



COLLEGE OF VETERINARY MEDICINE, ANIMAL RESOURCES AND BIOSECURITY



Safer planet, prosperous communities

ANNUAL REPORT 2018

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1. INTRODUCTION

The College of Veterinary Medicine, Animal Resources and Bio-security (COVAB) is committed to nurturing citizens to become productive, entrepreneurial, job creators, skilled and with sufficient capacity to transform the existing challenges in the animal resources world into economic and livelihood opportunities. The College was able to put to market about several professionals in livestock farm entrepreneurs and technologists. In these farmers some of them were selected to represent the college to the Netherlands for further skilling.

The college has put to market many laboratory Technologists and some of them are working in different hospitals in and out of the country in addition to nurturing several Veterinarians, Animal Production technologists and wildlife Health Management specialists. Most of these professionals are working in different institutions in and out of the country.

2. ACHIEVEMENTS AND PROGRESS

2.1. 24 Young farmers complete the first phase of the General Artisan Certificate

After undertaking a two-month long training, 24 young farmers completed phase one of the General Artisan Certificate offered at the Africa Institute for Strategic Services and Development (AFRISA) under the Skills, Production, Enterprises Development and Academics program, known as the SPEDA Model.



Afrisa students, some trainers and AFRISA administration pose for a group photo at Ruth Keesling Centre CoVAB

As they visited various farms in the course of the training, the students learnt the importance of adding value to their farm produce and how to utilize land and use limited space to gain maximum output.

The Principal, College of Veterinary Medicine, Animal Resources and Bio- Security (COVAB), who is also the Principal Investigator of programs which aim at eradication of poverty through the SPEDA Model, Prof John David Kabasa, noted that majority of Uganda's population is below 30 years of age but they neither produce nor control wealth. He therefore urged the young generation to do so in order to survive.

Similarly, The AFRISA Head of Secretariat, Dr. Michael Kansiime encouraged the celebrants to have a working strategy for prosperity and to equally tell the world about AFRISA so that it can reach more people and hence change the world.

The AFRISA Head of Operations, Dr. David Lubega congratulated the celebrants and urged them to work hard and to remain committed to what they do. He also encouraged them to live exemplary lives in order to transform their communities.

Certificates of participation and completion of phase one of the General Artisan Certificate were awarded to all the participants. However, some of them were awarded for their outstanding performance in the course of the training. Kwesigye Robert was awarded a certificate for being hardworking, disciplined and an exemplary leader, Itungo Kennedy was awarded a certificate for being outstanding in reading and Interpreting content as well as having excellent presentation skills and the ability to transfer knowledge to others while Mutoni Phiona was awarded a certificate for standing out in active participation especially in practicals and hands-on training.

3. RESEARCH AND INNOVATION

3.1. Capacity Building and Strengthening in the pre-service workforce

It is common for teaching on most degree courses on the university to be conducted within a single school or college. This limits discussion and collaboration across disciplines, hindering shared understanding and vision and coordinated outcomes or solutions to health challenges within our community. One Health experiential education delivered to multidisciplinary student classes fosters the practice of 'doing-things-together' i.e. team building, learning principles together, problem-solving together, simulating together and practicing together etc. Multidisciplinary training allows for areas of synergy to be identified as well as appreciating the roles the other professions play in infectious disease prevention and control. This will result in a change in the mind-set, skills and knowledge of the future one health workforce (university students), and help instilling the one health practice in the minds of the students

3.2 One Health Graduate Fellowship Placements Attachment

A total of Graduate students placed at Institutions mentoring One Health for a period of 60 days. Some of these institutions included, the FAO-ECTAD-2 project, Amref Health Africa, International Disease Institute (IDI), AFRISA, ResillietAfrica Network (RAN) and the Uganda National Health Laboratory Systems. The graduate students were able to participate in real-time risk analysis, surveillance, reporting and aspects of community engagement, for Highly Pathogenic Avian Influenza, Trypanosomiasis, and Laboratory data.

3.3. COVAB Tick and Tick-borne diseases Researchers on developing an Anti-tick Vaccine

With the problem of emerging tick resistance against acaricides, a tick and tick-borne diseases research team, spearheaded by Dr. Saimo Kahwa Margaret and Dr. Ikwap Kokas is developing an anti-tick vaccine as one of the presidential initiatives to address the issue of ticks and tick borne diseases among livestock in Uganda.

The research team presented its study to the CoVAB administration and researchers on 26th October, 2018, who brain stormed ideas on how to progress with the problem solving study.

This integrated tick control development aims to produce recombinant proteins within the anti-tick vaccines and are proved to be used in countries such as; Cuba and Australia.

