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University Of Dar es Salaam, Tanzania



Research field Pediatric Nutrition and Microbiome Research

## PhD title

Investigation of an enteric bacteriome profile as a possible biomarker for growth in children below two years of age in Iringa region of Tanzania





## **Keywords**

- Enteric Bacteriome
- Biomarkers
- Child Growth and Iringa
- Tanzania

## Summary

It is evident that human-microbiome interaction has effect on host's gut physiology especially on the gut mucosa. Since many studies have shown that the gut microbiome is dominated by bacteria; this study thus will use genomic approach to investigate the enteric bacteriome in children in the Iringa region of Tanzania: with the highest record of stunted growth; 46.2%. This will be a community-based cross-sectional study. Oral interviews will be conducted at a scheduled time at the household and fecal samples will be randomly collected two times with an interval of six months from recruitment. Total genomic DNA will be isolated from the samples. Primer set targeting the V3–V4 region of the 16S rRNA gene will be used for amplification using Real time PCR then amplicons will be sequenced in the Illumina MiSeq platform. Statistical and bioinformatics analysis will be carried out in Rstudio software and QIIME2.



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