



www.isah-soc.org

e-news

**International Society
for Animal Hygiene**

N° 002 - 2018

SUMMARY

Dear members and friends of ISAH,

Please find the mid-year 2018 e-format ISAH Newsletter. It keeps record of activities of the Executive Board of ISAH and informs members about recent developments in the Society and on interesting topics in various fields of Animal Hygiene and beyond.

Hot topics today relate to:

- latest news from the Executive Board (EB),
- important activities of EB members,
- a new Broiler Farmer Assistant System (Precision Livestock Farming, PLF),
- deadlines for the 19th ISAH congress in Wroclaw, Poland, 2019
- the 4th ISAH book on air quality and livestock farming

We also take the opportunity to inform you that membership fee collection is working properly now. Please look on page 11 for details how to pay the membership fee.

Forthcoming events and publications related to the Society are presented in the end of this issue; please visit the associated pages (14 to 19).

Enjoy reading the Newsletter of our Society!



Contents

- Editorial

- News from the Society

- Publications

- Forthcoming events

EDITORIAL

By the President

Dear members and friends of ISAH,

Mid-summer will just be over when you read the mid-year ISAH Newsletter. 2018 is the year between the congresses, the time of more or less silent preparations for the 19th ISAH Congress 08–12 September 2019 in Wroclaw, Poland. The selection of topics is not yet closed and everybody can still send his ideas and proposals for a session or specific congress topic to the EB and / or the chair of the organizational board (Sebastian Opaliński, sebastian.opalinski@upwr.edu.pl)

One topic of increasing importance in livestock farming is the introduction of 4.0 technology also addressed as Precision Livestock Farming (PLF).

Digitalization promotes animal health and welfare when properly and prudently applied. Particularly animal welfare is an emotional topic that has to be defined and carried out by scientific means and measures. Animal health and welfare of farm animals are closely related. The farmer must know the indicators for an onset of disease and the onset of poor welfare or suffering of his animals. Here digitalization and PLF can help. Vision and sensor systems can monitor permanently in real time during day and night movement, resting, drinking and eating of the animals and compare the behavior to normal pattern. Sensors can recognize malfunctions of equipment and the farmer can be alarmed of an imminent danger.

Some people speak already of “Digital Animal Farms” where the farmers get information about the health of each individual animal and of the entire herd. This can promote animal welfare and economic success.

“Digital Animal Farming” is one of the lead topics of the EuroTier 2018 which will be held from 13–16 November this year in Hannover, Germany. It seems



worthwhile for animal agricultural engineers and veterinarians to visit this world leading animal farming fair. Some ISAH members were involved in the development of a new farmer assistant system called “ChickenBoy” which will be demonstrated during the fair and which can monitor in nearly real time health and welfare of broiler birds in farms.

Five weeks earlier, 5th October 2018, the EB will meet in Wroclaw for our annual EB meeting in order to preview the provisional program and event conditions of the 19th ISAH Congress. The meeting will happen one day after the XVI Scientific Conference “Ethical and legal aspects of animal welfare protection”, 4th October 2018 in Wroclaw, Poland, organized by the Wroclaw University of Environmental and Life Sciences and our ISAH member Prof. Roman Kolacz.

I wish you a good summer and some relaxing vacation days with your families and relatives.

Very best regards

Professor Dr. Dr. h. c. Jörg Hartung
President of ISAH



Contents

- Editorial
- News from the Society
- Publications
- Forthcoming events

News from the Society

Some activities

ISAH President Jörg Hartung was:

