

Supporting Applied AgriFood Research

AgriFood Charities Partnership

Hatfield

22nd November '17

Innovate UK

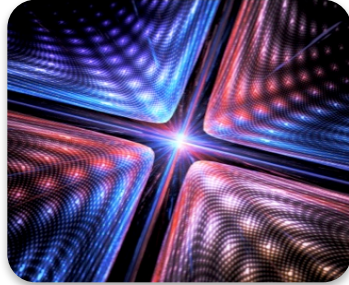
Andrew McLay
Innovation Lead - Agriculture
Nov 2017

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Innovate UK

Sectors approach to supporting businesses



**Emerging
and
Enabling**

**Health
and Life
Sciences**

**Infrastructure
Systems**

**Manufacturing
and
Materials**

**Open
Programme**

AgriFood Team

- Innovate transitioning to UK R&I



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Vacant
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Graduate Analyst

Innovate UK

Health & Life Sciences (H&LS) – Priority Themes

- improving agriculture productivity
 - enhanced food quality
 - biosciences
 - precision medicine
 - advanced therapies - cell, gene and others
 - preclinical technologies
- 

Agri-Food International Approach

AGRI PRODUCTIVITY

Novel genetics / breeding

Combating agro-chemical and anti-microbial resistance

Enhanced resilience to biotic and abiotic stress

Individualised livestock/aquaculture nutrition & healthcare

Advanced & Precision Engineering



FOOD QUALITY

Reducing Sugar, Salt & Fat

Enhanced nutritional value

New/smarter ingredients

Protein development

Authenticity & Traceability

Food Safety

Smarter Packaging

Modern food manufacturing technologies



Joining up value chains across borders & boundaries. Building on UK strengths & cross sector working. Nurturing disruptive technologies

Industrial Strategy Challenge Fund II

Facts / status

Timeline

- 15 August ISCF stakeholder workshop
- 8 Sept High level stakeholder meeting
- 30 October Bids submitted
- Early Nov HMT review of bids 
- Late Nov Budget announcements from Government
- Early 2018? HMT agree budget / business case 
- spring 2018? Competitions early?

More to say “as soon as as we know...”

