

The 75th EAAP Annual Meeting

Florence - Italy

1 - 5 September 2024



**FINAL
PROGRAMME**



Table of Contents

Summary

<i>Endorsements</i>	4
<i>The European Federation of Animal Science (EAAP)</i>	5
<i>Welcome to the 75th EAAP Annual Meeting in Florence</i>	7
<i>National Organizers of the 75th EAAP Annual Meeting</i>	9
<i>Industry Members Club</i>	10
<i>YoungEAAP</i>	11
<i>75th EAAP Annual Conference Sponsors and Friends</i>	12
<i>Agriculture and Animal Farming in Italy</i>	19
<i>Discover Florence</i>	20
<i>Sites to visit in Florence</i>	21
<i>How to get to Florence</i>	25
<i>Technical Tours</i>	26
<i>Social events</i>	30
<i>Information for participants</i>	32
<i>Congress Venue: Firenze Fiera</i>	36
<i>Scientific programme</i>	39
<i>EAAP Study commissions</i>	148

Medal of the President of the Italian Republic

Endorsements

Academy of Georgofili



Istituto Zooprofilattico Sperimentale del Lazio e della Toscana



REGIONE
TOSCANA



University of Pisa



University of Florence



The European Federation of Animal Science (EAAP)

The main aims of the EAAP are to promote, by means of active co-operation between its members and other relevant international and national organisations, the advancement of scientific research, sustainable development and production systems; experimentation, application and extension; to improve the technical and economic conditions of the livestock sector; to promote the welfare of farm animals and the conservation of the rural environment; to control and optimise the use of natural resources in general and animal genetic resources in particular; to encourage the involvement of young scientists and technicians. More information on the organisation and its activities can be found at www.eaap.org.

Former Presidents

1949-1961 A.M. Leroy (France)
1961-1967 R. Trehane (United Kingdom)
1967-1972 J.M. Rijssenbeek (The Netherlands)
1972-1978 J.H. Weniger (Germany)
1978-1984 E.P. Cunningham (Ireland)
1984-1990 A. Roos (Sweden)
1990-1996 A. Nardone (Italy)
1996-2000 P. Solms-Lich (Germany)
2000-2004 A. Aumaitre (France)
2004-2008 J. Flanagan (Ireland)
2008-2012 K. Sejrsen (Denmark)
2012-2016 P. Chemineau (France)
2016-2020 M. Gauly (Germany)

Council members

President

Isabel Casasús (Spain)

President - elect

Jöel Berard (Switzerland)

Vice-Presidents

Peter Sanftleben (Germany)

Hans Spooler (the Netherlands)

Members

Peer Berg (Norway)
Sam de Campeneere (Belgium)
Gunnfríður Elín Hreiðarsdóttir (Island)
Nicolò Macciotta (Italy)
Olga Moreira (Portugal)
Klemen Potocnik (Slovenia)
Diana Ruska (Latvia)

FAO Representative

Badi Besbes

Young EAAP President

Ines Adriaens

Auditors

Zdravko Barac (Croatia)
Georgia Hadjipavlou (Cyprus)

Alternate Auditor

Jeanne Bormann (Luxembourg)

