INTERVIEW WITH TOGNISSE ANIQUE GODJO



The Open Doors Fellowship Program



For women researchers in Africa













Tell us about yourself. How would you describe your career so far?

My name is Tognisse Anique Godjo, I am a Benin citizen, and I work as a researcher in the sector of crop protection. I have an international background working in great research collaboration with scientists in Africa and Europe. My research output is consistently of the highest caliber. I hold an agricultural engineering degree from the University of Parakou in Benin and a Master of Science in nematology from Ghent University in Belgium which I completed with great distinction. Subsequently, I received a funding from Ghent University (BOF scholarship) to pursue a doctoral research (2013-2018) focusing on different entomopathogenic nematode (EPN) species to combat fruit fly in mango cultivations. I recently obtained a research funding from ECOWAS under EU and AFD grant to research on the entomopathogenic nematode formulations for biological control of mango fruit fly soil stages. This ongoing project involves several undergraduate and postgraduate students who are performing their research work under my supervision. The quality of my research has earned my current research position in the brilliant research group of Dr Thomae Kakouli-Duarte at the enviroCORE at SETU (South East Technological University), Department of Applied science, in Ireland.

What research area are you working on?

In my current position, I basically work on the application of entomopathogenic nematodes as bioindicators for Chromium VI soil pollution to help mitigate its negative impact on the environment, and hence help preserve human and animal health. In addition to this, I remotely work with my research group in Benin focusing on developing good EPN formulations to control Tephritid fruit flies in mango orchards. Also, in collaboration with researchers at ILVO who hosted me during my Open Doors Fellowship research stay, I also work on rhizobacteria transformation of sweet potato to enhance its tolerance to biotic and abiotic stresses.

Why did you choose this area? What inspired you to go into your field?

As a girl from a family that loves agriculture, I grew up very close to nature and became alert to the living world from a very young age. My early exposure to living things served as a catalyst for establishing my passion for biology. In secondary and high school, I studied the sciences after which I got the chance to undertake agronomical science courses and obtained an agronomical engineering degree. Still, due to my quest for knowledge, I attended the European Master of Nematology at Ghent University (Belgium), where I have gathered knowledge on nematodes as parasites of plants and also as biological agents for pest control.

Chemical crop protection products, commonly referred to as pesticides or agrochemical products, play a vital role in controlling the pests and diseases that threaten our food supply. But using biological environmentally friendly agents to control crop pests represents a sustainable way to ensure food production and food supply to our population. Entomopathogenic nematodes can perfectly play that role as well as genetic transformation of crops to enhance their resistance to biotic and abiotic stresses. These are the reasons why I orientated my research work on sustainable crop protection focusing on environmentally friendly organisms for biological control of crop threats.

What are some of your achievements so far?

My research outcomes are published in relevant international peer reviewed journals. Four are fully published in peer reviewed A1 international journals and I am the first author of all of them. I also used other journals and conference proceedings to publish my research findings. I published in relevant journals on my discipline including Crop Protection, Elsevier (Impact Factor (IF): 2.571), Biological Control, Elsevier (IF: 3.687), Archives of Microbiology, Springer (IF: 1.835), Nematology (IF: 1.216).

Furthermore, I have disseminated my research outputs widely, thus far giving several oral and poster presentations at various national and international scientific conferences. I am a highly motivated researcher and I am developing an extensive scientific network in this regard in Ireland, Belgium, and Benin. The quality of my research has earned me review invitations for several reputable scientific journals including Scientific Reports, Crop Protection and Biological Control (Elsevier).

In 2019, I was selected among the tremendous number of female scientists in all disciplines in Africa to receive the prize of the African-German Network of Excellence in Science - Programme Advocating Women in Science (AGNES-PAWS). Currently, I am an Irish research council postdoctoral fellow (2022-2024) conducting my research work at the SETU University. I am also one of three Open Door fellows selected for the 2022-2024 program and I hope to be a good ambassador of this program that will engage and help a lot of African female researchers in the future to develop their career.

What would you like to achieve during this fellowship and afterwards?

