WORLD ASSOCIATION for ANIMAL PRODUCTION

Number 32 2023

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The World Animal Science News

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EDITORIAL

World Congress on Animal Production in Lyon August 2023: the place to be, in person or online

I am very happy to inform you that the scientific program of our WAAP-EAAP-Interbull conference which will be held in Lyon next August is now ready!

We received an incredibly high number of abstract submissions for this conference: more than 1900 abstracts compared to about 1300 in previous annual EAAP meetings. These abstracts come from 60 different countries from all over the world! This is probably the main effect of combining the WAAP with the two other partners to organize the conference. Many thanks to you if you have sent an abstract! Among these abstract submissions, more than 1200 have been selected as theatre presentations within 94 sessions as a whole; 16 of them will be WAAP-EAAP sessions during the week (see below). With the two WAAP sessions on Sunday, the WAAP-EAAP plenary scheduled for Tuesday and 2 poster sessions, this is a total of 99 sessions! I am sure that this incredible number will remain a lasting record as the "magic number" marking the success of this WAAP-EAAP-Interbull meeting of Lyon.

However, it is a real challenge to organize such an event. The efficiency of the scientific organization of EAAP under the chairing of Geoff Pollott, and the exceptional quality of the venue in the Lyon Palace of Congresses under the responsibility of Jean-François Hocquette, will create the perfect circumstances for an outstanding and memorable scientific meeting.
The congress will start on Sunday, August 27th with a WAAP specific day organized around two main sessions. There are 6 excellent speakers in each session tasked with addressing two of the major questions challenging livestock nowadays (see the program at the end of this editorial). The first one, in the morning, is dedicated to the "Control of Green House Gas emissions in Ruminant farming" and is an important area for research and development which has in its hands both a part of the future climatic conditions of our planet and the whole future of ruminant systems on the globe. The second one, in the afternoon, is dedicated to "Biodiversity as a lever for sustainable animal production" and deals, in my opinion, with the second most important item for Humanity and for the future of livestock systems to provide animal products to human beings. The two sessions are held in sequence on this Sunday because, of course, they are not independent: the control of GHG emissions should not be done by reducing biodiversity and the reverse.

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Editorial (continues)

The two sessions will be live-streamed so that everybody not in person at the meetings can follow them remotely (see below).
After this first day, from Monday morning to Thursday evening, 16 sessions will be joint sessions between WAAP and EAAP; eight of them (one every half day) will be live-streamed. In the large auditorium, the plenary of the whole congress, on Tuesday morning, will be dedicated to "Primum non nocere: Can we feed the planet without depleting its resources?" with 3 major presentations of top-scientists and two presentations by the Leroy-EAAP (Prof J. Soelkner) and WAAP (Dr F. Dunshea) awardees. The other seven live-streamed sessions in the morning (16 papers) and afternoon (14 papers) will be the following ones:

- Monday :

• *"Adaptation of breeding strategies and genetics to climate change, the right animal for right environment"*
• *"Alternative and new feed resources to reduce feed/food competition and enhance circularity of livestock production"*

- Tuesday:

• [Plenary, see above]
• *"Pasture based solutions to realise a role for ruminants in a sustainable food system »*

- Wednesday:

• *"Transformation of livestock practices in response to society's expectations on animal welfare, market demand for animal products and environmental issues »*
• *"Environmental challenges of cattle tropical grazing systems »*

- Thursday:

• *"Molecules in animal nutrition: over and above building blocks"*
• *"Carbon sources and sinks within global livestock systems »*

Seven other WAAP-EAAP joint sessions will be held (but not live-streamed) over the week:

- *Sustainable livestock farming – defining metrics and rationalising trade-offs? (1 and 2)*
- *Breeding for Climate Change (1- Mitigation and 2- Adaptation)*
- *EuroFAANG: genotype-to-phenotype research across Europe and beyond*
- *Resilient livestock farming systems in the face of climate and other global challenges - adaptation and mitigation.*
- *Challenges of fish nutrition for sustainable aquaculture.*

So viewing all of the above titles of the meeting sessions, this is around 225 theatre presentations which will be held under WAAP and WAAP-EAAP responsibility.

