Message from IRC Chair



The IRC continues to do its work despite the limitations imposed by the global pandemic of COVID-19, which has had such a devastating effect on lives, livelihoods, and society. In the absence of face-to-face meetings, we have become familiar with virtual meetings and maintaining contact that way, and in some ways the contact has improved or at least increased. The hopeful signs are that new vaccines will be available within the new year and people will be protected from the virus, and workshops and in-person meetings will be back on the agenda.

One of the effects of the pandemic is to bring to the forefront the importance of research in preventing and controlling disease, and that a range of disciplines are involved – immunology, vaccinology, virology, diagnostics and therapeutics - in generating solutions. Also, important is a One-Health approach, involving veterinary with human medicine, which was

diseases" organised by STAR-IDAZ IRC and CWG-AHW in June. The pandemic has also increased the public appreciation of the importance of research into vaccines and how investment and collaboration

It was also good to see the regional networks for Africa & Middle East, and for the Americas had virtual meetings, and that one for Asia and Pacific will be held on the 16th December. I would also like to give a warm welcome to Maddy Newman of Defra, who has joined the SIRCAH

be continuing his work in coordinating the project. I send my best wishes to colleagues on the International Research Consortium and hope that you and your families stay well. I ask you to consult the roadmaps on our STAR-IDAZ IRC website, and ensure that your current projects have been included. I look forward to the day that we will be able to meet

again in person and drive forward our important agenda to control animal and zoonotic diseases. Best wishes and seasonal greetings

Hong Yin, Director General, Lanzhou Veterinary Research Institute Chair IRC

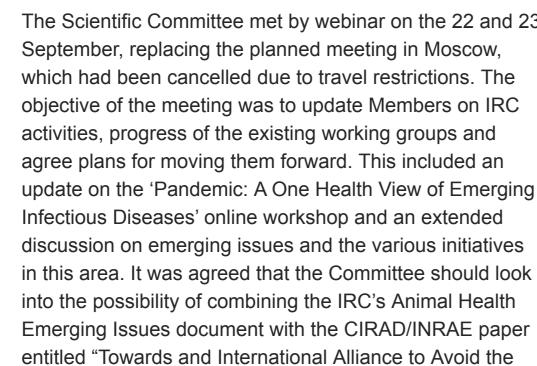


Infectious Diseases of Animals and Zoonoses and its associated International Research Consortium (STAR-IDAZ IRC). The webinar received the support of AnimalhealthEurope, DISCONTOOLS, ERA-NET ICRAD, One Health EJP and APRE, and aimed to investigate the

future animal and zoonotic pandemics. The meeting, moderated by Stefano Messori, of SIRCAH, had five invited talks (given by Ilaria Capua, Linfa Wang, Jean Christophe Audonnet, Mark Woolhouse and Alex Morrow) followed by a roundtable discussion which involved additionally invited speakers (Arjan Stegeman, Utrecht University; Jean Charles Cavitte, European Commission, DG AGRI; Hein Imberechts, Coordinator One Health EJP; Luke O'Neill, Trinity College Dublin, Ireland). The webinar presented the lessons learnt from the COVID-19 pandemic. It discussed how research on animal infectious diseases can contribute to the prevention or control of future human and animal pandemics and how Strategic Research Agendas in animal health can be improved to respond to emerging animal diseases. The event was run on the 30th of June and was structured in two phases: (1) invited talks setting the scene and summarizing the current knowledge and (2) a round table

public research institutions, industry, veterinary services and other government bodies from 53 countries. The report of the meeting summarises the main meeting outcomes, considering both inputs provided by the experts during the invited talks and the round table discussion, as well as from the audience. It outlines identified research needs and policy recommendations for the prevention and control of human and animal pandemics. These can give a new direction to Strategic Research Agendas on animal health and promote collaboration between the different actors. The workshop was recorded and can be viewed <u>here</u>. The full report of the meeting can be seen <u>here</u>.

Scientific Committee meeting 22-23 September The Scientific Committee met by webinar on the 22 and 23 September, replacing the planned meeting in Moscow,



Sanchez-Vizcaino (CISA)

Roadmap developments The <u>STAR-IDAZ website</u> currently has the generic roadmaps on: (1) Development of disease control strategies (2) Development of diagnostic tests (3) Development of therapeutics, and (4) Development of candidate vaccines. There are also roadmaps for the

new position in the summer. Maddy has worked at Defra since October and has a background in biological sciences and sustainable development. She joins us from the Department of Transport where she worked in stakeholder

We welcome a new member of the SIRCAH team, Maddy

Newman (Defra) (Madeline.Newman@defra.gov.uk), who

is taking the place of Luke Dalton who left to take up a

November 2020, and will continue coordinating the SIRCAH project and can be contacted by his new e-mail a.morrow@cabi.org.

