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PIG PROGRESS

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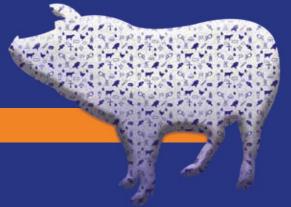


For further information please contact: Henke-Sass, Wolf GmbH \cdot Keltenstrasse 1 \cdot 78532 Tuttlingen \cdot Germany \cdot www.henkesasswolf.de \cdot info@henkesasswolf.de



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WELCOME TO UTRECHT, THE NETHERLANDS!

On behalf of the 11th European Symposium of Porcine Health Management (ESPHM) organising committee, I am thrilled to welcome you to the Netherlands from 22 to 24 May 2019 in the city of Utrecht.

The ESPHM 2019 is a collaboration of the European College and the European Association of Porcine Health Management (ECPHM and EAPHM) and the local Dutch organising committee. The idea of hosting the 11th ESPHM in the Netherlands in 2019 originated within GD Animal Health, a leading organisation in Animal Health and Animal Production in the Netherlands, founded in 1919 so indeed exactly a century ago. Furthermore, within the organising committee the Dutch porcine veterinary community with leading institutes like Utrecht and Wageningen Universities, main industrial partners and especially the veterinary practitioners, is very well represented.

The Netherlands is a prominent European country when it comes to pig production and porcine health management. Our relatively small country is densely populated with on one hand livestock and on the other hand critical, empowered consumers. Hence we are dealing with many challenges when it comes to animal care, environmental and welfare issues and the necessary technical innovations to be prepared for a sustainable future of the European pig producing sector. So after ten consecutive increasingly successful ESPHM meetings it is about time the Netherlands is hosting the 11th version of the European Symposium.

Utrecht is a vibrant city of knowledge with young, brainy residents, a thriving creative sector and attractive business locations, just 30 minutes from Amsterdam Schiphol Airport and at the junction of the country's key motorways and railway lines. Furthermore, Utrecht is also the home town of one of the oldest universities of the Netherlands, founded 1636, and the only faculty of veterinary medicine of the country with the largest academic veterinary hospital in Europe. The congress centre of the 11th ESPHM is Tivoli-Vredenburg, the exciting brand new concert and congress venue right in the city centre, next to the central railway station, close to hotels and within walking distance of all the historic highlights of Utrecht.

We wish you a very pleasant stay and a fruitful congress. Welcome to the Netherlands!

Theo M.J. Geudeke, President of the 11th ESPHM

COMMITTEES

LOCAL ORGANIZING COMMITTEE

- Theo Geudeke (Chair)
- Alex Eggen
- Hetty Schreurs
- Arjan Stegeman
- Tineke van de Veerdonk
- Peter van der Wolf

BOARD OF THE EAPHM

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- Kazimierz Tarasiuk Ordinary Board Member

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- Tania Susmelj Secretary, based at MV Congressi in Parma, Italy

BOARD OF THE ECPHM

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THE ECPHM IS SUPPORTED BY

• Tania Susmelj - Secretary, based at MV Congressi in Parma, Italy

ECPHM

THE EUROPEAN COLLEGE OF PORCINE HEALTH MANAGEMENT LTD.



www.ECPHM.org

The ECPHM is a non-profit organization within the European Board of Veterinary Specialization (EBVS). EBVS recognizes new speciality Colleges and maintain a register of European veterinary specialists (Diplomates); moreover, EBVS encourage and promote the enhanced utilization and availability of speciality services to the public and the veterinary profession. Therefore, the ECPHM is the College that works for the advance of health oriented porcine production management in the herd context in Europe and the increase of the competency of those who practice in this field. Major objectives of the ECPHM include:

- Establishing guidelines and standards of training for postgraduate education and experience prerequisite to become a specialist in the speciality of porcine health management.
- Examining and authenticating veterinarians as specialists in porcine herd health management to serve health and welfare of the animals, the economic outcome of the herd, and the production of safe quality product for consumers in a sustainable animal production by providing expert care for pigs.
- Encouraging research and other contributions to the science and practice of porcine herd health management including husbandry, reproduction, epidemiology, pathogenesis, diagnosis, therapy, prevention, and control of diseases directly or indirectly affecting pigs and the maintenance of healthy and productive pig herds. Porcine health management also includes the impact on quality and safety of pork and gives special consideration to herd health and production, production systems and targets and the management of pig populations.
- Promoting communication and dissemination of knowledge.

The ECPHM is organized through different bodies that take care of the different activities performed:

- Board: represent the College and it is its main government body
- Education Committee: educational issues for the residents, including organization of the pre-symposium workshop and the summer school.
- Examination Committee: exam preparation and examination of residents.
- Credentials Committee: review and approve the candidacy of applicants to sit the exam, to set a new residency program, and re-accreditation of the diplomates.
- Nominations Committee: receive and manage the proposals for nominates at the different committees and board.

EAPHM

THE EUROPEAN ASSOCIATION OF PORCINE HEALTH MANAGEMENT



www.EAPHM.org info@eaphm.org

The EAPHM is a non-profit organization and aims at joining all veterinarians dedicated to swine health and production including other professionals and industry staff members with an interest in pork production.

The EAPHM is representing all veterinary professionals in the field of porcine health management. This includes that all members of the European College of Porcine Health Management (Diplomates and Residents of the ECPHM) are automatically a member of the EAPHM. The EAPHM is also closely connected to the Federation of Veterinarians in Europe (FVE). The FVE is offering secretarial services and physical accommodation to the EAPHM in Brussels, Belgium.

The association was founded in 2010. Although still young the EAPHM is very active and this is reflected in the steadily increasing number members. The EAPHM would like to accommodate all practitioners, as well as veterinarians in the industry, irrespective whether they are members of the ECPHM or not, that work with pig health and/or production in Europe (full members category) but also all related non-veterinary academics (affiliated member category) and veterinarians not residing in the EU (associate member category). Please consult the website for membership category details.

The association is a meeting point for industry professionals, promoting and facilitating contracts between them, regardless of country of origin and is collaborating with other organizations, both veterinary and agricultural. Among the objectives of the EAPHM, the most important is to represent veterinarians and other professionals working in the pig sector in the various legislative committees and executives in Europe. Moreover, the EAPHM plays an important role in the continuous postgraduate education of swine practitioners. Therefore, the association is publishing clinical cases written by Residents of the EXPHM. In addition, the association is responsible for publishing all the material presented at the annual European Symposium of Porcine Health Management (ESPHM) on its website. By doing so, the members of the EAPHM have continuous access to the posters and oral presentations of every ESPHM. The bi-monthly EAPHM newsletter keeps the members informed on actual topics.

Becoming a member is easy, just visit the website www.eaphm.org and sign up for a membership. The annual fee is worth every Euro, when you look to the benefit of being an "EAPHM member".

Visit the EAPHM booth at the ESPHM2019 and JOIN THE EAPHM TODAY!

ESPHM

EUROPEAN SYMPOSIUM OF PORCINE HEALTH MANAGEMENT



Website: changing from year to year; this time www.esphm2019.org

The first ESPHM was organized by the EXPHM in 2009 in Copenhagen (Denmark). Subsequent meetings were organized in Hannover (Germany) and Helsinki (Finland). After the creation of the European Association of Porcine Health Management (EAPHM) in 2010, the following symposia were organized in a three-party fashion, involving the EAPHM, the ECPHM and the local organizers.

ESPHM 2009	Copenhagen (Denmark)	ESPHM 2014	Sorrento (Italy)
ESPHM 2010	Hannover (Germany)	ESPHM 2015	Nantes (France)
ESPHM 2011	Helsinki (Finland)	ESPHM 2016	Dublin (Ireland)
ESPHM 2012	Bruges (Belgium)	ESPHM 2017	Prague (Czech Republic)
ESPHM 2013	Edinburgh (United Kingdom)	ESPHM 2018	Barcelona (Spain)

By means of this organizational formula, the ESPHM has been held so far in various European Countries. The 11th edition will be held in in 2019 in Utrecht (The Netherlands).

The ESPHM in the expression of a long-standing need at a European level. The lack of a continental swine veterinarian congress like in North-America (American Association of Swine Veterinarians Annual Meeting) and Asia (Asian Pig Veterinary Society), prompted first the EXPHM and then the EAPHM to organize a yearly meeting devoted to all subjects of porcine health management. The symposium philosophy consist of mounting a sound program, with cutting-edge scientific-technical knowledge, practically oriented, which is able to catch the attention of swine veterinarians all over Europe, but with full international vocation. The symposium's content includes invited lectures, initiating always with the state-of-art swine production in the organizing country, as well as oral communications and posters.

Importantly, the ESPHM is an excellent platform for introducing the ECPHM Residents into the scientific world, by presenting their studies (Resident oral communication sessions) and participating in the College activities organized around the symposium (e.g., Resident workshop, farm visits). In addition, the ESPHM must serve as a vehicle for potentiating networking among pig veterinary professionals all around Europe, and emphasize the global character of a borderless profession. Also, Annual General Meetings of both EAPHM and ECPHM are organized within the program of the symposium, and facilitate that the critical masses of both organizations can join together once a year.

PORCINE HEALTH MANAGEMENT



www.porcinehealthmanagement.biomedcentral.com

Porcine Health Management (PHM) is an open access peer-reviewed journal that aims to publish relevant, novel and revised information regarding all aspects of swine health medicine and production. The journal provides a venue for global research on swine health and production, including infectious and non-infectious diseases, reproduction, epidemiology, management, economics, genetics, housing, nutrition, animal welfare and ethics, legislation, food safety, drugs and surgery. This journal is aiming at readers, and attracting authors, with different levels of experience; Diplomates and Residents of the ECPHM and other colleges as well as PhD students and experienced researchers from outside! Anticipated articles include: original research, reviews, short communications, case reports, case-studies and commentaries.

The Editors-in-Chief are Dominiek Maes (University of Ghent, Belgium) and Joaquim Segalés (Universitat Autònoma de Barcelona and CReSA-IRTA, Spain). PHM has been published articles since 2015 and it is now indexed in different databases, including the MedLine (PubMed). Please use the online submission system to submit your manuscript. For all enquiries about the journal, technical issues, payment of article processing chargers (APCs), etc. please contact: porcinehealthmanagement@biomedcentral.com.

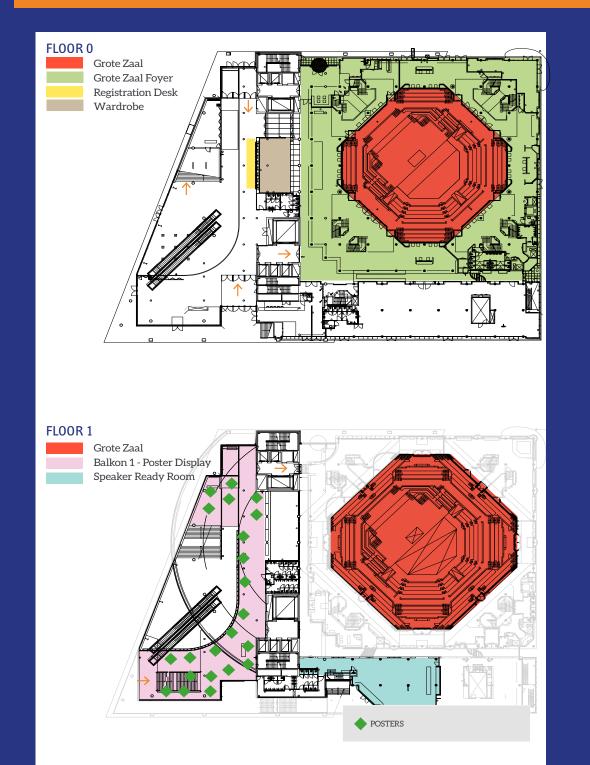
There are many reasons to publish in PHM:

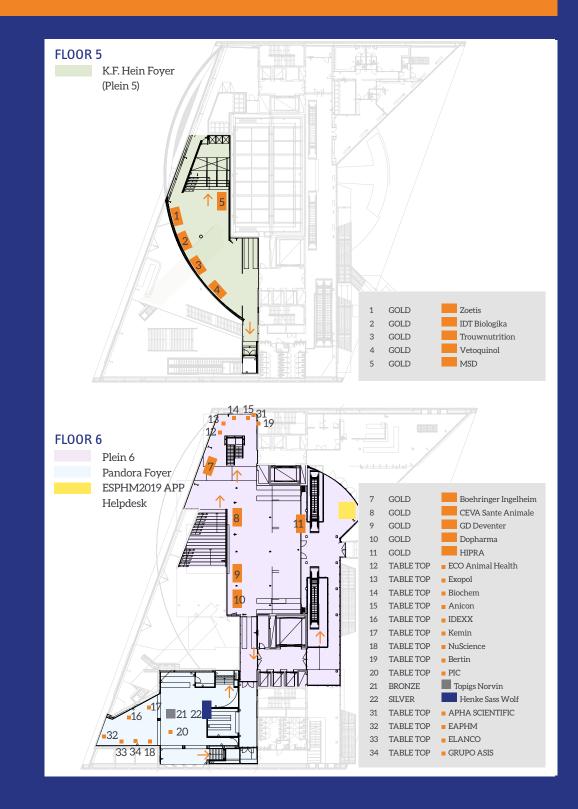
- High visibility / PHM's open access policy allows maximum visibility of articles published in the journal as they are available to wide, global audience.
- Speed of publication / PHM offers a fast publication schedule whilst maintaining rigorous peer reviews.
- Flexibility / Online publication in PHM gives authors the opportunity to publish large datasets, large numbers of color illustrations and moving pictures, etc.
- Promotion and press coverage / Articles published in PHM are included in article alerts and regular email updates.
- Copyright / Authors of articles published in PHM retain the copyright of their articles and are free to reproduce and disseminate their work.

PROGRAMME AT A GLANCE

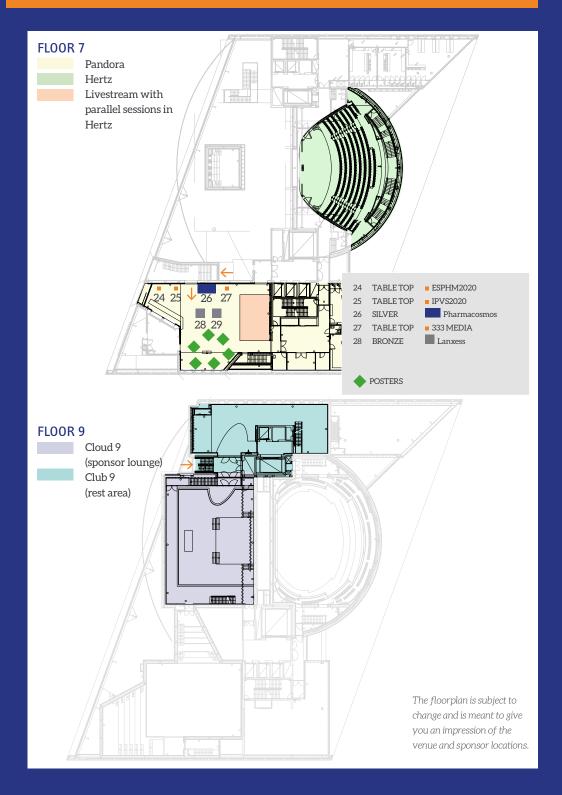
WEDNESDAY MAY 22 ND		THURSDAY MAY 23RD		FRIDAY MAY 24 [™]	
		08h00	Registration	08h00	Registration
		08h30 - 10h00	Keynote Sessions	08h30 - 10h00	Keynote Sessions
		10h00 - 10h30	Coffee Break and Poster Viewing	10h00 - 10h30	Coffee Break and Poster Viewing
		10h30 - 12h30	Parallel Sessions	10h30 - 12h30	Parallel Sessions
11h00	Registration and Poster Display	12h30 - 13h30	Lunch break and poster viewing	12h30 - 13h00	Closing Ceremony
13h00 - 13h30	Welcome and Opening	13h30 - 15h00	Keynote Sessions		
13h30 - 15h00	Keynote Sessions	15h00 - 15h20	EAPHM Peter Høgedal Award and JPHM presentation		
15h00 - 15h30	Coffee Break and Poster Viewing	15h20 - 16h20	Parallel sessions		
15h30 - 17h30	Parallel Sessions	16h20 - 16h40	Coffee Break and Poster Viewing		
17h40 - 18h40	ECPHM – Annual General Meeting	16h40 - 18h00	Parallel Sessions		
18h00 - 19h30	Welcome Reception	18h10 - 19h10	EAPHM – Annual General Meeting		
20h00 - 23h00	Pub Crawl	20h00 - 23h00	Symposium Farewell Dinner		

FLOOR PLANS





FLOOR PLANS



KEYNOTE LECTURES

JOHN BEREZOWSKI



✓ Wednesday May 22, 2019 / 13h30 – 14h00 [®] Grote Zaal
 "Big data in pig epidemiology"

John Berezowski is a Canadian born veterinarian who spent 18 years in food animal practice before completing his PhD in veterinary epidemiology in 2003. He then spent 8 years as a practicing epidemiologist in Canada where he focused much of his work on developing projects and programs aimed at creating information about livestock health, production and welfare for a variety of stakeholders. He currently works at the University of Bern in Switzerland where his research focus is on surveillance systems, big data and other methods for creating information that support decision-making by a wide variety of stakeholders in livestock production systems.



