

# **CURRICULUM VITAE.**



**NYONGESA ALBERT WAFULA**

**DEPARTMENT OF VETERINARY ANATOMY AND PHYSIOLOGY**

**UNIVERSITY OF NAIROBI**

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## **1. PERSONAL INFORMATION**

Name: Nyongesa Albert Wafula  
Nationality: Kenyan  
Religion: Christian  
Languages: English, Kiswahili, Luhya  
Postal Address: Department of Veterinary Anatomy and Physiology  
University of Nairobi  
P.O. Box 30197- 00100, Nairobi  
Physical Address: Off-Riverside Drive, Chiromo Campus, Department of Veterinary Anatomy and Physiology.

## **2. ACADEMIC BACKGROUND**

2009- 2013: University of Nairobi- (**PhD in Animal Physiology**)  
2002-2007: University of Nairobi- (**MSc in Comparative Animal Physiology**)  
1992- 1998: University of Nairobi (**Bachelor of Veterinary Medicine**)  
1988- 1991: Kimalewa High School (**KCSE**)  
1980- 1987: Siuna Primary School (**KCPE**)

## **3. PROFESSIONAL/WORK EXPERIENCE**

### **I. ACADEMIC APOINTMENTS**

04/05/2022- to date: Senior Lecturer, Department of Veterinary Anatomy and Physiology, University of Nairobi  
26/6/2012- 3/5/2022: Lecturer: Department of Veterinary Anatomy and Physiology, University of Nairobi.  
20/10/2007- 25/6/2012 Tutorial Fellow: Department of Veterinary Anatomy and Physiology, University of Nairobi.

### **II. TEACHING EXPERIENCE**

Undergraduate student programs:

- ✚ Bachelor of Veterinary Medicine (First Year class)- FVM
- ✚ Bachelor of Science in Wildlife Management (First and Second Year class)- FVM
- ✚ Bachelor of Science in Agriculture (First Year class)- Faculty of Agriculture
- ✚ Bachelor of Science in Food Science and Technology (First year class) - Faculty of Agriculture
- ✚ Bachelor of Science in Range Management (First year class) - Faculty of Agriculture
- ✚ Bachelor of Science in Agriculture, Education & Extension (First year class)- Faculty of Agriculture
- ✚ Bachelor of Science in Dryland Sustainability, Science & Technology (First year class) - Faculty of Agriculture
- ✚ Bachelor of Science in Biochemistry (second year class)- Faculty of Science & Technology

Postgraduate courses currently teaching:

- ✚ Master of Science in Comparative Animal Physiology
- ✚ Master of Science in Vertebrate Anatomy and Cell Biology
- ✚ Master of Science in Biology of Conservation

### III. SUPERVISION

Undergraduate students on industrial/field attachment:

**October 2018- May 2019:** Fifth Year BVM student at Githunguri County

**Jan 2015 – April 2015:** Fourth year Wildlife Management students (2 students) at Kisumu  
Impala Sanctuary and Kakamega Forest Reserve.

**Dec 2013 – April 2014:** Fourth year Biomedical Technology students (6 students) at KEMRI

**Dec 2011 – Feb 2013:** Fourth year Biomedical Technology students (10 students) at KEMRI

**Jan 2011 – April 2011:** Fourth year Biomedical Technology students (4 students) at KEMRI

**Dec 2009- March 2010:** Fourth year Biomedical Technology students (8 students) at KEMRI

Postgraduate students supervised:

1. **Esther Maluki**, Kenyatta University (MSc. Thesis). Area of research: “Effects of khat extract on endocrine and gonadal function following withdrawal from long-term use in male rabbits”
2. **Amos Makori**, Kisii University (MSc. Thesis). Area of research “Effects of isolation on reproductive fitness of the naked mole rat (*Heterocephalus glaber*): A eusocial species”
3. **Peter Otieno Oduor**, University of Nairobi (MSc. Thesis). Area of research: “Investigation of reproductive success in female Anubis yellow hybrid relative to their parental populations in Amboseli, Kenya”
4. **Peter Maguta Irungu** of University of Nairobi- MSc Thesis). Area of research: “Mitochondrial DNA variation of East African Lion (*Panthera leo melanochaita*) populations in Kenya”
5. **Valence BWANA Mutwedu** of University of the Nairobi- (PhD Thesis). “Pharmacological effects of *Moringa oleifera* aqueous extract on reproductive performances and oxidative damages induced by heat stress in rabbit does”.
6. **Joyce Wanjiku Muthungu** of University of Nairobi (Msc Thesis). Area of research: “Physiological and biochemical evaluation of *Mucuna pruriens* seed extract on fertility using male Wistar rats (*Rattus norvegicus*)”
7. **Henry Emonje Mukabwa** of University of Nairobi (MSc Thesis). Area of research: “Cardioprotective effects of partially purified serine proteases from *Bitis arietans* venom against ischaemia”
8. **Martin Ouma**- University of Nairobi (MSc Thesis). Area of research: “Biochemical and Physiological effects of *Carissa edulis* aqueous and ethanolic root extracts on infertility in male Wistar rats”

