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PRoSPECT: Predicting Salmonella Pathogenic Potential to Enhance Targeted Control Strategies

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The PRoSPECT project will address one of the most pressing cutting edge issues of Salmonella epidemiology: to find agenetic signature to predict the pathogenic potential of common and uncommon Salmonella enterica serotypes and their potential impact on public health.

By using a combination of epidemiological, genotypic and phenotypic information, PRoSPECT will test the suitability to prioritize Salmonella isolates responsible for human infections towards infrequently human isolated strains.

The relationships between epidemiological evidence and pathogenic potential will be studied throughout the entire food production chain and the impact on public health will be ranked through a multi-tier system combining epidemiological and genomic data with functional measurements.

PRoSPECT approach will serve as a proof-of-concept to drive the implementation of control measures based on evidence, enabling the effective response to novel and known health threats with major benefits for public health.