Africa CDC Database

Technical Handbook

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1 Introduction

This handbook provides instructions for developing and maintaining the Research Information Gateway (RIG) - a resource that catalogs African infectious disease research to support continental public health initiatives on zoonotic pathogens.

1.1 About the database

EcoHealth Alliance is leading the development of a comprehensive database cataloging active infectious disease research initiatives and scientists across Africa. This resource centralizes information about scientific research on the continent specifically relevant to understanding, detecting, and responding to zoonotic pathogens.

Following integration with the Africa CDC Knowledge hub, this database will provide a detailed, searchable, and visual platform (accessible via a dashboard) containing data on major (multi-year) and active One Health research projects. It includes critical information such as:

- Research subject matter and focus areas
- Project duration
- Geographical locations and research sites
- Key personnel and investigators
- Links to publicly available reports, preprints, and publications

A particularly valuable feature is the directory of subject matter experts associated with research initiatives across the continent. This roster can be utilized by public health practitioners seeking expert consultations to support training activities, surveillance programs, or outbreak response efforts.

Part I

Database

2 Dolt

The Research Information Gateway (RIG) is structured as a relational database. Relational databases like MySQL provide structured data storage with powerful querying capabilities, allowing complex relationships between different types of data to be efficiently modeled and accessed. The RIG uses Dolt as its database solution, which combines Git-style version control with MySQL database functionality, offering the benefits of both technologies in one integrated system.

2.1 Benefits of DOLT

1. Complete data history tracking and rollback capabilities
2. Git-like operations (fork, clone, branch, merge, push, pull)
3. Conflict-free collaborative data editing
4. Flexible import and export of data through CLI, an R package (`doltr`) and the DoltHub API
5. MySQL compatibility for seamless integration with existing systems such as Africa CDC's Knowledge Hub

This approach brings software development best practices to data management while maintaining a familiar SQL interface.

3 Schema

The final unified table, africa_unified, integrates data from various sources with the following structure: (click to expand)

Field	Description
activity_id	Unique identifier for each activity or record
Title	Name of the publication or activity
Publication Link	URL to access the publication
Description	Detailed explanation of the content
Cover Image	Link to associated image
Data Category	Primary classification of the data
Data sub-Category	Secondary classification for more granular organization
Publication Category	Type of publication (e.g., journal article, report)
Geographical Coverage	Areas covered by the data
Geographical Coverage Country ISO	Standard country codes for geographic areas
Citation Link	Reference information for academic citation
Associated Authors	Names of contributors
Activity Type	Classification of action or research type
activity_start_date	When the activity began
activity_end_date	When the activity concluded
funder_name	Organization(s) providing financial support
topic_name	Subject matter classification
diseases	Health conditions addressed
disease_types	Categories of diseases covered
au_region_name	African Union regional classification
data_source	Origin of the data

3.1 Note

The database contains identifying information about researchers and is currently private. Contact Andrew Agaba for more information and access to the database.

Part II

Tools

4 Installing Dolt

Dolt is extremely simple to install. Dolt is a single ~100 megabyte program. To install it, you download or compile that program and put it on your PATH. To install in specific operating systems, follow the instructions below:

4.1 Windows

winget

```
winget install dolt
```

Chocolatey

```
choco install dolt
```

Both `.msi` files and `.zip` files are available.

Scoop

```
scoop install dolt
```

MSI Files

The easiest way to install Dolt on Windows is to use the MSI files that are provided with each release. They can be found in the Assets section of every release. Grab the latest here.

`.zip` Archive

For those preferring to install Dolt manually a zipped archive is provided with the requisite executables. It can be found in assets along with the latest release.

4.2 macOS

Install Script

The download script for Linux can be used, as OSX is a `*nix` system. It will download the appropriate binary, and place it in `/usr/local/bin`:

```
sudo bash -c 'curl -L https://github.com/dolthub/dolt/releases/latest/download/install.sh | l
```

Homebrew

A Homebrew formula is available with with every release, so Mac users using Homebrew for package management can build Dolt from source with a single command:

```
$ brew install dolt
==> Downloading https://homebrew.bintray.com/bottles/dolt-0.18.3.catalina.bottle.tar.gz
==> Downloading from https://d29vzk4ow07wi7.cloudfront.net/c03cc532d5045fa090cb4e0f141883685c
######################################################################## 100.0%
==> Pouring dolt-0.18.3.catalina.bottle.tar.gz
  /usr/local/Cellar/dolt/0.18.3: 7 files, 56.9MB
```

Which will install Dolt as follows:

```
$ ls -ltr $(which dolt)
lrwxr-xr-x  1 oscarbatori  admin  30 Aug 26 16:49 /usr/local/bin/dolt -> ../Cellar/dolt/0.18
```

MacPorts

On macOS, Dolt can also be installed via a community-managed port via MacPorts:

```
sudo port install dolt
```

4.3 Linux

For Linux users, an installation script is available that will detect your architecture, download the appropriate binary, and place in `/usr/local/bin`:

```
sudo bash -c 'curl -L https://github.com/dolthub/dolt/releases/latest/download/install.sh | s
```

The use of `sudo` is required to ensure the binary lands in your path.

5 DoltHub

DoltHub is GitHub for Dolt databases - a platform to share, collaborate on, and manage Dolt databases. DoltHub hosts public data for free and provides a modern, secure web GUI for database management.

As a Dolt remote, you can clone, push, pull and fetch from DoltHub. It adds collaborative features including:

- Permissions
- Pull requests
- Issues
- Forks
- A built-in SQL workbench for exploring and modifying databases through the web

5.1 DoltHub API

DoltHub offers an API with the following capabilities:

1. Authentication
2. SQL API - For read/write SQL queries to DoltHub databases
3. CSV API - For downloading CSV versions of DoltHub tables
4. Database API - For interacting with databases and pull requests
5. Hooks - For receiving notifications about database changes

6 R

R is a free and open-source programming language and software environment for statistical computing and graphics. Installation instructions are available on the R Project website. Developed in the early 1990s at the University of Auckland, R is widely used by statisticians, data analysts, and researchers across various fields.

R provides a comprehensive range of statistical and graphical techniques including linear and nonlinear modeling, statistical tests, time-series analysis, classification, and clustering. Its active community continuously develops new packages and extensions, making it powerful for data science applications. For the Research Information Gateway, R's ability to integrate with tools like Airtable through community-developed packages makes it particularly well-suited.

6.1 R Data Processing Workflow

6.1.1 Overview

The Research Information Gateway uses R to process dataset files before importing them into Dolt. This workflow handles data cleaning, transformation, and standardization.

6.1.2 Key Processing Steps

1. **Setup & Data Loading**
    - Installs required packages using pacman
    - Loads custom functions from the R folder
    - Reads source CSV files and reference data
2. **Data Transformation**
    - Converts dummy variables back to categorical data
    - Combines related fields (such as name components)
    - Converts separate year and month values into proper date formats
3. **Data Enrichment**
    - Maps entity names to standardized codes

- Identifies regional classifications
- Applies consistent mapping across related fields

4. **Data Cleanup**
    - Removes duplicates and empty columns
    - Standardizes NULL/NA/empty values
    - Validates field lengths
5. **Export & Database Import**
    - Exports processed data to CSV
    - Uses Dolt commands to import with appropriate primary keys

This workflow ensures data is properly structured, standardized, and ready for use in the Research Information Gateway's Dolt database.

Part III

Data Sources

7 PandemicPACT Overview

This is a description of the RIG database's primary data source, Pandemic PACT. We originally used a variety of data sources (summarized under Appendix, Alternate Sources), but replaced them with Pandemic PACT, which is a more comprehensive data source. Should Pandemic PACT become unavailable in the future, the Alternate Sources can be used instead.

8 Introduction

This document provides a review of the Pandemic PACT dataset. Specifically, this document:

1. Gives a brief description of what the Pandemic PACT dataset is about; and,
2. Reviews the fields available in the Pandemic PACT dataset and matches it to the fields available in EcoHealth Alliance's Research Information Gateway database.

9 Pandemic PACT Overview

The **Pandemic PACT** project is an initiative led by the Pandemic Sciences Institute at the University of Oxford. It aims to monitor and analyse global research efforts in pandemic preparedness, focusing on the development of diagnostics, therapeutics, vaccines, and other countermeasures for infectious diseases.