Postgraduate students currently being supervised:

1. **Samwel Machungu Wafula** (MSc Student) of University of the Nairobi working on “Reproductive disorders induced by sweet and bitter cassava (*Manihot esculenta*) roots female wistar rats”.
2. **Gabriel Owino Omondi**- (MSc Student) of the University of Nairobi working on “Effects of the Human Immunodeficiency virus antiretroviral therapy on reproductive hormone levels in men living with HIV at Kenyatta National Hospital”.
3. **Emmanuel Kiprotich Sigey**- (MSc student) of the University of Nairobi on “An investigation into factors affecting semen quality in Gir crossbreed bulls at KAGRC, Kenya”.

### IV. OTHER ACADEMIC RESPONSIBILITIES

I have been appointed variously as internal examiner for MSc theses examinations in relevant areas of specialization in Departments of Clinical Studies, Animal Production, Public Health, Pharmacology & Toxicology of the Faculty of Veterinary Medicine as well as Board member during students' Msc. thesis defence seminars. I have also been appointed variously as internal examiner and Board member in MSc thesis examination of students in the Departments of Biochemistry as well as Biology (Faculty of Science and Technology) of the University of Nairobi.

**Nov 2023- to date:** Appointed as External Examiner in Zoology Department, Jomo Kenyatta University of Agriculture and Technology

**Nov 2019- 2022:** Appointed as External examiner, Faculty of Veterinary Science, Department of Anatomy and Physiology of the University of Pretoria.

**May 2018- 2021:** Appointed as internal examiner to Department of Biology of the University of Nairobi.

**Jan 2017- Nov 2020:** Appointed as internal examiner to Centre for Biotechnology and Bioinformatics (CEBIB) of the University of Nairobi.

**Jan 2014- Aug 2018:** Appointed as external examiner to AHITI NDOMBA, NYAHURURU and KABETE

#### **V. PROFESSION:**

A registered Veterinary Surgeon (KVB Reg No. 1799 and KVA Reg No. 0964) and membership is current.

#### **VI. SCIENTIFIC RESEARCH ENGAGEMENTS**

**8/9/2025:** Appointed as Editorial Board member of African Journal of Life Sciences Research (AJLSR)

**2024- present:** Reviewer in International Journal of Tropical Disease and Health

#### **4. ADMINISTRATIVE EXPERIENCE**

##### **I. PROFESSIONAL COMMITTEES SERVED**

**March 2023 – present:** Chairman, Departmental Science Technology & Innovation Committee

**May 2022 – present:** Focal person, Faculty Science Technology & Innovation

**Jan 2020 – present:** Member, Public Complaints and Resolution Committee

**May 2019- present:** Chairman, Departmental Curriculum Development Committee

**2014- July 2018** Chairman, *Ad Hoc* Departmental Committee on Procurement

**2015- Aug 2018** Member of the Departmental Income Generation Unit

**2012- Feb 2019** Departmental representative- Timetabling Committee.

**2013- present** Departmental representative- Library and Teaching Materials Committee

##### **II. POSITIONS OF RESPONSIBILITY:**

- **17/3/2022 – present:** Chairman, Veterinary Anatomy & Physiology Welfare Association (VAPWA)
- **18/9/2024- 30/10/2024:** Acting Chairman, Department of Veterinary Anatomy and Physiology, University of Nairobi
- **8/7/2022 – 4/8/2022:** Acting Chairman, Department of Veterinary Anatomy and Physiology, University of Nairobi

- **23<sup>rd</sup> Nov 2020 – 4<sup>th</sup> Dec 2020:** Acting Chairman, Department of Veterinary Anatomy and Physiology, University of Nairobi.
- **17<sup>th</sup> Feb 2020- 6<sup>th</sup> March 2020:** Acting Chairman, Department of Veterinary Anatomy and Physiology, University of Nairobi.
- **28<sup>th</sup> Jan 2020- 29<sup>th</sup> Jan 2020:** Acting Chairman, Department of Veterinary Anatomy and Physiology, University of Nairobi.
- **9<sup>th</sup> August 2019- 22<sup>nd</sup> August 2019:** Acting Chairman, Department of Veterinary Anatomy and Physiology, University of Nairobi.
- **15<sup>th</sup> July 2019- 22<sup>nd</sup> July 2019:** Acting Chairman, Department of Veterinary Anatomy and Physiology, University of Nairobi.
- **February 2019- present:** Appointed as Section Head of Physiology Section and Examinations Officer, Department of Veterinary Anatomy and Physiology, University of Nairobi.
- **Jan 2014 – Dec 2017:** Chairman, Veterinary Anatomy & Physiology Welfare Association (VAPWA)
- **Sep 2009 – Dec 2013:** Secretary, Veterinary Anatomy & Physiology Welfare Association (VAPWA)
- **2004-06 -** Appointed as student representative of postgraduate students' fraternity as well as journal clubs' coordinator in the Faculty of Veterinary Medicine.
- **1996** Appointed as Director of Finance of Kabete Campus University Students Organisation (KCUSO) and worked for two years.
- **1997-98-** An active member of the Catholic community at St. Paul's Chapel in 1995 and later at St. Raphael- CAVS.  
Member of the Young Men Christian Association (YMCA) at Main Campus, University of Nairobi.
- **1991-** Head prefect at Kimalewa High School. I was also a member of Young Christian Society (YCS).
- **1986-** A class prefect at Siuna Primary School as well as member of Young Farmers Club (YFC) as well as 4 k Club

