



www.waap.it

# WORLD ASSOCIATION for ANIMAL PRODUCTION

Number

8

2016

www.waap.it

## The World Animal Science News

### Main Topics

- From WAAP members
- News from Science
- News from Industry
- Publications
- Meetings and Conferences
- Job offers

## EDITORIAL

### 2016 Politics: The Need to Advocate for Science, Food, and Human Nutrition

By Deb Hamernik, President-Elect, ASAS

In 2016, many interesting and potentially far-reaching political events have already taken place. In May, Brazil impeached its President. In June, the United Kingdom (UK) voted to leave the European Union (EU). And, the presidential campaign in the United States (US) is filled with drama and controversy that will likely continue to escalate until the November elections. Each of these political scenarios provided the opportunity for the public to engage in discussions on a wide range of topics, including the economy, jobs, immigration, healthcare, education, international trade, and others. However, in none of these countries was science, agriculture, or food on the political agenda or a topic of debate. Yet, the ramifications of politics in Brazil, the UK and the US will likely have a long-lasting impact on science, food production, and human nutrition.

The most immediate impact of political change in Brazil is a potential disruption of funding for science. The interim president of Brazil downgraded Brazil's science ministry by fusing the federal Ministry of Science, Technology and Innovation with the ministry that handles telecommunications and internet regulations. In addition, federal funding for research in Brazil was 37% lower in 2016 compared to 2015 and will likely be cut by an additional 6% this year due to declining oil revenues resulting from a bribery scandal that involves the major state-run oil company (1).

... Continues

## Editorial (continues)

In the UK, it is too soon to tell how the vote to leave the EU will impact funding for science or science policy. EU funding programs have provided around 8 billion euros to scientists in the UK over the past 10 years. Scientists in the UK will be shut out of the EU's multi-billion euro Horizon 2020 program, if the UK restricts immigration or until the UK signs a new agreement with the EU. Scientists in the UK were also leading efforts to work around controversial issues associated with the use of federal funding for research with human embryonic stem cells. It is not clear if UK scientists will be allowed to participate in these policy issues in the future. What will happen to research facilities located in the UK that are owned by the EU? What will happen to trainees from other EU countries that are in programs located in the UK? What will happen to EU-funded collaborations that are led from the UK? Despite advocacy campaigns supported by overwhelming facts and empirical evidence generated by academic experts, lobby groups that represented scientists, and other scientific experts...52% of the UK public ignored this science-based evidence and voted to leave the EU. (2)

In addition, with the sharp decline in the British pound after the vote to leave the EU, the cost of imported meat (especially bacon) is expected to rise. Almost half of all meat products consumed in the UK are imported. The UK may have to independently negotiate new trade agreements with EU countries as well as with major beef exporting countries including Brazil, Argentina and Uruguay. More than half of Ireland's beef exports and around 60% of Ireland's pork exports go to the UK. After Brexit, Ireland will now be treated as a foreign country so that tariffs, regulatory barriers or other restrictions may be imposed and may lead to more than a billion euros in reduced trade and considerable damage to the UK's beef industry and rural economy. (3)

In the US, a Clinton presidency is expected to

essentially be status quo for scientists, farmers, and ranchers while a Trump presidency is at best unpredictable. Funding for science or support for farm policy rarely gets more than a few seconds of media attention from either candidate. Instead, farmers and ranchers seem to be more interested in other national issues such as composition of the Supreme Court, additional regulatory burdens, and potential changes to the Constitution. Farmers and ranchers should likely pay more attention to issues associated with immigration and the potential for disruption in opportunities for international trade. Without sound policies for immigration the future workforce needed for crop, vegetable, and livestock production as well as meat processing plants may be in jeopardy and export markets for these food products may be limited. (4)

The US food system may be the biggest challenge and opportunity that is absent from the US political agenda. Human nutrition and the environmental impact of the food system are major policy issues that are in need of basic and applied research, education, and extension efforts. Production of food accounts for 70% of water use, significant release of greenhouse gases, and tremendous challenges to the oceans, biodiversity, and rural communities. Sustainable food production systems that are economically viable for producers, environmentally responsible, and socially acceptable are needed. Poor nutrition is the leading cause of poor health in the US and around the world. Americans spend more than \$3 trillion annually on health care, including more than \$1 trillion per year on diabetes, pre-diabetes, heart disease, obesity, and cancer. The only way to reduce the amount of money spent on preventable and curable diseases is through improved food choices, improved diets, and healthier lifestyles. In addition, Americans with lower incomes often have lower quality diets, reduced performance in school, lower wages, increased costs for health care, and more poverty. The gap between the size and scope of these problems and the media attention it receives is larger for food and nutrition than any other issue

being debated by the presidential candidates. (5)

Now is the time for scientists, especially animal scientists around the world, to engage in discussions with politicians and the public to advocate for increased funding and science-based policies that will ensure the sustainable production of animal-sourced foods that promote human health and well-being. We must learn from the recent events in the UK and take every opportunity to use new communication methods (including social media) to elevate science, food, and human nutrition to the forefront of political agendas in countries around the world.

