# **CReSADIGITAL**

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Informative bulletin of the Fundació Centre de Recerca en Sanitat Animal (CReSA)

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## AT THE FRONT PAGE

#### A low cost experimental vaccine protects pigs against circovirus

Researchers from CReSA (Dr Fernando Rodriguez and Dr Joaquim Segalés) have published an article in the *Vaccine* journal demonstrating the capability of *Trichoplusia ni* insect larvae to produce the recombinant capsid protein (Cap) of porcine circovirus type 2 (PCV2) and the potential use of this protein to obtain a low cost experimental vaccine against this virus.

Porcine circovirosis is a multifactorial disease that causes significant economic losses. Currently, there are available commercial PCV2 vaccines, some of them also based on the baculovirus-derived recombinant Cap protein, but in these cases they are produced in cell-based bioreactors. One of the drawbacks of such vaccines is the high production cost.

The originality of the new vaccine resides in using as biofactories one of the natural hosts for baculovirus: the *Trichoplusia ni* insect larvae, allowing for a much more competitive production cost. This work was possible thanks to the support of National and European funding institutions and the close collaboration between public and private research institutions (CReSA, IRTA, UAB, INIA) and ALGENEX (owner company of the methodology of protein expression in *Trichoplusia ni* larvae). (+)



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# HIGHLIGHTS



The new General Director of Research visits the CReSA

Last March 2, 2011, Josep Maria Martorell, General Director General of Research of the *Generalitat de Catalunya*, and Carles Jaime, Vice-rector for Strategic Projects and Planning of the *Universitat Autònoma de Barcelona* (UAB), met the members of CReSA Board. (+)

#### **SEMINAR**



African swine fever virus is plenty of energy

Dr. José Manuel Sánchez-Vizcaino gave a seminar the last 18th of March in Bellaterra after visiting CReSA. He talked about the current epidemiological situation of the African swine fever virus (ASFV) in Africa, the Caucasus and the Russian Federation. (+)



#### RESEARCH



CReSA researchers present the last applied research in pigs

During the XIII UAB Swine Conference, researchers of the CReSA presented the last discoveries on swine influenza epidemiology, genetic and immunological variability of the PRRSV, studies of *Haemophilus parasuis* colonization and new vaccine developments against Glässer's disease and African swine fever. (+)

#### **PUBLICATION**



The feather pulp, an ideal sample for the early detection of highly pathogenic avian influenza viruses in poultry

A study realized by CReSA's researchers determined feather pulp as a perfect sample to identify cases of highly pathogenic avian influenza viruses in poultry infected.(+)

#### **PUBLICATION**



A study shows the high susceptibility of the partridge against the highly pathogenic H7N1 strain

A group of researchers from CReSA studied the susceptibility of the red-legged partridge to two strains of avian influenza virus and showed that this specie may contribute to the spread of a potential local outbreak of the virus. (+)

#### **PUBLICATION**



Quantitative assessment of the probability of bluetongue virus overwintering by horizontal transmission: application to Germany

CReSA has developed a model of stochastic risk assessment in order to assess the probability that the bluetongue virus persists after winter. To put it into practice, was implemented in Germany between 2006 and 2007. (+)

#### **SERVICES**



CReSA will collaborate in the avian influenza surveillance of wild birds for one year more

The Department of Agriculture, Livestock, Fisheries, Food and Natural Environment of the *Generalitat de Catalunya* has published the annual surveillance programme of avian influenza. CReSA collaborates since 2006. (+)

# **SERVICES**



Seminar for cooperative veterinarians at CReSA

Last 25th February, Dr Joaquim Segalés and Dr Laila Darwich offered the seminar called "Process for a definitive diagnosis: from the clinical story to the lab". This event was organized by the CReSA, in association with the Federació de Cooperatives Agràries de Catalunya (FCAC) and the IRTA. (+)

#### **NETWORK**



**CReSA** becomes part of ENIVD

ENIVD is a European network of collaboration that pretends to be an organization that aims to put as much effort on viral infectious diseases imported that threaten the population. (+)

# **SCIENCE AND SOCIETY**



CReSA tv: a digital channel to bring science to everybody

CReSA has launched its own channel where you can watch digital audiovisual content produced by the centre. CReSA tv will feature informative videos for all ages that will explain the main research carried out by the centre. (+)



#### **MEETING**



# CReSA takes part at the COPIT meeting

On November 19th, 2010 was held the COPIT meeting. The Eureka building of the *Universitat Autònoma de Barcelona* was the meeting point of different companies and research centers in order to establish a first contact and create attachment points for possible collaborations. (+)

#### **BOOK**



Pathologists from CReSA have developed an atlas of avian necropsy

"Atlas de la necropsia aviar. Diagnóstico macroscópico y toma de muestras" is the name of the book written by two researchers from CReSA. Roser Dolz and Natalia Majó have developed a detailed and accurate guide to avian necropsy. (+)

### STUDENT BURSARY



Emerging2011: Young person's bursary

The 6th International Symposium on Emerging and Reemerging Pig Diseases will offer Young Person's Bursaries to the presenting authors of the accepted abstracts who are aged 35 or under and are still in training (enrolled in a PhD program).(+)

#### **WEB 2.0**



Events calendar, YouTube and RSS: innovations on the website of CReSA

CReSA has added three new applications in the website: a calendar where you can view all the public activities organized by the center, YouTube channel and RSS, to disseminate updated information to subscribers to the source content. (+)



