

# Crop Improvement Club

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# Introduction

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- BBSRC research and technology clubs
- Idea behind the Crop Improvement Club
- Research Challenges
- Summary

# Research and Technology Clubs

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- A consortium of companies work together with BBSRC to fund **basic research in strategic areas**
- In the typical club model, **BBSRC** contributes **90%** of funding, industry consortium contributes 10%
- Company members decide on the **research priorities** and contribute to review of research proposals
- Regular **dissemination** events allow members to network, to hear about research projects and to meet researchers

# Example Funding Scenario

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*For example*

## Funding (over 5 years)

BBSRC contributions:	£9M
Industry contributions £3k-£10k/ annum	£1M
<b>Total Funding pot</b>	<b>+ £10M</b>

- Allows 3 annual calls each just over £3M

# Diet and Health Research Industry Club (DRINC)



DRINC • DIET AND HEALTH RESEARCH INDUSTRY CLUB



**Support the food industry in meeting increased demand from consumers for healthier diet**

- Industry-relevant research areas identified
  - Bioactives in Food that Benefit Health
  - Improved Understanding of Healthier Diets
- BBSRC, EPSRC, MRC, TSB (Bioscience for Business KTN)
- Club supports research projects from a joint fund in excess of £10M through three calls
- £1M of which comes from 15 industrial members
- 9 projects awarded £4.2M through the first call



# Benefits to Company Members

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- ✓ Influence research areas of economic value (through a significant quantity of government funding)
- ✓ Participate in research funding decisions
- ✓ Up to date knowledge on the progress of research and early access to results
- ✓ Opportunity to work with academics, postdocs and postgrads
- ✓ Opportunity to identify the best potential industry recruits
- ✓ Information and advice related to research council activities e.g. training and KT schemes
- ✓ Public promotion through the Club

# Capacity for Members to Influence Research

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- Membership
  - Identification of **research challenges**
  - Feedback on club **development** and **management**
- Steering Committee
  - **Representation** of different industry sectors
  - **Influence** which projects are funded
  - **Monitor** progress against research challenges
- Advisory groups
  - **Visit** research groups with coordinator
  - **Advise** research groups
  - **Observe** the progress of projects against aims

# Club Management

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- External coordinator appointed by BBSRC
- Steering group formed – 7 industry and 7 academia
  - Take forward the Club research agenda
  - Provide strategic direction
  - Review proposals, progress of funded projects and Club operation.
- Company members also involved in reviewing proposals



# Dissemination Events

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- **Two dissemination events a year**
- Provide a forum for funded groups to update Industry Members on research progress
- Networking between industry and research members
- Discussion of future research and training opportunities

# Crop Club Model

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- Focus on wheat, barley and OSR for food and feed uses

Companies pay £10 k pa unless they are legally defined SMEs in which case they pay £3 k pa

- BBSRC will match the total at a 9:1 ratio
- Additional support will be given by the Scottish Government
- BBSRC will continue to attract investment from other companies
- The club will operate under the same general principles as other BBSRC clubs
- Separate pot of funding available for studentships aligned with funded projects

# Research Challenges

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Through consultation with industry, crop **productivity** and **quality** have both been highlighted as high priority areas, where pre-competitive, innovative, industrially relevant research could provide benefits for the whole sector.

## **Productivity**

- Nutrient use efficiency
- Total biomass
- Combating Pests and Diseases

# Research Challenges

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## Quality

- Protein quality and functionality in wheat
- Mycotoxin contamination
- Non-starch polysaccharides in wheat and barley
- High malt/alcohol yield in barley
- Occurrence of glycosidic nitrile in barley
- Oil composition in oilseed rape

# Company members

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The following companies have expressed a formal interest in becoming members of the Club:

**BASF**

**Campden BRI**

**Elsoms Seeds**

**HGCA**

**KWS**

**Limagrain**

**Monsanto UK Limited**

**nabim**

**RAGT Seeds**

**SWRI**

**Syngenta**

**United Oilseeds**

**Velcourt**

# Current Funding

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- Total industry subscriptions over 5 yrs amount to **£545k**
- BBSRC will contribute at 9:1 to give a combined **£5.45M**
- The Scottish Government have agreed to put **£0.5M** additional money into the Club
- This will give a total funding pot of **£5.95M**
- Additional company members will help to boost this figure

# Comments from BRIC

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**“We appreciate the opportunity to shape the strategic direction of a large programme of research for the benefit of the industrial community”**

**“BRIC is an absolutely essential initiative to the continued health and success of the bioprocessing community in the UK”**

**“Through BRIC academia is much more aware of industry’s needs and also the slightly different industrial approach to problem solving”**

**“Without BRIC, the UK biotech sector will fall behind Asia and other European Union member states.”**

**Comments from industry members**

# Summary

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- BBSRC are aiming to support science that is industry-directed and is industry-relevant, with a 9:1 funding ratio.
- We are aiming to build a Club community where members benefit from interactions with one another.
- We are aiming to build a productive relationship between BBSRC and industry so that our science will continue to deliver valuable impacts.