- 1) Angelo, Claudio. 2016. Brazil science woes mount. *Nature* 533: 301.
- 2) Abbott, Alison; Daniel Cressey; and Richard Van Noorden. 2016. UK scientists in limbo after Brexit shock. *Nature* 534: 597-598.
- 3) Murphy, Dan. Meat of the Matter: Assessing the aftermath. *Drover's Cattle Network*. <http://www.cattlenetwork.com/community/meat-matter-assessing-aftermath> Accessed on June 30, 2016.
- 4) Phipps, John. 2016. Trump or Clinton: Who is better for ag? *Drover's Cattle Network*. <http://www.cattlenetwork.com/news/trump-vs-clinton-who-better-ag> Accessed on June 30, 2016.
- 5) Mozaffarian, Dariush. 2016. Why our food is the single biggest election issue not on the table. *Aspen Institute*. <https://www.aspeninstitute.org/aspens-journal-of-ideas/food-single-biggest-election-issue-not-table/> Accessed on June 30, 2016.

## FROM WAAP MEMBERS

### From Asociación Latino-Americana de Producción Animal (ALPA)

Available the first draft of the ALPA 50th program and the relative website meeting: <http://www.alpa2016.com.br>

The XXV Latin American Congress of Animal Production and Northeast XI Congress of Animal Production will be organized in more than two months in Brasil. 1444 abstracts were already submitted for review, which is one of the guarantees of scientific success of the event. In addition, already there are enrolled 907 people, which suggests that at least 1,500 participants will attend the meeting in Recife. ALPA celebrates 50 years of activities, since it was created in Venezuela in April 1966, and activities will be organized to celebrate the event in Recife (Brasil) from November 7th to 10th 2016.

### From the American Society of Animal Science (ASAS)

#### *ASAS Announces New JAS Edit Service*

In order to provide enhanced services to our members and to individuals who submit to the *Journal of Animal Science*, ASAS is announcing a new service called JASEdit. The service will provide three levels of review for authors and can be accessed pre- or post-submission to JAS.

The three levels include:

1. **Formatting:** Authors may submit manuscripts and have freelance tech editors prepare the manuscript in JAS style and form. Following formatting, authors will have the option of reviewing and submitting the manuscript or having JAS move the formatted manuscript directly into review.
2. **Technical editing and language review:** This will include formatting services, technical editing and fixing associated language issues. Following this service authors will have the option of reviewing and submitting the manuscript or having JAS move

the manuscript directly into review.

3. Full technical edit and writing consultation: At this level technical editors will perform services 1 and 2 and a freelance writing consultant will evaluate the strengths and weaknesses of the article with the author via email.

The service launched July 1, 2016. Pricing and details can be found at: <https://mc.manuscriptcentral.com/jasedit>

### JAM 2016 Virtual Meeting Now Available

Recordings of symposia and other oral presentations from the 2016 ASAS-ADSA®-CSAS-WSASAS Joint Annual Meeting, held July 19-23 in Salt Lake City, Utah, are now available. The cost to purchase the Virtual Meeting is \$575 (USD).

To purchase the Virtual Meeting, go to: [https://netforum.avectra.com/eweb/shopping/shopping.aspx?site=asas&webcode=shopping&shopsearch=virtual&prd\\_key=8be511ce-24b3-48fe-b4cd-b9ce099f95c8](https://netforum.avectra.com/eweb/shopping/shopping.aspx?site=asas&webcode=shopping&shopsearch=virtual&prd_key=8be511ce-24b3-48fe-b4cd-b9ce099f95c8)

### 2016 Joint Annual Meeting Abstracts Available

The American Society of Animal Science (ASAS), the American Dairy Science Association® (ADSA®), the Western Section of the American Society of Animal Science (WSASAS), and the Canadian Society of Animal Science (CSAS) held the 2016 Joint Annual Meeting (JAM) in Salt Lake City, Utah, July 19-23.

### ASAS announces renovated Animal Science Image Gallery

ASAS has introduced a newly renovated Animal Science Image Gallery. The gallery is now housed at: [animalimagegallery.org](http://animalimagegallery.org)

The site is designed to provide images, animations,

and short videos for classroom and outreach learning. To supplement the visual information, each file has a description and metadata, including the origin and ownership of the image. Downloading any image within the gallery is free for ASAS members and only \$5 (USD) per image for non-members. Each file in the gallery has had at least two peer reviews to optimize the image and its metadata, and to ensure that the information is sufficient and accurate.

Submitting an image to the gallery is easy! There is no submission fee for ASAS members and only a \$25 fee (USD) per image for non-members.

### **From the Canadian Society of Animal Science (CSAS)**

#### Another success story - our 2016 Joint Annual Meeting

Over 3,250 participants from over 35 countries gathered in Salt Lake City (USA) from July 19th to 23rd for the joint meeting of the Canadian Society of Animal Science with the American Dairy Science Association, the American Society of Animal Science and the Western Section of the American Society of Animal Science.

