

Report

2023 Combined Workshop of the European Federation of the World's Poultry Science Association (WPSA) Working Groups 6 (Incubation and Fertility) and 12 (Physiology), Wrocław, Poland, 18 September – 20 September 2023

The local organisation of the 2023 Combined Workshop of the Working Groups (WG) 6 (Incubation and Fertility) and 12 (Physiology) of the European Federation of the World's Poultry Science Association (WPSA) was in the hands of Ewa Łukaszewicz and Artur Kowalczyk and their team from the Department of Poultry Breeding at the University of Environmental and Life Sciences in Wrocław and took place under the auspices of the Polish WPSA branch. Co-organisers were the chairs of the WPSA WG 6 Ampai Nangsuay and WG 12 Barbara Tzschentke.

The main objectives of the Combined Workshops were to bring together participants from basic and applied research as well as practice and administration, and to present and discuss current news and developments around the topic of avian and poultry incubation, reproduction and physiology. We welcomed about 100 participants from 16 countries from science, practice and administration to this year's Combined Workshop.

The scientific program offered three invited lectures followed by short presentations thematically organized in seven scientific sessions on topics as fertility and reproduction, embryo communication, egg characteristics, embryonic needs in artificial and natural incubation. The workshop program was concluded with a round table discussion on "Incubation and embryonic needs; effects on performance and welfare".

The three keynote lectures to the following topics were offered by experts in avian and poultry reproduction, physiology, embryo development and incubation techniques:

-**Anna Hrabia**, University of Agriculture in Krakow, Poland - "Selected molecular mechanisms of structural and functional remodelling of the avian reproductive system",

-**Mylene M. Mariette**, Doñana Biological Station EBD-CSIC, Spain & Deakin University, Australia - "Long-term effects of prenatal sounds in birds",

-**Ron Meijerhof**, Poultry Performance Plus, The Netherlands - "Physics of incubation".

In addition, the Combined Workshop provided students and young scientists a platform to present and discuss their research with a broad audience from academia and practice. In a student competition session for the Nick French Award, the candidate with the best and most original scientific project and presentation was selected. In 2019 the award was established by Aviagen in honour of Nick French's great contribution to research and practice in the field of

poultry embryo development and hatchery science. This year, the Nick French Award was presented to Lotte Hebbink from Pas Reform Academy, NL, for her presentation on “Exploring the impact of external egg characteristics on hatchability”.

An abstract collection of the keynote lectures and short presentations in the individual scientific sessions will be published in the European Poultry Science and in the International Hatchery Practice Journal beginning of 2024.

At this year's Combined Workshop there was also the opportunity to celebrate the 20th Anniversary of WPSA Working Group 12 (Physiology), which was founded in 2003 at the first Workshop at Humboldt-Universität zu Berlin.

We would like to express our special thanks to our valuable sponsors, honorary and media patrons and the professional organizer as well as all organizing committee members and other persons responsible for the Workshop organization made every effort and have been doing their utmost to make this meeting successful, fruitful and pleasant.

Ewa Łukaszewicz, head of the Organizing Committee

Ampai Nangsuay, chair of WPSA WG 6

Barbara Tzschentke, chair of WPSA WG 12