



G20 MACS - Xi'an 30th May 2016

Progress of Working Group on Animal

diseases High Priority Vaccines







Steve Visscher BBSRC, United Kingdom

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Overview



- Background to Global Research Collaboration
 Platforms and previous MACS discussions
- Strategic Alliances for the Coordination of Research on Major Infectious Diseases of Animals and Zoonoses (STAR-IDAZ)
- STAR IDAZ International Research Consortium
 - Features, plans and developments
- Vaccine Networks
 - Barriers to collaboration across GRCPs
 - Action for MACS





Previous MACS discussions

- Mexico 2012 Agreed GCRPs to facilitate new partnerships on collaborative research in agriculture, food security and nutrition.
- Russia 2013 MACS set goal of identifying global research priorities and targets, facilitating public/ private collaboration, drive sustainable gains and track progress
- Australia 2014 Agreed sub group to undertake a pilot project to map members' priorities.
- Turkey 2015 Agreed to build on findings and establish a UK-led working group focussing on animal diseases and high priority vaccines. Aim to use existing mechanisms where possible





Benefits of International Collaboration

- Development of strategic alliances
- Ability to contribute to the global effort and address national challenges. Global challenges have no boundaries
- Improved value from faster progress / alignment / co design/ avoiding duplication.
- Link national programmes with research for Development
- Link complimentary skills /facilities; spill over benefits
- Gain political and funder support.





STAR-IDAZ International Research Consortium on Animal Health

International Research Consortium on Animal Health







STAR-IDAZ (Global Strategic Alliances for the Coordination of Research on the Major Infectious Diseases of Animals and Zoonoses)

- A four-year EU-funded global initiative to address the coordination of research programmes at international level
- Network now operating under an MoU signed by 28 funding organisations from 21 countries



Outputs of STAR-IDAZ



- Established global network and regional networks for Asia & Australasia, Americas, Africa, the Middle East and Europe
- A database of research publications
- Research programmes database (incl. capacity and activities)
- Research needs at global, regional and industry sector levels established
- Agendas on target priority diseases / issues developed
- Instruments to enable cooperation, clustering and partnerships identified
- Development of a long-term Strategic Research Agenda



Further EC support for STAR-IDAZ activities



Support for international research on animal health

Aim of call:

The action will provide organisational support to the implementation of the global infectious diseases of animals and zoonoses consortium (STAR-IDAZ) goals, in close collaboration with the European Commission, research funding agencies from Member States and from other third countries involved through the formation of a scientific secretariat

EUR 3 million – Coordination and Support Action



STAR-IDAZ - International Research Coordination (IRC)





Objective of STAR-IDAZ IRC



The deliverables include:

- Candidate vaccines
- Diagnostics
- Therapeutics
- Other animal health products and procedures
- Key scientific information/tools to support risk analysis and disease control



International Research Consortium (IRC)



Higher level of commitment for coordinated research activities

- Minimum investment in research on priorities over a five year period (threshold \$US 10 million; group funding commitment possible)
- Agree delivery targets
- Agree to coordinate/align funding to deliver these targets (members' own funding procedures, unless agreed otherwise; governance document & policy guidelines)
- Agree to share research results (as much as necessary, without jeopardising IPR)
- 16 partners from 12 countries plus one international organisation and three from industry have signed Letter of Intent to participate
- Total combined research budget of \$US 2.5+ billion