Outside ambient temperatures of 35°C helped to keep attendees inside the temperature-controlled convention centre. The cool atmosphere inside helped the participants to remain calm while they decided which of the many presentations to attend from the program of concurrent sessions. On Wednesday July 20th, the CSAS student competition took place (poster and oral presentations). A number of presentations were very well attended, some beyond seating capacity. All of the presentations were of high quality – very well done. As a member of the team of judges, it was extremely challenging to evaluate this year's participants and choose the winners. Our 2016 Annual General Meeting and Lunch took place July 21st in Salt Lake City. The executive team presented updates about a number of achievements as well as hosted a discussion on some challenges confronting

our society.

At our CSAS awards night on July 22nd CSAS recognized and celebrated outstanding members. During the evening the CSAS President's gavel passed from Dr. Tim Reuter to Dr. Filippo Miglior and new executive members were introduced.

Overall, the conference was full of great opportunities to learn, share, and network as well to see old friends, and meet new ones in Salt Lake City.

### **From the EAAP – European Society of Animal Science**

#### *67th Annual Meeting will be held in few days*

The 67th Annual Meeting of the EAAP will soon be held in Belfast (UK). The meeting is at The Waterfront Conference and Exhibition Centre in the heart of Belfast and on the banks of the River Lagan. It runs from 29 August – 2 Sept 2016. The theme of the annual meeting is "Sustainable Food Production: Livestock's Key Role". This is Europe's largest animal science conference and will feature more than 1000 presentations and around 1400 delegates.

The content will cover the whole range of animal science including genetics, nutrition, animal management and health, physiology, cattle, sheep and goat, pig, poultry and horse production and livestock farming systems. It will also feature fish and food and there will be sessions featuring science relevant to industry. For more info please visit: [www.eaap2016.org](http://www.eaap2016.org)

#### *Council member recognized for his activities*

Two very important awards recognize the activities of the EAAP Council member Nuno Vieira e Brito. Nuno is Professor of Higher Education and Research, Doctor of Veterinary Science, specialist in agricultural and agri-food issues, having been Secretary of State for Food and Agrifood Research

on the Ministry of Agriculture and currently EAAP Council member.

On the 8th of July he was awarded the insignia of Commandeur de l'Ordre du Mérite Agricole Nuno Vieira e Brito, for his outstanding services to Agriculture. The title of Commander is the highest grade of the Agricultural Merit Order, instituted by the Ministry of Agriculture to reward national and foreign personalities who have distinguished themselves by high services in agriculture. This is the recognition of the French Government to the work of Nuno Vieira e Brito as organizer in the areas of agriculture, food and agrifood, in particular for its action in the area of international cooperation and its commitment to strengthening the relations between Portugal and France in these areas.

Nuno Vieira e Brito also received this year's prize of the Luso-Chinese Personality. He contributed, as Secretary of State for Food and Agrifood Research for the promotion of trade relations with China. He integrated and led various government missions to China and was responsible for enabling various Portuguese food products, including the obtaining of Portugal Dairy Export Certificate to China, the completion of the technical process for pork qualification the promotion of the MoU on agriculture with the Shanghai municipality, the promotion of trade and investment relations between the two countries. The distinction Luso-Chinese Personality is awarded annually and has as main objective to publicly distinguish Chinese citizens and/or Portuguese who have stood out for their achievements and/or contributions entrepreneurial, innovative and responsible in the context of business and economic relations between Portugal and the China.

#### *New experts for H2020 EU Project*

EAAP invites its members and all other animal scientists to apply for becoming an expert to evaluate H2020 proposals and monitor projects.

You have a chance of being selected as an expert if you:

- have high-level of expertise in the relevant fields of research and innovation (see call for details on types of expertise).
- can be available for occasional, short-term assignments

Experts, as peer reviewers, assist in the:

- evaluation of proposals
- monitoring of actions

In addition, experts assist in the preparation, implementation or evaluation of programmes and design of policies. This includes the Horizon 2020 Advisory Groups.

Assignments mainly concern research and innovation, falling within the Horizon 2020 programme designed to address the challenges Europe is facing through funding excellent science, technology and innovation.

In order to access the expert registration form, you are first asked to login with a valid Participant Portal (ECAS) account. If you do not have it yet, it is easy to create your Portal (ECAS) account.

Registered experts can complete or update their profile at any time by logging-in to their Portal account (ECAS) and accessing My Expert Area.

Your profile is only available to the Commission for consideration once it is complete and valid. Should you get a contract as independent expert, please check that the Bank Account on which you want to be paid is still valid before you introduce a request for payment.

[A web application for the Bibliometric study on animal health and welfare of livestock in Europe](#)

A web application was dedicated to the results of

the bibliometric analysis. This work has been led by the French National Institute for Agricultural Research (INRA) with the collaboration of the French Agency for Food, Environmental and Occupational Health & Safety (ANSES) and the Italian Ministry of Health (MH-DVPHNSF).

