First Name	CLAIRE	
Surname	MUGASA	
Other Name	MACK	
Academic Title	SENIOR LECTURER	
Position e.g. Head of	DEAN, SCHOOL OF BIOSECURITY,	
Department	BIOTECHNICAL AND LABORATORY SCIENCES	
	(SBLS)	
Telephone Number	+256772365060	
Email	claire.mugasa@mak.ac.ug; mugasaclaire@gmail.com	
Office Number		
Courses Taught	VETERINARY ENTOMOLOGY, VETERINARY	
	PROTOZOOLOGY, ECTOPARASITES AND	
	VECTORBONE DISEASES, VETERINARY	
	HELMINTHOLOGY, BIOMEDICAL	
	PARASITOLOGY, GRADUATE SEMINARS; APPLIED MOLECULAR PARASITOLOGY	
	APPLIED MOLECULAR PARASITOLOGY	
Areas of Research Interest	PARASITOLOGY, MOLECULAR DIAGNOSTICS,	
	ENTOMICS	
Brief Biography	Claire M. Mugasa BVM, Mak; MSc, Mak; PhD, UvA (The	
	Netherlands)	
	Senior Lecturer;	
	Dr. Mugasa Claire is the first female Dean, School of	
	Biosecurity, Biotechnical and Laboratory Sciences (SBLS),	
	College of Veterinary Medicine, Animal Resources and	
	biosecurity (COVAB), Makerere University Kampala and	
	serves under the department of Biotechnical and Diagnostic	
	sciences where she has been the chair since August 2020.	
	Her areas of teaching and research interest are Diagnostics,	
	veterinary Parasitology and entomics. She is also interested in	
	communication of scientific literature through critical review	
	and seminar presentations especially at graduate level.	
	She has researched and published extensively in the areas of	
	molecular detection and diagnosis for management of various	
	infectious diseases. She currently is delving into	
	entomics/production entomology with a bias to entomic meal	
	production technologies. In effort to accelerate entomic	
	science Technology and Innovation, she has spearheaded the	
	inauguration of an alliance for promotion of Insect Value	
	chains, Science Technology and Innovation (APISTIA). She is	
	the executive secretary of the interim committee based at	
	COVAB with membership from academia, public and private	
	partners.	

	Claire is an alumnus of Africa Women in Agriculture Research and Development (AWARD) and is recently a member of Higher Education Resource Service East Africa HERS-EA Fourth Academy. She is the focal person representing COVAB on the technical working group for the proposed Investment partnership between Uganda Development Corporation (UDC) and Brentec Investment Limited.	
Education Background	BVM (MAK), MMB (MAK), PHD (UvA)	
Other key skills training	Certificate of Completion Higher Education Resource	
(Certification)	Service East Africa, Fourth Academy July 2021	
Research project history	Makerere Innovations Fund (Principal Investigator) 2010- 2021- Enhancing the efficiency of emerging entomic meat and protein value chains in Uganda	
	 NORHED- Postdoctoral Research, Prevalence and Molecular profiling of Cryptosporidium in communities neighboring in Queen Elizabeth National Park (QENP) in western Uganda Setting a model for the elimination of <i>T. b. rhodesiense</i> sleeping sickness. (Field and Laboratory Research Scientist) Funder: UBS OPTIMUS, 2012-2014 Grand Challenges Canada (Principal Investigator) 01/01/13-01/01/14 Helicase dependant amplification for simpler diagnosis of sleeping sickness. 	
	• THRiVE supported by Wellcome Trust (Principal Investigator) 01/01/13-01/01/14 Diversity of Tabanidae in the Lake Victoria basin in Uganda.	
	 Human African Trypanosomiasis and Leishmaniasis Diagnostics: Simplified and rapid molecular assays for disease diagnosis and parasite (sub)species identification (TRYLEIDIAG Project) Funded by commission of the European communities' Sixth Framework Programme, priority INCO-DEV, project TRYLEIDIAG, contract 015379 	
Conferences/workshops papers presented	Pedagogical training Workshop (Makerere University Kampala, Feb 2004) Basic University Teaching, Learning and Teacher Training and Evaluation	