- invited by the German Federal Ministry of Agriculture to take part in the international conference on the future of agriculture GFFA 2018 (Global Forum for Food and Agriculture), 18th January and the “Green Week”, 19–27 January, an international food and agriculture fair in Berlin, helping to support the idea of sustainable livestock farming in developing countries by improving hygiene and animal welfare.
- re-elected for 4 years as member of the board of trustees of the Tönnies Research Foundation, Wiedenbrück, Germany.
- invited to the session Agribusiness and Innovation of the German – Brazilian Economic Consultation 24th June 2018 in Cologne, Germany to present a talk about importance of further and continuous education of veterinarians and related professions in animal health and welfare for beef/livestock production in Brazil (“Animal Welfare Academy”). These meetings are held alternately in Germany and Brazil each year. They are organized by the German (BDI) and Brazilian (CNI) Industrial Associations, with participation of the German (BMEL) and Brazilian (MAPA) Agricultural Ministries, the German Chamber of Commerce (AHK) in Sao Paulo and further organizations. Agreement was reached to continue talks about further educational and development programs. The picture below shows members of both Agro-business delegations (BDI, CNI, BMEL, AHK, ISAH and others) demonstrating their preparedness for further cooperation.



Picture: Christian Gruppe



ISAH President Jörg Hartung and Secretary Christelle Fablet took part in the 86th general assembly of the **OIE** (World organisation for animal Health) from 20-25 May.



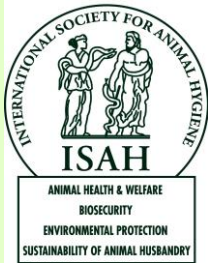
C. Fablet and Prof. J. Hartung

The General Session of the World Assembly of Delegates lasts five days and is held every year in May in Paris. It comprises the Delegates of all Member Countries and meets at least once a year. It is the highest authority of the OIE.

The main functions of the Assembly are:

- to adopt international standards in the field of animal health, especially for international trade;
- to adopt resolutions on the control of the major animal diseases;
- to elect the members of the governing bodies of the OIE (President and Vice-President of the Assembly, members of the Council and of the Regional Commissions), as well as the members of the Specialist Commissions;
- to appoint the Director General of the OIE;
- to examine and approve the annual report of activities and the financial report of the Director General and the annual budget of the OIE.

In addition, during the General Session, two technical items of general interest are dealt by speakers chosen for their specialist knowledge, and the animal health situation worldwide is presented in summary form with additional



information provided by each Member Country.

This year, a lot of presentations and discussions were about the last activities and renewal of OIE. The director general, Dr Monique Eloit, presented the top 3 priorities of the OIE until 2020:

- Ensure the health and welfare of animals by an adapted risk management
- Ensure transparency of the global animal health situation, including zoonoses.
- Reinforce the capacities of the veterinarian network

Particular attention and discussions dealt with diseases of major interest, including:

- **highly pathogenic avian influenza** in birds. The data collected for HPAI through WAHIS for 2017/2018 show that the world is experiencing a massive spread of avian influenza. In this context, OIE strengthen the importance to collect as much accurate, real-time information as possible. OIE member Countries have been encouraged to maintain their efforts in disease prevention and monitoring, as the most effective way to prevent potential future panzootic events.
- **peste des petits ruminants** is one of the priority diseases identified by the FAO-OIE Global Framework for the progressive control of Transboundary Animal Diseases.
- **foot and mouth disease** remained one of the three most frequently notified OIE-listed diseases. The disease was reported present, under five serotypes, in 34% of the 184 reporting countries and territories.
- **rabies** - dog-mediated human rabies costs the lives of people every year mainly in Africa and Asia. Between 2017 and early May 2018, the disease was reported present in 57% of the 183 countries and territories which notified information to the OIE.
- **African swine fever** is of concern to many regions around the globe. Since no vaccine exists, risk management should focus on prevention of the disease through reducing the risk of virus introduction and exposure to potential sources as well as by the adequate implementation of biosecurity procedures.
- an **emerging disease** in aquatic animals, **Tilapia lake virus disease** has caused substantial mortality rates of up to 70% in farmed tilapia and the wild population over the last years in several regions of the world.



⌘ ⌘ ⌘ ⌘ ⌘ ⌘ ⌘ ⌘ ⌘

ISAH Standing vice president Dr. Andres Aland participated in the organization of the 36th Conference and Annual General Meeting of the Society for Veterinary Epidemiology and Preventive Medicine (SVEPM) in Tallinn, Estonia in March 2018.

The information from the conference of high scientific value can be still read from the website <https://www.svepm2018.org/>.