The Objectives of the study are:

- To build a unique database containing the scientific publications concerning both animal health (all diseases in livestock animals) and animal welfare
- To map the collaborations between European countries and research organisations, and to identify the major publication topics of those collaborations
- Establishing thematic terminologies in infectious and non-infectious diseases, animal welfare and animal species groups (Ruminants, Horses, Pigs, Rabbits, Poultry, Fishes, Bees)
- Extraction of bibliographic records from Web of Science ® database (primary articles or reviews in English language)
- Implementation of supplementary filters (inclusive and exclusive) to discard irrelevant neighbouring topics
- Enrichment of the database with additional fields (pathogens groups, diseases groups, welfare components, animal species groups) and standardised organisation names

The bibliometrics refers to a statistical procedure, useful to describe and highlight trends or relations. It will be possible to consider thematic analysis, geographical mapping and collaboration network by country and organisation (i.e. scientific openness). The web application allows to interactively navigate in the results and based on an intuitive navigation process, the application offers the opportunity to explore results.

## NEWS FROM SCIENCE

### Publically available sheep genomes

The team running SheepGenomesDB is pleased to announce the completion of a significant milestone. The project has analysed publically available sheep genomes by applying a standardized read mapping and variant calling pipeline to discover sequence variants (SNP and indels). The team recently completed Run1, containing 453 sheep genomes collected from 56 globally distributed populations. The result is the production of two variant collections. First, a total of 91 M raw variants are available which represent unfiltered variant calls obtained from two independent callers (GATK-UG and SAMtools). Second, a set of 46.4 M high quality variants are available that passed filtering and were independently identified by both callers. Each variant collection (raw and high quality) is available via the European Variant Archive (EVA) and the high quality variants are being accessioned by dbSNP (links are given below). The high quality variants have been annotated using sheep genome reference OARv3.1 and are searchable using an array of filtering options via the EVA Variant Browser. We view this dataset as an essential resource for researchers performing gene variation discovery, imputation and investigations into the consequences of animal breeding and selection. Additional information were contained in a presentation to the recent ISAG meeting (Salt Lake City, July 23-27) that can be found at the project website.

The project is run under the auspices of the International Sheep Genomics Consortium (ISGC) with funding from a USDA NIFA award. Key project members include James Kijas (CSIRO), Rudiger Brauning (AgResearch), Shannon Clarke (AgResearch), Alan McCulloch (AgResearch), Noelle Cockett (Utah State University), Gary Saunders (EMBL-EBI), Marina Naval Sanchez (CSIRO), Sean McWilliam (CSIRO), Amanda Chamberlain (DEDJTR) and Hans Daetwyler (DEDJTR).

Planning is underway for Run2 which is scheduled for later in 2016, where we expect to analyse in excess of 1000 sheep genomes. If you have ovine genomes you would like included, the first step is submission of FastQ formatted sequence to the Short Read Archive. For additional information on participation please contact Rudiger (Rudiger.Brauning@agresearch.co.nz), Hans (Hans.Daetwyler@ecodev.vic.gov.au) or James (James.Kijas@csiro.au).

Data Access Links:

- <http://sheepgenomesdb.org/home>  
[project webpage]
- <http://www.ebi.ac.uk/eva/?Home>  
[European Variation Archive]
- <http://www.ncbi.nlm.nih.gov/SNP>  
[dbSNP]

## NEWS FROM INDUSTRY

### **Rapid, low-temperature process adds weeks to milk's shelf life**

This article describes an applied research project by Purdue University (USA) and specifically by the food scientist Bruce Applegate who developed a simple process that reduces harmful bacteria in milk.

A rapid heating and cooling of milk significantly reduces the amount of harmful bacteria present, extending by several weeks the shelf life of one of the most common refrigerator staples in the world, according to a Purdue University study. Bruce Applegate, Purdue associate professor in the department of food science, along with collaborators from Purdue and the University of Tennessee, published their findings in the journal SpringerPlus, where they show that increasing the

temperature of milk by 10 degrees for less than a second eliminates more than 99% of the bacteria left behind after pasteurization. “It’s an add-on to pasteurization, but it can add shelf life of up to five, six or seven weeks to cold milk,” Applegate said.

Pasteurization, which removes significant amounts of harmful pathogens that can cause illness and eventually spoil dairy products, is considered a high-temperature, short-duration method. Developed by Louis Pasteur in the 19th century, the treatment gives milk a shelf life of about two to three weeks. The low-temperature, short-time (LTST) method in the Purdue study sprayed tiny droplets of pasteurized milk, which was inoculated with *Lactobacillus* and *Pseudomonas* bacteria, through a heated, pressurized chamber, rapidly raising and lowering their temperatures about 10°C but still below the 70°C threshold needed for pasteurization. The treatment lowered bacterial levels below detection limits, and extended shelf life to up to 63 days.

“With the treatment, you’re taking out almost everything,” Applegate said. “Whatever does survive is at such a low level that it takes much longer for it to multiply to a point at which it damages the quality of the milk.”

The LTST chamber technology was developed by Millisecond Technologies, a New York-based company. Sensory tests compared pasteurized milk with milk that had been pasteurized and run through MST’s process. Panelists did not detect differences in colour, aroma, taste or aftertaste between the products.

Phillip Myer, an assistant professor of animal science at the University of Tennessee and a co-author of the paper, said the process uses the heat already necessary for pasteurization to rapidly heat milk droplets. “The process significantly reduces the amount of bacteria present, and it doesn’t add any extra energy to the system,” Myer said. Myer said the promise of the technology is that it could reduce waste and allow milk to reach distant locations where transport times using only

pasteurization would mean that milk would have a short shelf life upon arrival. Applegate said the process could be tested without pasteurization to determine if it could stand alone as a treatment for eliminating harmful bacteria from milk.

