

CURRICULUM VITAE



BIODATA

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|------------------------------------|---|
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| i) County of Birth | Bungoma |

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PERSONAL STATEMENT

I am an Associate Professor of Microbiology and Biotechnology with over 30 years' experience in research, teaching and administration. My research efforts have been fruitfully rewarded in form of the KARI Indigenous Chicken and Dairy Goats conspicuously contributing to food security and poverty reduction in Kenya. I have shared my results at different fora where severally, I have been recognized and awarded certificates of excellence. I have made significant technological contributions to science with notable examples being bacterial and fungal endophytes whose metabolites have anthelmintic and antibiotic potential and pen-side pH indicator impregnated Mastitis kit among others. At community level, I have spearheaded several development projects such as drilling of water borehole at Maeni girls Secondary School with the support of donor funding. I also serve as an investments officer for LAKARINAPWA Enterprise Limited, accompany of professional group in the Western Region of Kenya.

Administratively, I am hands and results oriented transformative leader with a special focus on interpersonal relations and team works. This team spirit and orientation towards small, often forgotten issues that have direct impacts on mankind has resulted in many achievements at institutional, community and personal levels, details of which are presented hereunder.

EDUCATION AND TRAINING

Institution	Main discipline	Certificate attained	From	To
Moi University	Zoology (Parasitology)	Doctor of Philosophy (D.Phil) Thesis Title: Mechanisms of hypobiosis in <i>Haemonchus contortus</i> of goats in semi-arid lands (SAL) of Kenya.	2005	2008
Freie Universitat, Berlin, Germany	Animal health management	Post graduate certificate	1997	1997
University of Nairobi	Vet. Pathology & Microbiology.	Master of Science (MSc) Thesis Title: Evaluation of the integral membrane proteins of <i>Fasciola gigantica</i> for control of ovine fascioliasis.	1991	1994

University of Nairobi	Veterinary Medicine	Bachelor of Veterinary Medicine (BVM)	1984	1988
Kapsabet Boy's High School	Advanced Level Secondary Education	Kenya Advanced Certificate of Education (KACE)	1981	1982
Kitale Day Sec. School	Ordinary Level Secondary Education	Kenya Certificate of Education (KCE)	1977	1980

RELEVANT MANAGEMENT AND PROFESSIONAL TRAINING

- 1) Corporate Governance for Public sector Boards, 2020, Kenya School of Government
- 2) Pedagogical Skills Training 2015, Kibabii University College
- 3) Confidentiality and Security of information, 20th -22nd May 2015
- 4) Effective Management Techniques, 26th September -1st October 1999
- 5) Gender in Agricultural Research and Extension 18th 22nd May 1998, KARI Naivasha
- 6) Small Ruminant Production Techniques 14th 25th May 1990, ILCA Bulawayo, Zimbabwe
- 7) National Youth Service, Pre-University Training Programme, 4th May – 13th August 1984

EMPLOYMENT HISTORY (WORK EXPERIENCE)

Year	Organisation	Role and Achievements
February 2020	Kibabii University	Chairman of the Negotiation Committee of Council on Implementation of the 2017 – 2021 Internal CBAs of the Three Unions (UASU, KUSU and KUDHEIHA)
30th May 2019 to Date	Kibabii University	<p>Ag. Deputy Vice Chancellor (Administration, Finance and Development)</p> <p>Achievements</p> <ol style="list-style-type: none"> i) Ran a successful recruitment, selection and appointments of senior teaching and administrative staff ii) Improved the working environment of staff by making available suitable office space and facilities

		<ul style="list-style-type: none"> iii) For the first time, made available and furnished the office of the Chair of Council iv) Instilled discipline among staff and restored confidence in management. v) Coordinated the development and signing of First internal University CBAs and that has reduced staff conflicts with management vi) Initiated coordinated the development of human resources management policies and staff career development guidelines vii) Coordinated the procurement, installation and commissioning of CCTV system that has improved security within the University and improved examination management especially invigilation of examination viii) Streamlined the management of part time lecturers recruitment and payment system that has reduced the waiting period to one semester. It is projected that the system will be automated by end of this calendar year (2020) to ensure real time payments. ix) Coordinated the procurement and installation of priority facilities in lecture halls. This has contributed to improved lecturer-student interaction and delivery of content. x) Currently coordinating the COVID-19 University rapid response team that is tasked with continuous gathering, analysis and sharing of correct information with Kibabii University community, Coordinating the manufacture and distribution of liquid soap and sanitizers to staff and the surrounding community
June 2019	Kibabii University	Chairman of the Negotiation Committee of Council on Implementation of the 2013 – 2017 Internal CBAs of the Three Unions (UASU, KUSU and KUDHEIHA)
June 2019	Kibabii University	ISO 9001:2015 Management Representative (MR)

