



UNSW
SYDNEY



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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