I should also mention that to each one of these sessions, poster presentations will be associated during two poster sessions. Considering that we expect around 2000 delegates from more than 60 countries, this will be an absolutely unique opportunity for all scientists and people involved in animal production and animal science to come to Lyon next August.

Take this opportunity!

If you cannot come physically, please attend virtually! I know that there are a lot of WAAP scientists from around the world for whom Lyon is far away and expensive; thus, we have organized internet Live-Streaming as follows:

1. There will be live-streamed sessions every day, in the morning and the afternoon, from Sunday to Thursday
2. The welcome session with the award ceremony of Monday end afternoon will also be live-streamed.
3. Delegates connected by live-streaming can choose a one-day registration for only one day of live-streaming, or a full one-week registration to follow all lived-streamed sessions
4. Registrations for live-streaming are done at low prices compared to their costs.
5. All 10 (+1 with the ceremony) live-streamed sessions will be recorded and will be available later on the EAAP YouTube channel (for EAAP individual members)

Of course, if you participate by live-streaming online you will miss the two poster sessions (more than 600 posters) as well as all the discussions with other delegates coming from the entire world. You will miss the opportunity of joining existing networks working on your own subject or even the possibility of creating your own network.

You will also miss the unique opportunity of experiencing the different social events organized by the local organizers such as the French and the Gala dinners (may I remind you that Lyon is considered as the capital of the French gastronomy!)!

So, whatever you decide, either to come physically or by remote, you will be very welcome in Lyon next August.

Here you can read the agenda of the WAAP plenary session!
More than ever: Lyon in August 2023 is the place to be, whether in person or online!

Philippe Chemineau
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From WAAP Members

American Dairy Science Association® (ADSA®)

ADSA News

Since 1906, ADSA has been the home for trustworthy dairy science and for a diverse community of educators, scientists, and industry representatives advancing the science behind the food we eat. The following is an update on ADSA meetings, events, and programs.

Want to stay up-to-date on the latest in dairy science news? Join our free weekly newsletter.



Don't miss out | 2023 ADSA Annual Meeting

June 25 to 28, 2023

We're excited to convene in Ottawa, Ontario, Canada, this June 25 to 28. Get your early bird tickets now to enjoy the benefits of #ADSA2023, including

• Expert keynotes and symposia sessions on pressing dairy industry issues
• 1,200 oral and poster presentations conveying the most relevant, cutting-edge science in the profession
• A chance to connect and collaborate with more than 1,500 dairy scientists from around the globe

ADSA members enjoy a significant discount on registration fees. Join or renew today and save! Register!

Register | Virtual 44th ADSA Discover Conference on food animal agriculture: Why Cheese from Milk?

May 3 to 4

Join the ADSA Discover Conference, in collaboration with the American Cheese Society, for an entirely virtual program this **May 3 to 4**. Attendees will get access to the latest information from dairy science

experts, engage with production and foods colleagues in the cheese sector, and receive evidence-based messaging about dairy. Register !



Join and save | ADSA members enjoy author discounts

ADSA publishes the top open-access dairy science journals in the profession: *the Journal of Dairy Science®* and *JDS Communications®.* ADSA members can stay connected to the best in dairy science with online access to both journals. Professional members also enjoy significant discounts toward article-publishing charges—more than $1,900 for the *Journal of Dairy Science* and more than $500 for *JDS Communications*.

Explore the many benefits of membership and join or renew today! Not ready to become a member? We offer half-off e-memberships for individuals outside of the US and Canada. Learn more



Explore - Special JDS Communications issue on Advances in Dairy Cow Fertility

JDS Communications has just released a special guide to the latest advances in dairy cow fertility. The issue contains 14 articles that explore important scholarship on periparturient disease, genetics, nutrition, embryo development, pregnancy loss, and more. This collection of papers serves as an essential resource and a benchmark for scientific advances in dairy cow fertility. Read the full issue and join the online discussion happening all month. Read more.

American Society of Animal Science (ASAS)

ASAS News

AMERICAN SOCIETY OF ANIMAL SCIENCE

As a member of ASAS, we are sure you are aware of all the benefits that having a professional membership offer, including complimentary registration to monthly webinars and early access to the recordings, access to ASAS Journals, and discounted meeting registration to name a few. Remember to renew your ASAS membership or join ASAS to take advantage of these benefits. More information on memberships can be found on the Membership website.

