

OIE Collaborating Centres Reports Activities

Activities in 2018

This report has been submitted : 2019-01-16 14:19:47

Title of collaborating centre:	Investigación y el control de las enfermedades porcinas emergentes y reemergentes en Europa
Address of Collaborating Centre:	Centre de Recerca en Sanitat Animal (CReSA) Edifici CReSA Campus Universitat Autònoma de Barcelona 08193 Bellaterra (Barcelona) SPAIN
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Name of Director of Institute (Responsible Official):	Josep Usall, General Director, Institut de Recerca i Tecnologia Agroalimentàries
Name (including Title and Position) of Head of the Collaborating Centre (formally OIE Contact Point):	Joaquim Segalés, Full Professor at the Universitat Autònoma de Barcelona and Researcher at the Institut de Recerca i Tecnologia Agroalimentàries (IRTA) - Centre de Recerca en Sanitat Animal (CReSA)
Name of writer:	Joaquim Segalés

ToR: To provide services to the OIE, in particular within the region, in the designated specialty, in support of the implementation of OIE policies and, where required, seek for collaboration with OIE Reference Laboratories

ToR: To identify and maintain existing expertise, in particular within its region

1. Activities as a centre of research, expertise, standardisation and dissemination of techniques within the remit of the mandate given by the OIE

Disease control	
Title of activity	Scope
Biosecurity, research	A risk assessment tool was developed for improving biosecurity on pig farms as part of a voluntary program for PRRS control on farms located in Spain. This tool will allow identifying where efforts should be focused in biosecurity actions forming part of disease control programs.
Testing of commercial vaccines, research	The use of a commercial vaccine against porcine circovirus 2 (PCV2) was tested in sows to demonstrate their efficacy in preventing reproductive problems associated with this viral infection together with demonstration of transfer of immunity from vaccinated sows to their offspring.
Gilt acclimation, research	Gilt replacement acclimation against different pathogens is key on the herd health stability. We reviewed the M. hyopneumoniae acclimation practices in Europe and North America, indicating that vaccination is the main strategy used, but there is a current trend in US to deliberately expose gilts to the pathogen.
Epidemiology, surveillance, risk assessment, modelling	
Title of activity	Scope
Emerging pig viruses, research	During 2018 we have described the occurrence of porcine circovirus 3 (PCV-3), a novel virus of pigs, in domestic pig and wild boar. It has demonstrated to be an ubiquitous virus. Moreover, other viruses such as porcine parvovirus 6 and Ungulate bocaparvovirus 2 have been described in Spain for the first time. The latter viruses were found through metagenomics approach.
Novel genotyping method, research	A phylogeny-grounded genotype definition for porcine circovirus 2 (PCV-2) based on three criteria has been proposed: maximum intra-genotype p-distance of 13% (calculated on the ORF2 gene), bootstrap support at the corresponding internal node higher than 70% and at least 15 available sequences. This scheme allowed defining 8 genotypes (PCV-2a to PCV-2h).
Animal models	The research centre is committed to the development of different animal models for diseases in order to test potential vaccine products or antibiotics. A number of animal models available for testing are available, including those for Mhyo, PRRSV, PCV2, SIV, Actinobacillus pleuropneumoniae, Haemophilus parasuis and Streptococcus suis.