		Achievements i) Successfully Steered ISO recertification
21 st September 2018 to date	Commission for University Education	Peer Reviewer
October 2017	Kibabii University	Director TVET
November 2016	Kibabii University	Associate Professor of Microbiology and Biotechnology
March 2016	Kibabii University	Committee member to develop institutional profile for Bungoma County Investment Conference
January 2016	Kibabii University	Chairperson of the Technical subcommittee of the international conference
December 2015	Kibabii University	Member of Senate Committee to draft policy on Women in STEM
September 2015	Kibabii University	Senior Lecturer
2015	Masinde Muliro University of Science and Technology	Member of the Research Extension Committee
2014	Masinde Muliro University of Science and Technology	Faculty representative to Senate AD-HOC COMMITTEE to investigate examination irregularities during the 2013/2014 Academic year
		Member of EXAMINATION RULES AND REGULATIONS REVIEW COMMITTEE
		Co-opted member to KITALE/ELDORET UNIVERSITY COLLEGE TASK FORCE (Animal Science and Biotechnology)
2013 – 2015	Masinde Muliro University of Science and Technology	Examination/Timetable co-ordinator, Faculty of Science (Processed the 2013/2014 academic Year Results efficiently and timely)
2013- 2014	Masinde Muliro University of Science and Technology	Chairperson, Departmental Graduate Committee , Biological Sciences (Effectively steered the Committee for the department to graduate a record 13 MSc students in 2013)

2013	Department of Biological Sciences-MMUST	Programme Coordinator BSc Biotechnology (Steered biotechnology students to win the first NCST Kenyan Universities biotechnology contest held at KICC Nairobi. Awarded a trophy and Cash awards)
2011 to date	International Atomic Energy Agency, Vienna, Austria	Expert/Consultant in animal production and Health
2011 – 2015	Masinde Muliro University of Science and Technology	Senior Lecturer , Masinde Muliro University of Science and Technology
2010 -2015	Faculty of Science - MMUST	Chairman of the Curriculum Review and Development Committee (Facilitated the review and development of over 70 existing and new programmes in accordance with Commission for University Education guidelines)
2010 – 2015	Masinde Muliro University of Science and Technology	Member of the steering committee of MMUST – KARI MOU (Established linkages that enabled industrial attachment and graduate students access research facilities at KARI, Collaboratively developed grant winning proposals)
2010 - 2011	Masinde Muliro University of Science and Technology	Lecturer , Masinde Muliro University of Science and Technology
2009- 2009	Kenya Agricultural Research Institute (KARI)	ISO9001:2008 champion National Animal Husbandry Research Centre, Naivasha Head of laboratory services and coordinator, seminars and Workshops , National Animal Husbandry Research Centre, Naivasha
2005 – 2009	Masinde Muliro University of Science and Technology	Lecturer , Part time, Masinde Muliro University of Science and Technology
2008 – 2009	Kenya Agricultural Research Institute (KARI)	Principal Research officer , Kenya Agricultural Research Institute (KARI)

2001 – 2005	Kenya Agricultural Research Institute (KARI)	National Coordinator , Small Ruminant Research Programme, KARI. Oversaw the integration of the dairy goat into the National dairy Research project
2001 – 2005	Kenya Agricultural Research Institute (KARI)	Deputy Centre Director , National Animal Husbandry Research Centre, Naivasha. As a Deputy Centre Director of a National Animal Husbandry Research Centre within KARI, I was the principal assistant of the Centre Director in administrative matters such as workplans and budget formulation, implementation and reporting
2000 – 2005	Kenya Agricultural Research Institute (KARI)	Head of Small ruminant Research KARI, Naivasha. Revived the Dual purpose Goat development project and integrated it in the National dairy Research project
1996 – 2000	Kenya Agricultural Research Institute (KARI)	Head of poultry Research , KARI Naivasha. Collaboratively developed the Kenya Indigenous Chicken as AI expert
1993 – 2008	Kenya Agricultural Research Institute (KARI)	Research officer , Kenya Agricultural Research Institution (KARI).
1988 – 1993	Kenya Agricultural Research Institute (KARI)/Small Ruminant Collaborative Research Support Programme	Collaborating Scientist , SR- CRSP Maseno
1988-1993	Kenya Agricultural Research Institute (KARI)	Assistant Research Officer , Kenya Agricultural Research Institution (KARI).

RESEARCH INTERESTS

Applied Microbiology and Biotechnology, Molecular Epidemiology of Parasites, Epidemiology and Control of Livestock Diseases, Emerging and Re-Emerging Zoonotic Diseases, Immunoparasitology, Natural Therapeutic Products Research, Feed/Food Safety, Parasite-Nutrition Interaction, Waste Management, Ecosystem Health and Animal Production.

PATENTS AND PRODUCT REGISTRATION

1. Forage silage block (Siloblock) (Patent and Trade Name registration initiated)
2. Microbial Fuel Cell (Electrogenic waste pin) (**Patent application initiated**)
3. Bacterial and Fungal endophyte derived anthelmintics and antibiotics (**Patent application in progress**)
4. Pen-side pH indicator impregnated mastitis test strip (**Patent application in progress**)

CONSULTANCY IN RESEARCH AND DEVELOPMENT

I have consulted and successfully undertaken tasks in research and development with various international and national organisations.

