

# 14-34 avenue Jean Jaurès 75019 PARIS

### Paris, September 20th 2022

The MSF Foundation is a specialised entity created by Médecins Sans Frontières (MSF) dedicated to medical innovation targeting patients living in contexts with limited resources. Ongoing projects relate, among other things, to the use of 3D printing to create personalised prostheses; the development of digital tools for epidemic control and surveillance; and the development of a smartphone application based on machine learning to streamline and automate antibiotic susceptibility testing: Antibiogo.

The Antibiogo project will contribute to the fight against antibiotic resistance, a major public health concern that is expected to cause 10 million deaths per year by 2050.

Antibiogo is a free, open source, offline Android app, that supports non-expert laboratory technicians in measuring and interpreting antimicrobial susceptibility tests, in order to help doctors prescribe appropriate antibiotics to their patients and to provide accurate results that can be used for surveillance purposes.

A first version of Antibiogo that was clinically evaluated across three different sites and countries (Jordan, Mali & Senegal) has been CE-marked since May 2022 (according to the In Vitro-Diagnostic Medical Devices Directive 98/79/EC) as a mobile device application used for the interpretation of antibiograms in resource-limited settings and is being deployed within MSF laboratories.

In parallel, a second version of the app integrating additional features is under development that must be evaluated as well in terms of clinical performances. This evaluation is performed through several clinical studies implemented in additional countries and settings (including central and peripheral bacteriology laboratories). The results of the studies will be used to obtain CE-marking for this second version of Antibiogo according to the new In-Vitro Diagnostic Medical Devices Regulation (EU) 2017/746.

Different teams work in collaboration on Antibiogo under the responsibility of Antibiogo program manager, including the clinical team, the product team, and the quality insurance team.

In this framework, we are looking for an **Epidemiologist** to join the Antibiogo clinical team.

# **Epidemiologist**

#### **Activities:**

Antibiogo Epidemiologist will be responsible for **data management** for all the on-going and future clinical evaluation studies, in accordance with the study protocols and procedures, ethical principles, MSF policy, and local and international regulations.

Under the hierarchical responsibility of Antibiogo Clinical lead, and the functional responsibility of Antibiogo research coordinator, and in collaboration with the local investigators of the clinical studies in the different countries, the main duties of the Epidemiologist will be (non-exhaustive list):

- Adapt and manage the database for each clinical study using REDCap software.
- Suggest improvements and optimal solutions for data collection.
- Test the database prior to sample enrolment for each study.
- Setup a data management plan; develop quality control mechanisms and systems for the management of data.

- Participate in the training provided to the local investigators in the different study settings for data entry;
- Remotely support the local investigators in case of any issues related to the use of REDCap;
- Generate regular data monitoring reports and descriptive analyses for dissemination to team.
- Check accuracy, completeness, consistency of data collected on a daily basis; generate queries for investigators and ensure their resolution.
- Ensure that data from Antibiogo are properly transferred into REDcap;
- Ensure that security and confidentiality of all data is maintained.
- Conduct interim and final data analyses; prepare and deliver reports accordingly.
- Provide statistical expertise to ensure scientifically valid conclusions.
- Contribute to the interpretation and publication of research results

Participate in regular meetings organised with Antibiogo project team.

## Profile:

Education: Master or PhD in Epidemiology, Biostatistics, Public Health, or any related field

Experience: Participation in scientific research as data manager

Languages: Fluent French and English; Spanish is a plus.

## Competencies:

- Results, Quality and Precision
- Teamwork and Cooperation
- Communication
- Behavioural Flexibility
- Commitment to MSF Principles
- Stress Management

#### Knowledges:

- Highly proficient in REDCap software: including form creation and monitoring of a project
- Highly proficient in R, Stata or SAS.
- Ethics in biomedical research

**Start date:** as soon as possible

Conditions: Type of contract: 2 to 3 days/week. Preferably located in Paris

Duration: 12 months

Please send your applications to the following address: delphine.rapoud@paris.msf.org