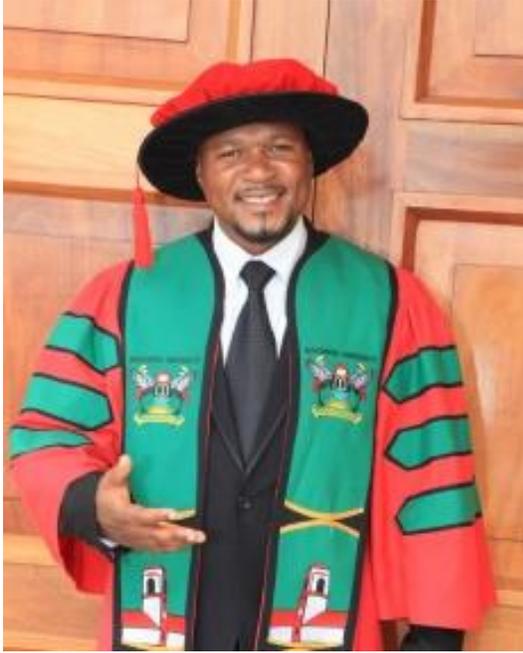


## **RUFORUM POST DOCTORAL FELLOWSHIP**

### **Dr. Agaba Rolland's Experience**

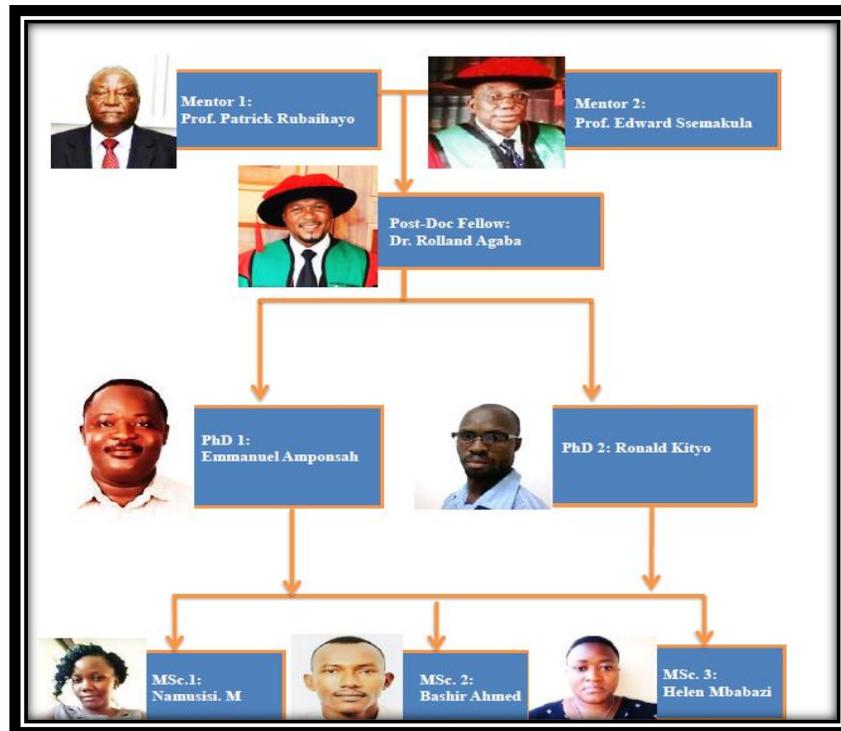


Earning a fellowship does not come easy but through hard work and in-depth conceptualization and critical thinking. Following release the call for postdoctoral fellowship proposals by RUFORUM with Support from Carnegie Corporation of New York in April 2022. The call was seeking proposals from recent doctorate holders to improve their teaching, research, leadership and mentoring skills so as to help strengthen African Universities and research institutions for creating knowledge and prosperity in Africa. This is what I was looking for every other day after my PhD training. I did comprehensive review word by word of the call and a gut feeling whispered to my heart that this was the break through I needed to advance my research after completion of doctoral training. The funding for doctoral research had come to an end and

my research career was in slowdown with no resources to continue conducting research for improvement of farmer preferred traits that offer food security, nutrition and resilience to climate change. I spent several nights awake while conceptualizing, researching and writing an impactful proposal, seeking for partnerships and letters of support and finally submitting it to RUFORUM.