SNo	Task	Nature of task	Organisation	Year undertaken
1	Characterization of the Livestock Production systems and potential for enhancing Dairy Productivity through improved Feeding in the Sub Humid Western Kenya	Research in feeds and feeding	ILRI-Research programme on integrated systems for the humid tropics	2014-2015
2	Establishment of agricultural technology incubation Centres	Research and Development	County Government of Bungoma	2014
3	Strategic Plan for dairy value Chain in Bungoma County	Research and Development	County Government of Bungoma	2014
4	Poultry Research and Development strategic plan	Research and Development	County Government of Bungoma	2015
5	Fistulation of experimental animals	Research in animal nutrition	KALRO Naivasha	2015
6	Fistulation of experimental animals	Research in animal nutrition	International atomic Energy agency at University of Zambia	2013 and 2014
7	Fistulation of experimental animals	Research in animal nutrition	KALRO (Previously KARI) Lanet	2006

8	Fistulation of experimental animals	Research in animal nutrition	KALRO Embu	2006
9	Fistulation of experimental animals	Research in animal nutrition	KALRO Kitale	2006
10	Fistulation of experimental animals	Research in animal nutrition	KALRO Naivasha	2005

NOTABLE CAREER ACHIEVEMENTS IN RESEARCH, TEACHING AND DEVELOPMENT

During my career as a research scientist and lecturer and member of community, I have been able to achieve the following:

1. **Donated a Research Equipment** (ECOSCAN) for sub-clinical Mastitis investigations and management. The equipment can be adapted for other parameters such as pH
 2. **Conceptualized, designed and described the Forage silage block** (Siloblock) making process (Patent and Trade Name registration initiated)
 3. **Designed Microbial Fuel Cell** (Electrogenic waste pin) (**Patent application initiated**)
 4. **Conceptualized, established** and serving as the founder chairman of Board of Management of **Jude Gates Lurare Premier Academy** for Underprivileged with the support of Christian Relief Fund (CRF).
 5. **Won a water supply development grant** from Christian Relief Fund (CRF) for Maeni Girls Secondary School and local community
 6. **Isolated and characterized bacterial and fungal** strains with industrial potential as source of anthelmintics and antibiotics (**patent application in progress**)
 7. Significantly contributed to the success of the 1st, 2nd and 3rd Kibabii University Annual International Conference as Member of Organizing Committee and Chair of the Technical Sub Committee.
 8. Contributed over **2000 titles of e-books** to Kibabii University Library
 9. Through funded research projects and direct negotiations with donors, I have been able to procure state of the art **equipment, glassware** and **reagents** for Biotechnology and Microbiology laboratories at Masinde Muliro University of Science and Technology.
- Some key items are presented below:

Item	Number	Mode of Procurement and current state
Rotary evaporator	1	Research Project/excellent state
Soxlet Extractor Unit	1	Negotiated/excellent state
PCR Units	1	Negotiated/serviceable
Electrophoresis unit	1	Negotiated/Excellent state
Milk Scan	1	Research project/Excellent state
MacMaster Parasitology Unit	3	Negotiated/Excellent state
pH metre	3	Research project/negotiated/Excellent state
Portable GPS reader	1	Research project/negotiated/Excellent state
High precision weigh balance	2	Research project/negotiated/Excellent state
High precision Micropipettes	8	Research project/negotiated/Excellent state
Glass ware	Assorted	Research Project
Molecular biology reagents (kits) and media	Assorted	Research Project/Consumable

10. **Developed a pen-side pH indicator** impregnated Mastitis test (**patent application in progress**)
11. Established a state of the art **animal health and biotechnology laboratory** at the Dairy Centre of Excellence, KALRO Naivasha.
12. Contributed and effectively steered the **Kenya Indigenous Chicken development** programme that resulted in the **KARI Indigenous Chicken**
13. Contributed and effectively steered the development of the **Kenya Dual Purpose Goat** (KDPG) foundation stock for the Kenya Dairy Goat industry

TEACHING EXPERIENCE

I have over 12 years of teaching experience at university level. During this period, I have been an instructor for the following courses at undergraduate level:

Introduction to genetics, Cell biology and genetics, General microbiology, Environmental microbiology, Industrial microbiology, Medical microbiology, General pathology, Animal genetics and evolution, Animal Nutrition, Animal physiology, Biochemistry of biofuels, Bioreactors, Biophysics, Introduction to Bioinformatics, Biopharmaceuticals, Discovery strategies in biotechnology, Introduction to Biotechnology, Introduction to Molecular biology, Principles of genetics and cytogenetics and Biological waste management.

At graduate level, I have effectively handled the following courses:

Molecular Biology of enzymes, Advanced Population genetics, Techniques in parasitology, Advanced Bacteriology, Advanced Microbial genetics, Bioinformatics, Entrepreneurship in Biotechnology and Molecular Genetics.

