



FIND 
Diagnosis for all

Photo: George Muiruri

FIND SPECIMEN BANK

2021 activity report & updates

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FIND Specimen Bank

The FIND Specimen Bank stores collections of over 500,000 specimens from more than 30,000 donors. We provide academic, non-profit, independent or commercial users access to a globally representative collection of biological samples from high-burden, endemic regions, with a focus on tuberculosis (TB) (289,143) and malaria specimens (133,847), but also fever (38,865), hepatitis C (36,929), antimicrobial resistance (584) and, more recently, COVID-19 (68,501). Samples are shipped worldwide to support product development and clinical trial activities, with users encouraged to report back on the data derived and share results with the wider scientific community.

All sample collections take place at qualified clinics, with partners following good clinical practice guidelines and protocols approved by ethical review boards. Donors are required to give informed consent for their specimens to be stored and used; sample requests are approved based on supporting evidence and data, relevance to public health, technological adaptability, and affordability of the final product for LMICs.

FIND Integrated Biobanks

To improve the quality, accessibility and availability of priority samples, FIND is working with partners to build a network of integrated biobanks across Africa, Southeast Asia, South America, and Europe. Decentralizing and devolving traditional systems, we are aiming to:

- Build in-country capacity for local biobanking services,
- Standardize processes for sample collection, quality control and use,
- Promote local ownership of samples, data, and research,
- Create new connections between facilities and regions,
- Share benefits and learning across the network,
- Reconnect supply with local and global health needs, and
- Transform access to high-quality, fit-for-purpose biological samples.

COVID-19 biobank activities

FIND is conducting prospective studies to collect and store bacteriologically and clinically well-characterized reference materials of adult COVID-19 from individuals with suspected, probable, and confirmed SARS-CoV-2 infection in Peru, South Africa and Moldova. Two more sites will be added in 2022. All collected samples are stored and available for distribution.

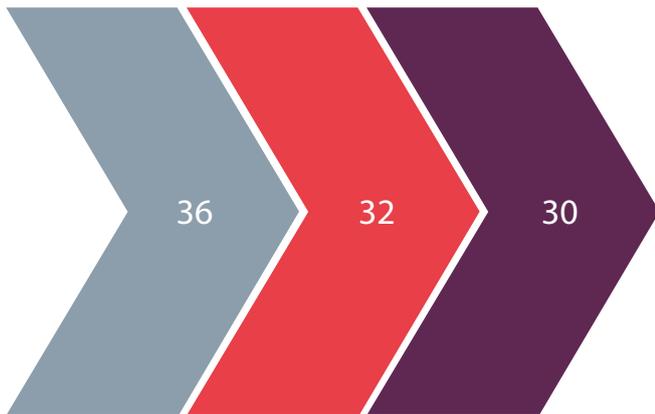


Distribution of specimens

Between Q1 2021–Q4 2021, the FIND Specimen Bank distributed 6,746 aliquots.
See the graphs below for details.

Distribution of material requests

Number of MRFs** submitted* Number of MRFs approved* Number of requests fulfilled*