41 Bids

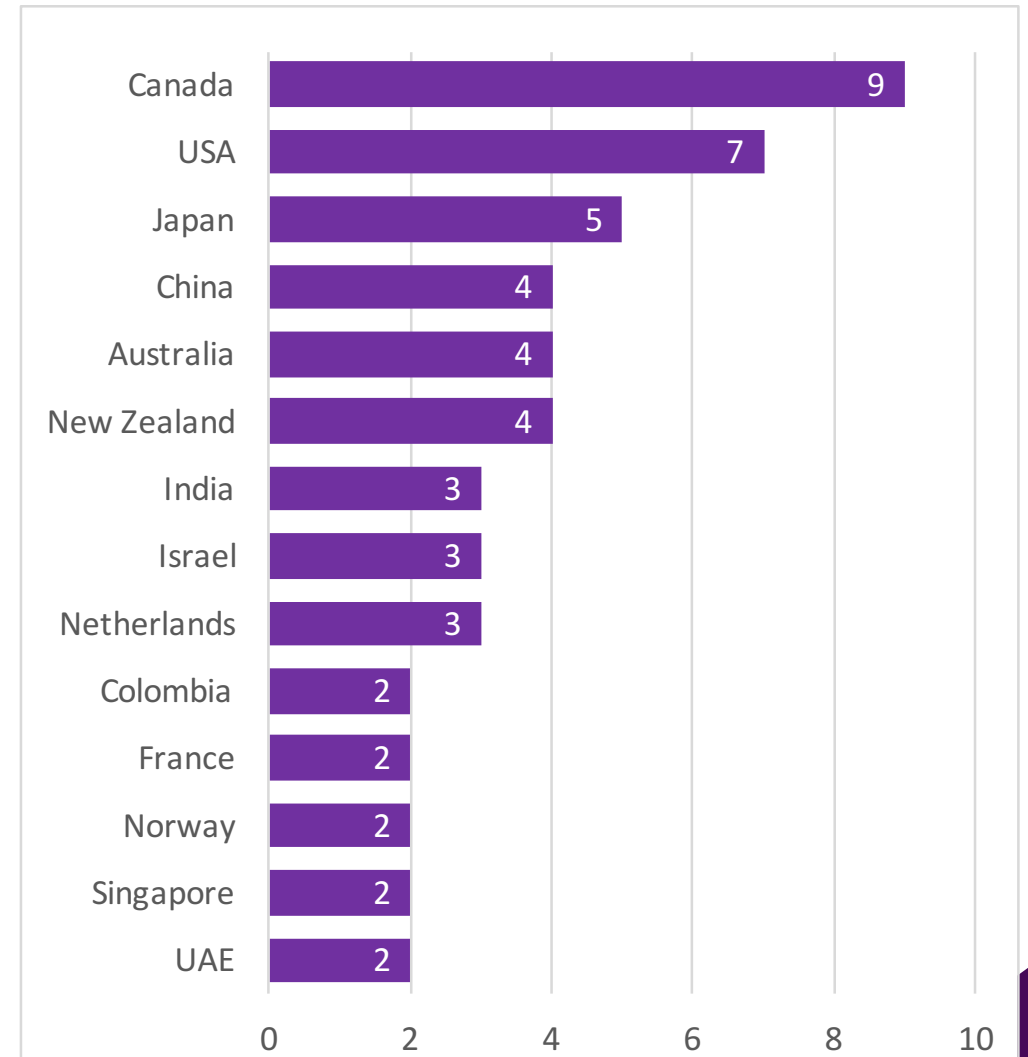
11 Short Listed

? Successful?

Agri-Food International Approach

- Take a more focused approach to where we work globally
- Build on UK business and academic strength
- Develop relationships with countries with complementary strengths and where working together can deliver mutual benefit
- Identify specific opportunities
- Use a range of ways for supporting the relationship – information exchange, workshops, missions, collaborative R&D calls, etc.

Subjective Scores



Canada - UK

Progress / Actions 2017 forward

- March UK mission to Canada: scoping priority themes and establishing links to funders, research-base and industry across Agri-Tech sector
- June On line workshop: developed priority theme areas for industry-led research that will address challenges facing UK / Canada AgriFood sector towards 2030 <https://drive.google.com/open?id=0Bw-NVQzvdGa9UklyNnhkaXhFM0E>
- September Roadmap workshop: details key actions required to meet challenges, with recommendations for industry-led collaborative research in thematic areas; timelines & funding required from UK and Canadian partners. Publication anticipated mid Dec
- Future Establish new bi-lateral partnerships between UK and Canada to enhance existing trade and create new export opportunities for AgriFood products and services (bi-lateral and international) for mutual benefit. Missions, MOU, funding opportunities (e.g. Eurostars, new bi-lateral funding?)

Canada - UK

Priority areas identified by Innovate UK

Health & Life Sciences

- Precision engineering / diagnostics for agri-food production systems
- Regenerative medicine
- Precision medicine, especially around oncology
- Health and care

Manufacturing & Materials

- High Value Manufacturing
- Automotive, especially Connected Autonomous Vehicles

Infrastructure Systems

- Energy with a particular focus on energy systems

Emerging & Enabling

- Artificial intelligence
- Quantum technologies

Colombia - UK

Approved, in final planning stages

- £ 3 million
- Agritech catalyst
- Prosperity fund
- Due diligence (some red flag issues to resolve)



China - UK

Collaboration to tackle antimicrobial resistance (AMR)

£10
million

Newton
Fund
Model



Developing
World

(UK+China)
Novel

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



- Focus on bacterial resistance, but TB out of scope
- Includes animal health where relevant to human health
- Excludes ABR in water and the environment

China UK

Collaboration to tackle antimicrobial resistance (AMR)

- 1) Explore Traditional Chinese Medicine (herbal medicines and/or botanicals) for the treatment and/or prevention of infectious diseases in humans and/or animals
- 2) Advance the discovery of new agents, including small molecule drugs, vaccines, antibodies and other biological products
- 3) Identify new agents to increase feed energy conversion in livestock
- 4) Optimise the use of current antibiotics – using modelling, retrospective and prospective studies
- 5) Develop tools for the diagnosis, treatment selection and surveillance of bacterial infections and ABR

Q4 17

Roadshows

Q1 18

Comp opens

Q3 18

Comp closes

Q4 18

Results

Ireland - UK Opportunity?

- Funding for exploration
- Sectors?
- Organisations?



Innovation Loans – A new initiative for Innovate UK

Overview

“Innovation loans will offer affordable, patient, flexible – and yes, interest bearing and repayable – funding for later-stage R&D projects with a clear route to commercial success.”

Innovation Loans

Quick Facts

£50
million

5x
competitions
£10m

1st
Infrastructure
systems
Nov 2017

Pilot ends
2019

Upto
10
Years

£100,000
to
£1,000,000

Single SME
applicant Only

Low
Interest

Innovation Loans

The fine print....

- It's a structured loan – not a gift or an overdraft!
- Will ask for collateral (reasonable)
- Not contingent on success – liable regardless of outcome
- Will be delivered through competitions
- Will still qualify as state aid
- Expect pilot to cover around 100 loans in pilot

Q&A

We can't stop thinking
about the future

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