ACADEMIC PROGRAMMES DEVELOPED

1. Diploma in Dairy farming and entrepreneurship - KIBU
2. Diploma in Livestock feeds and feeding systems - KIBU
3. BSc biotechnology - MMUST
4. MSc microbiology - MMUST
5. MSc Bioinformatics - MMUST
6. PhD in Microbiology - MUST
7. PhD in Bioinformatics - MMUST

PUBLICATIONS

Published **over 150 articles** – including 41 technical papers in internationally refereed journals, 3 books and thirteen (13) book chapters, numerous quality papers in local and international conference/workshop proceedings, Agricultural extension materials and author and co-author of several research and consultancy reports.

Thesis

1. Doctor of Philosophy (D.Phil) 2008

Thesis Title: Mechanisms of hypobiosis in *Haemonchus contortus* of goats in semi-arid lands (SAL) of Kenya

2. Master of Science (MSc) 1994

Thesis Title: Evaluation of the integral membrane proteins of *Fasciola gigantica* for control of ovine fascioliasis

Books

1. Lanyasunya, T. P. Ouda, J. O. ;Otieno, K ;**Siamba, D. N.** ;Kibitok, N. ;Mutunga, T. K. **2012.** Feed and Milk Hazard Control Handbook for Dairy Stakeholders. KARI Publication Unit. . **ISBN: 978-9966-30-015-7**
2. Chrispinus Mulambalah and **Donald Siamba.** **2012.** Malaria in the Western Highlands of Kenya. Transmission patterns and intervention strategies, LAB Lampard Academic Publishing, **GmbH & Co.KG. ISBN: 978-8484-8007-4**
3. **Siamba. D.N.**, Lanyasunya T.P. and Kariuki J.N. (*Ed*) **2016.** Dairy Cattle Farming in Kenya. A Practical Training Manual for Extension Workers. Manuscript ready for publication.

Book chapters

1. Muyekho, F.N., **Siamba, D.**, Agevi, H. and Okotsi, S. (**2014**). Characterizing the livestock production system and potential to enhance productivity through improved feeding in Matayos in Busia County, Kenya. IN: *Muyekho F.N., Lukuyu, B. and Duncan, A.J. 2014.* Characterization of the livestock production systems and potential to enhance dairy productivity through improved feeding in sub-humid western Kenya. Nairobi, Kenya: ILRI: 4-18. **Internet URL:** <https://cgspace.cgiar.org/handle/10568/64946>
2. Muyekho, F.N., **Siamba, D.**, Agevi, H. and Etiang, S.A. (**2014**). Characterization of the livestock production system and potential to enhance productivity through improved feeding in Sabatia, Vihiga County, Kenya. IN: *Muyekho F.N., Lukuyu, B. and Duncan, A.J. 2014.* Characterization of the livestock production systems and potential to enhance dairy productivity through improved feeding in sub-humid western Kenya. Nairobi, Kenya: ILRI: 19-34. **Internet URL:** <https://cgspace.cgiar.org/handle/10568/64946>
3. Muyekho, F.N., **Siamba, D.**, Agevi, H., Tennesi, G. and Koronge, E.M. (**2014**). Assessing the dairy value chain and potential to enhance productivity through improved feeding in Marani Sub-County, Kisii, Kenya. IN: *Muyekho F.N., Lukuyu, B. and Duncan,*

- A.J. 2014. Characterization of the livestock production systems and potential to enhance dairy productivity through improved feeding in sub-humid western Kenya. Nairobi, Kenya: ILRI: 35-49. **Internet URL:** <https://cgspace.cgiar.org/handle/10568/64946>
4. Muyekho Francis N. **Donald Siamba**, Humphrey Agevi, Dickens Nyagol and Dosa Karugara (2014). Characterization of the livestock production system and potential to enhance productivity through improved feeding in Kisumu West, Kisumu, Kenya. IN: *Muyekho F.N., Lukuyu, B. and Duncan, A.J. 2014. Characterization of the livestock production systems and potential to enhance dairy productivity through improved feeding in sub-humid western Kenya. Nairobi, Kenya: ILRI: 50-67. Internet URL: <https://cgspace.cgiar.org/handle/10568/64946>*
 5. Lanyasunya T.P., I.K. Lokwaleput, T.K. Mutunga, **D.N. Siamba**, J.O. Ondiek and J.M. Bwire. (2014). Implications of Mycotoxin contamination of dairy feeds and products. IN: *Lanyasunya, T. P., I.K. Lokwaleput, T. K Mutunga, D. N Siamba, J.O Ondiek and J.M. Bwire. ;. 2014. Feed and Milk Hazard Control: A handbook for Dairy Stakeholders. KARI Publication Unit. . ISBN: 978-9966-30-015-7*
 6. **Siamba D.N.**, T.P Lanyasunya., I.K. Lokwaleput, N.K Kiptok, T.K. Mutunga, J.O. Ondiek and J.M. Bwire. (2014). Risks of heavy metal contamination of dairy feeds and products. IN: *Lanyasunya, T. P., I.K. Lokwaleput, T. K Mutunga, D. N Siamba, J.O Ondiek and J.M. Bwire. ;. 2014. Feed and Milk Hazard Control: A handbook for Dairy Stakeholders. KARI Publication Unit. . ISBN: 978-9966-30-015-7*
 7. Lanyasunya T.P., I.K. Lokwaleput, T.K. Mutunga, **D.N. Siamba**, J.O. Ondiek and J.M. Bwire. (2014). Rapid and conventional testing methods for microorganisms in milk. IN: *Lanyasunya, T. P., I.K. Lokwaleput, T. K Mutunga, D. N Siamba, J.O Ondiek and J.M. Bwire. ;. 2014. Feed and Milk Hazard Control: A handbook for Dairy Stakeholders. KARI Publication Unit. . ISBN: 978-9966-30-015-7*