DANIEL BERCKMANS Wednesday May 22, 2019 / 14h00 - 14h30 Grote Zaal "Smart data in health management"

Daniel Berckmans has a Master Degree and a Ph.D. in Bio-Science Engineering from the Katholieke Universiteit Leuven in Belgium. As full professor he headed for 25 years the Division M3-BIORES (Measure, Model and Manage Bioresponses), Department of Biosystems, Faculty of Bioscience Engineering at the Katholieke Universiteit Leuven. The main field of research consists of real time signal analysis of humans and animals, by using technology like wearables, cameras and microphones. The focus lies on the development of real time wearable algorithms to monitor and improve the life of individuals.

During the last 20 years, the research group permanently counted 25-30 researchers who prepare a Ph.D. Daniel is considered as the spiritual father of the concept of Precision Livestock Farming and the team is recognised as a worldwide leading team in this field that has become important in the whole world. He initiated the first European Masters in Human Health Engineering (technology for healthy people), organised by four collaborating faculties at KU Leuven. Today half of the research team is working on animal applications (health monitoring, welfare monitoring, etc.) and half on human applications like intensive care unit, stress monitoring, sleep monitoring etc.

Daniel is co-author of over 300 scientific articles in peer-reviewed journals and over 400 papers in conference proceedings. He is member of several international advisory boards, visitation commissions in several European countries, and six international professional organisations worldwide.

Daniel has been a member of more than 63 Ph. D commissions in nine different countries. Written research agreements have been signed with over 48 research teams worldwide. About 165 master students for bio-engineer have finished their master thesis in the team.

Since 1982, 17 products have been developed for the world market in co-operation with industrial partners. 20 patents have been submitted. He has coordinated several EU-projects with the last one counting 20 partners and a budget of 8 M euro. Daniel is co-founder of 3 spin-off companies: BioRICS NV in 2006 on monitoring humans, Soundtalks NV in 2011 on monitoring livestock and BioRICS INC in San Francisco in 2016.



JAAP WAGENAAR

⑦ Thursday May 23, 2019 / 08h30 - 09h00 [◎] Grote Zaal "Antimicrobial Stewardship in pig health management"

Jaap Wagenaar was trained as veterinarian and completed his PhD study at Utrecht University and the USDA-National Animal Diseases Center, Ames, IA, US. In 1996 he started his research group at the Central Veterinary Institute (now: Wageningen Bioveterinary Research) in Lelystad, the Netherlands, on food safety and in particular on Campylobacter. From 2004-2006 he worked with WHO (Headquarters, Geneva, Switzerland, and for the Tsunami-relief operations with WHO Indonesia), the Centers for Disease Control and Prevention (Atlanta, US) and the USDA Western Regional Research Center (Albany, Ca, US).

In 2006 he was appointed as chair in Clinical Infectious Diseases at the Faculty of Veterinary Medicine, Utrecht University. His research group is focussing on Campylobacter and antimicrobial resistance. He was coordinator of a large EU-project on antimicrobial resistance (EFFORT) (2013-2018). He is member of the WHO-AGISAR-group (Advisory Group on Integrated Surveillance of Antimicrobial Resistance) and WHO-Global Foodborne Infections Network, a global capacity building network. He is member of the scientific panel of the Netherlands Veterinary Medicines Institute (SDa) and involved in the major reduction of antimicrobial use in livestock. He is member of the Technical Advisory Group of the Fleming Fund. He is director of the WHO Collaborating Center for Campylobacter and of the OIE-reference laboratory for Campylobacteriosis, and is acting frequently as expert for WHO, FAO and OIE

ANDREAS PALZER

Thursday May 23, 2019 / 09h00 - 09h30 ^(*) Grote Zaal "AM reduction in practice"

Dr Andreas Palzer is partner and director of the Scheidegg Veterinary Practice in Bavaria, Germany, within which ten veterinarians treat all animals. Dr Palzer specialises in pigs; his wife Dr Brenda Babel-Palzer is a leading vet in the small animals section. Dr Palzer also lectures as associate professor in the veterinary faculty of the Ludwig Maximillian University (LMU) in Munich. He is a member of the presidium of the Federal Association of Practicing Veterinarians (bpt) in Germany and president of the European Association of Porcine Health management (EAPHM). EAPHM is a community of specialist pig veterinarians in Europe with the aim of providing European practitioners with a platform for sharing information and works closely with the FVE (the Federation of Veterinarians in Europe) and Union of European Veterinary Practitioners (UEVP).



DESMOND MAGUIRE Thursday May 23, 2019 / 13h30 - 14h00 Grote Zaal "Pigs with long tails, the EU perspective"

Senior administrator working at the European Commission's Directorate General for Health and Food Safety in the Directorate of Health, Food, Audits and Analysis. Project Leader of European Commission's three year project to reduce the systematic tail docking of piglets in the EU. Working for 11 years in the field of animal welfare on farm, during transport, and at slaughter: primarily as an auditor but also as a desk officer leading campaigns on animal welfare during transport and now on pig welfare. I believe it is extremely important to bring enthusiasm and clarity to communicating the Commission's goals and in achieving tangible outcomes for its ambitions.......



NICOLE KEMPER ① Thursday May 23, 2019 / 14h00 - 14h30 ^③ Grote Zaal "Keeping pigs with long tails is possible"

Nicole Kemper, Prof. Dr. med. vet., is director of the Institute for Animal Hygiene, Animal Welfare and Farm Animal Behaviour at the Veterinary University of Hannover (TiHo) since August 2013. She achieved her license to practice in 2001 in Leipzig and obtained her doctoral degree in 2004. For the following years, she worked as PostDoc at the Institute of Animal Breeding and Husbandry, University Kiel, involved in many projects concerning Animal Health and Hygiene. She achieved her Habilitation in 2009 and was announced as Professor of Hygiene and Reproduction Physiology of Farm Animals at the Institute of Agricultural and Nutritional Science, University Halle in 2010.

Nicole is Certified Veterinary Specialist in Microbiology and in Animal Hygiene and Diplomate of the European College of Porcine Health. Nicole is co-author of more than 90 scientific publications in international peer reviewed journals.

PHILIPPE HOUDART Ø Friday May 24, 2019 / 08h30 - 09h00 Grote Zaal

"ASF updates and review of applied measures; practical experiences"

ANDREA GAVINELLI Friday May 24, 2019 / 09h00 - 09h30 ^(*) Grote Zaal "ASF political experiences"



PhD in Veterinary Medicine at the University of Milan.

Andrea has been dealing with several policy initiatives in the veterinary field and in particular in relation to animal health and welfare in the EU Commission since 1999. After serving 5 years as veterinary official in the Italian Ministry of Health, Andrea has been responsible in the Commission for EU policies on animal welfare where he contributed to the major international achievements in this policy area.

Since 2016, he is responsible for Unit G3 that is in charge of the implementation of the new Regulation on official controls in the Food and Feed Safety area and to coordinate the control and eradication of infectious diseases in animals including the management of emergencies.

Andrea has been actively collaborating with a vast stakeholders` network in the AGRI Food sector. The network includes public and private institutions and international organisations such as the Council of Europe, the World Animal Health Organization (OIE) and the Food and Agriculture Organization of the United Nations (FAO).

Andrea has been member of several international working groups and co-chair of technical working groups with EU trading partners in the framework of bilateral veterinary trade or cooperation agreements such as Chile, Canada, Brazil, New Zealand. He also contributed to technical working groups at international level in relation to the application and the mutual understanding of regionalization measures for the control and eradication of animal diseases.

At present, he is coordinating the main EU actions in relation to the control of major animal diseases such as African swine fever or Avian influenza but also dealing with new emerging diseases. In the area of Official Controls he coordinated the preparatory work for all the derived legislation in particular in relation to the legislation concerning the imports in the European Union. In relation to e-commerce in 2017 Andrea coordinated the first EU Control plan on the commerce of food supplements.

He has contributed to several articles and publications on EU policies and animal health and welfare and in relation to the sustainability of livestock farming. He attended several international conferences and seminars to present the EU policies. In the last years he has been lecturing on animal health and welfare in postgraduate courses both in the EU (Milan, Barcelona) and abroad.

In 2015 Andrea has been awarded with the Royal Society for the Prevention of Cruelty to Animals (RSPCA) European Animal Welfare Award for outstanding service in this area.

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GUIDELINES FOR PRESENTERS

ORAL PRESENTATIONS

Speakers are requested to bring their presentation files on a flash drive (USB memory stick) to the Speaker Ready Room at least 4 hours in advance of your scheduled presentation, or the day before if the presentation is in one of the morning sessions. All presentations will be sent directly to the correct lecture room through the internal computer network by specialized technicians. We kindly ask all authors not to come with their own computers into the lecture room at the last minute.

Please note that use of your own computer is not possible. All presentations must be downloaded in the Speaker Ready Room beforehand.

Speakers are entirely responsible for the presentation content (order, graphics etc). All presentations and questions must be delivered in English, as English is the official language of the symposium. Time reserved for scientific presentation is 20 minutes, 15 minutes presentation followed by 5 minutes of discussion. Speakers are requested not to exceed the allocated time. The time schedule will be strictly followed due to the nature of the symposium program.

Presentation format

All presentations should meet commonly compatible format, preferably using Power Point version 2010 or higher in 16:9 aspect ratio.

Supported file types

- Presentation: PPT, PPA, PPTA, PPTX, PDF
- Video: AVI, MPG, MKV, MOV, MP4, WMV
- Audio: WMA, MP3, WAV
- Pictures: JPG, GIF, BMP, TIF

If the presentation includes audio (sound or voice), animation or short movie file(s), speakers are advised to save each file separately and provide it to the technical staff of the Speaker Ready Room for testing, together with your presentation file. If you have any special requirements, please make sure to get in contact with the technical staff at the Speaker Ready Room in advance, ideally 1 day before.

Opening hours of the Speaker Ready Room

- Wednesday May 22, 2019: 09h00 18h00
- Thursday May 23, 2019: 08h00 18h30
- Friday May 24, 2019: 08h00 10h30

In the lecture room

A lectern with microphone, beamer, screen and sound system will be available for all speakers. Using own computers in the lecture room is not supported to avoid delays during sessions.

POSTER PRESENTATIONS

Poster format

The poster boards will be set up by the organization. The poster boards surface will be 100 x 125 cm (portrait format). The recommended size of the poster is A0 format.

The presentation number assigned to your poster should not be placed on your poster. The poster boards will be numbered by the organization.

Set-up and dismantling schedule

Poster presenting authors are responsible for setting-up and taking down their poster. Pushpins will be provided by the organization. Setting up and taking down the posters will take place as following:

Set-up: Wednesday May 22, 2019: 11h00 - 14h30 Dismantling: Friday May 24, 2019: 11h00 - 13h00

Posters which have not been removed before the due time shall be detached and dumped after the corresponding session. Unclaimed posters are not the responsibility of the symposium organizers and will be disposed.





At PIC, we've been working to build a better pig for over 55 years, and we're committed to continuing. We're combining the world's most advanced science with a practical understanding of commercial needs to improve performance and grow your bottom line.

WEDNESDAY 22 MAY 2019

① 11H00 – 17H00 REGISTRATION AND POSTER DISPLAY

 \odot 13H00 – 13H30 WELCOME AND OPENING \odot grote ZAAL

- Welcome Note
- Pork Production in The Netherlands Anton Pijpers

② 13H30 – 15H00 KEYNOTE SESSION: PIG HEALTH MANAGEMENT 4.0
 ◎ GROTE ZAAL

Chaired by Heiko Nathues and Tineke van de Veerdonk

- Big data in pig epidemiology John Berezowski
- Smart date in health management Daniel Berckmans
- Round table discussion

🕐 15H00 – 15H30 COFFEE BREAK AND POSTER VIEWING

Coffee break: Grote zaal foyer, Plein 5 & 6, Pandora and Pandora foyer Poster viewing: Balkon 1 and Pandora

⑦ 15H30 − 17H30 PARALLEL SESSION: HERD HEALTH MANAGEMENT & ECONOMY

🛛 GROTE ZAAL

Chaired by Arjan Stegeman and Kazimierz Tarasiuk

HHM-OP-01

APPLICATIONS OF POPULATION-BASED METHODS FOR PRRS MONITORING AND SURVEILLANCE IN BREEDING HERDS UNDERGOING VIRUS ELIMINATION Giovani Trevisan¹, Marcelo Almeida¹, Will Alberto Lopez¹, <u>Daniel Linhares¹</u> ¹Iowa State University

HHM-OP-02

DEVELOPMENT AND INITIAL EVALUATION OF AN INTEGRATED SYSTEM UTILIZ-ING LOW POWER BLUETOOTH BEACONS, SENSORS AND A CLOUD-BASED PLAT-FORM TO CONCURRENTLY MEASURE NEAR-REAL TIME MOVEMENT OF PIGS, SEMEN, FEED, SUPPLIES, ASSETS AND PERSONNEL THROUGHOUT A LARGE PIG PRODUCTION NETWORK IN THE UNITED STATES Dale Polson¹, Tyler Bates¹, Greg Hartsook¹, Erin Lowe¹, Xavier de Paz Solanes²

¹Boehringer Ingelheim Vetmedica Inc.