#### **5. MEMBERSHIP IN PROFESSIONAL/RELIGIOUS SOCIETIES**

<b>2022- Present</b>	Member, Catholic Men Association
<b>2007- Present</b>	Kenya Veterinary Association
<b>2003- Present</b>	Kenya Society of Neuroscientists
<b>2004- Present</b>	International Brain Research Organization Alumni
<b>2005 – Present</b>	International Society of Neuroscientists

#### **6. PROFESSIONAL TRAINING/CERTIFICATES AWARDED**

**20<sup>th</sup> April 2025:** Awarded Certificate of Appreciation for exemplary service in organizing for Second annual international scientific conference on “Harnessing Research for Resilience and Sustainability of Communities” at Upper Kabete campus

**30<sup>th</sup> Jan, 2025:** Awarded Certificate of Excellence in Reviewing in: International Journal of Tropical Disease and Health

**30<sup>th</sup> October- 1<sup>st</sup> November, 2024:** Convened Second annual international scientific conference on “Harnessing Research for Resilience and Sustainability of Communities” at Upper Kabete campus.

**3<sup>rd</sup> May, 2024:** Certificate of attendance in Math-Bio workshop organized by Amboseli Baboon Research Project held at the Department of Veterinary Anatomy & Physiology, University of Nairobi.

**23<sup>rd</sup> – 27<sup>th</sup> October, 2023:** Facilitated a 4-day Research Week Conference at the Faculty of Veterinary Medicine on the theme “Harnessing Research for Resilience and Sustainability of Community”

**4<sup>th</sup> Sept- 8<sup>th</sup> September, 2023:** Facilitated 1-week training on Laboratory Animal Science (LAS), Education and Training (ABD) at the University of Nairobi, Department of Veterinary Anatomy & Physiology.

**26<sup>th</sup> April – 29<sup>th</sup> April, 2023:** Participated in the 57 KVA Annual Scientific Conference and World Veterinary Day on Antimicrobial Resistance at Kakamega Golf Hotel, Kakamega.

**7<sup>th</sup> February, 2023:** Certificate of attendance by Amboseli Baboon Research Program held at the Department of Veterinary Anatomy & Physiology, University of Nairobi

**20<sup>th</sup> April 2022:** Awarded Certificate of Recognition for winning a multidisciplinary Research Grant in a project titled “Use of locally available resources for development of affordable estrogen and progesterone ELISA kits for research and diagnostics to enhance livestock production”

**4<sup>th</sup> – 6<sup>th</sup> October, 2022:** Participated in World Rabies Congress in Kitui County.

**8<sup>th</sup> July – 9<sup>th</sup> September, 2021:** Participated in online Digital skills course for Animal Health Professionals organized by Participatory Communications Network.

**31<sup>st</sup> May 2021:** Attended IBRO Horizons webinar: Translational Neuroscience & novel therapeutics for neurodegenerative diseases in the ASIA/Pacific region organized by IBRO Global Horizons Webinar Series.

**5<sup>th</sup> March, 2021:** Awarded a Letter of Commendation in implementation e-learning and examinations in the Department of Veterinary Anatomy & Physiology, UON

**31<sup>ST</sup> October – 1<sup>st</sup> November, 2019:** Participated in College of Biotechnology and Bioinformatics Stakeholders workshop on Curriculum Development at Elementaita Lodge, Naivasha.

**22<sup>nd</sup> July 2019:** Participated in Mentorship Training at Tigoni organized by College of Agriculture and Veterinary Sciences.

**Certificate of participation:** Attended Veterinary Continuous Professional Development training on Disease Control and Pig Production at AHITI, Kabete (**27<sup>th</sup> - 28<sup>th</sup> June, 2019**).

**Certificate of attendance:** Attended Pedagogy, Andragogy and Mentorship Training at Central Catering Unit, University of Nairobi (**19<sup>th</sup> - 21<sup>st</sup> June, 2019**).

