

1106-VG-782      **Jean-Jacques Kengwoung-Keumo\*** (jkengwou@cameron.edu), 2800 West Gore Boulevard,  
Lawton, OK 73505. *Disparities analysis in cervical cancer between White and African  
American/Black women using a longitudinal hyperbolastic mixed-effects model.*

With proper screening and early intervention, cervical cancer, caused by infection with particular types of human papillomavirus (HPV), is a highly treatable disease. Because of the screening process and the long period for cancer development, it is also generally preventable. Mortality rates, which have been steadily decreasing with the advent of improved treatment/screening methods, provide a measure of the success in the treatment and/or screening modalities of cervical cancer. In this talk, we model and analyze the disparity in cervical cancer between White and African American/Black women residing in 13 states located in the eastern half of the United States of America from 1975 through 2010. A longitudinal hyperbolastic mixed-effects type II model was used to study the cervical cancer mortality data, and SAS PROC NLMIXED and Mathematica were utilized to perform the computations. In all 13 states, cervical cancer mortality rates for both racial groups have fallen. Disparities in the pace of decline in mortality rates in these states may be due to differences in the rates of screening for cervical cancers. Of note, the gap in cervical cancer mortality rates between African American/Black women and White women is narrowing. (Received September 14, 2014)