

UNIVERSITY OF SCIENCES, TECHNIQUES AND TECHNOLOGIES OF BAMAKO (USTTB)

**AFRICAN CENTER OF EXCELLENCE IN BIOINFORMATICS AND
DATA SCIENCES (ACE-MALI)**



**AFRICAN CENTER
OF EXCELLENCE**
IN BIOINFORMATICS &
DATA SCIENCE (ACE-B)
MALI

Presentation

May, 2024

MISSION ET OBJECTIVES

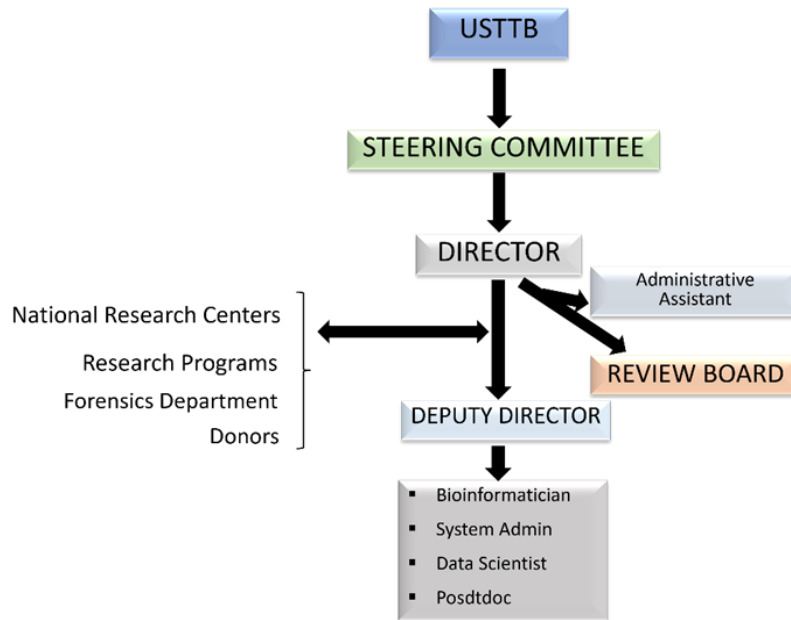
The African Center of Excellence in Bioinformatics and Data Sciences (ACE-Mali) is a research and training center created in December 2014, thanks to a fruitful collaboration between the National Institutes of Health (NIH) and the University of Sciences, Techniques and Technologies of Bamako (USTTB). The center is supported by the National Institute of Allergy and Infectious Diseases (NIAID), private sector companies, and the Foundation for the NIH (FNIH) through a public-private partnership based on in-kind contributions.

The purpose of this center is to reduce the threat of global infectious disease through improved access to tools, training, and mentoring in bioinformatics and data-intensive sciences for biomedical and life sciences research. The center addresses fundamental barriers to biomedical and life sciences research in Africa by offering high-performance computing infrastructure, bioinformatics tools, and training to African researchers and scientists.

The ACE's Mali mission is to :

- Provide high-quality training at MSc and PhD degrees in Bioinformatics and Data sciences.
- Carry out relevant, high-level research as the basis for high-quality training at the master's and doctorate levels that takes into consideration the One Health concerns.
- Build a strong African collaborative Network for innovative and impactful considerations.
- Provide expertise, mentorship, Training, and access to cutting-edge technologies and tools in Bioinformatics and data sciences to African researchers and scientists.

ACE-Mali Organigram



STEERING COMMITTEE

Is the Main governing body and is headed by the vice-rector of the USTTB.



Vice-Rector of USTTB: Chair
Prof. Mahamadou DIAKITE,
Immunogenetics



Dean of Faculty of Medicine (FMOS)
Prof. Seydou DOUMBIA, Public health



Director of National Center of Scientific Research and Technology (CNRST)
Prof. Drissa SAMAKE,
Chemistry



Representative of USTTB Research programs
Prof. Abdoulaye DJIMDE,
Parasitology/ Molecular Biology



Representative of Technical and Scientific Police
Dr. Mamadou BADIAGA, Chemistry



Director of ACE-B
Prof. Mamadou WELE
Biochemistry & Molecular Biology



Deputy Director of ACE-B
Dr. Cheickna CISSE,
Biochemistry & Bioinformatics

Deans and Director of USTTB



Dean of Faculty of Sciences & Techniques (FST)
Prof. Fana TANGARA, Mathematics



Dean of Faculty of Pharmacy (FAPH)
Prof. Boubacar TRAORE,
Immunology



Director of Institute of Applied Sciences (ISA)
Prof. Bourama TRAORE, Chemistry

Ex-officio, non-voting members














Representative of Institute Pasteur de Tunis (Tunisia)
Dr. Alia BENKAHLA,
Informatics/Bioinformatics



Representative of ACE Uganda (Uganda)
Prof. Daudi Jjingo,
Bioinformatics

REVIEW BOARD

Is in charge of research and training programs and is headed by the Director of ACE-Mali

		Representatives of Faculties and Institute of USTTB	Representatives research and programs and Centers
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Director of ACE-B: chair Prof. Mamadou WELE Biochemistry & Molecular Biology	 Director of USTTB Doctoral School (EDSTM) Prof. Amagana DOLO, Parasitology	 Representative of Faculty of Medicine (FMOS) Dr. Oumar SAMASSEKOU Neuro Genomics	 Representative of Research Center on Sickle Cell Disease (CRLD) Dr. Aldjouma GUIINDO Hematology
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		 Representative of Institute of Applied Sciences (ISA) Dr. Tidiane SYLLA Informatics	

RESEARCH TRAINING GRANTS

- 2RTW010673 West African Center of Excellence for Global Health Bioinformatics Research Training Tulane University and USTTB (WACEB) (Mali, USA), 2017-23
- 1U2RTW010679 West African Sustainable Leadership and Innovation Training in Bioinformatics Research (WASLITBRe) (Nigeria, Ghana and Mali) 2017-23
- H3ABioNet Pan African Bioinformatics Network for the Human Heredity and Health in Africa (H3Africa) consortium (Mali, UCT) 2017-23
- 1U2CEB032224 eLwazi ODSP Open Data Science Platform (Mali, UCT, Uganda) 2021-26
- UE5 Research Education Program: West Africa Center of Excellence for Data Science Research Education 2023-26

RESEARCH ACTIVITIES

- *Identification of promising **COVID-19 Drugs Candidates** from African natural products*

- *Prediction of **Malaria Drug Candidates** by **Molecular Modeling approaches***
- *Metagenomics analyses to understand **Rice plants diseases***
- *Genetic analyses of highly prevalent **Non-Communicable Diseases (NCDs)***
- *Analysis *in silico* for prediction of **Malaria Vaccine Candidates***
- *Genomic analyses of **Malaria infections** in children*

PARTNERS



ACE Global Consortium



U.S.T.T-B



MAKERERE UNIVERSITY



AFRICAN CENTERS OF EXCELLENCE IN BIOINFORMATICS

Foreign partners



Research Structures



A Mali-US Biomedical Research Partnership



funders



eLwazi
OPEN DATA SCIENCE PLATFORM



Equipment & Consulting