### **Circular economy and dairy farming by FrieslandCampina**

In 2010, FrieslandCampina announced its new growth strategy, ‘Route 2020’, which states the company has to achieve a reduction of 1,900 kilotons of CO2 emissions by 2020. An ambition of substantial size, considering the total volume of manure produced annually by all livestock sectors in The Netherlands is 74 million tons. An expansion of the dairy sector’s global scope also marked an increasing national dairy livestock, which resulted in The Netherlands exceeding the European phosphate ceiling of 172.9 kilograms in 2015. En route to 2020, FrieslandCampina found the key to a successful and responsible growth: closing loops. Manure that is dispersed over the land in large quantities greatly affects plant and animal life: biodiversity disappears, ecosystems are disrupted and the groundwater is contaminated. In recent years, legislations such as the phosphate cap were introduced to avoid issues on the short term, but seem to fall short on the long-term. With various partners, such as farmers and the Wageningen University and Research Centre, FrieslandCampina forged an alliance that successfully developed a method to optimize the economic value of manure – a catalyst for the development of circular products such as minerals, biogas and compost.

Phosphate is an important mineral that is essential for all life on earth. Despite the national surplus in The Netherlands – due to the vast amount of cow manure – a global phosphate scarcity is looming. Phosphate fertilizer is manufactured from rock phosphate, which is mined and processed in Morocco, North America and China. These stocks are rapidly diminishing. Moreover, through plants,



people, sewers and streams, phosphate also travels to open waters, where the mineral condenses on the ocean floor, leaving it very hard to reach. Needless to say, realizing a closed, circular system on farmsteads by recycling mineral components in manure can play an important and possibly even an essential part in upholding life cycles near and far. With the 'Route 2020' strategy, there is the commitment to achieve a reduction of 1,900 kilotons of CO<sub>2</sub> emissions by 2020. In addition to the recycling of scarce minerals, the strategy is looking into using biogas as an alternative source of energy for our production locations and transport vehicles. The anaerobic digestion of manure alone can achieve half of the targeted reduction. Additionally, the strategy considers to look into the placement of small-scale anaerobic installations on farmsteads, as they are also essential for FrieslandCampina to achieve its climate goal. These are, however, beyond the budget of the average farmer. It is important to get a green deal approved by the Dutch Ministry of Economic Affairs, which would enable carrying out the installment of such installations.

One of the key conditions for achieving the climate goal is a well-organized value chain that adopts our circular processes – using green gas and recycled components from manure for fertilizer alternatives. This requires (raising) awareness among farmers, scaling up and securing funding. With our farmers, our approach is based on reciprocity. In order to be an official supplier of FrieslandCampina, the farmers are required to reach certain sustainability targets; in return, they earn a bonus if they manage to save energy. The FrieslandCampina CEO Roelof Joosten stated: 'Manure? Yes, that is our challenge.' So today, it can be safely said that manure valorization is the requirement for a successful and responsible development of a circular Dutch dairy industry.

### **Video about Feed Safety**

The first meeting of the Steering Group of the FAO-led Feed Safety Multi-Stakeholder Partnership has been held in June 2016. Its members selected

the capacity development activities to implement in the first year of the Partnership programme of work. [Click here to see the video.](#)

If interested in joining the partnership, proposing additional activities or receiving detailed information on the partnership, please contact us at [feed-safety@fao.org](mailto:feed-safety@fao.org).

### **Virtual discussion about Cattle Genomics in Africa**

There are over 200 million poor livestock keepers in Sub-Saharan Africa, many of whom are looking to improve the productivity of their livestock. Genetic improvement strategies – particularly when packaged with other interventions on animal feed and health – offers great potential to this end. The use of genomics in Africa is in early stages, and further discussions are required on where and how genomics can contribute. To this end there will be a virtual discussion forum on "Cattle Genomics in Africa" organized by the International Livestock Research Institute & the Centre for Tropical Livestock Genetics and Health, all researchers and implementers in this field are invited to participate.

Discussions during this forum will centre on:

- Current and future applications of genomics to cattle in Africa – in particular, which applications are likely to make a difference to poor livestock keepers and animal source food consumers, and what capacities and resources are required to achieve this.
- The potential to create a genomic information resource on African cattle – a publically-available set of sequence information on cattle breeds in Africa, and critically which breeds to prioritize for this.

The forum will be online (web-based), and open from 16 to 26 August 2016. You can register in advance or just participate during the forum. To

join the forum simply go to this website: <http://cattle-genomix.net>

[EAAP annual meeting in Belfast \(UK\)](#)

## PUBLICATIONS

There are two new interesting publications from FAO, and both are freely available online.

One is about “Probiotics in Animal Nutrition – Production, impact and regulation”, that can be downloaded at: <http://www.fao.org/documents/card/en/c/e6232d34-e38e-4b4c-9a45-70fa75f7da23/>



The 67th EAAP annual meeting will be held at the Waterfront Conference and Exhibition Centre in the heart of Belfast and on the banks of the River Lagan (UK). Around 1400 animal scientists are expected for the largest livestock science meeting held in Europe.