This study on anti-tick vaccines suggests that the current anti-tick vaccines work basing on the anti-bodies released in vaccinated animals, which antibodies are taken in by the tick during feeding. Once inside the tick gut, they cause damage to the digestive and reproduc-

tive organs of the tick which can either die or reduce on its blood intake hence produces few eggs or doesn't lay any eggs.

The experiential work started in January 2018 with the aim of determining the extent to which the respective proteins in anti-tick vaccines influence the tick feeding time on the animal, the tick adult weight gain, the capacity of the tick to lay eggs and the numbers laid, and the hatchability of eggs into larvae.



The tick and tick-borne diseases research team, presenting their research to CoVAB Administration and researchers

According to research, it is reported that Uganda is one of the countries hard-hit by tick borne diseases leading to 30% loss of livestock.



3.4. Cuban Scientists in Collaboration with CoVAB on Developing a Strategy to Introduce the Gavac Anti-tick Vaccine in Uganda

On 17th May, 2017, the College of Veterinary Medicine, Animal Resources and Biosecurity (COVAB) hosted a team of Cuban Scientists to share ideas on the Gavac-anti tick vaccine and how it can be introduced in Uganda.

The team which was led by Dr. Hector Machiado presented the Gavac- anti tick vaccine to the COVAB Scientists in a meeting chaired by the Deputy Principal, Prof. Samuel Majalija. The two scientific teams made emergency arrangements and brain stormed notions on how to have the vaccine introduced in Uganda while its efficacy is monitored and evaluated.

Dr. Machiado reported that his team has been working on the Gavac- anti tick vaccine program from August 2017 to May 2018 and contacted the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) through the Cuban Ambassador to Uganda, seeking for collaboration while considering the different tick species in the country.

With the problem of emerging tick resistance against acaricides, Dr. Machiado stressed that the vaccine will reduce the farmers' use acaricides and anti-biotics to control diseases.

"The Integral Control Program will help the farmer in a progressive way as the number of ticks on the animal and the environment will reduce. The blood of the animals will be rich in proteins helping them to develop their own natural immunity. This is also an alternative for the environment since there will be reduced use of toxic agents and yet no resistance," said Dr. Machiado.

The Inter-institutional Committee Team Leader, Prof. Anthony Mugisha reported that a road map for this program was presented to the President, H.E. Yoweri

Prof. Majalija appreciated the Cuban Scientists for their willingness to contribute to the economic development of the country. He however emphasized the need for clear engagement of farmers and all stakeholders in implementing the program.

According to research, it is reported that Uganda is one of the countries hard-hit by tick borne diseases leading to 30% loss of livestock.

3.5. Delegates from Institute for Security Studies- Nigeria enthused by Makerere University's research capacity and innovativeness



At Makerere University Skilling and Incubation Centre- Nakyesasa which is under the College of Veterinary Medicine, Animal Resources and Bio-security, delegates were welcomed by the Principal Prof. David Kabasa.

*“COVAB represents a new generation of colleges that we call comprehensive veterinary colleges, which not only focus on medicine and animal welfare, but the total welfare of the animal and its people, which is termed as *the total animal concept*.”*

On 6th July 2018, Makerere University hosted seventeen delegates from the Institute for Security Studies, Abuja-Nigeria to explore the various research and innovation areas that position MAK as one of the best institutions of higher education in Africa.

The delegation which was headed by Mrs. Angela Oleseni firstly toured Makerere University Agricultural Research Centre, Kabanyolo under the leadership of the Principal of the College of Agricultural and Environmental Sciences, Prof. Bernard Bashaasha. While there, they had the opportunity to visit various units to mention but a few which include; the livestock improvement barn, the processing unit, spray race, and a feed mill.

They later proceeded to Makerere University Skilling and Incubation Centre- Nakyesasa which is under the College of Veterinary Medicine, Animal Resources and Bio-security (COVAB); the delegates were welcomed by the Principal Prof. David Kabasa, who introduced COVAB as a paradigm shift which focuses on generating science, technology and innovation in the animal world, but also transforming this into sustainable livelihoods.

“COVAB represents a new generation of colleges that we call comprehensive veterinary colleges, which not only focus on medicine and animal welfare, but the total welfare of the animal and its people, which is termed as the total animal concept.”

Prof. Kabasa, who is also the Principal Investigator of AFRISA later commended the Uganda government for developing a number of Centres for innovation at COVAB, emphasizing that the government is Centre for

Biosecurity and Biotechnology at this college for developing vaccines and is as well assisting the new generation of colleges to develop an Industrial livestock business park (Nakyesasa Incubation Center), with a mandate to take science, technology and innovation to the house hold so that it begins to produce for the market.