² Boehringer Ingelheim Vetmedica GmbH

HHM-OP-03

DIFFERENCES BETWEEN DUTCH AND BELGIAN PIG FARMERS WITH RESPECT TO THEIR BIOSECURITY LEVEL AND ANTIMICROBIAL USAGE WITHIN THE I-4-1-HEALTH PROJECT

<u>Nele Caekebeke¹</u>, Angelique van den Hoogen², Moniek Ringenier¹, Franca J. Jonquiere², Tijs J. Tobias², Merel Postma¹, Manon Houben³, Francisca C. Velkers², Nathalie Sleeckx⁴, J. Arjan Stegeman², Jeroen Dewulf¹

¹Faculty of Veterinary Medicine, Ghent University, Belgium

² Faculty of Veterinary Medicine, Utrecht University, the Netherlands

³GD Animal Health, the Netherlands

⁴ Experimental Poultry Centre, Belgium

HHM-OP-04

MEASURING THE RESPIRATORY PATHOGEN BURDEN IN GROWING PIGS TO ESTI-MATE THE IMPACT OF DISEASE

Rachel Stika¹, Christa Goodell², Erin Lowe², Ed Kluber³, David Baum¹, Jeremy Maurer³, Min Zhang¹, Ran Bi¹, Chong Wang¹, Jeffrey Zimmerman¹, Luis Gimenez-Lirola¹, Christopher Rademacher¹, Seth Playter², Ethan Schmaling², Derald Holtkamp¹ ¹ Iowa State University College of Veterinary Medicine ² Boehringer Ingelheim Vetmedica, Inc. ³ Smithfield Farms, LLC

HHM-OP-05

MODELLING THE EFFECT OF RESPIRATORY DISEASE ON PRODUCTION PERFOR-MANCE OF FARROW-TO-FINISH PIG HERDS Maria Rodrigues da Costa^{1,2,3}, Albert Rovira⁴, Montserrat Torremorell⁴, Rose Fitzgerald⁵, Josep Gasa Gasó², Helen O'Shea⁵, Edgar Garcia Manzanilla^{1,3} ¹ Pig Development Department, Teagasc - Animal & Grassland Research and Innovation

Centre, Moorepark, Fermoy, Co. Cork, Ireland ² Departament de Ciencia Animal i dels Aliments, Facultat de Veterinaria, Universitat

Autònoma de Barcelona, Bellaterra 08193, Barcelona, Spain ³ School of Veterinary Medicine, University College Dublin, Belfield, Dublin 4, Ireland

⁴ Department of Veterinary Population Medicine, College of Veterinary Medicine, Univer-

sity of Minnesota, 1365 Gortner Ave., St. Paul, MN 55108, USA

⁵ Bio-Explore, Department of Biological Sciences, Cork Institute of Technology, Rossa Avenue, Bishopstown, Co. Cork, Ireland

HHM-OP-06

COLOSTRUM INTAKE IN PIGS: ANALYSIS OF THE VARYING FACTORS IN 10 COM-MERCIAL FARMS

Philippe LENEVEU¹, Benoît LAUNAY², Agnès JARDIN¹, Paul CREAC'H¹, Verena SCHÜLER³, Anne LEHEBEL², Mily LEBLANC-MARIDOR², <u>Catherine BELLOC²</u> ¹IDT Biologika, 17 Rue du Sabot, 22 440 Ploufragan, France ²BIOEPAR, INRA, Oniris, Université Bretagne Loire, 44 307 Nantes, France ³IDT-Biologika GmbH

② 15H30 – 17H30 PARALLEL SESSION: RESIDENT SESSION

$^{\odot}$ Hertz

Chaired by Mari Heinonen and Tijs Tobias

RES-OP-01

THE SUCCESSFUL ERADICATION OF MYCOPLASMA HYOPNEUMONIAE FROM NORWEGIAN PIG HERDS - 10 YEARS LATER Stine Margrethe Gulliksen^{1,2}, Bjørn Lium³, Tore Framstad⁴, Anne Jørgensen⁵, Audun Skomsøy⁶, Mona Gjestvang³, Oddbjørn Kjelvik⁷, Carl Andreas Grøntvedt⁸ ¹ Animalia ² Norwegian Pig Health Service ³ Prev. Norwegian Pig health Service ⁴ Norwegian University of Life Sciences ⁵ Prev. Norwegian Pig Health Service ⁶ Nortura ⁷ Prev. Nortura ⁸ The Norwegian Veterinary Institute

RES-OP-02

UNDER THE SHADOW OF AFRICAN SWINE FEVER: A COLLECTION OF CASES OF PIGLETS WITH HAEMORRHAGES Lucía Dieste-Pérez¹, Linda Peeters¹, Theo Geudeke¹, Karin Junker¹ ¹GD Animal Health, Deventer, The Netherlands

RES-OP-03

IMPACT OF WASHING AND DISINFECTION OF MAMMARY GLANDS ON SOW AND PIGLET HEALTH AND PERFORMANCE <u>Alexandra Schoos¹</u>, Annelies Michiels¹, Laura Stroobants¹, Charlotte Brossé², Jeroen Dewulf³, Dominiek Maes¹ $^{\scriptscriptstyle 1}$ Ghent University, Faculty of Veterinary medicine, Porcine Health Management Unit

² Animal Health Care Flanders (DGZ), Lier, Belgium

³ Ghent University, Faculty of Veterinary medicine, Veterinary Epidemiology Unit

RES-OP-04

EDEMA DISEASE VACCINATION AS A TOOL FOR REDUCING ANTIBIOTIC USE AF-TER WEANING IN A SHIGATOXIN 2E POSITIVE FARM

<u>Susana Mesonero-Escuredo</u>¹, Joaquín Morales², Carlos Casanovas¹, Sergio Barrabés¹, Joaquim Segalés^{3,4}

¹ IDT Biologika SL, Gran Vía Carles III, 84, 3°, 08028 Barcelona, Spain.

² PigCHAMP Pro Europa, Calle Santa Catalina, 10, 40003 Segovia, Spain.

³ Departament de Sanitat i Anatomia Animals, Universitat Autònoma de Barcelona (UAB), 08193 Bellaterra, Barcelona, Spain.

⁴ UAB, Centre de Recerca en Sanitat Animal (CReSA, IRTA-UAB), Campus de la Universitat Autònoma de Barcelona, 08193 Bellaterra, Barcelona, Spain.

RES-OP-05

CASE OF LISTERIOSIS IN FATTENING PIGS WITH HEMORRHAGIC DIARRHEA AND SUDDEN DEATH

Heiko Stein^{1,2}, Beatrix Stessl³, Rene Brunthaler⁴, Igor Loncaric⁵, Herbert Weissenböck⁵, Ursula Ruczizka¹, Andrea Ladinig¹, <u>Lukas Schwarz</u>¹

¹University Clinic for Swine, Department of Farm Animals and Veterinary Public Health, University of Veterinary Medicine Vienna, Austria

² Vetpraxis Hegerberg, Kasten, Austria

³ Institute of Milk Hygiene, Milk Technology and Food Science, Department of Farm Animals and Veterinary Public Health, University of Veterinary Medicine, Vienna, Austria. ⁴ Institute of Pathology, Department of Pathobiology, University of Veterinary Medicine, Vienna, Austria.

⁵ Institute of Microbiology, Department of Pathobiology, University of Veterinary Medicine, Vienna, Austria.

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17H40 – 18H40 ECPHM ANNUAL GENERAL MEETING

HERTZ

Diplomates and Residents only

18H00 – 19H30 WELCOME RECEPTION

PLEIN 5 & 6

20H00 – 23H00 PUB CRAWL

NOTES

DETAILED PROGRAMME

THURSDAY 23 MAY 2019

O 08H00 REGISTRATION DESK OPENS

© 08H30 – 10H00 KEYNOTE SESSION: ANTIMICROBIAL STEWARDSHIP IN PIG HEALTH MANAGEMENT

$^{\odot}$ grote zaal

Chaired by Hetty Schreurs and Giovanbattista Guadagnini

- Antimicrobial Stewardship in pig health management Jaap Wagenaar
- AM reduction in practice Andreas Palzer
- Round table discussion

🕐 10H00 – 10H30 COFFEEBREAK AND POSTER VIEWING

Coffeebreak: Grote Zaal foyer, Plein 5 & 6, Pandora and Pandora foyer

Poster viewing: Balkon 1 and Pandora

① 10H30 – 12H30 PARALLEL SESSION: VIRAL DISEASES

GROTE ZAAL
 Chaired by Javier Martinez Lobo and Andreas Palzer

VVD-OP-01

FREQUENCY OF PORCINE CIRCOVIRUS 3 DETECTION IN SERUM OF PIGS WITH RESPIRATORY AND DIGESTIVE DISORDERS

<u>Viviane Saporiti</u>¹, Taís F. Cruz², Florencia Correa-Fiz¹, José I. Núñez¹, Marina Sibila¹, Joaquim Segalés^{3,4}

¹ IRTA, Centre de Recerca en Sanitat Animal (CReSA, IRTA-UAB), Campus de la Universitat Autònoma de Barcelona, 08193 Bellaterra, Spain

² Department of Immunology and Microbiology, Institute of Biosciences, College of Veterinary Medicine, São Paulo State University (UNESP), Botucatu, SP18618-000, Brazil ³ Departament de Sanitat i Anatomia Animals, Universitat Autònoma de Barcelona (UAB), 08193 Bellaterra, Barcelona, Spain.

⁴ UAB, Centre de Recerca en Sanitat Animal (CReSA, IRTA-UAB), Campus de la Universitat Autònoma de Barcelona, 08193 Bellaterra, Barcelona, Spain.

MUTATIONS IN ANTIGENIC SITES OF THE HEMAGGLUTININ PROTEIN FOLLOW-ING INFLUENZA VACCINATION

<u>Pia Ryt-Hansen</u>¹, Inge Larsen², Jesper Schak Krog³, Charlotte Sonne Kristensen⁴, Lars Erik Larsen¹

- ¹ National Veterinary Institute, Technical University of Denmark ² University of Copenhagen, Dpt. of Veterinary and Animal Sciences ³ Statens Serum Institut
- ⁴ SEGES Pig Research Centre

VVD-OP-03

VVD-OP-02

IMPACT OF PCV2 CO-INFECTION ON REPLICATION LEVEL OF A FIELD VAC-CINE-LIKE PRRSV-1 STRAIN Julie ECLERCY¹, Frédéric PABOEUF¹, Lionel BIGAULT¹, Cécilia BERNARD¹, Béatrice GRASLAND¹, Patricia RENSON^{1,2}, Nicolas ROSE¹, Olivier BOURRY¹ ¹ Anses, Ploufragan-Plouzané-Niort Laboratory ² IFIP, France

VVD-OP-04

MULTISYSTEMIC INFLAMMATION IN PIGLETS IN A HERD WITH CONGENITAL TREMOR AND CONCURRENT DEFORMITIES Susanna Williamson¹, Laura Wilson², Rachael Collins², Toby Floyd², Sylvia Grierson², Akbar Dastjerdi² ¹ Animal and Plant Health Agency (APHA)

 2 APHA

VVD-OP-05

IS ORF5 NUCLEOTIDE SEQUENCE ANALYSIS SUFFICIENT FOR TRACING PRRSV-1 STRAINS?

Jos Dortmans¹, Rianne Buter¹, Tom Duinhof¹, Tomasz Stadejek²

¹GD Animal Health

² Department of Pathology and Veterinary Diagnostics, Faculty of Veterinary Medicine, Warsaw University of Life Sciences, Warsaw, Poland

VVD-OP-06

ANALYSIS OF RESILIENCE MARKERS IN RELATION TO ABORTION RATE IN PIGS Romi Pena¹, Carlos Fernández², Maria Blasco-Felip³, <u>Lorenzo Fraile¹</u>, Joan Estany¹ ¹University of Lleida, Lleida, Spain ²INZAR SL, Zaragoza, Spain ³Free-lance veterinarian, Zaragoza, Spain

⑦ 10H30 − 12H30 PARALLEL SESSION: VETERINARY PUBLIC HEALTH

Chaired by Peter van der Wolf and Helle Stege

VPH-OP-01

EFFECT OF GROUP VACCINATION OF SOWS AND GILTS AGAINST SALMONELLA TYPHIMURIUM ON SALMONELLA SEROLOGY AND EXCRETION IN SOWS AND THEIR OFFSPRING

<u>Linda Peeters</u>¹, Jeroen Dewulf¹, Filip Boyen², Charlotte Brossé³, Tamara Vandersmissen³, Geertrui Rasschaert⁴, Marc Heyndrickx⁴, Mickaël Cargnel⁵, Frank Pasmans², Dominiek Maes¹

¹ Faculty of Veterinary Medicine, Department of Reproduction, Obstetrics and Herd Health, Ghent University, Belgium

² Faculty of Veterinary Medicine, Department of Pathology, Bacteriology and Avian Diseases, Ghent University, Merelbeke, Belgium

³ Animal Health Care Flanders (DGZ), Lier, Belgium

⁴ Flanders research institute for Agriculture, Fisheries and Food (ILVO), Melle, Belgium ⁵ Sciensano, Brussel, Belgium

VPH-OP-02

WELFARE ASSESSMENT OF FATTENING PIGS USING ROUTINELY COLLECTED AND EDITED PRODUCTION DATA

<u>Julia Grosse-Kleimann</u>¹, Birte Wegner², Ines Spiekermeier³, Elisabeth grosse Beilage⁴, Michaela Fels², Hendrik Nienhoff³, Henning Meyer⁵, Heiko Plate⁵, Hubert Gerhardy⁶, Lothar Kreienbrock¹

¹Department of Biometry, Epidemiology and Information Processing, University of Veterinary Medicine Hannover, Germany

² Institute for Animal Hygiene, Animal Welfare and Farm Animal Behaviour, University of Veterinary Medicine Hannover, Germany

³ Swine Health Service, Chamber of Agriculture Lower Saxony, Oldenburg, Germany
 ⁴ Field Station for Epidemiology, University of Veterinary Medicine Hannover, Germany
 ⁵ VzF GmbH, Uelzen, Germany

⁶ Marketing Service Gerhardy, Garbsen, Germany

VPH-OP-03

AN INTERVENTION STUDY TO FOSTER ANTIMICROBIAL USAGE DECREASE IN FARROW-TO-FINISH PIG HERDS THROUGH VETERINARIAN ADVICE Claire CHAUVIN¹, Julie DAVID¹, Angelique van den HOOGEN², Manon HOU-BEN², <u>Pascal SANDERS¹</u> ¹Anses ² porQ

VPH-OP-04

UNDERSTANDING HEPATITIS E VIRUS (HEV) DYNAMICS IN A FARROW-TO-FIN-ISH PIG FARM USING EXPERIMENTAL, FIELD AND MODELLING DATA Morgane Salines¹, Mathieu Andraud¹, Nicolas Rose¹ ¹ Anses Ploufragan-Plouzané-Niort Laboratory, Epidemiology, Health and welfare unit, PO Box 53, 22440 Ploufragan FRANCE

VPH-OP-05

APPLYING SALMONELLA VACCINATION AT THE TOP OF A UK PIG PRODUCTION PYRAMID Judy Bettridge¹, Martina Velasova¹, Francesca Martelli¹, Becky Gosling¹, Rob Davies¹, Richard Smith¹ ¹APHA - Weybridge

VPH-OP-06

TRENDS IN ANTIMICROBIAL CONSUMPTION IN DANISH PIG PRODUCTION IN 2014-2017 AND THE FIRST SIX MONTHS OF 2018 <u>Nicolai Weber</u>¹, Jan Dahl² ¹ SEGES Pig Research Centre ² Danish Agriculture and Food Council

🕐 12H30 – 13H30 LUNCH BREAK AND POSTER VIEWING

Lunch break: Grote Zaal foyer, Plein 5 & 6, Pandora, Pandora foyer, Balkon 1

Poster viewing: Balkon 1 and Pandora

⑦ 13H30 − 15H00 KEYNOTE SESSION: PIGS WITH LONG TAILS

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Chaired by Theo Geudeke and Thomas Würth

- Pigs with long tails, the EU perspective Desmond Maguire
- Keeping pigs with long tails is possible Nicole Kemper
- Round table discussion

 \odot 15H00 – 15H20 EAPHM, PETER HØGEDAL AWARD AND JPHM PRESENTATION

⑦ 15H20 - 16H20 PARALLEL SESSION: BACTERIAL DISEASES

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Chaired by Dominiek Maes and Isabel Hennig-Pauka

BBD-OP-01

SPATIAL SPREAD OF M. HYOPNEUMONIAE IN A WEAN-TO-FINISH BARN. Maria Jose Clavijo^{1,2}, <u>Seth Krantz</u>³, Marissa Rotolo¹, Alexandra Henao-Diaz¹, Thaire Marostica¹, Alexander Tucker⁴, Eduardo Fano⁵, Dale Polson⁵, Deanne Hemker², Robert Fitzgerald², Edgar Tapia⁶, Silvia Zimmerman⁶, Jean Paul Cano², Jeffrey Zimmerman¹ ¹ *Iowa State University College of Veterinary Medicine* ² *PIC North America* ³ *Tosh Farms* ⁴ University of Cambridge ⁵ Boehringer Ingelheim Vetmedica Inc. ⁶ *IDEXX*

BBD-OP-02

EVALUATION OF THE EXTENT OF MYCOPLASMA HYOPNEUMONIAE (MHYO) SHEDDING FROM GILTS TO THEIR PROGENY IN SEVEN MHYO ENDEMIC PIGGER-IES IN AUSTRALIA <u>Ruel Pagoto¹</u>, Hugo Dunlop², Trish Holyoake³, Bernie Gleeson⁴, Tom Harrison², Mark Eastaugh², Tony Fahy⁵ ¹ Boehringer Ingelheim Animal Health - Australia ² Apiam Animal Health ³ Holyoake Veterinary Consulting ⁴ SunPork Solutions ⁵ Arrow Animal Health Advisory

BBD-OP-03

PREVALENCE OF POST-WEANING DIARRHOEA IN DANISH HERDS NOT USING MEDICINAL ZINC AND ANTIMICROBIAL BATCH TREATMENT AT WEANING Malene Kjelin Morsing¹, Ken Steen Pedersen², Inge Larsen¹, Nicolai Rosager Weber³, Jens Peter Nielsen¹ ¹ Department of Veterinary and Animal Sciences, University of Copenhagen, Grønnegårdsvej 2, 1870 Frederiksberg C, Denmark

