Profile Template

Please write all text in the third person (i.e., Professor Bate is an expert in…" rather than "I am an expert in….")

	Add your information to this column. If you don't have research/teaching roles or publications, please add "n/a" in those fields.
Photograph	
Full name including title	**Pius Lutakome** Assistant Lecturer Pius.Lutakome@mak.ac.ug
Staff ORCID ID	https://orcid.org/0000-0002-0804-2649.
Staff ID Number	LP86213083
Unit under DAP	Animal Science
Contact Telephone number	+256 (0) 785 062997/+256 (0) 702 296 195

Email address	Pius.Lutakome@mak.ac.ug/plutakome@gmail.com.
Social media accounts	**Twitter**: https://twitter.com/PiusLutakome LinkedIn: https://.linkedin.com/LutakomePius
Address	College of Agricultural and Environmental Sciences| School of Agricultural Sciences| Department of Agricultural Production| Makerere University| https://www.mak.ac.ug/| 7062, University Rd, Kampala, Uganda
About/Introductory statement	Engaged in teaching, examining and supervising Undergraduates Students. Conducting and disseminating research on climate-smart livestock nutrition strategies and interventions based on the animal's metabolic status.
Qualifications	Grad. Cert. in Metabolomics data processing and analysis using R, University of Birmingham, UK, 2020 MSc in Animal Science, Makerere University, 2018. BSc (Hons) in Agriculture, Makerere University, 2011
Biography	Pius has 9 years of working experience in Animal nutrition-related research and dissemination. Currently, he is an assistant lecturer at the College of Agricultural and Environmental Sciences of Makerere University where he's engaged in teaching examining and supervising undergraduate students in animal science. Besides, he also a Doctoral Fellow at Ghent University in Belgium where he's working on a research topic **"Cross-breed dairy cows in grazing systems of Western Uganda: towards improved nutritional management based on monitoring the metabolic status**." His doctoral research is supported by a VLIR-IUC scholarship through the Mountains of the Moon University and the VLIROUS Joint Project. Pius is also the coordinator of the Joint Project entitled "Joint endeavour to enhance dairy and beef production in Vietnam, Uganda & Ethiopia through monitoring of Negative Energy Balance in early lactation" funded by VLIROUS in Belgium. In Uganda, the project aims at improving nutritional management of crossbred dairy cows in the grazing systems of Uganda

Unknown
Field Code Changed

	based on monitoring their metabolic status using novel biomarkers and tools. Details of the project can be found on this link https://www.vliruos.be/en/projects/project/22?pid=4098. Until June 2022, Pius coordinated the International Livestock Research Institute (ILRI)-Uganda team that worked on the Uganda Livestock CGIAR Research Program project entitled "Improving pig productivity and incomes through an environmentally sustainable and gender-inclusive integrated intervention package (MorePork II)". The team's country-level work aimed to influence investment and policy by both the private and public sector players. A detailed report of the project can be found at https://cgspace.cgiar.org/handle/10568/117347. Before coordinating the ILRI team, Pius worked with the World Agroforestry Centre (aka ICRAF) under the East African Dairy Development Project where he coordinated research and dissemination of a broad range of climate-smart interventions on dairy nutrition for increased on-farm milk production, food security, and economic development in Uganda.
Other Activities	Responsible for enhancing the Department's online presence and research project documentation
Teaching	❖ Introduction to Animal Agriculture ❖ Animal nutrition ❖ Animal feeds and feeding ❖ Pig and Rabbit production ❖ Fish farming

Research	Project 1: Joint endeavour to enhance dairy and beef production in Vietnam, Uganda & Ethiopia through monitoring of Negative Energy Balance in early lactation funded by VLIR-OUS. Specific objectives: *a)* To evaluate the relationship between plasma metabolites and hormones and dried blood spots (DBS) indices of energy and amino acid metabolism in transition dairy cows. *b)* To characterize and compare changes in metabolic and/or nutritional status of transition crossbreed dairy cows in a low-input tropical grazing system. Project 2: **Improving pig productivity and incomes through an environmentally sustainable and gender-inclusive integrated intervention package** (**MorePork II**)". Specific focus areas a. Improving pig genetics through collaboration with public sector and private sector partners to strengthen the artificial insemination (AI) system for distributing high-quality genetics. b. Improving pig Health by focusing on strengthening and disseminating advisory services in herd health and best practices in biosecurity. c. Improving pig feeds and forages with a focus on providing better feed to farmers through; i) piloting and evaluating a training and certification scheme of small-scale commercial feed producers, ii) enhancing uptake of well-selected and tested superior heat-tolerant food/feed crop cultivars for pig feeding, and iii) promoting the adoption, by farmers, of well-balanced and least-cost rations developed through the FeedCalculator App. d. Supporting environmental sustainability by; i) assessing the environmental impacts of different pigs and dairy production systems, and changes introduced by integrated technology packages, ii) estimating and mapping the potential future heat stress of pigs and cattle in Uganda, and iii) reducing the environmental footprint through improved waste (manure) management and adaptation to heat stress. e. Improving access to pig markets by working with pig aggregators to create market pull-through market arrangements that would provide reliable pig markets to men and women farmers and where possible also provide