Alex Morrow officially retires from Defra at the end of

emerging technologies and how these might be used to improve detection and diagnosis. This will involve a questionnaire followed by a workshop focused on i) defining the requirements of the target technology application, ii) identification of technologies supporting the targeted technology applications and iii) the R&D required to deliver the desired technologies. Members of the Executive and Scientific Committee were contacted asking for names and contact details of suitable people with different expertise to take part in the exercise.

(AMERN)

Africa & Middle East Research Network

Approximately 40 people have been nominated to

demonstrated the broad range of activities going on across the region. These included research projects on AMR, COVID-19, CBPP, FMD and ASF. ILRI also reported that, they had launched a "One Health Research, Education and Outreach Centre for Africa (OHRECA)" at the end of last year. From South Africa, Dr Mulumba reported that a new one health network (https://go.pardot.com/e/732633/2020-12-<u>10/27hmdg/549898649?</u> h=AleOqbJ8I4xkOIDh5iopxAJs4V65EkxbzCL6hIA DGg) had been created. The Members and IRC also thanked David Shamaki for serving as Chair of the Network for the past three years and welcomed Mustapha Oumouna, Algeria, as the new Chair.

https://go.pardot.com/e/732633/10-1111-tbed-13821/27hmdj/549898649? h=AleOqbJ8I4xkOIDh5iopxAJs4V65EkxbzCL6hIA DGq

EU-Funded Projects contributing to the

The following three major EU-funded projects follow the

policies and contribute to the objectives of STAR-IDAZ

or Stefano Messori) on their advisory boards.

IRC. They each have a member of SIRCAH (Alex Morrow

2. AVANT AVANT is a multi-actor inter-sectorial project (funded by European Union's Horizon 2020 research and innovation programme) launched in May 2020, that aims to develop alternatives to antimicrobials that will allow the weaning of healthy piglets while minimising the use of antibiotics. STAR-IDAZ is represented on the advisory board by Alex Morrow. Porcine diarrhoea during weaning is a major indication for antimicrobial use in livestock in Europe. Alternatives to antimicrobials will help combat porcine diarrhoea, reduce the risk of antimicrobial resistance in pigs and result in more productive and cost-efficient

opened the meeting, after which the Work Packages leaders reported on the results obtained since the launch of VACDIVA and presented the roadmap for the next three years.

animal health.

discontools.eu

DISCONTOOLS

Management Plan.

Further details can be found here

DISEASE CONTROL TOOLS

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However, even more gaps still remain. It is of concern that many companies are finding growing barriers to innovation in animal health, resulting in reduced R&D investment

from 10% to 8% of turnover. Also, public sector spending on animal health research tends to decrease globally. Animal health has to compete with many topics and although it is intrinsically linked to many of the pressing societal challenges (e.g. climate change, antimicrobial resistance, animal welfare, prevention and control of pandemics, food security) decision makers need to match the challenges with sufficient research funds. DISCONTOOLS e-book is available <u>here</u>. DISCONTOOLS website is available here

COMBAR – Combatting Anthelmintic Resistance in Ruminants COMBAR, together with the Livestock Helminth Research Alliance (LiHRA)have produced a document listing the key priority research needs in controlling helminths and reducing anthelmintic resistance. The document links to the research roadmaps on the STAR-IDAZ IRC website. The main areas identified are improving diagnostic tools, nematodes and liver fluke, and integrating control practices. The priorities were informed by an initial

resistance in ruminants: from research to recommendations". The meeting is open to all interested, but the deadline for registration is 3 December. Further information via the link below. Research priorities on helminths and anthelmintic resistance are available here. Publication on economic burden of helminth infections and

Information on next COMBAR WG meetings available

here.