Transmission and quasispecies, research	Transmission of porcine reproductive and respiratory syndrome virus (PRRSV1) to naïve pigs and the quasi-species variation of the virus during infection in vaccinated pigs was demonstrated. On the other hand, PCV-2 genetic variability under natural infection scenario revealed a complex network of viral quasispecies.
Surveillance for enteric pathogens, research	Several studies were carried out to detect and characterize enteric pathogens in swine in Spain, including Escherichia coli, Clostridium perfringens and rotavirus A.
Training, capacity building	
Title of activity	Scope
Pig necropsy course, service	A company of the pharmaceutical sector requested us to perform a pig necropsy session including theoretical and practical concepts for a number of veterinarians coming from 10 different European countries.
Zoonoses	
Title of activity	Scope
Middle East Respiratory Coronavirus (MERS-CoV), research	The co-localization of the Middle East respiratory syndrome coronavirus (MERS-CoV) and its receptor dipeptidyl peptidase-4 (DPP4) by immunohistochemistry (IHC) across respiratory and lymphoid organs of experimentally MERS-CoV infected pigs has been investigated. Notably, several nasal epithelial cells in pigs were found to express viral antigen but not DPP4, suggesting the possible existence of other molecule/s facilitating virus entry or down regulation of DPP4 upon infection.
Mycobacterium tuberculosis complex (MTC), research	The high herd prevalence, as well as the identification of significant spatial clusters, indicates widespread, but not homogenous MTC circulation among extensively-managed pig farms.
Wildlife	
Title of activity	Scope
Novel virus infection in wild boar, research	PCV-3 prevalence, dynamics of infection and viral tissue distribution was tested in wild boar. This virus is highly prevalent in serum and tissues and may persistently infect wild boar. Moreover, atypical porcine pestivirus infection was detected in wild boar for the first time in Spain.
Diagnosis, biotechnology and laboratory	
Title of activity	Scope
Development of diagnostic techniques (endemic pathogens), research	Two assays, a standard and a quantitative PCR, were developed to monitor PCV-3 infections in domestic swine and wild boar. Both tests were demonstrated to be highly sensitive and specific.
Development of diagnostic techniques (OIE listed pathogens), research	A validated Multi-rRT-PCR assay based on SYBR-Green I detection coupled to melting curves resolution for pan/FMDV diagnosis on clinical samples has been developed. This study highlights the need to incorporate the multi-target detection principle in the diagnosis of highly variable agents, specially, of those listed by OIE like FMDV.

Use of ultraviolet C (UV-C) irradiation to inactivate pathogens, research	Different studies have been conducted on UV-C irradiation to inactivate pathogens in a pig origin product such as porcine plasma. The system has been useful to inactivate or reduce significantly the level of different bacteria and viruses in such plasma (used as a source of protein for pig diets).
Use of alternative samples for diagnosis, research	The objective of this study was to test the suitability of umbilical cord (UC) sampling and ear vein swabbing (EVS) as alternatives to jugular vein bleeding (JVB) for the assessment of vertical transmission of PRRSV. It was concluded that UC testing was a faster and more sensitive alternative to JVB or EV for the detection of PRRSV in newborn piglets.
New genotyping and subgenotyping schemes of CSFV classification, research	A new update in the classification of CSFV is proposed and should allow the scientific community to establish more accurately the links among different outbreaks of the disease.
Veterinary medicinal products	
Title of activity	Scope
Testing of veterinary medicine products, service	A number of studies testing pig vaccines and antibiotics have been conducted to assess their safety and efficacy under experimental or field conditions. Biopharmaceutical companies are the usual promoters of these studies.
Vaccines	
Title of activity	Scope
Swine influenza virus vaccine development, research	Naked DNA vaccine technology provides a strong approach for the development of improved pig influenza vaccines, applying realistic low doses of DNA and a convenient delivery method for mass vaccination.
African swine fever virus, research	African swine fever virus (ASFV) is a tremendous reemerging threat in many parts of the world, but especially in European countries since its presence in Russia and a number of Eastern European Countries. CRESA is continuing performing research on ASFV development with promising results indicating partial protection. So far, there is no vaccine against this virus in the world.

ToR : To propose or develop methods and procedures that facilitate harmonisation of international standards and guidelines applicable to the designated speciality

2. Proposal or development of any procedure that will facilitate harmonisation of international regulations applicable to the surveillance and control of animal diseases, food safety or animal welfare

Proposal title	Scope/Content	Applicable area
N/A	N/A	<input type="checkbox"/> Surveillance and control of animal diseases <input type="checkbox"/> Food safety <input type="checkbox"/> Animal welfare

ToR: To establish and maintain a network with other OIE Collaborating Centres designated for the same specialty, and should the need arise, with Collaborating Centres in other disciplines

ToR: To carry out and/or coordinate scientific and technical studies in collaboration with other centres, laboratories or organisations

3. Did your Collaborating Centre maintain a network with other OIE Collaborating Centres (CC), Reference Laboratories (RL), or organisations designated for the same specialty, to coordinate scientific and technical studies?

