**Progress in AMR:**

**MAPPING GLOBAL FEVER PATHOGENS**

FIND and partners created an open-access, interactive map of leading causes of non-typhoidal fever in malaria endemic regions, designed to help make treatment decisions and to support research.

**Progress in AMR:**

**LANDSCAPE ANALYSIS OF BIOMARKERS FOR ACUTE FEVER**

FIND identified a number of fever biomarkers that potentially could be used to develop rapid diagnostic tests to distinguish causes of fever in low- and middle-income countries.

**Progress in AMR:**

**MULTI-CENTER STUDY TO EVALUATE TRIAGE BIOMARKERS**

FIND is conducting a study in three countries to evaluate the performance of novel biomarkers to differentiate bacterial from non-bacterial fever in patients.

**Progress in AMR:**

**DEVELOPMENT OF POINT-OF-CARE TRIAGE TEST**

BD and FIND are collaborating to develop a point-of-care biomarker test to distinguish bacterial from viral infections.
Progress in AMR:

RDT FOR MALARIA AND BACTERIAL INFECTION

Feesile patients with a negative malaria test often receive antibiotics, which are only appropriate for bacterial infections. SD BIOSENSOR and FIND are developing an RDT to simultaneously detect malaria infection and C reactive protein (CRP) in the blood, a biomarker associated with bacterial infection.

Progress in AMR:

ENSURING CORRECT ANTIBIOTIC USE VIA CRP TESTING

FIND is supporting a multi-centre trial on biomarker (CRP) testing as a basis for antibiotic prescription to understand how such testing may reduce antibiotic use for fever patients in primary health care settings.

Progress in AMR:

MULTIPLEX PATHOGEN TEST TO GUIDE TREATMENT

FIND and Chembio are collaborating on a multiplex diagnostic tool for identifying pathogens commonly responsible for fever in the Asia Pacific region.

Progress in AMR:

BLOOD STREAM INFECTIONS AND SEPSIS TEST

FIND and Specific Technologies are collaborating to promote the development of new solutions for diagnosis of bloodstream infections.
FIND is growing a specimen bank of well-characterized samples from patients with non-severe febrile illness in order to accelerate the development of acute febrile illness point-of-care tests.

FIND is conducting a study to understand how the availability of a fast pathogen ID test can optimize the treatment and outcome of severely sick fever patients in Botswana.

FIND conducted and published a systematic review that described the current status of AMR in Africa in relation to common causes of infections and drugs recommended in WHO treatment guidelines.

Patients with malaria symptoms in endemic countries often seek treatment from private providers who commonly treat without testing. FIND contributed to stimulating a private-sector market for quality assured malaria RDTs and to improving private provider fever case management capabilities.
LANDSCAPING MALARIA DRUG-RESISTANT SURVEILLANCE TOOLS

FIND has conducted research designed to understand, and support the improvement and sustainability of anti-malarial resistance surveillance networks worldwide.

IMPROVING USE OF MALARIA RDTs

FIND has developed numerous guidance documents, training tools and job aids designed to ensure correct transport, storage, and use of RDTs.

PROMOTING DEVELOPMENT OF DRUG SUSCEPTIBILITY TESTS

FIND fights the spread of TB drug resistance by promoting development of affordable molecular tests, including GeneXpert Omni, Xpert MTB/RIF, Ultra MTB/RIF, MolBio TrueNAT MTB/RIF, XDR (Hain & Cepheid), QuantuMDx MTB/ resistance detection, whole genome sequencing analysis.

RESEQTB – A TB AMR KNOWLEDGEbase

FIND and a global partnership of academic institutions, public health agencies and NGOs have developed a knowledgebase to share, analyze and retrieve information on TB strains that informs and enables the development of new diagnostics, drugs and drug regimens for the treatment of drug-resistant TB.
Progress in AMR:

SUPPORTING WHO GUIDANCE ON KEY TB DST ISSUES

FIND has conducted extensive research and analysis for WHO in guidance on many key topics related to drug susceptibility testing (DST), revision of critical concentrations for phenotypic testing, sequencing as a reference standard, and interpretation of mutations, among others.

Progress in AMR:

SUPPORTING WHO AND NATIONAL GUIDANCE ON NEW TESTS FOR TB DST

FIND has conducted trials that have supported the Xpert MTB/RIF Ultra MTB/RIF WHO policy recommendations. Trials on centralised DST (Abbott BD, Hain, Roche) are ongoing. Trials of TrueNAT have supported a recommendation of the Indian Council for Medical Research.

Progress in AMR:

SPECIMEN BANK WITH MULTI-DRUG RESISTANT AND EXTENSIVELY DRUG RESISTANT SAMPLES

FIND collects and shares samples from MDR and XDR TB patients for use by researchers and developers in the evaluation and development of DST tests.

Progress in AMR:

VIRTUAL STRAIN BANK FOR RESEARCHERS AND DEVELOPERS

FIND has established a database that will give researchers and test developers an overview of globally accessible strains—including and beyond those that are part of FIND's specimen bank.
Progress in AMR:

MOLECULAR DEVELOPERS’ TOOLSET

FIND is developing standardized panels of drug-resistant and drug-sensitive TB strains for manufacturers and researchers to use in development and evaluation of molecular TB tests.

Progress in AMR:

EXPANDING ACCESS TO XPERT MTB/RIF, A WHO-RECOMMENDED TEST FOR TB AND DRUG RESISTANCE

FIND supports countries in Xpert MTB/RIF implementation. Through EXPAND-TB, 103 labs were established in 27 countries to diagnose drug-resistant TB. From 2013 to 2015, the project diagnosed 14,000 cases of MDR-TB. A FIND pilot project for detecting childhood TB in India is being rolled out nationwide after nearly 5000 cases were identified, almost 10% were drug resistant.

Progress in AMR:

Ensuring quality in TB testing

FIND and partners are working to advance proficiency testing schemes for Xpert MTB/RIF and have developed an extensive set of tools (data collection, checklists for laboratories, etc.) to enhance correct use of Xpert MTB/RIF and other tests for drug resistance.

FIND’s work is made possible by the unfailing support of our donors