GLOBAL RESEARCH ALLIANCE

ON AGRICULTURAL GREENHOUSE GASES

GRA FLAGSHIP PROJECT TITLE:

Leader: Professor Sharon Huws

Council Champions:

1. Professor Wei-Yun, Nanjing Agricultural University, China
2. Professor Tim McAllister, AAFC, Canda
3. Professor Hauke Smidt, WUR, Netherlands
4. Dr Rodolpho Prado, Universidade de Maringa, Brazil
5. Dr Hugo Jiminez, Agrosavia, Columbia

Overview of project

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- **Start date and project length:**

- 01/06/22 (Flexible)
- Two years initially

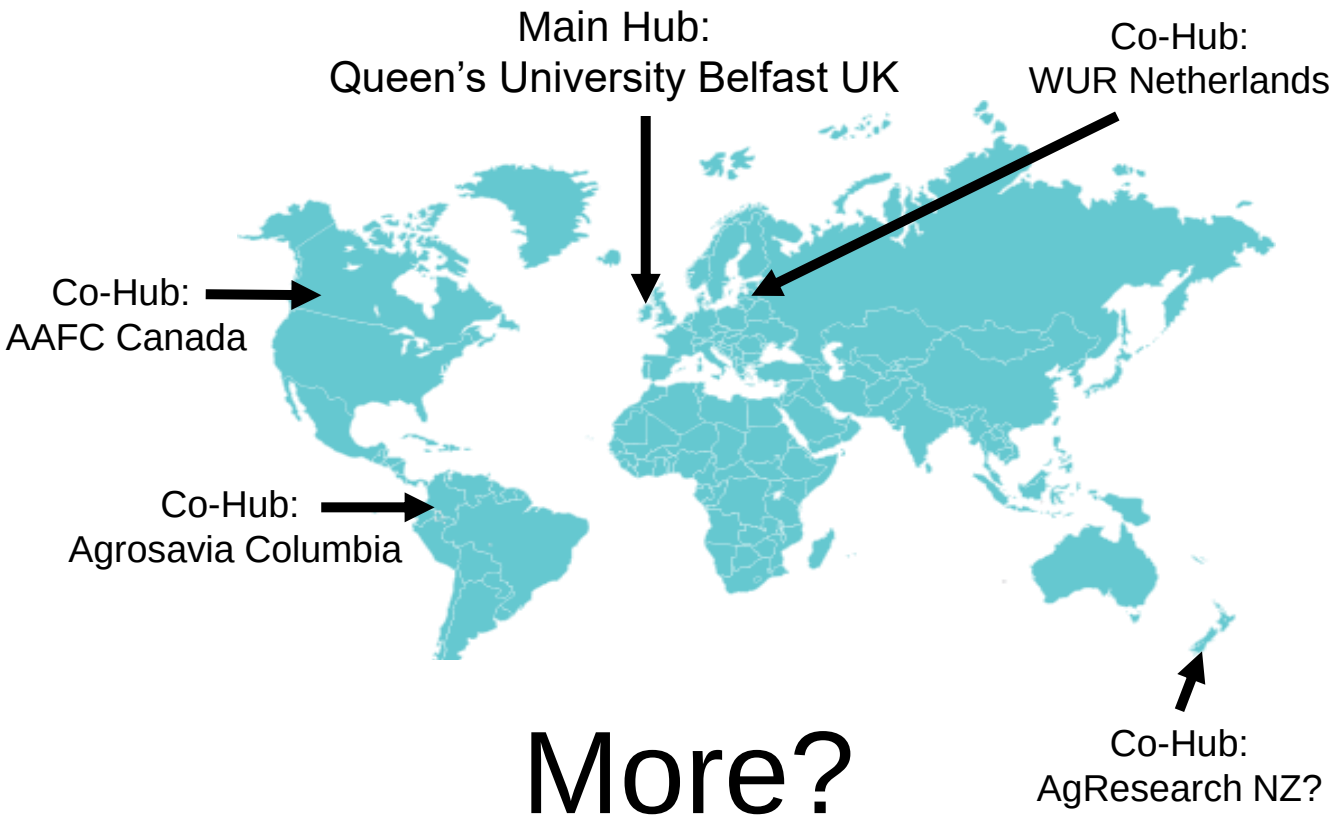
- **Brief description of project:**

- Flagship project: Hungate Collection provided a major step-change for the community.
- Hungate collection illustrated that many bacterial families are missing in current culture collections. Hampers development of innovation. Timing is right for a global effort into livestock microbiome culturomics.
- Benefits: Better understanding of these microbiomes for enhanced innovations to improve sustainable agricultural practices.

Objective: Enhance our microbial culture collections and raise our ability to innovate

How: Global Hubs with global participation

- Main hub and those with capacity can become co-hubs.
- Send samples to the most convenient hub (under MTA agreement if required). Ensures involvement of LMIC countries with little infrastructure to become co-hub.
- Involvement of LMIC countries essential to enable capture of microbial diversity.
- All involved become co-authors of a major publication.
- Training component of staff and students from LMIC e.g CLIFF-GRADS.



Key Participants and Resources

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How to become involved: Workshops have been held and emails sent to the RMG network members to ask their desire to be involved ether as a co-hub or willingness to send samples already. Response rate high and communication will be further enhanced via the LRG meetings to increase involvement at any level possible. The project is open to all to be involved.

Resources: At minimum a post-doctoral scientist for 2 years (scientists from LMIC countries particularly welcomed) with anaerobic microbiology experience. We will fund the consumables from existing projects if necessary and provide input in-kind to a value of greater than 30% of overall costs.