

# CURRICULUM VITAE

## GETRUDE SHEPELO PETER

### BIODATA

|                |   |
|----------------|---|
| Gender         | Female  |
| Date of birth  | 7 <sup>th</sup> Jan 1987  |
| Nationality    | Kenyan  |
| Postal address | P.O. Box 50800-00100, Nairobi-Kenya   |
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| Email address  | <a href="mailto:shepelo@uonbi.ac.ke">shepelo@uonbi.ac.ke</a> , <a href="mailto:gshepelo@cartafrica.org">gshepelo@cartafrica.org</a> |
| Profession     | Lecturer, Veterinarian  |

### CAREER OVERVIEW

A veterinarian with research interest on infectious diseases and pathogens, zoonosis and engagement with One-Health collaborations. In addition to the research, she has been mentoring graduate students on various One Health projects and fellowships. Shepelo has authored and co-authored peer-reviewed papers and received various research grants. Her career objective is to work in a dynamic and challenging environment with a focus on continuous learning and advancing leadership science.

### EDUCATION BACKGROUND

#### 1. PhD in Veterinary Clinical Studies {2017 - 2020} – University of Nairobi

**Research work:** Molecular epidemiology and molecular characterization of *Anaplasma* and *Ehrlichia* species in dairy cattle in smallholder farms in peri-urban Nairobi, Kenya.

**Key finding:** Emerging tick-borne pathogens of zoonotic importance were detected infecting cattle with identification of new species of ticks the areas of the study. Implication was the need for active surveillance to allow for pre-emption of potential disease outbreak within the livestock and human populations.

#### 2. Masters in Veterinary Medicine (MvetMed) {2013 – 2015} – University of Nairobi

**Research work:** Prevalence and risk factors associated with *Giardia*, *Cryptosporidia* and *Eimeria* infections in calves from Nyeri County, Kenya.

**Key finding:** *Cryptosporidium* infections was reported at 13.6% among the calves with no *Giardia* being detected. The implication was that proper calf management was important in the control of this zoonotic pathogen to prevent the possible human infection.

**3. Bachelor of Veterinary Medicine (BVM) {2007- 2012} - University of Nairobi**

**4. Diploma Business Information Technology- Strathmore University {2006 – 2007}**

**Qualification:** Distinction.

**5. Kenya Certificate of Secondary Education (K.C.S.E) { 2002 - 2005}**

Materi Girls' High School

**Qualification:** A-(Minus)

## **WORK EXPERIENCE**

**1. Designation: Lecturer {July 2022 - date}**

**Organization: University of Nairobi**

### **Roles:**

1. Teaching and mentoring undergraduate and post graduate students.
2. Research grant writing
3. Carry out clinical duties on ambulatory clinic and Herd Health Services.
4. Community outreach activities and herd health Co-ordination
5. Supervision of post graduate and undergraduate research projects

**2. Designation: Faculty fellow February 2024 – July 2024**

**Organization: Vétérinaires Sans Frontières (VSF) Germany**

### **Roles:**

1. Undertake One Health related research
2. Mentor students in One-Health related field work activities

**2. Designation: Tutorial fellow {Mar 2015 – June 2022}**

**Organization: University of Nairobi**

1. Teaching and mentoring undergraduate students.
2. Carry out clinical duties on ambulatory clinic and Herd Health Services.
3. Community outreach activities and herd health Co-ordination
4. Supervision of undergraduate research projects

**3. Designation: Team lead in Africa One Health University Network (AFROHUN)-Kenya**

**{July 2022 - Date}**

### **Roles**

- Co-ordinate multidisciplinary teams through ECHO program on aspects of Antimicrobial Resistance and Food safety.

- Co-ordinate multidisciplinary teams for Risk Communication and Community Engagement- June 2024; response to rabies exposure by school children.