8. Ondiek J.O., T.P. Lanyasunya, I.K. Lokwaleput, T.K. Mutunga, **D.N. Siamba**, and J.M. Bwire. (2014). Agriculture chemicals' related hazards control. IN: *Lanyasunya, T. P., I.K. Lokwaleput, T. K Mutunga, D. N Siamba, J.O Ondiek and J.M. Bwire.* ;. 2014. Feed and Milk Hazard Control: A handbook for Dairy Stakeholders. KARI Publication Unit. . ISBN: 978-9966-30-015-7

9. Lokwaleput I.K., B.S. Msangi, Lanyasunya T.P., T.K. Mutunga, **D.N. Siamba**, J.O. Ondiek and J.M. Bwire. (2014). Traceability: A step towards food safety in Eastern and central Africa countries and compliance with international food safety standards. . IN: *Lanyasunya, T. P., I.K. Lokwaleput, T. K Mutunga, D. N Siamba, J.O Ondiek and J.M. Bwire 2014.* Feed and Milk Hazard Control: A handbook for Dairy Stakeholders. KARI Publication Unit. . ISBN: 978-9966-30-015-7

10. **Siamba, D.N.**, Mukisira, E.A., de Jong, R., Lokwaleput, I. and Nampaso, J. (2000). Ticks and tick-borne diseases on smallholder dairy farms in Bahati Division, Nakuru District: Epidemiology and assessment of control strategies in different management systems. In de Jong and Mukisira (ed). *Testing of livestock technologies on smallholder mixed farms in Kenya. Research-Extension-Farmer experiences in the National Dairy Cattle and Poultry Research Programme (1995-1999).* KARI/KIT,Nairobi, pp 57-74 **ISBN 9966-879-34-X**

11. **Siamba, D.N.**, Ndegwa, J. M., Kimani, C. W., Nampaso, J., Ole Sinkeet, S.N., Mukisira, E.A. and de Jong, R. (2000). Rural poultry production: efforts to improve production and contribution to household economy. In de Jong and Mukisira (ed). *Testing of livestock technologies on smallholder mixed farms in Kenya. Research-Extension-Farmer experiences in the National Dairy Cattle and Poultry Research Programme (1995-1999).* KARI/KIT,Nairobi,pp 141-156 **ISBN 9966-879-34-X**

12. **Siamba, D.N.**, Waweru, D.N., Lanyasunya, T.P., de Jong, R., Mukisira, E.A., Nyakira, B.S. and Lokwaleput, I (2000). On-farm management of ticks and tick-borne diseases: Current use and potential role of plants in integrated control strategies on smallholder dairy farms in Nakuru District. In de Jong and Mukisira (ed). *Testing of livestock technologies on smallholder mixed farms in Kenya. Research-Extension-Farmer experiences in the National Dairy Cattle and Poultry Research Programme (1995-1999). KARI/KIT, Nairobi, pp 75-84 ISBN 9966-879-34-X*
13. Lokwaleput, I., **Siamba, D.N.** and de Jong, R. (2000). Improved cow fertility through appropriate management practices on-farm in Koibatek and Nakuru District. In de Jong and Mukisira (ed). *Testing of livestock technologies on smallholder mixed farms in Kenya. Research-Extension-Farmer experiences in the National Dairy Cattle and Poultry Research Programme (1995-1999). KARI/KIT, Nairobi, pp 85-104 ISBN 9966-879-34-X*

Refereed Journal Publications

- 1) David Gikungu, Jacob Wakhungu, **Donald Siamba**, Edward Neyole, Richard Muita, Benard Bett and Pietro Ceccato. **2019**. Differences between satellite and observed climate data as predictors of Rift Valley Fever in Kenya. **Submitted. Journal of Meteorology and Related Sciences**
- 2) Muranditsi A, **Siamba D.**, Wakhungu J. and Lisouza F. **2019**. Bacteriological analysis of dairy cattle feeds and the influence on milk quality in Kakamega County, Kenya. **Accepted International Advanced Research Journal in Science, Engineering and Technology.**
- 3) Agripina Muranditsi Khalembi, **Donald Siamba**, Jacob Wakhungu, Pirishon Lanyasunya. **2019**. Chemical and Biological quality of water used by dairy cattle farmers in Kakamega County, Kenya. **Accepted Journal of Animal Production Advances**
- 4) Khatiebi Sandra, **Siamba Donald Namasaka**, Konje Martha Muthoni and Mulambalah Chrispinus Siteti **2019**. Physicochemical Characteristics and Biodegradability of Organic

