**ABSTRACT**

**LUMINEX USER MEETING 8th NOVEMBER 2017**

**SPEAKER: FINN TERJE HEGGE**

**TITLE:**

**GA-map™ Dysbiosis Test; A 50-PLEX MOLECULAR ASSAY FOR GUT MICROBIOTA PROFILING**

**Background and Aim**

Genetic Analysis AS (GA) has developed and commercialized a high-plex IVD DNA probe based molecular assay for identifying and characterizing dysbiosis. The test has been CE-marked and documented in accordance with IVD directive 98/79/EC.

In order to expand the market potential of the test, GA is currently developing the method for use with the xMAP® technology.

**Methods**

The GA-map™ assay consists of a series of molecular biology operations in 96-well format utilizing commercially available reagents, instrumentation and methods. At the core of the technology is the proprietary Single Nucleotide Probe Extension (SNuPE) based probe labelling. The assay results in a multi-plex dataset that is converted into a user-friendly score sheet presented as a report form.

The 16S rRNA gene is amplified and used as template for the SNuPE reaction. The probes are labelled in a 50-plex reactions and finally sorted and detected on a solid surface. The xMAP® technology in combination with the MagPlex® Microspheres is well suited for the final steps of sorting and detection.

**Results**

Preliminary results will be presented on reagent kit development and assay performance. Emphasis will be made on the importance of a standardized and robust method across laboratories.

**Conclusions**

The xMAP® technology in combination with the MagPlex® Microspheres is well suited as a platform for a high-plex molecular diagnostic assay such as the GA-map™ Dysbiosis Test.