Crown Prince, Princess of Norway visited AHRI

AHRI has a long standing and fruitful partnership with Norwegian institutions and people at large. In addition to this strong partnership, AHRI's track record in the field of biomedical research has made it a choice for co-hosting the second Health Science and Higher education Conference with Oslo University Hospital. More than 250 researchers, academicians and practitioners attended the conference. Moreover, Norway's Crown Prince Haakon Magnus and Princess Mette-Marit opened the conference and paid a visit to AHRI showing their acknowledgment of AHRI's scientific contribution.

The 17th Tore Godal Prize Award Ceremony

The AHRI Tore Godal Prize committee every year provides the prize to deserving young scientists.

Dr. Tore Godal is a Norwegian Scientist who conducted research at AHRI about 45 years ago, and also served as AHRI Director from 1970-1973. He later joined the WHO Special Program on Tropical Diseases Research and Training (TDR). In recognition of his work with TDR, he received in January 2000 the Prince Mahidol Award from Thailand. In November 2001, he wrote a letter stating “since my international health career started at AHRI, I thought it would be appropriate to extend the benefit of the award to AHRI.” Accordingly, he donated the interest from his award to be given as an annual Prize to young Ethiopian researchers who write papers on topics related to infectious diseases. Currently Dr. Tore Godal is a Special Advisor on Global Health at Norwegian Ministry of Foreign Affairs.

This award ceremony was special due to the presence of Dr. Tore Godal who presented the award to the winners.

The first Tore Godal Award prize of this year was given to Mr. Eshetu Gelata, for his work entitled “Seroprevalence of Yellow Fever Virus and associated risk factors in selected health facilities in Borena District, Southern Ethiopia.”

The second Tore Godal Award prize of this year was given to Mr. Samuel Ayele, for his work entitled “Modeling TB-free survival among HIV patients on antiretroviral therapy in ALERT and Zewditu Memorial Hospitals”. Samuel is one of the coworkers of the Armauer Hansen Research Institute.
Welcome

2017 was a business unusual at AHRI. The design for 7-storey building is ready and the Institute will have cutting edge laboratory complex in the next 3 years. We have also continued equipment development and we have now installed Illumina NextSeq 500 Sequencer. This will change the paradigm of research we conduct at the institute; will substantially improve the quality and impact of the obtainable evidence; and minimize the volume of biological samples we ship overseas for advanced analysis. We have established Human Leukocyte Antigen laboratory at the Institute to support the National Renal Transplant Surgery Initiative. In science, we have contributed 46 peer-reviewed publications and some of these will have far reaching policy consequences.

Our scientists believe in robust partnership in research, innovation and training. In this regard, we have significantly expanded our partnership base. Among others, Ethiopia has joined European and Developing Countries Clinical Trial Partnership (EDCTP) Association and Coalition for Epidemic Preparedness Innovations (CEPI) and AHRI is a focal Institute representing the country at both partnerships. Sida and Norad have continued their generous support to the Institute. We concluded 2017 on a high note as the visit by the Crown Prince and Princes of Norway lifted our scientific spirit.

Federal Ministry of Health Clinical Research Program

Federal Ministry of Health provided financial support to AHRI to coordinate and run a clinical research and capacity building program on priority medical care challenges. The main activities of the program are to conduct research, train postgraduate students and establish and strengthen diagnostic capacity of laboratories in peripheral regions. The platform research projects selected are:

1. Hepatitis and Chronic Liver Disease Research Project
2. Cancer Diagnostics Project
3. Arboviral Diseases Research Project
4. Antimicrobials Research Project
5. Post graduate Student laboratory training

AHRI has created a network of five Universities (Addis Ababa University, Gondar University, Hawassa University, Haromaya University and Jimma University), conducted research with similar protocols on hepatitis, arboviral diseases, antimicrobial resistance and cancer diagnostics that also trained more than 22 Masters and six PhD students and is building a central biorepository at AHRI.

