

GARA NEWSLETTER

This newsletter contains relevant information about ASF for organizations, scientists, veterinarians and stakeholders.



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[GARA Website](#)

[GARA 2021 Scientific Meeting](#)

[GARA 2020 Webinar Registration](#)



Message from Cyril Gay



Senior National Program Leader, Animal Production and Protection, Agricultural Research Service (ARS), United States Department of Agriculture (USDA), Beltsville, Maryland, United States of America.

Although African swine fever (ASF) has historically been confined to the continent of Africa, the risk of introductions into ASF-free countries has never been greater. ASF has now spread to more than 25 countries since the first report of an outbreak in the Caucasus region in 2007, reaching the People's Republic of China in 2018. The situation in ASF-infected countries has not improved, increasing the risk that ASF will continue to spread to other countries, resulting in devastating economic impacts on farmers worldwide. Clearly, there is a need for additional scientific information and tools to control ASF.

The Global African Swine Fever Research Alliance (GARA) was launched in April 2013, at the Plum Island Animal Disease Center, in response to the continued threat posed by ASF to pig farmers worldwide. The aim of GARA is to establish and sustain global research partnerships that will generate scientific knowledge and tools to contribute to the successful prevention, control, and, where feasible, eradication of ASF.

This objective can be achieved through six strategic goals:

- Goal 1: Identify research opportunities and facilitate collaborations within the Alliance
- Goal 2: Conduct strategic and multidisciplinary research to better understand ASF
- Goal 3: Determine the social and economic drivers and impacts of ASF
- Goal 4: Develop novel and improved tools to support the prevention and control of ASF
- Goal 5: Determine the impact of ASF prevention and control tools
- Goal 6: Serve as a communication and technology-sharing gateway for the global ASF research community and stakeholders.

Today, GARA consists of 38 partner research institutions working together to fight the threat of ASF. The Alliance maintains the [GARA website](#) to facilitate communication and provide technical information. One of GARA's most important initiatives is the series of biennial ASF Gap Analysis workshops it organises; for example, an ASF Gap Analysis Workshop in Sardinia, Italy, April 2018.

The [report](#) from this workshop was instrumental in setting the research agenda and activities of the Alliance. Importantly, this report also provides information on the gaps in the scientific information and tools available for controlling ASF, as well as a list of research priorities for addressing those gaps. This information is critical in guiding stakeholders and funding agencies, and in the establishment of strategic research collaborations within GARA. Examples of important stakeholders who are supporting the work of GARA include the International Research Consortium on Animal Health ([STAR-IDAIZ IRC](#)) and the International Development Research Centre ([IDRC](#)).

As ASF continues to spread around the world we must not forget that the origin of this devastating animal disease is Africa, where the ASF virus continues to evolve in complex ecological settings. Today, the focus seems to be primarily on the Georgia 2007 ASF virus strain, which is still spreading across Asia. However, could another strain with different characteristics once again escape from Africa? This will be a key topic at the next GARA scientific meeting on 25–27 August 2021.

Upcoming GARA Events



The 2020 GARA Scientific Meeting was originally scheduled to take place in April 2020 in Kampala, Uganda. Facing the unexpected COVID-19 pandemic, we announced the rescheduling of the GARA 2020 Meeting for August in the hope that the situation would be better under control and allow us to convene together in Kampala this year.

Unfortunately, this is not the case. The scenario worldwide is different: while some European countries are coming slowly back to pre-pandemic activity, countries in other parts of the world are seeing an increasing number of positive COVID19 cases. Given these circumstances and the logistical difficulty of traveling abroad during a global pandemic, the GARA Scientific Meeting will be additionally postponed until August 2021.

For more information about GARA 2021 Scientific Meeting, please click [here](#).

To maintain momentum within the GARA community until the 2021 meeting, Keynote speakers from the postponed 2020 meeting will give their addresses via Zoom in August this year. Participants may attend these webinars live free of charge, or watch the recorded sessions retrospectively through the GARA website.