**Certificate of participation:** Participated in the Veterinary Continuous Professional Development training on Enhancing Technical skills in dairy animal breeding and small animal practice at AHITI, Kabete (**29<sup>th</sup> - 30<sup>th</sup> June, 2017**).

**Certificate of participation:** Participated in the Veterinary Continuous Professional Development training on Genetics and Nutrition at ACK Church Hall, Nakuru (**25<sup>th</sup> – 26<sup>th</sup> May, 2017**)

**Certificate of participation:** Participated in the Veterinary Continuous Professional Development training on Veterinary Practice, Value Addition, Technology and Self Reliance in Animal Health sector in Kenya at AHITI, Kabete (**11<sup>th</sup> Nov, 2016**).

**Certificate of Participation:** Training on Phenotyping and Genotyping of mutants for abiotic stresses in cereals at the IAEA Laboratories, Seibersdorf, Austria (**5<sup>th</sup> – 16<sup>th</sup> October, 2015**)

**Certificate of attendance:** Attended a Lecturer Didactic Training Workshop at Clinical Studies, University of Nairobi (**24<sup>th</sup> – 25<sup>th</sup> Sept, 2015**).

**Certificate of attendance:** Attended a practical poultry training on Viral and Bacterial poultry diseases: differentiation and diagnostic and sound flock management and prudent health control at Nobel Hotel, Eldoret (**4<sup>th</sup> – 5<sup>th</sup> Aug, 2015**).

**Certificate of attendance:** Attended the Continuing Professional Development training on Cattle Reproductive Health at the Faculty of Veterinary Medicine, Kabete, Nairobi (**10<sup>th</sup> July, 2015**)

**Certificate of participation:** 9<sup>th</sup> Biennial Scientific Conference on enhancing livelihood through improvement in Animal Health and Production in a changing environment, Kabete Campus (**3<sup>rd</sup> – 5<sup>th</sup> Sept, 2014**).

**Certificate of participation:** 11<sup>th</sup> International Conference of the Society of Neuroscientists of Africa in Rabat, Morocco (**13<sup>th</sup> – 17<sup>th</sup> June, 2013**).

**Certificate of participation:** the 25<sup>th</sup> IBRO/ISN Neuroscience School in Africa, Durban South Africa (**24<sup>th</sup> – 28<sup>th</sup> Oct, 2010**).

**Certificate of participation:** Proceedings of the 7<sup>th</sup> Biennial Scientific Conference (**Sept 8<sup>th</sup> - 10<sup>th</sup>, 2010**) on “One Health in a Changing Environment” at the College of Agriculture and Veterinary Sciences, Kabete.

**Certificate of attendance:** a 6-month certificate course on Bioinformatics in Primatology at Uppsala University, Sweden (**March- August, 2008**).

**Certificate of attendance:** Laboratory Animal Science- FELASA category C and Bioinformatics in Primatology course organized by the University of Nairobi in collaboration with Uppsala University, Sweden (**05<sup>th</sup>-18<sup>th</sup> May 2007**)

**Certificate of participation:** the 11<sup>th</sup> IBRO School on ‘behavioural neuroscience’, Nairobi, Kenya, sponsored by IBRO- ISN (**10- 17<sup>th</sup> Dec 2005**).

**Certificate of participation:** Participated in the 8<sup>th</sup> IBRO-INMHA African Neuroscience School in Rabat, Morocco (**19- 27<sup>th</sup> Mar 2005**).

**Certificate of participation:** First Interdisciplinary Pain Management Course at Avenue Hospital, Nairobi sponsored by International Association on Study of Pain (IASP) (**16- 25<sup>th</sup> Dec 2004**).

**Certificate of attendance:** Electron microscopy workshop at Chiromo campus organised by Department of Veterinary Anatomy and Physiology, University of Nairobi (**13- 15<sup>th</sup> Sep 2004**).

**Certificate of participation:** Kenya Society of Neuroscientists (KSN) symposium at Fareview Hotel, Nairobi, Kenya (**20<sup>th</sup> Nov. 2002**).

**Certificate of participation:** the 3<sup>rd</sup> International Brain Research Organization (IBRO) in Nairobi (ICIPE), Kenya, sponsored by IBRO (**1<sup>st</sup> - 9<sup>th</sup> Sep 2002**).

## **7. SCHOLARSHIPS/GRANTS AWARDED**

**National Research Fund Grant (April 2020):** Awarded a Multidisciplinary Research Grant 2019/2020 Financial Year.

**National Research Fund Grant (July 2017):** For my MSc. Student (Amos Makori) research work

**Deans Committee Research Grant (November, 2011):** To pursue PhD research project work

**Deans Committee Research Grant (July 2009):** To pursue PhD research project

**Seed Grant from University of Minnesota (2010) –** To pursue PhD research project work

**International Brain Research Organization- International Society of Neuroscientists scholarship/travel grant:**

To participate in 11<sup>th</sup> International Conference of the Society of Neuroscientists of Africa, Rabat Morocco (**13<sup>th</sup>-17<sup>th</sup> June, 2013**).