Distribution of samples

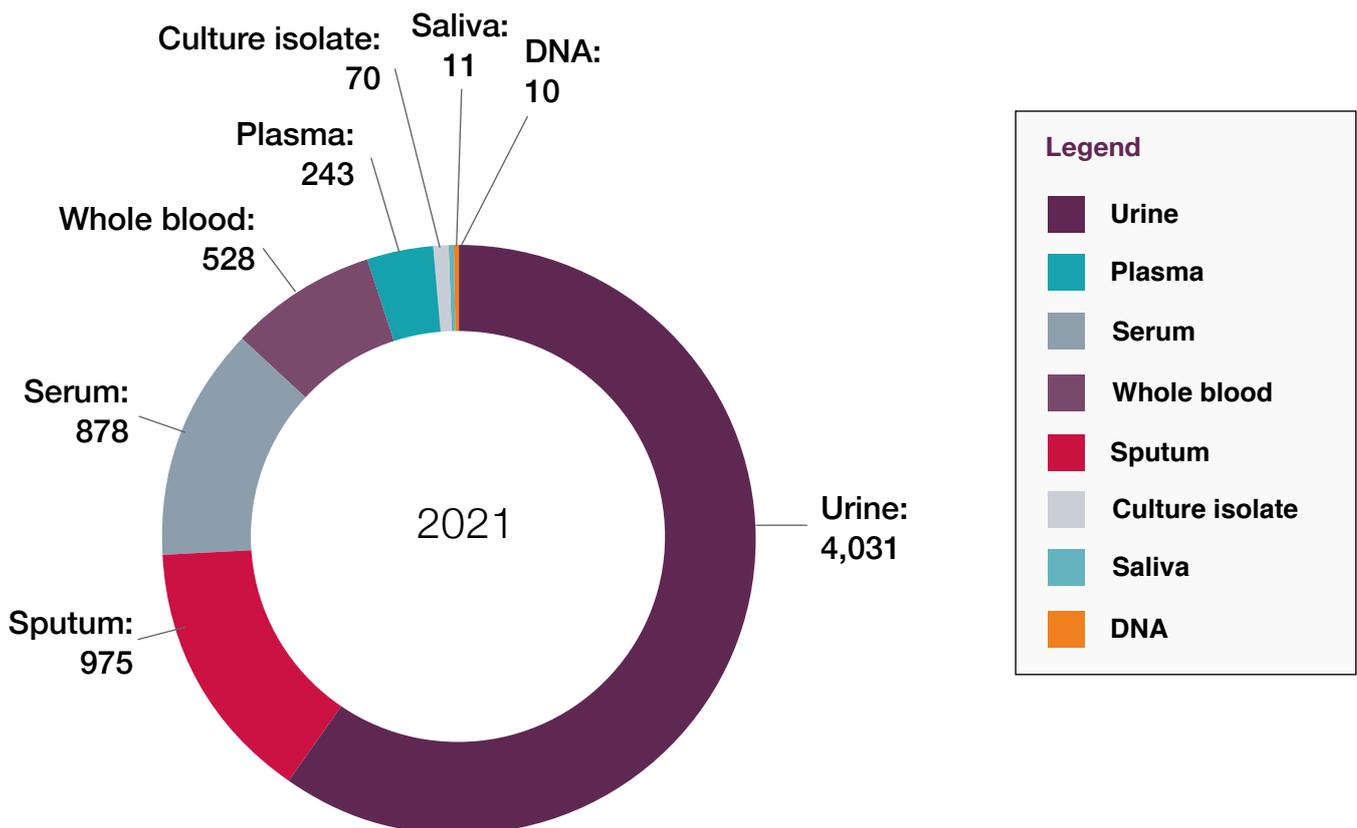
Number of aliquots approved* Number of aliquots distributed*



*Some MRFs were approved the previous year but aliquots were distributed the following year.