The project curates and tracks an extensive dataset, which include research projects, funding, and outputs from international studies. The objective is to provide insights into how resources are allocated and to identify gaps in global health security efforts. It emphasises equitable access to the benefits of research and innovation, particularly for vulnerable populations in lower-income regions.

9.1 The dataset

The data and tools developed through the Pandemic PACT project are hosted on platforms like Figshare[^1] and on its website[^2], enabling open access for researchers to analyse trends and contribute to pandemic readiness globally.

9.1.1 Curation process

The process of curating the Pandemic PACT dataset is described in their protocol and is summarised in Figure 9.1.

9.2 Data governance

In the Pandemic PACT's published protocol, it states its data governance procedures:

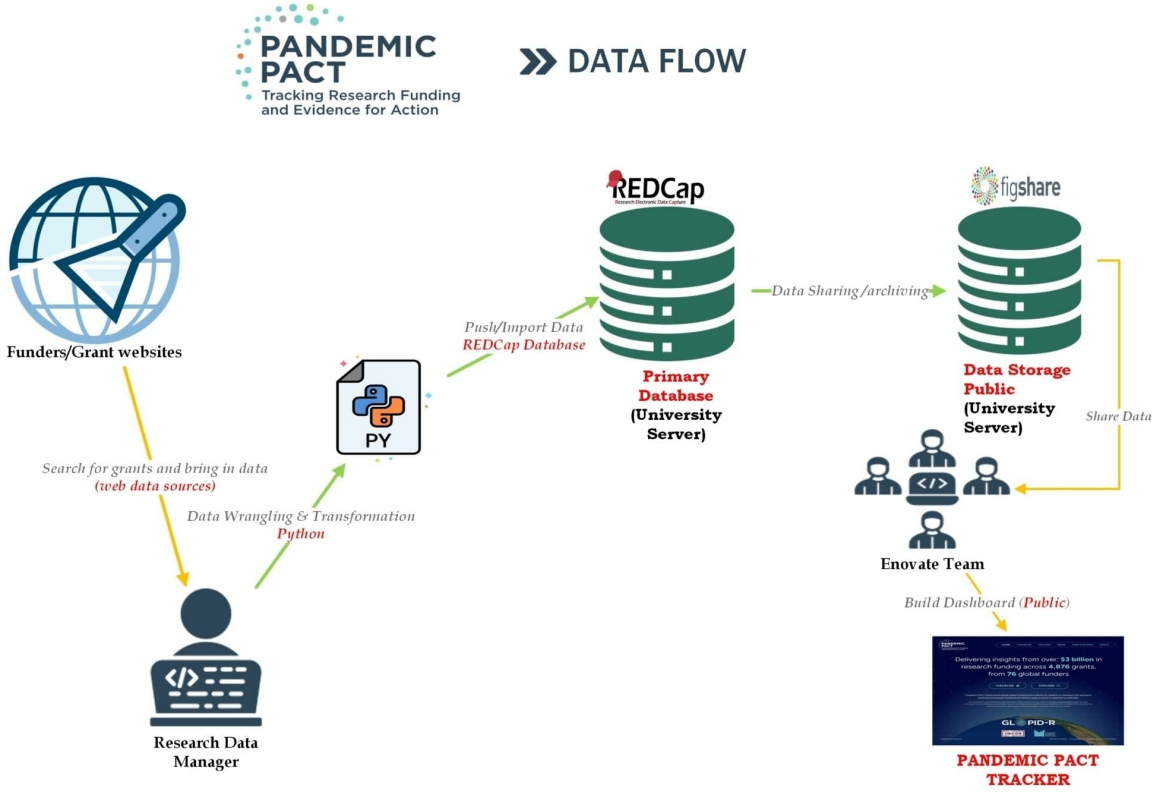


Figure 9.1: Pandemic PACT Data Flow
Source: https://www.pandemicpact.org/about/our-data

For the purposes of the Pandemic PACT project, we have collected data on researchers and their research outputs using names and Open Researcher and Contributor IDs (ORCIDs) ("personal" data). The University of Oxford are the 'data controller' for these data, which means we decide how to use it and are responsible for looking after it in accordance with the UK General Data Protection Regulation and associated data protection legislation. We share data with anyone who wishes to download and re-use the information under a CC-BY licence. We will only retain data for as long as we need it to meet our purposes, including any relating to legal, accounting, or reporting requirements. Data will be held securely in accordance with the University's policies and procedures. Further information is available on the University's Information Security website where information on rights in relation to personal data are explained.

9.2.1 Sources

The Pandemic PACT lists the following funders as their sources of information found in the dataset (see Figure 9.2).

Funder	COVID-19					Other New Disease				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
African Academy of Sciences (AAS)	No	Yes	No	No	No	No	No	No	No	No
Agence nationale de recherche sur le sida et les hépatites virale National Agency for AIDS Research (ANRS)	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	No
Bill & Melinda Gates Foundation	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
British Academy	Yes	Yes	No	No	No	No	No	No	No	No
Bundesministerium für Bildung und Forschung - German Federal Ministry of Education and Research (BMBF)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Canadian Institutes of Health Research (CIHR)	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
Coalition for Epidemic Preparedness Innovations (CEPI)	Yes	No	No	No	No	Yes	No	No	Yes	Yes
Consejo Nacional de Ciencia y Tecnología (CONACYT)	Yes	No	No	No	No	No	No	No	No	No
Department for Environment, Food and Rural Affairs (DEFRA)	Yes	Yes	No	No	No	No	No	Yes	No	No
Department of Health and Social Care / National Institute for Health and Care Research (DHSC-NIHR)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
European Commission	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Foreign, Commonwealth & Development Office (FCDO)	Yes	No	No	No	No	No	No	No	No	No
Fundação de Amparo à Pesquisa do Estado de São Paulo - São Paulo Research Foundation (FAPESP)	Yes	Yes	Yes	No	No	Yes	Yes	No	No	No
Global Alliance for Vaccines and Immunization (GAVI)	No	Yes	No	No	No	No	No	No	No	No
Indian Council of Medical Research (ICMR)	Yes	Yes	No	No	No	No	No	No	No	No
Institut Pasteur International Network (IPIN)	Yes	No	No	No	No	No	No	No	No	No
International Development Research Centre (IDRC)	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
Japan Agency for Medical Research and Development (AMED)	Yes	No	No	No	No	Yes	No	No	No	No
Ministerio de Ciencia, Tecnología e Innovación Ministry of Science, Technology and Innovation (MINCYT)	Yes	No	No	No	No	No	No	No	No	No
Ministry of Health - Italy	Yes	No	No	No	No	No	No	No	No	No
National Council for Science and Technology (NCST) Rwanda	No	Yes	No	No	No	No	No	No	No	No
National Health and Medical Research Council (NHMRC)	Yes	Yes	No	No	No	Yes	Yes	No	No	No
National Institute of Health Carlos III [El Instituto de Salud Carlos III (ISCIII)	Yes	No	No	No	No	No	No	No	No	No
National Institutes of Health (NIH)	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
National Research Foundation of Korea (NRF)	Yes	No	No	No	No	No	No	No	No	No
Netherlands Organisation for Health Research and Development (ZonMW)	Yes	Yes	No	No	No	No	No	No	No	No
Research Council of Norway (RCN)	Yes	Yes	No	No	No	No	No	No	No	No
South African Medical Research Council (SAMRC)	No	Yes	No	No	No	No	Yes	No	No	No
Swiss National Science Foundation (SNSF)	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No	No
UK Research and Innovation (UKRI)	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
WHO	Yes	Yes	No	No	No	No	No	No	No	No
Wellcome Trust	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No

Figure 9.2: Pandemic PACT data sources
Source: https://www.pandemicpact.org/about/our-data

10 Fetch Data

The primary data source for future updates to the Africa CDC Research Information Gateway is Pandemic PACT, a repository of global funding sources and research projects on diseases with pandemic potential.

10.1 Downloading the Latest Data

PandemicPACT data can be downloaded from figshare. The data is updated monthly and contains comprehensive pandemic-related surveillance information.

