National Biofilms Innovation Centre

sfam society for applied microbiology

Microbes and Biofilms in the Food Industry

4 February 2021

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@CIELivestock1

Centre for Innovation Excellence in Livestock

www.CIELivestock.co.uk

UK Agri-Tech Centres

CHAP
CROP HEALTH & PROTECTION

AGRIEPICENTRE
Engineering • Precision • Innovation

CIEL
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Agrimetrics
THE CATALYST FOR CHANGE

National Biofilms Innovation Centre

AGRI-TECH CENTRES

UKRI Innovate UK

World-leading livestock research alliance bringing new technologies and processes to livestock food production

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12 Academic Partners

≈ 800 Researchers

≈ 60 Industry Members

Multi-departmental
Government Partners

Investment
£70M

Facilities
26

>30,000
Livestock

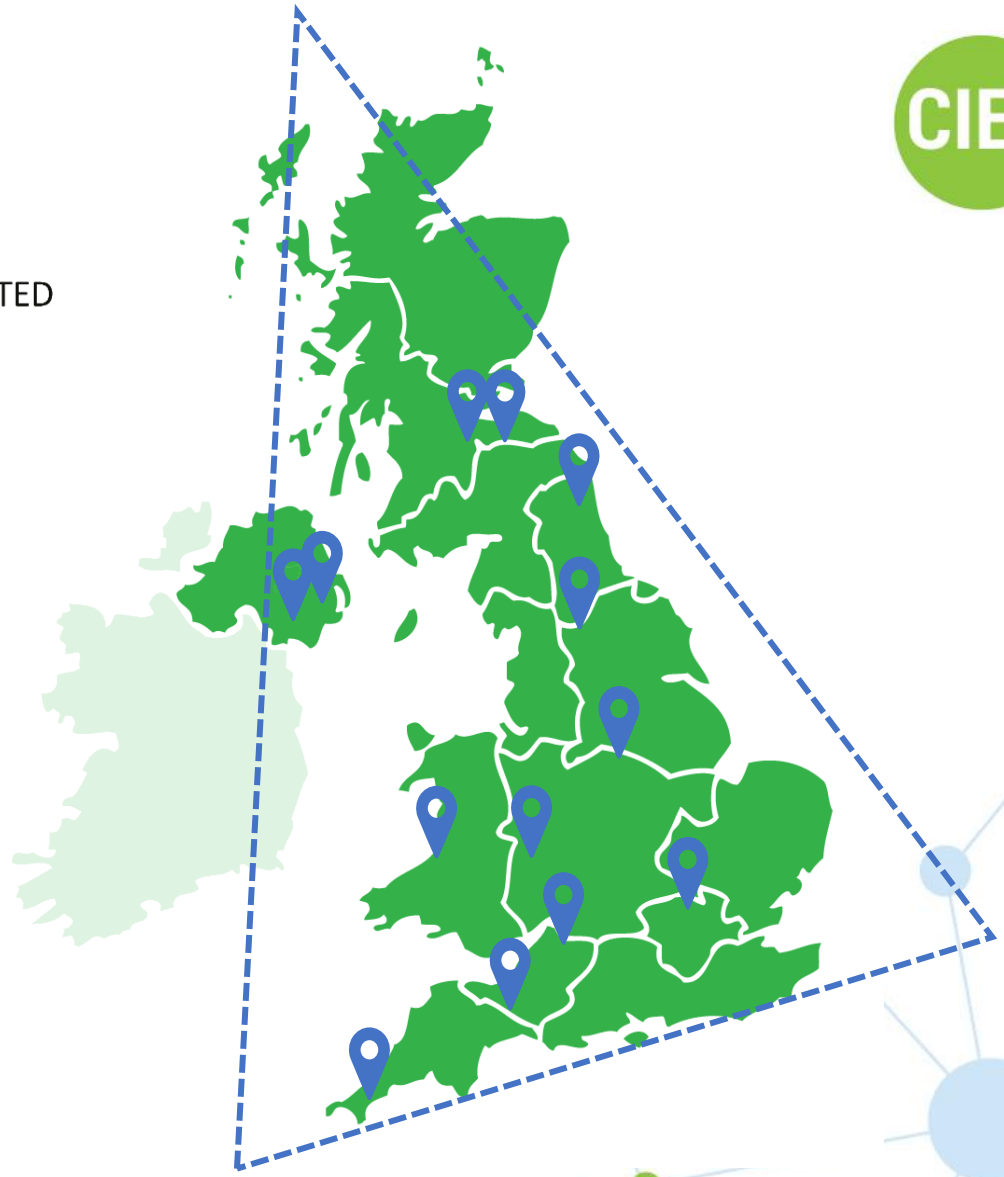
£££Ms
Projects managed and in pipeline

- **The front door** for research & innovation in livestock
- **Providing leadership** by joining up distinct pockets of excellence to form a world-class hub of expertise
- **Creating valuable collaborations** between industry and academia
- **Facilitating access** to major capital investment in commercially relevant livestock research capability
- **Areas of focus**
  - Gene Technologies
  - Nutrition & Productivity
  - Health, Welfare & Behaviour
  - AMR
  - Resource Efficiency
  - Environmental Impact
  - Food Production pre/post-farmgate
