



PREPARE-TID: Diagnostics for Pandemic Preparedness

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It has become apparent that the ease of travelling, global warming, and changes in the environment accelerate the spread of infectious diseases of zoonotic origin. International collaboration is essential to impact on the control of disease epidemics, and as the COVID pandemic has shown rapid diagnostics are one of the main pillars. PREPARE-TID will target infectious agents of three types: an ongoing neglected epidemic, an ongoing emerging epidemic, and an ongoing elimination drive. The aim is to develop the necessary diagnostic tools for preparedness needed in case of the emergence of infectious agent X. PREPARE-TID is a multidisciplinary research consortium where biomedical laboratory researchers will work alongside epidemiologists, clinicians, veterinarians, and software engineers to implement a pipeline from a mobile suitcase sequencing laboratory with a simple bioinformatics to a fieldable rapid nucleic acid extraction procedure, a mobile smartphone linked molecular point-of-care and a multiplex PCR one-health surveillance platform, and a one health digital platform. These will provide innovative diagnostic solutions for cross-border health threats at international level. PREPARE-TID will increase the accessibility to novel diagnostics for detection of pathogens with pandemic potential. The consortium will deliver point-of-care and mobile diagnostics, which can be easily deployed and mass produced in case of an epidemic or pandemic.