²Ø-vet A/S, Køberupvej 33, 4700 Næstved, Denmark

³ SEGES livestock Innovation, Axeltorv 3, 1609 Copenhagen V, Denmark

① 15H20 – 16H20 PARALLEL SESSION: WELFARE AND NUTRITION

HERTZ

Chaired by Leo van Leengoed and Marco Terreni

AWN-OP-01

TAIL BITES IN FREE-RANGE BASED FINISHER PIG SYSTEMS - PREVALENCE AND RISK FACTORS. Hanne Kongsted¹, Leslie Foldager^{1,2}, Jan Tind Sorensen¹ ¹Department of Animal Science, Aarhus University ²Bioinformatics Research Centre, Aarhus University

AWN-OP-02

THE INFLUENCE OF A 16-HOUR DELAY IN SOLID FEED PROVISIONING ON THE FEED INTAKE AND PERFORMANCE OF WEANLING PIGLETS Sam Millet^{1,2}, Hubèrt van Hees^{3,2}, Marijke Aluwé², Geert P.J. Janssens², Sam De Campeneere¹, Sarah De Smet⁴ ¹ILVO (Flanders research institute for Agriculture, Fisheries and Food) ²Laboratory of Animal Nutrition, Ghent University, Ghent, Belgium ³Trouw Nutrition Research and Development ⁴Pig Information Center, Melle, Belgium

AWN-OP-03

DO WEANERS HAVE GASTRIC ULCERS? Juan Miguel Peralvo Vidal¹, Anni Øyan Pedersen¹, Jens Peter Nielsen¹, Svend Haugegaard², Nicolai Weber² ¹University of Copenhagen ²SEGES Pig Research Centre

① 16H20 – 16H40 COFFEE BREAK AND POSTER VIEWING

Coffee break: Grote zaal foyer, Plein 5 & 6, Pandora and Pandora foyer

Poster viewing: Balkon 1 and Pandora

① 16H40 – 18H00 PARALLEL SESSION: BACTERIAL DISEASES II

GROTE ZAAL

Chaired by Dominiek Maes and Isabel Hennig-Pauka

BBD-OP-04

OUTBREAK OF "NEW" NEONATAL DIARRHEA IN A NORWEGIAN SWINE HERD -A CASE REPORT Helene Wisløff¹, Bjarne Bergsjø^{2,3}, Marianne Gilhuus¹, Stine Margrethe Gulliksen¹ ¹Norwegian Veterinary Institute ² Animalia ³Norwegian Pig Health Service

BBD-OP-05

DEVELOPMENT OF A STREPTOCOCCUS SUIS SEROTYPE 9 ANIMAL MODEL -DOSE FINDING STUDY Jobke van Hout¹, Erik van Engelen¹, Manon Houben¹, Karin Junker¹, Ton Jacobs² ¹GD Animal Health. Deventer. The Netherlands ² MSD Animal Health, Boxmeer, The Netherlands

BBD-OP-06

ASSESSMENT OF THE SALMONELLA STATUS IN 118 FARMS IN GERMANY FROM JANUARY 2015 TO JULY 2018 Kathrin Lillie-Jaschniski¹, Judith Rohde², Nicolas Mertens¹, Monika Köchling¹ ¹IDT Biologika GmbH, Dessau-Rosslau, Germany ² Institute for Microbiology, University of Veterinary Medicine, Foundation, Hannover, Germany BBD-OP-07

FIRST DESCRIPTION OF CO-INFECTION WITH BRACHYSPIRA HYODYSENTERIAE AND ENTAMOEBA POLECKI IN A FATTENING PIG WITH SEVERE DIARRHOEA Maria Cuvertoret¹, Christiane Weissenbacher-Lang², Madeleine Lunardi², René Brunthaler², Mònica Coma³, Herbert Weissenböck², Joaquim Segalés^{4,5}

¹ Servei de Diagnòstic de Patologia Veterinaria (SDPV), Departament de Sanitat i d'Anatomia Animals, Universitat Autonòma de Barcelona

² Institute of Pathology, University of Veterinary Medicine Vienna, Vienna, Austria ³ Cooperativa Plana de Vic, Barcelona, Spain

⁴ Departament de Sanitat i Anatomia Animals, Universitat Autònoma de Barcelona (UAB), 08193 Bellaterra, Barcelona, Spain.

⁵ UAB, Centre de Recerca en Sanitat Animal (CReSA, IRTA-UAB), Campus de la Universitat Autònoma de Barcelona, 08193 Bellaterra, Barcelona, Spain.

① 16H40 – 18H00 PARALLEL SESSION: MISCELLANEOUS

• HERTZ

Chaired by Leo van Leengoed and Marco Terreni

MIS-OP-01

DENTAL AND PERIODONTAL DISEASE IN SOWS EUTHANISED OR FOUND DEAD ON CONVENTIONAL FINNISH FARMS <u>Camilla Munsterhjelm¹, Eve Ala-Kurikka¹, Paula Bergman¹, Taina Laine², Henna Pekkarinen², Olli Peltoniemi¹, Anna Valros¹, Mari Heinonen¹ ¹University of Helsinki</u>

² Finnish Food Safety Authority EVIRA

MIS-OP-02

NETWORK ANALYSIS OF PIGS MOVEMENTS IN ARGENTINA: BASIC REPRODUC-TION RATE IN RELATION WITH OF FARMS BIOSECURITY Laura Valeria Alarcón^{1,2}, Pablo Ariel Cipriotti³, Mariela Monterubbianesi⁴, Carlos Perfumo⁵, Enric Mateu⁶, Alberto Allepuz⁶ ¹ Department of Swine Medicine, La Plata National University ² Universitat Autónoma de Barcelona ³ Department of Quantitative Methods and Information Systems, School of Agriculture, University of Buenos Aires ⁴ National Food Safety Service ⁵ Laboratory of Special Pathology, La Plata National University ⁶ Centre de Recerca en Sanitat Animal, Universitat Autónoma de Barcelona

MIS-OP-03

ECONOMIC IMPACT OF SWIAV OUTBREAK IN A 1000 SOW HERD <u>EVELYNE GAILLARD¹</u>, PAUL CREACH², Philippe LENEVEU², SILKE WACHECK³, Agnès JARDIN²

¹Cabinet vétérinaire de Pontrieux – Vetarmor, Rue de Briantel, 22 260 Ploëzal, France ² IDT Biologika, 17 Rue du Sabot, 22 440 Ploufragan, France

³ IDT Biologika, Am Pharmapark, 06861 Dessau-Roßlau, Germany

MIS-OP-04

ACTIVE SURVEILLANCE OF PRRSV IN BREEDING, NURSERY AND FINISHING FARMS FROM CARCASSES Jordi baliellas¹, Elena Novell¹, Vicens Tarancon¹, Carles Vilalta², Lorenzo Fraile³ ¹Grup de Sanejament Porci, Lleida, Spain

² Swine Health Monitoring Project, University of Minnesota, USA

³University of Lleida, Lleida, Spain

② 18H10 – 19H10 EAPHM ANNUAL GENERAL MEETING

♥ HERTZ

Open for all interested delegates

- 20H00 23H00 FAREWELL DINNER
- TIVOLI-VREDENBURG, RONDA

Extra ticked needed

Dresscode: Smart Casual

NOTES

FRIDAY 24 MAY 2019

② 08H30H – 10H00 KEYNOTE SESSION: ASF IN EUROPE

[♥] GROTE ZAAL

Chaired by Alex Eggen and Rick Janssen

- ASF updates and review of applied measures; practical experiences - Philippe Houdart
- ASF political experiences Andrea Gavinelli
- Round table discussion

① 10H00 – 10H30 COFFEE BREAK AND POSTER VIEWING

Coffee break: Grote Zaal foyer, Plein 5 & 6, Pandora and Pandora foyer

Poster viewing: Balkon 1 and Pandora

① 10H30 – 12H30 PARALLEL SESSION: IMMUNOLOGY AND VACCINOLOGY

🛛 GROTE ZAAL

Chaired by Paolo Martelli and Joaquim Segalés

IMM-OP-01

CONTAMINATION LEVEL OF SYRINGES USED TO ADMINISTER PORCINE VAC-CINES IN BELGIUM AND THE NETHERLANDS Sjouke Van Poucke¹, <u>Annelies Michiels¹</u>, Denise Meijer¹, Daniel Angelats², Lorena Nodar² ¹HIPRA Benelux ² HIPRA

IMM-OP-02

PRRS POST-VACCINAL IMMUNE RESPONSE TO MLV IN PRRS MULTIVACCINATED SOWS Christelle FABLET¹, Patricia RENSON^{1,2}, Florent EONO¹, Sophie MAHE¹, Eric EVENO¹, Mireille LE DIMNA¹, Nicolas ROSE¹, <u>Olivier BOURRY¹</u> ¹ Anses, Laboratoire de Ploufragan, France ² IFIP, France

FRIDAY 24 MAY 2019

IMM-OP-03

EFFECT OF EARLY PRRSV (PORCINE REPRODUCTIVE AND RESPIRATORY SYN-DROME VIRUS) VACCINATION ON PIG HEALTH AND PERFORMANCE: THE EARLI-ER THE BETTER?

<u>Michele Drigo</u>¹, Giovanni Franzo¹, Claudia Maria Tucciarone¹, Andrea Manfredda², Paola Zanardelli², Fabrizio Solari Basano³, Roberto Nazzari³

¹Department of Animal Medicine, Production and Health (MAPS), University of Padua, Viale dell₂Università 16, 35020 Legnaro (PD), Italy

² Zoetis Italia S.r.l., Via Andrea Doria, 41M, 00192, Roma, Italy

³ 3Arcoblu s.rl., Via Milesi 5, 20133 Milano, Italy

IMM-OP-04

HUMORAL AND CELLULAR IMMUNE RESPONSES AFTER ADMINISTRATION OF INNOVATIVE MYCOPLASMA HYOPNEUMONIAE BACTERINS IN PIGS Anneleen Matthijs¹, Gaël Auray², Dominiek Maes¹, Christophe Barnier-Quer³, Virginie Jakob³, Filip Boyen¹, Annelies Michiels⁴, Freddy Haesebrouck¹, Artur Summerfield² ¹Faculty of Veterinary Medicine, Ghent University, Belgium ²Institute of Virology and Immunology, Switzerland ³Department of Biochemistry, University of Lausanne, Switzerland ⁴Hipra Benelux

IMM-OP-05

COLOSTRUM IMMUNE TRANSFER EVALUATION IN PIGS BY USING FLU HI TEST AT 3 WEEKS OF AGE Philippe LENEVEU¹, Benoît LAUNAY², Agnès JARDIN¹, Paul CREAC'H¹, Verena SCHÜLER³, Stefan PESCH³, Mily LEBLANC-MARIDOR², Catherine BELLOC² ¹IDT Biologika, 17 Rue du Sabot, 22 440 Ploufragan, France ²BIOEPAR, INRA, Oniris, Université Bretagne Loire, 44 307 Nantes, France ³IDT Biologika GmbH

IMM-OP-06

ASSESSMENT OF THE REPLICATION OF PORCINE REPRODUCTIVE AND RESPIRA-TORY SYNDROME MODIFIED LIVE VIRUS ATTENUATED VACCINES IN PORCINE ALVEOLAR MACROPHAGES <u>Monica Balasch¹</u>, Lucas Taylor¹, Jay Calvert¹ ¹Zoetis ① 10H30 – 12H30 PARALLEL SESSION: REPRODUCTION

♥ HERTZ

Chaired by Olli Peltoniemi and Johannes Kauffold

REP-OP-01

EFFECT OF IGF-1 LEVEL AT WEANING ON SUBSEQUENT LUTEAL DEVELOPMENT AND PROGESTERONE PRODUCTION IN PRIMIPAROUS SOWS Tachee Han¹, Stefan Björkman¹, Nicoline Soede², Claudio Oliviero¹, Olli Peltoniemi¹ ¹University of Helsinki ²Wageningen University & Research

REP-OP-02

EVOLUTION OF REPRODUCTIVE PERFORMANCE IN SPANISH FARMS IN THE LAST 10 YEARS AND PREDICTION FOR 2020. IMPACT OF FARMS' SIZE M Angel de Andres¹, Armando Occon², Celia Santiago², Inmaculada Diaz², <u>Carlos Pineiro³, Maria Aparicio² ¹ Pig CHAMP Pro Europa SL ² Pig Champ Pro Europa SL. ³ Pig Champ Pro Europa S.L.</u>

REP-OP-03

USE OF A PROGESTERONE ON-FARM KIT DETECTION (OVU-CHECK®) TO IM-PROVE GILTS MANAGEMENT IN A COMMERCIAL FARM Eva Ramells¹, Rut Menjón², Marcial Marcos², Jiménez Marta² ¹Inga Food ² MSD Animal Health

REP-OP-04

DIFFERENCES IN RETURN TO ESTRUS RATE AND NUMBER OF TOTAL BORN PIG-LETS CAUSED BY VARIATIONS IN PEOPLES' ARTIFICIAL INSEMINATION TECH-NIQUE Alexander Grahofer¹, Sara Joller¹, Heiko Nathues¹ ¹Clinic for Swine, Vetsuisse Faculty, University of Bern, Switzerland

REP-OP-05

TRANSABDOMINAL ULTRASOUND EXAMINATION OF SOWS TO IMPROVE THE REPRODUCTION - A FIELD STUDY István Makkai¹, Péter Máté¹, László Búza^{1,2,3,4}, László Ózsvári⁴ ¹MSD AH CERG Swine Business Unit - HUNGARY ²Szent István University Doctorial School ³Hungarian Pig Health Management Association ⁴University of Veterinary Medicine, Budapest

REP-OP-06

PRE-FARROWING SUPPLEMENT THROUGH DRINKING WATER REDUCES STILL-BIRTH <u>Pieter Langendijk¹</u>, Jac Bergman¹, Marleen Fleuren¹ ¹Trouw Nutrition R&D

🕐 12H30 – 13H00 CLOSING CEREMONY/ESPHM 2020 IN BERN



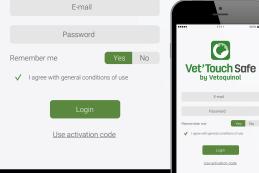
NOTES

SOLVE YOUR FARM'S CHALLENGES WITH TROUW NUTRITION'S FEED, FARM AND HEALTH MANAGEMENT APPROACH

THE AUDIT AT YOUR FINGER TIP

Vet'Touch Safe THE BIOSECURITY APP



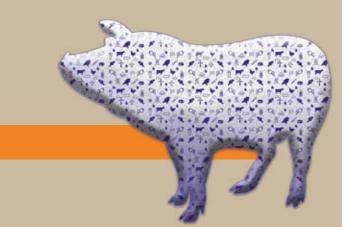


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LIST OF POSTERS



BACTERIAL DISEASES

BBD-PP-01

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ECOPHAR Veler Indi la S.L.O

³ ECO Animal Health Ltd, Southgate, London, UK

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² Brazilian Agricultural Research Corporation, Embrapa Swine & Poultry, Concórdia, Santa Catarina, Brazil

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² Departament of Veterinary Population Medicine, College of Veterinary Medicine, University of Minnesota, St. Paul, MN, United States.

