Bienvenido/Welcome to the web-based seminar for the UK–Mexico Newton Fund call:

Improving Mexican Crop Resilience to Abiotic Stress
Improving Mexican Crop Resilience to Abiotic Stress

Overview

• Webinar will be in English
• Use the Q&A function
• Use ‘Technical Assistance’ chat for webinar faults
• The webinar is being recorded
• All slides will be available early next week
Webinar Agenda

1. Presentation from Mexican and UK funders (1h)
   a) Welcome and overview of webinar
   b) Description of call scope and funding available
   c) Overview of Colima, Jalisco and Sonora crops of importance and abiotic stresses relevant to the states
   d) UK strategic view and useful tools to find UK collaborators
   e) Application and peer review process
   f) Summary of key Q&As
   g) Next steps

2. Networking via the webinar chat (1h)
Programme Objective
To build partnerships between the UK and Mexico that will generate innovative research and novel solutions which will underpin sustainable crop production systems in Mexico.

Scientific Scope
To research how crop genetics, environmental interactions, and smart technology can be used to detect, manage, and reduce abiotic stress.
Scientific Scope in detail

Three areas for collaborative proposals focusing on resilience to abiotic stress:

1. Crop genetics (e.g. gene diversity, tools for breeding, genotype to phenotype, in relation to abiotic stress)

2. Crop / environment interaction (e.g. roots and microbiome under abiotic stress)

3. Precision, smart technology and data to address abiotic stress (e.g. detection, management and prediction of abiotic stress)

All need a clear path to impact in Mexico

Out of scope
Non-Mexican crops; biotic stresses; sequencing only; risk analysis; policy interventions; lack of novelty.
Funding available

UK
BBSRC has up to £3.2M to support successful UK applicants

Mexico
Cecytcol has up to $5M MXN to support successful applicants from Colima
Coecytjral has up to $5M MXN to support successful applicants from Jalisco
Coecyt has up to $20M MXN to support successful applicants from Sonora

Collaborative applications can request:
• up to £533k (80% FEC) from BBSRC to cover the UK costs and
• up to $5M MXN per Mexican applicants in each State.

Funding cannot cross state boarders and only one Mexican funder can be engaged per application
Application Restrictions

• Bilateral collaborative research proposals: UK researchers with Mexican researchers based in either Colima, Jalisco or Sonora;

• Additional partners outside Colima, Jalisco or Sonora can be partners but will not be eligible for funding through this call;

• Maximum duration of projects: 3 years starting late 2018/early 2019;

• The aim is to fund up to 6 projects shared across the states:
  o 1 collaboration between UK-Colima
  o 1 collaboration between UK-Jalisco
  o 4 collaborations between UK-Sonora
What is an eligible project?

As a minimum, each application must:

1. Address one (or more) of the described scope areas;
2. Demonstrate a true partnership between eligible UK researchers and eligible researchers from either Colima, Jalisco, or Sonora;
3. Describe clearly how the research will address the economic and social development of Mexico;
4. Remain within the funding and remit restrictions;
5. Submit all requested documentation by 19 July 2018, 16:00 (BST)

Please ensure you read the full ‘Call Guidance’ and associated annexes available on the call webpage
Colima: Funders View

Consejo Estatal de Ciencia y Tecnología del Estado de Colima
State of Colima: Crops of Interest

<table>
<thead>
<tr>
<th>Crops</th>
<th>Place</th>
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</thead>
<tbody>
<tr>
<td>Tamarind</td>
<td>1st</td>
</tr>
<tr>
<td>Coconut</td>
<td>2nd</td>
</tr>
<tr>
<td>Blueberry</td>
<td>2nd</td>
</tr>
<tr>
<td>Soursop (Guanabana)</td>
<td>2nd</td>
</tr>
<tr>
<td>Papaya</td>
<td>3rd</td>
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<tr>
<td>Blackberry</td>
<td>3rd</td>
</tr>
<tr>
<td>Lime</td>
<td>4th</td>
</tr>
<tr>
<td>Banana</td>
<td>4th</td>
</tr>
<tr>
<td>Carambolo</td>
<td>5th</td>
</tr>
<tr>
<td>Pineapple</td>
<td>7th</td>
</tr>
</tbody>
</table>

*Place at nationwide production

Pole of Development III
Tecoman Valley
Vocation: Agroindustry

Interested in crop resilience, droughts, high winds and soil salinity
Colima: Important documents for the innovation ecosystem and economic sectors of Colima.