To participate in the 25<sup>th</sup> IBRO/ISN Neuroscience School in Africa, Durban South Africa (24<sup>th</sup> – 28<sup>th</sup> Oct, 2010).

To participate in the 8th IBRO-INMHA African Neuroscience School in Rabat, Morocco (19- 27<sup>th</sup> Mar 2005).

**International Brain Research Organization:** Participated in the 11th IBRO School on 'Behavioural Neuroscience', Nairobi, Kenya (10- 17<sup>th</sup> Dec 2005).

**Swedish International Development Agency:** To attend a 6-month certificate course on Bioinformatics in Primatology at Uppsala University, Sweden (March – August, 2008).

**University of Nairobi Scholarship:** Pursue Master of Science in Animal Physiology (2001 – 2007)

## **8. RESEARCH ACTIVITIES:**

- ❖ Use of locally available resources for development of affordable estrogen and progesterone ELISA kits for research and diagnostics to enhance livestock production.
- ❖ Use of gut microbiota and their resistomes among selected non-human primates, livestock and pastoral communities in Kenya.
- ❖ Phytochemical characterization of Turkana medicinal herb extract and evaluation of anti-obesity activity in high fat diet induced obesity in rats
- ❖ Physiological and biochemical evaluation of *Mucuna pruriens* seed extract on fertility using male wistar rats (*Rattus norvegicus*).
- ❖ Pharmacological effects of *Moringa oleifera* aqueous extract on reproductive performances and oxidative damages induced by heat stress in rabbit does

## **9. PUBLICATIONS:**

### **I. PRESENTATIONS AND PROCEEDINGS**

Samwel MW., **Nyongesa AW.**, Kaluwa CK., Kimwele CN., Nyaboga EN (2024). Sweet and Bitter Cassava root meal differentially influences reproductive performance in female wistar rat model. Second Annual International Scientific Conference held at Upper Kabete Campus, 30<sup>th</sup> October – 1<sup>st</sup> November, 2024).

Martin O., Bichang'a G., **Nyongesa AW.**, Muge EK., Nyaboga EN (2024). Carrissa spinarum L root extracts reverses oxidative stress-induced infertility in male wister rats. Second Annual International Scientific Conference held at Upper Kabete Campus, 30<sup>th</sup> October – 1<sup>st</sup> November, 2024).

Mukabwa HE., Towett PK., **Nyongesa AW.**, Waweru PW (2023). Puff adder (*Bitis arietans*) snake venom-derived serine proteases attenuate myocardial ischaemia reperfusion injury in a global ischaemia rabbit heart model. First Annual International Scientific Conference held at Upper Kabete Campus, 25<sup>th</sup> – 27<sup>th</sup> October, 2024).

Muthungu J., **Nyongesa AW.**, Kaluwa CK., Nyaboga EN (2023). Physiological and Biochemical evaluation of *Mucuna pruriens* seed extracts on fertility using male wistar rats. First Annual International Scientific Conference held at Upper Kabete Campus, 25<sup>th</sup> – 27<sup>th</sup> October, 2024).

Samwel MW., **Nyongesa AW.**, Kaluwa CK., Nyaboga EN (2024). Effects of consumption of cassava (*Manihot esculenta* Crantz) storage root meals on reproductive performance in female wistar rats. First Annual International Scientific Conference held at Upper Kabete Campus, 25<sup>th</sup> – 27<sup>th</sup> October, 2024).



**Nyongesa A.W.**, Oduma J.A., Sakwe, A., Chirwa, S (2014). Acute and sub-chronic effects of cathinone on sex steroid hormone metabolism in isolated interstitial testicular cells of vervet monkeys (*Chlorocebus aethiops*), Kabete Campus, 3<sup>rd</sup> - 5<sup>th</sup> Sept, 2014).

**Nyongesa A.W.**, Oduma J.A., Motohiro N., Odongo h., Adoyo A.P., al'Absi M (2013). Neural and hormonal interplay on behaviour in vervet monkeys (*Chlorocebus aethiops*) following acute and sub-chronic cathinone exposure. Proceedings of the 11<sup>th</sup> International Conference of the Society of Neuroscientists of Africa, Rabat, Morocco, 13<sup>th</sup> – 17<sup>th</sup> June.

**Nyongesa A.W.**, Forberg A, Hallberg C, Carlsson H.E (2010). Use of lesser bush baby (*Galago senegalensis*) in research. A Retrospective Study. Proceedings of the 7<sup>th</sup> biennial scientific conference: One Health in a Changing Environment, Kabete Campus.

