

## Monitor population immunity against vaccine preventable diseases

## Acronimo: Vaccinesurvey Call: H2020-MSCA-RISE-2014 Responsabile UNIPG: Prof.ssa Roberta SPACCAPELO

**Abstract**: The project aims to develop and validate an innovative tool to monitor the progress of different vaccination programs and experimentally validate record-based coverage data. The proposed technical solution is based on an assay system that integrates multiplex capability and analytical performance to simultaneously quantify antibody levels against the major vaccine components. The multiplex capability will facilitate the analysis of cross coverage monitoring while generating reactivity profiles against the different vaccine components to discriminate vaccinated versus infected individuals. Spatial temporal co-ordinates of assay results will be used to generate interactive data sets for modelling changes in the age-specific risk of infection and the risk of outbreaks. The proposed system represents a formidable tool of unprecedented power to monitor the progress of different vaccination programs and experimentally validate recordbased coverage data. University of Perugia will mainly be involved in the definition and development of the assay system based on microarray technology.