### **Curriculum vitae**

Name: Gertrude Alupo

Current address: Anyara Subcounty, Kalaki District Local Government

P.O. Box 722, Soroti

Email: gertrudealupo@gmail.com

Telephone: +256 784 190 104

#### **ACADEMIC QUALIFICATIONS:**

Master of Science in Animal Sciences. The Hebrew University of Jerusalem (October 2017 to October 2019).

- Bachelor of Animal Production and Management. Busitema University, Uganda (September 2012 to 2015).
- Diploma in Agrostudies. Ruppin Campus, Israel (October 2015 to September 2016).
- Uganda Advanced Certificate of Education. St. Joseph's S.S.S Naggalama (2010 to 2011).
- Uganda Certificate of Education. St. Joseph's S.S.S Naggalama (2006 to 2009).

#### EXPERIENCE AND POSITIONS OF RESPONSIBILITY

# Part-time Teaching Assistant Busitema University, Arapai Campus – 01.06.2022 up to date.

- Conducted teaching and learning of Animal Selection, Breeding, and biotechnology (BSA 1205), Animal Nutrition (APM 1204), Pasture production and management (DAP 1205), Swine production, value addition and marketing (APM 2206), Small Ruminant and rabbit production (DAP 2204), Animal Genetics and Breeding (APM 2103), Animal Nutrition and feed processing (BSA 2104), Dairy production, value addition and marketing (APM 2203).
- Set, invigilated, marked assignments, course work and exams.

- Supervised 13 students on Industrial training in Nabilatuk district in October 2022.
- Supervised 4 students on Industrial training in Abim district in February 2023
- Supervised a research project (APM 3206) on "Efficacy of garlic in controlling Haemonchus contortus in goats at Busitema University, Soroti district".
- Was assistant examiner for special research projects of four final year students in Bachelor of animal production and management.

## Animal Husbandry Officer, Anyara Sub County, Kalaki (formerly Kaberamaido) District Local Government (20<sup>th</sup> March 2017 to date).

- Promoting adoption of improved breeds and animal production technologies.
- Training individuals/groups and beneficiaries of Parish Development Model (PDM), Discretionary Development Equalization Grant (DDEG), Operation Wealth Creation (OWC), livestock restocking, Youth Livelihood Program (YLP) and Uganda Women Entrepreneurship Program (UWEP) on mindset change from subsistence to commercialized agriculture, enterprise selection, business planning, adoption of good animal production practices such as good record keeping, providing good animal housing conditions, adequate nutrition, pasture production and dry season feeding.
- Monitor government inputs for projects such as OWC, NUSAF 3, DDEG, YLP, and UWEP
- Conducting vector and disease surveillance to detect any disease outbreaks e.g.,
  Foot and Mouth Disease (FMD), Lumpy skin disease (LSD), Newcastle disease
  (NCD) and signal relevant authorities for an early reaction. This includes both
  passive and active surveillance through receiving notifications about sick animals, visiting and interviewing farmers, examining the animals, conducting meat
  inspection, and reporting to authorities.
- Educating farmers to recognise and report signs of disease.
- Sensitizing the community on disease prevention and control measures for major diseases in livestock including NCD, Fowl pox, rabies, FMD, LSD etc.

- Sensitizing meat butchers on quality assurance and proper meat handling practices.
- Vaccinating livestock against major diseases.
- Collating and disseminating data on animal production.
- Building capacity of staff and other stake holders on delivery of animal production services.

## Farm manager Kiryowa mixed farm, Njeru Municipality - Buikwe district (2014 to 2017).

- Developed an idea of a family farm and made decisions while putting production and income into account.
- Planned and implemented breeding.
- Marketed and sold farm products
- Supervised the farm attendant to ensure that feeds were mixed in rightful proportions.
- Ensured that animals were fed adequately.
- Ensured that animal houses were clean and in a livable condition.
- Kept track of financial and inventory records.
- Observed general herd health and treated all sick animals.
- Took precautions necessary to prevent and control disease spread on the farm.
- Assisted the farm owner to determine financial growth of the farm and gave advice on how to maximize profit.
- Developed a passion for integrated farming and commercialized agriculture besides gaining exposure to numerous farmers who paid on farm visits.
- Shared knowledge enthusiastically with farmers and students who paid on farm visits.

#### RESEARCH EXPERIENCE

 Publication of MSc Thesis in Frontiers in endocrinology <a href="https://doi.org/10.3389/fendo.2020.00094">https://doi.org/10.3389/fendo.2020.00094</a> Identification and characterisation of a non-muscular myostatin in the Nile tilapia (Segev-Hadar *et.al.*, 2020).

