

West African Center of Excellence for Global Health Bioinformatics Research Training



The Goal: to build a sustainable bioinformatics research training program that will foster genomics approaches to address global health issues in West Africa.

The Problem

Researchers working in the life sciences are generating data of increasing size and complexity due to modern research techniques. Interpreting this data is essential for understanding health and disease and developing solutions to improve African and global health. Considering this and also the lack of modern research infrastructure in Africa, there is an ever-increasing need to develop the human and physical capacity for bioinformatic research in Africa to enable the interpretation of valuable African genomics data.

Project Strategy

1. Strengthen local leadership in bioinformatics training and research to address the need for advanced bioinformatics and data sciences research expertise in Africa.
2. Enhance existing graduate bioinformatics training at University of Bamako/University of Sciences, Techniques and Technology of Bamako (USTTB) including a doctoral program and advances courses in Bioinformatics and genomics.
3. Produce and enhance the careers of trainees and provide support to clinical and laboratory researchers for use of bioinformatics and genomics approaches to address global health issues.

Potential Impact

Due the program's focus on the training of the next generation of bioinformaticians, the impact of these efforts will not only be felt in the present but for many years to come, as these future leaders will go on to train those who will follow them. These current and future leaders are the teaching faculty and clinical/laboratory researchers of USTTB who will be trained in numerous fields (bioinformatics, biostatistics, computational biology, genomics, and proteomics). Therefore, the program supports the need for bioinformatics research expertise in the H3Africa Consortium while establishing a sustainable center of bioinformatics research training relevant to global health research for the African continent.

Project Leads



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Project Sites



A: Mali
University of Sciences, Techniques and Technology of Bamako

B: Guinea
University Gamal Abdel Nasser of Conakry

C: Tunisia
Institut Pasteur de Tunis

Non-African Institutions:
USA: Tulane University, Northwestern University
France: University of Strasbourg



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