This overview was after Mrs. Oleseni requested for advice on how Makerere University maintains its position of being one of the best Universities in regards to research and innovation.

Under the guidance of Prof. Kabasa, the delegation later visited the feeds farm and the feed processing area; the leather and the dairy processing industries. Prof. Kabasa also introduced the delegates to the Household Economic Transformation Initiative (HETI); a mobile training unit that is ready to take Makerere University to the community.

The Institute of Security Studies was established in 2004 and registered under the Companies and Allied Matters Act, as an independent, non-governmental, non-for-profit professional organization. Its main objective is to provide a forum for security and safety practitioners in both the private and public sectors to exchange ideas and share experience in the art and science of security. Since its establishment, it has developed considerable both in size and stature and achieves an influential status in security education. The institute was established to undertake research, teaching & professional training in the study of public disorder, crime control and prevention, security and risk, crises and disaster.

4 KNOWLEDGE SHARING, TRANSFER AND PARTNERSHIPS

Knowledge sharing and transfer is one of the core functions of CoVAB. The College has also engaged in both local and international partnerships to drive transformative knowledge, skills, innovations and services for the continuous improvement of society. More of the 2018 developments include; trainings, conferences, and community outreaches as a way of finding solutions and address issues of the rising pandemic health threats.

4.1. COVAB-VETS UNITED Animal Welfare and Health Training



The College of Veterinary Medicine, Animal Resources and Biosecurity in partnership with VETS UNITED –WTG (Germany) conducted a training on Animal Welfare and Health from 19th March, 2018 to 24th March, 2018.

The workshop was to equip COVAB students with practical hands on skills and techniques in animal welfare and health to supplement on the animal welfare curriculum. This had positive response from students at the College who included; BVM 5, BAP 2, 3, and 4, WHM 3, and Animal Value Chain students (AFRISA).

The Animal Welfare and Health training was supported by Welttierschutzgesellschaft e. V. (WTG- VETS UNITED), a non- profit organization which is set out to improve animal health care standards in emerging and

developing countries through locally organized education and postgraduate training.

Activities held during the training

Under the coordination of Dr. Ssuna Paul and Dr. Gabriel Tumwine, a number of activities were entailed in this course and these included; theory classes on animal health and welfare which were held at the Ruth Keesling Centre.

Participants were as well taken through the Small animal Clinical examination, Anaesthesia injection sites and emergency medicine, euthanasia and how to improve small animal animal practice in Uganda by Dr. Bernard Agwai, Dr. James Gibson from the Department

of Pharmacy, Clinics and Preventive Medicine, COVAB and Carol, a veterinary nurse. Participants were as well taken through the Small animal Clinical examination, Anaesthesia injection sites and emergency medicine, euthanasia and how to improve small animal animal practice in Uganda by Dr. Bernard Agwai, Dr. James Gibson from the Department of Pharmacy, Clinics and Preventive Medicine, COVAB and Carol, a veterinary nurse.

Participants visited the Large Animal field Clinic in Nakasongola where they conducted animal treatment, deworming, castration, and dehorning as a way of giving back to the community.

On 23rd March, 2018, participants visited the Uganda Wild life Education Center (UWEC) and were taken through conservation, welfare of zoo animals, surger-

ies, and vaccinations by Dr. Lawrence George Opio.

On finalizing with the workshop, participants were assessed on what they had gained from the Animal Welfare and Health Training. They as well discussed some of the expectations from the study and forwarded suggestions on how to better the training. Conclusively, a total of 40 participants were also awarded Certificates of Completion of the COVAB-VETS UNITED Animal Welfare and Health Training.



Participants in the postmortem laboratory COVAB conducting a demonstration on how to collect samples from an animal's internal organs and carrying out dog castrations on 21st March, 2018..

4.2. Biomedical Professionals on Biosafety and Biosecurity Sector Improvement

Following the global health pandemic threats partly comprising of negligence by human resource in containment and handling of the laboratory technology and poor laboratory practices risking the lives of humans, animals and the environment through exposure to microorganisms, Biomedical professionals are currently in action to improve biosafety and biosecurity in Uganda.

This year, it was showcased during the Strategic Planning workshop for Biosafety and Biosecurity Association of Uganda held in Mbale and targeted towards improving the skills of biomedical professionals.

CoVAB was blessed to be part of the training through

representation by the Deputy Principal, Prof. Samuel Majalija in spearheading to align the biomedical professionals in the human, animal and laboratory field to play a leading role in ensuring responsible Biosafety and Biosecurity practices in the health sector.