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¹Ceva Salud Animal, Barcelona, Spain

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<u>Christine Renken¹</u>, Mathias Ritzmann¹, Lisa Beffort¹, Christine Weiß¹, Andrea Luppi², Christoph Wähner³, Mathias Eddicks¹

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³ CEVA Animal Health, Duesseldorf, Germany

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¹ Swedish University of Agricultural Sciences, Dept of Biomedical Sciences and Veterinary Public Health

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⁴ Department of Pathology, Bacteriology and Poultry diseases

⁵ Animal health care Flanders

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⁷ Veterinary Epidemiology Unit

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⁵ IZSLER, Italy

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HERD HEALTH MANAGEMENT AND ECONOMY

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² Vetoquinol N.-A. Inc. Canada

³ Vetoquinol SA France

⁴ Independent Statistical Consultants

⁵ Departamento de Nutrición Animal y Bioquímica, Facultad de Medicina Veterinaria y Zootecnia, Universidad Nacional Autónoma de México

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¹Veterinary Population Medicine Department, University of Minnesota, USA

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Inge Larsen¹, Nikolaj Kjer Jensen¹, Julie Lynegaard¹, Nicole Bakkegård Goecke², Lars Erik Larsen², Jens Peter Nielsen¹

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⁴ Experimental Poultry Centre, Belgium

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Giovani Marco Stingelin¹, Marcela Cristina de Cezaro¹, Raphaela Moreira Oliveira¹, Reinaldo Fernandes Cooke², Marina Lopes Mechler-Dreibi³, Elizabeth Moreira dos Santos Schmidt¹

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³ 3 Department of Pharmaceutics and Industrial Pharmacy, Faculty of Pharmaceutical Sciences, Chulalongkorn University, Bangkok, Thailand

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⁶ Dpto. Anatomía y Anatomía Patológica Comparadas. Facultad de Veterinaria. Universidad de Murcia. Spain IMM-PP-14

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¹ Departamento de Fisiología, Facultad Veterinaria, Universidad de Murcia, Murcia, España ² Departamento de ciencia animal, Universidad de Lleida, Lleida, España

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⁴ UAB, Centre de Recerca en Sanitat Animal (CReSA, IRTA-UAB), Campus de la Universitat Autònoma de Barcelona, 08193 Bellaterra, Barcelona, Spain.

⁵ Boehringer Ingelheim Vetmedica GmbH AH Swine, Ingelheim, Germany

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¹General Pecuaria S.A., Vic, Spain

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- ² AGES, Institute for Veterinary Disease Control Mödling, Austria
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Ivan Mayor¹, David Escalada¹, Miguel Angel Jimenez¹

¹UVE S.A.

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¹ Department of Veterinary Science, University of Parma, Strada del Taglio, 10 – 43126, Parma, Italy

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Luca Ferrari¹, Giulia Ferrarini², Elena De Angelis¹, Benedetta Passeri¹, Giulia Ogno¹, Walter Magliani³, Paolo Borghetti¹, Paolo Martelli¹

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³ Department of Biomedical, Biotechnological and Translational Sciences (S.Bi.Bi.T), University of Parma, Via Gramsci, 14 – 43126, Parma, Italy

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Sophie Dürlinger¹, Gyula Balka², Poul Henning Rathkjen³, <u>Christian Kraft</u>⁴, Rebecca Morgenstern⁵, Andrea Ladinig¹

¹University Clinic for Swine, Department of Farm Animals and Veterinary Public Health, University of Veterinary Medicine Vienna, Austria

² University of Veterinary Medicine Budapest

³ Boehringer Ingelheim Vetmedica GmbH

- 4 Boehringer Ingelheim Veterinary Research Center GmbH & Co. KG
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Christian Kraft¹, Sophie Dürlinger², Gyula Balka³, Poul Henning Rathkjen⁴, Rebecca Morgenstern⁵, Andrea Ladinig²

¹Boehringer Ingelheim Veterinary Research Center GmbH & Co. KG

² University Clinic for Swine, Department of Farm Animals and Veterinary Public Health, University of Veterinary Medicine Vienna, Austria ³ University of Veterinary Medicine Budapest ⁴ Boehringer Ingelheim Vetmedica GmbH ⁵ Boehringer Ingelheim RCV GmbH & Co KG

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² IFIP, France

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PRELIMINARY STUDY ON "PAN-SURFOME" OF TRUEPERELLA PYOGENES ISOLATED FROM PIGS IN SPAIN Angela Galán-Relaño¹, Lidia Gómez-Gascón¹, Manuel José Rodríguez-Ortega², <u>Fernando Cardoso-To-</u> set³, <u>Belén Huerta¹</u>, <u>Inmaculada Luque¹, Carmen Tarradas¹</u> ¹ Animal Health Department, University of Córdoba, International Excellence Agrifood Campus 'CeiA3', 14071, Córdoba, Spain ² Department of Biochemistry and Molecular Biology, University of Cordoba. Campus of Rabanales, 14071, Cordoba, Spain 'International Excellence Agrifood Campus, CeiA3'

³ CICAP - Food Research Centre, 14400, Pozoblanco, Córdoba, Spain

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VACCINATION AGAINST SWINE ENZOOTIC PNEUMONIA WITH HYOGEN: PREVALENCE AND SEVERI-TY OF LUNG LESIONS IN A COMMERCIAL FARM. <u>Tiago Nunes</u>¹, Francisco Costa¹, Joana Ceia² ¹Ceva Portugal, Lda ²DVM - Valpor, SA (Alcanede - Portugal)

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INFLUENCE OF A COMBINED COLI/CLOSTRIDIUM VACCINATION OF SOWS ON THE ANTIBIOTIC USE IN PIGLETS DURING THE FARROWING - AND NURSERY PHASE <u>Elise Vandekerckhove¹</u>, Ilse Declerck¹ ¹ Boehringer Ingelheim

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ERADICATION OF PRRSV WITH THE PRIME BOOST VACCINATION CONCEPT ON A HUNGARIAN SWINE FARM Gabor Schindler¹, Tamas Revesz¹, Preben Mortensen², <u>Han Smits</u>³ ¹ Ceva Hungary & EU zone, Budapest, Hungary ² Ceva Sante Animale, Libourne, France ³ Ceva Phylaxia, SID, Budapest, Hungary

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<u>Piotr Cybulski</u>¹, Katarzyna Podgorska², Artur Jablonski², Edyta Michalik¹, Tomasz Chareza¹, Tomasz Stadejek³

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Life Sciences, Warsaw, Poland

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Hamadi Karembe¹, Reynald Magnier¹, Mathieu Peyrrou Peyrrou¹, Nicolas Guerra¹, Jan Vasek², Jiri Smola²,

Anja Joachim³, Daniel Sperling¹

¹Ceva. France

² VFU Brno

³ Vetmeduni, Vienna

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³ Ceva, France

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Ursula Ruczizka¹, Barbara Ulrike Metzler-Zebeli², Christian Knecht¹, Lisa Reiter¹, Till Rümenapf³, Andrea Ladinig¹

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² Institute of Animal Nutrition and Functional Plant Compounds, Department for Farm Animals and Veterinary Public Health. University of Veterinary Medicine Vienna. Vienna, Austria

³ Institute of Virology, Department for Pathobiology, University of Veterinary Medicine Vienna, Vienna, Austria

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Sophie Brilland¹, Nathalie Capdevielle², Paloma Suarez², Hamadi Karembe², Nicolas Guerra³, Daniel Sperling³

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² Specialist Animal Heath Service (GD), Deventer, The Netherlands

³ Chairman VGV KNMvD, Veterinary Clinic de Varkenspraktijk, Oss, The Netherlands

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² Ceva, France

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³ Faculty of Veterinary Science, Chulalongkorn University, Bangkok, Thailand

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Diocleciano Gayubo¹, <u>Carlos Pineiro</u>¹, Celia Santiago¹, M Angel de Andres¹, Inmaculada Diaz¹, Maria Aparicio¹

¹ Pig Champ Pro Europa SL

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M Angel de Andres¹, Armando Occon¹, Celia Santiago¹, Inmaculada Diaz¹, <u>Carlos Pineiro¹</u>, Maria Aparicio¹ ¹ Pig Champ Pro Europa SL

VETERINARY PUBLIC HEALTH

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CASE REPORT OF TRANSMISSIBLE GASTROENTERITIS CORONAVIRUS INFECTION ASSOCIATED WITH SMALL INTESTINE AND BRAIN LESIONS

Vasileios Papatsiros¹, Ioanna Stylianaki², Georgios Papakonstantinou³, Nikolaos Papaioannou², Georgios Christodoulopoulos3

¹Clinic of Medicine, Faculty of Veterinary Medicine, School of Health Sciences, University of Thessaly, ²Laboratory of Pathology, School of Veterinary Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki

³ Clinic of Medicine, Faculty of Veterinary Medicine, School of Health Sciences, University of Thessaly

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Vojislav Cvjetković¹, Carina Antonczyk¹, Christoph Waehner¹, Maxi Harzer², Kristin Heenemann², Dr. Antje Rückner², Michael Sieg², Bernd-Andreas Schwarz³, Thomas Vahlenkamp²

¹Ceva Tiergesundheit GmbH, Düsseldorf

² Center for Infectious Diseases, Institute of Virology, Faculty of Veterinary Medicine, University of Leipzig, An den Tierkliniken 29, 04103 Leipzig, Germany ³ Vaxxinova GmbH, Leipzig

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VVD-PP-07

PCV2D GENOGROUP MIGHT HAVE BECOME DOMINANT IN FRANCE Anne Leroux¹, Laetitia Poret², Alexis Nalovic³, Guilhem Poudevigne⁴, Hervé Tosser¹, Luc Miéli⁵, Frédéric Colin⁶ ¹HYOVET, Carrefour de Penthièvre, 22640 Plestan (France) ² SELAS DU BOCAGE, 36, route de Tercei, 61200 Argentan (France) ³ EPIDALIS, 16, bd Denis Papin, 35500 Vitré (France) ⁴ SOCSA ELEVAGE, 11, rue d'Ariane, 31240 L'Union (France) ⁵LABOCEA, 7 rue du Sabot, 22440 Ploufragan (France) ⁶ ZOETIS, Bâtiment VIVA, 10, Rue Raymond David, 92240 Malakoff, (France)

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RESULTS OF THE SEROLOGICAL INVEASTIGATION OF AUJESZKYS DISEASE AMONG SWINE IN UKRAINE. Vitaliy Ukhovskyi¹, Oleksandr Romanov², Jevgeniya Shaihet³, Irvna Sobko³ ¹Institute of Veterinary Medicine of National Academy of Agrarian Sciences, Kyiv, Ukraine ² Independent expert health and welfare of pigs, Ukraine, ³Center of Veterinary Diagnostics, Kyiv, Ukraine

VVD-PP-09

INFECTION PRESSURE OF PCV2 IN 20 FRENCH FARMS AND IMPACT OF THE VACCINATION ON THE EXCRETION. SOPHIE BRILLAND¹, NATHALIE CAPDEVIELLE¹, ROMAN KREJCI¹, ANDREA LUPPI², CORALIE DEFFON-TAINE³, MILY LEBLANC-MARIDOR³ ¹CEVA SANTE ANIMALE 10 Avenue de la Ballastière 35101 LIBOURNE CEDEX FRANCE ² IZSLER, Reggio Emilia, Italy ³ BIOEPAR, INRA, Oniris, Université Bretagne Loire, 44 307 Nantes, France



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² Swine Health Monitoring Project, University of Minnesota, USA ³ University of Lleida, Lleida, Spain

VVD-PP-14

CO-INFECTION BY PORCINE CIRCOVIRUS TYPE 2 (PCV2) AND PORCINE PARVOVIRUSES 1-7 (PPV1-7) IN SERUM OF PIGS

Dagmara Milek¹, Aleksandra Wozniak¹, Tomasz Stadejek¹

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VVD-PP-15

MACROSCOPIC AND MICROSCOPIC EVALUATION OF CENTRAL NERVOUS SYSTEM OF PIGLETS EX-PERIMENTALLY INOCULATED WITH BOVINE VIRAL DIARRHEA VIRUS DURING FOETAL PERIOD Marina Lopes Mechler-Dreibi¹, Felipe dos Santos Gomes¹, Igor Renan Honorato Gatto¹, Gabriel Yuri Storino¹, Felipe Ferreira Barbosa Pires¹, <u>Luís Guilherme de Oliveira¹</u>

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VVD-PP-16

EXPERIMENTAL INOCULATION OF BOVINE VIRAL DIARRHEA VIRUS IN PREGNANT GILTS DID NOT INDUCE CONGENITAL PERSISTENT INFECTION IN PIGLETS

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VVD-PP-17

DETECTION OF PORCINE CIRCOVIRUS TYPE 2 (PCV2) IN DIFFERENT DIAGNOSTIC MATERIALS <u>Aleksandra Wozniak¹</u>, Dagmara Milek¹, Tomasz Stadejek¹

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VVD-PP-18

RESULTS OF DIAGNOSTIC SAMPLES FROM SWINE FOR SWINE INFLUENZA A VIRUS IN THE NETHER-LANDS AND BELGIUM IN 2018 Peter van der Wolf¹, Verena Schüler², Emile Libbrecht¹, Marlies Olde Monnikhof¹, Katrin Strutzberg-Mind-

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³ IVD Innovative Veterinary Diagnostics (IVD GmbH)

VVD-PP-19

SUCCESS OF A NEW PRRS CONTROL PROGRAM, INCLUDING ROUTINE EARLY PIGLET VACCINATION, IN A PERSISTENTLY AFFECTED SPANISH FARM Juan Rodriguez¹ ¹ Agropormanso

VVD-PP-20

PREVALENCE OF PRRS VIRUS IN NURSERY PIGS IN DUTCH FARMS IN BETWEEN OCTOBER 2017 AND MARCH 2018 <u>Anke Verhaegen¹</u>, Tom Meyns², An Vanderzeypen² ¹ZOETIS B.V., Rivium Westlaan 74, Capelle ad Ijssel, The Netherlands ²ZOETIS Benelux, Mercuriusstraat 20, 1930 Zaventem, Belgium

VVD-PP-21

EVALUATION OF SERUM PORCINE TESCHOVIRUS TITER IN GROWER PIGS WITH NEUROLOGICAL SIGNS - A LONGITUDINAL STUDY

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VVD-PP-22

MONITORING THE EFFICACY OF A NEW PRRS VACCINATION PROGRAM IN A FARM EXPERIENCING AN OUTBREAK USING A NEW DIVA PCR PRRS TEST Juan Grandía¹, Teresa Montull¹, Rocío Sarasa², Beatriz Aznar², Javier Abadías³ ¹ Agro-Test-Control, S.L ² Inbiotic-Esmedagro, S.L ³ Zoetis Spain, S.L

VVD-PP-23

ABSENCE OF BOVINE VIRAL DIARRHEA VIRUS EFFECT ON THE SEMINAL QUALITY OF EXPERIMENTALLY INFECTED BOARS

Gabriel Yuri Storino¹, Marina Lopes Mechler-Dreibi¹, Eduarda Bellini Xavier¹, Artur Simonatto Fioroto¹, Igor Renan Honorato Gatto¹, Maria Emilia Franco Oliveira¹, <u>Luís Guilherme de Oliveira¹</u>

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VVD-PP-24

SAFETY AND EFFICACY OF PRRS VACCINATION IN PIGLETS AT 1 TO 4 DAYS OF AGE IN A FLEMISH FARM Stefan De Groote¹, Patrick Rabaeys¹, An Vanderzeypen², Anke Verhaegen³, Tom Meyns² ¹ DAP Vedanko, Keukelstraat 66A, 8750 Wingene, Belgium ² ZOETIS Benelux, Mercuriusstraat 20, 1930 Zaventem, Belgium ³ Zoetis B.V., Capelle ad Ijssel, The Netherlands.