- Induction Course for Graduate Extension Workers recruited into Local Government. (MAAIF, June 2002) Making the Plan for Modernization of Agriculture an instrument for Poverty Eradication
- Netherlands Society for Parasitology Conference (Papendal Netherlands April 2007). Paper presented: Quantitative Nucleic acid sequence based amplification assay for the detection of *T. brucei* parasites in blood samples. (Unpublished)
- Bioinformatics workshop (Makerere University, July 2007), by University of Bern Switzerland
- Training and capacity building of Laboratory Technicians under the TRYpanosomiasis LEIshmaniasis DIAGnosis (TRYLEIDIAG) project. (Makerere University Kampala June, 2007)
- 30th Meeting of International Scientific Council For Trypanosomiasis Research And Control Entebbe, Uganda, September, 2009. Paper presented: Phase II evaluation of sensitivity and specificity of PCR and NASBA followed by oligochromatography (OC) for diagnosis of Human African Trypanosomiasis.
- Advanced computer training leading to a computer certificate (Makerere University Kampala, January 2009)
- Technical workshop on LAMP (Loop-mediated isothermal amplification) for tick borne diseases (Faculty of Veterinary Sciences, University of Pretoria, South Africa August 2010)
- PhD supervision and Mentoring workshop (School of Graduate Studies, Makerere University, Kampala January 2011)
- Workshop on Scientific and proposal writing for African Women in Agricultural Research and development (AWARD) fellows. By AWARD trainers, June 2013, Munyonyo Speke Resort Hotel, Uganda
- The 1st Annual hand-on workshop in Point-of-care Diagnostics. Bringing Diagnostic Prototypes to the pointof-care (Institute of Primate research, June 2012) Nairobi, Kenya

Published books	N/A
Published Book Chapters	N/A

Published Journal Articles

- 1. Mugasa CM, Schoone GJ, Ekangu RA, Lubega GW, Kager PA, Schallig HD. Detection of Trypanosoma brucei parasites in blood samples using real-time nucleic acid sequence-based amplification. Diagnostic microbiology and infectious disease. 2008; 61(4):440-5. PMID: 18486402
- 2. Mugasa CM, Laurent T, Schoone GJ, Kager PA, Lubega GW, Schallig HD. Nucleic acid sequence-based amplification with oligochromatography for detection of Trypanosoma brucei in clinical samples. Journal of clinical microbiology. 2009; 47(3):630-5. PMID: 19116352
- 3. Mugasa CM, Laurent T, Schoone GJ, Basiye FL, Saad AA, El Safi S, Kager PA, Schallig HD. Simplified molecular detection of Leishmania parasites in various clinical samples from patients with leishmaniasis. Parasites & vectors. 2010; 3(1):13. PMID: 20196849
- 4. Mugasa CM, Deborggraeve S, Schoone GJ, Laurent T, Leeflang MM, Ekangu RA, El Safi S, Saad AF, Basiye FL, De Doncker S, Lubega GW, Kager PA, Büscher P, Schallig HD. Accordance and concordance of PCR and NASBA followed by oligochromatography for the molecular diagnosis of Trypanosoma brucei and Leishmania. Tropical medicine & international health: TM & IH. 2010; 15(7):800-5. PMID: 20487429
- 5. Matovu E, Mugasa CM, Ekangu RA, Deborggraeve S, Lubega GW, Laurent T, Schoone GJ, Schallig HD, Büscher P. Phase II evaluation of sensitivity and specificity of PCR and NASBA followed by oligochromatography for diagnosis of human African trypanosomiasis in clinical samples from D.R. Congo and Uganda. PLoS neglected tropical diseases. 2010; 4(7):e737. PMID: 20625557
- 6. Matovu E, Kazibwe AJ, Mugasa CM, Ndungu JM, Njiru ZK. Towards Point-of-Care Diagnostic and Staging Tools for Human African Trypanosomiaisis. Journal of tropical medicine. 2012; 2012:340538. PMID: 22545057
- 7. Mugasa CM, Adams ER, Boer KR, Dyserinck HC, Büscher P, Schallig HD, Leeflang MM. Diagnostic accuracy of molecular amplification tests for human