**4. Designation:** Team leader Veterinary Emergency Response Unit (VERU)

**-Organisation:** University of Nairobi Chapter {2013 - date}

**Roles:**

- Training of new VERU members among the veterinary students in the faculty
- Responded to veterinary disasters and emergencies as follows:
  - a) Response to floods in Malawi following cyclone Idai in 2019**  
Rescued flooded and injured animals and provided treatment and vaccination to them.
  - b) El Niño preparedness in Baringo County, Kenya in 2015**  
Vaccination of livestock against Rift Valley Fever and rabies, creating awareness on safety measures to be taken by communities following the imminent floods as a result of *El Niño* phenomenon.
  - c) Tana River County, Kenya inter-clan clashes in 2013**  
Evacuation of injured animals and provision of water and shelter for the rescued animals.
  - d) Mwingi, Kenya drought disaster in 2011**  
Conducted a needs assessment of the affected communities, undertook interventions of treatment, vaccination and pasture management

**3. Designation:** Partnership and Development officer {Nov 2013 – Feb 2015}

**Organization:** Laikipia County Assembly

**Roles:**

- Establishment of collaborations with partners for the county assembly
- Undertaking public participation activities for the bills at the county assembly

**4. Designation:** Research Assistant {June 2013 – Oct 2013}

**Organization:** International Development Research Corporation (IDRC) Cow- Calf nutrition project in Nyeri County.

**Roles:**

Undertook data and sample collection, used for my MSc project

## STAKEHOLDER ENGAGEMENTS

1. **Herd health and community outreach (2017-date):** I am the herd health coordinator at my department therefore I organize and co-ordinate student visits to farms and community outreach activities such as mass vaccinations, deworming and free health treatment by the faculty.
2. **Mentorship (2023 -2025):** I chair the mentorship sub-committee in the Kenya Women Veterinary Association (KWVA), where I engage with various stakeholders from industry, private practice academia and research among others to facilitate the discussions with the students
3. Facilitation of the **Mentored Experiential learning and Training (MELT) (Nov. 2024)** I have been a facilitator at the AFROHUN (Africa One Health University's Network) where I have engaged county government, Non-governmental Organization, ministry of Health, institutions of higher learning to develop learning demo sites for participants over five countries.
4. **Policy brief: [Tick-borne diseases affecting cattle in Kenya | The AAS](https://www.old.aasciences.africa/news/tick-borne-diseases-affecting-cattle-kenya)** (Mar, 2021) <https://www.old.aasciences.africa/news/tick-borne-diseases-affecting-cattle-kenya>

## PUBLICATIONS

1. Kibet N C., Gitau G K., **Peter S G.**, Muasya D W., Ngetich W. (2024): Prevalence of *Babesia bigemina* and *Anaplasma marginale* infections and their associated risk factors among calves in Narok County, Kenya. East African Journal of Science, Technology and Innovation, Vol. 5 (2).
2. **Peter S.G.**, Kariuki, H.W., Aboge, G.O., Gakuya, D.W., Maingi, N., Mulei, C.M.M. (2021): Prevalence of ticks infesting dairy cattle and the pathogens they harbor in smallholder farms in peri-urban areas of Nairobi, Kenya. Veterinary Medicine International, 2021: 9501648.
3. **Peter S.G.**, Aboge, G.O., Kariuki, H.W., Kanduma, E.G., Gakuya, D.W., Maingi, N., Mulei, C.M.M., Mainga, A.O. (2020): Molecular prevalence of emerging *Anaplasma* and *Ehrlichia* pathogens in apparently healthy dairy cattle in peri-urban Nairobi, Kenya. BMC Veterinary Research, 16(1): 364.