2023 ASAS ASAS/CSAS/WSASAS Annual Meeting Information

The 2023 Annual Meeting will be held at the Albuquerque Convention Centre in the heart of vibrant downtown Albuquerque, New Mexico, July 16-20, 2023. The WSASAS board has decided to move the WSASAS annual meeting this year. Instead of meeting in Boise during the Fall, we will be joining the ASAS/CSAS Annual Meeting

in Albuquerque. This was a logical change with Western Section's long and distinguished history partnering with New Mexico State University. Make sure to check the meeting website for registration and housing information.

Canadian Society of Animal Science (CSAS)

CSAS News

Greetings from the Canadian Society of Animal Science! We are looking forward to 2023, especially the ASAS-CSAS Symposium to be held in Albuquerque, New Mexico this year - make sure you save the dates, July 16 to 20, 2023. CSAS hopes you can either attend our AGM or Awards Ceremony.We also are having sessions throughout the Symposium on "Meat Protein Alternatives, Exotic Species." Our focus will be on topics in rabbit, elk, deer, llama, and potentially more!

A few important things to keep on your radar in the upcoming months:

• CSAS Major Awards nomination will open in the next few months. If you know of a deserving individual, contact the CSAS office for instructions on how to apply. These are the major scientist awards that are handed out each year at the Awards Ceremony:
o Fellowship Award
o Technical Innovation in Enhancing Production of Safe Affordable Food Award
o Canadian Industries Award in Extension and Public Service
o Young Scientist Award
o Excellence in Nutrition and Meat Sciences
• Graduate students! Are you interested in travelling to the ASAS-CSAS Symposium? You can apply for $500 towards expenses for travel to the 2023 CSAS-ASAS Annual Meeting. Contact the CSAS office.
• Oral and Poster Competitions will start accepting abstracts online as well – keep your eyes on the website!

We look forward to seeing you soon! Any questions on our society can be directed to Laura Shantz at laura.tfio@bell.net

European Federation of Animal Science (EAAP)

EAAP News

Registrations for the EAAP Annual Meeting of Lyon are open

We cordially invite you to register for the upcoming EAAP Annual Meeting to be held in Lyon! This conference offers a unique opportunity to showcase your research, connect with colleagues, and learn from experts in your field.With almost one hundred sessions, this year's event will be the largest ever, with a record-breaking submission of over 1900 abstracts. Don't miss out on the chance to advance your career and contribute to the scientific community! Register by June 1st to take advantage of our early-bird discount. EAAP members can receive an additional discount of 300 Euros. If you are not already an EAAP individual member, apply soon to enjoy the additional discount and other exclusive services on the EAAP website. We are confident that this year's EAAP Annual Meeting will provide

valuable insights and promote collaborations, so we encourage you to register today and secure your spot at this exciting event.

Animal Task Force meeting on the role of meat in the food system



The Animal Task Force organized a workshop to discuss the role of meat and livestock in our food system. The workshop emphasized the importance of looking at scientific evidence to understand the role of meat in society. The workshop supported the conclusions of a position paper signed by almost 1000 scientists, which highlighted the positive contributions of meat and livestock to personal health and well-being, ecological balance, and socioeconomic livelihoods. The position paper was the major outcome of the "International Summit on The Societal Role of Meat – What the SCIENCE Says", held in Dublin last October and hosted by Teagasc, the Irish Agriculture and Food Development Authority. The summit brought together globally leading scientists from various relevant disciplines to present a comprehensive synopsis of the scientific insights on the role of meat in society. At the meeting held in Brussels last week it was confirmed that, given the importance and scale of meat production, is critical for agricultural, industrial, governmental, and educational actors to continuously strive to earn their societal license to operate. Meat production and consumption are frequent subjects of societal debate, and the best technologies must be utilized to maximize benefits and minimize undesirable impacts. In conclusion, understanding the objective scientific evidence on the role of meat in society is essential for policy makers and civil society to make informed decisions.

First EAAP Regional meeting, everything is ready!