Yes

Name of OIE CC/RL/other organisation(s)	Location	Region of networking Centre	Purpose
Department of Animal Medicine, Production and Health (MAPS), University of Padua	Italy	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Research collaboration on porcine circoviruses type 2 and 3; epidemiology and viral evolution
Centro Nacional de Sanidad Agropecuaria (CENSA)	Cuba	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Research collaboration on classical swine fever
Plum Island Animal Disease Center	USA	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Research collaboration on African swine fever
The Roslin Institute and Royal (Dick) School of Veterinary Studies, University of Edinburgh	United Kingdom	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Research collaboration on porcine reproductive and respiratory síndrome virus
Swine and Poultry Infectious Diseases Research Center (CRIPA) and Groupe de Recherche sur les Maladies Infectieuses en Production Animale, University of Montreal	Canada	<input type="checkbox"/> Africa <input checked="" type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input type="checkbox"/> Europe <input type="checkbox"/> Middle East	Research collaboration on Streptococcus suis and Haemophilus parasuis
Department of Virus and Microbiological Special Diagnostics, Statens Serum Institut	Denmark	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Research collaboration on swine influenza virus vaccine development

4. Did your Collaborating Centre maintain a network with other OIE Collaborating Centres, Reference laboratories, or organisations in other disciplines, to coordinate scientific and technical studies?

Yes

Name of OIE CC/RL/other organisation(s)	Location	Region of networking Centre	Purpose
OIE Reference Laboratory on classical swine fever, IRTA-CReSA	Spain	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Research collaboration on swine pestiviruses
Erasmus Medical Center	The Netherlands	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Research collaboration on MERS-CoV; exchange of reagents and samples
Boehringer Ingelheim	Germany/Spain	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Industrial doctorate on African swine fever
Ceva Animal Health	France/Spain	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Industrial doctorate on Mycoplasma hyopneumoniae
APC Europe	Spain	<input type="checkbox"/> Africa <input type="checkbox"/> Americas <input type="checkbox"/> Asia and Pacific <input checked="" type="checkbox"/> Europe <input type="checkbox"/> Middle East	Industrial doctorate on porcine plasma and pathogen inactivation procedures

ToR: To place expert consultants at the disposal of the OIE.

5. Did your Collaborating Centre place expert consultants at the disposal of the OIE?

No

ToR: To provide, within the designated specialty, scientific and technical training to personnel from OIE Member Countries

6. Did your Collaborating Centre provide scientific and technical training, within the remit of the mandate given by the OIE, to personnel from OIE Member Countries?

No

ToR: To organise and participate in scientific meetings and other activities on behalf of the OIE

7. Did your Collaborating Centre organise or participate in the organisation of scientific meetings on behalf of the OIE?

Yes

National/International	Title of event	Co-organiser	Date (mm/yy)	Location	No. Participants
International	10th European Symposium of Porcine Health Management	IRTA, ECPHM and EAPHM	05/18	Barcelona (Spain)	1900
International	Classical swine fever OIE Reference Laboratories: Exchange between China and Spain	IRTA and OIR Laboratory China	10/18	Barcelona (Spain)	30

ToR: To collect, process, analyse, publish and disseminate data and information relevant to the designated specialty

8. Publication and dissemination of any information within the remit of the mandate given by the OIE that may be useful to Member Countries of the OIE

a) Articles published in peer-reviewed journals: 36

Current Knowledge on Porcine circovirus 3 (PCV-3): A Novel Virus With a Yet Unknown Impact on the Swine Industry.

Klaumann F, Correa-Fiz F, Franzo G, Sibila M, Núñez JI, Segalés J.

Front Vet Sci. 2018 Dec 12;5:315. doi: 10.3389/fvets.2018.00315. eCollection 2018. Review.

Porcine circovirus 2 (PCV-2) genotype update and proposal of a new genotyping methodology.

Franzo G, Segalés J.

PLoS One. 2018 Dec 6;13(12):e0208585. doi: 10.1371/journal.pone.0208585. eCollection 2018.

Full-genome characterization by deep sequencing of rotavirus A isolates from outbreaks of neonatal diarrhoea in pigs in Spain.

Vidal A, Clilverd H, Cortey M, Martín-Valls GE, Franzo G, Darwich L, Martín M, Mateu E.

Vet Microbiol. 2018 Dec;227:12-19. doi: 10.1016/j.vetmic.2018.10.002. Epub 2018 Oct 11.

Exploratory metagenomic analyses of periweaning failure-to-thrive syndrome-affected pigs.

Franzo G, Kekarainen T, Llorens A, Correa-Fiz F, Segalés J.

