National AMR research program

Country: United Kingdom

The UK Five Year antimicrobial resistance strategy 2013-2018

O’Neill review: This review in the “economic issues surrounding AMR” was announced by the Prime Minister on July 2nd, to be led by economist Jim O’Neill. Two reports have been published portraying the economic burden of AMR and calling for a global fund to support AMR research.

Through the Fleming Fund the UK Department of Health is supporting WHO, Food and Agriculture Organization of the United Nations (FAO) and World Organisation for Animal Health (OIE) to the value of £18m over the life of the Fleming Fund (2016-2021) – this will build on already effective tripartite working. Using a one health approach, this funding will support delivery of the Global Action Plan with a clear focus on low and middle income countries. Activities will focus on:

- Supporting on the development and implementation of one health national action plans;
- Development and piloting of methodologies for antibiotic consumption and use; and
- Improving awareness and understanding of AMR across all sectors, with support of alternatives to AMs, good practice guidelines etc.

National research calls and year

1. AMR cross council initiative led and managed by UK MRC.
   *Phase 1 supported research under 4 themes:
   - Understanding Resistant bacteria (supported 11 innovation awards and 2 collaborative awards in 2015)
   - Accelerating therapeutics and diagnostics development (supported 8 innovation awards and 3 collaborative awards in 2016)
   - AMR and the environment (supported 9 pump priming awards and 4 research grant awards relating to the outdoor environment and host microbiome in 2016 and 11 pump priming awards relating to the built and indoor environment in 2017)
   - Behaviour change within and beyond the health care setting (supported 12 pump priming awards and 7 collaborative awards in 2016 and 17)

To date £46m has been committed via this initiative. In addition, EPSRC ran a £6m call to Bridge the gaps between engineering and physical sciences and AMR in 2014.

The MRF committed to funding £2.5m in 2017 to support an interdisciplinary AMR PhD training programme for PhD students in the UK 2018-21

A further call is currently being run at the international level: AMR in a Global Context (supported 10 development awards in 2017, with consortia funding to be committed in March 2018), this will commit an additional £10m.

2. GCRF Antimicrobial Target Discovery and Validation (MRC) will support consortia of academics and/or industry focused on AMR target identification/validation of infections. £4m call launched Oct. 2017.
3. Newton Funds (International):
   Previous AMR specific calls have been run with China (£4.5m) and India (£2m) 2015/16
   Previous infectious disease calls have been run with Philippines (£800k), Thailand (£400k),
   Vietnam (£800k) (figures in () denotes funding to AMR specific projects) all in 2016
   Calls are currently being run with India (£6.5m), China (£8m) and Brazil (£2.5m) on AMR with
   workshops in each country in 2017 prior to the calls being launched in 2017/18
   Calls are being scoped with South Africa (£0.5m) and Kenya (£1m) on AMR

4. Longitude Prize is a challenge with a £10 million prize to create a cost-effective, accurate,
   rapid and easy-to-use diagnostic test for bacterial infections, which will help prevent the rise
   of drug resistance by reducing the amount of broad spectrum antibiotics that are prescribed.
   Submission is now open.
   http://www.longitudeprize.org/

5. Global AMR Innovation Fund (DH) is currently working to build global partnerships and
   activities/ Calls will begin in 2017/18 (scoping work needs to be conducted first to identify
   where the “blackholes” and “bottlenecks” are, and where the fund can add value to the
   system, as well as where the health need is greatest). UK has committed £50m over 5 years
   to this and it is Official Development Assistance (ODA) budget and therefore, the primary
   purpose of the commitment is to promote the economic development and welfare in low
   and middle income countries but other funders investment does not need to be for this
   primary purpose.

6. Fleming Fund (DH) is currently working to tackle the growing problem of drug-resistant
   infection with a £265m fund. This fund will be used to support surveillance, the development
   of NAPs for AMR. Country grants and fellowships will begin in 24 low and lower-middle
   income countries across Sub-Saharan Africa, South and South East Asia from Oct 2017.

7. Training for AMR implementation research (TDR, Wellcome Trust) will support an
   implementation research training programme to strengthen low and middle income country
   capacity to implement Antimicrobial Resistance (AMR) national action plans. This has a
   budget of £10m and will run from 2018-21.

8. Prevention Research Program (NIHR) will evaluate the Implementation of the UK Anti-

9. NIHR Global Health Research Unit on Genomic Surveillance of Antimicrobial Resistance
   (Wellcome Trust Sanger Institute) £7m 2017-21

10. NIHR Biomedical Research Centres – 4 centres specific to AMR 2017-22 £20m

11. NIHR Antimicrobial Resistance Themed Call - Minimising the risks of emergence of antibiotic
    resistance during therapy by precise regimen individualisation and use of combination
    therapy £350k 2018-21

12. Food Standards Agency: Surveillance study of AMR in retail chicken and pork £287k 2017 and
    EU Harmonised Survey on AMR in Retail Meats (Year 3 - Beef & Pork) £135k 2017

13. Ross Fund activities (DFID)
    TB Alliance To develop new drugs to treat TB (joint funding from DFID, Australia,
    Netherlands, Germany, Japan, Ireland, USA, BMGF) £30m 2017-21

National coordinate structure
Funders Forum