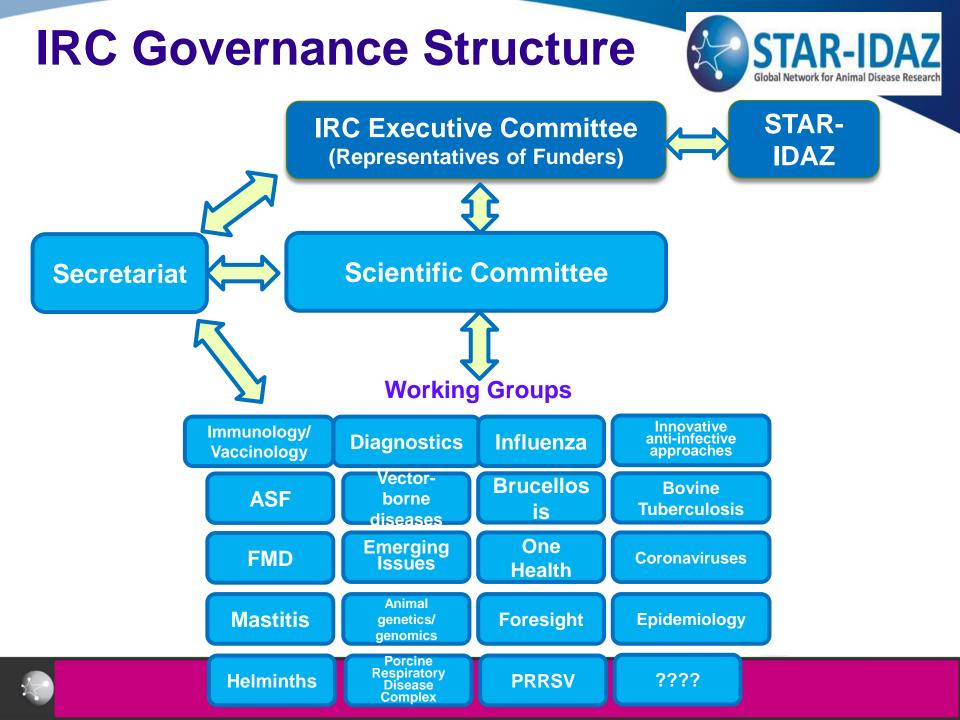


Working Groups









IRC- Work Package Proposals



- WP1. Advocacy and international engagement
- WP2. Operational support
- WP3. Research prioritisation and programme
- alignment
- WP4. Communication and dissemination
- WP5. Project management and reporting



WP3. Research prioritisation and

programme alignment



- Establish a common approach for IRC projects regarding open data, IP and early engagement with industry.
- Establish & maintain relationships with related EU initiatives.
- Establish working groups for priority diseases/ crosscutting issues.
- Produce gap analysis/roadmap reports from Working groups
- Advise the Scientific and Executive Committees on how research programmes could be aligned and make funding recommendations based on the gap analysis, roadmap reports and current funding activities.
- Monitor and report on emerging animal health issues.



IRC Partners (to date)

DTU / Denmark **INRA / France ANSES / France** MoH / Italy Min. of Economic Affairs / Netherlands **INIA/Spain** Defra / UK **BBSRC / UK Kimron Veterinary Institute** /lsrael International Livestock Research Institute (ILRI)



Tanzania Veterinary Laboratory Agency NIAH/ Japan USDA-ARS/US INTA / Argentina MINCYT / Argentina CFIA / Canada

Zoetis Health for Animals European Manufacturers of Veterinary Diagnostics





STAR-IDAZ International Research Consortium launch – Brussels January 2016







For further information visit www.star-idaz.net. To enquire about joining the IRC or the working groups please contact the STAR-IDAZ IRC Project Office:

Alex Morrow or Luke Dalton Defra, Area 5B, Nobel House, 17 Smith Square, London SW1P 3JR Alex.Morrow@Defra.gsi.gov.uk, Luke.Dalton@Defra.gsi.gov.uk





Understanding Research Gaps and Unmet Needs in Veterinary Vaccinology

STAR-IDAZ Global Survey

100 responses from 19 Countries

- 79 Researchers
- 21 Policy Makers/Research Funders

Main Findings:

Research Gaps

- Immunology of the protective immune response
- Long term research challenge: developing new tools and technologies (DIVA, Synthetic vaccines, Multivalent techniques)

Others

- Industry engagement
- Facilities

UK Survey Over 175 responses

Main Research Gaps

- Immunology
- Tools and Technologies

Other areas:

- Immunogen design (including 'Omics and Bioinformatics)
- One Health approach
- Epidemiology, transmission (including modelling) and surveillance
- Economics and other social sciences, to identify the most urgent problems and evaluate the impact of research
- Interactions with industry
- Regulatory aspects, in particular to new technologies
- Capacity and capability





To foster a **multi-disciplinary community** to enhance the development and uptake of novel **tools and technologies** as well as address the "unmet" needs in **protective immunity** in the field of veterinary vacccinology





BBSRC Funded Network



Global Veterinary Vaccinology Research Alliance

Vision

A coordinated global research alliance **facilitating** the development of **novel and/or improved'** veterinary vaccines