Epidemiology of taeniosis/cysticercosis in Europe, a systematic review: eastern Europe.

Trevisan C, Sotiraki S, Laranjo-González M, Dermauw V, Wang Z, Kärssin A, Cvetkovikj A, Winkler AS, Abraham A, Bobić B, Lassen B, Cretu CM, Vasile C, Arvanitis D, Deksnė G, Boro I, Kucsera I, Karamon J, Stefanovska J, Koudela B, Pavlova MJ, Varady M, Pavlak M, Šarkūnas M, Kaminski M, Djurković-Djaković O, Jokelainen P, Jan DS, Schmidt V, Dakić Z, Gabriël S, Dorny P, Devleesschauwer B.

Parasit Vectors. 2018 Oct 30;11(1):569. doi: 10.1186/s13071-018-3153-5. Review.

Porcine circovirus 2 (PCV-2) genetic variability under natural infection scenario reveals a complex network of viral quasispecies.

Correa-Fiz F, Franzo G, Llorens A, Segalés J, Kekarainen T.

Sci Rep. 2018 Oct 19;8(1):15469. doi: 10.1038/s41598-018-33849-2.

Bottlenecks in the transmission of porcine reproductive and respiratory syndrome virus (PRRSV1) to naïve pigs and the quasi-species variation of the virus during infection in vaccinated pigs.

Cortey M, Arocena G, Pileri E, Martín-Valls G, Mateu E.

Vet Res. 2018 Oct 19;49(1):107. doi: 10.1186/s13567-018-0603-1.

Epidemiological surveillance of Mycobacterium tuberculosis complex in extensively raised pigs in the south of Spain.

Cano-Terriza D, Risalde MA, Rodríguez-Hernández P, Napp S, Fernández-Morente M, Moreno I, Bezos J, Fernández-Molera V, Sáez JL, García-Bocanegra I.

Prev Vet Med. 2018 Nov 1;159:87-91. doi: 10.1016/j.prevetmed.2018.08.015. Epub 2018 Sep 5.

Comparative proteomic analysis reveals different responses in porcine lymph nodes to virulent and attenuated homologous African swine fever virus strains.

Herrera-Urbe J, Jiménez-Marín Á, Lacasta A, Monteagudo PL, Pina-Pedrero S, Rodríguez F, Moreno Á, Garrido JJ.

Vet Res. 2018 Sep 12;49(1):90. doi: 10.1186/s13567-018-0585-z.

Atypical porcine pestivirus in wild boar (*Sus scrofa*), Spain.

Colom-Cadena A, Ganges L, Muñoz-González S, Castillo-Contreras R, Bohórquez JA, Rosell R, Segalés J, Marco I, Cabezon O.

Vet Rec. 2018 Nov 10;183(18):569. doi: 10.1136/vr.104824. Epub 2018 Sep 10. No abstract available.

African swine fever virus does not express viral microRNAs in experimentally infected pigs.

Núñez-Hernández F, Vera G, Sánchez A, Rodríguez F, Núñez JI.

BMC Vet Res. 2018 Sep 3;14(1):268. doi: 10.1186/s12917-018-1601-2.

Characterization of the attachment and infection by Porcine reproductive and respiratory syndrome virus 1 isolates in bone marrow-derived dendritic cells.

Li YL, Darwich L, Mateu E.

Vet Microbiol. 2018 Sep;223:181-188. doi: 10.1016/j.vetmic.2018.08.013. Epub 2018 Aug 11.

Evaluation of ultraviolet-C and spray-drying processes as two independent inactivation steps on enterotoxigenic *Escherichia coli* K88 and K99 strains inoculated in fresh unconcentrated porcine plasma.

Blázquez E, Rodríguez C, Ródenas J, Pérez de Rozas A, Campbell JM, Segalés J, Pujols J, Polo J.

Lett Appl Microbiol. 2018 Nov;67(5):442-448. doi: 10.1111/lam.13068. Epub 2018 Sep 19.

Porcine circovirus 3 is highly prevalent in serum and tissues and may persistently infect wild boar (*Sus scrofa*).

Klaumann F, Dias-Alves A, Cabezon O, Mentaberre G, Castillo-Contreras R, López-Béjar M, Casas-Díaz E, Sibila M, Correa-Fiz F, Segalés J.