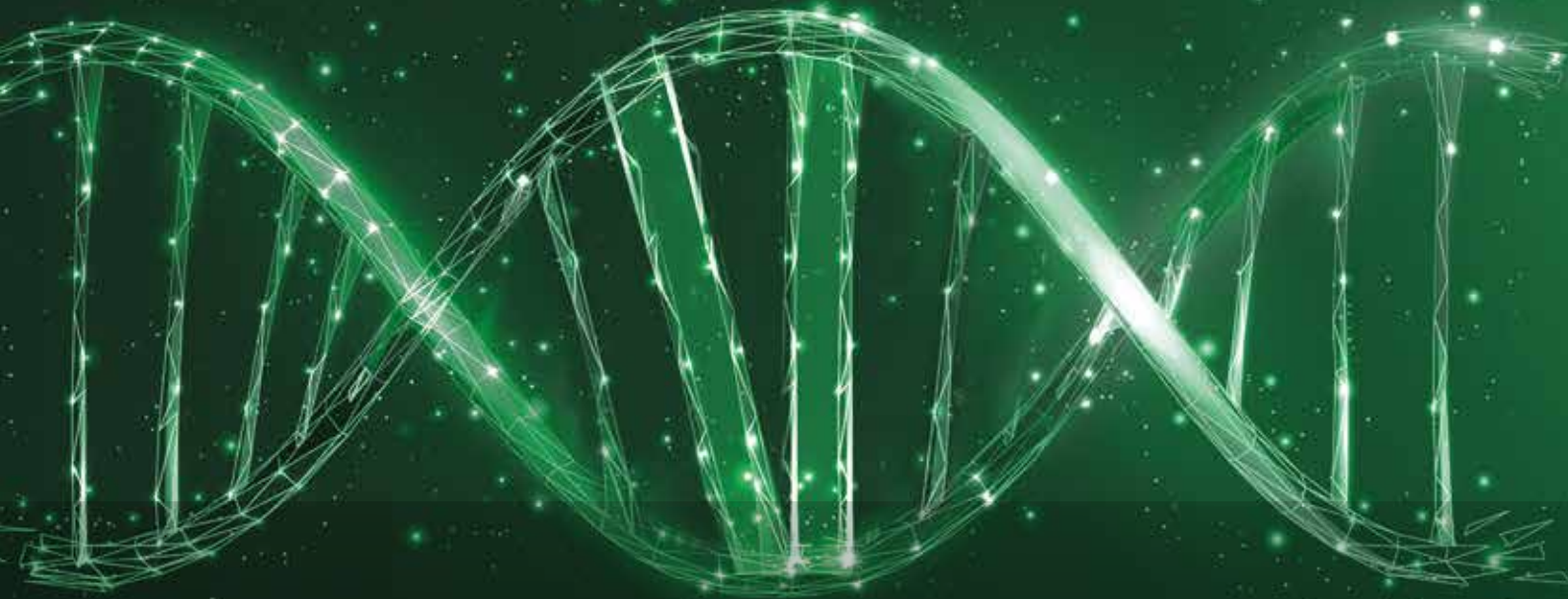
Secretary General

Andrea Rosati

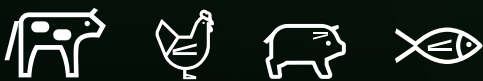
European Federation of Animal Science has close established links with the sister organizations American Dairy Science Association, American Society of Animal Science, Canadian Society of Animal Science and Asociación Latinoamericana de Producción Animal.



Research is written in our DNA



Research is part of the Vetagro essence:
all our solutions are the result of the
passionate and dedicated work of
specialized researchers. This is what
we rely on to stand out.



vetagro.com

VETAGRO[®]
LIKE NO ONE ELSE[®]

Welcome to the 75th EAAP Annual Meeting in Florence

Ladies and Gentlemen,

on behalf of the organizing committee and of the whole community of the Italian Association for Animal Science and Production we are very happy and honored to welcome you to the 75th annual meeting of the European Association for Animal Production, that will take place in Firenze (Florence) from September 1st to September 5th 2024.

Firenze is one of the main art cities of Italy. An outstanding richness of monuments, historical sites, museums and churches represents the cultural and artistic heritage of Firenze, considered the capital of the Renaissance. Firenze is the capital of the region of Tuscany, placed in the heart of Italy, and known worldwide for its beautiful hilly agricultural Landscapes, the country mansions of the region of Chianti, the wines, the olive oil, the autochthonous giant beef cattle "Chianina", the "Fiorentina" steak. These products represent excellences of the Italian agriculture. Social events during the EAAP congress, hosted on some of the most spectacular venues of the City, will offer the opportunity to directly taste several of these products.