## September 12th-15th, 2016

[Conference on “Grazing in a changing Nordic region” in Reykjavik \(Iceland\)](#)

The conference will take place in Reykjavik (Iceland). The conference will bring together policy-makers and experts of different disciplines to provide an integrated assessment of grazing in the changing Nordic region through presentations. The topics that will be dealt with are: Nordic ecosystems and their responses to grazing under climate change; Historical and cultural values of traditional landscapes (conservation and restoration, biodiversity); Grazing management in Nordic conditions; Environmental impact of grazing on biodiversity and ecosystem services; Sustainable use and conservation of animal genetic resources in grazing; Socio-economic effects of grazing in rural areas (tourism, rural livelihoods) and linking

The second is about “Animal nutrition: beyond the boundaries of feed and feeding”, freely available at: <http://www.feedipedia.org/content/animal-nutrition-beyond-boundaries-feed-and-feeding>

## MEETINGS AND CONFERENCES

**August 29th–September 2nd, 2016**

goals of sustainability with support policies for grazing based agriculture. On the conference homepages <http://www.nordicgrazing2016.org/> there are background and practical information, the preliminary scientific program, and information to register and submit abstracts for the conference.

### **September 14th-16th, 2016**

*The 3rd Livestock Genomics meeting in Cambridge (United Kingdom)*

The 2016 meeting will be held at Homerton College Conference Facilities in Cambridge between 14th and 16th of September. Details of the meeting can be found here: [http://www.ebi.ac.uk/~streeeter/livestock\\_meeting\\_2016.html](http://www.ebi.ac.uk/~streeeter/livestock_meeting_2016.html)

All aspects of the field relevant to current and future research will be covered. Example topics include: Genome sequencing or re-sequencing project, Genome annotation, Production and analysis of genomic variation data, Functional annotation of genomes, Genotype-phenotype associations, Comparative analysis of genomic data, Biodiversity and population genetics.

### **September 15th-17th, 2016**

*X Iberian Congress on Animal Genetic Resources in Castelo Branco (Portugal)*

At the Escola Superior Polytechnic Institute Agrária do Castelo Branco, The Portuguese Society of Genetic Resources Animais (SPREGA) and the Spanish Society for Animal Genetic Resources (SERGA) with the support of the Agricultural College Polytechnic Institute Castelo Branco (ESA / IPCB), will hold the X Iberian Congress on Animal Genetic Resources.

As in previous congresses, researches will present new aspects about the genetic diversity of races, productive or demographic characterization, and related management programs, conservation,

improvement and marketing of Animal Genetic Resources ( AnGR). Proposed presentations will be accepted for oral presentation or poster.

The main topics of the conference are: Genetic characterization; Demographic Characterization Morphological and productive characterization; Reproductive technologies and conservation programs; Selection Schemes; Certificates and sustainability of AnGR Products; there will also be free communications. For more info: <http://www.sprega.com.pt/conteudo.php?idm=49>

### **September 18th-20th, 2016**

*Large Animal Genetic Engineering Summit in Bethesda MD (USA)*

The international conversation about the importance and promise of large animal models in biomedical and agricultural research will be organized at Bethesda. Details and registration online at [www.LAGE.usu.edu](http://www.LAGE.usu.edu)

### **September 19th- 21st, 2016**

*OECD “Blue Sky” event in Ghent (Belgium)*

In September 2016 the Blue Sky event will be held. This even takes place every 10 years, and this year, like always, will gather science, technology and innovation practitioners around a discussion on evidence gaps and data needs.

The European Commission has established through DG Research & Innovation intense cooperation with the OECD’s Science, Technology and Innovation Directorate. This cooperation has resulted in the launch of the STI Policy Survey 2016 (<https://www.innovationpolicyplatform.org/ecoecd-stip-database>), which this year and for the first time is a joint product by both institutions. In addition, comprehensive work on the incidence and impact of R&D tax incentives has been launched and an observatory for public sector innovation is

being set up.

In this context, it is important to draw the attention of the SSH and Forward-looking community to the upcoming OECD Blue Sky Forum which shall take the form of an unconstrained discussion on evidence gaps in science and innovation and on initiatives the international community can take to address data needs in this area. It will engage the policy community, data users and providers into an open dialogue to review and develop a long-term agenda on science, technology and innovation data and indicators.

It will showcase examples of data and indicator development with the potential for international adoption, as well as examples of ground-breaking application of existing or new sources addressing questions and providing evidence on the state of science and innovation systems and the role of STI policies worldwide.

Please find the background and call for paper at <http://www.oecd.org/science/blue-sky.htm>.

The event counts on you to:

- submit original contributions on your preferred STI theme (as it is “blue sky”, the focus of these inputs is not constrained);
- diffuse the call to all those who can help develop a forward-looking and policy-relevant agenda on STI measurement.