Fraction of Solid Wastes Generated in Eldoret Municipality, Kenya. **Research Journal of Environmental and Earth Sciences. In press**

- 5) Wanyama Milton Mario Kollenberg, **N. Siamba Donald** and Nyongesa Peter **2019**. Bacterial Counts of Unprocessed Bovine Milk Produced by Small Scale Farmers in Ndivisi Ward, Bungoma County, Kenya. *Journal of Advances in Microbiology*, 14(1): 1-11, 2019; Article no.JAMB.45570 ISSN: 2456-7116
- 6) Ndirangu P N, Mungube E O, Maichomo M W, Nyongesa P K, Wamae D, On'gala J O, Gicheru N W, Keya G, Wesonga H O and **Siamba D. 2019**: A novel pH-based pen-side test for detection of sub-clinical mastitis: validation in cattle and camels, Kenya. *Livestock Research for Rural Development. Volume 31, Article #7*. Retrieved January 17, 2019, from <http://www.lrrd.org/lrrd31/1/erick31007.html>
- 7) Maritim N, Ngeiywa M, **Siamba D**, Mining S, Wesonga H. **2018**. Influence of worm infection on immunopathological effect of *Mycoplasma capricolum capripneumoniae* pathogen in goats. *Adv. Anim. Vet. Sci.* 6(6): 234-241. DOI <http://dx.doi.org/10.17582/journal.aavs/2018/6.6.234.241>
- 8) Maritim Kipkoech Noah, Ngeiywa Moses Mwajar, **Siamba Donald Namasaka**, Mining Simeon Kipkoech, Wesonga Hezron Okwaka. **2018**. Nematode Infection Depresses Humoral Immune Responses of Goats to *Mycoplasma capricolum* subsp. *capripneumoniae* Vaccine Antigens. **Adv. Anim. Vet. Sci.** 6(2): 57-61
- 9) Sandra Khatiebi, **Donald Siamba**, Zedekiah Onyando, Chrispinus Mulmbala and Martha Konje. **2018**. Heavy metal contamination at dumpsites at Eldoret, Kenya, in the Lake Victoria Basin. *African Journal of Tropical Hydrobiology and Fisheries* 16: 93-97
- 10) Sarah Kindiki, Mario Kollenberg, **Donald Siamba**, Anthony Sifuna and Clabe Wekesa **2018**. Analysis of Fecal Coliform Levels at Watering Points along the Upper Reaches of River Isiukhu in Kakamega County, Kenya. *Journal of Advances in Microbiology*. 10(1): 1-7, 2018; Article no.JAMB.39522 ISSN: 2456-7116

- 11) Ndirangu P. N, **D Siamba**, H O Wesonga, E O Mungube, M W Maichomo, J M Mugambi. **2017**. Prevalence of bovine mastitis and multi-antibiotic resistant Staphylococcus and Streptococcus species in a research centre farm at Naivasha, Kenya. *Bull. Anim. Hlth. Prod. Afr.*, 65, 289-301. ISSN 0378 – 9721 ISSN 0378 – 9721
- 12) Ibrahim O. Barasa and **Donald N. Siamba** **2017**. Potential Environmental Benefits of Anaerobic Digestion of Sewage for Energy Production in Secondary Schools of Kakamega County, Kenya. *International Journal of Current Research Vol. 9, Issue, 05, Pp.51547-51550*,
- 13) Ibrahim O. Barasa and **Donald N. Siamba**. **2017**. Potential Environmental Impact of Chemical and Microbial Characteristics of the Sewage Generated in Kakamega County, Kenya. *Journal of Geography, Environment and Earth Science International* 8(4): 1-8
- 14) Nabiswa Patrick Koyi, Prof. Jacob W. Wakhungu, **Dr. Donald N. Siamba**, Dr. Kadian Wanyonyi Wanyama. 2016. Key Value Chain Actors in the Dairy Sector In Bungoma County, Kenya. *Journal of International Academic Research For Multidisciplinary. Vol. 4, Issue 7, 2320-5083*
- 15) David Gikungu, Jacob Wakhungu, **Donald Siamba**, Edward Neyole, Richard Muita and Benard Bett. **2016**. Dynamic risk model for Rift Valley fever outbreaks based on climate and the disease outbreak data in Kenya. *Geospatial Health Vol. 11, No. 377 pp 95-103*
- 16) Joseph Mutitu Ndegwa, Patricia Norrish, Derek Shepherd, Catherine Kimani, Anne Wachira, **Donald Siamba**, Roger Mead **2015**. Evaluating Characteristics of Indigenous Chicken System with Flock Size Trends in a Participatory Research on Improved Management Practices in Kenya. **Journal of Agricultural Studies**, Vol. 3, No. 2 pp 97-113. ISSN 2166-0379
- 17) Joseph Mutitu Ndegwa, Roger Mead, Patricia Norrish, Derek Shepherd, Catherine Kimani, Anne Wachira, **Donald Siamba**. **2015**. Evaluating interventions uptake in indigenous chicken production in a participatory research with smallholder farmers in Kenya. **Journal of Agricultural Studies**, Vol. 3, No. 2 pp 145-165. ISSN 2166-0379