4.3. COVAB, University of Bern, University of Zurich Train researchers on Data Analysis



From 8th October to 19th October 2018, CoVAB hosted an introductory course into Data Analysis with R-Studio software to equip researchers with knowledge and skills in research data analysis and interpretation.

The two weeks graduate programme was facilitated by a Veterinary Epidemiologist from the University of Bern, Dr. Sonja Hartnack and a bio-statistician PhD student from the University of Zurich, Dr. Muriel Buri, with coordination by Dr. Terrence Odoch, under the Department of Biosecurity, Ecosystems and Veterinary Public Health (BEP).

Dr. Sonja emphasized that it's very important for students to know how to analyze their own data, starting by putting the data into a software and describing it which makes it more independent.

"I've heard that the lack of this training in the past led to a longer duration in studies for the Masters Students and PhDs because they lacked the confidence in data analysis," said Dr. Sonja.

With Makerere University working towards becoming a research-led institution, Dr. Odoch affirmed that the Data Analysis training is basically for the PhD and Masters students who are expected to conduct re-

search as a major requirement for graduation therefore promoting research in all disciplines. He added that for such a goal to be achieved, they expect CoVAB, especially the university top management to provide maximum support to these programmes.

To mention but a few of the College partners in running this programme include; University of Zurich, University of Bern, and International Livestock Research Institute, which sent two participants last year with also 2 participants this year.

On listing the partners in this programme, Dr. Odoch said that partners can participate in the training reporting that this year, there's a participant from the district which will be their study area on the Free roaming dog ecology project, who is also a PhD student here.



The Data Analysis class

Considering the results from last year's training, Dr. Sonja reported that they identified two suitable Master's students, who are using this knowledge and will part of the Free roaming dog ecology project, which is yet to commence.

"One student is currently applying knowledge on data

analysis in her topic on attitude and knowledge regarding anti-biotic usage and anti-microbial resistance. She was jointly supervised and defended her proposal, conducted her field work and with guidance, she will analyze her data using R-studio,” said Dr. Sonja. Adding that another student will be part of the Free roaming dog ecology project, who will also have the master pieces in that using different methods on how to estimate the number of dogs and will also use R- studio.

4.4. CAPAZOMANINTECO project embarks on running Continuous Professional Development Courses (CPDS)



The Capacity building Zoonotic diseases Management Using Integrated Ecosystems and gender focused approach (CAPAZOMANINTECO) project, on the 18th and 19th October 2018 conducted a workshop to develop training material for running the Continuous Professional Development courses (CPDs) as a major activity under the project’s third pillar of *institutional development*.

The multi-disciplinary workshop that was organized by the Department of Biosecurity, Ecosystems and Veterinary Public Health (BEP) was held at the College of Veterinary Medicine, Animal Resources and Bio-security (CoVAB), Makerere University, under the coordination of the project’s Principal Investigator, Prof. Clovice Kankya.

It brought together a team of experts to brain storm on ideas that underlie the various modules that were previously developed by the CAPAZOMANINTECO team in 2017 in a meeting that was held at the University of Zambia (UNZA).

In regards to modules that were presented to the participants by the CAPAZOMANINTECO team, the participants engaged in group discussions in which they prioritized and merged particular modules and had a session

of sharing these ideas, to concretize on selected merged modules.

Following the issues that underlie food safety in Uganda, the project found the need for more efforts to address these issues by skilling organizations and people in the food industry on how to handle food in an acceptable healthy manner, hence promoting food safety and security.



L- Participants engaged in a group discussion and R- one of the participants presenting a module.

4.5. Data visualization training using Linux system

“The problem of ticks is affecting both livestock and humans and this can be solved by science which is facing a new challenge, and requires knowledge in addressing this issue and how the tools are used in addressing this challenge.”

From 3rd September to 14th September 2018, CoVAB hosted a multi-disciplinary team of researchers in molecular areas for a training in data analysis and visualization using Linux System.

The workshop that was coordinated by Prof. Lawrence Mugisha was to equip ticks and tick-borne diseases researchers with data interpretation skills to be in position of addressing the problem of ticks and tick-borne diseases through research.

CoVAB was blessed to have facilitators from Swedish University of Agricultural Sciences, who were led by Dr. Maja Malmberg for the two weeks workshop which comprised of mainly graduates; 11 PhD students and 9MSc students with only 1 Bachelors student (BLT).

On closure of the workshop, the College Deputy Princi-

pal, Prof. Samuel Majalija commended the Prof. Mugisha for coordinating such a research problem solving workshop and thanked the facilitators for sharing their knowledge with participants. He additionally commended the participants for obtaining knowledge in regards to the most advanced tools in research.

Prof. Majalija also encouraged participants to use the knowledge for redeeming society from the problem of ticks and tick-borne diseases.