August 24th, 2020

Prof. Dirk Pfeiffer, **An Update on the Epidemiological Situation in Asia** – 9:00-10:00 AM CET

Dr. Michel Dione, **An Update on the Epidemiological Situation in Africa** – 2:45-3:15 PM CET

Prof. Arvo Viltorp, **An Update on the Epidemiological Situation in Europe** – 3:30-4:00 PM CET

August 25th, 2020

Dr. Sandra Blome, **An Update on Diagnostic Challenges** – 2:00-2:30 PM CET

Dr. Manuel Borca, **An Update on Live Attenuated Vaccines** – 2:45-3:15 PM CET

Dr. Raquel Portugal, **An Update on Subunit Vaccines** – 3:30-4:00 PM CET

Dr. Jan Forth, **An Update on NGS** – 4:15-4:45 PM CET

[Click here to register](#)

Meet our speakers



Prof. Dirk Pfeiffer

Chow Tak Fung Chair Professor of One Health at City University of Hong Kong, PR China and Professor of Veterinary Epidemiology at Royal Veterinary College, London, UK Adjunct Professor at China Animal Health and Epidemiology Centre, Qingdao, PR China

Dirk Pfeiffer graduated in Veterinary Medicine at the Justus-Liebig University, Giessen, Germany in 1984. This was followed by postgraduate research towards a Dr.med.vet degree at the same university. He obtained a PhD from Massey University, New Zealand, in 1994, where he also worked as an academic for 9 years. Since 1999, he has been holding the Chair in Veterinary Epidemiology at the Royal Veterinary College (RVC), London, UK. In 2016, Dirk joined City University of Hong Kong as Chair Professor of One Health, while still maintaining a 20% appointment at RVC. Dirk has been involved in epidemiological research since 1985 working in many developing as well as developed countries around the world. Dirk has worked extensively at the science-policy interface through advisory roles for the European Union, the United Nations FAO, the World Organisation for Animal Health (OIE) and several national governments. Dirk has co-authored 331 peer-reviewed publications associated with an Scopus h-index of 51 (as of August 2020). He has conducted research on zoonotic diseases such as bovine tuberculosis, Rift Valley fever and avian influenza as well as non-zoonotic diseases such as African swine fever.



Dr. Michel Dione

Veterinarian Epidemiologist at the International Livestock Research Institute



Michel Dione is a veterinarian epidemiologist at the International Livestock Research Institute. Dione's main research areas covers epidemiology of transboundary diseases of livestock such as ASF and PPR in East and West Africa. He is also involved in designing and evaluating pilot interventions based on a package of technical and organizational strategies to improve herd health; and testing models for delivery of livestock health inputs such as vaccines and diagnostics. Dione spent many years studying the dynamics of ASF in smallholders pig production settings in East Africa (esp. Uganda); thus, linking epidemiology, pig value chains, socio-economic dimensions to control; and exploring incentive for biosecurity uptake by value chains actors.

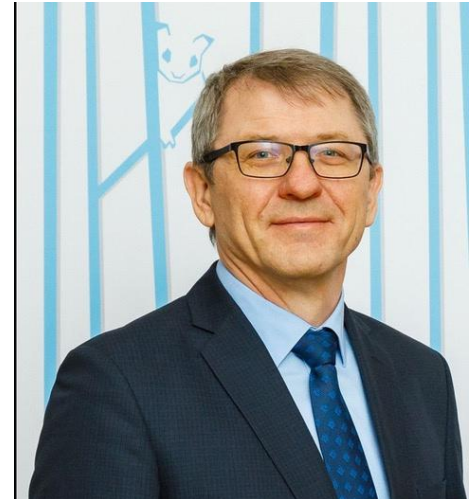
Meet our speakers



Prof. Arvo Viltrop

Chair professor of veterinary bio- and population medicine at the Estonian University of Life Sciences

Arvo Viltrop is a chair professor of veterinary bio- and population medicine of the Estonian University of Life Sciences. He defended his degree of Doctor of Science in 2002 on epidemiology of Bovine viral diarrhoea. He has been involved in research on epidemiology of various infections including honeybee, animal and human pathogens. Since 2014, after incursion of African swine fever to Estonia, ASF has become his main research topic particularly environmental factors favouring the indirect transmission of the virus, epidemiology of the infection in wild boar and domestic pigs. He is a member of the EFSA Scientific Panel on Animal Health and Welfare since July 2018.