Transbound Emerg Dis. 2018 Aug 8. doi: 10.1111/tbed.12988. [Epub ahead of print]

Revisiting the genetic diversity of classical swine fever virus: A proposal for new genotyping and subgenotyping schemes of classification.

Rios L, Núñez JI, Díaz de Arce H, Ganges L, Pérez LJ.

Transbound Emerg Dis. 2018 Aug;65(4):963-971. doi: 10.1111/tbed.12909. Epub 2018 May 25.

Multi-Target Strategy for Pan/Foot-and-Mouth Disease Virus (FMDV) Detection: A Combination of Sequences Analysis, in Silico Predictions and Laboratory Diagnostic Evaluation.

Ríos L, Perera CL, Coronado L, Relova D, Álvarez AM, Ganges L, Díaz de Arce H, Núñez JI, Pérez LJ. Front Vet Sci. 2018 Jul 12;5:160. doi: 10.3389/fvets.2018.00160. eCollection 2018.

Diagnosis by ruling out other diseases or conditions.

Segalés J.

Vet Rec. 2018 Jul 21;183(3):93-94. doi: 10.1136/vr.k3132. No abstract available.

The analysis of genome composition and codon bias reveals distinctive patterns between avian and mammalian circoviruses which suggest a potential recombinant origin for Porcine circovirus 3.

Franzo G, Segales J, Tucciarone CM, Cecchinato M, Drigo M.

PLoS One. 2018 Jun 29;13(6):e0199950. doi: 10.1371/journal.pone.0199950. eCollection 2018.

Combined effects of spray-drying conditions and postdrying storage time and temperature on *Salmonella choleraesuis* and *Salmonella typhimurium* survival when inoculated in liquid porcine plasma.

Blázquez E, Rodríguez C, Ródenas J, Saborido N, Solà-Ginés M, Pérez de Rozas A, Campbell JM, Segalés J, Pujols J, Polo J.

Lett Appl Microbiol. 2018 Aug;67(2):205-211. doi: 10.1111/lam.13017. Epub 2018 Jun 27.

Assessment of the in vitro growing dynamics and kinetics of the non-pathogenic J and pathogenic 11 and 232 *Mycoplasma hyopneumoniae* strains.

García-Morante B, Dors A, León-Kempis R, Pérez de Rozas A, Segalés J, Sibila M.

Vet Res. 2018 May 25;49(1):45. doi: 10.1186/s13567-018-0541-y.

Digestive microbiota is different in pigs receiving antimicrobials or a feed additive during the nursery period.

Soler C, Goossens T, Bermejo A, Migura-García L, Cusco A, Francino O, Fraile L.

PLoS One. 2018 May 25;13(5):e0197353. doi: 10.1371/journal.pone.0197353. eCollection 2018.

Acclimation strategies in gilts to control *Mycoplasma hyopneumoniae* infection.

Garza-Moreno L, Segalés J, Pieters M, Romagosa A, Sibila M.

Vet Microbiol. 2018 Jun;219:23-29. doi: 10.1016/j.vetmic.2018.04.005. Epub 2018 Apr 4. Review.

Testing of umbilical cords by real time PCR is suitable for assessing vertical transmission of porcine reproductive and respiratory syndrome virus under field conditions.

Martín-Valls GE, Hidalgo M, Cano E, Mateu E.

Vet J. 2018 Apr;234:27-29. doi: 10.1016/j.tvjl.2018.01.008. Epub 2018 Feb 1.

Characterisation of *Bergeyella* spp. isolated from the nasal cavities of piglets.

Lorenzo de Arriba M, Lopez-Serrano S, Galofre-Mila N, Aragon V.

Vet J. 2018 Apr;234:1-6. doi: 10.1016/j.tvjl.2018.01.004. Epub 2018 Feb 6.

Exploratory field study on the effect of Porcine circovirus 2 (PCV2) sow vaccination on serological, virological and reproductive parameters in a PCV2 subclinically infected sow herd.

Oliver-Ferrando S, Segalés J, López-Soria S, Callén A, Merdy O, Joisel F, Sibila M.

BMC Vet Res. 2018 Apr 16;14(1):130. doi: 10.1186/s12917-018-1452-x.

Retrospective detection of Porcine circovirus 3 (PCV-3) in pig serum samples from Spain.