  - Food Safety, Quality & Integrity

CIEL Industry Members

CIEL

Research Partners across UK



Joint investments Collaborative working Open access New research partnerships welcome

Tackling Grand Challenges for Livestock Production

- Climate Smart Food Systems
- Resource Efficiency & Precision Nutrition
- Endemic Disease Reduction
- Anti-Microbial Resistance
- Health & Welfare Management
- Food Safety, Quality & Integrity

Example:

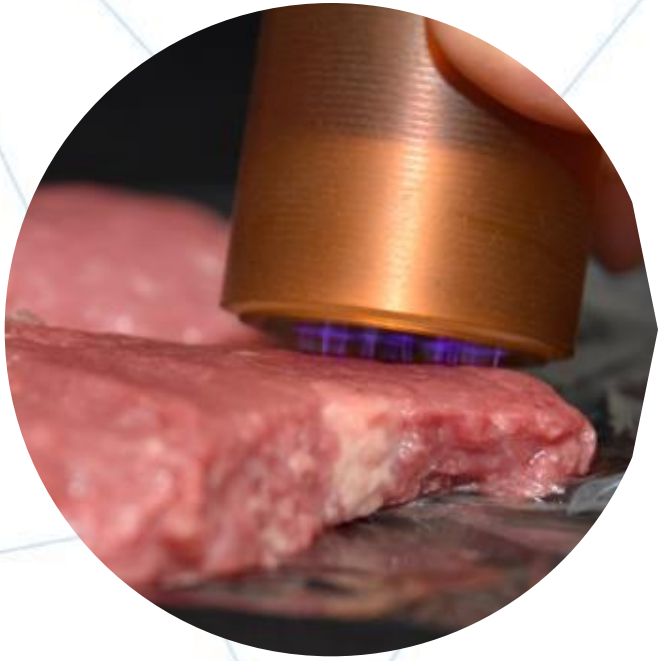
Centre for Plasma in Agrifood (AgriPlas)

In partnership with

QUEEN'S UNIVERSITY BELFAST

- Dedicated agrifood research facility within IGFS at QUB
- Enabling cutting edge research & industry evaluation of cold plasma for agrifood
- Exploring potential uses of the antimicrobial properties of cold plasma for livestock healthcare & biosecurity, food hygiene & shelf-life extension
- Technology could:
  - Treat chronic bacterial infections in livestock
  - Lessen need for antibiotic use in animal husbandry & welfare
  - Offer an alternative to disinfectants & for decontaminating air in livestock sheds
  - Reduce microbial & chemical contamination of animal feed
  - Destroy harmful bacteria & pathogens in food during processing, increasing shelf life
- Leaves no chemical residues making it a safer treatment in food production.

https://youtu.be/V2CFOAjroYY



The front door for research & innovation in livestock food chains

Please get in touch

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