The complete list of members is: 4. Ministry of Health, Italy

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), 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

in on 11 March, this meeting was organized to update members on the current status and activities of the Network and to discuss coordination of coronavirus research, vaccine platform development and diagnostics. The update on activities included reports on the 'Pandemic' Webinar workshop, the submission of the paper on the roadmaps to the *Transboundary and* Emerging Diseases journal, and updates to the roadmap system. There was an update on the ICRAD ERA-Net

provided by Kristian Møller: the common call launched earlier in the year covered three topics: improved understanding of epidemic and emerging infectious animal diseases with a focus on ASF and animal influenzas; generic technology platforms for producing novel and/or improved vaccines; and highthroughput rapid, accurate and easy to use in-field detection technologies. Preproposal applications had been assessed and full proposals invited with a closing date of the 5th October. The meeting considered the survey of IRC members relating to their research on coronavirus infections. A common research call was proposed and the mechanisms for running it were discussed. The Coronavirus spreadsheet was to be updated and recirculated. Other issues covered included the use of platform technologies for vaccine development. It was agreed that, with the COVID-19 pandemic, there was a great deal of interest in this approach and that STAR-IDAZ IRC should bring

requirements of the target technology application, identifying technologies supporting the targeted technology applications, and the R&D required to deliver the desired technologies. A further Webinar meeting was scheduled for 13 October. ExCo meeting 13 October 2020 The meeting reviewed the activities of the IRC, its objectives of coordinating research initiatives, and how the components of the IRC (Executive

Committee, Scientific Committee and

Secretariat) are progressing towards

partners would be carried out as part

The STAR-IDAZ IRC vaccine platform

workshop (8 October 2020: for details

see news item below) was reported to

current platforms would form the basis

of an analysis of gaps and research

resource mobilisation that would be

needs. This would then inform the

needed to fill the knowledge gaps.

An update on coronavirus research

the meeting and how a review of

meeting objectives. A survey of

of the review.

together experts to see how best to

promote this area. Also, the proposed

work on diagnostics was looked at -

this includes a questionnaire and

workshop focussed on defining the

was provided and partners were invited to send details of key people researching in this area to Sadhana Sharma. The meeting also discussed the ICRAD ERA-Net, the STAR-IDAZ IRC working group on Alternatives to antibiotics, and emerging issues. In a discussion on the critical knowledge gaps in FMD, ASF, PRRSV, and helminths, partners agreed to submit details of current research activities from their areas to capture project activities.

The next ExCo webinar meeting

would be 19 January 2021.

Technologies Focus Group

Webinar, 8 October 2020

As part of the IRC activity to advance

the work on vaccinology, which is one

Vaccine Platform

of the ICR priorities, a focus group was organised that brought together experts from the IRC Executive Committee, Scientific Committee and others to examine the potential for vaccine platforms to be adopted in the development of new animal vaccines and identify what research is needed to address the current knowledge gaps. The meeting, chaired by Vish Nene (ILRI), heard how the field of vaccine research had been completely changed by the pressure for rapid development and approval of vaccines for SARS-CoV-2, and that there were possible beneficial spin-offs for vaccine development in general. A technology was defined as a platform if an underlying, nearly identical mechanism, device, delivery

vector, or cell line was employed for

multiple target vaccines – noting that

regulatory agencies approve products

not platforms - but procedures may be

less onerous with subsequent

submissions involving the same

platform. The meeting reviewed

currently available platforms and

attenuated vaccines, where the

possibility that the take-up of new

by commercial partners could be

attenuation is by codon de-

an issue.

emerging technologies (such as live-

optimization) and mRNA vaccines. The

technologies to replace existing ones

reduced due to costs was identified as

It was agreed that we would organise a review of existing platforms, the level to which they have been tested and their attributes, for reference when looking for a platform to express antigens, or for looking at potential applications for platforms being developed. Also, that the discussion on platforms should be widened to include other bodies such as the International Veterinary Vaccinology Network, GALVmed, the private sector, regulators, individuals actively engaged in research on the various platforms, the international Association of Biological Standards (IABS), VICH (involves EU, US and Japan working on standardization of standards), Transvac 2, and CEPI. **Antimicrobial Resistance** and Alternatives to **Antibiotics webinars**

A STAR-IDAZ IRC working group (WG)

Antimicrobial resistance and innovative

alternatives to antibiotics (ATA). A gap

workshop had been planned to take

the European Federation of Animal

Science (EAAP) in Porto, Portugal

cancelled, in order to advance the

work of the WG, a series of webinars

were held in early October, focussing

on the "Role of the microbiome in the

"Agents/compounds for their ability to

immunomodulators)" and "Alternatives

pathogen (with focus on phages)". The

workshops explored what research is

required and discussed draft research

roadmaps. It is hoped that a physical

meeting of the working group can take

enhance the hosts' resistance to

to antibiotics acting directly on the

2020. However, when this was

maintenance of health",

disease (with focus on

place in 2021.