Klaumann F, Franzo G, Sohrmann M, Correa-Fiz F, Drigo M, Núñez JI, Sibila M, Segalés J.

Transbound Emerg Dis. 2018 Oct;65(5):1290-1296. doi: 10.1111/tbed.12876. Epub 2018 Apr 14.

Development of a risk assessment tool for improving biosecurity on pig farms.

Allepuz A, Martín-Valls GE, Casal J, Mateu E.

Prev Vet Med. 2018 May 1;153:56-63. doi: 10.1016/j.prevetmed.2018.02.014. Epub 2018 Feb 26.

Viral and bacterial investigations on the aetiology of recurrent pig neonatal diarrhoea cases in Spain.

Mesonero-Escuredo S, Strutzberg-Minder K, Casanovas C, Segalés J.

Porcine Health Manag. 2018 Apr 5;4:5. doi: 10.1186/s40813-018-0083-8. eCollection 2018.

Development and validation of direct PCR and quantitative PCR assays for the rapid, sensitive, and economical detection of porcine circovirus 3.

Franzo G, Legnardi M, Centelleghé C, Tucciarone CM, Cecchinato M, Cortey M, Segalés J, Drigo M.

J Vet Diagn Invest. 2018 Jul;30(4):538-544. doi: 10.1177/1040638718770495. Epub 2018 Apr 9.

ICTV Virus Taxonomy Profile: Asfarviridae.

Alonso C, Borca M, Dixon L, Revilla Y, Rodriguez F, Escribano JM, Ictv Report Consortium.
J Gen Virol. 2018 May;99(5):613-614. doi: 10.1099/jgv.0.001049. Epub 2018 Mar 22.

Full-genome sequencing of porcine circovirus 3 field strains from Denmark, Italy and Spain demonstrates a high within-Europe genetic heterogeneity.

Franzo G, Legnardi M, Hjulsgaard CK, Klaumann F, Larsen LE, Segales J, Drigo M.
Transbound Emerg Dis. 2018 Jun;65(3):602-606. doi: 10.1111/tbed.12836. Epub 2018 Feb 16.

Analysis of the genetic diversity and mRNA expression level in porcine reproductive and respiratory syndrome virus vaccinated pigs that developed short or long viremias after challenge.

Cortey M, Arocena G, Ait-Ali T, Vidal A, Li Y, Martín-Valls G, Wilson AD, Archibald AL, Mateu E, Darwich L.
Vet Res. 2018 Feb 15;49(1):19. doi: 10.1186/s13567-018-0514-1.

Comparison of cytokine profiles in peripheral blood mononuclear cells between piglets born from Porcine circovirus 2 vaccinated and non-vaccinated sows.

Oliver-Ferrando S, Segalés J, Sibila M, Díaz I.
Vet Microbiol. 2018 Feb;214:148-153. doi: 10.1016/j.vetmic.2017.12.011. Epub 2017 Dec 19.

Limited Interactions between Streptococcus Suis and Haemophilus Parasuis in In Vitro Co-Infection Studies.

Mathieu-Denoncourt A, Letendre C, Auger JP, Segura M, Aragon V, Lacouture S, Gottschalk M.
Pathogens. 2018 Jan 6;7(1). pii: E7. doi: 10.3390/pathogens7010007.

Protective effect of a polyvalent influenza DNA vaccine in pigs.

Karlsson I, Borggren M, Rosenstjerne MW, Trebbien R, Williams JA, Vidal E, Vergara-Alert J, Foz DS, Darji A, Sisteré-Oró M, Segalés J, Nielsen J, Fomsgaard A.
Vet Immunol Immunopathol. 2018 Jan;195:25-32. doi: 10.1016/j.vetimm.2017.11.007. Epub 2017 Nov 23.

Update on Mycoplasma hyopneumoniae infections in pigs: Knowledge gaps for improved disease control.

Maes D, Sibila M, Kuhnert P, Segalés J, Haesebrouck F, Pieters M.
Transbound Emerg Dis. 2018 May;65 Suppl 1:110-124. doi: 10.1111/tbed.12677. Epub 2017 Aug 23. Review.

b) International conferences: 12

AS INVITED SPEAKERS

“Practical session of swine necropsy” y “Pathology quiz show”.

Technical seminar at the University of Vienna

5-6/4/2018

Vienna (Austria)

Joaquim Segalés

“ASF vaccines, a reality or an utopia?”