1. Navigate to the figshare link
2. Click the 'Switch View' button in the lower left of the figshare window to change to 'File View'
3. Download both the most recent data file (typically named "PACT_Data_YYYY_MM.csv") and the most recent data dictionary (typically named "PACT_Dictionary_YYYY_MM.pdf")
4. The most recent data present in this database was updated on 02/2025 data, data dictionary

10.1.1 Notes

- Date fields are formatted as YYYY-MM-DD
- Missing values are represented as "NA" or as " "
- Regional codes follow the standard PACT format (refer to the data dictionary)

11 Process Data

Scripts to process new PandemicPACT data and update the Research Information Gateway database are available at the acdc-db-search GitHub repository

11.1 Clone the Repository

1. Open your terminal or command line interface
2. Clone the `acdc-db-search` GitHub repository using one of these methods:
   - Using GitHub CLI:

     ```
     gh repo clone ecohealthalliance/acdc-db-search
     ```

   - Using HTTPS:

     ```
     git clone https://github.com/ecohealthalliance/acdc-db-search.git
     ```

3. Navigate to the cloned repository:

   ```
   cd acdc-db-search
   ```

This repository contains all the necessary scripts for data processing and database updates. See the repository

12 Update Database

12.1 Data Processing

1. Download PandemicPACT CSV files to the `data` folder
2. Run process_pandemic_pact_data.R script

12.2 Database Import

12.2.1 For Dolt

```
dolt table import -c -f --all-text --pk pactid pact_data_processed ../data/pact_data_processe
```

12.2.2 For DOLT or MySQL

MySQL Import Command: (click to expand)

```
LOAD DATA INFILE '../data/pact_data_processed.csv'
INTO TABLE pact_data_processed
FIELDS TERMINATED BY ','
ENCLOSED BY '"'
LINES TERMINATED BY '\n'
IGNORE 1 ROWS;
```

12.3 Update Unified Table

SQL for Updating africa_unified Table: (click to expand)

```
-- Step 1: Drop the existing tables if they exist
DROP TABLE IF EXISTS africa_unified;
DROP TABLE IF EXISTS africa_unified_temp;

-- Step 2: Create the temp table with data from both sources
```

```
CREATE TABLE africa_unified_temp (
 activity_id TEXT,
 Title TEXT,
 `Publication Link` TEXT,
 Description TEXT,
 `Cover Image` TEXT,
 `Data Category` TEXT,
 `Data sub-Category` TEXT,
 `Publication Category` TEXT,
 `Geographical Coverage` TEXT,
 `Geographical Coverage Country ISO` TEXT,
 `Citation Link` TEXT,
 `Associated Authors` TEXT,
 `Activity Type` TEXT,
 activity_start_date TEXT,
 activity_end_date TEXT,
 funder_name TEXT,
 topic_name TEXT,
 diseases TEXT,
 disease_types TEXT,
 au_region_name TEXT,
 data_source TEXT
);

-- Step 3: Insert the RIG data
INSERT INTO africa_unified_temp
SELECT
 activity_id,
 activity AS Title,
 activity_website AS `Publication Link`,
 abstract AS Description,
 NULL AS `Cover Image`,
 'Research and Development' AS `Data Category`,
 NULL AS `Data sub-Category`,
 NULL AS `Publication Category`,
 country AS `Geographical Coverage`,
 country_code as `Geographical Coverage Country ISO`,
 NULL AS `Citation Link`,
 researcher_name AS `Associated Authors`,
 activity_type AS `Activity Type`,
 activity_start_date,
 activity_end_date,
 funder_name,
```

```
 topic_name,
 diseases,
 disease_types,
 au_region AS au_region_name,
 source_name AS data_source
FROM
 rig_unified;

-- Step 4: Insert the PACT data with "Pandemic PACT" as Associated Authors
INSERT INTO africa_unified_temp
SELECT
 pactid as activity_id,
 grant_title_eng AS Title,
 NULL AS `Publication Link`,
 abstract AS Description,
 NULL AS `Cover Image`,
 'Research and Development' AS `Data Category`,
 NULL AS `Data sub-Category`,
 NULL AS `Publication Category`,
 research_location_country AS `Geographical Coverage`,
 research_location_country_iso AS `Geographical Coverage Country ISO`,
 NULL AS `Citation Link`,
 investigator_name AS `Associated Authors`,
 study_type_main AS `Activity Type`,
 grant_start_date AS activity_start_date,
 grant_end_date AS activity_end_date,
 funder_name,
 study_subject AS topic_name,
 disease AS diseases,
 families AS disease_types,
 research_location_au_region AS au_region_name,
 'Pandemic PACT' AS data_source
FROM
 pact_data_processed
WHERE
 research_location_au_region LIKE '%Africa%';

-- Step 5: Create final table with updated AU regions for blank values
CREATE TABLE africa_unified AS
SELECT
 t.activity_id,
 t.Title,
 t.`Publication Link`,
```

```
 t.Description,
 t.`Cover Image`,
 t.`Data Category`,
 t.`Data sub-Category`,
 t.`Publication Category`,
 t.`Geographical Coverage`,
 t.`Geographical Coverage Country ISO`,
 t.`Citation Link`,
 t.`Associated Authors`,
 t.`Activity Type`,
 t.activity_start_date,
 t.activity_end_date,
 t.funder_name,
 t.topic_name,
 t.diseases,
 t.disease_types,
 t.au_region_name,
 t.data_source
FROM
 africa_unified_temp t;

-- Clean up the temporary table
DROP TABLE africa_unified_temp;

DELETE FROM africa_unified
WHERE Title IS NULL;
```

Part IV

Appendix

13 Alternate Sources

Following is a list of alternate sources of information that were originally used for the RIG database. As Pandemic PACT uses all these sources and more, we have now switched to using Pandemic PACT as our primary data source. We have included these alternate sources as an Appendix so that they can be used if Pandemic PACT becomes unavailable in the future.

13.1 UKRI

UK Research and Innovation or UKRI is a non-departmental public body in the United Kingdom that was established in 2018. It brings together the seven UK Research Councils, Innovate UK, and Research England, which were previously separate organizations, to create a single body that oversees research and innovation funding and strategy in the UK.

The seven UK Research Councils are:

1. Arts and Humanities Research Council (AHRC)
2. Biotechnology and Biological Sciences Research Council (BBSRC)
3. Engineering and Physical Sciences Research Council (EPSRC)
4. Economic and Social Research Council (ESRC)
5. Medical Research Council (MRC)
6. Natural Environment Research Council (NERC)
7. Science and Technology Facilities Council (STFC)

Innovate UK is the UK's innovation agency, which provides funding and support for innovative businesses and projects.

Research England is responsible for funding and overseeing research in English universities and higher education institutions.

UKRI's main role is to drive innovation and research in the UK and to support research and development that benefits society and the economy. It funds research projects, provides support to researchers, promotes international collaboration, and works to ensure that research and innovation are integrated with government policies and priorities.

Of these various groups within UKRI, we further focused on the Biotechnology and Biological Sciences Research Council (BBSRC), Medical Research Council (MRC), Science and Technology Facilities Council (STFC), Innovate UK, and Research England.

13.2 Wellcome Trust

The Wellcome Trust is a global charitable foundation based in the UK. It was established in 1936 by Sir Henry Wellcome, a pharmaceutical entrepreneur and philanthropist. The Wellcome Trust is one of the largest charitable organizations in the world, with an endowment of over £29 billion.

The Trust's mission is to improve health by supporting scientists, researchers, and innovators in their work to understand, treat, and prevent disease. The Trust funds research in areas such as neuroscience, genetics, infectious diseases, and global health. It also provides support for public engagement with science, education and training for scientists, and the translation of research into practical applications that benefit patients and communities.

The Wellcome Trust is known for its long-term, strategic approach to funding research, and for its commitment to open science and data sharing. It also operates the Wellcome Collection, a public venue in London that hosts exhibitions and events related to health, medicine, and science.

13.3 National Institutes of Health

The National Institutes of Health (NIH) is a biomedical research agency of the United States federal government. It is the largest biomedical research institution in the world, with its main campus located in Bethesda, Maryland. The NIH is composed of 27 separate institutes and centers, each with a specific research focus, and is responsible for conducting and funding research in a wide range of areas, including cancer, genetics, infectious diseases, and neuroscience.

The NIH was founded in 1887 as the Hygienic Laboratory and was later renamed the National Institutes of Health in 1930. Today, it is one of the world's foremost centers for medical research, with a mission to seek fundamental knowledge about the nature and behavior of living systems and to apply that knowledge to enhance health, lengthen life, and reduce illness and disability. The NIH is funded by the U.S. government through the Department of Health and Human Services and operates under the direction of the Office of the Director.