**Nyongesa A.W.**, Patel N.B., Wango E.O., Onyango D.W (2008). Acute and chronic effects of khat (*Catha edulis*) on reproductive function in male rabbits. Proceedings of the 5<sup>th</sup> Biennial Scientific Conference: Emergence and re-emergence of diseases in livestock industry in Kenya, Kabete Campus.

## II. THESIS

**Nyongesa A.W (2013).** Mechanism of action of purified cathinone from khat (*Catha edulis*) on behavioural and reproductive function in vervet monkeys (*Chlorocebus aethiops*), University of Nairobi, Kenya. A PhD Thesis

**Nyongesa A.W (2007).** Khat-induced reproductive dysfunction in male rabbits, University of Nairobi, Kenya. A Master of Science Thesis

## III. PEER REVIEWED ARTICLES

Valence B. Mutwedu, **Albert W. Nyongesa**, Rodrigue B. Ayagirwe (2025). Moringa oleifera aqueous seed extracts and its efficacy in the management of heat stress: assessment of physiological parameters in female New Zealand White rabbits. Discover Animals 2: 13

Fogel A.S., Oduor, P., **Nyongesa A.W.**, Kimwele C.N., Alberts S., Archie, E., Tung J (2022). Ecology and age, but not genetic ancestry, predict fetal loss in a wild baboon hybrid zone. American Journal of Biological Anthropology, 1 – 15 <https://doi.org/1002/ajpa.24685>.

Mutwedu V.B., **Nyongesa A.W.**, Kitaa J.M., Ayagirwe, B.B., Baharanyi, C., Mbaria J.M (2022). Effects of Moringa oleifera aqueous seed extracts on reproductive traits of heat-stressed New Zealand white female rabbits. Frontiers in Veterinary Science pp 1 - 14. DOI: 10.3389/fvets.2022.883976.

Mutwedu V.B., **Nyongesa A.W.**, Oduma J.A., Kitaa J.M., Mbaria J.M (2022). Phytochemical profile and antioxidant activities of aqueous extract of *Moringa oleifera* (Lam) collected from DR Congo and Kenya. Turkish Journal of Agriculture- Food Science and Technology 10 (2): 347 – 354. 102780 DOI: <https://doi.org.10/24925/turjav.v10i2.347-354.4872>.

Mutwedu V.B., **Nyongesa A.W.**, Aine P.C., Chiregereza D.K., Ngoumtsop V.H., Mugumaarhahama Y., Ayagirwe R.B (2021). Growth performance and reproductive function impairment of glyphosate-based herbicide in male guinea pig (*Cavia porcellus*). Veterinary Medicine and Science 00: 1 – 9. DOI: 10.1002/vms3.443

- Mutwedu V.B., **Nyongesa A.W.**, Oduma J.A., Kitaa J.M., Mbaria J.M (2021). Thermal stress causes oxidative stress and physiological changes in female rabbits. *Journal of Thermal Biology* 95: 102780 DOI: 10.1016/j.jtherbio.2020.102780.
- Nyongesa A.W.**, Maluki E.M., Simbauni J.A (2020). Evidence of regeneration of testicular and epididymal tissue structure and function following withdrawal from sub-chronic khat exposure: studies in the rabbit animal model. *Journal of Applied Life Sciences International* 23 (9): 10 – 23.
- Makori A.O., **Nyongesa A.W.**, Odongo H.O., Masai R.J (2020). Assessment of stress on serum estradiol and cortisol levels in female subordinate naked mole rats following isolation from natal colony. *Journal of Biosciences and Medicines* 8: 9 – 17. DOI: 10.4236/JBM.2020.83002.
- Mutwedu V.B., Ayagirwe R.B.B, Bacigale S.B., Mwema L.M., Butseme S., Kashosi T., Mitima B., Manyawu G.J., **Nyongesa AW (2019)**. Effect of dietary inclusion of small quantities of *Mucuna pruriens* seed meal on sexual behaviour, semen characteristics, and biochemical parameters in rabbit bucks (*Oryctolagus cuniculus*). *Tropical Animal Health and Production* **51** (5): 1195 – 1202 DOI: 10.1007/s11250-019-01808-2
- Nyongesa AW.**, Patel NB., Wango EO and Onyango DW (2017). High khat dose and long-term exposure impairs spermatogenesis: experimental study using rabbit model. *Journal of Morphological Sciences* **34**: 156 -167.
- Nyongesa AW.**, Oduma J.A., al'Absi M and Sanika Chirwa (2015). Immunohistochemical localization of anterior pituitary cell types of vervet monkeys (*Chlorocebus aethiops*) following sub-chronic cathinone exposure. *Journal of Ethnopharmacology* **174**: 168 - 177.
- Nyongesa AW.**, Oduma J.A., Nakajima M., Odongo, H., Adoyo, A and al'Absi M (2014a). Acute and sub-chronic effects of purified cathinone from khat (*Catha edulis*) on behavioural profiles in vervet monkeys (*Chlorocebus aethiops*). *Metabolic Brain Disease* **29**: 441 - 449.
- Nyongesa AW.**, Oduma J.A., Nakajima M., Odongo, H., Adoyo, A and al'Absi M (2014b). Dose-response inhibitory effects of purified cathinone from khat (*Catha edulis*) on cortisol and prolactin release in vervet monkeys (*Chlorocebus aethiops*). *Metabolic Brain Disease* **29**: 451 - 458.
- Nyongesa A.W.**, Patel, N.B., Onyango, D.W., Odongo, H.O and Wango, E.O (2008). Khat (*Catha edulis*) lowers plasma luteinizing hormone (LH) and testosterone secretion, but increases cortisol levels in male rabbits. *Journal of Ethnopharmacology* **116**: 245- 250.
- Kimani S.T and **Nyongesa A.W** (2008). Effects of single daily khat (*Catha edulis*) extract on spatial learning and memory in CBA mice. *Behavioural Brain Research* **195**: 192 – 197.
- Nyongesa A.W.**, Patel, N.B., Onyango, D.W., Wango, E.O and Odongo, H.O (2007). *In vitro* study of the effects of khat (*Catha edulis* Forsk) extract on isolated mouse interstitial cells. *Journal of Ethnopharmacology* **110**: 401- 405.