“The problem of ticks is affecting both livestock and humans and this can be solved by science which is facing a new challenge, and requires knowledge in addressing this issue and how the tools are used in addressing this challenge,” affirmed Prof. Majalija.

Dr. Malmberg appreciated those that were part of the

workshop and encouraged them getting the whole knowledge and skill in using the Linux system is a process that progresses with time.

The trainees also raised a vote of thanks to all their trainers through a representative who thanked the workshop facilitators for sharing their knowledge and Dr. Mugisha for maintaining and advancing the ticks and Tick-Borne based project.

Participants were later awarded with certificates on completion of the workshop, which were handed over to them by the Prof. Majaliya, who was the session's guest of honor.

4.6. Scientific Seminars

4.6.1. Improve Veterinary Capacity to Support Animal Health Infrastructure in Africa ~ Prof. Logan

On 6th September, 2018, CoVAB hosted a Pathobiologist from the Texas A & M University, College of Veterinary Medicine, Prof. Linda L. Logan, who presented her research to Covabians on Food Security through Effective Animal Health Delivery Programs: The case for US Veterinary Programs.

The major aim of her visit to promote frontline veterinarians and improve their skills as one of the US-Vet and United Nations Food and Agricultural Organization (UN FAO) collaborative strategies.

With the recent struggles with ticks and tick borne diseases, Prof. Logan introduced the School of Vet. Texas as a champion that was formed to solve the tick problem since globally, there is a high demand of protein foods that can only be provided by healthy animals.

"Historically, diseases have spread across international borders and within countries due to movement of animals and animal products. Therefore, to support animal health infrastructure in Africa, there's need to improve veterinary services/ capacity," said Prof. Logan. Adding that the Animal Health Network must respond to animal Health issues which include; scientific, customer demands, public health issues, food safety, animal welfare concerns, trade interests, political conditions, and environmental issues.

It should be remembered that the value chain for animals requires a lot of people; veterinary health workers, farmers, importers, exporters, universities among others.

4.6.2. Students' seminar on citation

Referencing/ acknowledging any kind of information while documenting a study proves professionalism in authors' work and that is why students need to gain knowledge on how quotes/ citations are presented in their academic research studies.

COVAB being a science research based academic institution, on 13th September 2018, students were impart-

ed with knowledge on how citations are presented in their work engaged in a seminar which was organized by the Deputy Principal, Prof. Samuel Majaliya.

It should be noted that conducting and presenting professional research is a major requirement for all students to graduate at Makerere University.

4.6.3. Molecular tools of Tick-borne Pathogen Research

On 20th September, 2018, students also had a session on *molecular tools of tick-borne diseases (TBD)* which was under the facilitation of Dr. Maja Malmberg from Swedish University of Agricultural Sciences- Sweden.

This research project is an interdisciplinary approach in addressing TBD in Ugandan cattle and aims to contribute to livestock health in Uganda.

Dr. Malmberg reported that 70% of the world's low income earners depend on livestock and cattle are frequently infested with ticks yet the ticks are getting resistant to drugs. She added that there's still limited knowledge on ticks and tick-borne diseases in Uganda. Therefore this research is a participatory epidemiology study which analyses the anti-bodies in the cattle's blood.



Dr. Malmberg (front R) making a presentation as a participant (front L) makes a contribution.

5. TEACHING AND LEARNING

5.1 Student Enrollment– 2018/2019

5.1.1 Undergraduate

Degree Program	No. of Students				
	Year 1	Year 2	Year 3	Year 4	Year 5
Bachelor of Animal Production Technology and Management	42	27	23		
Bachelor of Biomedical Laboratory Technology	188	158	170		
Bachelor of Veterinary Medicine	99	63	75	76	70
Bachelor of Wildlife Health and Management	7	11	5		
Total	336	259	273	76	70

5.1.2 Graduate Enrollment

Graduate Program	2018
Master of Science in Biomedical Laboratory Sciences and Management	07
Master of Science in International Infectious Diseases	15
Master of Science in Livestock Development Planning and Management	13
Master of Science in Molecular Biology	21
Master of Veterinary Preventive Medicine	10
Master of Wildlife Health and Management (Aquatic Health Management)	01
Master of Science in Wildlife Health and Management (Wildlife Clinical Medicine)	01
Master of Veterinary Medicine (Food Animal Health and Production)	21
TOTAL	89

5.1.3 SPEDA-AFRISA Programs Enrollment

Degree Programs

Program	2018/2019	
Year	Year 1	Year 2
Bachelor of Livestock Industry and Business	11	04
TOTAL	11	04