13.4 National Science Foundation

The National Science Foundation (NSF) is an independent federal agency of the United States government that supports fundamental research and education across all fields of science and engineering. The NSF was established by the National Science Foundation Act of 1950 and has a budget of around $8 billion.

The NSF funds research and education in areas such as mathematics, computer science, physics, chemistry, biology, social sciences, and engineering. It supports individual researchers, small

teams, and large interdisciplinary research collaborations through a competitive, merit-based process of proposal submission and review. The NSF also supports the development of science, technology, engineering, and mathematics (STEM) education at all levels, from K-12 through graduate education.

The NSF operates through several directorates and offices, each with a specific research focus or mission, such as the Directorate for Biological Sciences, the Directorate for Social, Behavioral and Economic Sciences, and the Office of Polar Programs. The NSF works to advance scientific discovery, promote science education and outreach, and promote innovation and economic growth through its investments in research and education.

13.5 Defense Advanced Research Projects Agency

The Defense Advanced Research Projects Agency is a research and development agency of the United States Department of Defense that is responsible for the development of emerging technologies for use by the military.

DARPA was established in 1958 in response to the Soviet Union's launch of Sputnik, the first artificial satellite, and has been involved in a number of high-profile technological innovations, including the development of the Internet, GPS, and stealth technology.

DARPA's mission is to maintain the technological superiority of the U.S. military by sponsoring and conducting research in a wide range of fields, including artificial intelligence, robotics, biotechnology, materials science, and aerospace technology. DARPA works with academic researchers, private companies, and other government agencies to develop and test new technologies, and it is known for its high-risk, high-reward approach to research and development.

Some of DARPA's current research initiatives include the development of hypersonic weapons, the creation of autonomous drone swarms, and the development of brain-machine interfaces for use in treating neurological disorders. DARPA's work has had significant impacts on both military and civilian technology, and the agency is seen as a leader in cutting-edge research and development.

13.6 ClinicalTrials.gov

ClinicalTrials.gov is a publicly accessible database of clinical trials that are being conducted worldwide. It is maintained by the National Library of Medicine, a part of the National Institutes of Health (NIH) in the United States.

The database provides information on clinical trials for a wide range of diseases and conditions, including both interventional and observational studies. It includes information about the

purpose of the trial, who may participate, where the trial is being conducted, and the status of the trial, such as whether it is recruiting participants or has been completed.

ClinicalTrials.gov was created in response to a 1997 law requiring the registration of clinical trials for certain serious or life-threatening diseases or conditions. Since then, the database has grown to include information on thousands of trials from around the world.

ClinicalTrials.gov is an important resource for researchers, healthcare professionals, and members of the public who are interested in clinical research. It can be used to identify ongoing or completed trials, learn about the purpose and design of a study, and find out how to participate in a trial. It also serves as a platform for researchers to share their results and comply with the requirements of various funding agencies and regulatory bodies.

13.7 GEPRIS

Geförderte Projekte in der Forschung und Entwicklung (Funded Projects in Research and Development) or GEPRIS is an online database of research projects funded by the German Research Foundation (DFG).

The DFG is the largest independent research funding organization in Germany and funds projects across all scientific disciplines, from the humanities and social sciences to the natural and life sciences. GEPRIS provides information about the projects that the DFG has funded, including their aims, methods, and outcomes, as well as the institutions and researchers involved.

Researchers and members of the public can use GEPRIS to search for projects that have been funded by the DFG, and to access information about these projects. The database includes information about ongoing and completed projects, and users can search by various criteria, such as by researcher name, institution, scientific discipline, or project title.

GEPRIS is a valuable tool for researchers to identify potential collaborators, explore research trends, and find information about the funding landscape in their field. It is also useful for members of the public who are interested in learning about the research being conducted in Germany and the impact of this research on society.

13.8 EDCTP

European and Developing Countries Clinical Trials Partnership or EDCTP is a public-public partnership between countries in Europe and sub-Saharan Africa, established in 2003, with the aim of accelerating the development of new clinical interventions to fight infectious diseases that disproportionately affect Africa.

The partnership's mission is to improve the health of people in Africa by supporting the development of new medicines, vaccines, and other health interventions to prevent and treat diseases such as HIV/AIDS, tuberculosis, malaria, and neglected infectious diseases. EDCTP supports collaborative research projects that bring together scientists, institutions, and countries from both regions to conduct clinical trials and other research activities.

EDCTP works with a range of partners, including national governments, research institutions, civil society organizations, and the private sector, to support research that is relevant and responsive to the needs of African communities. It also provides training and capacity-building opportunities to support the development of sustainable health research infrastructure and expertise in Africa.

The partnership is funded by the European Union, its member states, and other donors. Since its inception, EDCTP has supported over 100 collaborative research projects and played a key role in advancing the development of new interventions for infectious diseases that affect the people of Africa.

13.9 GLOPID-R

Global Research Collaboration for Infectious Disease Preparedness or GLOPID-R is an international partnership that aims to strengthen global research efforts in the field of infectious disease preparedness. The partnership was established in response to the 2014 Ebola outbreak in West Africa, which highlighted the need for improved global coordination and collaboration in research and development for emerging and re-emerging infectious diseases.

GLOPID-R brings together stakeholders from the global health community, including research funders, policy-makers, researchers, and public health organizations. The partnership aims to promote international cooperation and coordination in research to accelerate the development of new tools and approaches to prevent, detect, and respond to infectious disease outbreaks.

GLOPID-R's main objectives include identifying research priorities for infectious disease preparedness, coordinating research efforts across different regions and countries, and promoting capacity building and knowledge exchange to strengthen global health research infrastructure.

The partnership focuses on a range of infectious diseases, including those caused by emerging and re-emerging pathogens, neglected tropical diseases, and antimicrobial resistance. It works to support research efforts across the entire spectrum of infectious disease preparedness, from basic research to clinical trials and implementation research.

GLOPID-R is supported by a range of funding agencies and partners from around the world and is seen as an important platform for promoting global cooperation and collaboration in infectious disease research and preparedness.

13.10 NRF South Africa

The National Research Foundation of South Africa (NRF) is an independent organization that promotes and supports research and innovation in all fields of science, engineering, technology, and social sciences in South Africa. The NRF was established in 1999 through the National Research Foundation Act and operates under the jurisdiction of the Department of Science and Innovation.

The NRF provides funding, develops policies, and manages research infrastructure to support South African researchers and institutions. It also fosters international collaboration in research, and supports the training and development of the next generation of researchers through various funding and fellowship schemes.

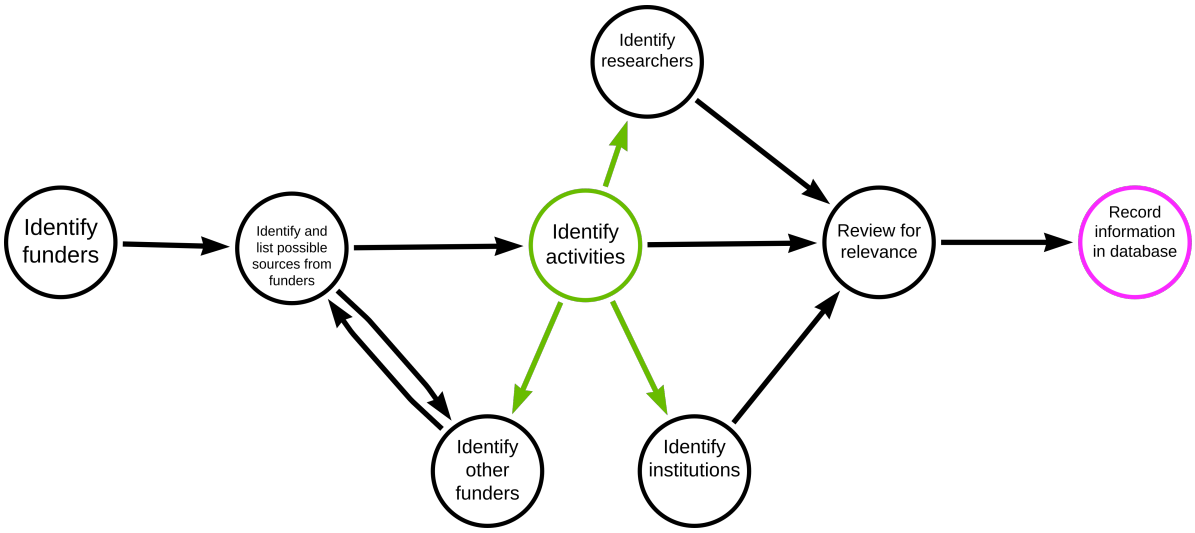
The NRF provides funding through a number of programs, including competitive grants, fellowships, and research chairs. It also supports the development of research infrastructure and the establishment of research centers of excellence.