	linkages to input suppliers as well as other necessary business development services. Project 2: The East Africa Dairy Development Project (Phase II) The phase II of the East Africa dairy development project was a five-year (2014-2018) dairy sector intervention designed to help 136,000 smallholder farm families to achieve improved livelihoods. It was implemented in Uganda, Kenya and Tanzania by four international non-profit organisations which include the world agroforestry Centre (ICRAF); International livestock research institute (ILRI), Heifer international, Technoserve (TNS), and African breeders' services (ABS). In Uganda EADD phase II primarily focused on achieving sustainability for phase I dairy hubs, while testing the approach in a few new areas. The project looked at replication of the hub model for scalability, ensure gender equity and farmer sustainability among other things. It targeted 43,000 families from 33 dairy producer organisations covering three milk sheds of southwestern, Central and Eastern Uganda.
Research groups and Centres	a. Rumen Group of the Laboratory of Animal Nutrition and Product quality at Ghent University. b. Livestock CRP group at the International Livestock Research Institute (ILRI). c. East Africa Dairy Development Project team with World Agroforestry Centre (ICRAF).
Community based work	❖ Training of farmers in dairy nutrition topics for improved milk production. ❖ Training of farmers in **Gender responsiveness and mainstreaming in the dairy value chain** ❖ Training farmers in **Livestock Feed Assessment using the FEAST Tool**
Awards or special recognitions received	Ph.D. Scholarship in Dairy Nutrition at Ghent University by VLIR-OUS Belgium.

Publications	Stijn, H., Dan, J., Jing, X.P., Stefańska, B., **Lutakome, P**., Vandaele, L., Fievez, V. 2022. Various reticuloruminal pH metrics of high-yielding dairy cattle during the transition period in relation to metabolic health, activity and feed intake. J. Dairy Sci. 105:6880–6894 https://doi.org/10.3168/jds.2021-21751. Hammond, J., Siegal, K., Milner, D., Elimu, E., Vail, T., Cathala, P., Gatera, A., Karim, A., Lee, J., Douxchamps, S., Tu, M. T., Ouma, E., Lukuyu, B., **Lutakome**, **P.**, Leitne, S., Wanyama, I., Thi, T. P., Phuc, P. T. H., M. Herrero, van Wijk, M. 2022. The impacts of COVID-19 restrictions on smallholder farmers: evidence from seven lower- and middle-income countries. Agricultural Systems; 198: 103367. Lukuyu, B., Namazzi, S., **Lutakome, P**. and Ouma, E. 2021. Assessing knowledge, attitude, and practices and small-scale commercial feed producers in Uganda. Presented at Tropentag 2021 - Towards shifting paradigms in agriculture for a healthy and sustainable future, 15-17 September 2021. Nairobi, Kenya: ILRI. https://hdl.handle.net/10568/115079 **Lutakome P**, Kabi F, Tibayungwa F, Laswai GH, Kimambo A, Ebong C. (2017). Rumen liquor from slaughtered cattle as inoculum for feed evaluation, Livest. S; 3(1):300-309. https://doi.org/10.1016/j.aninu.2017.06.010. Kabi F., **Lutakome P.** (2013). Effect of harvesting *Gliricidia sepium* at different cutting frequencies on quantity and quality of herbage biomass for dairy cattle nutrition. J. Anim. Sci. Adv. 2013, 3(6): 320-333. DOI: 10.5455/jasa.20130703021048. Kugonza J., Wabwire R., **Lutakome P**., Lukuyu B., and Kirui J. (2012). Characterization of the livestock production system and potential for enhancing productivity through improved feeding in Kasawo Dairy Farmers Association in Mukono district of Uganda. East African Dairy Development Project (EADD). https://cgspace.cgiar.org/bitstream/handle/.../feast_uganda. Dione, M., Magnusson, U., Jacobson, M., and **Lutakome, P**. 2020. Strengthening capacity of Ugandan veterinarians: Report from a training for “Pig Herd Health Champions” at Swedish University of Agricultural Sciences, 2-13 March 2020. Nairobi, Kenya: ILRI. https://hdl.handle.net/10568/108435 Ouma, E.A., Lukuyu, B.A., Dione, M.M., Sebatta, C., Namazzi, S. and Lutakome, P., 2021. Pork value chain businesses: A

	scoping study of pig aggregators, veterinary drug stockists and feed processors in central region, Uganda. **III Journal Articles and Peer-reviewed reports (in pipeline)** Stijn, H., Jing, X.P., Stefańska, B., Oszmałek, E., Buysse, L., **Lutakome, P**., Zhang, M., Thys, M., Vandaele, L., Fievez, V. 2022. Diagnostic milk biomarkers for predicting the metabolic health status of high yielding dairy cattle during early lactation. Manuscript resubmitted to the Journal of Dairy Science with responses to reviewers' comments.
Podcasts	
Videos	
Keywords	Metabolic status, Transition Dairy Cows, Animal Nutrition, Nutrition Physiology, MorePork II, ILRI, ICRAF.