 Msc Thesis; The Hebrew University of Jerusalem (September 2018 to October 2019).

The effect of environmental challenges on *mstn* expression in fish muscles.

 Research exercise, The Hebrew University of Jerusalem (December 2017 to September 2018).

Removal of Geosmin and 2-Methyl-iso-borneol from recirculating aquaculture systems by different filtering media.

Undergraduate research topic, Busitema University, Arapai Campus (2014 to 2015).

Adoption of Biogas as an alternative source of energy in Jinja district.

 Research exercise; Agrostudies apprenticeship program, Ruppin campus, Israel (2016).

The effect of different growth media on growth of New Guinea Impatiens (NGI) dark pink.

#### RESEARCH SKILLS

#### Laboratory work.

- Quantitative polymerase chain reaction using Step One Plus™ Real-Time PCR
   System (Applied Biosystems, Inc. Foster City, CA, USA).
- Reverse transcription of RNA to form a single strand of Complementary DNA (cDNA) using High-Capacity cDNA Reverse transcription kit (Thermo Fisher Scientific, Vilnius, Lithuania).
- Total RNA extraction using Trizol reagent (Life technologies Corporation, Carlsbad, USA).
- Analysis of metabolites in plasma using Cobas™ C111 chemistry analyzer
   (Roche Diagnostics International Ltd. Rotkruez, Switzerland).

- Volatile fatty acid analysis using a gas chromatograph coupled to a flame ionized detector (HP5890, Palo Alto, CA).
- Ammonia, nitrite, and nitrate analysis using a spectrophotometer.
- Measuring pH using a digital pH meter.
- Extraction of phytonutrients in medicinal plants for qualitative chemical analysis, testing of efficacy and toxicity on laboratory animals.

#### Field work.

- Care and management of swine, poultry, dairy cAattle on a family farm.
- Advisory services to individuals, farmer groups, and students.
- Supervision of animal housing construction on a family farm, for example indigenous microorganisms (IMO) shelter for swine, dairy shed for cattle.
- Management of a 9m³ domestic biogas plant.
- Care and management of Nile tilapia for experimental purposes in recirculating aquaculture systems.
- Water quality analysis using a dissolved oxygen probe, kits for ammonia and nitrite, minimum and maximum thermometer to monitor temperature.
- Meat inspection.
- Identification, harvesting, and conservation of medicinal plants for treating animals.

#### ADDITIONAL SKILLS

- Proficient in using JMP® Pro 14.0.0 software; Microsoft office packages (Word, Excel, and PowerPoint); Mendeley, One drive. These skills were applied to write academic reports, research exercises, course work, home assignments and online exams.
- Good teamwork skills stemming from various leadership roles like coordinating group members during the Agrostudies research project, serving as the General secretary of St. Paul Catholic community – Busitema University from 2014 to 2015,

being a leader of the praise and worship team from 2013 to 2014 and the course leader for my undergraduate class from 2012 to 2015. Vice president, then president of the Legion of Mary from 2008 to 2009 and 2010 to 2011 respectively. These offices imparted a culture of responsibility, orderliness, and good communication skills. Was a devout member of several church choirs, a school prefect, and an active participant in school debates. This molded me into a courageous and investigative lady.

- Always willing to gain new knowledge. Underwent training in green house farming and enterprise management under Waluz greenhouse solutions and farms Ltd.
   Awoja, Soroti from 23rd September to 5th October 2013.
- Willingly takes up leadership roles as illustrated above, likes singing in the church choir and travelling for leisure. Reads inspirational literature and makes new friends.

## **REFEREES**

## Supervisors, Kalaki District Local Government.

1. Dr. Ocoma Francis 2. Mr. Mbogua Joseph

District Veterinary Officer Ag. Head of Dept Animal Production & mgt.

Department of Production. Faculty of Agriculture and Animal Sciences

Kalaki District Local Government. Busitema University, Arapai campus.

Phone: +256 786 717 075 Phone: +256 774 515 986 / +256 702 331 919

### Academic Supervisors, The Hebrew University of Jerusalem.

Dr. Jakob Biran

Email: jakob@volcani.agri.gov.il

+972 542 260 501

Department of Poultry and aquaculture

Agricultural Research Organisation-Israel.

Academic Supervisor, Busitema University.

Ms. Akullo Jolly

Email: jolodongo@yahoo.com

2. Prof. Jaap Van Rijn

Email: jaap.vanrijn@mail.huji.ac.il

+972 548 820 856

Department of Animal Sciences

The Hebrew University of Jerusalem

Phone: +256 782 875 905

Department of Animal Production. Busitema University.