Diplomas

Program	2018/2019
Diploma in Laboratory Science Education and Industry	17
Diploma in Poultry Industry and Business	18
Diploma in Feed Industry and Business	03
Diploma in Leather Industry and Business	02
Diploma in Fish Industry and Business	04
Diploma in Pig Industry and Business	07
Diploma in Dairy Industry and Business	19
Diploma in Meat Industry and Business	01
Diploma in Bee Industry and Business	01
Diploma in Livestock Product Development and Entrepreneurship	16
TOTAL	88

Ordinary Certificate

Program	2018/2019
Dairy Industry and Business	16
Poultry Industry and Business	10
Bee Industry and Business	-
Pig Industry and Business	03
Fish Industry and Business	02
Feed Industry and Business	01
Wildlife Industry and Business	02
Meat Industry and Business	02
Laboratory Science Education Industry and Business	05
Leather Industry and Business	01
TOTAL	42

Artisan Certificate

Program	2018/2019
Dairy Industry and Business	06
Poultry Industry and Business	04
Bee Industry and Business	-
Pig Industry and Business	02
Fish Industry and Business	01
Feed Industry and Business	03
Wildlife Industry and Business	01
Meat Industry and Business	-
Laboratory Science Education Industry and Business	-
Leather Industry and Business	01
TOTAL	18

5.2 Students' Graduation 2018

Program (Undergraduate)	No. of Graduands
	2018
Diploma in Livestock Health Science	02
Diploma in Dairy Industry and Business	05
Diploma in Laboratory Science Education and Industry	09
Diploma in Leather Industry and Business	01
Diploma in Pig Industry and Business	04
Diploma in Poultry Industry and Business	09
Diploma in Livestock Products Development and Entrepreneurship	–
Bachelor of Animal Production Technology and Management	–
Bachelor of Biomedical Laboratory Technology	123
Bachelor of Science in Wildlife Health and Management	06
Bachelor of Veterinary Medicine	48
Bachelor of Science in Meat Industry and business	01
Bachelor of Dairy Industry and business	03
Bachelor of feed Industry and Business	02
Bachelor of Laboratory Science Education and Industry	07
Bachelor of Science in Poultry Industry and Business	05
TOTAL	225

Program (Postgraduate)	No. of Gradu- ands
2018	
Degree of Doctor of Philosophy (PhD) Veterinary Medicine	01
Master of Wildlife Health Management	-
Master of Science In Molecular Biology and Biotechnology	02
Master of Science in Biomedical Laboratory Science Manage- ment	01
Master of Veterinary Medicine (Food Animal Health and Pro- duction)	02
Master of Animal Products Processing, Entrepreneurship and Safety	-
Master of Science in Livestock Development Planning and Management	05
Master of Science in Infectious Disease Management	-
Master of Veterinary Preventive Medicine	01
Post Graduate Diploma in Livestock Development Planning and Management	-
Degree of master of natural products technology and value chain management	-
Degree of master science in veterinary pathology	-
TOTAL	12

6. STUDENTS' ACTIVITIES

With continued support from the Administrative, Academic and Support staff, CoVAB students have had a number of accomplishments that have contributed to the Capacity built among them stretching from academics, social, political, and health areas.

6.1 Papa Were Salim- the Covabian elected 84th guild president of Makerere University

The year-four Veterinary Medicine student, emerged victorious in the 84th guild race with 3202 votes of those cast in a closely contested election marred by allegations of bribery of a top university official and electoral commission authorities, nomination of unqualified candidates, and suspension of guild rallies.

Papa, who joined in the guild race on the Independent Party ticket is the first Covabian to become Guild President of the prestigious University. He was followed by Kinene Edward, who emerged second with 2267 votes. The voting happened on Wednesday 14th March, 2018 amid security deployment to maintain order as the elections were being held.

More in the guild race were; Chiluba Fred with 776, Andama Fred with 57, Isabirye Dan with 60, Kamyuka Patrick with 103, Namuganza Florence with 42, Nuwataho Samuel with 146, Obbo Johnson with 131, Lwamaza Silver with 1528, Taliwaku Andrew with 1380, Turyasingra Henry with 123, and Kasumba Jyavira with 46.

Papa, who also resides in Nsibirwa Hall now takes over from the embattled Kato Paul who won last year's contest on the FDC ticket.



Papa Were celebrating his victory on emerging as winner in the guild race.



The Principal, Prof. John David Kabasa with both the out-going and incoming Students' cabinet during the ceremony on 3rd May, 2018 in the Media Hall, COVAB.

6.2 COVAB students' 2018/2019 leadership fully installed

On 3rd May, 2018, COVAB held a handover ceremony in which the students' new leadership was granted full power to represent and serve the Covabians as well as Makerere University at large.