We are eagerly anticipating the upcoming regional scientific meeting to be held in Nitra (Slovakia) on April 26th– 28th, which promises to be a great success and an important event for the local scientific community. The meeting will bring together scientists and researchers from various institutions and fields mainly from Central Eastern European countries to exchange ideas, present their research findings, and explore opportunities for collaboration. We registered around 120 abstracts and 170 registered participants. This meeting will provide a platform for animal scientists and researchers to showcase their work, discuss the latest advancements in their fields, and network with other like-minded professionals. The meeting will also feature a plenary session with several prominent keynote speakers who will share their expertise and provide valuable insights into the latest developments in their respective fields. Their contributions are sure to generate interest and excitement among the attendees and inspire new ideas and collaborations. The importance of this meeting for the local scientific network cannot be overstated. By bringing together scientists and researchers from various institutions and fields of the Central and Eastern European countries, the meeting will foster a sense of community and collaboration, which will help to promote scientific excellence in the area. The event will provide a valuable opportunity for scientists and researchers to network, learn from each other, and explore new avenues of research. More information on the website. In conclusion, we are confident that the upcoming regional scientific meeting will be a great success and an important event for the local scientific community. We look forward to the knowledge, insights, and collaborations that will be generated at this meeting, and we are excited to see the impact it will have on the scientific community in our region.

Latin American Association of Animal Production (ALPA)

ALPA News

The XXVII Scientific Meeting of the Latin American Association for Animal Production, and the XLVIII Scientific Meeting of the Mexican Association for Animal Production and Food Safety A.C., will be held from April 26-28, 2023, at the Palacio de Conventions of the city of Zacatecas. More than 300 papers have been received and the presence of 600 participants is expected. For more information visit the website.

South African Society of Animal Science (SASAS)

SASAS News

The South African Society for Science (SASAS) has been invited by the Botswana Society of Livestock Science and Production to co-host the 8th edition of the All-Africa Conference for Livestock Production to be held in Gaborone, Botswana, with the theme "Sustainable African Animal Agriculture: Challenges and Future Prospects" from 26 to 29 September 2023. We are looking forward to participation from throughout Africa and beyond. A recent development is a request by the Western Africa Branch of the International Society for Animal Ethnology (ISAE) for local animal scientists to arrange a workshop to promote research on behaviour and welfare in the Southern African Development Community (SADC). A 2-day workshop in Pretoria is proposed for 6-7 November, 2023. SASAS is honoured to have been invited to produce a guest issue of Animal Frontiers, issue number 5 of 2023, with the Theme: Climate Adapted Livestock and Production in Harsh Environments, focussing on Extensive grazing systems in the sub-tropics. Prof Normal Casey is our guest editor.

News from Science

Strategies for choosing core animals in the algorithm for proven and young and their impact on the accuracy of single-step genomic predictions in cattle

The development of genomic selection has revolutionized the genetic evaluation of livestock species. However, the standard single-step genomic best linear unbiased prediction (ssGBLUP) model requires the inversion of the genomic relationship matrix (G), which becomes computationally unfeasible when the number of genotyped animals exceeds a certain threshold. The algorithm for proven and young animals (APY) has been developed to overcome this problem by partitioning the genotyped animals into two groups, core and non-core. Only the portion of G corresponding to the core animals is directly inverted. The effectiveness of different strategies for defining core animals in APY was tested using simulated and real data. One strategy involved the use of principal component analysis to calculate the genetic contributions of animals to the genomic relationship matrix (GCONTR) for identifying key individuals for sequencing and imputation purposes. The accuracies of the ssGBLUP model increased as the size of the core increased, but the criteria for selecting core animals and the optimum size of the core are still debated. The results showed that including animals with the lowest values of GCONTR led to higher accuracies than including those with the largest

values. The criteria of choice appear less important for larger sizes of core animals, and the inclusion of animals with the lowest values of GCONTR led to increases in accuracy. These are preliminary results based on a small sample size that need to be confirmed on a larger number of genotypes. Read the full article on Animal.

