

BactiVac, a network to support the study, development & implementation of bacterial vaccines

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Why do we need a bacterial vaccine network?

- Infections cause >20% of all deaths worldwide, and kill disproportionately in low-middle income countries (LMICs)
- Bacterial infections kill ~5 million people annually, with the AMR crisis limiting further our options for controlling infections
- Vaccines save millions of lives yearly and are a cost-effective approach to prevent infectious disease and their devastating sequelae
- Vaccines work silently in the background, promoting the body's ability to kill the pathogen before an infection is established
- Studying vaccines also allows us to study immune function in health and disease
- There are many bacterial infections against which we lack any licensed vaccine and there is no network with a focus on bacterial vaccines
- To help address this, the MRC and BBSRC, through the GCRF, have funded our network, **BactiVac**
- This is one of 5 networks funded to support discrete areas of vaccine research
- It launched in August 2017, now has £2.8m of funding and is led by Profs Cal MacLennan & Adam Cunningham.



What do we want to do?

Our vision is to save lives through accelerating the development and use of vaccines against bacterial infections relevant to LMICs.

For many bacterial diseases, there is either no vaccine or the existing vaccine does not provide complete protection.



New vaccines against bacterial infections will help people worldwide, but most directly those in LMICs.

There are many barriers that limit vaccine development and implementation.

These barriers can be scientific, such as what antigens to target, or economic issues, such as neglect due to lack of commercial viability.

We are establishing an **open, multidisciplinary network of experts** to help overcome barriers limiting the generation of new vaccines and their use where needed.



To do this we will continue to:

- **Grow awareness** of the need for bacterial vaccines and ensure we represent the interests of our members to a wide range of stakeholders
- **Promote close interactions and working between members and across disciplines**, encouraging the dissemination of skills and best practice
- Help achieve this through **subsidised network meetings**, bringing key experts and opinion makers together to discuss recent advances
- **Provide catalyst funding for projects and training** to grow new directions and capacity, leading to further, larger grant funding
- **Fund scoping exercises** to identify gaps in vaccine research and industry capacity.

Work with us: Becoming a BactiVac member

BactiVac will only succeed if it serves its members and the community.

Join the BactiVac network to help grow R&D capacity and skills to help drive vaccine development.

The key benefits of becoming a member include:

- ✓ Access to our catalyst funding to pump-prime projects and facilitate training visits
- ✓ Invitation to our subsidised annual meetings. Our next Annual Network Meeting will be held in Birmingham on the **20 & 21 March 2019**
- ✓ Access to details held within our members' directory to facilitate connecting members to potential partners.

Join by completing our short and simple online membership application form available on our website (www.birmingham.ac.uk/bactivac).



Catalyst funding to grow bacterial vaccinology

Pump-priming projects

We have funding to support catalyst projects between partners in academia and industry with interests in LMIC-relevant bacterial vaccinology.

The aim is to provide flexible funds to generate partnerships and data to support substantive further, downstream funding applications.

Calls for proposals will prioritise projects that:

- Facilitate onward progression of bacterial vaccines along the pipeline to licensure
- Offer robust solutions to overcome the difficult preclinical to clinical transition
- Involve BactiVac partnerships with a long-term work plan
- Include LMICs and/or industrial partners
- Have realistic plans in place to demonstrate IP has been considered
- Include plans for achieving further substantive funding at the end of the project



Training

Catalyst funding is also available to support training opportunities and exchanges, especially for LMIC members.

These are flexible and can be between academic or industrial partners to help transfer knowledge and skills in bacterial vaccinology.

The aim of this funding scheme will be to support members to train in vaccine R&D targeting the main preclinical to clinical area of focus for BactiVac.

This scheme will be run throughout the period of funding (up to August 2021) with calls for proposals likely to focus on:

- Opportunities for both UK and LMIC members, including bilateral exchanges
- Key skills gaps within an LMIC, academic or industrial partners' institution.



Round 3 of catalyst funding will open at our Annual Network Meeting, 20-21 March 2019. Full details of projects funded & how to apply are available on our website.