



Dr Kabamba B Alexandre

Studies of Antiviral Lectins Promising HIV-1 Topical Microbicide Candidates

James Gear Fellow: 2012/13

I was awarded the James Gear Fellowship in 2012/2013 to study potential anti-HIV-1 microbicides in the United States of America, National Institute of Health. This was a very important career move for me at the time as it enabled me to obtain valuable research and work experience in a world leading research institution and to work directly with many international researchers with similar aspiration as myself. In addition, this allowed me to expand and/or strengthen my network of collaborators who went on to play key roles later in my professional career as they were involved in my future projects when I began to establish my research group. Furthermore, when I returned to South Africa after my stay in the United States the James Gear Fellowship funded my very first project in the country as an independent researcher, at the Council for Scientific and Industrial Research (CSIR). This funding gave me a chance to have, as some would say, “a foot at the door” to begin my journey as an independent researcher. This journey led me to having my own research group as the principal researcher, at the CSIR, and guiding new generation of scientists in the country to complete their MSc and PhD studies. One of the main highlights of this group was helping to establish a COVID-19 testing laboratory at the CSIR during the pandemic that

assisted the National Health Laboratory Service, especially during peak periods, with diagnostics. This work also assisted many mining companies with the screening of their workforce daily in order to identify and isolate the infected ones so that these companies could remain functional during the lockdown period. In addition, my research group helped several private and public institutions during the pandemic to test their own technologies against the virus, coupled with providing consultancy services to control the spread of the disease in the workplace. Because of apparently work largely well done during this period, many of these companies remained attached to us and employed our services in consultancy and advisory capacities. Another highlight of my research group at the CSIR was that one of the medical technologies we produced was voted by the World Health Organization as a top 30 innovations that could make an important impact in healthcare in Africa. The competition involved thousands of entries from around the world.

The above are just few highlights that can be quickly mentioned to illustrate the huge benefit I personally got from the James Gear Fellowship Award and how that has played a very important role in my development as an independent researcher. Also, it illustrates how this award has been a catalyst for allowing us to contribute directly to the country's wellbeing like during the COVID-19 pandemic, and indirectly by training new generation of scientists for future benefit of the nation. My wish is that the James Gear Fellowship continues in South Africa and give many other aspiring virologists the same opportunity it gave us. Also why not one day seeing it expanding throughout the African continent or even around the world, it does not hurt dreaming big.