

HPV and STI Training Centre for Africa Launched

Dr Lisbeth Lebelo & Mr Padi Matlala



Dr Ramokone Libelo, Medical Scientist and local leader of the HPV & STI's Training Centre for Africa

Cervical Cancer (CC) is the fourth most common cause of female deaths worldwide and the second most common Cancer in women living in less developed regions with an es-

timated 445 000 new cases in 2012 making 84% of the new cases worldwide.

In 2012, approximately 270 000 women died from CC more

than 85% of these deaths occurring in low- and middle-income countries.

Dr Ramokone Lisbeth Lebelo, a medical scientist and local leader of the "HPV and STI's



Prof John Paul Bogers, University of Antwerp, Belgium

Some of these countries have yet to introduce HPV Vaccine into their national programme. What is more important is the collapsed or non-existing CC screening programmes in Africa.

Therefore a network of researchers was established to address some of these problems faced by many African countries. The network was formalised through funding from the VLIR-UOS North-South-South Cooperation Programme.

It is due to the lack of baseline; epidemiological data on

Training Centre for Africa In many African countries
Almost 100% of the CC cases are due to Human Papillomavirus (HPV) infection, HPV 16 and 18 causing about 70% of the cases.

In many African countries there is limited data on the circulating HPV types causing CC. This is due to lack of capacity and resources to detect and genotype HPV.

the circulating HPV types in most of the African countries that the network decided that, in order to assist scientists and clinicians from these countries to do epidemiological studies on HPV, capacity must be developed to pave the way for the establishment of the laboratory.

A network called WAKA HPV AFRICA was established and was led by Prof John-Paul Bogers of the University of Antwerp (UA), in Belgium. WAKA HPV is the abbreviation of Swahili phrase 'Wanavyama wa Kudhibiti ya HPV' [The translation of: Wanavyama (Partners) wa (of the) Kudhibiti (control) ya (for) HPV (HPV)]. The network involves an impressive array of gynaecologists, pathologists and scientists from several universities in different countries within Africa (Democratic Republic of the Congo (DRC), Ethiopia, Kenya, Uganda, Malawi, Burundi and South Africa (SA)). Most of the members are PhD students studying in the field

of cervical cancer diagnosis, prevention and treatment as well as HPV.

Due to the success of HPV project and other STIs in phase I of the VLIR-IUC project 8 (infectious diseases) under the leadership of Prof Maphoshane Nchabeleng (SMU) and Prof JP Bogers (Au), including collaborations with local Pathology departments, it was decided that the phase II of the VLIR-IUC will focus on the laboratory detection and public health aspect of HPV and other STIs (rebranded as and VLIR-IUC to collaborate). It was therefore decided to establish a centre known as "HPV and STIs Training Centre for Africa" which would set up an HPV reference centre to serve Project 4).

Therefore, the quest to reduce the incidence of cervical cancer and mortality rates inspired SMU, UA, WAKA HPV AFRICA network African Countries, local institutions and SMU community especially projects emanating from project 4 of the phase II VLIR-

IUC. Training Centre for Africa was established and launched recently at SMU and it is located at the Department of Virological Pathology.

The PANTHER System is a fully automated system that integrated nucleic acid testing system that fully automates all steps necessary to perform the APTIMA assays from sample processing through amplification, detection, and data reduction. Hologic Aptima HPV assay has been approved by the Food and Drug Administration (FDA) to be used on the PANTHER system.

Hologic's Aptima HPV mRNA based assay is a nucleic acid amplified test that detects 14 high-risk strains of HPV associated with cervical cancer and precancerous lesions. It is a clinically proven diagnostic tool that helps healthcare providers more accurately assess a patient's risk of developing cervical cancer.

Ilex South Africa is active in

various fields including In Vitro Diagnostics, Blood Bank Testing, Molecular Biology, Laboratory Information Systems and the company is a local distributor for PANTHER system from Hologic.

ThinPrep T5000 system delivers a fully automated processing option for ThinPrep non-gynaecology or UroCyte samples. Utilizing the ThinPrep slide preparation technology, the ThinPrep 5000 system processes up to 20 samples per batch. ThinPrep 5000 is a true walk-away processor, significantly reducing the hands-on time required to process specimens. This system is distributed by Separation Scientific in South Africa for Hologic. Separation Scientific is a company supplying world class equipment and instrumentation.

VLIR_UIC funded the procurement of a BioPlex MagPix Multiplex Luminex system costing R600 000 from Bio-rad. This multiplex technology is highly

sensitive and based on fluorescent bead technology, it allows simultaneous detection of nucleic acids against up to 50 different HPV types in single reaction volume. For this project, a collaboration with Dr Massimo Tomassino from the IARC/WHO (Lyon, France) was set up.

Dr Ramokone Lisbeth Lebelo, who is a medical scientist, is the local leader of the "HPV and STIs Training Centre for Africa" that will be based in the Department of Virology (DV).

The centre will work in close collaboration with Department of Anatomical Pathology (DAP) led Prof Meshack Bida that will be responsible for testing cytology samples. Dr Lebelo will be working under Prof Nchabeleng as the South project leader for project 4 VLIR-IUC and Prof JP Bogers as the North project leader for project 4 and project leader for VLIR-NSS.

The centre plans to be a refer-

ence laboratory with ISO certification to be able to participate in internal and external quality control. The aim was to strengthen the research in HPV field in African countries and also to encourage collaborations between countries.

Setting up this centre is a continuous process and it is possible through the support of WAKA HPV AFRICA network, VLIR-UOS North South South Cooperation Programme, VLIR-IUC, Hologic (Ilex and Separation Scientific), Department of Virology, Department of Microbiology and Department of Anatomical Pathology.

Although the donations and initial funding are appreciated, to get the centre running as a reference centre, still needs more funding and resources.