

Faith Osier Interview



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Faith Osier is a talented researcher in the field of Malaria Immunology. She got her MBChB degree from the University of Nairobi and completed her internship at Coast General Provincial Hospital. Faith then took up a position as a Medical/Research Officer at KEMRI-Kilifi. This is where her research career began. She went on to graduate with distinction in Human Immunity at the University of Liverpool and obtained her PhD from the Open University, UK. Faith now runs labs at both KEMRI-Kilifi, Kenya and Heidelberg University Hospital, Germany. Faith has recently been appointed the Vice-President of the International Union of Immunological Societies.

Faith took time out to speak to us about immunity to malaria and the challenges of making an effective preventative vaccine

against the disease.

Name: Faith Hope Among'in Osier

Position: Junior Group Leader, Department of Parasitology, Heidelberg University Hospital, Germany. Chair, Biosciences Dept, KEMRI-Wellcome Trust Research Programme, Kilifi, Kenya

Research Interest: Malaria Immunology, Vaccines

How does the immune system respond to malaria infection? Our bodies respond by recognising the proteins in the parasite, and mounting immune responses that help to control and eventually eliminate the infection.

Why are children more susceptible to severe malaria? Children are more susceptible to severe malaria because their immune systems have not yet learned how to deal with the infection. Although they may survive after an episode of severe malaria, it takes their bodies years and years of repeated infections to learn how to overcome new infections.

Can people develop immunity to malaria? Yes – people do develop immunity to malaria. We see this clearly in communities in which malaria is endemic. Although everyone gets bitten by mosquitoes carrying malaria, older children and adults rarely succumb to the disease while young children living in the same households can get desperately ill.

How achievable is a highly effective malaria vaccine? The fact that people actually develop immunity gives us the strong conviction that it will be possible to make a highly effective malaria vaccine. Current advances in technology are allowing us to understand much more about the biology of the malaria parasite and the human immune response against this faster than we ever did in the past. I strongly believe that research in this area will yield a highly effective malaria vaccine sooner than we think.

Will a T cell based or B cell based malaria vaccine be more effective? The evidence suggests that an antibody-based malaria vaccine is likely to be highly effective. Experiments conducted more than fifty years ago showed that IgG antibodies when transferred passively from adults who had become immune to malaria were effective in “treating” malaria in children.

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Interview by Thandeka Moyo