Corrected milk: Reconsideration of common equations and milk energy estimates

The article discusses the importance of reconsidering the use of corrected milk equations and the energy equations from which they are derived. Corrected milk is a standardized measurement used in the dairy industry to compare the energy output of milk with different compositions, which makes it difficult to compare milks of different compositions. The article argues that the equations used to determine corrected milk should be re-evaluated to determine which are best suited to current applications, given the changes that have occurred in the dairy industry over the past 100 years. The article describes the applications of corrected milk, which includes evaluating milk production by country, determining individual animal productivity and comparing with herd mates, assessing the efficiency of feed use for milk production, as functional units for lifecycle assessments, assessing the effects of experimental treatments, and calculating the energy requirements of lactating cows. The article notes that the accuracy of corrected milk equations depends on the accuracy of the energy equations used to create them. Milk energy equations have evolved over time, with the inclusion of multiple milk components more accurately predicting milk energy content than fat content alone. The article tentatively recommends using energy equations that include the three main milk components and their gross energy multipliers for predicting milk energy and deriving corrected milk equations. The article also notes that the accuracy of energy equations is affected by the accuracy of gross energy values of individual components and variability of milk composition. Finally, the article notes that, in research, direct reporting of milk energy values, rather than corrected milk, provides the most explicit, least manipulated form of data and should be fairly comparable across studies. Read the full article on Journal of Dairy Science.



Peer review perpetuates barriers for historically excluded groups

A new study published in Nature Communications shows that peer review bias in scientific publishing affects authors based on their demographics, including gender, geography, institution, race, and other factors. The study is based on a meta-analysis of 31 studies that examined 312,740 manuscripts submitted to over 640 journals in the biological sciences, including Nature Portfolio journals, Science, and Proceedings of the National Academy of Sciences. The analysis found that authors whose institutional affiliations were in Asia, whose country's primary language is not English, and those from countries with lower Human Development Indices experienced worse review outcomes, such as lower overall acceptance rates. The study also found that relatively few journals are proactively combating bias, with only 15.9% of journals practicing double-blind review and 2.03% having reviewer guidelines that mention social justice issues. The lack of demographic equity in peer review signals an urgent need to better understand and implement evidence-based bias mitigation strategies. The study calls for more research on reducing bias, including exploring the efficacy of alternative peer-review models

and other strategies aimed at promoting greater diversity among the scientific community and published works. Peer review is a core part of the scientific process and vital for advancing scientists' careers. However, the study highlights that peer review bias disadvantages scientists from historically excluded backgrounds, and solutions to mitigate bias are lacking. The authors call for more evidence-based solutions to alleviate review bias and greater proactive measures by journals to combat bias. Read the full article on Nature.



News from Industry

Workshop: "Food and Feed for the future"

The workshop "Food and Feed for the Future" will be held at ISARA in Lyon, on 1st of September 2023 and organised by INRAE, CSIRO and AFZ. Agri-food systems must evolve towards a pattern of sustainability and resilience to ensure food security and nutrition for all. The status quo is not an option. Major transformations in agricultural systems and natural resource management will be required to ensure a safe and healthy future for all people and the entire planet. The growing protein demand of the growing global population can only be sustainably addressed by diversifying the protein offering. The workshop presents and discusses challenges and opportunities for protein production from animals, plant-based sources, and novel protein sources (insects, yeast, and microalgae) and how they contribute to sustainable food systems. Different options are discussed to address this problem: they can focus on new technologies such as microbial production to produce more food or they can consider more sustainable land-based food systems. For more information and registration visit the website.

UK: New trade deal a "nail in the coffin" for animal welfare

A new Trans-Pacific trade deal could open the door to imports of products produced to lower animal welfare standards than are legal in the UK, warns animal welfare charity, the RSPCA. "Many members of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) use methods of production that would be illegal in the UK, and there are no explicit references to animal welfare standards in the trade bloc's formal conditions," notes the RSPCA. The organisation says that it fears that meat produced in the bloc's member countries using methods that are illegal in the UK will find its way onto the UK's supermarket shelves and onto the plates of British consumers. Read the full article on PoultryWorld.



Dutch politics could shape the future of its dairy industry

News has spread beyond borders about the victory of the BBB (BoerBurgerBeweging) Farmer-Citizen Movement in the Dutch provincial elections. Could the victory spell a new chapter for the dairy

industry, as the nitrogen emission reduction laws are revisited? Read the full article on DairyGlobal.



