Introducing SPREC in a software for biobank

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The Sample PREanalytical Code (SPREC) is a seven-element-long code in which each element corresponds to a preanalytical variable and contains a string of letters (different for fluid or for solid tissues) in a defined order. SPREC has been released by the ISBER (International Society for Biological and Environmental Repositories) Biospecimen Science Working Group and it has been adopted in order to track and make explicit preanalytic variations in collection, preparation and storage of specimens. These features, together with software capable of organizing sample collection, which are essential for the optimal management of a biobank. Several factors are fundamental prerequisites for the development of a software platform. It has to be configurable in real time for new requirements; it has to connect professionals with each other, across hospital, to provide a multidisciplinary approach. It has to be easy to use (user friendly); it has to permit easy research in the data and generate reports; it has to give information about donors’ health; and it has to give information about preanalytic variations in collection, preparation and storage of specimens. In this light, oloHEALTH_BioBim, a platform with web interface integrated with a SPREC generating tool for the management of sample requirements, has been developed. oloHEALTH_BioBim enables the traceability of the entire life-cycle of biological samples, their organization and storage; and retrieval of associated data, while ensuring full and continuous compliance with national and international regulations.

Biography

Daniele Mondello is the Founder of Olomedia, an Italian Company devoted to the development of Health Software Solutions. In his career, he has held various roles, as Team Leader, Project Manager and Quality Manager in the provision of engineering services. He operates in the Italian Healthcare sector providing its expertise in projects based on “Web-Based” technologies and performing an intense training activity during refresher courses in various subjects related to Information Technology (Usability, Accessibility, Semiotic, Programming Languages, Web Server, etc.). He is an assertive supporter of the importance of automation in the software development process, on which he focuses his research and free time.

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