Seminar at the National Veterinary Institut (SVA)

19-22/4/2018

Uppsala (Sweden)

Fernando Rodríguez

“Where is the vaccine against ASF and what else can we do?”

10th European Symposium of Porcine Health Management (ESPHM)

9-11/5/2018

Barcelona (Spain)

Fernando Rodríguez

“DNA Vaccines for Veterinary Applications”

2nd International Vaccinology Congress & DNA Vaccine Workshop 2018

24-26/5/2018

Turkey

Fernando Rodríguez

“Current challenges of porcine circovirus 2 prevention and control”

25th International Pig Veterinary Society Congress.

10-14/6/2018

Chongqing (China)
Joaquim Segalés

“Virulence and immunity in PRRS”
25th International Pig Veterinary Society Congress.
10-14/6/2018
Chongqing (China)
Enric Mateu

“Emerging and re-emerging viral diseases and infections of swine: what’s next?”
Institute of Animal Husbandry and Veterinary Science of the Shanghai Academy of Agricultural Sciences, SAAS
15/6/2018
Shanghai (China)
Joaquim Segalés

“Emerging and re-emerging pig diseases and infections: what can be expected in the future?”
5th Congress of the European Association of Veterinary Laboratory Diagnostics
14-17/10/2018
Brussels (Belgium)
Joaquim Segalés.

“Animal reservoirs in disease control and eradication”
10th International Meeting of the Global Virus Network
28-30/11/2018
Annecy (France)
Joaquim Segalés.

“African Swine Fever Virus and PRRSV, what lessons are they teaching us?”
12th Asian PRRSpective.
12-13/11/2018
Thailand
Fernando Rodríguez

“What are the prospects for a vaccine against ASF?”
XX Universitäts-Dialog 2018
21/11/2018
Hannover (Germany)
Fernando Rodríguez

“PRRS vaccines”
North American PRRS Symposium
1-2/12/2018
Chicago (United States)
Enric Mateu

c) National conferences: 10
AS INVITED SPEAKERS

“Desmedro en cerdos: de la clínica al diagnóstico”
III PorciFORUM
28/2 to 2/3/2018
Lleida (Spain)
Joaquim Segalés

“Mesa Redonda “I+D+i en Sanidad Animal: De dónde venimos y hacia dónde vamos”
X CONFERENCIA ANUAL Vet +i
30/5/2018
Madrid (Spain)
Fernando Rodríguez

“Activitats de recerca en ramaderia ecològica a Catalunya a l’IRTA-Centre de Recerca en Sanitat Animal (CRSA)”
Jornada DARP

20/9/28

Santa Coloma Farners (Barcelona, Spain)
Florescia Correa-Fiz

“Qué debes saber de la Peste Porcina Africana (PPA). ASPECTOS CLÍNICOS Y EPIDEMIOLOGICOS DE LA PPA”

Jornada Técnica de la AVPA y ANAPORC

25/10/2018

Zaragoza (Spain)

Francesc Accensi

“PPA: aspectos técnicos desde la perspectiva de un equipo de científicos: Contribuyendo a la lucha”

Mesa Sectorial del Porcino, DARP

26/10/2018

Barcelona (Spain)

Fernando Rodríguez

“One health”: from the concept to reality”

XVII Jornada de Virologia de la Societat Catalana de Biologia

30/10/2018

Barcelona (Spain)

Joaquim Segalés, Núria Busquets, Júlia Vergara-Alert.

“¿Sabem reconèixer la Pesta Porcina Africana i la Pesta Clàssica?”

Jornada al Col·legi Veterinaris Lleida, DARP

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Vic/Lleida (Spain)

Fernando Rodríguez, Lilliane Ganges

Situación actual de la peste porcina Africana en la Unión Europea”

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VI Congreso de la Asociación Nacional de Veterinarios Porcinos

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Marina Sibila

“Control del síndrome respiratorio y reproductivo porcino”

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Enric Mateu

d) Other

(Provide website address or link to appropriate information): 2

Slaughterhouse support network

<http://www.cresa.cat/blogs/sesc/category/porcina/?lang=en>

CRSA blogs

<http://www.cresa.cat/blogs/sociedad/en/pesta-porcina-africana-preguntas-frecuentes/>

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