



PhD in CONSERVAZIONE DEI BENI ARCHITETTONICI / PRESERVATION OF THE ARCHITECTURAL HERITAGE - 38th cycle

**PNRR_351_PATRIM_CULT Research Field: SAFEGUARDING THE CULTURAL HERITAGE
AND MANAGING THE EMERGENCY DUE TO NATURAL HAZARDS**

Monthly net income of PhDscholarship (max 36 months)
€ 1195.5
In case of a change of the welfare rates during the three-year period, the amount could be modified.

Context of the research activity	
Motivation and objectives of the research in this field	<p>The fragility of the Italian and world cultural heritage is increasingly the cause of irrecoverable losses and, therefore, the object of attention and care. This is demonstrated by the many interventions intended by the PNRR, also with the decree that assigns substantial resources for the seismic resistance improvement and safety interventions on 257 places of worship, towers, and bell towers.</p> <p>The aim of the research project is to define an updated knowledge framework on the mainly hydrogeological risks of the Ligurian territory. Furthermore, it is intended to identify the cultural heritage most at risk and to build a mapping of the spaces with the minimum requirements required for the temporary storage of damaged works of art, to be used in case of emergencies deriving from calamitous events.</p> <p>The research proposal is framed within the training course of the Doctorate in Conservation of Architectural Heritage in which the doctoral student will carry out training, research and evaluation moments, except that periods of 6 months at Segretariato regionale del Ministero della Cultura per la Liguria and 6 months at UPV - Universitat Politècnica de València (Spain)</p> <p>The doctoral student will be able to rely on qualified and specific operational facilities for his or her research activities.</p>



	<p>The research ensures compliance with the horizontal principles of the PNRR and is framed within Mission 1 Digitization, Innovation, Competitiveness, Culture and Tourism, particularly with the theme of Open Data and innovative mapping tools for cultural heritage, and Mission 2 Green Revolution and Ecological Transition for the themes of land security and cultural heritage.</p>
<p>Methods and techniques that will be developed and used to carry out the research</p>	<p>The research, entitled: "<i>Safeguarding cultural heritage and emergency management. The situation in Liguria: the current situation and new perspectives</i>", will be divided into four main themes.</p> <ul style="list-style-type: none"> -The first of a general nature, has as its object a review of European legislation on the safety of cultural heritage in emergency situations, in addition to examining the state and territorial structures responsible for their management in Italy. -The second theme is the verification of hydraulic and hydrogeological risks at the regional level, with the identification of the areas at greatest risk in Liguria. The data will be interpolated with the Risk map, verifying the tools relating to the assessment of the hazard. -The third theme concerns the deepening of the UCCR activation systems, the MiC structures responsible for intervening in emergency situations, including a survey of the emergency communication systems, the identification of criticalities, the definition of new tools and procedures effective. -The fourth theme concerns the management of the emergency, with reference to the reconnaissance and mapping of existing deposits and of the spaces and structures that can be used on a regional scale for the temporary recovery of damaged movable goods, meeting the minimum requirements. The activity to be carried out at the Regional Secretariat includes, in particular: <ol style="list-style-type: none"> 1. Study of the territory and information systems for the management of information relating to the real estate assets of the MiC. 2. Analysis and evaluation of the information systems of the Ministry and their interoperability ("Risk card" and



	<p>"Network constraints", etc.). 3. Examination of the activities of the UCC, identifying their potential and limits, aimed at: coordinate the activities of the MiC staff on the territory; guarantee the connection with the local structures responsible for emergency interventions; manage the teams for the relief of damage to cultural heritage; identify the places for the provisional recovery of the cultural goods that requires movement for safety; guaranteeing the functions of supervision and support during the phases of survey, safety and eventual reconstruction, for the interventions on the cultural good. In fact, at each regional secretariat of the Ministry, an organizational structure is set up which is activated in the event of emergencies deriving from natural disasters. The structure is made up of the National Coordination Crisis Unit - UCCN-MiC, which operates at the General Secretariat and the Regional Coordination Crisis Units - UCCR-MiC, on the territory. The Regional Secretariat is the only structure of the Ministry which, in close connection with the National Coordination Unit, works in synergy with the territorial structures responsible for emergency interventions, such as Prefectures, Fire Brigades, Civil Protection, etc.</p>
<p>Educational objectives</p>	<p>The PhD candidate will acquire knowledge and analysis skills of the organization and functioning systems of the structures of the Ministry of Culture in charge of dealing with emergencies due to natural disasters. Her activity will include the verification and possible implementation of information systems capable of defining the risk levels of the regional heritage and identifying the probability that an unwanted event will damage a cultural asset. This will require the acquisition of the ability to examine complex situations, to act and make decisions in emergency conditions, to coordinate activities to be carried out promptly and knowledge of the principles of communication in critical situations. The research activity will be developed in connection with UPV - Universitat Politècnica de València (Spain)</p>
<p>Job opportunities</p>	<p>Graduates of the PhD programme have often found</p>



	<p>employment in public sector and conservation institutions, as well as in professional practices and in the business world, in specific specialized fields.</p> <p>PhD candidates from abroad find job in their native countries at University or in Cultural Heritage Institutions. As regards Italy, the relationship with Italian Ministry of Cultural Heritage (Mibact), has been definitely fruitful, especially when we consider that many among the best PhDs in Preservation of Architectural Heritage have been hired as officers and executives to the above ministry: recently many PhD from this Programme won the competitive exam to become public officers in the Ministry of Cultural Heritage and most of them are now responsible in prestigious seats.</p>
Composition of the research group	<p>10 Full Professors 13 Associated Professors 0 Assistant Professors 41 PhD Students</p>
Name of the research directors	Stefano Francesco Musso; Giovanna Franco

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Additional support - Financial aid per PhD student per year (gross amount)	
Housing - Foreign Students	--
Housing - Out-of-town residents (more than 80Km out of Milano)	--

Scholarship Increase for a period abroad	
Amount monthly	834.84 €
By number of months	6

National Operational Program for Research and Innovation	
Company where the candidate will attend the stage (name and brief description)	Segretariato regionale del Ministero della Cultura per la Liguria
By number of months at the company	6



Institution or company where the candidate will spend the period abroad (name and brief description)	Universitat Politècnica de València
By number of months abroad	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information

Educational activities (purchase of study books and material, funding for participation in courses, summer schools, workshops and conferences):

financial aid per PhD student **4.872,90 euros** per student (total for 3 years)

Teaching assistantship:availability of funding in recognition of supporting teaching activities by the PhD student:

There are various forms of financial aid both for research and teaching activities. The PhD student is encouraged to take part in these activities, within the limits allowed by the regulations.

Computer/Desk availability:In the PhD candidates room are available workstations for shared use, connected with the printer. All the PhD students can use their own laptop with the wireless connection. Workstations and other equipment are available in the various laboratories linked with the doctoral programme.