VVD-PP-25

DIAGNOSIS OF PORCINE CYTOMEGALOVIRUS BY QPCR Lola Tolstrup¹, Charlotte Kristiane Hjulsager², Lars Erik Larsen², Svend Haugegaard³, Tim Kåre Jensen², Mette Sif Hansen², Charlotte Sonne Kristensen³ ¹SEGES Pig Research Center ²National Veterinary Institute ³SEGES Pig Research Centre

VVD-PP-26

PRRS 'PIGLET MONITOR' IN NORTHERN BELGIUM <u>Tamara Vandersmissen¹</u>, Willem Van Praet¹, Caroline Bonckaert¹, Marylène Tignon², Herman Deschuytere¹ ¹ Animal Health Care Flanders, Lier, Belgium ² Sciensano, Brussels, Belgium

VVD-PP-27

INTRODUCTION OF PCV2-VACCINATION IN A SOW FARM AND EFFECTS ON VIRUS LOAD IN BLOOD AND SALIVA SAMPLES <u>Annette Gass-Cofré¹</u>, Astrid Pausenberger², Katharina Schlessmann¹, Robert Tabeling² ¹ vet practice ² MSD Animal Health

VVD-PP-28

EVALUATION OF PORCINE EPIDEMIC DIARRHEA VIRUS (PEDV) SEROPREVALENCE IN FRANCE IN 2018 Isabelle Corrégé¹, <u>Roxane Rossel</u>¹, Béatrice Grasland², Nicolas Rose² ¹ ANSP – 5 rue Lespagnol, 75020 Paris ² Anses Laboratoire de Ploufragan-Plouzané-Niort, 22440 Ploufragan

VVD-PP-29

SWINE INFLUENZA - RESULTS FROM ROUTINE DIAGNOSTICS <u>Astrid Tschentscher</u>¹, Jan Böhmer¹, Verena Schüler², Stefan Pesch², Katrin Strutzberg-Minder¹ ¹IVD Innovative Veterinary Diagnostics (IVD GmbH) ²IDT Biologika GmbH

VVD-PP-30

DISCOVERING THE DOOR OPENER FOR PRRS IN TWO NEGATIVE FARMS WITH BIOPORTAL: CASE REPORT Iván Hernández-Caravaca¹, Sebastián Figueras-Gourgues¹, Victor Rodriguez-Vega¹, Eugenio Sánchez Tarifa¹, Gloria Abella¹ ¹ Boehringer Ingelheim Animal Health España

VVD-PP-31

OVERCOMING THE PRACTICAL LIMITATIONS OF PRRS ORF5 SEQUENCING Laura Valls¹, Alba Sánchez², Elena Navas², Jaime Maldonado² ¹HIPRA, Amer (Girona), Spain ²HIPRA

VVD-PP-32

USE OF OROPHARYNGEAL SWABS FOR PORCINE RESPIRATORY AND REPRODUCTIVE SYNDROME VIRUS DIAGNOSTICS AND SURVEILLANCE <u>Carles Vilalta¹</u>, Jorge Garrido², Juan Sanhueza¹, Montserrat Torremorell¹, Cesar Corzo³ ¹Veterinary Population Medicine Department, University of Minnesota, USA ² garri098@umn.edu ³ Background and Objectives

VVD-PP-33

CHARACTERISTICS OF PCV2 INFECTION DYNAMIC RELATIVE TO THE AGE OF PIGS IN THREE EU COUNTRIES Roman Krejci¹, Sophie Brilland², David Espigares³, Michael Albin⁴, Andrea Luppi⁵, Vilmos Palya⁶, Zalan Homonnay⁶ ¹Ceva

² Ceva, France ³ Ceva, Spain

- ⁴Caeva, Denmark
- ⁵ IZSLER, Regio Emillia, Italy ⁶ Ceva Phylaxia, Budapest, Hungary

VVD-PP-34

PCV2D-2 VIRUS DETECTED IN THE NETHERLANDS <u>Susan Kars-Hendriksen</u>¹, Zalan Homonnay², Manon Houben³, Karin Junker³, Han Smits² ¹Ceva Santé Animale B.V., Naaldwijk, The Netherlands ²Ceva Phylaxia, Budapest, Hungary ³GD Animal Health, Deventer, The Netherlands

VVD-PP-35

EPIDEMIOLOGICAL SURVEILLANCE AND CHARACTERIZATION OF INFLUENZA A VIRUSES (IAV) IN SPANISH AND PORTUGUESE PIG FARMS <u>Silvana Sosa¹</u>, Martí Cortey¹, Carlos Casanovas², Sergio Barrabés², Susana Mesonero-Escuredo², Montserrat Tello¹, Enric Mateu¹, Gerard Martín-Valls¹ ¹ Departament de Sanitat i Anatomia animals, Universitat Autònoma de Barcelona (UAB), 08193, Barcelona ² IDT Biologika SL, Gran Vía Carles III, 84, 3°, 08028 Barcelona

VVD-PP-36

DETECTION AND GENOTYPING OF PCV-2 AND DETECTION OF PCV-3 IN SERUM SAMPLES FROM DIF-FERENT EUROPEAN FARMS Viviane Saporiti¹, Marina Sibila¹, Florencia Correa-Fiz¹, Bernd Grosse Liesner², Joaquim Segalés^{3,4} ¹IRTA, Centre de Recerca en Sanitat Animal (CReSA, IRTA-UAB), Campus de la Universitat Autònoma de Barcelona, 08193 Bellaterra, Spain ²Boehringer Ingelheim Vetmedica GmbH AH Swine, Ingelheim, Germany ³Departament de Sanitat i Anatomia Animals, Universitat Autònoma de Barcelona (UAB), 08193 Bellaterra, Barcelona, Spain. ⁴UAB, Centre de Recerca en Sanitat Animal (CReSA, IRTA-UAB), Campus de la Universitat Autònoma de Barcelona, 08193 Bellaterra, Barcelona, Spain.

USE OF BIOPORTAL IN A PRRSV OUTBREAK IN A SPANISH FARM Roberto Bautista¹, Alberto García¹, <u>Sebastián Figueras</u>², Gloria Abella², Ivan Hernández², Victor Rodríguez², Eugenio Sánchez² ¹ Inga Food S.A., Zaragoza, España ² Boehringer Ingelheim Animal Health España, Spain.

VVD-PP-38

MOLECULAR CHARACTERIZATION OF ROTAVIRUS B AND ROTAVIRUS C STRAINS ISOLATED FROM NEONATAL DIARRHEA OUTBREAKS IN CATALONIA. <u>Anna Vidal¹, Margarita Martín¹², Laila Darwich¹², Enric Mateu¹², Martí Cortey¹</u> ¹ Departament de Sanitat i Anatomia Animals, Universitat Autònoma de Barcelona (UAB), 08193, Cerdanyola del Vallès, Spain. ² Centre de Recerca en Sanitat Animal (CReSA), UAB-IRTA, Campus de la Universitat Autònoma de Barcelona, 08193, Cerdanyola del Vallès, Spain.

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VVD-PP-39

CELL DEATH PHENOMENA ASSESSMENT IN THE THYMUS OF PIGLETS INFECTED WITH PRRSV-1 STRAINS OF DIFFERENT VIRULENCE

<u>Inés Ruedas Torres</u>¹, Irene Magdalena Rodríguez Gómez¹, Jose María Sánchez-Carvajal¹, Francisco José Pallares², Inmaculada Barranco¹, Jaime Gómez Laguna¹, Librado Carrasco¹

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VVD-PP-40

PCV2 GENOTYPE DISTRIBUTION IN ORGAN SAMPLES COLLECTED FROM PCVD CLINICAL CASES IN FLANDERS

Caroline Bonckaert¹, Emily Rolly¹, Liesbeth Allais¹, Steven Van Colen², Eva De Jonghe², Han Smits³, Peggy De Backer²

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² Ceva Santé Animale, Metrologielaan 6, 1130 Brussels, Belgium

³ Ceva Phylaxia, SSIU, Budapest, Hungary

VVD-PP-41

PREVALENCE AND SEASONAL VARIATION OF INFLUENZA A VIRUS - SWINE CIRCULATION IN NURS-ERY PIGS OVER A 5-YEAR PERIOD IN BELGIUM AND THE NETHERLANDS Frédéric Vangroenweghe¹

 $^1\mathrm{BU}$ Food Animals, Elanco Animal Health Benelux

VVD-PP-42

BENCHMARKING ON DIFFERENT SAMPLE TYPES FOR EARLY DETECTION OF PRRSV INFECTION Philipp Könighoff¹, Isabel Hennig-Pauka¹, Elisabeth große Beilage¹, Andrea Menrath¹, Tim Snider², Anna Romagosa², Kathrin Siebert²

¹ Field Station for Epidemiology, University of Veterinary Medicine Hannover, Bakum, Germany ² Pig Improvement Company, Sant Cugat del Valles, Barcelona, Spain

VVD-PP-43

ENVIRONMENTAL MONITORING OF ENTEROBACTERIACEAE CAN BE USED TO DETERMINE WEAK-NESSES IN FEED MILL BIOSECURITY FOR PORCINE VIRUSES Savannah Stewart¹, Cassandra Jones¹ ¹ Kansas State University

VVD-PP-44

IMPLEMENTATION OF PIGLET VACCINATION AT PROCESSING IN A PRRS UNSTABLE HERD Caroline Van de Veire¹, Martin Fockedey¹, An Vanderzeypen², Anke Verhaegen³, Tom Meyns² ¹DAP Vedanko, Keukelstraat 66A, 8750 Wingene ²ZOETIS Benelux, Mercuriusstraat 20, 1930 Zaventem, Belgium ³Zoetis B.V., Capelle ad Ijssel, The Netherlands.

VVD-PP-45

COMPARISON OF CONTEMPORARY STRAINS OF DIFFERENT PCV2 GENOTYPE VIRUSES BY EXPERI-MENTAL INFECTION OF PIGS Vilmos Palya¹, Zalan Homonnay¹, Steven Van Colen², Tamas Mato¹, Tibor Farkas¹, <u>Istvan Kiss¹</u> ¹Ceva Phylaxia, Budapest, Hungary ²Ceva Santé Animale B.V., Naaldwijk, The Netherlands

VVD-PP-46

FIRST DETECTION OF ANTIBODIES AGAINST PORCINE RESPIRATORY CORONAVIRUS IN NORWAY <u>Carl Andreas Grøntvedt</u>¹, Siv Klevar¹, Anne Nordstoga¹, Malin Jonsson¹, Siri Løtvedt², Solfrid Åmdal², Madelaine Norström¹ ¹ The Norwegian Veterinary Institute ² The Norwegian Food Safety Authority

VVD-PP-47

EFFICACY OF INGELVAC PRRSFLEX® EU AGAINST EXPERIMENTAL CHALLENGE WITH PRRSV AUT15-33 ("ACRO" PRRSV) Sophie Dürlinger¹, Gyula Balka², Poul Henning Rathkjen³, Christian Kraft⁴, Rebecca Morgenstern⁵, Till Rümenapf⁶, Andrea Ladinig¹ ¹ University Clinic for Swine, Department of Farm Animals and Veterinary Public Health, University of Veterinary Medicine Vienna, Austria ² University of Veterinary Medicine Budapest ³ Boehringer Ingelheim Vetmedica GmbH ⁴ Boehringer Ingelheim Veterinary Research Center GmbH & Co. KG ⁵ Boehringer Ingelheim RCV GmbH & Co KG ⁶ Institute of Virology, Department for Pathobiology, University of Veterinary Medicine Vienna, Vienna, Austria

VVD-PP-48

IMMUNOPATHOGENESIS OF LUNG LESIONS DURING THE EARLY PHASE OF INFECTION WITH PRRSV1 STRAINS OF DIFFERENT VIRULENCE

<u>Jose María Sanchez-Carvajal</u>¹, Irene Magdalena Rodríguez-Gómez¹, Francisco José Pallarés², Inés Ruedas-Torres¹, Ivan Díaz³, Enric Mateu⁴, Gerard Martín⁴, Jaime Gómez-Laguna¹, Librado Carrasco¹

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VVD-PP-49

FIRST DETECTION OF PDMH1N1(2009) IN A SWINE HERD IN BELGIUM Emile Libbrecht¹, Marlies Olde Monnikhof¹, Verena Schüler², Stephanie De Cuyper³, Peter van der Wolf¹ ¹IDT-Biologika Benelux ²IDT-Biologika GmbH ³DAP Mervet

VVD-PP-50

H1N1PDM09 INFECTION IN PIGS - SUBCLINICAL BUT IMMUNOLOGICALLY RELEVANT <u>Charlotte Schröder</u>¹, Theresa Schwaiger¹, Alexander Schäfer², Julia Sehl¹, Claudia Karte³, Bernd Köllner², Thomas C. Mettenleiter⁴, Reiner Ulrich¹, Ulrike Blohm² ¹ Department of Experimental Animal Facilities and Biorisk Management, Friedrich-Loeffler Institute, Gre *ifswald* ² Institute of Immunology, Friedrich-Loeffler Institute, Greifswald ³ Institute of Diagnostic Virology, Friedrich-Loeffler-Institut, Greifswald ⁴ Institute of Molecular Virology and Cell Biology, Friedrich-Loeffler-Institut, Greifswald

VVD-PP-51

EFFICACY OF A NOVEL VACCINE AGAINST PORCINE REPRODUCTIVE AND RESPIRATORY SYN-DROME VIRUS (PRRSV) IN NEONATAL PIGLETS <u>Heinrich Kreutzmann¹</u>, Gyula Balka², Sophie Dürlinger¹, Marta Cabana³, Monica Balasch³, Lucas Taylor⁴, Andrea Ladinig¹ ¹University Clinic for Swine, Department of Farm Animals and Veterinary Public Health, University of Veterinary Medicine Vienna, Austria

²University of Veterinary Medicine Budapest

³ Zoetis Manufacturing and Research Spain S.L.

 4 Global Development & Operations, Zoetis

VVD-PP-52

CASE STUDY OF PRRSV ERADICATION BY COMBINING A MLV AND KV PRRS VACCINE ON A HUN-GARIAN SWINE FARM Gabor Schindler¹, Tamas Revesz¹, Han Smits², <u>Preben Mortensen³</u> ¹Ceva Hungary & EU zone, Budapest, Hungary ²Ceva Phylaxia, SID, Budapest, Hungary ³Ceva Sante Animale, Libourne, France

VVD-PP-53

PORCINE RESPIRATORY AND REPRODUCTIVE SYNDROME (PRRS) CONTROL IN 6 FATTENING TO FIN-ISH (FF) HERDS: BENEFIT OF A WHOLE HERD APPROACH Ingrid Messager¹, Aline Lefèbvre², Rémy Jagu¹ ¹Boehringer Ingelheim ² SELAS vétérinaire HYOVET

VVD-PP-54

PRRSV1 INFECTION IMPACT IN THE INTESTINAL MICROBIOME COMPOSITION: A COMPARATIVE STUDY WITH STRAINS OF DIFFERENT VIRULENCE

HECTOR ARGUELLO¹, Irene Magdalena Rodríguez-Gómez², Jose María Sánchez-Carvajal³, Francisco José Pallares^{4,5}, Fiona Crispie⁶, Raúl Cabrera⁶, Enric Mateu⁷, Gerard Martín-Valls⁸, Librado Carrasco³, Jaime Gómez-Laguna⁹

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WELFARE AND NUTRITION

AWN-PP-01

IN VIVO EFFECT OF A COMPOUND FEED THAT IS BENEFICIAL FOR INTESTINAL HEALTH AND GROWTH IN WEANING PIGLETS IS PREDICTED BY IN VITRO ANALYSES <u>Yvonne Schilder¹</u>, Bart Engelen¹, Daniëlle Fiechter², Stefan Vaessen², Rob Bleumink³, Robert Jan Veldman²,

Bert Meijer¹, Raymond Pieters²

- ¹Dopharma Research BV
- ² Hogeschool Utrecht
- ³ Utrecht University

AWN-PP-02

POSITIVE EFFECT OF PORCESTIN ON ZOOTECHNICAL PARAMETERS (AVERAGE DAILY FEED INTAKE AND GROWTH) AND GUT HEALTH PARAMETERS (ILEAL VILLI LENGTH AND TOTAL ANTIOXIDANT CAPACITY) OF WEANED PIGLETS

Silvia Giorgi¹, Marcello Comi¹, Matteo Ghiringhelli¹, Angelo Lauwaerts², <u>Tim Vandecasteele</u>², Valentino Bontempo¹

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AWN-PP-03

IN VITRO PREBIOTIC PROPERTIES OF ARABINOXYLAN-RICH INGREDIENTS IN THE GASTROINTESTI-NAL TRACT OF WEANED PIGLETS Julie Uerlings¹, Martine Schroyen¹, Els Willems², Geert Bruggeman², Jérôme Bindelle¹, Nadia Everaert¹ ¹ Precision livestock and Nutrition Unit, TERRA teaching and research centre, Gembloux Agro-Bio Tech, ULiège, Passage des Déportés 2, 5030 Gembloux, BE ² Royal Agrifirm Group, Landgoedlaan 20, 7325 AW Apeldoorn, NL

AWN-PP-04

EFFECTS OF DIETARY VITAMIN PREMIX LEVELS ON PHYSIOLOGICAL RESPONSES, BLOOD PROFILES AND REPRODUCTIVE PERFORMANCE IN GESTATING SOWS DIET Hong Jun Kim¹ ¹ Seoul National University

AWN-PP-05

EFFECTS OF DIETARY HY-D® ON PHYSIOLOGICAL RESPONSES, BLOOD PROFILES, REPRODUCTIVE PERFORMANCE AND THEIR PROGENY IN GESTATING SOWS DIET Hong Jun Kim¹, <u>Sung Min Yoo¹</u> ¹ Seoul National University

