

A meeting to discuss the creation of a Functional Genomics Consortium Nairobi (April 2024)

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In general, we created a group with a strong desire to build a functional genomics consortium, for Africa, in Africa. We managed to bring together in Kenya a group (academia and industry) with diverse, but complementary expertise (from genetics to biobanking to bioinformatics, across universities and companies) and interests (from rare disease genetics to diseases of lifestyle), and that everyone agrees that we can and should work together to ensure that we, as a collective, have the resources and capacity to perform our own functional studies to further biomedical research of relevance to the people of our countries. In our short time together, we managed to identify (1) an overarching theme that unites all of our individual interests, (2) potential working groups within the consortium, (3) a proposed experimental approach that will make use of all our expertise, and (4) appropriate grants to apply for that could support both the establishment of the consortium and targeted research projects within each working group. We also agreed on developing regional centres of research and training, and that finding ways to facilitate travel between these centres should be a priority. While a number of obstacles that make doing this kind of research in Africa challenging were highlighted, people were also able to share some of the creative and innovative solutions they have found to overcome some of these problems. I think this more than anything very nicely highlighted where we agreed we should target

capacity development initially - the extensive, existing, well-trained talent in Africa (lecturers, postdocs, PhD students nearing completion of their degrees) that is currently being underutilised. We just need to find ways to identify such people and equip them with the resources to support their resources. We have also settled more concrete timelines and identified the key personnel who will coordinate the writing of the first grant.

Formation of a consortium with a clear focus on ensuring provision of local solutions using local data gained through research locally is a bold step in the right direction and will indeed help on strengthening Africa's healthcare system, provide opportunities and benefits to the local populations, help educate local masses on importance of research as well as build capacity and competences among our local populations. The group included the company MERCK, to cover in the discussion the challenges we may have especially for sourcing and receiving some research products (pricing, logistics, authorization...) as well as support in terms of scientific knowledge and building capabilities in current trends in research.

The discussion included the African diversity as a scientific wealth and as a problem concerning availability of health services and main health problems. The consortium discussed how this diversity could be directed and used to help collaborative initiatives' establishment in a perfect context building on variable clinical, laboratory and basic research expertise and combining that with the developed country's scientific and technical support to fill existing gaps.

We discussed the need for capacities establishment and exchange of expertise within African regions as well as investing in personnel and centers of excellence to be made available for the whole of the region where they are established.

A potential consortium name was discussed: FUNGEN

The involvement of private partners such as MERCK, Yemmachi, and NextGen Molecular Laboratories, Kenya, underscores an important commitment to leveraging existing capacities in both public and private domains for functional genomics and addressing health challenges in Africa.

In the workshop we concluded that we will be applying to two calls. The first one is the 'MRC Partnership' <https://beta.ukri.org/opportunity/responsive-mode-partnership/>. To apply for funding to support new partnerships between diverse groups of researchers within the remit of MRC. A document to be shared with your office and with MRC is almost finished for a first exploration on how fitted the call is for our established interests. We aim at applying in 4 months time.

The second call will be more of a research grant. We will be exploring the WT Discovery research and under the umbrella 'Immunology and diseases in Africa'. The areas of focus for research were identified as cancer, neuroinflammation and respiratory diseases (COPD). It was agreed that all these diseases had an aspect of the immune system. This part of the consortium needs further development, and we have a subgroup in charge of it.