In presence of the College staff and students, the new leadership took an oath, emphasizing their willingness to be loyal and serve the students in accordance to the University and Students' Association constitutional requirements. As the guest of honor at the ceremony, the Principal, Prof. John. D. Kabasa commended the out outgoing leadership for serving the college appropriately. He also congratulated incoming leadership for obtaining the respective offices through the democratic will of the students.

He however urged the new leadership to spearhead students in social networking with professional organizations so as to open an opportunity for students all to learn and work as professional teams.

In his remarks, the Deputy Principal, Prof. Samuel Majalija wished the new cabinet the best in serving the college and promised to work hand in hand with them.

He also informed them that through leadership, they are making a decent history for the future.

"The veterinary profession is a shepherding profession, the knowledge and skills you have as veterinarians can be used to rescue the public from suffering, the professional organizations shepherd the sector to grow into a ministry to which the veterinarians and laboratory experts can join."

It is remembered that the college democratic elections for leadership of the various students' associations at COVAB were held on 27th April, 2018.

PICTORIAL : STUDENTS' SPORTS GALA



6.3. The Antimicrobial Resistance Stewardship Public Health Challenge



On 15th March, 2018, the Students' Consortium for Public Health Challenges (SCPHC) together with Makerere University Biomedical Laboratory Students Association (MUBLTSA), College of Veterinary Medicine, Animal Resources and Biosecurity (COVAB) held a **Student's Public Health Challenge** based on the theme, *"Antimicrobial Resistance Stewardship."*

The purpose of the challenge was to provide a platform to all students from multi disciplines to engage in increasing awareness on crucial public health problems and actively involve them in solving those health threats like infectious diseases, antimicrobial resistance, Zoonotic diseases, and nutrition.

The consortium focuses on the engagement of a layman in understanding basic scientific research, enable him realize his role ending the public health threats.

The consortium has well established strategic plans to enable it achieve the set goals. Such strategies include organizing public health challenges for tertiary institutions, primary and secondary school outreaches, agricultural trade exhibitions, organizing for the commemoration of national and global days/weeks for the different health events, organizing trainings for village health workers and use of social media platforms. This is to increase awareness about the several life threatening conditions typically neglected.

Participants

During the event, the Guest of Honor was Head Emergency Operations Center- Ministry of Health, Dr. Makumbi Issa.



Dr. Makumbi during the challenge.

The key note address was given by the Project Manager Global Health Security Engagement, Dr. Walyema Richard represented by Dr. Kizito from Infectious Diseases Institute (I.D.I).

Welcome remarks were given by the MUBLTSA President, Mr. Isabirye Herbert Kiirya.

Participants were also blessed with remarks from the Dean- School of Biosecurity, Biotechnical and Laboratory Sciences (SBLS), Prof. Frank Mwine represented by the Head of Department, Biosecurity, Ecosystems and Veterinary Public Health (BEP), Prof. Clovice Kankya, the SCPHC Head Investigator, Dr. Edward Wampande and Dr. Jesca Nakavuma, who was the Chief Adjudicator of the students challenge.



Dr. Wampande making his remarks during the event.

More among the participants were students from Bugema University, Katikamu Senior Secondary School, Vic View Primary School, Kampala International University- Bushenyi Campus, Mbarara University, International Health Science University and Kyambogo University.

Activities

Students made presentations on Antimicrobial Resistance, a primary School Pupil, Byanso Joshua recited a poem on Hand washing as a way of disease prevention. 15 Contestants made powerpoint presentations on AMR.

This challenge was to determine participants who had easily understood information on Antimicrobial resistance by the layman.

Participants also had a drama presentation from Bugema University students on the *Effects of Antimicrobial Resistance on Family*. Additionally, participants had a poem on Antimicrobial Resistance by students from Katikamu Senior Secondary School.



Students from Bugema University presenting a play on the Effects of Antimicrobial Resistance on Family.

Various participants in their different capacities and organizations such as; IDI who were supportive towards the event were awarded certificates of appreciation. Contestants in the challenge were also awarded certificates of merit.



L-Bwanso Joshua, a pupil from Vic View Primary School receiving a certificate after writing and presenting a poem on Antimicrobial Resistance and R- Students of Katikamu SDA Senior Secondary School receiving their certificate.

Participants also had remarks from the Adjudicator, Dr. Nakavuma, who rated the presentations. The presenters who satisfied the required criteria and emerged winners were given awards.

Prof. Kankya in his closing remarks stressed the need for increasing public awareness on public health concerns through more interactive programs similar to SCPHC's AMR challenges and urged the students to actively participate and be innovative in future events.