The general theme of the congress is "Global quality: Environment, Animals, Food". The congress will consist in several parallel scientific sessions where updated research results covering the whole domain of the Animal Science will be presented and discussed together with the presentation of main ongoing research projects. With its geographical position, Italy exhibits a great variety of environments, ranging from Alpine to Mediterranean climate. This peculiarity is reflected in the structure of its agriculture. Intensive dairy and beef cattle, pigs and poultry farms are typical of the Northern district. Buffalo farming can be found in Latium and Campania, in the Central-Southern part of Italy. Small ruminant systems characterize Southern Italy and the two main islands: Sicily and Sardinia. This richness results in a number of biodiverse livestock farming systems, which generate high-quality products, in many cases certified as PDO or PGI. The products are expression of local genetic resources and of the Italian cultural heritage and they contribute to define the "Made in Italy" brand. Some of these production systems will be the target of technical tours organized at the end of technical sessions.

Benvenuti a Firenze!

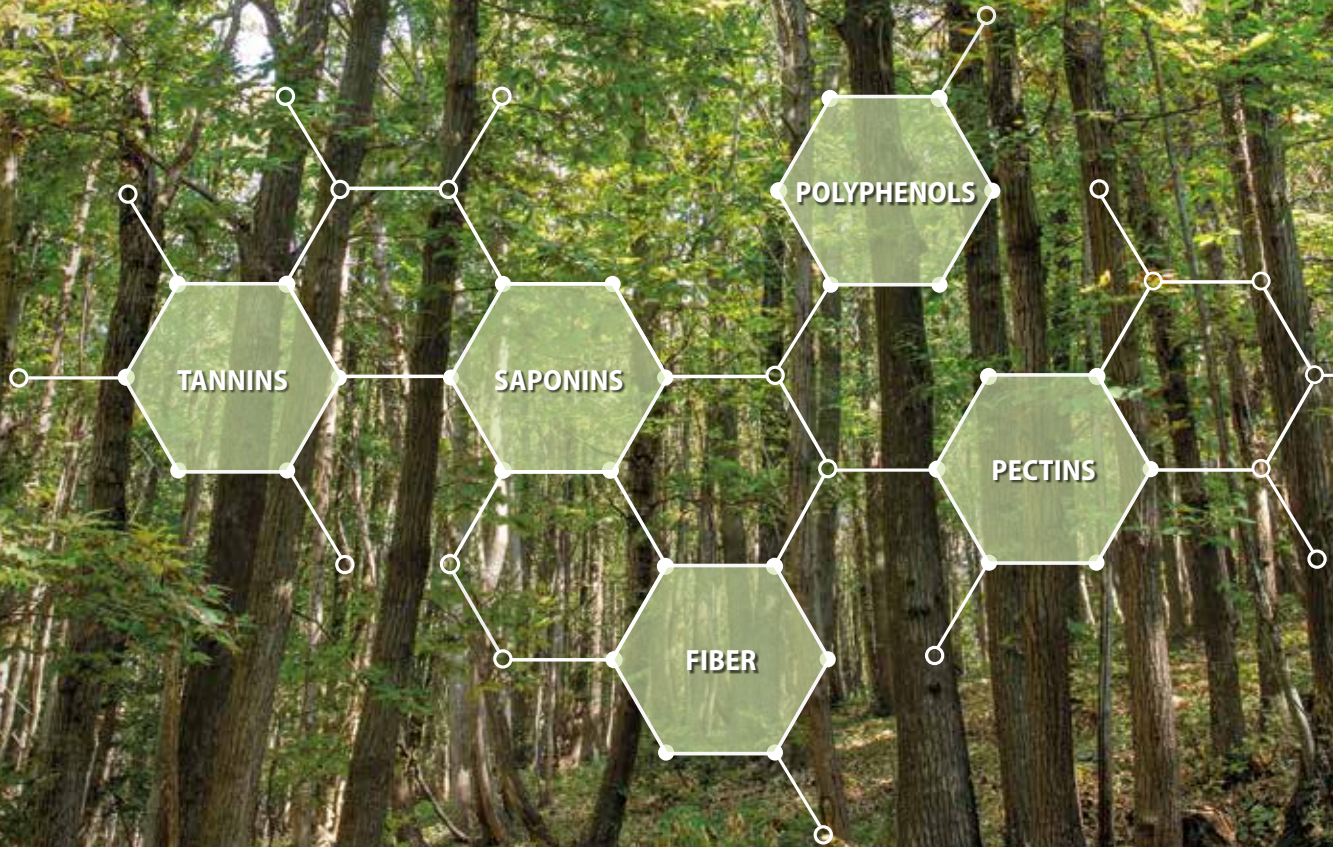
Presidents

Nicolò Pietro Paolo Macciotta

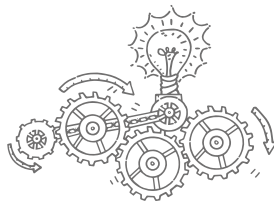
Marcello Mele



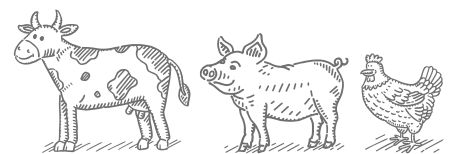
GIFTS OF NATURE TO ANIMAL NUTRITION



Sustainable supply chain



Manufacturing know-how



Welfare driven solutions

PLANT POWERED SOLUTIONS SINCE 1854

Our mission is to re-introduce several **natural compounds** lost due to modern breeding systems, showing how to maximise their benefits during the daily life of any livestock species. These eco-designed additives and premixes can provide **holistic solutions** to target critical issues related to environmental footprint, nutrition, physiology and balance between performance and wellbeing.



National Organizers of the 75th EAAP Annual Meeting

Presidents

Nicolò Pietro Paolo Macciotta
ASPA President – University of Sassari

Marcello Mele
University of Pisa