AWN-PP-06

CAN DIETARY FIBRE LEVEL AND A SINGLE ENRICHMENT TYPE REDUCE THE RISK OF TAIL BITING IN UNDOCKED PIGS? Jen-Yun Chou^{12.3}, Rick B. D'Eath², Dale A. Sandercock², Keelin O'Driscoll¹ ¹Teagasc ²SRUC ³University of Edinburgh

AWN-PP-07

EFFECT OF A NEW PROBIOTIC COMPOSITION (AQ02) ON NEWBORN PIGLETS MARTA GARCIA-DIEZ¹, HECTOR ARGUELLO², JOAN MARCA¹, ANA CARVAJAL³, PEDRO RUBIO³, ED-GAR G. MANZANILLA⁴ ¹ AQUILON CYL S.L. ² Grupo genómica y mejora animal. Departamento de Genética. Universidad de Córdoba. ³ Grupo DIGESPORC. Sanidad Animal. Facultad de Veterinaria. Universidad de León ⁴ Pig development department. Teagasc Moorepark. Ireland

AWN-PP-08

MODELLING THE EFFECT OF BIOSECURITY PRACTICES ON KEY PIG WELFARE INDICATORS <u>Maria Rodrigues da Costa¹²</u>, Nienke van Staaveren³, Julia Calderón Díaz¹, Gerard McCutcheon⁴, Edgar Garcia Manzanilla¹², Laura Boyle¹ ¹ Pig Development Department, Teagasc - Animal & Grassland Research and Innovation Centre, Moorepark, Fermoy, Co. Cork, Ireland ² School of Veterinary Medicine, University College Dublin, Belfield, Dublin 4, Ireland ³ Department of Animal Biosciences, University of Guelph, Guelph, N1G 2W1, Canada ⁴ Pig Development Department, Teagasc Oak Park, Co. Carlow, Ireland. **AWN-PP-09**

BACILLUS-BASED PROBIOTIC REDUCES FAECAL EXCRETION OF CLOSTRIDIUM PERFRINGENS IN SOWS AROUND FARROWING Antonia Schulte¹, <u>Birgit Keimer¹</u>, Carina Helmer² ¹Biochem Zusatzstoffe GmbH, Germany ² AniCon Labor GmbH, Germany

AWN-PP-10

COMBINATION OF A BACILLUS-BASED PROBIOTIC AND YEAST-BASED PREBIOTIC IMPROVES FAECAL CONSISTENCY AND REDUCES INDIVIDUAL ANTIBIOTIC TREATMENT IN EARLY WEANED PIGLETS <u>Birgit Keimer¹</u>, Antonia Schulte¹ ¹ Biochem Zusatzstoffe GmbH, Germany

AWN-PP-11

EFFECT OF A COMMERCIAL ORGANIC ACID BLEND ON GROWTH PERFORMANCE, GUT MORPHOL-OGY, MICROBIOTA COMPOSITION AND METABOLIC FUNCTION IN NURSERY PIGS UNDER DIETARY AND ENVIRONMENTAL CHALLENGES Ping Ren¹, Juxing Chen¹, Mercedes Vazquez-Anon¹ ¹ Novus International, Inc., St. Charles, Missouri, USA

AWN-PP-12

COLLECTION AND COMPOSITION OF SALIVA FROM SUCKLING PIGLETS Eva de Goede², Floris Bikker¹, <u>Tijs J. Tobias</u>² ¹ Academisch Centrum Tandheelkunde Amsterdam ² Faculty of Veterinary Medicine, Utrecht University, the Netherlands

AWN-PP-13

PORK PRODUCER OUTREACH: COULD WE BE DOING BETTER? RESULTS OF A NORTH AMERICAN SURVEY Sarah H Ison^{1,2}, Ronald O Bates², Juan P Steibel², Catherine W Ernst², Janice M Siegford² ¹World Animal Protection

² Michigan State University

AWN-PP-14

CHARACTERIZATION OF DEPOSITS IN DRINKING WATER PIPES IN PIGLET NURSERIES Johanna Vogels¹, Jost Wingender², Jaqueline Uphoff², Kai Aumann³, Gabriela Schaule⁴, Diana Meemken⁵, Isabel Hennig-Pauka¹ ¹ Field Station for Epidemiology, University of Veterinary Medicine Hannover, Bakum, Germany ² Biofilm Centre, Aquatic Microbiology, University of Duisburg-Essen, Essen, Germany ³ Aumann Hygienetechnik, Vechta, Gemany ⁴ IWW Water Centre, Mülheim, Germany ⁵ Institute for Food Safety and Food Hygiene, Freie Universiteat Berlin, Berlin, Germany

AWN-PP-15

NORTH AMERICAN STAKEHOLDER PERCEPTIONS OF ISSUES AFFECTING THE MANAGEMENT, PER-FORMANCE, AND WELFARE OF PIGS <u>Sarah H Ison^{1,2}</u>, Kaitlin E Wurtz², Carly I O'Malley², Janice M Siegford² ¹World Animal Protection

² Michigan State University

AWN-PP-16

EFFECTS OF OIL ADMINISTRATION ON ENDOTOXIN TRANSLOCATION IN WEANING PIGLETS <u>Nicole Reisinger¹</u>, Barbara Doupovec¹, Caroline Emsenhuber¹, Elisabeth Mayer¹, Gerd Schatzmayr¹ ¹BIOMIN Research Center

AWN-PP-17

COMPARATIVE EFFICACY OF ORAL MELOXICAM (METACAM® 15 MG/ML ORAL SUSPENSION FOR PIGS) AND INJECTABLE KETOPROFEN AS METAPHYLAXIS TREATMENT IN POST-PARTUM SOWS Ivan Galindo¹, Paula Sánchez¹, <u>Sebastián Figueras</u>², Antonio Callén², Gloria Abella², Ivan Hernández², Victor Rodríguez², Eugenio Sánchez² ¹ Agropor S.L., Murcia, Spain ² Boehringer Ingelheim Animal Health España, Spain.

AWN-PP-18

SCORING CLAW LESIONS ON A DUTCH SOW HERD: USING INTERDISCIPLINARY KNOWLEDGE IN YOUR PRACTICE Aron Coenders¹, <u>Wikke Kuller</u>¹, Josine Gelauf¹, Bas Kolpa¹ ¹University Farm Animal Practice, Harmelen, The Netherlands

AWN-PP-19

RELATIONSHIP BETWEEN SKIN LESION SEVERITY AND PHYSIOLOGICAL STRESS INDICATORS, CAR-CASS AND MEAT QUALITY OF SLAUGHTER PIGS <u>Nikola_obanović¹</u>, Nedjeljko Karabasil¹ ¹ Department of Food Hygiene and Technology, Faculty of Veterinary Medicine, University of Belgrade

AWN-PP-20

FUNGAL FERMENTED PRODUCTS INCREASE GROWTH AND SLAUGHTER WEIGHT OF FATTENERS. Sara Sancho Knapik¹, Juan Antonio Mesonero Escuredo², Janneke Allaart³, Petra Roubos³, Nienke de Groot² ¹Inga Food I + D ²Trouw Nutrition

³ Trouw Nutrition R&D

AWN-PP-21

USE OF BONE BIOMARKERS OSTEOCALCIN AND C-TELOPEPTIDE TO DIAGNOSE METABOLIC BONE DISORDERS IN PIGS <u>Theo Geudeke¹</u>, Godfried Groenland², Sylvia Greijdanus¹, Kikianne Kroeske¹, Guillaume Counotte¹ ¹GD Animal Health, Deventer, The Netherlands ²De Heus Animal Nutrition, The Netherlands

AWN-PP-22

POST OPERATIVE INTRANASAL PAIN TREATMENT IN A MINIATURE PIG Alexander Grahofer¹, Alessandro Mirra² ¹ Clinic for Swine, Vetsuisse Faculty, University of Bern, Switzerland ² Clinical Anesthesiology, Vetsuisse Faculty, University of Bern, Switzerland

AWN-PP-23

SPECIFIC DIETARY AMINOACIDIC PROFILE MIGHT IMPROVE GROWTH PERFORMANCE OF PIGLETS FROM GILTS IN THE POST WEANING PHASE <u>Carlos Pineiro</u>¹, Joaquín Morales¹, Gema Montalvo¹ ¹ PigCHAMP Pro Europa. C/Dámaso Alonso 14, 40006, Segovia, Spain

AWN-PP-24

INFLUENCE OF LIVE WEIGHT OF GROW-FINISH PIGS ON THE FEED INTAKE FED VIA A LIQUID FEED-ING SYSTEM WITH DIFFERENT GROUP SIZE AND WITH A DIFFERENT PIG-TO-FEEDER RATIO. Martin Ziron¹, Julia Aschebrenner¹ ¹FH SWF Soest

AWN-PP-25

ANIMAL WELFARE ASSESSMENT IN GERMAN FATTENING PIG UNITS - CLINICAL EVALUATIONS (PART OF THE MUITIVIS-PROJECT) Ines Spiekermeier⁴, Birte Wegner², Julia Grosse-Kleimann³, Henning Meyer⁴, Heiko Plate⁴, Hendrik Nien-

hoff¹, Michaela Fels², Elisabeth grosse Beilage⁵, Lothar Kreienbrock³, Hubert Gerhardy⁶

¹Swine Health Service, Chamber of Agriculture Lower Saxony, Oldenburg, Germany

² Institute for Animal Hygiene, Animal Welfare and Farm Animal Behaviour, University of Veterinary Medicine Hanover, Foundation, Hanover, Germany

³ Department of Biometry, Epidemiology and Information Processing, University of Veterinary Medicine Hanover, Foundation, Hanover, Germany

⁴ VzF GmbH Erfolg mit Schwein, Uelzen, Germany

⁵ Field Station for Epidemiology, University of Veterinary Medicine Hanover, Foundation, Hanover, Germany ⁶ Marketing Service Gerhardy, Garbsen, Germany

AWN-PP-26

STATUS QUO ANALYSES OF NOISE LEVEL IN PIG FATTENING UNITS IN GERMANY <u>Birte Wegner¹</u>, Ines Spiekermeier², Hendrik Nienhoff², Julia Grosse-Kleimann³, Karl Rohn³, Henning Meyer⁴, Heiko Plate⁴, Hubert Gerhardy⁵, Lothar Kreienbrock³, Elisabeth grosse Beilage⁶, Nicole Kemper¹, Michae-

la Fels¹ ¹ Institute for Animal Hygiene, Animal Welfare and Farm Animal Behaviour, University of Veterinary Medicine Hanover, Foundation, Germany

² Swine Health Service, Chamber of Agriculture Lower Saxony, Oldenburg, Germany

³ Department of Biometry, Epidemiology and Information Processing, University of Veterinary Medicine Hanover, Foundation, Germany

⁴ VzF GmbH, Uelzen, Germany

⁵ Marketing Service Gerhardy, Garbsen, Germany

⁶ Field Station for Epidemiology, University of Veterinary Medicine Hanover, Foundation, Germany

AWN-PP-27

IRON DEFICIENCY IN NEWLY WEANED PIGS Robert Friendship¹ ¹University of Guelph

AWN-PP-28

USE OF ANTIPYRETIC, ANTI-INFLAMMATORY AND ANALGESIC MEDICATION IN BELGIAN SWINE INDUSTRY

<u>Alexandra Schoos</u>¹, Eva De Jonghe², Peggy De Backer², Dominiek Maes¹ ¹Ghent University, Faculty of Veterinary medicine, Porcine Health Management Unit ²Ceva Santé Animale, Metrologielaan 6, 1130 Brussels, Belgium

AWN-PP-29

MICROBIOTA REGULATION IN INTESTINE OF PIGLETS FED DIFFERENT COPPER SOURCES AND DOSES Carmen Ambrosio¹, Hauke Smidt¹, Jurgen van Baal¹, <u>Rudi Forier</u>², Agathe Romeo², Paul Bikker¹ ¹Wageningen University & Research, 6708 PB Wageningen, The Netherlands ² Animine, 74330 Sillingy, France

NOTES

φ**idt**

Shigatoxin/Edema Disease: Still walking on a tight rope?

Eliminate the threat completely. Tread on solid ground.

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Ecoporc SHIGA suspension for injection for pigs. Qualitative and quantitative composition: Each dose of 1 ml contains: Active substance: Genetically modified recombinant Stx2e antigen: $\geq 3.2 \times 10^6$ ELISA units. Adjuvant: Aluminium (as hydroxide) max. 3.5 mg. Excipient: Thiomersal max. 0.115 mg. Indications for use: Active immunisation of piglets from the age of 4 days, to reduce the mortality and clinical signs of oedema disease caused by Stx2e toxin produced by *E. coli* (STEC). Onset of immunity: 21 days after vaccination. Duration of immunity: 105 days after vaccination. So not use in case of hypersensitivity to the active substance, to the adjuvant or to any of the excipients. Adverse reactions: Commonly very small local reactions such as mild swelling at the injection site (maximum of 5 mm) may be observed, but these reactions are transient and subside within a short time (up to seven days) without treatment. Clinical signs such as temporary mild behavioural disturbances can uncommonly be observed after application of Ecoporc SHIGA. Commonly a slight rise in body ut temperature (maximum of 1.7 °C) may occur after injection. But these reactions subside within a short time (maximum of 1.7 °C) may occur after injection. But these reactions subside within a short time (maximum of 1.7 °C) may occur after injection. But these reactions subside within a short time (maximum of 1.7 °C) may occur after injection. But these reactions subside within a short time (maximum of 1.0 °C) may occur after injection. But these reactions subside within a short time (maximum of 1.0 °C) may occur after injection. But these reactions subside within a short time (maximum of 1.0 °C) may occur after injection. But these reactions subside within a short time (maximum of 1.0 °C) may occur after injection. But these reactions subside within a short time (maximum of 1.0 °C) may occur after injection. But these reactions subside within a short time (maximum of 1.0 °C) may occur after injection. But these reactions subside within a sho

Ecoporc SHIGA Suspension for injection for pigs. Инжекционна суспензия за прасета Екоащо екондруга ула хеброос

GIDT

ECOPORC

50 ml

Ecoporc SHIGA

SOCIAL PROGRAMME

WELCOME RECEPTION

The Welcome Reception takes place in Tivoli-Vredenburg on Floor 5 and 6 on Wednesday 22 May, 18h00, after the scientific programme.

Tivoli-Vredenburg has been striving to be as open as possible since its opening. A low-threshold and accessible place, from and for the city, for young and old. The wide programme attracts many different audiences to the different halls, but there is also room for meetings and liveliness in the spaces between them. The K.F. Hein Foyer and Plein 6 are such examples of how Tivoli-Vredenburg wants to implement this.

Join us for a drink and food bites on the first symposium day of the 11th ESPHM and take this opportunity to socialize with colleagues, friends and make new contacts in an informal environment.

PUB CRAWL

After the Welcome Reception we invite you to discover the beauty of Utrecht with a Pub Crawl along different Pubs, hosted by official sponsors of the ESPHM2019.

Some of the sponsors have fully adopted a Pub in the heart of the city center. It is up to you to discover the city and find the Pubs (with guidance) to join them for a drink and some food bites. We will provide you with a map of the city center, some coins for your drinks and guidance along the way.



SYMPOSIUM FAREWELL DINNER

The Farewell Dinner takes place in the Ronda, which is one of the unique halls of Tivoli-Vredenburg, on Thursday 23 May from 20h00.

The name Ronda comes from the round shape of the hall and the fact that the hall hangs like a house in the building; just like the houses on the mountain ridge of the Spanish city of Ronda.

The Boston Tea Party will join us for musical entertainment. They are, according to insiders, Dutch best and especially most fun music band with well-known hits and many mash-ups of delicious old and new party classics.

GOLD SPONSORS

BOEHRINGER INGELHEIM ANIMAL HEALTH www.boehringer-ingelheim.com



Boehringer Ingelheim is the second largest animal health business in the world. We are committed to creating animal wellbeing through our large portfolio of advanced, preventive healthcare products and services. With net sales of 3.9 billion euros (2017) and around 10,000 employees worldwide, we are present in more than 150 markets. We believe that the value of an animal health company goes beyond the products they sell. It's the industry knowledge, technical support and customized solutions they bring that really help improve your overall production and profitability.