** Material Request Forms (MRF)

Distribution of specimens per type



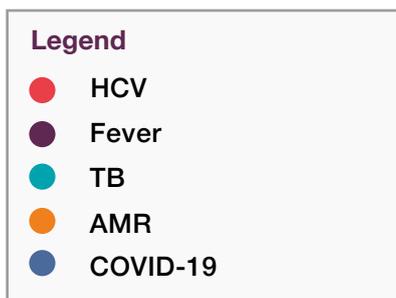
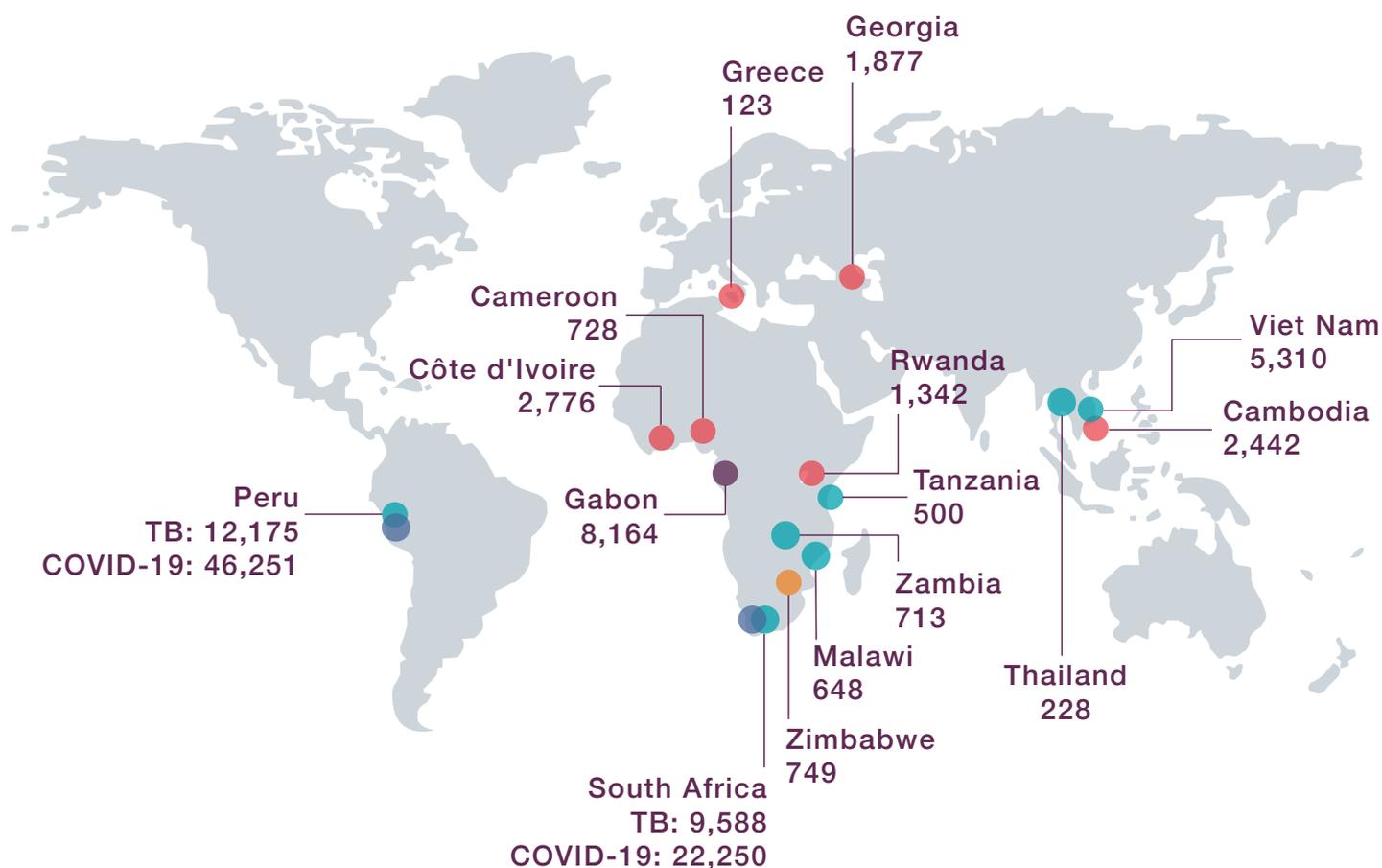
Specimen inventory

The FIND repository currently holds more than 500,000 aliquots from collection sites in Cambodia, Cameroon, Côte d'Ivoire, Gabon, Georgia, Greece, Malawi, Peru, Rwanda, South Africa, Switzerland, Tanzania, Thailand, Viet Nam and Zambia. FIND also manages the WHO-TDR TB collection, which includes 28,347 aliquots from Spain, The Gambia, El Salvador, Peru, South Africa, Tanzania, Uganda, Viet Nam, Canada, Bangladesh, Brazil, Colombia and Kenya.