Committee

Antonella Baldi
University of Milan

Giovanni Bittante
University of Padua

Riccardo Bozzi
University of Florence

Arianna Buccioni
University of Florence

Giuseppe Campanile
University of Naples

Salvatore Claps
*Research Centre for Animal Production
and Aquaculture- CREA ZA*

Pasquale De Palo
University of Bari

Andrea Formigoni
University of Bologna

Riccardo Negrini
*Italian Association of Animal Breeders AIA - Univer-
sity of Piacenza*

Giuliana Parisi
University of Florence

Fabio Pilla
University of Campobasso

Baldassare Portolano
University of Palermo

Carolina Pugliese
University of Florence

Giuseppe Pulina
University of Sassari

Bruno Ronchi
University of Tuscia

Agostino Sevi
University of Foggia

Bruno Stefanon
University of Udine

Francesco Tiezzi Mazzoni Della Stella Maestri
University of Florence

Paolo Trevisi
University of Bologna

Scientific Committee

Umberto Bernabucci
University of Tuscia

Antonello Cannas
University of Sassari

Massimo De Marchi
University of Padua

Pasquale De Palo
University of Bari

Laura Gasco
University of Torino

Filippo Miglior
University of Guelph

Giulietta Minozzi
University of Milan

Gianluca Neglia
University of Naples

Luciano Pinotti
University of Milan

Enrico Sturaro
University of Padua

Paolo Trevisi
University of Bologna

Industry Members Club



EAAP started in 2023 a new initiative to create closer connections between European livestock industries and the animal science network. Therefore, the “EAAP Industry Club” was shaped with the specific aim of bringing together the important industries of the livestock sector with our European Federation of Animal Sciences. All companies dealing with animal production (nutrition, genetic, applied technologies, etc.) are invited to join the “EAAP Industry Club” because industries will have opportunity to increase their visibility, to be actively involved in European animal science activities, and to receive news and services necessary to industries. In addition, through the Club, industries will enlarge their scientific network and will receive specific discounts on sponsoring activities.