After a comprehensive review and response to reviewers' comments, I was awarded a post doc Fellowship hosted at Makerere University in collaboration with Bishop Stuart University in Uganda. The fellowship proposed implementation multidisciplinary research, training and mentorship programs aimed at developing research outputs with potential for improving food security, nutrition and incomes of small holder farmers in Uganda. Five research activities were proposed including crop improvement research for potato, yams, cowpeas, and rice, plus an investigation of the food storage technologies and agro processing innovations for food security used by small holder farmers to augment resilience to famine in their communities. The fellowship was designed to support mentorship of the fellow in teaching, research planning and management, academic supervision, scientific and grant writing, publication and scientific communication and transferable skills and networks for professional career growth. Besides supporting training and scientific publication of quality research papers by graduate students, making a contribution to the

vision of skilling the next generation of African scientists. The fellowship brought together over eight collaborations, two mentors, 2 PhD students, 3 masters students and a postdoctoral Fellow.



### **Fellowship Targets**

The fellowship targeted to produce a highly skilled and networked post doc with enhanced capacities in teaching, research, supervision, project management and mentoring of graduate students. Competent graduates of 2 PhDs and 3 MScs after completing their training and research by the end of the fellowship. At least 5 scientific papers published in reputable peer reviewed journals by the research team, 3 posters, 2 conference papers presented at conferences to disseminate research findings. In addition, student graduates should have acquired additional skills in research, grant writing, scientific writing and communication and publication of journal papers. Also, several networks were to be developed for the research team besides the RUFORUM network in several countries in Africa and beyond.

By the end of the fellowship, 2 Msc and 2PhDs will be completed and the graduates contributed to the skilled next generation of scientists for African transformation.



**MSc student conducting laboratory research for rice improvement with support from the fellowship**

The fellowship provided me critical resources to establish a breeding program for breeding climate resilient potato for adaptation to warmer environments in Uganda. I am leading efforts to develop drought tolerant potato varieties for farmers in low altitude environments whose passion for potato growing has grown but yields are low due to lack of adapted varieties.



**Fellow conducting field research activities for breeding climate smart potato varieties**



**Fellow training internship student from Kabale University in experimental research for potato**

The fellowship empowered me in writing and participating in writing 4 grant proposals submitted to several donors. As lead investigator, I won a competitive research grant from **UBL** in September 2021 to conduct a baseline study assessing the productivity potential and market performance of the apple enterprise to inform decision making for investment in apple cider (beer) production based on locally produced apples. The results showed potential for 25million apple fruits annually from Ugandan farms and UBL used the information to make an investment decisions worth millions of dollars in an apple cider production line in Uganda.

I have also won the Apple Value Addition Project, which is expected to start in July 2022 for the next 3 years. The apple project brings together several partners including National Agricultural research Organisation (NARO), Makerere university(MAK), Uganda Breweries Limited (UBL), and 14 Local Government Districts besides several farmers in 3 regions (Kigezi, Rwenzori and Elgon). This Apple project aims to support productivity and commercialisation of the apple value chain in Uganda. The Apple Project is funded by the government of Uganda through the Competitive Research Grants (CGS) with a public private partnership with Uganda Breweries Limited (UBL) to foster commercialisation of apple value chain.

### **Experiences, Skills and lessons learnt**

Implementing the post doc Fellowship was an undertaking worth experiencing. The fellowship did not only give me chance to exercise my critical thinking but also provided me an opportunity to be mentored by accomplished professors. Fellowship implementation taught me soft skills of empathy, patience strict adherence to ethical considerations, decision making. I learnt that some students needed a lot of support and motivation to overcome the depression caused by COVID 19 pandemic. The fellowship gave me an opportunity to lead a multinational, multidisciplinary and

multi-talented team of researchers; this came with different world views that shaped the project in an improved way. To a large extent, the fellowship provided me an opportunity to establish my credentials and develop connections and skills to raise research resources and improve future career prospects.

### **Challenges in Fellowship Implementation**

The COVID 19 restrictions and recurrent lockdowns delayed field and laboratory research activities. Some activities were delayed by 6 months which affected the timelines for completion of research studies. The restrictions also affected processing of fellowship funds from the host university resulting in delayed access to critical resources for research. Some of the research team members were severely affected by COVID 19 undergoing hospitalization and intensive care treatment. Consequently, this affected planned physical mentorship meetings but online engagements were adopted which provided more options for mentorship and interactions between the team at minimal costs to the fellowship.