6.4. MUBLTSA - COVAB administration join efforts to transform students' welfare



The Deputy Principal, Prof. Samuel Majalija and the new cabinet in the Conference room, COVAB on Monday 7th May 2018.

Through the students' bodies that work hand in hand appropriately addressed.

with the College administration, the College of Veterinary Medicine, Animal Resources and Biosecurity (COVAB) ensures that all student's concerns are ap- This was clearly manifested on 7th May 2018, when the Makerere University Biomedical Laboratory Technology Students' Association (MUBLTSA) presented a work

plan for their service and the existing concerns of students to the College administration.

Spear headed by the MUBLTSA President, Mr. Siranje Matovu, the Association presented a list of events to consolidate during the new cabinet's term of service. These included but not limited to the Secondary School Students' Conference which is aimed at extending career guidance as well as sensitize students on public health challenges, sensitization of the University students about sanitation and hygiene, AIDS campaign to advocate for positive behavior change and contribute to the global 90 90 goal through HIV testing and counseling, the National Conference for Laboratory professionals to strengthen working networks, the outreach program at Kigezi to promote charity as well as the General Assembly to provide a platform for students and administrators to discuss various college issues.

The Deputy Principal, Prof. Samuel Majalija appreciated the MUBLTSA leaders, saying that the presented plan was a perfect step to transform the College at its best. He however encouraged them to also consider the pending issues that weren't tackled by the previous cabinet.

He as well encourage the students' leaders to target the bigger global programs such as; the World Aids Day, World Veterinary Day and more, through which they can easily influence the university to provide them with support.

Conclusively, Prof. Majalija recommended that issues concerning student's health need to be addressed immediately. He promised support to the student leaders as they serve the College and the University at large.

6.5. The AIMS System sensitization program

As one of the major contributions to fulfilling the mission of Makerere University *"to provide innovative teaching, learning, research and services responsive to National and Global needs"* as well as her core value of *"Customer Responsiveness"*, COVAB embraces guiding students in using the university technical systems.

With the newly enrolled system of tuition payment (AIMS System) at Makerere University, on 31st August, 2018, COVAB students were as well introduced to AIMS and guided on how it is used. They were taken

through all the procedures to follow with help from the technical team that was allocated to the different colleges. With effect from the first semester academic year 2018/19, all students were advised to make payments through this system, this after generating a Payment Reference Number from their student accounts, which are then presented to the bank for payment.

7. COMMUNITY OUTREACHES

7.1. CoVAB Supports Bududa Community

Following the Bududa mudslide tragedy that claimed hundreds of lives and displaced over 800 people after River Tsume burst its banks, the College of Veterinary Medicine, Animal Resources and Biosecurity (CoVAB) Makerere University has taken initiative to support the Bududa community with some items and funds to as-

sist in rebuilding their livelihood.

This was manifested today, 24th October 2018 when the College staff and administration, represented by the Dean, School of Veterinary Medicine and Animal resources (SVAR) handed over the donated items to

the Makerere University Academic Staff Association (MUASA) Executive team that was led by the MUASA Chairperson, Dr. Deus Kamunyu Muhwezi.

Dr. Muhwezi thanked the College staff and students for their heartwarming support towards the people of Bududa, adding that Makerere University is still active in this initiative until Friday 26th October 2018, and

therefore urged those with something not to hesitate in making their contributions to assist Bududa community.

This noble cause by CoVAB was spearheaded by Dr. Andrew Tamale, and to mention but a few donations that were made included food, shoes, clothes, and jerseys.

8. RESEARCH GRANTS

COVAB received a funding under the presidential initiative to fast track the development of the Antitick Vaccine using University facilities and presidential farms.

COVAB in partnership with the African Academy of science received funds through welcome trust to develop a diagnostic Kit for sleeping sickness.

Through the funding from German Research Foundation, COVAB is spearheading the development of the East Coast Fever Vaccine.

Through a funding from National Agricultural Research Organization (NARO), COVAB has been able to develop the following: A comprehensive all animal feed factory and industrial research unit, the development of the anti-mycotoxin binder, a farm gate brucellosis diagnostic kit.

COVAB also received a funding through One Health for Central and East Africa (OHCEA) for curriculum transformation and workforce development in global health sector for the public sector.

Through NORAD funding COVAB received funds for capacity development in zoonotic disease management.

COVAB also received funding from the Ministry of Agriculture, Animal Industry and Fisheries. (MAAIF) for training skilling Agricultural extension farmers.

I thank all these funders for taking part in transforming the existing challenges in the animal resources world into economic and livelihood opportunities.



9. 2018 PUBLICATIONS

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