In addition to providing funding and support for research, the NRF plays a key role in developing research policies and strategies at the national level. It advises the South African government on research priorities and is involved in various initiatives aimed at promoting science, technology, and innovation in the country.

The NRF is an important organization for the South African research community and has been instrumental in advancing the country's research and innovation capabilities. Its funding and support have contributed to numerous scientific discoveries and innovations in a wide range of fields, including health, energy, and the environment.

14 Update Alternate Sources

This is a summary of the previous update process for the RIG database, based on a variety of data sources. Should Pandemic PACT become unavailable as a data source in the future, these instructions can be used to download data from our alternate data sources.



Following are the source-specific process of updating or retrieving information for the RIG database.

14.1 Wellcome Trust Grant Funding Data

14.1.1 General Information

Using the downloadable spreadsheet of funds awarded between 01st of October 2005 and 4th of May 2022 found at https://cms.wellcome.org/sites/default/files/2022-05/Wellcome-grants-awarded-1-October-2005-to-04-05-2022.xlsx, the following steps were taken to retrieve relevant information for the database:

14.1.2 How to update

Please note that the steps below were done using the current available spreadsheet from the Wellcome Trust website and added the relevant projects to the RIG database. These steps can therefore be used as a guide for how to update the database with new information in the future to when the Wellcome Trust publishes its most up-to-date spreadsheet.

1. Go to column J – Recipient Org:Country -> deselect all and then select all the African countries in the list
2. Go to column N – Planned end date -> select all the years in the future
3. These two steps reduced the list from 19,833 projects to 111 projects
4. Read the project title and decide if the project is relevant for our database or not
5. If unsure, read the abstract – that also helps to identify the keywords to tag the project within our database
6. If the project is relevant transfer all the information into our database

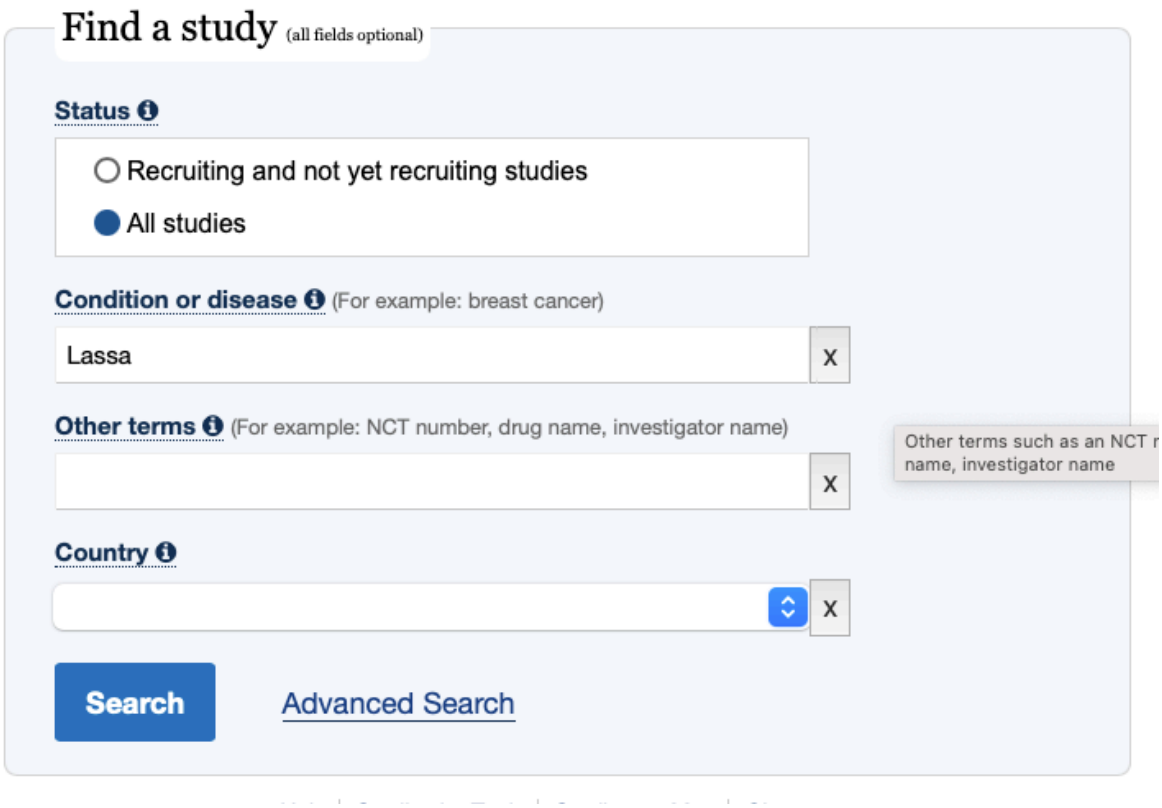
Note: This method is only able to detect projects/activities where an African organisation itself holds the grant. It does not detect projects where African researchers are involved as collaborators. The spreadsheet does not list collaborators on projects, so it's yet to be determined how we will identify projects on which African research institutes collaborate with international organisations being awarded the grant.

14.2 ClinicalTrials.gov

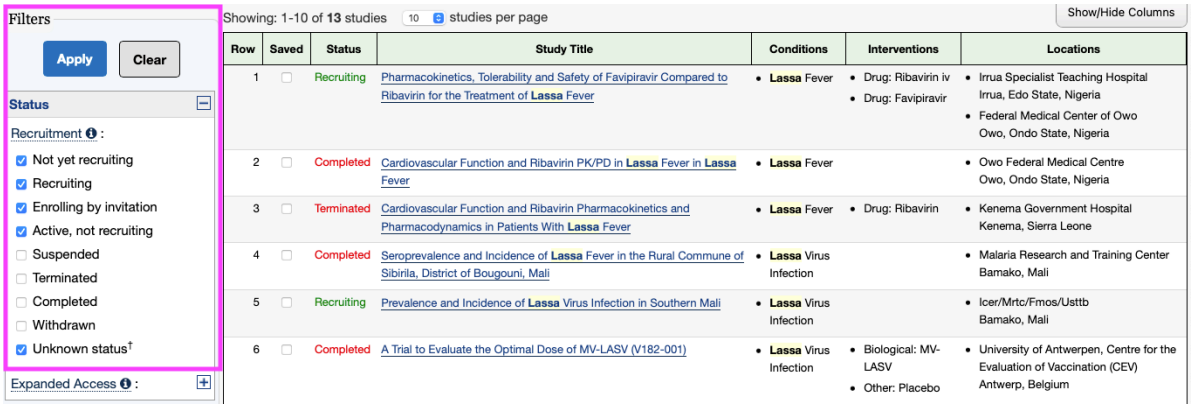
14.2.1 How to update

Following are steps taken to extract data from ClinicalTrials.gov.

