Poster Topic E – Microbiological spotlights

P5.1

Virulence potential and antibiotic resistance of shiga toxigenic Escherichia coli (STEC) isolates from raw cow milk in Ghana

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Dr. Fortune Akabanda will present her work on virulence potential and antibiotic resistance of shiga toxigenic Escherichia coli (STEC) isolated from raw cow milk at dairy farms in Ghana. STEC is an important food-borne pathogen of public health concern in both developed and developing countries. In her work, Dr. Akabanda demonstrates that about 58% of raw milk collected from dairy farms in northern Ghana are contaminated with E. coli, and further uses PCR based techniques to determine virulence associated genes in the STEC isolates. Finally, the work demonstrates that all the isolated STEC isolates shows phenotypic resistance to at least two different antibiotics. Dr. Akabanda’s work is very significant as she demonstrates the potential risk associated with the consumption of raw milk, and thus provide useful information for proper management of dairy farms to reduce raw milk contamination and the health risks to the Ghanaian population.

Keywords: STEC, Virulence, Raw milk, Antibiotic resistance, Serogroups