

## **Structural Biology is a tool for sustainable development in Africa**

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Tropical Diseases and Antibiotic Resistant Microorganisms constitute a significant health, social and economic burden to the African continent. Structural Biology is an important tool used to understand the molecular basis of these diseases. In fact, knowledge of the molecular structures guides the rational design of new drugs and the optimisation of existing medicine. However, due limited resources but most importantly the lack of trained persons, exodus of skilled scientists, the majority of the countries across the continent of Africa do not conduct research in structural biology. This led to the establishment in 2017 of BioStruct-Africa to help bridge this gap. Indeed, *“the poverty gap is a technology gap”*.

At BioStruct-Africa, our main objective is to build capacity in the field of structural biology in Africa. This is done this through the organisation workshops at universities and research institutes in Africa that have active biological research programmes. The workshops are followed by a mentoring to ensure sustainable capacity building. The short-term goal is to demonstrate that structural biology can be done in Africa. By doing so, we hope to ignite the interest of Africa-based scientists to pursue endeavours in structural biology thereby planting the seed for BioStruct-Africa’s long-term goal: to develop world class structural biologists working in Africa on the diseases that are a burden for the continent. *“Give a man a fish he can feed his family for a day, but teach him how to catch fish he can feed his family for a life time”*. This adage is true when considering structural biology and its impact in containing the prevalent diseases in Africa.

Synchrotron light sources are indispensable tools for structural biologists around the globe and access is always based on scientific merit and economical priorities. For African to build and operate their own light source and beamlines will remove one of the greatest hurdles for African scientists as they will be able to prioritise projects that are relevant to the continent. With BioStruct-Africa, the structural biology community will be ready before the light source is turned on.