

## Strengthening COVID-19 Response on the Islands of São Tomé and Príncipe

# SToP-CoV

## Strengthen National Laboratory Capacity and Establish a National Molecular Surveillance for SARS-CoV-2

### Duration

2021 – 2023

### Budget

approx. 385,000 EUR

### Partner countries

Democratic Republic of São Tomé and Príncipe

### Challenges addressed by the project

Laboratory diagnostics for SARS-CoV-2 using PCR is a crucial component in the fight against the COVID-19 pandemic. Hence, support in the field of molecular testing, including whole-genome sequencing for molecular surveillance of SARS-CoV-2 in São Tomé and Príncipe (STP) helps to meet the demand for testing, to ensure quality control, establish a molecular surveillance and thus to help contain the pandemic.

### Objectives

- » Support the COVID-19 response in STP by strengthening national laboratory capacity
- » Establishment of a national molecular surveillance for SARS-CoV-2 for early detection of emerging genetic variants of the virus
- » Prevent the spread of SARS-CoV-2 through capacity building in infection prevention and control

### Overview of activities

As part of the long-term strategy to combat COVID-19 and moreover to prepare for future epidemics there is a need to build a functioning surveillance system that enables the early detection and identification of COVID-19 cases. In order to specifically protect vulnerable groups from infections the capacity in the area of prevention and control of infections in the health sector is also supported, e.g. by targeted trainings of health care workers on preventive hygiene measures. The capacity built within the framework of SToP-CoV will also be important for combating other infectious diseases. The SToP-CoV project lays the foundation for the development of detection and molecular diagnostics for other pathogens, which is key for an effective response mechanism to ensure national and international health security. To strengthen laboratory capacity for SARS-CoV-2 diagnostics staff from the national laboratories has been trained to conduct the SARS-CoV-2 specific molecular diagnostics steps. In July 2021 the SToP-CoV team together with partners from the Laboratório Nacional de Referência da Tuberculose in São Tomé conducted a theoretical and practical training on the nanopore genome sequencing technology. The laboratory team is now able to independently perform bioinformatic data analysis and identify genetic variants of the SARS-CoV-2 virus strains circulating in São Tomé and Príncipe. Sequencing results are shared with national authorities and the international research community, thus contributing important information on genomic surveillance of SARS-CoV-2.



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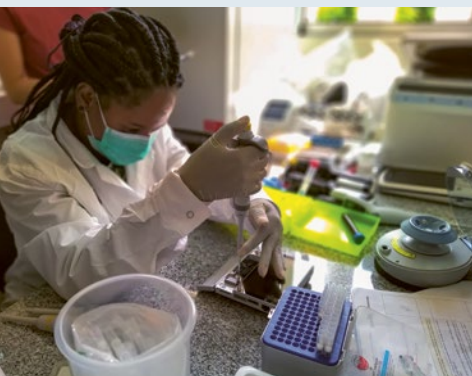
on the basis of a decision  
by the German Bundestag



Participants of the whole genome sequencing training with Kathrin Schuldt and Doris Winter from BNITM.



Theoretical introduction into whole genome sequencing technology.



Applying a probe onto the sequencing device.



Participants of the sequencing training together with Doris Winter and Kathrin Schuldt from BNITM in front of the Laboratório Nacional de Referência da Tuberculose (LNR-TB) in São Tomé.

Further project activities include the implementation of measures to prevent and control infections in laboratory and health care settings and the implementation of wastewater surveillance for SARS-CoV-2.

### Partner institutions/Contact

- » WHO Country Office São Tomé and Príncipe
- » Ministry of Health of São Tomé and Príncipe (MoH STP)
- » Laboratório Nacional de Referência da Tuberculose (LNR-TB), São Tomé and Príncipe  
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