4. **Peter, S.G., (2020):** Zoonotic Anaplasma and Ehrlichia infections and their potential reservoirs: a review. *International Journal of Veterinary Science*, 9(1): 1-9.
5. **Peter, S.G.,** Gakuya, D.W, Maingi, N, Mulei, CM. **(2019):** Prevalence and risk factors associated with Ehrlichia infections in smallholder dairy cattle in Nairobi City County, Kenya. *Veterinary World*. 12:1599–607
6. Richards, S., Vanleeuwen, J., **Peter S.G.,** Wichtel, J., Kamunde, C., Uehlinger, F and Gitau, G. **(2019):** Impact of mineral feeding on reproductive efficiency on smallholder dairy farms in Kenya. *Livestock Research for Rural Development. Volume 31, Article #80*
7. Serem, E.K., Abuom, T.O., **Peter, S.G.,** Gakuya, D.W., Kirui, G.K. and Mbuthia, P.G. (2019). Microcardia associated with Reticuloepicarditis (TRP) in an adult female Ayrshire cow: A case report. *International Journal of Veterinary Science*, 8(2): 73-78.
8. Christine Minoo Mbindyo, George Chege Gitau, **Gertrude Shepelo Peter (2018):** Constraints affecting dairy goat milk production in Kenya. *Tropical Animal Health and Production Trop Animal Health Production* (2018) 50: 37-41
9. Florence Wakoko-Studstill, Margaret Loy Khaita, Samuel George Okech, John Baligwamunsi Kaneene, Patrick Pithua, Sherry Blackmon, Haiden Rogers, **Gertrude Shepelo**, Muasya Daniel Wambua, Erick Komba, Richard Samson, Tsegay Tkue Gebrewahde, Richard Habimana, Andrew Kibogo, Viola Kasonev, Augustus Okite, Watson Aijuka, John David Kabasa, **(2017):** Model African Union: experiential pedagogical approach to teaching one health in veterinary medicine and public health. *The Pan African Medical Journal*. (2017): 27 (Supp 4):18.
10. **Peter, S.G.,** Gitau, G.K., Richards, S., Vanleeuwen, J.A., Uehlinger, F., Mulei, C.M. and Kibet, R.R. **(2016):** Risk factors associated with *Cryptosporidia*, *Eimeria*, and diarrhea in smallholder dairy farms in Mukurwe-ini Sub-County, Nyeri County, Kenya. *Veterinary World*, 9(8): 811-819.
11. Richards, S., Vanleeuwen, John. A., **Peter, Shepelo. G.,** Gitau, George. K, Wichtel, Jeff., Kamunde, Collins, and Uehlinger, Fabienne. **(2016):** Randomized clinical trial on impacts of dairy meal feeding interventions on early lactation milk production in smallholder dairy farms of Central Kenya. *Preventive Veterinary Medicine*, 125: 46–53.
12. **Peter, S.G.,** Gitau, G.K., Mulei, C.M., Vanleeuwen, J.A., Richards, S., Wichtel, J., Uehlinger, F., and Mainga, O. **(2015):** Prevalence of *Cryptosporidia*, *Eimeria*, *Giardia*

and *Strongyloides* in calves in smallholder farms in Mukurwe-Ini District-Kenya. *Veterinary World* 8(9): 1118-1125, EISSN: 2231-0916.

13. Shauna Richards, John VanLeeuwen, **Getrude Shepelo Peter**, George Karuoya Gitau, Collins Kamunde, Fabienne Uehlinger and Jeff Wichtel (2015): Associations of farm management practices with annual milk sales on Smallholder dairy farms in Kenya. *Veterinary World*, 8(1): 88-96, EISSN: 2231-0916.
14. **Peter S.G** and Maingi N. (2014): Major causes of poultry mortality in Nairobi and its environs established from autopsy. *Kenya Veterinarian* 38 (1): 32-42. ISSN 0256-5161

