11/27/21, 7:07 AM RePORT ) RePORTER

Back to Search Results

**Description** 

**Details** 

Sub-Projects

**Publications** 

**Patents** 

**Outcomes** 

**Clinical Studies** 

**News and More** 

<u>History</u>

**Similar Projects** 

## Clinical and genetic studies of hereditary neurological disorders in Mali

**Project Number Contact PI/Project Leader** 3U01HG007044-07S1 LANDOURE, GUIDA

Awardee Organization **UNIV OF SCIENCES, TECH** & TECH OF BAMAKO

or onare ▼



#### **Abstract Text**

Summary Despite the vast diversity of its populations, genetic studies in Africa have been limited. African populations, Malians in particular, have a high rate of intra-ethnic and consanguineous marriage, resulting in increased prevalence of autosomal recessive diseases. Family-based genetic studies can be limited in developed countries due to small sib ships. The average fertility rate in Mali is over 6 births per woman, offering a unique opportunity to find new disease genes or mutations that can then be studied in other populations. Neurological disorders present public health challenges globally with total disability- adjusted life years (DALYs) greater than some infectious diseases. These challenges are even greater when considering hereditary neurological diseases that cause premature death, severe disability and loss of productivity, resulting in high health care costs. Although most are currently untreatable, increasing awareness and community engagement about hereditary neurological disorders can reduce this burden. Our previous studies have established the molecular defects in a good number of families and identified variants in novel genes. Through genetic counseling and community engagement session, patients and families as well as their communities have gained knowledge regarding the cause of these diseases; lifting in part the psychosocial burden, and orienting their partner choice. However, more work is needed for a full understanding of the mechanism of these diseases. Despite the increased number of trained physicians and students in the characterization of these diseases and the basics in genetics, many other families haven't gotten access to medical genetic services. Standard genetic testing in several other families has been inconclusive, confirming our premise that Malians have specific phenotypic variants of hereditary neurological disorders that may be due to novel mutations or to mutations in as yet undiscovered genes. The infrastructures built with the previous award have created a suitable environment to perform state-of-art research and train the next generation African scientists. To ensure sustainability, African government should be fully engaged to empower genetic training and research funding. With this support, African scientists and clinicians would be ready to meet emerging medical genetics and genomic challenges. With the commitment of some African leaders and philanthropists, there is a hope that Africans will soon fund a big part of the research in Africa.

#### **Public Health Relevance Statement**

Project narrative This project will identify new clinical and genetic neurological entities that may be studied in other populations. Genetic counseling and community engagement will have more impact in decreasing stigma and perhaps decreasing the rate of consanguineous marriages with the effect of reducing the burden of recessive diseases in the Malian population. The acquired infrastructures will set the stage for training the next generation African scientists, and for scientific productivity and advances to ensure sustainability for future generations.

#### NIH Spending Category

**Behavioral and Social Science** Clinical Research Biotechnology **Genetic Testing** 

Genetics **Health Services Human Genome Neurosciences** 

#### **Project Terms**

**Affect** Africa Africa South of the Sahara African Award Awareness

Cessation of life **Biology** Birth **Cell Culture Techniques** Clinical

RePORT ) RePORTER 11/27/21, 7:07 AM

#### Back to Search Results

**Description** 

**Details** 

**Sub-Projects** 

**Publications** 

**Patents** 

**Outcomes** 

**Clinical Studies** 

**News and More** 

<u>History</u>

**Similar Projects** 

## Clinical and genetic studies of hereditary neurological disorders in Mali

**Project Number** 3U01HG007044-07S1 **Contact PI/Project Leader** LANDOURE, GUIDA

**Awardee Organization UNIV OF SCIENCES, TECH** & TECH OF BAMAKO

**Genetic Services Genetic study Genetic Diseases Genetic screening method** 

**Read More** 

**Details** 

**Contact PI/ Project** Leader

Name

LANDOURE, GUIDA

Title DR Contact

g.landoure@ucl.ac.uk

**Other Pls Program Official** 

Not Applicable Name

TROYER, JENNIFER L

Contact

troyerj@mail.nih.gov

### **Organization**

Name **UNIV OF SCIENCES, TECH & TECH OF BAMAKO** 

City **BAMAKO** Country MALI (ML) Department Type Unavailable **Organization Type** 

Unavailable

State Code

**Congressional District** 

### **Other Information**

FOA RFA-RM-16-015

**Study Section** 

ZHG1-HGR-M(M1)

**Award Notice** 

Date

Fiscal Year 28-August-2019 2019

Administering Institutes or

Centers

**NATIONAL HUMAN GENOME RESEARCH INSTITUTE** 

565539819 172

**DUNS Number CFDA Code** 

27-**Project Start** 

Date September-

2013

Project End

30-June-

2022 Date

**Budget Start** 28-August-2019 Date

**Budget End** 30-June-2020 Date

### **Project Funding Information for 2019**

**Total Funding Indirect Costs Direct Costs** \$134,837 \$130,997 \$3,840

Year **Funding IC** FY 7 2019 NATIONAL HUMAN GENOME RESEARCH INSTITUTE \$134,837

#### Click here for more information on NIH Categorical Spending **NIH Categorical Spending**

**FY Total Cost by IC Funding IC NIH Spending Category** Behavioral and Social NATIONAL HUMAN GENOME RESEARCH INSTITUTE \$134,837

Science; Biotechnology; Clinical Research; Genetic

Thank you for your feedback!

11/27/21, 7:07 AM RePORT ) RePORTER

**✓ Back to Search Results**

**Description** 

**Details** 

Sub-Projects

Publications

**Patents** 

**Outcomes** 

**Clinical Studies** 

News and More

History

**Similar Projects** 

## Clinical and genetic studies of hereditary neurological disorders in Mali

Project Number Contact PI/Project Leader 3U01HG007044-07S1 LANDOURE, GUIDA

Awardee Organization
UNIV OF SCIENCES, TECH
& TECH OF BAMAKO

No Sub Projects information available for 3U01HG007044-07S1

## **Publications**

No Publications available for 3U01HG007044-07S1

# > Patents

No Patents information available for 3U01HG007044-07S1

### Outcomes

The Project Outcomes shown here are displayed verbatim as submitted by the Principal Investigator (PI) for this award. Any opinions, findings, and conclusions or recommendations expressed are those of the PI and do not necessarily reflect the views of the National Institutes of Health. NIH has not endorsed the content below.

No Outcomes available for 3U01HG007044-07S1

## Clinical Studies

No Clinical Studies information available for 3U01HG007044-07S1

# News and More

### **Related News Releases**

No news release information available for 3U01HG007044-07S1

# History

No Historical information available for 3U01HG007044-07S1

# **Similar Projects**

No Similar Projects information available for 3U01HG007044-07S1