⌘ ⌘ ⌘ ⌘ ⌘ ⌘ ⌘ ⌘ ⌘

ISAH Secretary Christelle Fablet was nominated to the editorial board of the scientific journal Folia Veterinaria. This scientific journal is issued by the University of Veterinary Medicine and Pharmacy in Košice, Slovakia. It is published quarterly in English and distributed worldwide. Publication of original research papers on all aspects of veterinary science, relevant review articles, clinical case studies. Papers of original studies, review articles and case studies in a range of scientific fields with focus on veterinary medicine, food hygiene and environmental conditions related to public health are published. Don't hesitate to submit your scientific papers in this journal!
<https://content.sciendo.com/view/journals/fv/fv-overview.xml>



ISAH EB member, **Associate Professor Dr. Stefan Gunnarsson**,

- received an 'Animal welfare' prize (see picture below)
- coordinates a collaboration project of 7 countries called 'FreeBirds'. More info may be found at <http://projects.au.dk/coreorganiccofund/research-projects/freebirds/>



Associate Professor Dr. Stefan Gunnarsson



*Animal Protection
Sweden*



ISAH EB member, Professor Dr. **Jàn Venglovsky**, the rector of Košice University, Jana Mojžišova and Naďa Sasáková (DVM, PhD at Košice University) took part in two meetings in May in France in order to foster collaborations with the French Agency for food, environmental and occupational health and safety (Anses; <https://www.anses.fr/en/content/presentation-anses>) and the National Research Institute of Science and Technology for Environment and Agriculture (IRSTEA; <http://www.irstea.fr/en/accueil>).



Prof. Dr. **Jàn Venglovsky** and Jana Mojžišova
at Anses headquarter in Paris



Prof. Dr. **Jàn Venglovsky**, Jana Mojžišova and Naďa
Sasáková (Košice University) and Dr Jose Martinez (IRSTEA)

⌘ ⌘ ⌘ ⌘ ⌘ ⌘ ⌘ ⌘ ⌘

Dr. Frank J.C.M. Van Eerdenburg, Member of the Society from Utrecht University, The Netherlands took part in an Animal Welfare course in Mexico in March 2018. This course was part of the Jean Monnet programme co-funded by the European Union and La Universidad Autónoma Metropolitana.

⌘ ⌘ ⌘ ⌘ ⌘ ⌘ ⌘ ⌘ ⌘

ISAH member Jan Hultgren has a project on Small-scale and mobile slaughter. Farm animals are usually transported on road to the slaughterhouse, where they often spend the night before being slaughtered. Stress occurs in connection with handling, during transport and in unfamiliar environments where the animals are subjected to numerous different stimuli. It is well-known that animal welfare and meat quality can be negatively affected. Small-scale slaughter can possibly reduce these problems. To improve the possibilities for small-scale slaughter and strengthen the competitiveness of Swedish meat producers, the Department of Animal Environment and Health conducts scientific research and contributes to development work. More details are given at <https://www.slu.se/en/departments/animal-environment-health/research/research-project/Small-scale-and-mobile-slaughter/>.

⌘ ⌘ ⌘ ⌘ ⌘ ⌘ ⌘ ⌘ ⌘

Prof. Lotta Berg, from the Swedish University of Agricultural Sciences, received an award on Global Welfare from the World Veterinary Association (WVA)



Professor Lotta Berg



www.isah-soc.org

e-news

**International Society
for Animal Hygiene**

N° 002 - 2018



19th ISAH Congress, 8th – 12th September 2019 Wroclaw, Poland



Save the date! The next ISAH congress will be hold in Wroclaw, Poland in September 8th - 12th 2019.

The ISAH 2019 Scientific and Organizing Committees do hope that You will join us and take an active part in all that we are offering. The Congress is a unique opportunity for industry and scientists to meet and acquire new knowledge as well as to exchange experience. With warm hospitality and more than enough facilities, we believe that it will be great success and unforgettable experience. Now, we would like to invite you to submit a proposal for oral and poster presentation at the Congress.

