



# BiOrbic, Bioeconomy SFI Research Centre

BiOrbic, Bioeconomy SFI Research Centre harnesses the wealth of Ireland’s natural resources on land and in the sea for the development of a sustainable circular Irish bioeconomy, enabling vibrant sustainable communities.



BiOrbic, Bioeconomy SFI Research Centre develops sustainable novel processes and products using biobased resources, creating clusters for new industry partnerships and delivering the expertise and trained workforce to translate new technologies into new sustainable products, processes, markets and industries.

## Research Areas

- > Bioeconomy
- > Agri-Food
- > Marine
- > Advanced Materials
- > Renewable biological resources
- > Biotechnology/Biologics
- > Resilient and Resource-Efficient Value Chains
- > Rural Renaissance

HOST INSTITUTION



University College Dublin  
An Coláiste Ollscoile, Baile Átha Cliath

PARTNER INSTITUTIONS



Trinity College Dublin  
Coláiste na Tríonóide, Baile Átha Cliath  
The University of Dublin



A World  
Leading SFI  
Research  
Centre



## Research Programmes

BiOrbic, Bioeconomy SFI Research Centre will address 3 key interrelated research questions

1. Selective Separation
2. Conversion
3. Sustainability

## Facilities

- > HPLC coupled to size exclusion chromatography with refractive index detector
- > Q Exactive
- > Varian Saturn 2000 GC-MS (ion trap) with GC olfactometry
- > NMR Spectroscopy
- > Mass Spectroscopy
- > Electron Microscopy

## Industry and Commercialisation

BiOrbic, Bioeconomy SFI Research Centre collaborates closely with industry across the Agri-food and Marine sectors to convert residues and waste streams created during primary production processes to higher value products (including food/feed ingredients), creating new business opportunities and new value chains, enabling our partners to diversify and increase resource efficiency.

Through our partnerships we are stimulating rural regeneration, curtailing environmental damage, extracting healthy nutritional supplements, reducing import dependency, and developing human capital.

## Industry partners include:

- > BHSL
- > Commercial Mushrooms Producers
- > Glanbia
- > Nutramara
- > Monaghan Mushrooms
- > NVP Energy
- > Nuritas
- > Carbery

## Education and Public Engagement:

BiOrbic, Bioeconomy SFI Research Centre's public engagement programme focuses on enhancing the public understanding of bioeconomy and its impact on Irish society.

Research outputs from BiOrbic, Bioeconomy SFI Research Centre's Sustainability Platform informs and supports dissemination activities, including the development of the knowledge hub which integrates emerging knowledge from the centre for engagement with consumers, society, industry, investors, researchers, regulators and policy makers.



## Key Contacts

### Prof Kevin O'Connor

Director

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*Prof Kevin O'Connor, SFI Researcher of the Year 2019, is shaping the European Bioeconomy Strategy through his chairmanship of the Scientific Committee for the €3.7 billion PPP (Bio Based Industries). He has been at the forefront of national developments and was instrumental in securing EU Model Demonstrator Region (MDR) status for the Southeast, drawing together stakeholders from industry, academia and policy-makers from Tipperary County Council. He is a champion for the step-change a bioeconomy can deliver to the Irish economy and society. He is a PI on EU projects researching synthetic biology (P4SB) and biobased products (SYNPOL). Consequently, he is very strongly networked with leading industries, academic institutions and policy makers in the bioeconomy. He is the recipient of Nova UCD Innovation award 2016.*

### Prof Nicholas Holden

Deputy Director

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### Derek O'Brien


Executive Director

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