### **September 27th-29th, 2016**

*The 13th International Symposium on Milk Genomics and Human Health in Davis (USA)*

The three-day event will bring together international experts in nutrition, genomics, bioinformatics and milk research to discuss and share the latest research. The annual symposium is the event that features scientific research related to milk and human health done throughout the

world. The symposium draws from the diversity of its memberships to cover the breath of genomics themes that reflect the interest of the International Milk Genomics Consortium. The goal of the Consortium is to bring together the research and dairy communities to share, translate, and interpret data that are happening within the fields of the “-omics” science. The deadline to send paper is July 29th. More info and the preliminary program can be found at: <http://milkgenomics.org/2016/02/24/13th-international-symposium-on-milk-genomics-and-human-health/>

### **October 16th- 21st, 2016**

*IDF World Dairy Summit in Rotterdam (the Netherlands)*

The Organizing Committee of the IDF World Dairy Summit 2016 ‘Dare to Dairy’ in Rotterdam, Netherlands, has disclosed details of the programme <http://www.idfwds2016.com/index.php/program-dates>. Different from other Summits, ‘Dare to Dairy’ will be joined by high-level keynote speakers from outside the dairy sector, including leading representatives of non-governmental organizations. Registration at a discount fee is still possible until July 31. To obtain more information, please visit <http://www.idfwds2016.com/index.php/registration/>

### **October 26th-27th, 2016**

*PhenoDays in Berlin (Germany)*

The phenotyping conference will be held this year in Berlin. As always, this will be an interesting and well-attended event with delegates and speakers from academia and industry across the world. The first day will focus on laboratory and greenhouse phenotyping and the second day on field phenotyping. The conference participants aim to present new science, including new research and new applications for both automated and manual

phenotyping.

PhenoDays 2016 will be held at the Hotel Nhow, Berlin. To register and to see the sessions program now you can visit the specific website: [www.phenodays.com](http://www.phenodays.com)

### **June 12th – 14th, 2017**

*European Symposium on South American Camelids in Assisi PG (Italy)*

The 7th European Symposium on South American Camelids and 3rd European Meeting on Fibre Animals will be held in Assisi, Italy. Following the tradition of previous events, the Symposium will cover a broad range of topics related to the breeding and keeping of South American domestic and wild Camelids, wool sheep, Cashmere and Angora goats, Angora rabbit and all other fibre mammals in Europe and in the World. The invitation to participants interested in all fibre producing animals is expected to stimulate the exchange of knowledge and thus enabling their expertise to be implemented on a more general scale. There will be scientific sessions about Sustainable development and climate change, Biodiversity, Breeding and genetics, Reproduction and pathology, Nutrition, Meat and fibre production and Fibre metrology.

### **June 25th- 28th, 2017**

*ADSA in Pittsburgh (USA)*

The 2017 American Dairy Science Association will be held for the first time in many years separately from the ASAS conference. It will be end of June in Pittsburgh. For more information, please visit: <http://www.adsa.org/Meetings/ADSAMeetings.aspx>

### **September 6th-8th, 2017**

*WAFL international scientific conference in Wageningen (the Netherlands)*

WAFL will be held from 6-8 September 2017 at Wageningen (the Netherlands) and will be organized by the Wageningen Centre for Animal Welfare and Adaptation (CAWA) in collaboration with Van Hall Larenstein University of Applied Science. Some topic that will be discussed are: Welfare assessment protocols; Precision Farming and other new techniques for welfare measurements; Statistical methods to deal with large amounts of data; Genetics and welfare; Communication to consumers and welfare labelling. Please visit the website <http://www.waf2017.com/> for more information on the main conference, and the pre-conference activity. The important dates are 15 October 2016 for the opening of the registration and abstract submission and 1 February 2017 for the deadline of the abstracts submission

### **February 11th-16th, 2018**

*WCGALP meeting in Auckland (New Zealand)*

The Organising Committee of the World Congress on Genetics Applied to Livestock Production is gearing up to the meeting in Auckland, New Zealand that will be held in February 2018. The registration will be open on December 1st 2016. Call for papers will open on May 1st, 2017. The deadline will be September 7th, 2017.

## **JOB OFFERS**

### **Postdoctoral Fellow - Statistical Genetics and Genomics in Truro (Canada)**

The Faculty of Agriculture at Dalhousie University invites applications from qualified candidates for a full-time, two-year term postdoctoral position in Statistical Genetics and Genomics.

As the research fellow, the candidate will be responsible for conducting research and development projects in genetics and genomics, including the traditional breeding, variance component estimations, development and use of methods for genetic/genomic evaluation, whole genome association analyses, gene discovery and validation, and their integration to mink breeding programs in North America. As part of this research, the candidate will be familiar with the analysis of large data sets for genetic and genomic studies and the use of corresponding statistical methods. In this role the candidate will have the opportunity to interact with a strong and stimulating team of collaborators within Dalhousie University, University of Guelph, and University of Alberta, as well as other collaborating research centres.

The successful candidate will have a PhD, or nearly completed (by January 2017) in Animal Breeding and Genetics, Quantitative Genetics, Statistical Genomics or equivalent. He/she should have demonstrated expertise in quantitative genetics or statistical genomics as it relates to genetic/genomic evaluation in animal breeding, and a peer-reviewed publication record. In addition, the candidate will have extensive experience with statistical methods and computer programming for the analysis of large data sets. You will possess good oral and written English communication skills. The position start date is January 2017.