IMPORTANT DATES

Abstract Submission and Congress Registration starts on 10th of August 2018

Abstract Submission deadline is November 30th 2018

Early Registration and Payment deadline is April 30th 2019

Abstracts can only be submitted online via the online abstract submission system after your registration to the system. More information you can find on <http://www.isah2019.com/>

We are happy to announce that selected papers of the Congress will be published in the “Annals of Animal Science”. According to the Journal Citation Report published in June 2018 (JCR 2018) the journal has an Impact Factor (IF) of 1.018.

Annals of Animal Science accepts original papers and reviews from the different



topics of animal science: genetic and farm animal breeding, the biology, physiology and reproduction of animals, animal nutrition and feedstuffs, environment, hygiene and animal production technology, quality of animal origin products, economics and the organization of animal production.

Link to previous volumes of Annals of Animal Science:
<http://www.izoo.krakow.pl/en/periodicals>

We are looking forward to welcome You in Poland with the motto of the Congress - "Animal Hygiene as a Fundament of One Health and Welfare improving biosecurity, environment and food quality".

On behalf of the Organizing and Scientific Committees,

Associate Professor Dr Sebastian Opaliński

Chairman of the XIX ISAH Congress

and ISAH ORGANISING VICE PRESIDENT



Membership fees



Scientists, veterinary practitioners and other persons with a special interest in the field of Animal Hygiene can become member of the International Society on Animal Hygiene by paying a biannual membership fee of 40 Euros for two (2) calendar years in between the ISAH-congresses.

The ISAH membership fee is effective from the 1st of January and runs for 24 consecutive months. Members who pay their fee in due time get a discount on the congress fee for the upcoming ISAH congress in that period.

Membership fee can currently be paid only by money transfer. Alternatives are currently explored and might become available in the future.

Please visit our webpage for more details:

<https://www.isah-soc.org/?Members/Membership-fee>



Further news

A novel ceiling-based mobile broiler farmer assistant system (“ChickenBoy”) for improving animal health, welfare and productivity was demonstrating at the Automatica Fair, 19–22 June in Munich, Germany by Dr. Heiner Lehr of Faromatics and Professor Jörg Hartung. The photo shows both at the booth with a model of the ChickenBoy in front.



The background for this development is that citizens and consumers are increasingly worried about the living conditions of intensely farmed chickens and the health and welfare problems in crowded broiler houses such as diarrhoea, leg and foot diseases, pododermatitis, poor air quality, respiratory diseases and other health and behavioural issues.



Most of these problems are recognized rather late because of the low surveillance frequency in large broiler herds and the impossibility to monitor chickens permanently and individually under current production conditions.

The demonstrated mobile system (“ChickenBoy”) runs permanently on ceiling-based rails and monitors continuously and in real time the birds, faeces and litter conditions, food and water supply by visual and infrared cameras, temperature, relative humidity and CO₂ (NH₃ optional) close above the heads of the animals. The system can identify dripping nipple drinkers, anomalous faeces structures, wet litter areas and immobile and dead birds.

All data are stored in a protected, cloud-based system, mapped across the barn floor and presented to the farmer via PC or smart phone. It enables the farmer to survey animals continuously and at any time. He can take early action in case of animal disorders or indisposition and the data mapping leads him directly to the points of technical failure or animal health or welfare problem in the barn.

First experiences in broiler farms in Spain show the great potential of the ChickenBoy to improve the quality of life of broilers. There is hope that this new intelligent PLF (Precision Livestock Farming) technology can enhance the confidence of farmers in their animals and production, improves animal health and welfare, stabilizes productivity and may create more confidence of consumers by transparency of production. Estimates show that the system can work profitable after about one year already.

Interested or curious to get more info? A short demonstration video can be viewed under: www.faromatics.com.