place alongside the annual meeting of

from the 31th August to 4th September

analysis and research roadmap

was established in 2019 to look into

Americas Regional meeting A meeting of the Americas Regional Network was held as a webinar on 23rd

October, with representatives from

Guadeloupe, Colombia, Mexico and

organisations in the USA, Cuba,

Trinidad and Tobago, including

CaribVET representatives. The

objective of this meeting was to update the members on recent IRC activities, including the research roadmaps, the 'Pandemic' webinar, ongoing Coronavirus research, DISCONTOOLS and funding opportunities. Country reports highlighted the research priorities and projects of each country, including COVID-19, ASF, rabies and Avian influenza research. The Group also discussed the US Animal Health Action Plan and ongoing research into how future pandemics could be avoided being carried out by the National University of Mexico. **Coronavirus funding** activities Back in April, a survey was conducted among members of STAR-IDAZ IRC and the CWG AHW relating to their current and planned research on coronavirus infections of a range of species, including SARS-CoV-2 infections, and also their interest in a common research call. After an initial

discussion about running it as a 'stand-

alone' initiative, it was decided that it

common call within the ICRAD ERA-

Net. External partners could participate

expected to be launched in the second

The UKRI-BBSRC and Defra will fund

Research and Innovation Network for

Coronaviruses, looking at the virus

subfamily. It will bring together the

major global research and industry

players working on veterinary and

human Coronaviruses to learn from

each other, identify research needs

a One Health approach so will also

consider the social and economic

The pre-announcement for the

4th) is now live on the new **UKRI**

there will be global participation so

other funders would be welcome to

BBSRC and DEFRA will be hosting a

control strategies.

join in.

impact of coronavirus infections and

Coronavirus Network call (opening Jan

'Funding Finder' portal. It is hoped that

and improve collaboration. It will have

should be considered for a second

with their own funding. The call is

the establishment of a Global

half of 2021.

webinar to provide further information and context on this call for all who are interested and eligible to apply. Either Wednesday 2 December 2020 11:00-12:00 GMT or Tuesday 8

December 2020 16:00-17:00 (each

webinar will have the same content).

register for Wednesday 2 Dec 2020

register for Tuesday 8 Dec 2020

African Swine Fever

upon registration, you can:

11:00-12:00 (Zoom)

16:00-17:00 (Zoom).

Webinar joining details will be provided

Meeting that should have been held this year in Kampala, Uganda, was postponed – it will now be on 24-26 August 2021. The GARA Executive Committee will re-open abstract submissions for oral and poster presentations from January 15th, 2021 through February 15th, 2021, (send abstracts to Hayley Harman at GARA@crdfglobal.org and follow

The 2020 GARA (Global African Swine

Fever Research Alliance) Scientific

updates on the **GARA** website).

In the absence of the actual Scientific

stimulating scientific programme was

All the GARA 2020 presentations were

live streamed to **YouTube** and are now

available via this dedicated GARA

(feel free to subscribe for future

individual presentations:

Ståhl

<u>Ståhl</u>

Douglas Gladue

Diagnostic Challenges

Attenuated Vaccines

Subunit Vaccines

Scientific Communications channel

updates) or via the links below to the

Aug 24 Session 1: Chaired by Dr Karl

Aug 24 Session 2: Chaired by Dr Karl

Dr. Dirk Pfeiffer, An Update on the Epidemiological Situation in Asia.

Meeting, a series of webinars was

organised for the 24-25 August. A

put together by Sandra Blome,

Douglas Gladue, and Karl Stahl.

Dr. Michel Dione, An Update on the **Epidemiological Situation in Africa** Dr. Arvo Viltorp, An Update on the **Epidemiological Situation in Europe** Aug 25 Session 3: Chaired by Dr

Dr. Sandra Blome, An Update on

Dr. Manuel Borca, An Update on Live

Dr. Raquel Portugal, An Update on

Dr. Jan Forth, An Update on NGS

USDA, Agricultural **Research Service, National Program 103 Animal** Health 2022-2027. Action Plan USDA ARS, who are IRC partners, have published their national animal health programme and action plan. The goal of National Program 103 (NP

103), Animal Health, is to protect and

ensure the safety of the Nation's

improved disease detection,

applied to solve animal health

problems of high national priority.