Job Offers

Postdoctoral Position at University of Lausanne, Switzerland

The University of Lausanne is looking for a postdoctoral position in Anatomic and Functional Mapping of POMC Neuronal Circuits. Expertise in neuroanatomy, stereotaxic surgeries, and histological approaches is required. Expertise should be attested by publications. **Deadline: 8 May 2023**. For more information read the job vacancy.

Core scientist at The Roslin Institute, United Kingdom

The Roslin Institute and The Royal (Dick) School of Veterinary Studies of University of Edinburgh are looking for a Core Scientist in Data-Driven Breeding and Genetics to join the HighlanderLab. **Deadline: 10 May 2023**. For more information read the job vacancy.

PhD candidates at AgResearch, New Zealand

AgResearch in New Zealand is recruiting five PhD candidates ('A' grades) interested in researching rumen microbiology and CRISPR technologies to develop strategies to reduce methane emissions from farmed ruminants. The successful applicants will join a multidisciplinary team led by AgResearch in Palmerston North, New Zealand. For more information and application visit the website.

Two positions at University of Montreal, Canada.

Two positions as "professor" are open at University of Montréal. More information on the dedicated webpage (in French).

Publications

1.Elsevier

Animal: Volume 17- Issue 4 – April 2023
Article of the month: "Negative dietary cation–anion difference in prepartum dairy cow diets: a pragmatic study in two commercial dairy farms"

2. New technical articles have been recently published on Engormix:

I. "Precision Mineral Nutrition for Dairy Cows"

II. "On the Development of Online Tools to Support the Production of Sustainable Animal Feeds"

III. "In-feed additives to help reduce Salmonella infection"

IV. "How fungi make potent toxins that can contaminate food"

Other news

ERFP collaborates with the European Reference Centre of Endangered Animal Breeds

Since beginning of this year the European Reference Centre of Endangered Animal Breeds (EURC-EAB) provides to European Commissions the scientific and technical advice to establish and harmonize methods for conversation of endangered animal breeds, as well as preservation of genetic diversity within these breeds. This includes the breeding of cattle, pigs, sheep, goats and horses. The EURC-EAB will also support governments and breed

organizations in the implementation and further development of European breeding regulations (EU 2016/1012). To this regard, the European Regional Focal Point for Animal Genetic Resources (ERFP) will work closely with the organization to establish priorities or needs and to disseminate existing guidelines and tools for implementing breeding and conversation strategies of endangered breeds. Most of this collaboration was discussed in the last ERFP General Assembly which took place last September in Porto, Portugal.

Meetings and Conferences

WAAP invites you to check the validity of the dates for every single event published below and in the Calendar of the website, due to the state of sanitary emergency that World is currently dealing with.

Event	Date	Location	Information
XXVII ALPA meeting	26 – 28 April 2023	Zacatecas, Mexico	website
1st EAAP Regional Meeting	26 – 28 April 2023	Nitra, Slovakia	website
SafePork Conference	15 – 17 May 2023	New Orleans, LA, USA	website
ICAR Conference 2023	21 – 26 May 2023	Toledo, Spain	website
11th International Ruminant Reproduction Conference	28 May – 1 June 2023	Galway, Ireland	website
20th Spanish Animal Production Conference	13 – 14 June 2023	Zaragoza, Spain	website
ASDA annual meeting	25 -28 June 2023	Ottawa, Canada	website
ASAS-CSAS Annual meeting	16 – 20 July 2023	Albuquerque, USA	website
74th EAAP Annual Meeting	28 August – 1 September 2023	Lyon, France	website
International Conference on Sustainable Animal Agriculture for Developing Countries (SAADC)	21 – 24 November 2023	Vientiane, Laos	website

More conferences and workshops are available on EAAP website.

The **World Animal Science News** is the Official WAAP Newsletter. This interesting update about activities of the global animal science community presents information on leading research institutions in the entire world and also informs on developments in the industry sector related to animal science and production. The Newsletter is sent to all WAAP member organizations and to their associates. You are all invited to submit information for the newsletter. Please send information, news, text, photos and logo to waap@waap.it .

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