#### IV. MANUSCRIPTS IN PREPARATION

1. Cathinone from khat (*Catha edulis*) leaves and sex steroid hormone metabolism: *in vivo* and *ex vivo* studies in male vervet monkeys (*Chlorocebus aethiops*).

2. Assessment of the efficacy of *Moringa oleifera* aqueous seed extracts on physiological parameters in the management of heat stress in female rabbits

## V. CHAPTERS IN BOOKS

**Nyongesa A.W.**, Oduma J.A., Okelo D.O., Chirwa S (2019): Khat (*Catha edulis*) Addiction, effects on general body health and interventional remedial measures. In: Drug Abuse: Addiction and Recovery Volume 1 Chapter 4 pp 1 – 18. E-books

**Nyongesa A.W** and Onyango D.W. (2009): Khat (*Catha edulis* Forsk): A Boon or Bane to humanity. In: A.S Awaad., V.K Singh and J.N Govil, (Eds). Recent Progress in Medicinal Plants. Studium Press LLC, USA **28**: 173 - 193.

## 10. PRESENTATIONS IN CONFERENCES, SYMPOSIA AND WORKSHOPS.

Samwel MW., **Nyongesa AW.**, Kaluwa CK., Kimwele CN., Nyaboga EN (2024). Sweet and Bitter Cassava root meal differentially influences reproductive performance in female wistar rat model. Second Annual International Scientific Conference held at Upper Kabete Campus, 30<sup>th</sup> October – 1<sup>st</sup> November, 2024).

Martin O., Bichang'a G., **Nyongesa AW.**, Muge EK., Nyaboga EN (2024). Carrissa spinarum L root extracts reverses oxidative stress-induced infertility in male wister rats. Second Annual International Scientific Conference held at Upper Kabete Campus, 30<sup>th</sup> October – 1<sup>st</sup> November, 2024).

Wafula S.M., **Nyongesa A.W.**, Kaluwa C.K., Nyaboga E.N. Effects of consumption of cassava (*Manihot esculenta crantz*) storage root meal on reproductive performance in female wistar rats. 1<sup>st</sup> Annual Faculty Scientific Conference, Upper Kabete Campus, 25<sup>th</sup> – 27<sup>th</sup> October, 2023.

Mukabwa H.E., Towett P.K., **Nyongesa A.W.**, Waweru P.M. Puff adder (*Bitis arietans*) snake venom-derived serine proteases alternate myocardial ischemia reperfusion injury in a global ischemia rabbit heart model. 1<sup>st</sup> Annual Faculty Scientific Conference, Upper Kabete Campus, 25<sup>th</sup> – 27<sup>th</sup> October, 2023.

**Nyongesa A.W.** Basic and appropriate biology of laboratory animals 1<sup>st</sup> Laboratory Animal Science Training, Department of Veterinary Anatomy & Physiology, University of Nairobi. 4<sup>th</sup> – 8<sup>th</sup> September, 2023.

**Nyongesa A.W.**, Oduma J.A., Sakwe, A., Chirwa, S (2014). Acute and sub-chronic effects of cathinone on sex steroid hormone metabolism in isolated interstitial testicular cells of vervet monkeys (*Chlorocebus aethiops*), Kabete Campus, 3<sup>rd</sup> - 5<sup>th</sup> Sept, 2014).

