

COVER

This
Weekend

Prof. Stella Ifeanyi Smith: Pioneering Research on African Cure for Ulcers

As Director of Research, Molecular Biology, and Biotechnology at the Nigerian Institute of Medical Research (NIMR) and Professor of Microbiology at Mountain Top University, Prof. Stella Ifeanyi Smith has made groundbreaking contributions to medical research. Her pioneering work on *Helicobacter pylori*, a pathogen causing ulcers, has profoundly impacted Africa and beyond. Recognised for her exceptional contributions, Prof. Smith has been elected as a Fellow of the Nigerian Academy of Science (FAS), Fellow of the Academy of Medicine Specialties of Nigeria (FAMeS), and Fellow of the African Academy of Sciences (FAAS). She has also been appointed as the sole African Consultant for the European Maastricht VI/Florence Italy Consensus project and the Real-World Gastritis Initiative (RE.GA.IN) project, comprising 29 countries and 42 members. In 2022, Prof. Smith launched the African *Helicobacter* and Microbiota Study Group (AHMSG), serving as its Founding President. Her work has garnered international recognition with an impressive 206 publications and a Google Scholar citation of 4,954. In this exclusive interview with **MARY NNAH**, Prof. Smith shares her remarkable journey, insights, and experiences, offering a glimpse into the life of a true trailblazer in medical research.

Your remarkable achievements have earned you esteemed recognition. How do you feel about being elected as a Fellow of the Academy of Medicine Specialties of Nigeria (FAMeS) and, most recently, a Fellow of the African Academy of Sciences (FAAS)?

Indeed, I feel great. I believe that this is a confirmation of hard work over the years. These Fellow awards do not come without hard work and recognition of your area of specialty over the years and I must say it has been God. I acknowledge unashamedly that I am what I am by the grace of God. If it was left to man, I would not have been able to achieve this much.

Did you ever envisage that you will get to this level of professional accomplishment when the journey started in 1999?

Honestly, I didn't. I never even knew that working with the pathogen, *Helicobacter pylori* would take me to the level it has taken me now. I remember the vogue then was HIV/AIDS, TB, and malaria, and then more recently covid-19 and some viral haemorrhagic fevers which were more promising due to the heavy funding. For *H. pylori*, it has always been a neglected disease till date, but by the grace of God and consistency alongside my collaborators, the African *Helicobacter* and Microbiota Study Group was established. We need to make an impact in proper *H. pylori* diagnosis and management and get stakeholder involvement as well as political good will, hence the first scientific conference which is geared towards these objectives will have international experts coming to Cape Town, South Africa in August for this conference. This is all because one person, yours truly, had a dream to establish this group to aid proper diagnosis and management of *H. pylori* the causative agent of ulcer.

Can you briefly take us through the journey of your career progression and probably the challenges?

I came into the Nigerian Institute of Medical Research through Dr. D. K. Olukoya who was a young, single lady who was interested in researching diseases of public health importance and particularly those diseases that are not generally studied and for which much attention is not given to it. I resumed work immediately after I obtained my MSc the same year and started under the leadership of Dr. D. K. Olukoya who was the Head of Division of Genetics and Blood Disorders.

It was under his headship/tutelage, I had my growing interest in molecular epidemiology and with particular interest on medically important pathogens. I rose through the ranks today to be Director of Research in 2013 and my interest in *Helicobacter pylori* developed after my one year pre-doctoral in the UK in 1994. I actually started working on *H. pylori* since 1999 and that has been my story with *H. pylori* for which I decided to focus on this neglected pathogen in Africa as a whole not Nigeria and that has won me several research grants and opportunities to showcase my work within and outside the country. It was my German Research Foundation (DFG) funding for 7 years that enabled me recognition in this area, to the glory of God. This doggedness in working with *H. pylori* in spite of all big funding in other areas led me to the formation of the African *Helicobacter* and Microbiota Study Group for which I have been the founding President since 2022. I currently have 10 African countries as Board members and 90 ordinary members from 17 African countries.

I have had several challenges along the journey but the fact is that those challenges bring out the best in me.

Your achievements have also led to a notable distinction: you are the sole African representative in the esteemed Maastricht VI and RE.GA.IN projects.

I will say my interest in *H. pylori* and not shifting has given me this recognition with God on my side. I have worked with this germ since 1999 and have been consistent with it. Others have either worked on it for a brief period and dropped it due to the difficulty in working



coming from Europe, US and Japan, and notable amongst them is Prof. Peter Malferteiner who is the brain behind European *Helicobacter* and Microbiota Study Group and they have been functional for 38 years now. Other Europeans attending our conference include Prof. Marcis Leja from Latvia, Dr. Christian Schulz from Germany. From the US is Dr. Christian Abnet, while Prof. Yoshio Yamaoko will be coming from Japan. We also have a team from Richen HongKong, Sight, Inqaba Biotech, and American Molecular laboratories and others who are supporting us in this conference. It promises to be an interesting conference that would put heads together in forging forwards, as we look at proper diagnosis and management of *H. pylori* in Africa. During this conference, I will be handing over the Presidency of the Group to Prof. Mashiko Setshedi, a South African.