Map of Technological Route for the Agrofood industry

http://www.promexico.mx/documentos/mapas-de-ruta/industria-agroalimentaria-colima.pdf

Innovation Agenda of Colima

http://www.agendasinnovacion.org/?cat=26
Colima: Possible Partners to Develop Projects in the Agro Sector

- Government of the State of Colima
- University of Colima
- Municipality of Tecoman
- Institute of Technology of Colima
- University of Technology of Manzanillo
- State Councils of:
  - Agriculture
  - Producers of Berries
  - Producers of Sugar Cane
  - Producers of Mango
  - Producers of Lemon
  - Producers of Papaya
  - Association of Producers of Bananas
  - Producers of Coffee
  - Producers of Coconut
- Produce Foundation of Colima A.C.
- Producers of Ornate Plants
- Federal Institutions such as Inifap, Sagarpa, etc.
- Other business and companies related to the sector

For more information about possible partners contact:

Science and Technology Council of Colima:

- Gloria Marmolejo Jaramillo 52 (312) 3162000 ext 2290
  gmarmolejoj@gmail.com

- Abel Alejandri Villasuso 52 (312) 3162000 ext 2358
  comunicacion@cecytcol.gob.mx
Jalisco: Some Crops of Interest

- Berries
- Lime
- Avocado
- Tomato
- Maize
- Agave
- Sugar Cane
- Mango

- Cacao
- Coffee
- Banana
- Soil Salinity
- Droughts
Jalisco: Some Possible Partners

ITESO, Universidad Jesuita de Guadalajara

CIATEJ

INSTITUTO TECNOLÓGICO JOSE MARIO MOLINA PASQUEL Y HERNÁNDEZ

INSTITUTO TECNOLÓGICO DE TLAJOMULCO, JALISCO

Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias

Cinvestav

Newton Fund

Coecytjal
Sonora: Funders View
Sonora: Crops of Importance

- Wheat
- Corn
- Tomatoes
- Green Chile
- Asparagus
- Grape
- Pecan
Sonora: Abiotic Stresses of Importance

- Water Deficit
- Salt
- Climate Change (crops)
Sonora: State Plans

- Sonoran State Development Plan 2016 – 2021

- Sonora Agriculture, Livestock, Hydraulic Resources, Fishing and Aquaculture State Program 2016 – 2021

- Science and Technology State Program 2016 – 2021

- Economic Development Program of the state of Sonora 2016 – 2021

- High aim in prioritise green energy sources with preference solar energy.
Sonora Key Partners
Policies for Genetic Modified Organisms in Mexico

• Law of Biosafety of Genetically Modified Organisms
  – Regulates the activities of confined use, release, commercialization, import and export of genetically modified organisms.

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• Official Mexican Norm
  – Establishes the characteristics and content of the report of results of the release or releases of genetically modified organisms, in relation to the possible risks to the environment and biological diversity and, additionally, to animal, plant and aquaculture health.
BBSRC: Funders View

Launched April 2018
UK Research and Innovation

Launched April 2018
What is UK Research and Innovation?

UK Research and Innovation, launched in April 2018, will be the new funding organisation for research and innovation in the UK. It brings together the seven UK research councils, Innovate UK and a new organisation, Research England, working closely with its partner organisations in the devolved administrations.
BBSRC – what we do

• Invest in **world-class bioscience research** in UK Universities and Institutes

• Invest in **bioscience training and skills** for the next generation of bioscientists

• Drive the widest possible **social and economic impact** from our bioscience in industry, policy and public goods

• Promote **public dialogue** on bioscience
BBSRC invests in bioscience research, infrastructure and skills right across the UK
Meeting society’s challenges in UK and globally

- The world needs to produce 50% more food by 2050
- Food & agri sector in UK already worth £96Bn a year
- Need for low carbon alternatives to fossil fuels
- Demand for energy predicted to grow by 20% in 2030 (from 2010)
- 21% of UK population will be aged 60+ by 2050
- Tackling obesity would save wider UK economy £50bn per year by 2050
## Three major strategic priorities

| Agriculture and food security | Industrial biotechnology and bioenergy | Bioscience for health |

Image credits 1. Thinkstock 2. TMO Renewables 3. Stephanie Schuller, IFR
BBSRC Agriculture and Food Security - Strategic Framework

- The aim is to expand on, and provide further details of, BBSRC’s strategic priorities in AFS.