**Nyongesa A.W.**, Oduma J.A., Motohiro N., Odongo h., Adoyo A.P., al'Absi M (2013). Neural and hormonal interplay on behaviour in vervet monkeys (*Chlorocebus aethiops*) following acute and sub-chronic cathinone exposure, Rabat, Morocco, 13<sup>th</sup>- 17<sup>th</sup> June.

**24<sup>th</sup> – 28<sup>th</sup> Oct, 2010** Presented research work on "Mechanism of action of purified cathinone from khat (*Catha edulis*) on the mesolimbic and hypothalamic dopaminergic systems in vervet monkey (*Chlorocebus aethiops*)" at the 25<sup>th</sup> IBRO/ISN Neuroscience School in Durban South Africa on "onslaughts on the central dopaminergic system.

**8<sup>th</sup> – 10<sup>th</sup> Sep, 2010** Presented an abstract at the 7<sup>th</sup> biennial conference on "one health in a changing environment" at the Faculty of Veterinary Medicine, Upper Kabete Campus, University of Nairobi.

- 6<sup>th</sup>- 8<sup>th</sup> Sep 2006** Presented two abstracts at the 5<sup>th</sup> biennial conference on emergence and re-emergence of diseases in livestock industry in Kenya at the Faculty of Veterinary Medicine, Upper Kabete Campus, University of Nairobi.
- 13- 15<sup>th</sup> Sep 2004:** Electron microscopy workshop at Chiromo campus organised by Department of Veterinary Anatomy and Physiology, University of Nairobi.
- 20<sup>th</sup> Nov. 2002:** Kenya Society of Neuroscientists (KSN) symposium at Fairview Hotel, Nairobi, Kenya

#### **11. COLLABORATIONS:**

- Collaboration with the University of Agriculture in Krakow, Poland in the areas of Economics, Agriculture and Veterinary Medicine with particular focus on student and teacher mobility within Erasmus+ International Programme 2022-1-PL01 KA171-HED-000076863.
- Use of locally available resources for development of affordable estrogen and progesterone ELISA kits for research and diagnostics to enhance livestock production. A multidisciplinary study with Kenya Agricultural and Livestock Research Organization, Institute of Primate Research, Centre for Biotechnology and Bioinformatics and School of Biological Sciences of the University of Nairobi.
- Collaborating with Dr. Evans Nyaboga of Department of Biochemistry, University of Nairobi on research area "Phytochemical characterization of Turkana medicinal herb extract and evaluation of anti-obesity activity in high fat diet induced obesity in rats".
- The Human-animal conflict: Use of gut microbiota and their resistomes among selected non-human primates, livestock and pastoral communities in Kenya. A multidisciplinary study in collaboration with the Institute of Primate Research, Maseno University, Daystar University and Kenya Wildlife Services.

#### **12. RESEARCH INTERESTS:**

- Learn research techniques in dealing with problems in Reproductive Physiology and Behavioural Sciences.
- Enhancing research interests in Reproductive Neuroendocrinology and with particular focus to promoting research in this area.

#### **13. OTHER SKILLS:**

Have working knowledge in computer (operating systems, Ms Office, Statistical software). I have good command of English language and verbal presentation skills in seminars, conferences, workshops and in business industry.

#### **14. HOBBIES:**

My greatest interests are in teaching, reading and doing research, since these widen my basic knowledge and develop a mind in readiness of any challenge at work. I am an active sportsman and with good interest in soccer and in-door games. During my free time, I like listening to music to refresh my mind, travelling to interact with different people and share ideas as well as offering community-based services.

#### **15. FUTURE OBJECTIVES:**

I have developed great interest in responsibility. My aspiration lies in working with reputable organizations and highly esteemed institutions of higher learning in situations calling for total dedication, creativity and decision-making.

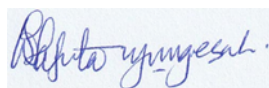
**16.: CAREER ASPIRATIONS:** To work diligently in the field of Reproductive and Behavioural Physiology research and with dedication in teaching to give the best to the students, my employer, the nation and the world as a whole.

**REFEREES:**

1. Prof. Daniel Onyango  
Associate Professor,  
Department of Veterinary Anatomy and Physiology  
University of Nairobi,  
P.O Box 30197-00100, Nairobi  
Email: [dwo@uonbi.ac.ke](mailto:dwo@uonbi.ac.ke)
2. Prof. Charles Kimwele  
Associate Professor,  
Department of Veterinary Anatomy and Physiology  
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P.O Box 30197-00100, Nairobi  
Email : [ckimwele@uonbi.ac.ke](mailto:ckimwele@uonbi.ac.ke)

**Declaration:** The above information is true to the best of my knowledge.

Signature:



Dated: 9<sup>th</sup> day of September, 2025