

# **MAKERERE UNIVERSITY**

## **SHORT TRAINING: NEXTGEN LANDSCAPE GENOMICS FOR FARM ANIMAL CONSERVATION**

**THEME:** Next generation methods to preserve farm animal biodiversity

### **Background**

The NEXTGEN consortium is an EU-funded collaborative research initiative in the area of landscape genomics in cattle, sheep and goats using whole genome data. NEXTGEN aims to provide the necessary tools for the exploitation of new generation genomic and reproductive technologies for farm animal genetic resource characterization and conservation.

### **Details of the short training**

As part of NEXTGEN's capacity building, the consortium is inviting applications for a 3 days training workshop (**24<sup>th</sup> -26<sup>th</sup> January 2011**). The topics that will be taught include Livestock diversity and husbandry practices, population structure and evolution of Africa's large mammals, diagnostics of genetic defects in livestock, basic concepts in conservation genetics Mitochondrial DNA and methods of analysis, Nuclear markers and methods of analysis, Modern and upcoming technologies for genome analysis, Basic concepts in bioinformatics, Selection signatures, the domestication process, ethics/biorepository strategies, Geographic Information systems and landscape genomics

### **Qualities of applicants required**

The candidates must have an interest in animal genetic resources. This is a basic course and therefore there are NO strict rules on background training.

### **How to register**

Please send an email indicating your interest to participate in the training by **6<sup>th</sup> January 2011** to [cmasembe@muienr.mak.ac.ug](mailto:cmasembe@muienr.mak.ac.ug) and [vmuwanika@muienr.mak.ac.ug](mailto:vmuwanika@muienr.mak.ac.ug)