- It identify areas where the BBSRC will focus efforts and expects to deliver the most impact over the next five years.

http://www.bbsrc.ac.uk/research/food-security/
Focus

The Strategic Framework is divided into six focus areas:

• Sustainable agricultural systems
• Crop and farmed animal health
• Food safety and nutrition
• Reducing waste
• Understanding and exploiting genomics
• Precision agriculture and smart technologies
Sustainable agricultural systems

• Addressing the complexity of the challenges by utilising **multi-scale and systems** approaches to agri-ecosystems

• Delivering improved agricultural performance and sustainability through enhancement of the **soil microbiome**

• Improving on-farm efficiency and long-term sustainability through more effective **resource use**

• Improving the **resilience** of the agricultural system though increased understanding of the effects of abiotic stresses
Precision agriculture and smart technologies

- Developing precision farming by embedding smart engineering technologies in agri-food research and innovation
- Supporting the development of digital and predictive tools to improve decision making
- Revolutionise future farming by developing and utilising novel technologies
Newton Fund

- £735M from 2014 to 2021 to support research and innovation partnerships between the UK and 15 countries
- UK investment is matched by investment from partner countries/funders

Key objectives:
- To promote the economic development and social welfare of partner countries
- To build strong, sustainable and systemic relationships with partner countries
How to make connections with UK Researchers

- BBSRC specific, Portfolio Analyser- [https://bbsrc.ukri.org/research/grants-search/](https://bbsrc.ukri.org/research/grants-search/).
- UK networks:
  - SIRN [https://sirn.org.uk/](https://sirn.org.uk/).
  - STFC food network [https://www.stfcfoodnetwork.org/](https://www.stfcfoodnetwork.org/).
- Use today’s opportunity to make connections remotely
- Outside of this event BBSRC cannot act as a match maker
UK Applicant Eligibility

• Standard Responsive Mode eligibility

• Please refer to the Grants Guide (https://bbsrc.ukri.org/documents/grants-guide/)

• Lecturer level fellowships should be checked with the office prior to application

• Assets over £10,000 cannot be requested

• Always check with the Office if in doubt-before submission: newton.mexico@bbsrc.ac.uk

Read Annex 1 in the Call Guidance
Developing your collaborative application

Case for Support should be:
- jointly developed;
- describe the detailed scientific case for the entire proposal (both the UK and Mexican components);
- represent an equal partnership between Mexico and the UK.

Justification of Resources should include full justifications for:
- Both UK and Mexican costs (clearly indicated in local currency);
- PI and Co-I time;
- Level of staffing required (e.g. post doc, technician);
- Level of resource (e.g. travel, consumables, facilities access).

Please ensure you read the guidance and annexes in full
Developing your collaborative application

ODA Statement should:

- describe how you seek to investigate a **specific problem** or seek a **specific outcome** which will have an impact on Mexico;
- provide evidence as to **why this is a problem** in Mexico;
- identify **appropriate pathways to impact** to ensure that Mexico benefits from the research.

Further information: [http://www.newtonfund.ac.uk/about/what-is-oda/](http://www.newtonfund.ac.uk/about/what-is-oda/)
Assessment Criteria

- Scientific excellence, novelty, and feasibility;
- Significance and impact of the research on Mexican crop resilience to abiotic stress;
- Potential of the research to impact the economic and societal welfare of Mexico;
- Appropriateness and added value of the joint research partnership;
- Appropriateness of the project structure proposed;
- Potential for the collaboration to build capacity in partner countries;
- Value for money.

The final funding decision will be made jointly between the funding agencies and the Panel may be asked to consider scientific and state spread in order to achieve a balanced portfolio.
Submission process

- The application must be submitted using the Je-S system by UK PI by 1600 BST, 19 July

- Additional attachments (Mexico cost form; Applicants List; ODA Statement; Letter of Support; Partnership and Project Management Statement, Documents Specific to the Mexican State)

- Applicant list and Mexico Cost Form (in Spanish) templates are available to download from BBSRC web site

Please ensure you read the guidance and annexes in full
Post Application Process

- **Proposal submission**
  - Submitted but UK lead, 19 July 2018 (16:00 BST)

- **External reviewing**
  - August/September

- **Panel meeting**
  - Mid-October

- **Outcome Notification**
  - Late-Oct/early-Nov

- **Grants start**
  - Mexico: Dec 2018
  - UK: Early Jan 2019
Presentation wrap up and next steps

- Slides, webinar recording and anonymised Q&A will be available on the call page early next week.

- Share your research interest in one slide (optional)
  - You can prepare a single slide describing your research interest and send it to newton.mexico@bbsrc.ac.uk. The slide should be sent in PDF format.
  - All slides received by 15 May 2018 will be collated and published on the call webpage on 21 May 2018.
  - Please note any submitted slides will subsequently be publicly available on the BBSRC webpage for the duration of the open call.

- Move to ‘Networking phase of webinar
  - Chat and Q&A functions staying open for 60 minutes.