Incoming specimens 2021

Fever: 8,164 specimens **TB:** 29,162 specimens **HCV:** 9,288 specimens

AMR: 749 specimens **COVID-19:** 68,501 specimens

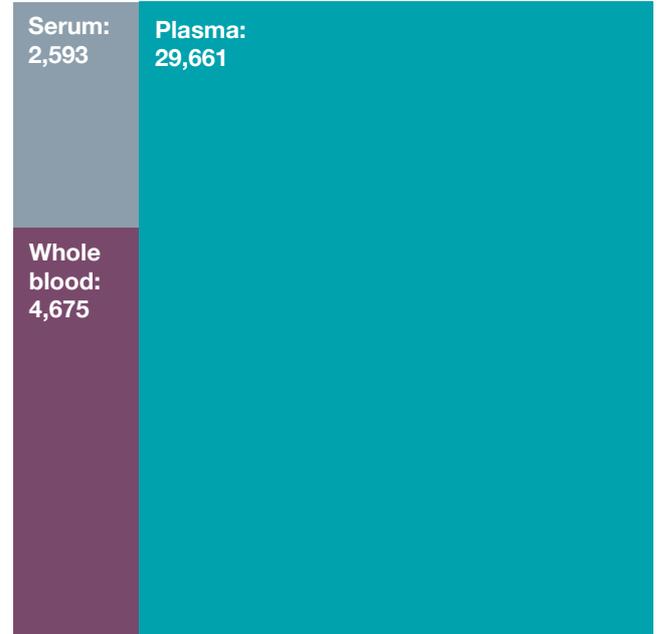


Specimen inventory

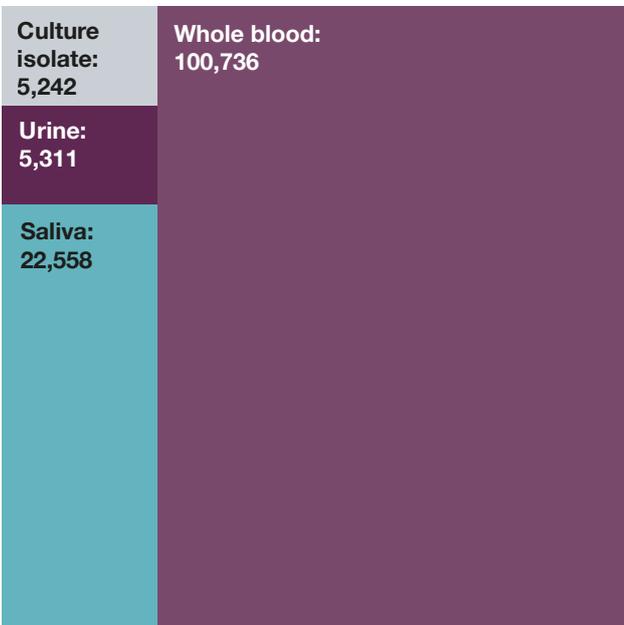
Fever: 38,865 specimens



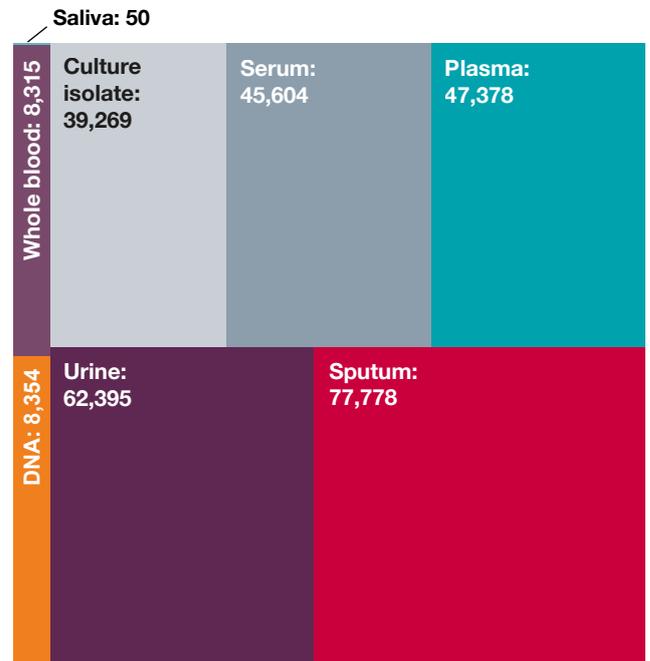
HCV: 36,929 specimens



Malaria: 133,847 specimens



TB: 289,143 specimens

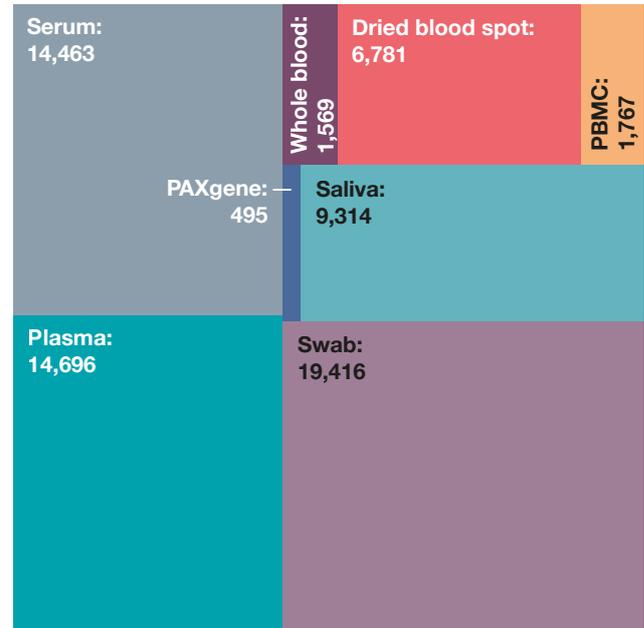


Specimen inventory (continued)

AMR: 584 specimens

Urine:
584

COVID-19: 68,501 specimens



Strains/DNA isolates and matching specimens

Specimens from MDR/XDR-TB patients were collected from globally representative sites in South America, South East Asia, Africa and Eastern Europe. These include sputum, plasma, serum and urine. Strains are characterized by whole genome sequencing and phenotypic testing against first- and second-line drugs and the minimum inhibitory concentration. Over 1,000 strain isolates are currently available.

Number and type of specimen	Number of MDR/XDR participants
10,332 sputum aliquots	1,211 participants
7,311 serum aliquots	1,271 participants
8,856 plasma aliquots	1,271 participants
8,354 DNA aliquots	1,147 participants
39,269 culture isolates	1,212 participants
102 urine aliquots	20 participants
391 PAXgene aliquots	391 participants

Quality control

To improve quality and ensure high standards, FIND implements quality control and quality assurance processes for blood, sputum, and urine samples. This includes recording critical data about the collection, conducting additional baseline testing, and applying stringent monitoring of storage conditions and processing times. For instance, baseline testing of urine samples with dipsticks now allows documentation of the physical characteristics of the sample and presence of proteins, glucose, ketones, haemoglobin, bilirubin, urobilinogen, acetone, nitrite, and leucocytes.

Revenue

As FIND is a non-profit organization, requestors are asked to cover all shipping costs. We also charge a small handling fee per sample (USD \$ 50–200, depending on the sample type and characterization) to cover operational costs. FIND received USD \$34,069 in handling fees from specimen requestors from Q1 2021–Q4 2021.

