African Swine Fever

In recent months outbreaks of African swine fever (ASF) have occurred in China, and its spread has continued through Europe with first reports in Belgium and Romania. ASF arrived in China in August 2018, which is particularly significant as the country has around half of the world’s pig population. The spread of the disease has shown how diseases are a global threat and has emphasised the need for a global response to coordinate research to discover a vaccine. ASF is endemic in parts of Africa and was discovered in Georgia in the Caucasus in 2007, and subsequently spread to neighbouring countries and further into Eastern Europe. Currently, ASFV is present in parts of the Russian Federation and neighbouring countries, including Ukraine, Poland, Latvia, Lithuania, Estonia and Moldova, as well as, more recently, the

STAR-IDAZ IRC
new Website launched

The STAR-IDAZ web-site (http://www.star-idaz.net) has been redesigned and relaunched. The web-site will help coordinate global research on important topics in animal health. A key aspect of the new site is the roadmaps for the priority topics identifying research gaps for vaccines diagnostics and disease control. There are vaccine
Czech Republic and Romania. Wild boar are important for maintaining infection in a territory and their population in Europe, based on numbers killed by hunters, has significantly increased in the last 50 years: for the introduction of ASFV into a new territory human actions are more significant. In China, since the first outbreak in the north-east (Liaoning), the disease has spread to more provinces (16 to date). In response to these outbreaks, the Ministry of Agriculture has banned the feeding of kitchen waste to pigs, a source implicated in the spread of ASF there.

No vaccine for ASF currently exists and development of vaccines has been impeded by gaps in the knowledge of ASFV infection and immunity. The precise nature of the protective responses has not been determined and protective antigens have not yet been identified, hampering the design of a vaccine.

Global African Swine Fever Research Alliance (GARA) scientific workshop in Italy

The Global African Swine Fever Research Alliance (GARA) is a global network of research institutions and other stakeholders development roadmaps for bovine tuberculosis, porcine reproductive and respiratory system (PRRS) and brucellosis. Others will be added as they are developed and agreed by the Working Groups. The web-site contains news on animal health topics, as well as research calls from IRC members, and coming events.

Road Maps

Road maps are fundamental to the approach taken by STAR-IDAZ IRC to coordinate animal health research into new diagnostics, vaccines and other tools for disease control. They form part of a systems approach to the development of animal disease control strategies. The integrated research roadmaps are designed to focus research effort on the critical gaps. This
active in African swine fever (ASF) research, established as a coordinated global research alliance aiming to generate scientific knowledge and tools to contribute to the prevention, control and, where feasible, eradication of ASF. The GARA is acting as the Working Group on ASF for the STAR-IDAZ IRC, supporting the delivery of research gap analyses and research roadmaps. GARA has, to date, 33 partners coming from all regions of the world and several stakeholders, including STAR-IDAZ. GARA members have conducted research gap analyses on ASF diagnostics, vaccinology, epidemiology and virology, which are periodically updated.

The biannual scientific workshop of the GARA took place in Cagliari (Sardinia, Italy) on the 11 - 14 April 2018. The three-day meeting brought together around 150 participants, including experts from ASF research institutions, vaccine suppliers, policy makers and operation managers. The event was officially supported by several private commercial sponsors and other institutions, including the STAR-IDAZ IRC. During the workshop, a representative of the STAR-IDAZ IRC gave a presentation on the activity of the International Research Consortium and coordinated one session for discussing with the experts a draft roadmap for ASF vaccine development, which was prepared by the STAR-IDAZ IRC secretariat prior to the meeting using information from the gap analyses of the previous GARA workshop. The participants discussed about the different steps to be followed, and the gaps to be filled, to get from the current state of the art to a vaccine (possibly DIVA) for ASF. The 2018 GARA Gap Analysis report is now available on the STAR-IDAZ website. The roadmap is now being finalised and, once validated by the experts, will be published on the STAR-IDAZ IRC website, so as to provide guidance for future research.

The next GARA meeting is planned for Uganda, in September 2020.

Global Foot and mouth disease

systems approach also aims to capture the wider collaborative cross-sector requirements and solutions for global animal disease control and will help combat problems such as antimicrobial resistance (AMR) through implementing strategies such as vaccine development and delivery. Roadmaps are currently being developed for the ‘Priority topics’ agreed by the IRC Executive Committee and are being added to the STAR-IDAZ website as they are completed. This systems approach to developing disease control strategies will be officially launched at an event in Washington DC in December 2018 (see below).

Scientific Committee Meeting Vienna, Austria 31 August 2018

The second Scientific Committee meeting of 2018 was held at the University of Veterinary Medicine Vienna on 31st August. The meeting
Research Alliance (GFRA) workshop in Argentina

A Global Foot and mouth disease Research Alliance (GFRA) scientific workshop was held in Buenos Aires (Argentina) on the 12-14 June 2018. The aim of the meeting was to bring together FMD experts at global level to analyse and discuss the different research gaps and current challenges in relation to the control of the disease on a global scale.