1. Start with searching a disease/topic of interest



2. On the results page apply the following filters to look for active studies



3. Click on 'Apply' and then look manually through the column 'Locations' of the list of the results to find studies that take place in African countries

Row	Saved	Status	Study Title	Conditions	Interventions	Locations
1	☐	Recruiting	Pharmacokinetics, Tolerability and Safety of Favipiravir Compared to Ribavirin for the Treatment of **Lassa** Fever	• **Lassa** Fever	• Drug: Ribavirin iv • Drug: Favipiravir	• Irrua Specialist Teaching Hospital Irrua, Edo State, Nigeria • Federal Medical Center of Owo Owo, Ondo State, Nigeria
2	☐	Recruiting	Prevalence and Incidence of **Lassa** Virus Infection in Southern Mali	• **Lassa** Virus Infection		• Icer/Mrtc/Fmos/Usttb Bamako, Mali
3	☐	Active, not recruiting	Dose-ranging Study: Safety, Tolerability and Immunogenicity of INO-4500 in Healthy Volunteers in Ghana	• **Lassa** Fever	• Drug: INO-4500 • Device: CELLECTRA™ 2000 • Drug: Placebo	• Noguchi Memorial Institute for Medical Research, University of Ghana Legon, Accra, Ghana
4	☐	Recruiting	A Clinical Trial to Evaluate the Safety and Immunogenicity of rVSVΔG-LASV-GPC Vaccine in Adults in Good General Heath	• **Lassa** Fever • **Lassa** Virus Infection	• Drug: rVSVΔG-LASV-GPC • Other: Placebo/Diluent	• George Washington University Washington, District of Columbia, United States • East-West Medical Research Institute Honolulu, Hawaii, United States • Brigham and Women's Hospital Brookline, Massachusetts, United States • Redemption Hospital New Kru Town, Greater Monrovia, Liberia
5	☐	Recruiting	**Lassa** Fever Clinical Course and Prognostic Factors in Nigeria	• **Lassa** Fever • **Lassa** Virus Infection • Pregnancy	• Other: Non interventional research	• Owo Federal Medical Centre (Owo FMC) Owo, Ondo, Nigeria

4. Click on the first study to start working your way through the information available
5. The first information provided is the sponsor -> this information should be added to the Funder – column in the Activities table
6. Information about collaborators can be added to Collaborators column

Pharmacokinetics, Tolerability and Safety of Favipiravir Compared to Ribavirin for the Treatment of Lassa Fever (SAFARI)

The safety and scientific validity of this study is the responsibility of the study sponsor and investigators. Listing a study does not mean it has been evaluated by the U.S. Federal Government. Know the risks and potential benefits of clinical studies and talk to your health care provider before participating. Read our disclaimer for details.

ClinicalTrials.gov Identifier: NCT04907682

Recruitment Status : Recruiting
First Posted : June 1, 2021
Last Update Posted : August 20, 2021

See Contacts and Locations

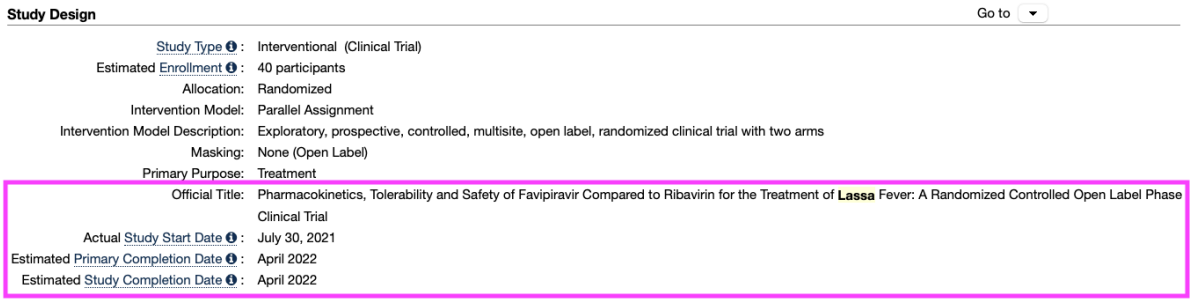
Sponsor:
Bernhard Nocht Institute for Tropical Medicine

Collaborators:
University of Hamburg-Eppendorf
Alliance for International Medical Action
Institut National de la Santé Et de la Recherche Médicale, France
University of Bordeaux
Federal Medical Centre, Owo
Irrua Specialist Teaching Hospital

Information provided by (Responsible Party):
Bernhard Nocht Institute for Tropical Medicine

7. Staying in the 'Study Details'-tab, scroll down to 'Study Design'
8. This section contains the official title, which should be used as the name for the Activity

9. Additionally it contains information about the start and end date, which should be copied into the respective fields in the Activities table



Study Design Go to

Study Type :	Interventional (Clinical Trial)
Estimated Enrollment :	40 participants
Allocation:	Randomized
Intervention Model:	Parallel Assignment
Intervention Model Description:	Exploratory, prospective, controlled, multisite, open label, randomized clinical trial with two arms
Masking:	None (Open Label)
Primary Purpose:	Treatment
Official Title:	Pharmacokinetics, Tolerability and Safety of Favipiravir Compared to Ribavirin for the Treatment of **Lassa** Fever: A Randomized Controlled Open Label Phase Clinical Trial
Actual Study Start Date :	July 30, 2021
Estimated Primary Completion Date :	April 2022
Estimated Study Completion Date :	April 2022

10. Scroll further down to 'Contact and Locations'
11. The information given under contacts should be added to the Researcher column in Airtable
12. Switching into the Researcher-table within in Airtable the given contact details should be added to the newly created entries for the involved researchers
13. Also the affiliation to a certain institute can be added based on these information as well as the researcher's location -> is it possible to link the Location with the Affiliation so that the location is automatically added based on the information about the institution the researcher is affiliated with?
14. Switch back into the Activities table and add information about the Locations to the Activity Location and the Institutions columns

Locations

Nigeria

Irrua Specialist Teaching Hospital — **Recruiting**
Irrua, Edo State, Nigeria
Contact: Peter Akhideno, Dr +2348037048831 ehideno@yahoo.co.uk
Contact: Cyril Erameh, Dr +2348032413382 cyrilerameh@gmail.com

Federal Medical Center of Owo — **Recruiting**
Owo, Ondo State, Nigeria
Contact: Oluwafemi Ayodeji, Dr femiayodeji@yahoo.com

Sponsors and Collaborators

Bernhard Nocht Institute for Tropical Medicine

University of Hamburg-Eppendorf

Alliance for International Medical Action

Institut National de la Santé Et de la Recherche Médicale, France

University of Bordeaux

Federal Medical Centre, Owo

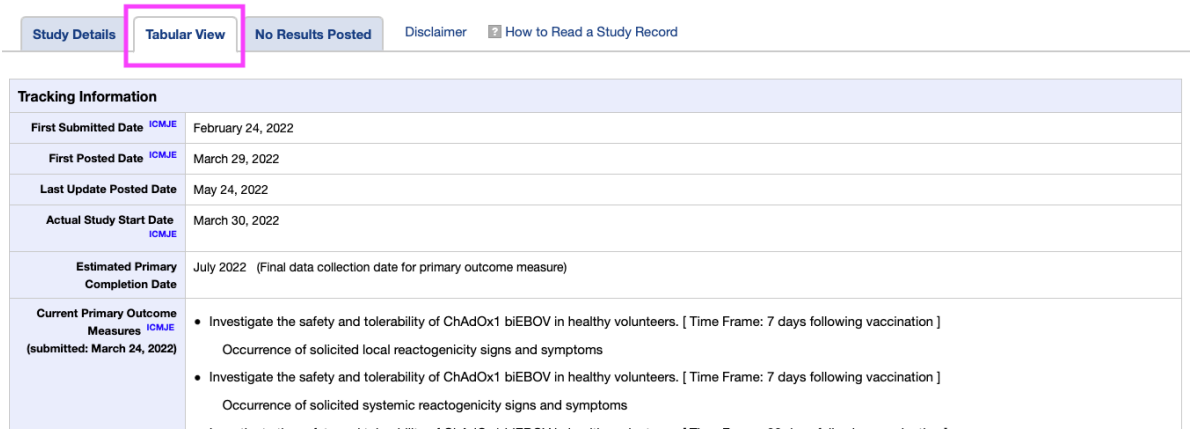
Irrua Specialist Teaching Hospital

Investigators

Principal Investigator:	Peter Akhideno, Dr	ISTH
Principal Investigator:	Sylvanus Okogbenin, Prof	ISTH
Principal Investigator:	Oluwafemi Ayodeji, Dr	FMCO

15. Scroll up again to the selection of tabs
16. Click on the Results tab -> it's worth checking this tab even when it's called No Results Posted as it might still contain links to publications that are affiliated with the study
17. These links can be copied into the Published Work column in the Activities table

18. I also copied the link of the study page on clinicaltrials.gov into the Activity Website column



19. to determine the Research Field, I had to use my own understanding of the study so I am not sure if this can be automated or rather needs to be done by a database librarian

14.3 Public journal/research databases

In order to aid in automation, maintain a list relevant search terms for each topic of interest (stored in the "Topics" table in Airtable). Even if the terms are not used for the purposes of developing a search strategy, they can be used by those who are not subject matter experts when collection information on a specific topic

14.3.1 Example of a successful search:

```
(zoonoses OR zoonotic disease OR zoonotic illness) and (africa*) and (surveillance OR trackin
```

The majority of results from this search, when conducted in PubMed, appeared relevant to the database (based on title/abstract scanning)

14.3.2 Example of PubMed search for surveillance activities for Brucellosis:

```
("surveillance"[Title/Abstract] OR "prevalence"[Title/Abstract] OR "monitoring"[Title/Abstrac
```

This search yielded a large quantity of results, not all of which were relevant. Manual processes are required to validate results.