## CONFERENCE PRESENTATIONS

1. Assessing knowledge, attitudes, and barriers to mass dog vaccination campaigns against rabies and responsible dog ownership: Insights from in Machakos County, Kenya. Kenya Veterinary Association and Kenya Medical Association 18<sup>th</sup> World Rabies Day Scientific Conference, 25<sup>th</sup> – 28<sup>th</sup> September, 2024. Jacaranda Indian Ocean Beach Resort, Kenya.
2. Catalysing action against Antimicrobial Resistance (AMR) through a One Health Approach: The AFROHUN Kenya Echo Program. Southeast Asia One Health University Network (SEAHUN) conference, 5-7<sup>th</sup> September 2022. Grand Richmond Hotel, Thailand.
3. Occurrence of *Ehrlichia ruminantium* in smallholder dairy farms in Peri-urban Nairobi, Kenya. 55<sup>th</sup> KVA annual scientific conference and 15<sup>th</sup> World Rabies Day Celebrations, 27<sup>th</sup> -28<sup>th</sup> September 2021, Sandies Tropical Village, Malindi.
4. Detection of emerging tick-borne pathogens in cattle in peri-urban Nairobi, Kenya. Consortium for Advanced Research Training in Africa 8<sup>th</sup> Annual Joint Advanced Seminar (JAS 4) Conference, held on 23<sup>rd</sup> to 24<sup>th</sup> September, 2021, Virtual.
5. Multidisciplinary student- led engagement in community-based intervention of one health challenges– a case study of Amboseli ecosystem, Kenya. 52<sup>nd</sup> Kenya Veterinary Scientific Conference and Annual General Meeting, 25<sup>th</sup> -27<sup>th</sup> April 2018, Green Hill Hotel, Nyeri.
6. Prevalence of protozoa and helminth pathogens in calves in smallholder dairy farms in Mukurwe-ini District, Nyeri County, Kenya. 49<sup>th</sup> KVA Annual Scientific Conference, 22<sup>nd</sup> – 25<sup>th</sup> April, 2015, Hotel Itoya, Busia-Kenya.
7. Characteristics of Calf rearing systems in Mukurwe-ini-Kenya. 11<sup>th</sup> African Crop Science Society Conference, 14 - 17 October, 2013, Imperial Hotel -Entebbe Uganda.

## POSTGRADUATE SUPERVISION AND THESIS EXAMINATION

1. **Completed Masters student:** Naomi C. Kibet - Masters of Veterinary Medicine: Thesis title Prevalence of *Anaplasma* and *Babesia* infections and their associated risk factors in calves in Narok County, Kenya. Graduated Dec 2023.
2. **Ongoing PhD student:** Olum Moses- PhD in Veterinary Clinical Studies: Project title- Characterization of phenotypic and genotypic acaricide resistance in tick species from selected counties in Kenya.
3. **Internal examiner:**
  - i) Alexina Kwamboka Morang'a; Thesis title: Stakeholder mapping and their roles in the veterinary antibiotic supply chain in Kenya. Master of Science in Veterinary Public Health.
  - ii) Mercy Chelangat Ngetich; Thesis title: Pastoralists perceptions and socio-economic impact of abortions in flocks of goats and sheep in Isiolo, Kenya. Masters of Science degree in Veterinary Epidemiology and Economics of the University of Nairobi.
4. **Board of examination committee member for the following postgraduate students:**
  - i) **Wycliff Ngetich**-Doctor of Philosophy in Veterinary Clinical Studies, Thesis Title: Incidence of morbidity, mortality and risk factors associated with East Coast Fever and *Theileria parva* infection in calves in Narok County, Kenya. June 2024
  - ii) **Jeanette Mokhothu**- Master of Science in Range Management; Thesis title: Prevalence and risk factors of gastrointestinal parasitism in sheep in the rangelands of Kajiado County, Kenya. May 2024
  - iii) **Jerono Kiptanui**- Doctor of Philosophy in Veterinary Public Health, Thesis Title: Seroprevalence estimates of brucellosis and coxiellosis in cattle, sheep and goats: associated risk factors and perception in livestock farmers in Nandi County, Kenya. November, 2023
  - iv) **Raphael Chimweli Nyawa**- Masters in Veterinary Pathology, microbiology and Parasitology (Bacteriology option), Thesis title: The safety and seroconversion of a mixed Peste des Petits ruminants and sheep and goat pox vaccine in sheep and goats in Kwale county, Kenya. November 2023
  - v) **Qassim Abdi Mohammed**-Master of Science in Veterinary Public Health: Thesis title: Prevalence and risk factors of brucellosis in goats in Southwest State of Somalia. October, 2023