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1. Protect Your Milk and Dairy Products from Pathogenic Microbial Contamination and Save Life **(2013)**
2. Be Aware! Heavy Metal Contamination in Livestock Products can have Serious Health Implications in Both Humans and Animals **(2013)**
3. How to Control Mycotoxins in Milk and Dairy Feeds **(2013)**
4. Learn How to Rear Your Dairy Goats **(2013)**
5. Learn How to Rear Your Dairy Goat Kid **(2013)**
6. Use A Simple Wooden Box to Make High Quality Hay for Sustainable Milk Production Throughout the Year **(2013)**
7. Appropriate Stover Handling Techniques for Dairy Cattle Feeding **(2013)**
8. Learn How to Make High Quality Maize Silage for Year Round Milk Production **(2013)**
9. Learn How to Grow and Utilize Napier Grass for Sustained Milk Production **(2013)**
10. Control Ticks and Reduce Cattle Losses **(1999)**

Recent Project Technical Reports

1. Muyekho F.N., **Siamba D.N.**, Lukuyu B and Duncan A **(2015)**. Characterization of the Livestock Production systems and potential for enhancing Dairy Productivity through improved Feeding in the Sub Humid Western Kenya
2. **Siamba D.N.** 2015. The Bungoma County poultry value chain strategic plan (2014 - 2017)
3. **Siamba D.N.** **(2014)** End of mission Report on animal fastulation at the University of Zambia, Lusaka Zambia (2014)
4. **Siamba D.N.** **(2013)** End of mission Report on animal fastulation at the university of Zambia, Lusaka Zambia (2013)
5. **Siamba D. N.**, H.M. Tsingalia, D.M. Kuria, A. Osogo, P. Nyongesa. **(2013)**. Isolation, characterization and evaluation of endophytes from selected medicinal plants for anthelmintic metabolites. **Final project (NCST/5/003/call2/48) Technical Report**

6. K. Otieno, I. K. Lokwaleput, T. P. Lanyasunya, T.K Mutunga, **D.N. Siamba. (2013).** Enhancing appropriate policies and safety standards of feeds and milk for improved livelihoods in the ECA countries. (Project REF: EAAPP/RDCoE/RP/04/2011)

GRANTS FOR COMPLETED AND ONGOING RESEARCH PROJECTS

1. **Grant No EAAPP/2010/AH/01:** Development of a pH based pen-side test for mastitis control and improvement of milk quality. (Associate Researcher). **Ongoing.**
2. Grant No **REF: EAAPP/RDCoE/RP/04/2011:** Enhancing appropriate policies and safety standards of feeds and milk for improved livelihoods in the ECA countries (Associate Researcher). **Concluded phase 1**
3. **Grant No NCST/5/003/CALL2/48.** Isolation, characterization and evaluation of endophytes from selected medicinal plants for anthelmintic metabolites. (Principal Researcher). **Concluded.**
4. **ARF/LSKP/RC-IDA/6007001/1 of 2001** Smallholder dairy feeding practices. (Associate Researcher). **Completed**
5. **ARF/LSK/2017001/1 of 1999** On-farm performance of Kenya Sahiwal, its crosses and other breed types in dairy production systems in medium and semi-arid areas of Kenya (Associate Researcher). **Completed.**
6. **ARF/LSKP/1001097/1 of 1999** Dual Purpose Goat production: Nutritive value of leguminous shrubs as supplementary feed in dual purpose goat production (Associate Researcher). **Completed.**
7. **ARF/LSKP/RC-IDA/1004017/1 of 1997.** Studies on the nutrition of indigenous chicken of Kenya. (Associate Researcher). **Completed**

POST GRADUATE STUDENT SUPERVISION

The list of the Master and Doctorate (PhD) degree students that I have supervised to completion and those that I am currently supervising is given below:

PhD

1. **Lily Khendo Simasi (SBB/H/01/14)** Doctor of Philosophy (Molecular Biology), MMUST. **Ongoing**
2. **Nanyende David Wanyonyi.** Doctor of Philosophy, Disaster Management and Humanitarian Assistance. (MMUST). **Submitted.**
3. **Martim Noah Kipkoech.** Doctor of Philosophy (Parasitology) University of Eldoret. **Completed, to graduate in December 2018**
4. **Patrick Nabiswa Koyi.** Doctor of Philosophy in Disaster Management and Sustainable Development (MMUST). Completed and graduated in **2017**
5. **Olunga Ibrahim Barasa.** Doctor of Philosophy, Disaster Management and Humanitarian Assistance. (MMUST). Completed and graduated in **2017**
6. **David Gikungu Irungu 2015.** Doctor of Philosophy, Disaster management and Sustainable Development. Completed and graduated in **2015.**
7. **Olunga Mouren Stella-**Doctor of philosophy (Zoology-Parasitology) Moi University (2011). Completed and graduated in **2011**

