APC Microbiome Institute

APC is a gastrointestinal health research institute exploring the role microbes (microbiome) play in health and disease. The microbiome is a target for treatment and prevention of disease, and a source of functional food ingredients, new drugs and disease biomarkers.

One of the world’s leading institutes in gut microbiome research, APC is receiving €70 million in SFI and industry funding across 2013-2019. It hosts a diverse group of clinicians and scientists working in teams and sharing ideas and resources.

Research Areas
- Discovery of molecules for therapeutics and functional foods
- Designing functional ingredients/foods across the lifespan
- Links between diet, microbes and mental health
- Signalling, host immune-inflammatory responses
- Phage as regulators of the microbiome in health and disease

Research programmes
APC’s 300+ researchers include global research leaders in food/pharma areas, such as gastroenterology, microbiology, immunology, neuroscience, nutrition, neonatology, gerontology, cardiovascular and metabolic health.

Technology Platforms
- Culture collection
- Next generation sequencing
- BioIT
- Pre-clinical and germ-free
- Human studies
- Flow cytometry
- Bio-processing

Industry and commercialisation
The APC team has extensive experience collaborating with the food, agriculture, pharmaceutical, biotechnology and diagnostic sectors and welcomes new industry partnerships.

APC’s industry partners can access technology platforms, extensive databases and biobanks, and the expertise of its investigators.

Now in its second decade, APC has developed several technology platforms that can be of significant benefit to industry clients in furthering their own R&D agendas.

Mining the Microbiome for different life stages
Current industry partners include:

- AbbVie
- Adare Pharma
- Alimentary Health
- Cremo SA
- Danone
- Friesland Campina
- GE Healthcare
- General Mills
- Janssen Pharmaceuticals
- Kerry Foods
- Mead Johnson Nutrition
- Nutricia Advanced Medical Nutrition
- Second Genome
- Sigmoid Pharma
- Suntory Wellness
- Trino Therapeutics
- 4D Pharma

Education and Public Engagement:

APC’s main ambition is to create economic and societal impact, and collaborations with innovative industry partners are key to this success. They design industry workshops to cater for the ongoing research and training requirements of the food, pharma and diagnostic sectors with a view to attracting new industry partners. APC in collaboration with Science Foundation Ireland, is involved in many local and national events, including Science Week, Smart Futures and the following unique programmes:

- The Microbe Magic @ School programme for primary schools
- Budding Biologists Programme for secondary schools
- Science for All in which postgraduates present their research to the general public
- Bringing Science to Society, a programme to engage the wider scientific community and stimulate public engagement

Key Contacts

Prof Fergus Shanahan
APC Microbiome Institute Director
f.shanahan@ucc.ie

Fergus Shanahan is Professor and Chair of the Department of Medicine at University College Cork (UCC). He was previously Associate Professor of Medicine with tenure at University of California, Los Angeles (UCLA). He has published more than 500 peer-reviewed scientific articles and several books. He has particular research interests in mucosal immunology, inflammatory bowel disease and most things that influence the human experience. Science Foundation Ireland named him as ‘SFI Researcher of the Year’ in 2013.

Prof Paul Ross
Deputy Director
p.ross@ucc.ie

Dr Sally Cudmore
General Manager
s.cudmore@ucc.ie

Dr Brendan Curran
IP and Commercialisation Manager
bcurran@ucc.ie

Dr Catherine Buckley
Communications and Outreach Manager
c.buckley@ucc.ie