## FUNDED RESEARCH GRANTS

- October 2024:** Co-Investigator in the project ‘Assessment of the impact of implementing biosecurity practices on health and production of poultry in small-scale farmers in Kajiado county Kenya. Funded by International Livestock Research Institute under Capacitating One Health in East and Southern Africa (COHESA) project. Euros 35,000
- May 2024:** Co-Investigator in the project ‘Epidemiology of foodborne bacteria and associated antimicrobial resistance profiles of the isolates in Murang’a County, Kenya. A One Health approach’- Funded by CARTA (USD 50,000)
- March 2024:** Co-Investigator in the project ‘Effects of supplementing Dairy Heifer Diets with *Saccharomyces Cerevisiae* Fermentation Post-Biotic on health, weight gain, Post Vaccination Immune Response and Return on investment’- Funded by TRANSFORM USAID; USD 100,000
- February 2024:** Co-Investigator in the project ‘Enhancing rabies awareness and responsible dog ownership among communities in Makeni County, Kenya’-Funded by African Universities One Health Network (AFROHUN) (USD 6000)
- January 2024:** Principal Investigator in the project ‘Enhancing rabies awareness among teachers and primary school learners in Machakos County, Kenya’-Funded by AFROHUN (USD 7000)
- January 2024:** Co-Investigator in the project ‘Enhancing the Capacity of Early Career Researchers (ECR) and PhD students on Grant/Proposal writing’- Funded by CARTA USD 20,000
- 2022:** Co-Principal Investigator in the project ‘Isolation, Characterization and Characteristics of the Virus causing Pox-like Disease of Horses in Kenya and Study of the Disease’ – Funded by Tonix Pharmaceuticals. (USD 640,000)
- 2021:** Co-Principal Investigator: CARTA-COVID-19 mitigation Peer-mentorship grant, funded by Swedish International Development Co-operation Agency (SIDA)- (USD 900)
- 2020:** Principal Investigator – PhD Research work funded by National Research Fund (NRF) grant – (Ksh. 194, 000).
- 2018:** Principal Investigator - DAAD In-Country/In-Region Scholarship for the Ph. D research (USD 3. 000)
- 2018:** European Education Program in Epidemiology (EEPE) travel fellowship.
- 2018:** Consortium for Advanced Research Training in Africa (CARTA) Ph.D fellowship (USD 100,000)

## PROFESSIONAL ENGAGEMENTS



**Mentor of a fellow on One Health Leadership fellowship program through the AFROHUN-Kenya placement (October -November 2024):** Supported the fellow through gaining different competencies in One Health leadership and advocacy, management, civic engagement, networking and advocacy through experiential learning.

**Committee member-**Consortium for Advanced Research training in Africa (CARTA) Strategic Planning Working Group (**August 2024 -Date**). Engaging in the development of CARTA strategic plan beyond 2025

**Mentor in the University of Helsinki and University of Nairobi Early Career Champions mentorship programme (2023/2024)** – The main role is to mentoring the early career researchers through their doctoral studies mainly focused on One-Health. I am assigned two doctoral students; one from University of Helsinki and another from the University of Nairobi. We hold one-on one session and monthly meetings to support and guide their One-Health research.

**Team lead (2023-Date):** African One Health Universities Network (AFROHUN-Kenya), Risk Communication and community engagement (RCCE)

## **TRAININGS/WORKSHOPS**

**July 2024:** Postgraduate supervision training by Consortium for advanced research Training in Africa (CARTA)

**May 2024:** Africa One Health University Network (AFROHUN)- Risk communication and Community engagement (RCCE).

**November 2023:** Africa One Health University Network (AFROHUN)-Transition Award Multidisciplinary Action Research Essential Foundation Skills Orientation and Training

**October 2023:** Consortium for advanced research Training in Africa (CARTA) graduate workshop to build on skills for successful and substantial grant proposal writing proposal

**September 2023:** Trainer of Trainees on Food Safety Standards offered by Trade Mark Africa

**January 2021:** Policy Engagement and Evidence Uptake for Early Career Researchers, by African Institute for Development Policy (AFIDEP).

