



An important observation by

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<http://www.vetsweb.com/news/merial-ibd-summit-the-future-control-of-avian-diseases-852.html>

Merial IBD summit: The future control of avian diseases

//27 Jan 2010

At the Merial IBD summit, organised on January 26 in Atlanta, Georgia, Dr. John Glisson talked about the future control of avian diseases: From Pasteur to Genomics.

Glisson, from the University of Georgia in the US, explained that Pasteur (father of modern microbiology) loved chickens and discovered the first live attenuated vaccine for fowl cholera. Since then, the control of avian diseases have always been focused on using vaccines and antimicrobials.

However, Glisson addressed, today there are more tools available (genomics, proteomics, advances microscopy) that we can use to target diseases in poultry. At the same time, the use of antimicrobials is getting less, which speeds up the search for alternative ways to keeping the birds healthy.

Constraints

The use of vaccines is still the backbone of poultry immunisation, said Glisson and unfortunately there are some constraints that prevent new techniques taken off on a commercial level. Glisson named the current vaccine prices, minimal research funding, about costs of vaccination, patents and GMO controversy as some of the hurdles in developing new vaccine strategies.

Optimistic

This sounds pessimistic, but Glisson is quite optimistic when it comes to the future control of avian diseases. There are many opportunities for innovation, he said. For example, there are products needed for mucosal and local immunity in the respiratory and intestinal tract. Also in the field of maternal transfer of immunity a lot of possibilities for new products exist. He also mentioned that recombinant vaccines show promise in keeping the birds healthy without damaging the respiratory tract.

Genomics

Glisson also mentioned genomics as a field of opportunity. In the near future, birds can be selected for resistance against specific diseases. Lastly, Glisson mentioned that in-ovo vaccination is promising but still needs to be fine tuned regarding embryo lethality of many viruses and bacteria, maternal immunity interference and compatibility of multiple vaccine mixtures.

[By Emmy Koeleman]