During this fellowship, I intend to broaden my scientific network, improve my communication skills, and my research skills while interacting with other international researchers.

How did the Fellowship help improve your skills and how has it helped you achieve your goals?

During my stay in Belgium, I met and interacted with so many researchers, and these researchers are now part of my research network. Since then we continue to interact professionally. I also followed several in-person and online capacity building courses which helped me to acquire new knowledge in my field of work, and also learned new communication skills as well. The "Negotiate with success", "Cross cultural communication", and "Present with power" courses were so meaningful to me, as I learned so many new aspects of communication and now apply these skills I learnt in my daily life. I can confess these training changed dramatically my way of seeing things around me, and how I communicate with other researchers who I work with.

For the "Present with power" course, I won the first prize for the oral presentation competition I participated in at the end of the course. This course was attended by other researchers from around the world, and I am very proud of myself. There are many such courses coming ahead and I am really looking forward to follow them.

How would you describe your experience in Belgium?

My experience in Belgium was great. I enjoyed working with Dr Emmy Dhoogbe and Dr Helen De Keizer as these two researchers are amazing scientists, very brilliant in their field of work. With them I learned so many things such as sweet potato tissue culture. I also tissue cultured other plants including chrysanthemum and rose flowers. I learned the transformation of sweet potato using Rhizobium bacteria and acquired some phenotyping skills as well. I had the privilege to meet Dr Angelo Dewitte, who was also very helpful in showing me how to perform meristem cultures, and shared a lot of information on the growing sweet potato market in Europe. I also visited the research group of Dr Chris De Jonghe at ILVO, plant 96 section, who deals with sweet potato virus disease detection using the High Throughput Sequencing technology and its management.

Overall, my stay in Belgium was very fruitful, and it helped me also to physically meet my former colleagues and friends that I left in Belgium some years ago, as I stayed in Belgium over seven years for my master's and PhD programs. It was good seeing them back after 4 years, and being back in the environment I stayed for so long, was very good. My stay was full of positive and good feelings.

The Open Doors Fellowship Program organizers are very unique, as they are truly determined in helping us to achieve our goals, and I personally think, I am lucky to be part of this program. I thank the IPBO team, particularly Prof Dr Laura Cortada and Dr Marc Heijde for the care and attention they provided me and my colleagues during our stay in Belgium. They arranged everything to make our stay fabulous. It was, and it continues to be an interesting experience I am having with this program. I wish long life to the program.

How do you intend to promote the activities of the fellowship?

I will let other mid-career researchers in my group and elsewhere know about the Open Doors Fellowship Program and I will encourage them to apply.

How does the Fellowship address the challenges faced by women in science and research? The main challenges faced by female researchers in Africa include gender inequality in the employment process which implicitly favors men and the lack of institutional strategies to support women researchers to stay in research and give them equal opportunity for leadership as men have.

The Open Doors Fellowship Program addresses these challenges by supporting women scientists by providing them soft skill training and helping them with their career development by growing their research network, hence giving them more funding opportunities.

How would the Open Doors fellowship promote equity in gender, diversity and inclusion in the research space in Africa?

The program is already doing a lot, but I personally think if the fellow's direct supervisors can actively be included, they will be more aware of the program and make more opportunities for their female scientists. Women are not well represented in science, and the little available ones are still struggling to make a small space for themselves to be part of the decision-making body in our existing institutions in Africa.

What is your favorite book? What do you do in your spare time or to relax?

My favorite book is the bible even though I have not read it as much as I would like. During my spare time, I like taking care of my family, taking my kids out to play and spending good time with them. I love travelling as well, visiting new places around the world with family and friends, taking beautiful pictures as souvenirs. As a researcher, I don't have much time for these, so once I get the chance, I truly enjoy spending quality time with my family and friends moving around to discover new places and new cultures.

How would you describe yourself in 5 words?

Ambitious, motivated, adaptable, approachable, and result oriented.

Who is your role model?

The African Singer Angelique Kidjo. I like her life philosophy, her simplicity, and her attachment to her country and culture regardless of the great success she has in her career abroad. She never forgets where she came from.