Shange R.<sup>3</sup>0LFURELDO (FRORJ\ 860/micQtola%/setshtheetcology/Roof Infordoboal FRPPXQLWLHV ´,1@Ambual/24165Tu/skkgeet/Stanbuhetr School: Water, Energy, Environment and Food Security in a Changing Clim@teagadougou, Burkina Faso. June 2012.

ShangeR. and R.O. Ankumah. 2012. Assessing the structure and membership of soil microbial communities cultivated und**an** industrial poultry production syste**in**: ASA Southern Regional Branch Meeting 2012. Birmingham, AL.

Jones S.Şhange R, and R.O. Ankumah. 2012 Assessing soil functional status across an agroecosystem using soil phosphatase enzylmes SA Southerr Regional Branch Meeting 2012. Birmingham, AL.

Keith J., Odom L.J., Ankumah R.O., aRd Shange 2012. Influence of TransgenicD(4E1) and Non-Transgenic Cotton on Soil Phosphodiesterase Activity Over a Growing PeriodSA Southern Regional Branch Matering 2012. Birmingham, AL(Award-winning presentation:

Shange R.(2011)Assessing the impacts of agricultural land use on the structure and composition of soil microbial ecosystems: a multiple case study in coupled homatamal systems Tuskegee University, Tuskegee, A

Shange (Shirk)R. (2006). The Political Reality of Modern Biology Howard University Washington, DC(Unpublished Manuscrip):

### **GRANTS & FUNDED PROJECTS**

Co-PI (10%). Tuskegee UniversitBlack Belt Photoirrigation Project (T-2/BP). Natural ResourceConservationServiceUSDA Conservation Innovation Grant program. Total Direct Costs: \$1,868,523PI: Walter Hill, Ph.D

Participating Faculty (5%). Decesion pendingTuskegee University Jobs Accelerator Project. Rural DevelopmenUSDA Rural Jobs Accelerat@hallengePI: Walter Hill, Ph.D.

#### COURSESTAUGHT

#### Genetics

Cell and Genetic Biology Math, Computers, an Bioscience Introduction to Soil Sciendeab Molecular Cell and Genetic Biology Lab Environmental Biology Lab (Team Taugh)t Introduction to Human Biology (for non-majors) General, Organic, and Biochemistry (for nonajors)

# PROFESSIONAL ASSOCIATION MEMBERSHIPS

xEcological Society of America xSoil Science Society of America xAmerican Society for Microbiology xAlabama Academy of Science

# AWARDS/ACHIEVMENTS

 xU.S. Fish and Wildlife/Wildlife Society Faculty Fellow@(mmer2012)
xTuskegee University/University of California at Davis CREAIGERT Trainee in biotechnology/environmental sustainabili@ctober 2008
x66<sup>th</sup> Profession Agriculture Workers Conference Grael@tudent Oral PresentationCompetition: Third PlaceDecember 2008
xRonald E. McNair Graduate Fellow (2004)

### SOFTWARE/COMPUTING COMPENTENCIES

Bioinformatic software packages/algorithms:

xRelated to microbial ecology:

- o MOTHUR, Ribosomal Database Project Psequencing Pipeline, QIIME, FastUnifrac
- xMore generalized tools that can be used with many biological systems:
  - o Geneious, JBrowse, Velvet Assembly, NCDBatabasesUCSC Genome Browser, and other oline applications.

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