Contents

- Editorial

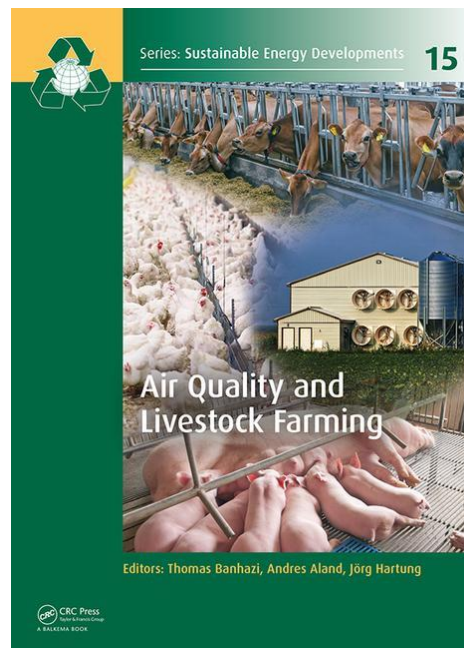
- News from the Society

- Publications

- Forthcoming events

Publications

4th ISAH book: "Air Quality and Livestock Farming"



Associate professor Thomas Banhazi, Lecturer Andres Aland and Professor Jörg Hartung have edited the 4th book under the auspices of ISAH! There is in total 22 principal chapters covering the wide and important topic of air quality in livestock buildings. It addresses the raising awareness of the importance of optimal health and welfare for livestock species and provide-up-to-date information for professionals involved in modern animal production. With many contributions from internationally acknowledged specialists and researchers from Europe, Australia and U.S.A, the book is available since June 2018.

To read the description, to learn more about the contents and editors, and to buy one to multiple copies, please visit:
<https://www.crcpress.com/Air-Quality-and-Livestock-Farming/Banhazi-Aland-Hartung/p/book/9781138027039>.

Proceedings of the European Symposium of Porcine Health Management (ESPHM)



The ESPHM is a joint collaboration among three parties including the European College of Porcine Health Management (ECPHM), the European Association of Porcine Health Management (EAPHM) and, for the ESPHM 2018, the *Centre de Recerca en Sanitat Animal (CReSA)* at *Institut de Recerca i Tecnologia Agroalimentàries (IRTA)* as Local Organizing Committee (LOC).

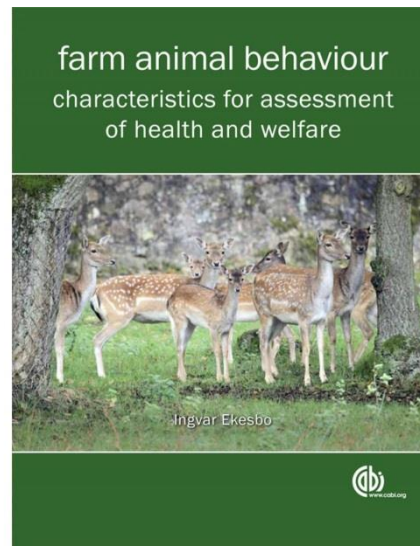
The ESPHM held in Barcelona. It was the 10th edition of the symposium, representing the complete consolidation of a meeting that started in Copenhagen (Denmark) in 2009 with 220 delegates. Since then, the congress has evolved at all levels, with more than 1,540 delegates in the last edition in Prague (Czech Republic) in 2017. This is an evident proof of the increasing interest that the scientific contents of the ESPHM offers, not only for European veterinarians but also to the international community. Although settled in Europe, the ESPHM aspires to be a source of updated knowledge and know-how in its field for the whole world.

Interested in the final programme and book of proceedings?

Please visit the dedicated webpage:

<https://www.esphm2018.org/index.php/welcome>

Farm animal behaviour. Characteristics for Assessment of Health and Welfare."



Animal behaviour is the basis for ascertaining their welfare and is a topic of ever growing importance. This textbook is organised into three sections covering all major farm animals of the world, both mainstream and specialist: large farm animal species (horses, cattle, swine, sheep and goats), poultry and farmed birds and non-domesticated animals such as deer. Each chapter describes the elements of behaviour of a particular species in a clear and uniform format. Background to domestication, innate and learnt behaviour, social behaviour, mating behaviour, activity patterns, senses, behaviour in the young animal, vision and hearing are all covered for each species. Understanding of ethological knowledge is both a necessary aid for getting correct diagnoses, but also for the assessment of health and welfare in the single animal or a group of animals, making the book valuable for veterinary practitioners as well as students at university and tertiary level.

