

**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 LAW (SC 06/M2 - FORENSIC AND OCCUPATIONAL MEDICINE - SSD MED/43 - FORENSIC MEDICINE) TYPE B - EUROPEAN PROGRAM HORIZON2020 - "JUSTICE PROGRAMME DRUGS POLICY INITIATIVES" - PICA CODE: 20AR023**

*announced with decree of the Chancellor Rep. no. 365/2020 of 31.07.2020 and posted on the official registry of the University on 07.08.2020*

**RESEARCH PROJECT  
"Real-time on-site forensic trace qualification (acronym RISEN)"**

**Research structure:** Department of law

**Duration of the grant:** 12 months

**Scientific Area:** 6 - Medicine

**Academic recruitment field:** 06/M2 - Forensic and occupational medicine

**Academic discipline:** MED/43 - Forensic medicine

**Scientific Director:** Prof. Francesco Saverio Romolo

The aim of the RISEN project is the development of an innovative approach for the activities on a crime scene, including disaster sites and terrorist attacks. A set of real-time contactless sensors will be developed for the optimization of the trace detection, visualisation, identification and interpretation on-site, with a consequent reduction of the time and resources in the laboratory.

<https://www.risen-h2020.eu/>

**STEP 1**

The researcher will focus on the state of the art of technical capabilities for the investigation of trace evidence in selected forensic scenarios. The tangible tasks of this step 1 are to review state-of-the-art of: 1) Techniques used in forensic investigation (analytical, photography, 3D, etc.); 2) Quality assurance tools and techniques; 3) Analytical markers; 4) Operational procedures including time for analysis, manpower needed, missed and misinterpreted traces; 5) Review standards in forensic analysis and data sharing among LEAs. The development of point 5 will provide an overview and an assessment of existing formal and informal standards on National, European, and International level (CEN, ISO etc.) as well as regulatory framework that has to be considered.

**STEP 2**

Selected traces will be studied to evaluate their analysis and forensic interpretation in laboratories for the transfer of the knowledge from forensic laboratories to the crime scene. In more details the study will provide the following tasks: 1) Forensic operational procedures for both conventional and state of the art laboratory approaches will be collected and summarised; 2) Relevant information about validation, time for analysis and price of the equipment will be collected; 3) A list of validation procedures from forensic laboratories will be also prepared.