MSc

1. **Redempta Bulinda (SCH/G/08/2015).** Master of Science (Applied Chemistry) MMUST. **Student is writing thesis**
2. **Philip Wamalwa Makhuwa (SCH/G/09/15).** Master of Science (Applied Chemistry) MMUST. **Student is writing thesis**

3. **Zenalle Emma Adhiambo.** Master of Science in Crop protection (applied microbiology). **Student is writing thesis.**
4. **Milton Wanyama.** Master of Science in Microbiology (MMUST). **Submitted**
5. **Sarah Kindiki.** Master of Science in microbiology (MMUST). **Graduated 2018**
6. **Nyongesa P. Kuloba.** Master of Science in Medical Biotechnology (Maseno). Graduated in **2016.**
7. **Agripina Khalembi** Master of Science in Disaster Management and Humanitarian Assistance. (MMUST). Graduate in **2016**
8. **Sandra Khatiebi. .** Master of Science in Environmental biology (MMUST). Completed and graduated in **2015**
9. **Ogutu James Ochieng.** Master of Science in Disaster Management and Humanitarian Assistance. (MMUST). Completed and graduated in **2015**
10. **Mwongula W. Albert.** Master of Science in Microbiology (Moi University). (2013) Completed and graduated in **2013**

POST GRADUATE STUDENT THESIS EXAMINATION

I have examined graduate student theses listed below:

1. Edwin Kipyegon Mutai ,. DPHIL Moi University (2018)
2. Irene Chepkoech. MSc, University of Eldoret, (2015)
3. Joan C. Koech. MSc, University of Eldoret, (2015)
4. Benard Ngoitsi Jumba. MSc, University of Eldoret, (2014)
5. Beatrice Muzame Aleyo, MSc University of Eldoret (2014)
6. Samwel Morris Lifumo Symekher. Master of Public Health “Maseno University (2013)
7. Edwin Kipyegon Mutai ,. MPHIL Moi University (2013)

8. Claris Nyongesa Omuse MSc MMUST (2013)
9. Leonard Okumu Obiet. MSc MMUST (2013)
10. Omemo Peter, Master of Public Health, Maseno University (2012)
11. Mary Wambui Kamau, Master of Public Health, Maseno University (2012)
12. Peter Lokomar Nyanga.. Master of Public Health “Maseno University (2012)

AWARDS AND COMMENDATIONS

- (i) World Bank Scholarship award for PhD studies at Moi University
- (ii) Certificate of excellence in recognition of outstanding performance at 6th KARI scientific conference (**Best scientific presentation**)
- (iii) Certificate of excellence in recognition of outstanding performance at 6th KARI scientific conference (**Best presentation in animal health**)
- (iv) Certificate of excellence in recognition of outstanding performance at 6th KARI scientific conference (**Second best overall presentation**)
- (v) Certificate of excellence in recognition of outstanding performance at 6th KARI scientific conference (**Second best presentation in livestock**)
- (vi) **Third best KARI project** (Improvement of indigenous chicken production by Ndegwa, J.M., Kimani, C.W., **Siamba, D.N.** and Mburu, B.M.) awarded at 6th KARI scientific conference.
- (vii) USAID scholarship award for Master of Science Studies at University of Nairobi

SPECIAL SKILLS

- (i) Excellent expertise **in rumen and Ileal canulation** for animal experimentation. Canulated 108 ruminants for nutritional experiments in Kenya, Tanzania and Zambia as a consultant for the International Atomic Energy Agency, Vienna, Austria.
- (ii) Excellent expertise in **Artificial Insemination in Chicken** (used as a tool for breeding and multiplication of the Kenya Indigenous Chicken at KARI Naivasha
- (iii) **Computer literate.** Competent in the use of ICT in research and teaching

PROFESSIONAL AFFILIATION

- i) Member of the Kenya National Academy of Sciences (KNAS)
- ii) Registered Veterinary Surgeon with Kenya Veterinary Board
- iii) Member of Kenya Veterinary Association (KVA)
- iv) Member of Animal production Society of Kenya (APSK)
- v) Member No 1001600 to American Association for Science and Technology (AASCIT)

UNIVERSITY AND COMMUNITY SERVICES

1. Member of County Government of Bungoma task force on Mt- Elgon and Chetambe Eco-system Conservation and Management
2. Member of County Government of Bungoma Dairy and Poultry value Chain steering Committee
3. Motivational Speaker and career advisor in Secondary Schools
4. Member of planning committee in Maeni Monthly Meeting of Quaker Church
5. Chairperson of the school management Board, Maeni Girls Secondary School
6. Chairperson of the school management Board, Bilibili Secondary School
7. Founding member and Chairman of the school Management Committee Lurare, Premier Academy

REFEREES

1. Prof. Isaac Odeo Ipara
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2. Prof. Thomas W. Sakwa
Faculty of Science
Masinde Muliro University of Sciences and Technology
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3. Dr. Ludovicus Oriama Okitoi
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4. Prof. Peter Maina Gatongi
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5. Lawrence Wu, Jr.
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