



2022

ANNUAL REPORT HIGHLIGHTS

BiO TROPICAL
RESOURCES
B I O B A N K

OVERVIEW

The Biotropical Resources biobank (BIOTROP) was established in 2016, and since then it has received, processed and stored a wide variety of biological samples and associated data aiming to foster the biomedical research for the innovation and translation on Global Health.

Activities pursued focusing the four main areas of intervention previously established (1-4), but a specific effort has been made this year to improve networking and the visibility of the infrastructure. We have crossed international frontiers and established collaboration with one of the biggest institutions in Brazil, the Oswaldo Cruz Foundation – FIOCRUZ, with a great maturity concerning the institutionalization of biological collections (<https://portal.fiocruz.br/en/biological-collections>) and innovative technological apparatus at the recently created COVID-19 Biobank (<https://biobanco-covid19.fiocruz.br/>). We also extended our presence to Angola, where BIOTROP was showcased at an international meeting.

Our maturity has also started to be recognized as several consultation requests have been received from other institutions that are starting the implementation process of a biobank, regarding biobanking management and best practices.

We also welcome the new member, Doctor Luís Távora Távora, a clinical pathologist with expertise in laboratorial medicine, who integrated our Biobank Scientific Commission.

1 SAMPLE DIVERSITY AND QUALITY

We continued to integrate samples from the IHMT Traveler’s Clinic (infected samples of human origin).

The biobank was listed as collaborator by 41% of GHTM researchers in the FCT call for R&D projects, with one successful approval.

SAMPLES <http://biotropical.ihmt.unl.pt/>

GASTROPOD
RESERVOIRS 155

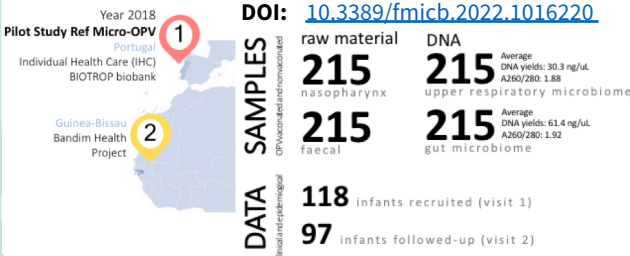
TICK
VECTORS 233

HUMAN MICROBIOME
(UPPER AND GUT) 860

HUMAN BLOOD AND
SERUM 4 708
(INFECTED OR NOT)

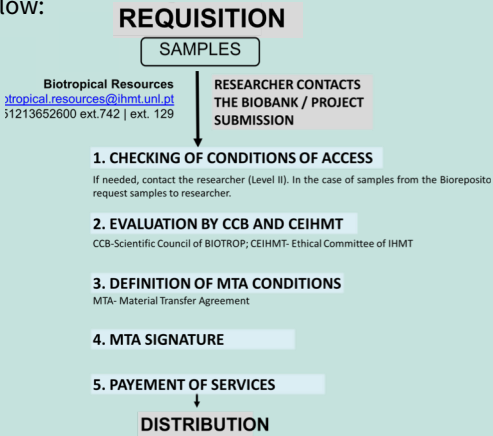
MOSQUITO
VECTORS 14 991

HIGHLIGHTED COLLECTION – HUMAN MICROBIOME



2 SAMPLE MANAGEMENT

Biobank is fully implemented and the first sample requests occurred this year. At the moment, one of the request is in phase **2** of the samples REQUISITION workflow:



3 SUSTAINABILITY

Biobank continues to provide a set of services:

- Biobank management support
- Culture/isolation: Bacteria; Virus; Parasites
- DNA/RNA extraction
- PCR
- qRT-PCR
- NGS
- Metagenomic
- IFA
- Sequence and gene expression analysis
- Other on request

4 VISIBILITY

- ✓ Bring biobank closer to the public through the participation in the ENCONTRO CIENCIA 2022 (16-18 May 2022, Lisbon/Portugal)




- ✓ Biobank management and best practice consultancy meeting with Solange Gil Neves and Frederico Aires da Silva, from the Faculty of Veterinary Medicine (University of Lisbon) (31st May 2022, Lisbon/Portugal)
- ✓ Networking visit to the INSA biobank under the coordination of Marta Barreto and Rita Cordeiro (23 June 2022, Lisbon/Portugal)
- ✓ Consolidation as an international partner, the Oswaldo Cruz Foundation - FIOCRUZ (Fiocruz Biological Collections and COVID19 Biobank) (04-08 July 2022, Rio de Janeiro/Brazil)





- ✓ BIOTROP online presentation at the II International Symposium on Human Genetics, Faculty of Medicine - Agostinho Neto University (14 July 2022, Luanda/Angola)
- ✓ Meeting with the Biobank Scientific Committee (6 December 2022, Lisbon/Portugal)
- ✓ Participation in the inauguration event of the MIRRI-ERIC European headquarters and networking meeting with the national microbiological resources network PT-mBRCN/MIRRI-PT (14 December 2022, Braga/Portugal)




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 <https://impact.webview.pt/2021/03/05/biotropical-resources-biobank/>
<http://biotropical.ihmt.unl.pt/>
<https://ghmt.ihmt.unl.pt/consultancy-and-services/>

 <https://www.facebook.com/biotropicalresources/>

 <https://www.instagram.com/biotropbiobank/>



FUTURE PLANS

Continue promoting biobanking activities standing as the national and international leading reference in the field of tropical infectious diseases.

- **Establish the Portuguese-Speaking Countries biobank network** (kick-off Seminar/April 2023)
- **Delineate a Business Plan**
- **Continue to attract the main target users** (increase samples turnover and establish new collections)
- **Implement sample quality assessment plan**
- **Increase scientific output**