Over the years, you have been known for organising hands-on-training workshops, can you take us into your hands-on-training programme and the impact it has made?

I started my molecular biology hands-on-training workshop in 2009. This followed my post-doctoral fellowships in France and Germany. I realised that molecular biology techniques were not common then and I was interested in building the capacity of the young ones as well as interested participants who comprised university lecturers, Medical Laboratory Scientists and other stakeholders from different geo-political zones in the country. In the first two years, I had a large turn out of participants that were so eager to learn these techniques and as the years grew, other groups started their own hands-on-training workshops. In order to train the young ones, I started training the final year 400L students of Biological and Biochemistry departments of Mountain Top University annually on polymerase chain reaction (PCR) some three years ago.

Why is your laboratory referred to as a German laboratory?

My laboratory is referred to as a German laboratory because most (85%) of the equipment I have in my laboratory was bought with the German funding by either the Alexander von Humboldt (AvH) Foundation or the German Research Foundation (DFG).

Why do you have a strong passion about research and can you give us insight into how it all started?

I have a strong passion for research because I am driven by the need to succeed and to find out the answer at the end of the research. It all started under the tutelage of Dr. D. K. Olukoya who was the Head of Division of Genetics and Blood Disorders and being someone who was inclined in the medical and allied field; I was introduced to molecular epidemiology by Dr. D. K. Olukoya and following my pre-doctoral stay in Manchester, UK, I was all the more interested in conducting research in the medical microbiology with a specialty on bacteriology. My research journey started in 1988 after my MSc and

I enrolled for a PhD on the bacterial pathogen causing diarrhoea (*Campylobacter*), itself a neglected diarrhoeal disease-causing pathogen. I was able then in spite of the low funding/scholarship opportunities to obtain an European Union scholarship which funded the whole PhD work, with one year in the UK and two years in Nigeria. I was really blessed to have that opportunity and we were just two that were given the scholarship in my Institute then. The second person (a guy) 'japad' and never came back, but I did to the surprise of many people who thought I would never come back. Honestly, I have always been an ambassador for Nigeria and proudly Nigerian wherever I go. Nigerians are a special breed of people who do not take no for an answer and are goal getters.

Since I got back in 1994, I have looked at various ways of making an impact in my society and the academic world at large and God has been faithful.

What was your growing up like?

Growing up was really good. Although I had no father figure because he died when I was just a year old, my late mother did everything to make sure that her two girls were happy. I believe that also made me all the more determined to be a better and successful person in life. My mother gave us all she could while ensuring that we were not spoiled children. For example, although we had house help most of my stay with my mum before getting married, I have been married for close to 32 years but had house help for only two years. My husband and I do the house work and what we cannot do we leave till another time.

Who are your role models?

My role model was my late mother, Mrs. Stella Okwui Ebigwei who was a widow. She instilled discipline, hard work and fear and reverence of God in my sister and I and so I had a focus that I would not derail but be a notable person someday. She was my strong supporter and always called me 'Star'.

My other role models are Bishop Mike and Peace Okonkwo, my parents in the Lord, who always prophesied over us and taught us about integrity and having a giving spirit.

My other role model is Professor D. K. Olukoya whom I call my dearest 'Egbon' and he is my mentor. He introduced me to the world of molecular epidemiology and he is my strong supporter and always prays for my success as well.

What does fashion mean to you since you don't apply make up or use attachment to your hair?

Fashion is looking good and natural and without all the attachment. I like long hair, that is why my hair is long, although I don't give much time to it. In terms of my dressing my husband has to approve of my clothes otherwise I wouldn't wear them. I generally dress in moderation.

How did you meet your husband?

I met my husband when I was doing my PhD and that was actually in church. He told me directly he was not interested in a long relationship or courtship but marriage and under six months we were married and have been for close to 32 years and still counting to the glory of God. My husband is God-sent, he is the one that pushes me to get to where I am. Some men would not even want their wives to outshine them, but my hubby doesn't mind. He always encourages me to achieve my goals and beyond and he assists so much with the house chores and that is why we do not have any house help. He doesn't prevent me from traveling for official purposes. All I need to do is make sure that I have cooked food and kept for him and he is good to go.

What would you consider as your most challenging and most inspiring period?

My most challenging period was when I lost my mother and it dawned on me that I had no parents on planet Earth. My most inspiring period comes when I see those that I have trained doing well.