

# A Joint Degree in “International Infectious Disease Management & Biosecurity”, The first in North America.

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College of Agriculture, Food Systems, and Natural Resources

North Dakota State University



Higher Education Challenge Grant

# A Joint Degree in International Infectious Disease Management & Biosecurity

Dept. Veterinary & Microbiological Sciences  
College of Agriculture, Food Systems, and Natural Resources  
North Dakota State University (NDSU)



&

College of Veterinary Medicine, Animal Resources & Biosecurity  
Makerere University, KAMPALA-UGANDA (Mak)





# Global perspectives in agriculture

- are critical to the safety of our agricultural resources and require an international solution, yet very few opportunities exist for their study in the US.
- Graduates of this program will have a better understanding of international agricultural issues, making them much more viable in today's competitive job market.
- This is a unique program within the NDUS & the US, and the first joint degree in North America.

# Study abroad – summer course 2007, one month, 3 credits

## International Animal Production, Disease Surveillance & Public Health

- Undergraduate students
- Graduate students
- Professional students/ internship
- 3 credits, in state tuition for all students
- Distance & Continuing Education (DCE)
- Non credit option/ internship

# Course Objectives

- To expose course participants to **tropical animal resources management & production systems** (livestock & wild life) & **food safety**
- To acquire relevant skills in **public health & Disease Surveillance** especially in relation to international health (transboundary diseases) and zoonoses
- To **foster interaction between university students from developed and developing nations - cultural exposure**

# Course Participants-2007 (4NDSU +5 MAK)



# 2008 summer class 13 US & 6 MAK students





# 2008 summer class- 6 NDSU students with NDSU President then (J. Chapman)



# NDSU President then & Delegation Administrative support was high



# A Joint Degree in International Infectious Disease Management & Biosecurity

## Objectives

- Develop a joint Master of Science (MS) degree, Graduate Certificate (GC) & Undergraduate Certificate in *International Infectious Disease Management & Biosecurity (IDM)*.

## Program Approval

- Approved 2011 at NDSU & Mak (MS & GC)
- 1<sup>st</sup> Cohort of 8 MS students (enrolled summer 2011-12)

# The 1<sup>st</sup> cohort of MS-IDM students



# Program Requirements

- The program requires completion of **30 credits** with **13 credits of core courses** offered jointly by both institutions.
- Students can enroll through NDSU or Mak; however, they have to spend at least one semester at the other institution and complete two practicum projects of 2 credits each, one at each institution.
- **Experiential learning** with cross pollination of teaching methods from both institutions; it is problem-based learning with a **service-learning component**.

# Core courses – Taught jointly

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Course	Credits	Institution	Instructor
MICR 674:* Epidemiology	3	NDSU	M. Khaita
MICR 721: Prevention and Control of Zoonoses & Transboundary Infectious Diseases (ZTID)	3	MAK	F. Ejobi
MICR 722: International Health Systems, Policy and Biosecurity	2	NDSU	M. Khaita
MICR 723: International Animal Production, Disease Surveillance & Public Health (Cornerstone course)	3	NDSU & MAK	M. Khaita & F. Ejobi
MPH 7204:* Social & Behavioral Determinants of Health	2	MAK	J. Kiguli

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# Service Learning Example -1<sup>st</sup> cohort

- June 3-29, 2012, 5 of 8 students participated in a community service project in Arizona to control Rocky Mountain spotted fever.
  - **US Centers for Disease Control & Prevention (CDC)**
  - **CDC Foundation**
  - **San Carlos Department of Health**
  - **Virginia Tech Regional Vet College**
  - **NDSU**



Life After High School -  
WHAT'S MY NEXT STEP?

WHAT'S MY NEXT STEP?  
CLASS OF 2016  
CLASS OF 2014

RMSF  
RODEO

RMSF  
RODEO

RMSF  
RODEO

RMSF  
RODEO

RMSF  
RODEO

RMSF  
RODEO

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RODEO

RMSF  
RODEO





# CDC - Environmental Health



- Spraying lawn
- Tick collar – 8 months
- Education of dog owners





**USAID**  
FROM THE AMERICAN PEOPLE

# USAID –HED Grant



- Africa-US Higher Education Initiative for development (11 partnerships)
- Capacity building (*institutional & Human*) in Integrated Management of Transboundary Animal Diseases and Zoonoses
- To fund 10 MS – IDM students from Uganda (**1<sup>st</sup> cohort-4; 2<sup>nd</sup> cohort-6**)

# Challenges

- Joint admission
- Tuition
- Transfer of credits between institutions
- Registration & Records keeping
- Internships

# Acknowledgements