Including terms to filter the results based on location were helpful, but still included results not located on the African continent. Search term to filter for African countries:

```
(Djibouti[Title/Abstract] OR Seychelles[Title/Abstract] OR DR Congo[Title/Abstract] OR Comor
```

From publications, can extract researchers, institutions, funders, activities. Ideally, researchers, institutions, and funders can be extracted automatically as opposed to manually, but scripts would need to be customized for each journal.

14.3.3 Validation of results

Validation of results can be useful to better understand the overlap between publications and activities and determine the priority of searching through publications vs. navigating to institution sites directly (or other strategies).

After finding a relevant publication, look at the publication's authors and their respective institutions

Navigate to institutions' sites to search for publications or results from research

Are their activities listed on the site? Are those activities explicitly mentioned in the publications? Etc.

14.3.4 Some relevant journals/databases:

- Zoonoses & Public Health from Wiley Online Library : https://onlinelibrary.wiley.com/action/doSearch?Se
- Journal of Public Health in Africa: https://www.publichealthinafrica.org/jphia/issue/view/30
- PLoS Journal of Neglected Tropical Diseases: https://journals.plos.org/plosntds/search?filterJournals=PL

14.4 GEPRIS

14.4.1 General Information:

GEPRIS is a database listing all projects funded by the German Research Foundation (German: Deutsche Forschungsgemeinschaft; abbr. DFG) The DFG is a research funding organisation, which functions as a self-governing institution for the promotion of science and research in the Federal Republic Germany. In 2019, the DFG had a funding budget of €3.3 billion.

14.4.2 How to Use:

The database can be accessed here: https://gepris.dfg.de/gepris/OCTOPUS?language=en&task=showSearchSi

This link should directly lead to the English version of the website, otherwise the language can be changed by clicking on English in the top right corner.

- In the database one can search for Projects, People, or Institutions – for our purpose the project option is the most relevant
- One can either search for keywords or filter for different criteria – for a systematic approach I found using the filtering options easier than going through all our

1. On the search start site stay in the Projects tab.
2. Click on Show extended search.
3. Under Subject Area select one of the following:
    - Agriculture, Forestry and Veterinary Medicine
    - Basic Research in Biology and Medicine
    - Medicine
    - Microbiology, Virology, and Immunology
    - Social Sciences
    - Water Research

- Zoology

Note: After working through all these subject areas, any relevant project in the field of One Health should be picked up by the searches

4. Leave everything under DFG Programme as it is
5. Move on to Funding and change Status to Current
6. Move on to International and change Continent to Africa
7. Click on Find
8. Read through the project titles on the results page to identify relevant projects
9. Import all the relevant project information (as highlighted on the screenshots) into the Africa CDC database

Projekt

The potential of nonhuman primates as a reservoir for human yaws

Applicants	→ Privatdozent Dr. Sascha Knauf, Ph.D., until 7/2019; → Professor Dr. Christian Roos
Subject Area	Parasitology and Biology of Tropical Infectious Disease Pathogens
Term	since 2014
Project identifier	*Deutsche Forschungsgemeinschaft (DFG)* *Project number 252488542*

Project Description

It has been propagated that human yaws caused by the bacterium Treponema pallidum subsp. pertenue (TPE) has no animal reservoir. Yet, reports of T. pallidum (TP) infection in nonhuman primates (NHPs) are accumulating. Several studies demonstrate simian infection with strains that are most closely related to human yaws-causing TPE strains. Our DFG funded study on NHP infection further supports the above mentioned findings. Data on simian TP strain diversity in Tanzania (TZ) are accumulating and reveal epidemiological insight into the spread of this conspicuous bacterium across the country. The phylogenetic branching pattern obtained from whole genome sequences of a greater number of simian strains (West and East Africa) suggests a rapid initial radiation of TPE across humans and NHPs and that at least ancestral TPE strains were most likely not host species specific. The East African Lake Manyara National Park simian strains reveals an overall gene synteny (including rRNA operons) with str. Gauthier with only 8.9% amino acid differences. A complete picture of TP infection in humans and NHPs including the definite answer to the NHP reservoir question will, however, only assemble when existing data on simian infection are compared to a greater number of circulating human TP(E) strains, which originate from areas with characterized simian infection.We hypothesize that humans and NHPs in TZ share the same TP(E) strains and also that NHPs in (Ghana) GH are infected with TP. While GH reports yaws until today, there is a chance of hidden TPE infections in humans in TZ, a country that currently does not report yaws, but harbors a great number of infected NHP species. DNA based assays (e.g. LAMP) are designed to fast-track identification on the subspecies level complementing the serological testing. This will increase specificity of yaws diagnosis from atypical clinical manifestations followed by whole genome sequencing.


increase specificity of yaws diagnosis from atypical clinical manifestations followed by whole genome sequencing. Simian and human TP strains from Africa have not yet been investigated using an integrated approach, and the results obtained are crucial for the understanding of Treponema evolution and epidemiology as well as to answer the important question on inter-species transmission. New laboratory TP strains will allow advanced immunological research and the creation of translational animal models which could open new pathways for vaccine development and testing. The project combines basic research in the field of Treponema infection with continues One Health capacity building and early-career research training at the African locations. A South-South partnership is created to support scientific excellence in the field of infectious disease research, addressing an urgent need in TZ and GH. Research activities of this project are logically expanded towards a yaws endemic country (GH). The project is expected to improve local health care services in TZ and GH and has the potential to support public health initiatives in post-yaws MDA surveillance.

DFG Programme	Research Grants
International Connection	Ghana, Tanzania
Co-Investigators	→ Idrissa S. Chuma; → Dr. Julius D. Keyyu; → Inyasi A. V. Lejora
International Co-Applicants	→ Professor Dr. Rudovick Kazwala; → Dr. Sayoki Mfinanga, Ph.D.; → Dr. Augustina Sylverken

10. To identify the research institutes that are involved in the project one has to click on the researchers names and extract that information from their profile (their affiliation with a research institute is listed there)

14.4.3 Positive aspects of this source:

The filtering options allow to filter for several criteria which are crucial for the relevance of a project to our database. That removes a lot of irrelevant projects from the results pages. The project pages list almost all the information we are interested in.

14.4.4 Downsides of this source:

The project page doesn't list the anticipated end date of a project.

One has to click on the link to the researcher's profile to identify the participating organisations.

Even using all the different filtering options not all resulting hits are relevant for our database, so I don't think the process can be fully automated or at least requires a subsequent manual validation or clean up step to remove irrelevant projects.

14.5 EDCTP

14.5.1 General Information

The European & Developing Countries Clinical Trials Partnership (EDCTP) is a non-profit organisation with a European office in The Hague, The Netherlands and an African office in Cape Town, South Africa. EDCTP is a partnership between European Union (EU), Norway, Switzerland, and African countries to accelerate the development of new clinical interventions such as drugs, vaccines, microbicides, and diagnostics against poverty-related diseases in Africa. The organisation supports clinical trials, capacity strengthening and networking in Africa and Europe. Funding comes from the EU, member states, pharmaceutical industry and private organisations and charities like The Wellcome Trust and The Bill & Melinda Gates foundation.

Note: Since funding comes from several sources that we also list as sources for populating the database such as the European Union (European Commission), The Wellcome Trust and The Bill & Melinda Gates Foundation, there is the possibility that downloading project information from all these sources into our database could lead to duplicate entries. I created a column in the Actvities table for the Project ID, as this might be helpful to identify duplicates and remove them automatically.

14.5.2 How to use:

The database of funded project can be accessed here: https://www.edctp.org/edctp2-project-portal/

There is the option to download the list of projects as a PDF, CSV or XLXS file. Personally, I did not find that helpful for manually adding projects to the database, but it might be useful for an automated process.