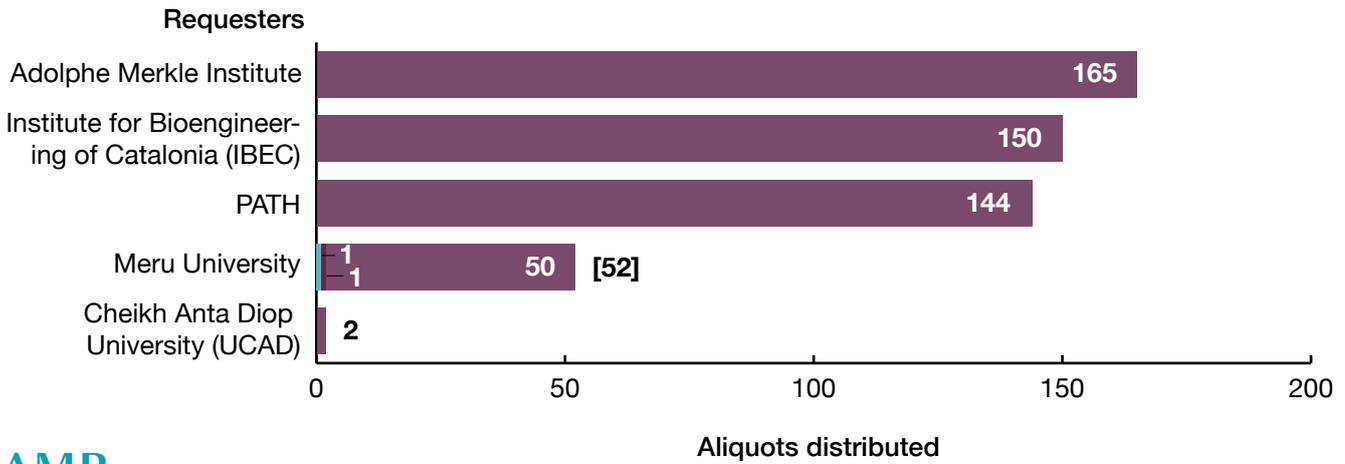


Photo: FIND/J.Rae

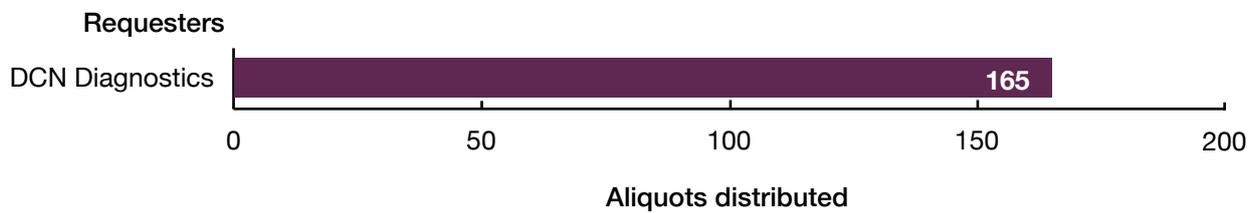
Information on materials
distributed per requester

2021

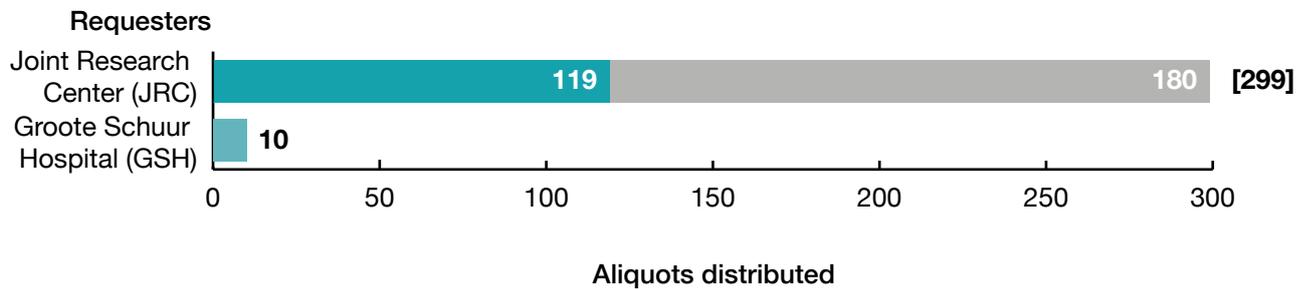
Malaria



AMR



COVID-19



TB