and procedures to control animal

and vaccine platforms;

agriculture and food supply through

prevention, and control. Basic and

applied research approaches will be

Emphasis will be given to methods

diseases through the discovery and

development of: Diagnostics; Vaccines

Biotherapeutics; Alternatives to antibiotics; Disease management systems; Disinfectants; Farm Biosecurity measures. The Action plan can be seen <u>here</u>

18. Zoetis 19. OIE-World Organisation for Animal Health Bill and Melinda Gates Foundation (BMGF)

SIRCAH, funded by the European Commission through H2020, is run by a partnership including Defra

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emphasized in the excellent webinar workshop "PANDEMIC! A one health view of emerging infectious

can speed up their delivery. The focus group that the IRC organised in October, on the potential of vaccine platforms, indicated the exciting possibilities of new vaccine technologies, and considered how they could be used to help control animal diseases. It was pleasing to see the publication of the roadmaps paper in Transboundary and emerging Diseases, which brings our work to the attention of the global scientific community. team, and also congratulate Alex on his retirement from Defra. I am very pleased to hear that Alex will

IRC Executive Committee Virtual meetings: "PANDEMIC! A one health view of emerging infectious diseases. What 7 July 2020 veterinary sciences can contribute." Following the first IRC Virtual meeting A global interactive webinar was jointly organised with the

Collaborative Working Group on Animal Health and Welfare Research (CWG-AHW) and the Global Strategic Alliances for the Coordination of Research on the Major role of veterinary sciences in coping with, and preventing,

discussion with experts. Webinar attendees were invited to participate in the round table discussion by responding via an interactive web tool to specific questions. The event

was attended by 506 participants from academic and

objective of the meeting was to update Members on IRC activities, progress of the existing working groups and agree plans for moving them forward. This included an update on the 'Pandemic: A One Health View of Emerging Infectious Diseases' online workshop and an extended

Next Pandemic". From here, it was then proposed that a

meeting be organised with people from the various

initiatives to develop a common approach to address

importance of promoting the roadmaps so that they are

widely and easily accessible, and more likely to be taken

up by the research funders so the research gaps can be

moved forward: i) Mycoplasmas; ii) PRDC, focusing on the

bacterial component rather than influenza and PRRS; and

iii) Mastitis. SIRCAH will review these and bring proposals

filled. Several new working groups were raised to be

It was agreed, that like the Executive Committee, the

The next meeting will be held as a webinar 14th

Scientific Committee will hold two-hour webinars every 3

months while current travel restrictions restrict face-to-face

for discussion at the next meeting.

meetings.

December.

r.taylor@cabi.org

engagement.

participate.

SIRCAH news

emerging issues. The committee also discussed the

following disease topics: Foot-and-mouth disease; African swine fever; Brucellosis; Porcine reproductive and respiratory syndrome; Bovine TB, and Helminth infections. There are currently over 200 research projects added to the roadmap system, and researchers and programme owners can register and include their project details.

If you would like further information on adding information

on current projects please contact Robert Taylor (SIRCAH)

Diagnostics workshop Plans are being developed for an exercise to examine

The Africa and Middle East Regional Network met virtually in September for the first time since the meeting in Abuja, 2017. Representatives from organisations in Algeria, Uganda, Nigeria, South Africa, Kenya, Senegal, Iran, and Israel as well as ILRI, and AU-IBAR and USDA were represented. The Network was updated on IRC activities, including the 'Pandemic: A One Health View of Emerging Infectious Diseases' webinar and a potential Coronavirus common research call. Country reports focused on the

challenges and current research activities, which

Roadmap paper A paper describing the creation and function of the generic roadmaps was published in the prestigious journal Transboundary and Emerging Diseases in September. The lead author was Gary Entrican, Roslin Institute at The University of Edinburgh, Edinburgh, UK, who sits on the IRC Scientific Committee and has been actively involved in the creation of the roadmaps. The paper is open access

Entrican, G.; Charlier, J.; Dalton, J.; Messori, S.; Sharma,

roadmaps for the strategic coordination of global research

into infectious diseases of animals and zoonoses, 2020,

and be accessed through the DOI link below.

S.; Taylor, R.; Morrow, A. Construction of generic

Transboundary and Emerging Diseases, First

published: 08 September 2020

objectives of the IRC

1. DEFEND

Sciensano, Belgium.

3. VACDIVA

project.