Interested? Please visit:

<https://www.cabi.org/bookshop/book/9781786391391>



Publications

Of interest from ISAH members

About pig production and animal hygiene

- ▶ Fablet, C., Rose, N., Grasland, B., Robert, N., Lewandowski, E., Gosselin, M., 2018. Factors associated with the growing-finishing performances of swine herds: an exploratory study on serological and herd level indicators. *Porcine Health Management* 4, 6. DOI 10.1186/s40813-018-0082-9. <https://porcinehealthmanagement.biomedcentral.com/articles/10.1186/s40813-018-0082-9>
- ▶ Fablet C. 2018. Pneumonia and pleuritis: a holistic approach is needed to tackle these multifactorial diseases. *Livestock UK-Vet.* <https://doi.org/10.12968/live.2018.23.Sup2.4>

About dairy cows housing and hygiene

- ▶ Pavlenko, A., Lidfors, L., Arney, D.R., Kaart, T., Aland, A. 2018. Behavior and Performance of Dairy Cows After Transfer from Tied to Cubicle Housing. *Journal of Applied Animal Welfare Science* 21 (1): 82–92; DOI: [10.1080/10888705.2017.1376204](https://doi.org/10.1080/10888705.2017.1376204)<https://www.tandfonline.com/toc/haaw/20/21/1?nav=tocList>
- ▶ Reimus, K., Orro, T., Emanuelson, U., Viltrop, A., Mõtus, K. 2017. Reasons and risk factors for on-farm mortality in Estonian dairy herds. *Livestock Science* 198: 1–9. <https://doi.org/10.1016/j.livsci.2017.01.016>
- ▶ Jokelainen, P., Tagel, M., Mõtus, K., Viltrop, A., Lassen, B. 2017. Toxoplasma gondii seroprevalence in dairy and beef cattle: Large-scale epidemiological study in Estonia. *Veterinary Parasitology* 236: 137-143. <https://doi.org/10.1016/j.vetpar.2017.02.014>



About chickens

- ▶ Zhang, X., Zhang, M., Su, Y., Wang, Z., Zhao, Q., Zhu, H., Qian, Z., Xu, J., Tang, S., Wu, D., Lin, Y., Kemper, N., Hartung, J., Bao, E. Inhibition of heat stress-related apoptosis of chicken myocardial cells through inducing Hsp90 expression by aspirin administration in vivo. *British Poultry Science* 59, 3 (2018) 308-317. <http://doi.org/10.1080/00071668.2018.1454585>

About farm animal welfare

- ▶ Gunnarsson, S. Technologies for Increasing the Productivity of Poultry: Welfare Implications. In: *Are We Pushing Animals to Their Biological Limits? Welfare and Ethical Implications* (Ed. by Grandin, T. and M. Whiting), in press, <https://www.cabi.org/bookshop/book/9781786390547>

Contents

- Editorial
- News from the Society
- Publications
- **Forthcoming events**

Forthcoming events



69th Annual Meeting of the European Federation of Animal Science (EAAP)

It will be held in the in Dubrovnik (Croatia) from **27th to 31st August 2018**. For decades, the Annual Meeting has hosted scientists and experts from the field of animal science, not only from Europe but also from other countries around the globe. The EAAP Congress provides insights into the latest research results from many areas of animal science. It is a unique opportunity for scientists and industry to meet and acquire new knowledge and to exchange experience. Carried out through many sessions, plenary meeting, a poster and an exhibition presentations, and discussions about scientific achievements in the European and world livestock production, Annual Meeting gives an opportunity for the application of new ideas in practice. All these preferences make the EAAP one of the largest animal science congresses in the world – we expect approximately 1000 participants from more than 50 countries.

XVI Scientific Conference: "Ethical and legal aspects of animal welfare protection"

It will be held in Wrocław (4th October 2018). ISAH president J. Hartung is invited to give a talk on "Intensification of animal production versus animal welfare".

The Newsletter is sent to all ISAH Members. You are all invited to submit information for the newsletter. Please send information, news, text, photos and logo to: christelle.fablet@anses.fr and joerg.hartung@tiho-hannover.de

Production staff: ISAH EB