

## Report IFRG meeting 2015 Berlin 1-4<sup>th</sup> September

The annual IFRG meeting in Berlin was a success, not only because of the pleasant atmosphere in the historical buildings of the Humboldt University but also that the diversity of participants ensured lively discussion and many questions after each talk. It was the third combined meeting of WPSA working groups 6 and 12, and in the Berlin meeting the organisation of the common sessions on epigenetics and perinatal development was highly appreciated and a reason to continue the collaboration in the future.

In total more than 90 delegates from Australia, US, North Africa and East and West Europe were present during 3 and half days of conference, which started with the celebration of the 40<sup>th</sup> Anniversary of the Incubation Fertility Research Group (IFRG). A former Chair Nick French gave an overview of activities of the IFRG during the 40 years and showed how the annual meetings had contributed to the development of the practice of incubation technology.

In total 41 lectures were and 12 posters were presented with the main topic addressing the important scientific work performed by Prof. Eddy Decuypere during his scientific career of 35 years at Leuven University. Shlomo Yahav (ARO The Volcani Centre, Israel) reviewed the development of Prof. Decuypere from student to a world-wide respected authority on the fundamental thyroid physiology of the chicken. Anne Collin (INRA Nouzilly France) emphasised how Prof. Decuypere was a great and always stimulating mentor for a large group of students.

After this laudatio Prof. Decuypere took his task of moderator very serious on the podium in a fundamentals of embryo development discussion with students and thanks to the enthusiastic presentations by the students a lively discussion with the audience was the result.

The scientific sessions started on Wednesday September 2<sup>nd</sup> with two presentations showing the new developments in commercial incubation: data analysis by Nick French (Aviagen, UK) and state-of-the-art of in-ovo sexing Anne Weissmann from Leipzig University.

Invited speaker Murray Bakst from ARS, USDA Beltsville presented very interested data on differences in gene expression in blastoderms in stored eggs or SPIDES treated eggs. The positive effects of pre-incubation treatment of long-stored eggs was also a theme of several speakers.

The negative effects of high and low incubation temperature egg shell temperature and the higher level of early mortality if CO<sub>2</sub> level are too high were also this year discussed in several presentations. This year also one presentation on turkey incubation discussed the generation of leg problems as a results of too high incubation temperatures and low levels of oxygen. Leg problems can be minimized if the bird can exercise after placement in the farm.

The second day of the meeting was mainly dedicated to physiological aspects of in-ovo photostimulation on embryo development. The application of monochromatic green light in

the setter draw our attention. Monochromatic green light stimulates the somatotrophic axis in broilers and results in accelerated growth of broilers. Lighting of embryo for 12 h per day stimulated ossification of bones. Also the effects of cold or warm embryo stimulation during specific stages of embryonic development on muscle and bone development of was the subject of several presentations.

On the last day of the combined meeting the lecture by W. Kloss (Dept. endocrinology Humboldt University, Berlin) on phenotypic changes by endocrine disruptors was highly appreciated by all participants as were the lectures on maternal and paternal effects on embryonic development.

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September 2015