

# Made in Africa

Scientific innovation from Benin Republic, South Africa and Nigeria receive recognition in 2016 awards

The Innovation Prize for Africa co-ordinated by the African Innovation Foundation (AIF) announced its winning line-up at a glittering occasion in Gaborone, Botswana in June. Out of a total of 985 applications, 10 nominees were selected, and from these Dr. Valentin Agon of Benin was selected overall winner, with Imogen Wright of South Africa winning the Second Prize, and Dr. Eddy Agbo of Nigeria winning the Special Prize for Social impact.

AIF partnered with Botswana's Ministry of Infrastructure, Science and Technology (MIST) and the Botswana Innovation Hub (BIH) to host IPA 2016 under its theme Made in Africa. President Lieutenant General Seretse Khama Ian Khama, the President of Botswana presided at the awards ceremony, held at the Gaborone International Conference Centre (GICC) in the capital's metropolis.

IPA winners this year demonstrated know how and expertise, boasting dynamic new inroads to address the malaria and HIV disease burdens confronting Africa. The winning innovations this year impressed the expert panel of judges, led by Amolo Ng'Weno: 'The standards were very high, and it was difficult to make a decision; everyone is a winner and all of them were addressing major social issues. I congratulate the winners and look forward to the next five years of IPA'.

Dr Valentin Agon of Benin was unanimous winner of the US\$100 000 Grand Prize for his innovation Api-Palu, an anti-malaria drug treatment that has hit the market not only in Benin, but in Burkina Faso, Tchad, and Central African Republic (CAR). Made from natural plant extract, Api-Palu is significantly cheaper than anti-malarial drugs currently on the market; it has great inhibitory effects on 3D7 strains of *plasmodium falciparum*, and is now registered for use in Benin, Burkina Faso, Central African Republic and Chad.

Imogen Wright of South Africa won the Second Prize of US\$25 000 for Exatype, a software solution that enables healthcare workers to determine HIV positive patients' responsiveness to antiretroviral (ARV) drug treatment. Until now, national responses have focussed on access to treatment for all. However, a growing number of people on ARVs are resistant to drug regimens, leading to failure of the therapy, exacerbating the continent's HIV burden. Exatype processes the highly complex data produced by advanced 'next-generation' DNA sequencing of the HIV DNA in



a patient's blood. Through a simple report, it detects drugs that are resistant to the patient, then highlights the need to avoid these to ensure successful treatment.

The Social Impact Prize of US\$25 000 was awarded to Dr. Eddy Agbo of Nigeria for his Urine Test for Malaria (UMT) a rapid non-blood diagnostic medical device that can diagnose malaria in less than 25 minutes. More often than not, when fever is detected, anti-malaria medication is administered. However, not all fevers are due to malaria. Also, the inability to quickly diagnose and commence malaria treatment can lead to various complications including kidney failure, build-up of lung fluid, aplastic anaemia and even death. UMT detects malaria parasite proteins in the patient's urine with fever due to malaria; it is simple and affordable, and a potential game changer in preventing unnecessary treatments against malaria, something that is threatening to compromise the effectiveness of the available drug regimens.

'All those involved in the advancement of the frontiers of innovation, science, and technology are winners, and on behalf of the Government of Botswana, we would like to congratulate all those who participated in IPA 2016. However, in this pool of achievers, there are those that stand head and shoulders above the rest and we applaud the winners of IPA 2016. We celebrate this fine achievement and trust that it will inspire innovators in Botswana and across the continent to do more to solve Africa's challenges,' says Alan Boshwaen, CEO of BIH.

This year's IPA 10 nominees showcased innovations from diverse African countries, reflecting the truly pan African flavour of the IPA initiative. African ingenuity included agricultural solutions, technological software development, power energy initiatives and ground-breaking healthcare innovations.