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Charles Masembe is a veterinarian, molecular geneticist and Associate Professor, with teaching and research experience in molecular genetics, diagnostics, evolution and epidemiology of important diseases of domestic animals, mainly Foot-and-Mouth Disease, African swine fever, and pathogen discovery. He has an MSc in Environment and Natural Resources Management (Makerere University), a PhD in Molecular Population Genetics (Makerere and Copenhagen University), and Post-Doctoral training (Makerere, Copenhagen University, and the Technical University of Denmark). I have been a visiting scientist under the Africa Biosciences Challenge Fund at the Biosciences eastern and central Africa (BecA-ILRI) with a main emphasis on Metagenomics, and a Visiting Research Scientist at Yale School of Public Health and the Swedish University of Agricultural Sciences.

Through the opportunities and platform provided by RUFORUM and other collaboration partners he has excelled in capacity and research-network building. Charles is now a Wellcome Trust fellow under the Intermediate Fellowship in Public Health and Tropical Medicine program; with a major focus on "Transmission dynamics of African swine fever in an endemic setting at the livestock-wildlife interface" (<http://asf.mak.ac.ug>).

Charles is experienced in the molecular biology and serological techniques needed for sampling and genetics/disease investigations in a variety of species. Research in his team has generated and published scientific information for conservation of Africa's wildlife resources and patterns of disease transmission at the wildlife-domestic interface. This expertise has grown to a level that has genetically characterised animal epidemics with particular emphasis on foot-and-mouth disease in the African Great Lakes region, and is aimed at unraveling livestock-wildlife disease interactions to design efficient disease control strategies for FMD. Charles' team has a vibrant research facility, which has in the recent past had active research on a diversity of projects (e.g. EU-FP7-NEXTGEN; Livestock-Wildlife Diseases in East Africa-DANIDA; Molecular tools for schistosome biology EU-CONTRAST; Conserving biodiversity in Uganda DARWIN INITIATIVE; Smallholder pig value chain development in Uganda; ASF in Uganda-FORMAS).

#### Some peer reviewed publications

Ståhl, K., Ogweng, P., Okoth, E., T Aliro, D Muhangi, LeBlanc, N., Atimnedi, P., Berg, M., Bishop, R.P., Rasmussen, H.B. and Masembe, C. (2014). Understanding the dynamics and spread of African swine fever virus at the wildlife-livestock interface: insights into the potential role of the bushpig, *Potamochoerus larvatus*. *Suiform Soundings* 13 (1), 24-28.

Chenais E, Boqvist S, Sternberg-Lewerin S, Emanuelson U, Ouma E, Dione M, Aliro T, Crafoord F, Masembe C, Ståhl K. (2015). Knowledge, Attitudes and Practices Related to African Swine Fever Within Smallholder Pig Production in Northern Uganda.

Muhangi, D, Masembe, C, Berg, M, Ståhl, K, Ocaido, M (2014) Practices in the pig value chain in Uganda; implications to African swine fever transmission - *Livestock Research for Rural Development* 26 (5) 2014

Kerfua, D.S., Isubikalu, P., Ademun, R.O., Muwanika, V.B., and Masembe, C. (2013). Molecular characterisation of serotype O foot-and-mouth disease virus from pigs: Implications for multi-species approach to disease control in Uganda. *African Journal of Biotechnology* Vol. 12(19), pp. 2547-2552.