Mission

To establish and sustain global research partnerships that will generate scientific knowledge and tools to contribute to the successful development of **novel and/or improved'** vaccines



Global Veterinary Vaccinology Research Alliance

Strategic Goals

Goal 1. Identify research opportunities and facilitate collaborations, **sharing tools and reagents** and resources/facilities within the network

Goal 2. Facilitate international efforts to better understand the **underpinning immunology** and address the unmet needs in protective immunity in the field of veterinary vacccinology

Goal 3. Provide a forum for continued identification of research priorities and gaps

Goal 4. Foster a multi-disciplinary community to develop and enhance the uptake of new **tools and technologies**

Goal 5: Promote collaboration with the human vaccinology research community (**One Health approach**)

Goal 6. Serve as a communication and **technology sharing gateway** for the global vaccinology research community and stakeholders





Barriers for Global Coordination



- Encourage in-country coordination as important first step.
- For example, the UK's Global Food Security Partnership represents 14 bodies, each with different remits and interests.
- Understanding national priorities may require amalgamating from a range of institutions





Barriers for Global Coordination: Networks & Data Sharing



- Endorsement from funders for the value of international co-ordination
- Funding for networking activities for researchers, policy makers and funders
- Sharing of data and knowledge
- Linking of existing databases
- Standardization and harmonization of data collection





Actions for MACS



- 1. MACS is invited to endorse development of STAR-IDAZ International Research Consortium as a MACS supported Global Research Collaboration Platform.
- 2. MACS is invited to endorse the development of the STAR IDAZ global Veterinary Vaccinology Research Alliance
- 3. MACS Members which are not presently part of STAR-IDAZ International Research Consortium to consider doing so.
- 4. MACS invited to consider what steps can be taken by members to reduce barriers to collaboration across all aspects of agriculture, food security and nutrition research?





Thank you

Steve Visscher

BBSRC Deputy Chief Executive -International





Additional slides





Proposals submitted to the European Commission

"<u>Secretariat for the International Research</u> <u>Consortium on Animal Health (SIRCAH)</u>"

Partners DEFRA BBSRC OIE CABI IFAH-EUROPE



DISCONTOOLS, Rome, April '16



- To expand the IRC:
 - a) through the involvement of additional partners from countries not currently involved in STAR-IDAZ and
 - b) through the involvement of additional organisations from countries where there is current engagement.
- To integrate activities with those of OIE, DISCONTOOLS, CABI and other expert groups.
- To work with other international stakeholder bodies/initiatives in areas of common interest.





- Facilitate communication within and between members of the Executive and Scientific Committees and the Working Groups.
- Provide support for the activities of the IRC bodies (Executive Committee, Scientific Committee, and Working Group) including managing logistics of meetings and reporting on them.



DISCONTOOLS, Rome, April '16



- Establish a common approach for IRC projects regarding open data, IP and early engagement with industry.
- Establish and maintain relationships with related FP7 and H2020 initiatives.
- Establish working groups for priority diseases and crosscutting issues.
- Produce and publish gap analysis and roadmap reports from working groups.
- Advise the Scientific Committee (SC) and ExC on how research programmes could be aligned and make funding recommendations based on the gap analysis, roadmap reports and current funding activities.
- Monitor and report on emerging animal health issues.





- Create IRC brand.
- Update the STAR-IDAZ Communications Strategy to meet the requirements of the IRC.
- Develop and maintain STAR-IDAZ IRC website to disseminate information to the public and an online collaborative platform and database for members to share information.
- Publicize IRC activities to the wider animal health community.





- To manage the project effectively with timely reporting to the European Commission, Executive Committee and the Chairperson of the Executive Committee.
- To ensure the work plan is on schedule through regular meetings of SIRCAH Partners.
- To develop a sustainability plan for the IRC.



Buenos Aires meeting



With regard to the Working Groups it was agreed that details be collected from IRC partners as to their level of funding for each of the priority topics.

Details of projects contributing to the IRC topics of Brucellosis, bTB, PRRSV and Vaccinology are to be collected.

Working Groups on Brucellosis, bTB, PRRSV and Vaccinology to be populated and taken forward.

Details of national funding processes, including timelines to be collected.