Dr. Sandra Blomme

Head of the German National Reference Laboratory for ASF and CSF at the Friedrich-Loeffler-Institut



Sandra Blome studied veterinary medicine at the University of Leipzig, Germany, and has a doctorate degree in veterinary medicine. Since 2008 she is senior scientist at the Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health (FLI), Germany, and responsible for the national reference laboratories for classical and African swine fever. Sandra Blome has long-term experience in working with transboundary viruses under high containment conditions up to BSL 3+ including animal experiments. She is deputy head of the Institute of Diagnostic Virology since 2015. Her research focuses on studies on pathogenesis of viral infectious diseases with particular emphasis on virus-host interaction and diagnostics/vaccine development.

Dr. Raquel Portugal

Pirbright Institute

Raquel Portugal finished her PhD in 2008 on modulation of apoptosis by ASFV and has worked in Portugal (FMV-UTL) and Germany (FLI) on different areas of ASF research, namely methods for ASFV recombinant virus selection, genome sequencing, IFN signalling and viral gene expression. In 2017 she joined the Pirbright Institute as a postdoctoral scientist in the ASFV group where she has been involved in the development of a vectored vaccine for ASFV.



Meet our speakers



Dr. Manuel Borca

Lead scientist at the Foreign Animal Disease Unit at Plum Island Animal Disease Center in New York

Manuel Borca works for the Agricultural Research Service of the Department of Agriculture as the lead scientist at the Foreign Animal Disease Unit at Plum Island Animal Disease Center in New York. He received the Dr. Daniel E. Salmon Award, an annual honor for outstanding contributions and service by federal veterinarians. Dr. Borca is an international leader in veterinary virology and expert in infectious animal disease. His research on African swine fever and classical swine fever in particular has influenced animal health researchers and helped others develop disease controls. Dr. Borca's team has developed vaccine-candidate virus strains for each, creating the African swine fever strains through technology he and other scientists developed to modify genetics of the viruses. Dr. Borca's current projects include efforts to control and eradicate foreign diseases of swine, support global control and eradication of the foot-and-mouth disease virus, and develop vaccines against swine diseases.



Dr. Jan Hendrick Forth

Scientist (PostDoc) at the Friedrich-Loeffler-Institut, Institute of Diagnostic Virology, National Reference Laboratory for African swine fever virus



Jan Hendrik Forth is a biologist by profession. He studied at the University of Greifswald with the focus on microbiology, virology and genetics. Jan Hendrik Forth joined the FLI in 2014 for his Master's thesis on methods for non-invasive sampling and diagnostics for notifiable animal diseases. In 2015, he enrolled in the FLI's internal ASFV research project working mainly on topics related to vector biology and evolution of African swine fever virus. In 2018, he received his doctorate from the University of Greifswald with the title: "African Swine Fever Virus – Exploring Virus Evolution and Vector Dynamics". Since 2018, Jan Hendrik Forth works as a Postdoc at the German National Reference Laboratory for African swine fever virus at the FLI focusing on viral genomics and evolution using next generation sequencing and the interaction of ASFV and its natural soft tick host.

GARA partners help in the fight against Covid-19:



Throughout the pandemic many of our partners have been contributing to the fight against Covid-19. Below is a summary of what some of them have been doing:

Vaccine development, treatment, and diagnostics of Covid-19:

- Researchers at the SVA (Sweden) are performing diagnostics of Covid-19, as well as working on developing both a vaccine for COVID-19 and antiviral drugs to help fight the disease.
- In the Netherlands, scientists from Utrecht University and The Institute for Translational Vaccinology, together with scientists at the Wageningen Bioveterinary Research (WBVR) facility are working on a safe and efficient intranasal vaccine. In addition to this, the WBVR is using its expertise to diagnose Covid-19, develop and test vaccines as well as collaborate and share knowledge to assist in the fight against Covid-19.
- The Pirbright Institute is lending both its diagnostic expertise and equipment to aid in testing for COVID-19 in the UK. In addition to supplying high-throughput testing equipment to the UK's National Coronavirus Testing Centre, more than 60 of Pirbright's diagnostic staff have volunteered to assist in the UK's testing efforts. The institute is also assisting in the development of a vaccine for COVID-19, with the first vaccine trial in pigs already underway.
- In collaboration with Francis Crick Institute, Simon Priestnall from the RVC has contributed to research showing that a protein hoped to be used as a treatment for Covid-19, can interfere with the repair of lung tissue.
- The IGC is coordinating a study to monitor 1000 healthcare professionals from the West Lisbon Hospital Center to determine if they have been exposed and infected with SARS-CoV-2 virus.
- ANSES is providing protective equipment and is supporting research programmes on Covid-19, lending their expertise on diagnostic kits.