Short Term Trainings

| Feb | - Biosafety and Biosecurity | - Data Management and Biostatistics |
| Apr | - Laboratory techniques in Molecular Biology | - Research Ethics |
| May | - Laboratory techniques in Immunology | - Policy Brief preparation |
| Jun | - Instruction Design and Curriculum Development | |
Kokosa is one of the Woredas found in West Arsi Zone which is found 375 km from Addis via Hawassa town. The road after Hawassa to Kokosa is a gravel road (65 Kms). Kokosa is well known for its cattle rearing and Enset (Ensete ventricosum) growing culture. The topography and the green fields are remarkable in that they force your eyes and mind to focus on the field.

Kokosa is one of the hotspots for leprosy where a significant number of new cases is reported every year. Considering the high leprosy burden in the woreda, AHRI has initiated a project which focuses on promoting active case detection and contact tracing in close collaboration with and support from GLRA, TLMi Ethiopia, BSPP (Sida), ENAPAL, West Arsi zone and Kokosa woreda health and administrative offices and others.

To ensure sustainability of this integrated leprosy control approach and to expand the effort to other hotspot areas in the country, collaboration with the national TB leprosy program and other organizations working on leprosy remains to be very important.

A PhD student and researcher (Tsehaynesh Mesele) is fully involved and leading the project with the team at AHRI and leprosy experts (Nurse Addis Mengiste and Nurse Desalegne Gobena). Several activities have been conducted in Kokosa that include training, identifying gaps specifically in leprosy control activities in the woreda and conducting house to house assessment for active case detection and contact tracing by health extension workers. Compared to previous years, a significant number of new cases was identified in a one year assessment and screening of close household contacts. The work is going on.

Illumina NextSeq 500 Sequencer installed

As part of the new initiative to strengthen the biotechnology and bioinformatics capacity of AHRI, Illumina NextSeq 500 Sequencer has been purchased and installed at AHRI. The installation was handled by an engineer from Illumina, Mr Ahmed Khairy.

Following the installation, a test run was made and training given for three days starting from November 6 - 8, 2017 for 7 AHRI staff members by Faraz Shaheed.

The training included: basic concepts on NGS technology, sequencing test run using φX library on NextSeq 500, creating sample information, data transfer protocols, routine machine washing steps, issue reporting for remote support, general safety and data quality checks.

The instrument is now ready for use and is expected to give service (whole genome, exome, RNA sequencing) as well as bioinformatics support not only to AHRI but also to all interested researchers/institutions in the country based on specific agreement. Currently, the unit is in the process of acquiring accessories and reagents to avoid interruption in function.
The Future Building

The FMOH has allocated a budget to build a modern laboratory and office complex for AHRI and a total of 5401.17 m² land within the ALERT compound is allocated for this purpose. The total floor area of the complex will be 23,828.48 m².

In 2017, the engineering team from FMOH and a committee established at AHRI have been facilitating the selection of a consultant company. The team critically evaluated the submitted documents including the architectural designs in consultation with the AHRI management and Yohannes Abbay Consulting Architects and Engineers won the bid.

The consultant group had 5 meetings with the team from FMOH and the team at AHRI including senior researchers where the architectural design was presented and feedbacks obtained.

As a result of the discussion, some major changes like having additional floors for the lab arm and functional reorganizations were made. Structural, electrical and sanitary designs were also assessed by the group. The design is now finalized and has been approved by the FMOH and a bid document for selecting a contractor is ready.

HLA lab is established

Establishing an HLA lab has been one of the priorities of AHRI for the last 2 years. The main purpose of establishing this lab was to support the national kidney transplantation program and to support research activities in communicable and non-communicable diseases.

Currently the lab has successfully established Luminex based anti HLA antibody detection: the Lab screen Mix and the single antigen beads assays. Validation tests will continue for these assays.

AHRI plans to initiate Flow cross match and PCR + Luminex based HLA typing in the coming February 2018.

The establishment of these assays at AHRI is a step forward to eventually provide the required support to the transplantation program and in building capacity of other sister institutions in the country.