The GFRA is a worldwide association of animal research organisations that are involved in combating foot-and-mouth disease (FMD). It was established in 2003 to bring together experts at a global level to generate and share knowledge, and to develop tools that can better combat the threat of the disease. More than 30 international experts and industry representatives participated in the meeting that was attended by one member of SIRCAH. The information collected at the meeting will be used to update the FMD research gap analysis that was performed by GFRA in 2010. This will serve as a basis for developing the STAR-IDAZ IRC FMD research roadmaps; once validated by the expert group, these will be published on the STAR-IDAZ IRC website.

Antimicrobial Resistance and disease control

STAR-IDAZ IRC in collaboration with the American-based representatives of the UK’s Foreign and Commonwealth Office (FCO) Science and Innovation Network have organised a high-level reception at the British Embassy in Washington to galvanise international political support for a global research initiative on the development of new and improved animal disease control strategies, including vaccines. Following the reception a workshop will be held on ‘A systems approach to research on the development of animal disease control strategies and its contribution to control of AMR’. These events will be held in

Events

UK & International Veterinary Vaccinology Network Conference 2019, 9-10 January 2019, The Tower Hotel London, UK

IRC Scientific Committee meeting 29 January 2019, London UK

IRC Executive Committee Annual meeting week of 11th March 2019 (further details to be confirmed)

African Vaccinology Network Workshop, 19-20 March 2019, Nairobi, Kenya
Washington, DC on 12-13th December 2018. The reception on the evening of 12th December will bring together key political leaders with an interest in agriculture, government officials, leaders of the agriculture and veterinary pharmaceutical industries, and heads of the key research centres. Following a “One Health” theme, talks will cover AMR in Human Health, the Environment and Animal Health. Dame Sally Davies, the UK’s Chief Medical Officer and co-convener of the UN Interagency Coordination Group on AMR, will talk about the global AMR challenge and this will be followed by presentations on the European Action Plan on AMR and the North American launch of the STAR-IDAZ IRC’s systems approach to the development of animal disease control strategies based on integrated research roadmaps designed to focus research effort on the critical gaps. Following the event, the IRC will be holding a one-day workshop on the 13th December bringing together research programme owners across the public and private sectors to discuss how they can engage with the roadmaps and move forward collectively to tackle animal disease in the livestock sectors.

IRC Members

The complete list of members is:
1. Danish National Veterinary Institute (DTU Vet), Denmark
2. National Institute of Agricultural Research (INRA), France
3. French Agency for Food, Environmental and Occupational Health & Safety (ANSES), France
4. Ministry of Health, Italy
5. Ministry of Economic Affairs (MinEZ), The Netherlands
6. National Institute for Agriculture and Food Research and Technology (INIA), Spain
7. Department for the Environment, Food and Rural Affairs (Defra), UK
8. Biotechnology and Biological Science Research Council (BBSRC), UK
9. Regional Consortium; Universiteit Gent (Ghent University), Université de Liège, the Federal Public Service Health, Food Chain Safety and Environment (Unit Contractual Research) and CODA-CERVA (Veterinary and Agrochemical Research Centre)
10. Kimron Veterinary Institute, Israel
11. International Livestock Research Institute (ILRI), Kenya
12. Tanzania Veterinary Laboratory Agency (TVLA), Tanzania
13. National Institute of Animal Health, National Agriculture and Food Research Organisation (NIAH), Japan
14. Agriculture Research Services, United States Department of Agriculture (USDA ARS), USA
15. National Institute of Agriculture Technology (INTA), Argentina
16. Ministry of Science, Technology and Productive Innovation (MINCYT), Argentina
17. Canadian Food Inspection Agency (CFIA), Canada
18. Zoetis
19. OIE-World Organisation for Animal Health
20. Bill and Melinda Gates Foundation (BMGF)
21. HealthforAnimals (Global Animal Medicines Association)
22. Diagnostics for Animals (Manufacturers of Animal Health Diagnostics)
23. European Commission
24. Regional Consortium; Nigerian Animal Health Research Network led by National Veterinary Research Institute Vom
25. National Advisory Council on Animal Health (CONASA) and the National Autonomous University of Mexico (UNAM), Faculty of Veterinary Medicine and Zootechnics (FVMZ)

SIRCAH

SIRCAH, funded by the European Commission through H2020, is run by a partnership including Defra (UK Department for Environment, Food and Rural Affairs), World Organisation for Animal Health (OIE), CAB International, BBSRC (Biotechnology and Biological Sciences Research Council), and AnimalhealthEurope (association representing animal medicines industry in Europe). It provides organisational and communication support to the IRC, facilitates research gap analysis including the provision of literature reviews for working groups, maps funding activities against identified research needs, and helps mobilise resources to address them. The Secretariat also plays an important role in advocacy for the consortium and bringing in new members.

Further Information

For further information about the IRC please visit www.star-idaz.net. Research funding organisations and programme owners interested in joining the IRC or researchers interested in joining the working groups should contact the STAR-IDAZ IRC Project Office: Alex Morrow: Alex.Morrow@Defra.gsi.gov.uk or Luke Dalton: Luke.Dalton@Defra.gsi.gov.uk.

SIRCAH
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