Microbiome Data Analytics for Biomarker Discovery

Specialising in microbiome data analytics for biomarker discovery focused on chronic inflammatory diseases of the digestive tract, and gastrointestinal cancers in particular.

Competitive advantage

- Expertise in deep profiling of the human microbiome documented in high impact outputs
- Documented capacity to perform multi-omics strategies
- Long-term experience with the handling and extraction of a range of clinical samples

Impact

- Profiling the human microbiome – now causally linked to a range of diseases that fall within the broad themes of cancer, infectious disease, non-communicable diseases and mental health – using next generation sequencing and big data analytics.

Successful outcomes

- Identified microbial signatures associated with therapeutic efficacy of faecal microbiota transplantation in ulcerative colitis
- Identified novel associations between the oesophageal microbiome and the progression of the oesophageal adenocarcinoma cascade

Capabilities and facilities

- Experience in study design, patient recruitment and sample collection for optimal downstream analysis
- Handling and extraction of clinical samples of diverse origins
- Access to next-generation sequencing facilities and computing infrastructure to handle big data
- Established data analysis pipelines for signature discovery

Our partners

- Extensive list of clinical

More Information

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