**February 2021:** Scientific communications and Publishing training- Trained by DAAD through Training Centre in Communication (TCC).

**November 2019:** Consortium for Advance research Training in Africa (CARTA) Joint Advanced Seminar II- Research Methods in public and population Health.

**January 2018:** Grant writing workshop

**October 2016:** Online E-learning Resources Training Workshop, Pretoria

**July 2016:** One-Health demo-site and field training

**September 2015:** Lecture Didactic training workshop

**May 2015 – June 2015:** International summer program and conference on One health - Makerere University in collaboration with USAID Higher Education for development – CIMTRAZ project

**Feb 2013:** Attended Livestock Emergency Guidelines and Standards (LEGS) training- Learnt on designing programs to be used in disaster management.

**Nov 2011:** Attended training on basic skills in veterinary emergency response by World society for Protection of Animals (WSPA)-Skills on management of animals in disaster.

## LEADERSHIP

1. Section Head (Medicine) -Department of Clinical studies, University of Nairobi Jan 2025 - Date
2. Vice-Chair Kenya Women Veterinary Association (KWVA): 2023 - Date
3. Committee member Kenya Women Veterinary Association: (2021-2023)
4. Assistant secretary Upper Kabete Welfare Club: (2021- date)
5. Committee member, Faculty Graduate Studies Committee: January 2024-Date
6. Committee member, Faculty Science, Technology and Innovation committee: February 2024-Date
7. Chairperson, Departmental Gender mainstreaming committee- 2023 - Date
8. Committee member Departmental Digitalization committee: 2023-Date
9. Board of Management Member (BoM) –St. Francis Girls Secondary School –Laikipia North Sub-County 2022-Date
10. Committee member in the Faculty Gender Mainstreaming Committee and Faculty Welfare Committee -2021 to date

## RECOGNITIONS

**2016:** Gandhi Smarak Nidhi Trustee Fund Prize: Best final year student in the Faculty of Veterinary Medicine in the year 2011/2012.

**2016:** University of Nairobi award: Best overall student in College of Agriculture and Veterinary Sciences, year 2011/2012.

**2016:** Ultravetis East Africa Limited award: Best final year student in veterinary clinical studies, Faculty of Veterinary Medicine in the year 2011/2012.

**2016:** Kenya Veterinary board award: Best final year student in the Faculty of Veterinary Medicine in the year 2011/2012.

**2012:** University of Nairobi Masters' Scholarship

**2011:** Won Professor Mugeru award; Best student in Veterinary Pathology.

**2003:** Won a three-year scholarship at Materu Girls' High School.

**2001:** Won an essay competition of Laikipia Wildlife Forum

## **MEMBERSHIP TO PROFESSIONAL BODIES**

Kenya Veterinary Board

Kenya Veterinary Association

## **REFEREES**

**Prof. Ndichu Maingi**, Professor of Veterinary Parasitology,  
Department of Veterinary Pathology, Microbiology and Parasitology,  
Faculty of Veterinary Medicine, University of Nairobi-Kenya  
Mobile: +254 722 452969, **Email:** [nmaingi@uonbi.ac.ke](mailto:nmaingi@uonbi.ac.ke)

**Prof. James Nguhiu-Mwangi**, Chairman, Department of Clinical Studies  
Faculty of veterinary Medicine, University of Nairobi-Kenya  
**Mobile:** +254 722 711 042, **Email:** [jnmwangi@uonbi.ac.ke](mailto:jnmwangi@uonbi.ac.ke)

**Prof. Henry Mutembei**, Professor of Theriogenology, Department of Clinical Studies  
University of Nairobi and Vice-Chancellor, Chuka University-Kenya.  
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