- **African trypanosomiasis--systematic review** PLoS neglected tropical diseases. 2012; 6(1):e1438. PMID: 22253934
- 8. Mukasa D, Mugasa CM, Nakavuma JL. Antibiotic misuse by farmers in Ngoma subcounty Nakaseke district, Uganda. Africa Journal of Animal and Biomedical Sciences. 2012; 7(2):108-116.
- 9. Kapaata A, Lyagoba F, Ssemwanga D, Magambo B, Nanyonjo M, Levin J, Mayanja BN, **Mugasa CM**, Parry CM, Kaleebu P. **HIV-1** subtype distribution trends and evidence of transmission clusters among incident cases in a rural clinical cohort in southwest Uganda, **2004-2010**. **AIDS** research and human retroviruses. 2013; 29(3):520-7.
- 10. Mugasa CM, Katiti D, Boobo A, Lubega GW, Schallig HD, Matovu E. Comparison of nucleic acid sequence-based amplification and loop-mediated isothermal amplification for diagnosis of human African trypanosomiasis. Diagnostic microbiology and infectious disease. 2014; 78(2):144-8. PMID: 24439269
- 11. Mwebaza S, Batamwita R, Karamagi Y, Mugasa C, Namwanje C, Mujuzi G, Nanteza A. Evaluation of noncentrifuged dried plasma spots versus centrifuged and non-centrifuged plasma for determination of HIV-1 viral load. J Virol Methods. 2013189(1):209-12. PubMed PMID: 23422513.
- 12. Atuhaire DK, Afayoa M, Ochwo S, Katiti D, Mwiine FN, Nanteza A, Mugasa CM, Matovu E, Okuni JB, Olaho-Mukani W, Ojok L. Comparative detection of African swine fever virus by loop-mediated isothermal amplification assay and polymerase chain reaction in domestic pigs in Uganda. African Journal of Microbiology Research. 2014 June 04; 8(23):2322.
- 13. 11. Tsongo L, Nakavuma J, **Mugasa C**, Kamalha E. **Helicobacter pylori among patients with symptoms of gastroduodenal ulcer disease in rural Uganda.** Infection ecology & epidemiology. 2015; 5:26785. PMID: 26560860
- 14. Kato CD, Nanteza A, Mugasa C, Edyelu A, Matovu E, Alibu VP. Clinical profiles, disease outcome and co-

- morbidities among T. b. rhodesiense sleeping sickness patients in Uganda. PloS one. 2015; 10(2):e0118370. PMID: 25719539
- 15. Kato CD, Alibu VP, Nanteza A, Mugasa CM, Matovu E. Interleukin (IL)-6 and IL-10 Are Up Regulated in Late Stage Trypanosoma brucei rhodesiense Sleeping Sickness. PLoS neglected tropical diseases. 2015; 9(6):e0003835. PMID: 26090964
- 16. Kato CD, Matovu E, **Mugasa CM**, Nanteza A, Alibu VP. The role of cytokines in the pathogenesis and staging of Trypanosoma brucei rhodesiense sleeping sickness. Allergy, asthma, and clinical immunology: official journal of the Canadian Society of Allergy and Clinical Immunology. 2016; 12:4.PMID: 26807135
- 17. Kato CD, Alibu VP, Nanteza A, Mugasa CM, Matovu E. Population genetic structure and temporal stability among Trypanosoma brucei rhodesiense isolates in Uganda. Parasites & vectors. 2016; 9:259. PMID: 27142001
- 18. Clark EL, Macdonald SE, Thenmozhi V, Kundu K, Garg R, Kumar S, Ayoade S, Fornace KM, Jatau ID, Moftah A, Nolan MJ, Sudhakar NR, Adebambo AO, Lawal IA, Álvarez Zapata R, Awuni JA, Chapman HD, Karimuribo E, **Mugasa CM**, Namangala B, Rushton J, Suo X, Thangaraj K, Srinivasa Rao AS, Tewari AK, Banerjee PS, Dhinakar Raj G, Raman M, Tomley FM, Blake DP. **Cryptic Eimeria genotypes are common across the southern but not northern hemisphere**. International journal for parasitology. 2016; 46(9):537-44. PMID: 27368611
- 19. Mugasa CM, Villinger J, Gitau J, Ndungu N, Marc Ciosi, Masiga D. Morphological re-description and molecular identification of Tabanidae (Diptera) in East Africa. *Zookeys.* 2018;(769):117-144. Published 2018. doi:10.3897/zookeys.769.21144
- 20. Namayanja M, Xu ZS, **Mugasa CM** et al. Preliminary evaluation of a Trypanosoma brucei FG-GAP repeat containing protein of mitochondrial localization AAS Open Res 2019, 2:165 (https://doi.org/10.12688/aasopenres.12986.1)

- 21. Kinyatta N, Wambua L, Mutahi W, **Mugasa C**, Kamau L, Langat SK, Wachira D, Ichugu C, Waigi E, Githae R, Lusweti J. Kagai J Molecular Characterization and Phylogenetic analysis of Wuchereria bancrofti in human blood samples from Malindi and Tana River Delta, endemic regions in Kenya bioRxiv 648220; doi: https://doi.org/10.1101/648220
- 22. Matovu E, **Mugasa CM**, Waiswa P, Kitibwa A, Boobo A, Ndung'u JM. Haemoparasitic Infections in Cattle from a Trypanosoma brucei Rhodesiense Sleeping Sickness Endemic District of Eastern Uganda Trop. Med. Infect. Dis. 2020, 5(1), 24; https://doi.org/10.3390/tropicalmed5010024