#### **Post-Doc position in animal genomics (Belgium)**

A post-doc position in animal genomics is available in the research group of Livestock Genetics at the Department of Biosystems at the KU Leuven in Belgium (ref. is BAP-2016-454)

The group is involved in projects on several livestock species (e.g. horses, pigs, dogs, cattle) on which a successful candidate will contribute on a molecular level (e.g. fine-mapping, functional analyses). Close supervision of an on-going EU project on horses will be an important initial

responsibility. In addition the candidate will be tasked with aiding in the day-to-day management of the research lab and teaching of students at MSc-level. The position offers excellent opportunities to publish, to network and to collaborate with local and international research groups of outstanding reputation as well as commercial partners.

The candidate must be highly motivated and a creative postdoc preferably with a PhD in the area of molecular genetics or genomics. An excellent lab experience in molecular techniques is required. The candidate should have excellent written and verbal English communication skills as well as sound training and/or experience in bioinformatics. Dutch written and verbal skills are a bonus. Applicants should have an established peer-reviewed publication record.

In order to apply, visit the link below and apply online

<https://icts.kuleuven.be/apps/jobsite/vacatures/53815850>

#### **Professor position at Purdue University**

A Position as Assistant/Associate Professor, tenure-track (9-month), at Purdue University with research and teaching responsibilities related to food animal microbiomes.

The required qualifications: A Ph.D. in animal sciences, intestinal and/or ruminal microbiology, microbiology, bioinformatics or related field. Research experience in microbial ecology and community assessment in animals, humans, and/or pre- or post-harvest food systems is essential. Postdoctoral training and research experience or training in immunology is desirable.

The successful applicant must develop a record of nationally- and/or internationally-recognized scholarship and extramural funding in research related to microbiomes, including the impact

of production practices, nutrition and/or the environment on microbial communities relevant to animal health, well-being and/or product quality and safety.

The review of applications will begin September 1, 2016 and continue until the position is filled or the search is closed. A background check is required for employment in this position. Candidates should submit for application, a letter of interest, curriculum vitae, contact information for three professional references and a statement of research and teaching interests. These materials should be sent electronically (as a PDF file) to [anscjobs@purdue.edu](mailto:anscjobs@purdue.edu).

### **Lecturer /Senior Lecturer in Animal Science and Production at University of Queensland (Australia)**

The University wishes to appoint a scientist with expertise in one of the animal science disciplines (nutrition, genetics, reproduction, ethology, meat science) and experience working in the animal industries, either ruminant or non-ruminant production systems. The appointee must be able to teach in formal class-room settings as well as by flexible delivery and through demonstration, practical assessment and laboratory techniques. The successful applicant will work within a teaching team, have a commitment to and enthusiasm for student education, have the ability to supervise Honours and postgraduate students and be able to contribute to the School's research in animal science and production and engage with industry. The successful applicant will engage as a Lecturer/Senior Lecturer in Animal Science and Production (ruminant and/or non-ruminant) within the discipline of Animal Science. The appointee will be responsible for teaching into undergraduate programs, and there is the potential to teach into a number of different courses depending on expertise. The appointee will be expected to contribute to the national and international

research profile of the School, and will be expected to supervise research students, establish a research program, and obtain external grant funding.

The essential qualifications is a degree in Animal Science, Agriculture, Veterinary Science or equivalent with appropriate research training and a PhD. All enquiries should be directed to: Dr Judy Cawdell-Smith or Prof Wayne Bryden [j.cawdellsmith@uq.edu.au](mailto:j.cawdellsmith@uq.edu.au) or [w.bryden@uq.edu.au](mailto:w.bryden@uq.edu.au). The position description can be seen at:

<http://jobs.uq.edu.au/caw/en/job/499191/lecturer-senior-lecturer-animal-science-and-production>

### **Full time position of professor in Precision Livestock Farming in Leuven (Belgium)**

The University of KU Leuven is looking for a strong candidate for a full time position of professor in Precision Livestock Farming (PLF). The candidate to find is a woman or a man who can join the team and make it stronger in the field of PLF. An open competition is desirable and all candidates are encouraged to apply! Gender balance also has become important so women with appropriate CV should not hesitate.

The position involves teaching tasks but the policy of KU Leuven is to give new professors the full opportunity to build up research during the first 5 - 10 years. Candidates are getting a full time Ph.D. researcher in this field to support them and there are several Ph. D students in the team. Candidates are supposed to speak Dutch in future but should not be scared too much by this since there is a lot of support to get help in language lessons and trainings.

The description can be found at:

<https://icts.kuleuven.be/apps/jobsite/vacatures/53639381?lang=en>

The deadline for submitting candidates is September 30.



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](mailto:waap@waap.it).

**WAAP Secretariat is located at the following address:** Via G. Tomassetti 3, A/I - Rome (Italy). Tel.: +39-06-44 20 26 39;  
E-mail: [waap@waap.it](mailto:waap@waap.it)

**Production staff:** Jim Sartin, Andrea Rosati, Eleonora Azzaro.

**Graphics design and layout:** Gianfilippo Ercolani.