PUBLIC SELECTION BASED ON QUALIFICATIONS AND INTERVIEW FOR THE AWARDING OF NO. 1 EARLY STAGE GRANT LASTING 12 MONTHS FOR CONDUCTING RESEARCH PURSUANT TO ART. 22 OF LAW NO. 240/2010 AT THE DEPARTMENT OF LETTERS, PHILOSOPHY AND COMMUNICATION (SC 10/A1 - ARCHAEOLOGY; 11/A1 - MEDIEVAL HISTORY - SSD L-ANT/08 - CHRISTIAN AND MEDIEVAL ARCHAEOLOGY; L-ANT/10 - METHODS OF ARCHAEOLOGICAL RESEARCH 10; M-STO/01 - MEDIEVAL HISTORY) TYPE B - CUP F54I19000230005 PICA CODE: 20AR014

announced with decree of the Chancellor Rep. no. 140/2020 of 17.03.2020 and posted on the official registry of the University on 27.03.2020

RESEARCH PROJECT "GIS visualization for management of historic landscapes"

Research structure: Department of Letters, philosophy and communication

Duration of the grant: 12 months

Scientific Area: 10 – Antiquities, philology, literary studies, art history; 11 – History, philosophy, pedagogy and psychology

Academic recruitment field: 10/A1 – Archaeology; 11/A1 – Medieval history

Academic discipline: L-ANT/08 – Christian and medieval archaeology; L-ANT/10 – methods of archaeological research; M-STO/01 – medieval history

Scientific Director: Prof. Riccardo Rao

The research project is focused on the study and enhancement of the historical landscape and on the representation of historical commerce trough Geographic Information System. An historical, archaeological and geographical method will be used for the reconstruction of the ancient territories. A specific case study will be the current territory of Monaco. The mapping and representation of the different land cover during its evolution between antiquity and contemporaneity will be the core business of the project. It will also be of central importance to develop ways of representing the movement of goods over the centuries, starting from written and material sources.

All the data collected by the historical, archaeological and geographic study will be represented on a WebGIS platform especially designed for the communication of the project results. The platform will be managed and created directly by the candidate and will be developed according to the representation of data deriving from XML markings of historical written sources and suitably collected archaeological data. For the WebGIS platform, proven knowledge of the open GeoJSON format will be required. It will be necessary to create and manage the spatial elements that will compose the final cartography of the project. They will be complex polygons, polylines and punctual elements with which to associate attribute elements considered significant in collaboration with the whole project team. The geographical representation will be made on specially geo-referenced historical cartography. A proven knowledge of the main graph database models, especially for the representation of ancient commerce and movement of goods.