Prevention Works is a holistic approach to swine health built on our range of innovative world-class vaccines complemented by:

- Professional people with a passion for pigs
- State-of-the-art diagnostics and support from global research facilities
- Tools to evaluate the success of prevention

Ultimately, we are committed to providing the unique knowledge, products and support services producers and veterinarians need to minimize disease transmission, maximize immune response and optimize profitability.

Our goal is to shape the future of Swine Health and help you take pig production to the next level.

For more information visit www.preventionworks.info

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Driven to innovate and with a proven record of double-digit growth, Ceva is one of the fastest growing top 10 animal healthcare companies. Our vision reaches far beyond animal health and welfare.

We're truly global, based in 45 countries and working across more than 110. We have 12 R&D centres, 25 production sites and more than 5000 employees worldwide.

Ceva is a key partner for the swine sector, thanks to a broad range of veterinary products providing the right responses to the sanitary and zootechnical objectives of modern swine farming. The Group has invested heavily, especially in R&D, to offer the right products to meet the needs of professionals, notably in vaccines, reproduction and anti-infectives.

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- Flexibility to use from 1 day old
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- Protects piglets, gilts and sows



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PRRS



zoetis

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DOPHARMA www.dopharma.com



Dopharma is a family owned veterinary pharmaceutical company with its headquarters in the Netherlands. Dopharma delivers high quality veterinary pharmaceuticals for livestock since 1969. Dopharma's products are sold in over 50 countries by 4 local subsidiaries and approximately 40 distribution partners. Dopharma produces antibacterial, antiparasitic and anti-inflammatory products as well as hormone preparations, corrective preparations and complementary feed.

GD ANIMAL HEALTH www.gdanimalhealth.com



Teaming up for animal health, in the interest of animals, their owners and society at large. For one hundred years, that has been the mission for which we stand at GD.

Approximately 500 employees innovatively work on the health of farmed animals and companion animals every day together with farmers, veterinarians, governments and the industry. GD is mainly active on the Dutch market, but is nowadays undertaking increasingly more international activities. In 2018, GD recorded a turnover of 60 million euros.

We own one of the largest veterinary laboratories in the world, in which we perform over 5 million laboratory analyses annually. GD employs a team of veterinarians, specialists and scientists who execute animal health monitoring, conduct practical research and develop programmes for animal disease prevention and control.

The combination of diagnostics and animal health expertise is what makes GD so unique. This enables us to offer products and services that not only improve animal health, but are also convenient for our customers and generate good financial returns. Our laboratory is equipped with state-of-the-art appliances. Approximately 1,000 different analyses are performed routinely, varying from post mortem research (dissection) to executing molecular diagnostic tests.

GD has a good international reputation as a contract research organisation for applied research, education and consultancy. Our 'GD Academy' education and training institute organises training sessions about animal health for farmers and their veterinarians and for the pharmaceutical and feed industries. The courses comprise both theory and practice of veterinarian diagnostics and laboratory research.

HIPRA www.hipra.com



HIPRA is a veterinary pharmaceutical company dedicated to the research, production and marketing of products for Animal Health. At HIPRA we are convinced that the future lies in prevention. We are specialists in developing innovative preventive solutions. We have a broad range of highly innovative Biological products, an advanced diagnostic service and our own line of Diagnostic kits. HIPRA has a great potential for growth and the most products launched in recent years, and this line will continue in the coming years. This enables us to continue our international expansion, while always maintaining the independence that we are characterized by and the entire dedication to the world of animal health and serving our customers.

IDT BIOLOGIKA www.idt-biologika.com



The IDT Animal Health (a division of IDT Biologika) develops, produces and markets highquality animal vaccines and pharmaceuticals to be used in veterinary practice, with a particular focus on livestock, especially swine. However, vaccines are also produced for cattle, rabbits, pigeons and poultry.

With its rabies vaccines for the oral immunisation of foxes, IDT Animal Health has been crucial to the successful eradication of rabies in Germany as well as in other European countries and beyond. Therefore, IDT Animal Health is a respected partner for the research and control of wild and domestic animal rabies worldwide.

Moreover, IDT Animal Health offers solutions for problems for which there are no commercial vaccines available as yet. The vaccines of the BESTVAC brand are manufactured in an outstanding quality for which they are known for in all of Europe. IDT Animal Health operates its own modern research facility for the development of innovative animal vaccines.

At IDT Biologika, we are an international leader in the field of biotechnology, a key global technology for the 21st century. An almost 100-year tradition of manufacturing vaccines and pharmaceuticals motivates and obligates us to continue our work in improving the health of humans and animals.

The headquarters of the company are in Dessau, Germany. IDT Biologika also operates worldwide through subsidiaries.

IDT Biologika

Am Pharmapark 06861 Dessau-Rosslau, Germany Phone: +49 (0)34901 8850

MSD ANIMAL HEALTH www.msd-animal-health.com



As a global healthcare leader, MSD works to help the world be well. MSD Animal Health, known as Merck Animal Health in the United States and Canada, is the global animal health business unit of MSD. We offer one of the industry's most innovative portfolios – not only of products, but also of services and technologies – to prevent, treat and control diseases across all major farm and companion animal species. Our mission – The Science of Healthier Animals – guides all of our work. Healthier animals mean a sustainable food supply, protection for humans against diseases passed from animals, and longer, healthier lives for pets.

Our products fight diseases that can devastate animals, threaten human health, and disrupt the supply of food. We continually introduce new technologies to help our customers maximize their efficiency while improving animal wellbeing, such as the world's first non-parasiticide cattle product with a transdermal route of administration. Finally, we keep people happy by caring for their family pets with innovative products including the first chewable tablet for dogs effective against fleas and certain tick species for up to 12 weeks.

MSD Animal Health's robust R&D pipeline spans key therapeutic areas, providing a solid platform for further advances in veterinary medicine. Our customers expect more from us than just medicines, and we continue to deliver the information, technologies and veterinary services to meet their needs around the world. As a multi-species global company operating in more than 150 markets, we respond readily to the demands of our dynamic industry.

For more information, visit www.msd-animal-health.com or connect with us on LinkedIn and Twitter.

TROUW NUTRITION www.trouwnutrition.com



Trouw Nutrition, a Nutreco company, is a global leader in innovative feed, farm and health management solutions for animal production, offering a range of products, models and services to boost productivity and support animal health through each life stage. With our unique, science-based solutions, Trouw Nutrition has been meeting the needs of farmers and home-mixers, feed producers, integrators and distributors since 1931. Headquartered in the Netherlands, our company has locations in 28 countries, employing approximately 8,000 people.

Trouw Nutrition is committed to sustainably feeding the world's growing population with healthier and safer foods of animal origin by driving the transition from current animal nutrition practices to new, sustainable, integrated farming solutions.

Trouw Nutrition's key innovation focus areas are Early Life Nutrition, Healthy Life, Precision Farming and Feed Safety & Quality. We conduct more than 70 global R&D studies annually at our in-house research facilities to develop nutritional products, models and services, and to explore their mode of action. Located in Canada, the Netherlands and Spain, these high-tech facilities include specialist electronic feeding and water stations that allow our researchers to individually monitor the feeding behaviour of animals in group-housed facilities. In addition, we employ metabolism facilities for health-related, physiological and digestibility research.

Passion and science are our core drivers. By providing knowledge-based solutions suited to today's ever-changing and increasingly connected world, we are able to ensure the profitability of our customers and business partners around the world. Our unique, integrated approach delivers the highest quality of feed, best farm-management practices, and optimal animal health and performance.

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VETOQUINOL, YOUR TRUSTED ANIMAL HEALTH PARTNER

Founded in 1933, Vetoquinol is a leading international player in animal health. Vetoquinol innovates, develops, manufactures and sells medicines and non-medicinal products for food-producing animals (cattle & pigs) and pets (dogs & cats).

With a presence amongst the top 10 global veterinary pharmaceutical laboratories, Vetoquinol combines durability, development and responsibility, while continuing to pursue its personal adventure.

Vetoquinol develops sustainable links based on trusted relationships, with veterinarians, breeders and pet owners alike. In constant contact with customers, Vetoquinol works to continuously adapt its products and services to their needs.

Partners and customers who trust us. In the world of the pharmaceutical industry, Vetoquinol stands apart due to its position as a company that's firmly dedicated to animal health and a trusted partner. Whether supporting a veterinarian who is developing a new clinic, helping a producer get the most out of their farm, or helping an animal lover maintain their pet's well-being by providing high-quality products, Vetoquinol's commitment remains focused on the same promise made over 85 years ago: achieve more together.

By the side of professionals : In addition to its widely-recognized high-quality products, Vetoquinol is going even further by designing value-adding services alongside veterinarians for use in their daily practice with their customers and breeders, including digital tools to improve observations and technical and scientific training, for example. Veterinarians represent the essential link in the world of animal health. The company focusses on building quality relationships with veterinarians and customers, listening carefully and responding to their needs.

ZOETIS www.zoetis.com



At Zoetis, we discover, develop, manufacture and market veterinary medicines, vaccines and diagnostics, complemented by genetic tests, biodevices and a range of services. We work to help meet the growing worldwide demand for meat, poultry, fish, eggs and dairy foods and to care for the increasing number of pets. We support those who raise and care for farm animals with a range of products and services that offer tangible solutions to the many health and productivity challenges they face every day. Zoetis is working to develop a next generation of animal health solutions that will help farmers and veterinarians produce a safe, affordable and sustainable supply of animal protein despite finite natural resources and other constraints. We are proud of our six-decade commitment to the veterinary profession. For practicing professionals, we provide technical support and continuing education. We partner with veterinary professional associations and institutions to provide scholarships, career development programs and research fellowships for veterinary students. In developing countries, we participate in collaborations with veterinary colleges and associations to elevate standards of veterinary education, modernize treatment and standards of care, and grant wider access to care. With our singular focus on animal health, we strive to make our products, services and people the most valued by veterinarians and livestock farmers around the world.



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HENKE-SASS, WOLF GMBH www.henkesasswolf.de



Henke-Sass, Wolf GmbH is a leader in the concept, design, production, sales & service of a range of needles, syringes and injection systems. HSW quality products are innovative, user-friendly and are specifically designed for use in the veterinary field.

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Pharmacosmos markets its world leading injectable iron brand Uniferon® through dedicated partners in more than 20 countries. Our injectable iron is a proprietary Pharmacosmos product optimized for use in veterinary medicine and it is supported by a strong brand platform and farm-level anaemia management service program. The optimal partner are companies with a full sales coverage of their local market, strong competencies in veterinary medicine, and a dedication to bring optimal iron care to their local veterinarians and farmers

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We collaborate with leading medical experts in driving research to uncover new clinical insights of iron metabolism and iron deficiency that have the potential to change the way iron deficiency is prevented and treated in humans. We are actively seeking opportunities to collaborate on investigator sponsored studies.

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Across the world, more than 1 billion people live with iron deficiency anaemia, making it one of the largest global health challenges of our time. At Pharmacosmos, we want to change the way iron deficiency is prevented and treated in humans and animals.

We are inspired by one central question: How can we continue to improve patient safety, recovery and convenience and thereby achieve better outcomes?

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Pig genetics company Topigs Norsvin is renowned for its innovative approach to implementing new technologies and a continuous focus on cost-efficient and sustainable pig production. Research, innovation, and dissemination of genetic improvement are the cornerstones of the company. Continuous and strong product improvement will enable clients to achieve significant added value in their production. We are more than happy to tell you more. Please visit www.topigsnorsvin.com or connect with Ton van de Goor, Director Marketing & Communication via ton.van.de.goor@topigsnorsvin.com



PRACTICAL INFORMATION

CONFERENCE VENUE

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The 11th European Symposium of Porcine Health Management (ESPHM) is held at Tivoli-Vredenburg in Utrecht, The Netherlands.

TIVOLI-VREDENBURG

Vredenburgkade 11 3511 WC Utrecht The Netherlands

SYMPOSIUM SECRETARIAT





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REGISTRATION DESK OPENING HOURS

Wednesday May 22nd: from 11:00h to 17:00h
 Thursday May 23rd: from 08:00h to 18:00h
 Friday May 24th: from 08:00h to 13:00h

Please go to the registration desk upon arrival to collect your symposium documents.

WARDROBE TIVOLI-VREDENBURG OPENING HOURS

Wednesday May 22nd: 10h00 to 20h00
 Thursday May 23rd: 07h30 to 19h30
 Friday May 24th: 07h30 to 14h00

All items have to be picked up before closing. If not picked up, Tivoli-Vredenburg staff will bring it to the artists' reception at the end of the day.



WIFI

The WiFi access is free for all the attendants to the symposium. This network will be broadcasted to all symposium venue areas. Access to this WiFi network is through the following network (no password needed):
 Network: ESPHM2019 (sponsored by FORCERIS by CEVA)

APP

Stay tuned by downloading the App!

Search for the App ESPHM2019 in the Apple store or Google Play, download and you're ready!



PUBLIC TRANSPORT

For up to date schedule information about trains and buses, we advise you to visit www.9292.nl/en. This is the most common public transport planner in the Netherlands.

MEDICAL ASSISTANCE AND INSURANCE

- In emergency situations, you can contact the local police, ambulance service, fire department and other emergency services by calling 112.
- Participants are advised to make their own arrangements regarding travel insurance and medical assistance during the symposium. Neither the Organization nor the Secretariat are able to accept any responsibility whatsoever for damage or injury to persons or their belongings during the symposium.

BADGES AND SECURITY

It is essential that you wear your personal badge at all times while in the symposium venue.

ATTENDANCE CERTIFICATE

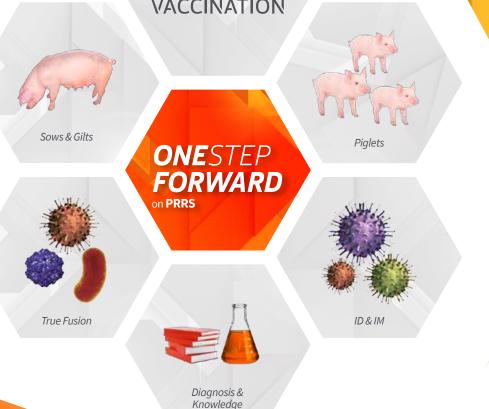
Attendance Certificates will be issued by the Symposium Secretariat and can be downloaded after the symposium through your personal ESPHM2019 account.

NOTES



Live vaccine, Porcine Reproductive and Respiratory Syndrome (PRRS)





UNISTRAIN®PRRS. Composition per dose: Live attenuated Porcine reproductive and respiratory syndrome vince (PPRSV), strain VP-046 BIS 103.5-105.5 CCIDS0 (cell culture infectious dose). Phosphate buffer solution. Indications: Breeding females: For active immunisation of breeding females from famos affected with European PRRS vince reproductive disorders, incidence and duration of vinaemia, transplacental vince transmission, vince tissue load and clinical signs associated with a first associated with strains of PRRS vince. Index on pilet performance (mortality and weight gain) within the first 28 days of life. <u>Onzero dimmunity</u>: 30 weeks. Administration occurred during the fattening period, a reduction in mortality and in the negative effects of index operimental conditions, the active immunisation of use in naive breeding herds in which the presence of European PRRS Vina to the established through reliable diagnositic virological methods. <u>Withdrawal period</u>, area of hypersensitivity to the active immediated products: Special Precations: Do not use in naive breeding herds in which the presence of European PRRSV has not been established through reliable diagnositic virological methods. <u>Withdrawal period</u>. Ero days. **Interaction with other** metedicated products: Special Precations: <u>Necerial Precations</u>, No and the INPRS UNCIDENCES, <u>Decial Product INPRS Vinas</u>, it is adviced to mass vaccinated all target pigs within hard of monte earliest receations: Vaccinate healthy animal solv). For an optimal control of PRRS Vinas, it is adviced to mass vaccinate all larget pigs within hard for momende age onwards. Newly introduced PRRS Vinas to the safety and efficacy data are available which demonstrate that this vaccine can be avaccine strain any past for up to 9 da





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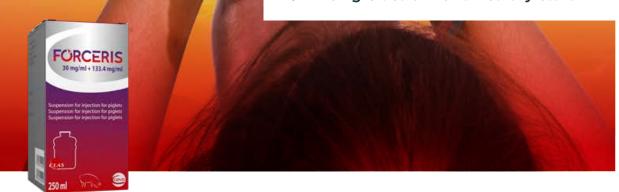
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