Understanding and tracing the transmission of Covid-19:

- Along with teams from Belgium, the UK and France, CIRAD is coordinating the European H2020 project "MOOD" which will model the transmission of Covid-19.
- The FLI institute (Germany) is testing the susceptibility of farm animals to COVID-19.
- UC Davis School of Veterinary Medicine (USA) has launched a tracking application that can track positive cases at the country, state, and county level.

GARA partners help in the fight against Covid-19:



Research into origin and evolution of Covid-19:

- CIRAD is coordinating the international ZooCov project which will develop an early detection system for disease transmission between wild animals and humans. In addition to the ZooCov project, the same scientists at CIRAD are also collaborating with the University of Caen and the IRD, to establish the DisCoVer project which aims to focus on the natural history of SARS-CoV-2 in Laos and Thailand. In addition to this, and in collaboration with the University of Zimbabwe, CIRAD has also launched a new project to assess the prevalence and diversity of Coronavirus in two colonies of mirco-bats in Zimbabwe. This project will look at better understanding the interactions between humans, livestock, and wildlife in Zimbabwe.
- The Animal Health Research Center (IRTA-CReSA) of the Institute for Agri-Food Technology and Research (IRTA) has partnered with the National Laboratory of Galveston and the University of Texas Medical Center of the United States of America to determine the evolution of the disease and understand where it originated from. Their previous experience with another coronavirus, MERS, is enabling them to assist in the search for an effective vaccine.



Early warning systems for zoonotic pathogens:

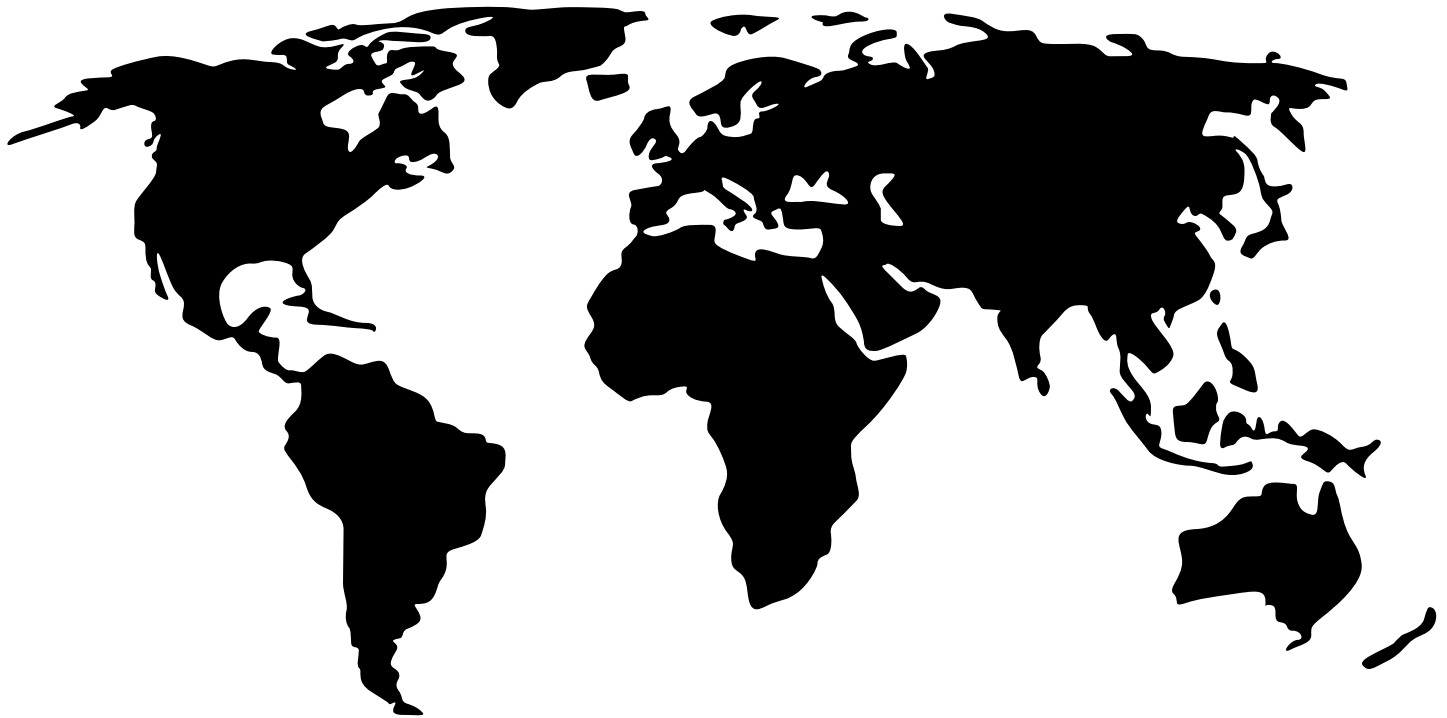
- Within the One Health Poultry Hub, two experts from the RVC are working with other scientists, medics, and vets to guide future responses to emerging zoonotic diseases.