DEFEND is a consortium of scientific partners working to control two diseases emerging into Europe and neighbouring countries – African swine fever virus (ASFV) and lumpy skin disease virus (LSDV). STAR-IDAZ is represented on the advisory board by Alex Morrow. The project underwent its first official review at the 18-month point, this involved a detailed interim report for the European Commission, which received positive feedback. The annual consortium meeting was successfully run as a

teleconference on the 16th and 17th September, allowing

collaboration between 40 different partners. The DEFEND

consortium is led by Dr Pip Beard from The Pirbright

Institute, UK, and co-lead by Dr Kris De Clercq from

DEFEND website can be accessed here.

Their most recent newsletter is available <u>here</u>.

farming. AVANT held their annual consortium meeting on 19th and 20th October online as a webinar. AVANT website is available here.

The EU-funded VACDIVA project aims to provide three

domestic pigs that are ready for registration. It will also

validate DIVA (differentiating infected from vaccinated

animals) tests and develop cost-benefit and -effective

offered in a portfolio of services to help animal health

authorities control and eradicate the disease. Stefano

Messori of SIRCAH sits on the advisory board of the

Epidemiological modelling of worldwide scenarios will be

The VACDIVA full consortium meeting was held online on

10 November. The meeting was initially planned to be held

in the Netherlands, but it was held online, organized by

participants from the different work packages, Advisory

catch up on the project's progress and disseminate the

board members and EC representatives who were able to

results. The coordinator, José Manuel Sánchez-Vizcaíno,

Composition, Background materials to be added into the

DISCONTOOLS

Consortium Agreement, and updates on the Data

Horizcience. The event was attended by over 85

surveillance and control-vaccination strategies.

safe and effective pilot vaccines for wild boars and

Finally, the event ended with the General Assembly where all partners had the opportunity to decide (through a polling questionnaire) on changes in the Advisory Board

DISCONTOOLS have published their Disease Sheets in a book entitled 'Disease Control Tools: Gaps and Needs for *Infectious Disease Control in Animals'*. It comprises 53 one-page summaries of disease control tools available as well as those that are needed, or need improving to secure Originally, it was planned to distribute the Disease Sheets during the DISCONTOOLS symposium in Spring 2020 in Brussels, which unfortunately was postponed because of COVID-19. It was decided that dissemination of this information could not wait until the new symposium, so the book was produced and is available for download. In recent years, many new medicines have been marketed in Europe on DISCONTOOLS listed gaps and diseases.

Helminth infection **Key priority** control in research needs August 2020 farmed ruminants

improving therapeutic responses, developing vaccines for assessment of the economic burden of major helminth infections in Europe, published in Preventive Veterinary Medicine: (Charlier, J. (et. al.) July 2020, Preventive Veterinary Medicine 182:105103 DOI: 10.1016/j.prevetmed.2020.105103.) The next annual COMBAR meeting will take place virtually on 9-10 December under the theme: "Anthelmintic

Further information can be found here. **IRC Members**

21. HealthforAnimals (Global Animal Medicines Association) 22. Diagnostics for Animals (Manufacturers of Animal Health Diagnostics) 23. European Commission Institute Vom

> 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

(UK Department for Environment, Food and Rural Affairs), World Organisation for Animal Health (OIE),

The Secretariat for the STAR-IDAZ IRC (SIRCAH) is funded from the European Union's Horizon 2020 research and innovation

rogramme under grant agreement No 727494

Robert Taylor (CABI) – r.taylor@cabi.org Madeline Newman (DEFRA) - madeline.newman@Defra.gov.uk

SIRCAH

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AR in Europe available <u>here</u>.

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 5. Ministry of Agriculture, Nature and Food Quality, 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

24. Regional Consortium; Nigerian Animal Health Research Network led by National Veterinary Research 25. National Advisory Council on Animal Health (CONASA) and the National Autonomous University of Mexico (UNAM), Faculty of Veterinary Medicine and Zootechnics (FVMZ) 26. Australian Animal Health Laboratory, CSIRO, Australia 27. Lanzhou Veterinary Research Institute (LVRI), China. 28. National Veterinary Institute of Sweden (SVA), Sweden SIRCAH

should contact the STAR-IDAZ IRC Project Office: Alex Morrow: A.Morrow@cabi.org Alex Morrow (Coordinator) - a.morrow@cabi.org Stefano Messori (OIE) – s.messori@oie.int Johannes Charlier (AnimalhealthEurope) j.charlier@animalhealtheurope.eu Sadhana Sharma (BBSRC) - sadhana.sharma@bbsrc.ac.uk