.2017** at **15.00** in Dipartimento di Scienze Politiche (DISPO), Sezione di Diritto Internazionale, torre ovest, 2° piano, Piazzale Emanuele Brignole 3A, 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.ssa Laura Carpaneto on the phone number: +39 01020951180 oppure via the email address: laura.carpaneto@unige.it.

Scientific coordinator: Prof.ssa Laura CARPANETO

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

Title: Best interests of the child in international abduction cases with particular attention to the experience in EU law. The Voice Of the Child in international child abductions in Europe (VOICE) JUST-JCOO-CIVI-AG-2016-764206.

Description: Within the research, the "assegnista" will cover some activities linked to the EU Project The Voice Of the Child in international child abductions in Europe (VOICE) JUST-JCOO-CIVI-AG-2016-764206. The "assegnista" will study the notion of "best interests of the child" within EU and Italian law, by collecting and analyzing the relevant case law. The "assegnista" will furthermore participate in the other project's activities, particularly focusing on the organization of training modules for legal professionals, in the field of mediation in cross-border family disputes. To this purpose, the "assegnista" will study the needs of legal professionals, also interviewing Italian judges, and will cooperate in drafting guidelines for the training modules.

Scientific disciplinary sector: IUS/14 DIRITTO DELL'UNIONE EUROPEA

Place: Dipartimento di Scienze Politiche (DISPO)

Required degree:
Laurea V.O. in: Giurisprudenza, o Scienze internazionali e diplomatiche
Laurea magistrale delle classi: LMG/01 Giurisprudenza, o LM-52 Relazioni internazionali, o LM-90 Studi europei.

Subjects of the interview:
- European private and procedural international law in civil and commercial matters.
- Regulation EC 2201/2003.
- 1980 Hague Convention on civil aspects of international child abduction.
- Directive EC 2008/52.
- Family law.
- Fundamental rights of the child.

The candidate will need to prove his/her knowledge of the English language.

SCIENTIFIC DISCIPLINARY AREA: ECONOMICS AND STATISTICS

RESEARCH PROGRAM NO. 37

The assessment criteria for the qualifications and the interview will be affixed on **21.12.2017** at **9.00** in Centro Italiano di Eccellenza sulla Logistica Integrata (C.I.E.L.I.), secondo piano, Via F. 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 **21.12.2017** at **12.30** in Centro Italiano di Eccellenza sulla Logistica Integrata (C.I.E.L.I.), secondo piano, Via F. Vivaldi 5, Genova.

The interview will be held on **21.12.2017** at **15.30** in Centro Italiano di Eccellenza sulla Logistica Integrata (C.I.E.L.I.), secondo piano, Via F. 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. Enrico MUSSO

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

Title: Study on the development of the retroportual areas of Santo Stefano di Magra (SP) for research activities related to the economic, legal and management related to the integrated and intermodal transport the maritime and port logistics.

Description: Research activities focused on the study of development opportunities of the economic and production context of the logistic terminal located in the municipalityof Santo Stefano di Magra (SP).
Desk research activities, preparation and submission of questionnaires and implementation of in-depth interviews for the analysis of the mobility and transportation needs for users of various types of goods and passenger logistic terminals; with a special focus on size related to physical, information and financial flows. The identification and monitoring of strategic funding lines at the regional, national and European level, capable to support the development of logistic centers both at the infrastructure level and in the improvement of human resources competences.

Scientific disciplinary sector: SECS-P/06 ECONOMIA APPLICATA

Place: Centro Italiano di Eccellenza sulla Logistica Integrata (C.I.E.L.I.)

Required degree:
Laurea Magistrale delle classi: LM-56 Scienze dell'economia, o LM-77 Scienze economico-aziendali, o LMG/01 Giurisprudenza

Subjects of the interview:
Logistics chain organization; the for ports, interports and logistics plateforms; the institutrional, juridical and operational organization of port authorities and logistics plateforms.

The candidate will need to prove his/her knowledge of the English language.