1. Go to Status of Project and select the filter Active
2. Go to Classification and select one of the following filters:

    - Co-Infections
    - COVID-19
    - Cysticercosis/Taeniasis

    - Diagnostics
    - Diarrhoeal Diseases
    - Drugs
    - Emerging Infections, incl. Ebola, Lassa
    - Epidemiology
    - HIV

- Human African trypanosomiasis (sleeping sickness)
- Implementation Research
- Leishmaniases
- Leprosy (Hansen disease)
- Lower respiratory infections
- Lymphatic filariasis
- Malaria
- Microbicides
- Onchocerciasis (river blindness)
- Rabies
- Schistosomiasis
- Soil-transmitted helminthiasis
- Social Science
- Tuberculosis
- Vaccines
- Yaws
- Yellow Fever

Note: Only one Classification at a time can be selected

3. Once one Classification was selected click on search
4. Change from Show Map to Show List -> this makes it easier to systematically look through the projects
5. On the results list you can see the location of the coordinating organisation, but even if it is not in an African country, it is worth checking the project details for the Participating Organisations. So read the project title and decide whether this could be a relevant project, if so, click on View details

Improved flucytosine formulation for the treatment of meningitis in advanced HIV disease

Reference: RIA2018CO-2516

Acronym: 5FC HIV-Crypto

Project Website:

Coordinating Organisation: Drugs for Neglected Diseases Initiative (DNDi), Switzerland

Coordinating Organisation Website: https://dndi.org/

Name of Coordinator: Dr Isabela Ribeiro

Participating Organisations:

- St. George's Hospital Medical School, United Kingdom
- Luxembourg Institute of Health (LIH), Luxembourg
- National Institute for Medical Research - Tanzania (NIMR), Tanzania, United Republic of
- FARMOVS (Pty) Ltd, South Africa
- University of North Carolina Project-Malawi (UNC Project-Malawi), Malawi

Grant Amount: € 3,537,000.00

Start Date: Jul 1, 2020

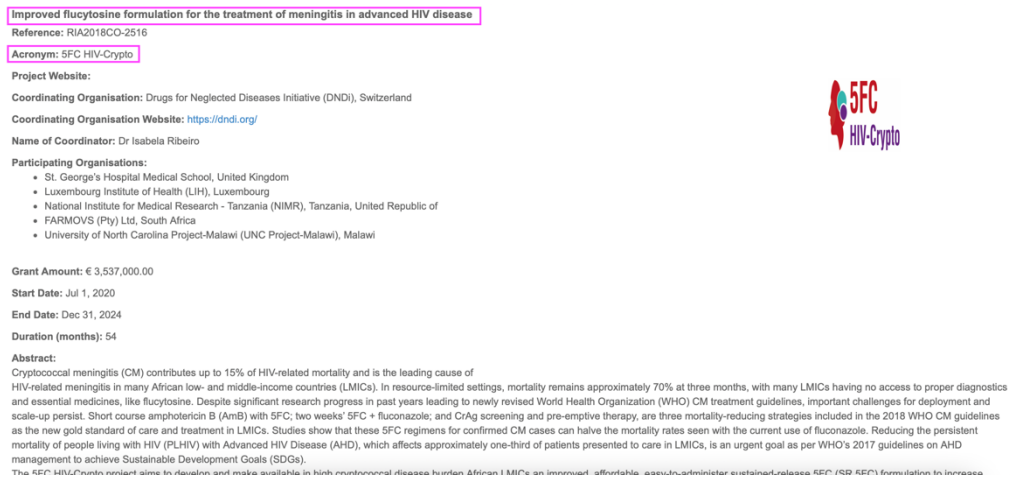
End Date: Dec 31, 2024

Duration (months): 54

Abstract:

Cryptococcal meningitis (CM) contributes up to 15% of HIV-related mortality and is the leading cause of HIV-related meningitis in many African low- and middle-income countries (LMICs). In resource-limited settings, mortality remains approximately 70% at three months, with many LMICs having no access to proper diagnostics and essential medicines, like flucytosine. Despite significant research progress in past years leading to newly revised World Health Organization (WHO) CM treatment guidelines, important challenges for deployment and scale-up persist. Short course amphotericin B (AmB) with 5FC; two weeks' 5FC + fluconazole; and CrAg screening and pre-emptive therapy, are three mortality-reducing strategies included in the 2018 WHO CM guidelines as the new gold standard of care and treatment in LMICs. Studies show that these 5FC regimens for confirmed CM cases can halve the mortality rates seen with the current use of fluconazole. Reducing the persistent mortality of people living with HIV (PLHIV) with Advanced HIV Disease (AHD), which affects approximately one-third of patients presented to care in LMICs, is an urgent goal as per WHO's 2017 guidelines on AHD management to achieve Sustainable Development Goals (SDGs).

6. Check the Participating Organisations first to decide whether the project is relevant to our database:



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Abstract:

Cryptococcal meningitis (CM) contributes up to 15% of HIV-related mortality and is the leading cause of HIV-related meningitis in many African low- and middle-income countries (LMICs). In resource-limited settings, mortality remains approximately 70% at three months, with many LMICs having no access to proper diagnostics and essential medicines, like flucytosine. Despite significant research progress in past years leading to newly revised World Health Organization (WHO) CM treatment guidelines, important challenges for deployment and scale-up persist. Short course amphotericin B (AmB) with 5FC; two weeks' 5FC + fluconazole; and CrAg screening and pre-emptive therapy, are three mortality-reducing strategies included in the 2018 WHO CM guidelines as the new gold standard of care and treatment in LMICs. Studies show that these 5FC regimens for confirmed CM cases can halve the mortality rates seen with the current use of fluconazole. Reducing the persistent mortality of people living with HIV (PLHIV) with Advanced HIV Disease (AHD), which affects approximately one-third of patients presented to care in LMICs, is an urgent goal as per WHO's 2017 guidelines on AHD management to achieve Sustainable Development Goals (SDGs).

The 5FC HIV-Crypto project aims to develop and make available in high cryptococcal disease burden African LMICs an improved, affordable, easy-to-administer sustained-release 5FC (SR-5FC) formulation to increase

7. If the project is relevant use the Project Name + Acronym for the Activity Column
8. Transfer all the relevant information to our database, including Project ID, Start and End date, Participating Organisations and corresponding locations, Project Website, Coordinating Organisation and Coordinating Researcher
9. Tag the project with the correct keywords in the Activity Type, Activity Outputs, Target Species, Topic, and Research Field columns based on your understanding of the project abstract

14.5.3 Benefits of this Source:

The projects can be easily filtered for currently active projects.

The EDCTP is specifically focused on projects in Africa or Europe with African collaborators so most projects fulfil at least one of our selection criteria

A lot of the projects (not all) are also topic-wise relevant for our database

The database lists most of the information that we are interested in for our database

14.5.4 Shortcomings of this source:

Only one disease/topic can be selected at a time so sequential searches are necessary

Project details only list the Coordinating researcher but no other lead researchers at the participating organisations

Part V

Exporting the Database

15 Exporting Data

The Research Information Gateway offers two primary methods to export data from Dolt:

1. **SQL Dump**: Generate a complete database dump in SQL format for importing into other database systems like MySQL. This approach exports the entire database with schema and data.
2. **CSV Export via DoltHub API**: Extract specific tables or query results as CSV files through the DoltHub API. This method is useful for targeted exports or when you need data in a format compatible with spreadsheet applications.

15.1 Exporting Data to a MySQL Database

1. Open the terminal or command prompt.
2. Navigate to the Dolt database directory.
3. Run the following command to create a SQL dump file:

   ```
   dolt dump -f
   ```

4. This will create a file called `doltdump.sql` that contains all the SQL statements needed to recreate the database structure and data.

15.1.1 Notes

The doltdump.sql is currently ~ 235Mb in size.

15.2 Importing Data into MySQL

1. Make sure MySQL is installed and running.
2. Import the dump file into the MySQL database:

   ```
   mysql -u username -p database_name < doltdump.sql
   ```

   Replace `username` with the appropriate MySQL username and `database_name` with the name of the target MySQL database.
3. When prompted, enter the MySQL password.
4. Wait for the import process to complete.

15.2.1 Notes

- The generated SQL dump contains standard SQL that's compatible with MySQL.
- This approach migrates both the schema (tables, views, etc.) and data in one operation.
- You may need to create the target MySQL database first if it doesn't already exist.