Covid-19 and Food security:

- The FAO is working on mitigating the disease's impact on food security, understanding the spread and origin of the disease, and working towards a One Health approach.
- The ARC (South Africa) is also working hard to ensure food security and supply food to poor and vulnerable people during the pandemic.



15th Update on African Swine Fever activities at FAO



GLOBAL

- From now on, these updates will be posted online in the news section of the Global ASF Research Alliance (GARA) as they become available so that they become accessible to everyone, not just those in this distribution list.
- The GF-TADs global initiative to control ASF has been published online. To mark the occasion, FAO and OIE have issued a joint press release (in all six UN languages).
- The GARA 2020 Scientific Meeting in Kampala, Uganda has been postponed from August 25-27, 2020 to August 24-26th, 2021. The call for abstracts for will re-open on 15 January 2021. In the meantime, keynote speakers from the postponed 2020 meeting will give their addresses via Zoom on 24-25 August this year.
- The newly released FAO Food Chain Crisis Early Warning Bulletin No. 36 covers the threats expected to occur in the world in July-September 2020, including ASF.

AMERICAS

- On June 2020, FAO applied a diagnostic survey to compile background information about preparedness and risk management for ASF as part of the implementation of an emergency project on ASF preparedness in Latin America and the Caribbean. Meetings are being held individually with countries to identify gaps and organize future actions.
- FAO is preparing an online course on good practices for emergency management (GEMP) to be launched for the countries of Central America in September 2020.



15th Update on African Swine Fever activities at FAO



EUROPE

- FAO is running a 4-week online course on ASF preparedness in Serbian in the Balkans. The course started on 20 July with the participation of 350 veterinarians from Bosnia and Herzegovina, Bulgaria, Croatia, Kosovo*, Montenegro, North Macedonia, and Serbia.
- A Regional Meeting on ASF for the Balkans took place via Zoom on 30 June with the participation of neighbouring affected countries as well. It was an opportunity for countries to share the disease situation, for FAO to update on past and upcoming project activities, and for the EU to present on a new project on “Action on Animal Disease Eradication in the Western Balkans”. It is expected to be repeated again after the Summer.
- The 15th meeting of the Standing Groups of Experts on ASF in Europe took place with the participation of 31 countries of Europe on 6 May 2020 via zoom instead of face-to-face due to the COVID-19 situation.
- An update on the FAO activities on ASF in the Balkans, including past and upcoming assessment missions, simulation exercises, trainings and more.



ASIA

- Virtual regional Training of Trainers on ASF detection organized by FAO RAP by engaging animal health officials from Cambodia, Myanmar, Viet Nam and Regional FETPV (22 June – 2 July 2020).
- Online course on ASF preparedness for Asia was successfully finished with 490 participants from 27 countries in Asia and Pacific Region with a dozen tutors (May-June 2020).
- Online meeting with CVO Papua New Guinea, NAQIA, FAO HQs, FAO Regional Office for Asia and Pacific (RAP) and FAO Papua New Guinea and Development Partners was held on 16 June to update on epidemiological situation and control measures, as well as to discuss support to ASF response.