The Industries that already joined the “EAAP Industry Club” are:



The Club gives:

Visibility • Company name and logo at EAAP website and all relevant documents • Slides with name and logo at Official Events • Priority links with EAAP Socials • Invite, through EAAP dissemination tools and socials, people to events organized by your company • Information disseminated through a brand new Industry Newsletter • Networking • Joining the Study Commissions and Working Groups • Suggest topics to be considered for Annual Meetings Scientific Sessions • Organize Professional Panel through the EAAP platforms • Economic Benefits • One free registration to each Annual Meeting and at every meeting organized by EAAP • Five individual memberships at no cost • Many possible discounts (-30%) to increase company visibility through: EAAP Newsletter, EAAP website, EAAP Annual Meetings and workshops • Support young scientist by sponsoring scholarships named by the company • Co-Organize and sponsor webinars

Make yourself more visible within the livestock industry via the animal science network!

For more information please contact eaap@eaap.org

YoungEAAP



What is the YoungEAAP?

YoungEAAP is a group of young scientists organized under the EAAP umbrella. It aims to create a platform where scientists during their early career get the opportunity to meet and share their experiences, expectations and aspirations. This is done through activities at the Annual EAAP Meetings and social media. The large constituency and diversity of the EAAP member countries, commissions and delegates create a very important platform to stay up-to-date, close the gap between our training and the future employer expectations, while fine-tuning our skills and providing young scientists applied and industry-relevant research ideas.

Committee Members at a glance

- Ines Adriaens (President)
- Jana Obsteter (Vice President)
- Giulia Gislou (Secretary)

YoungEAAP promotes Young and Early Career Scientists to:

- Stay up-to-date (i.e. EAAP activities, social media);
- Close the gap between our training and future employer expectations;
- Fine-tune our skills through EAAP meetings, expand the special young scientists' sessions, and/ or start online webinars/training with industry and academic leaders;
- Meet to network and share our graduate school or early employment experiences;
- Develop research ideas, projects and proposals.

Who can be a Member of YoungEAAP?

All individual members of EAAP can join the YoungEAAP if they meet one of the following criteria: Researchers **under 38 years of age** OR within **10 years after PhD-graduation**.

Just request your membership form (ines.adriaens@kuleuven.be) and become member of this network!!!

Thanks to the 75th EAAP Annual Conference Sponsors and Friends

Diamond



Platinum



Gold



Silver



AMERICAN DAIRY
SCIENCE ASSOCIATION®

Anavrin®
INNOVATION BY NATURE

VetosEurope

AMERICAN SOCIETY OF
ANIMAL SCIENCE

Bronze



CORTEVA™
agriscience



PIONEER®



NOVUS®



ThermoFisher
SCIENTIFIC

una¹italia
UNIONE NAZIONALE
FILIERE AGROALIMENTARI
CARNI E UOVA





In cooperation with



Associazione Scientifica di Avicoltura
Italian Branch of World's Poultry Science Association

Sponsored Talks

Sponsored by: Silvateam

September 1st at 15:45, Room: Maremmana

Silvafeed ATX to mitigate the effect of oxidative stress in animals' health and meat quality

Elizabeth Santin, DMV, PhD – esantin@silvateam.eu

Polyphenols are a diverse group of naturally occurring compounds found in plants, known for their potent antioxidant properties. In animal studies, polyphenols have demonstrated significant potential in mitigating oxidative stress, a condition characterized by an imbalance between the production of reactive oxygen species (ROS) and the antioxidant defense system. Oxidative stress is implicated in various pathological conditions, including inflammation, aging and chronic diseases. In livestock, oxidative stress can adversely affect meat quality, leading to lipid peroxidation, protein oxidation, and discoloration, which in turn reduce shelf life and consumer acceptability. Polyphenols exert their beneficial effects by scavenging free radicals, chelating metal ions and modulating antioxidant enzyme activities. Additionally, they influence cellular signaling pathways and gene expression related to oxidative stress responses. However not all polyphenols have the same anti-oxidant effect. We will present evidence regarding Silvafeed ATX, a well-balanced blend of polyphenols that stands out for its efficacy in improving antioxidant status, reducing markers of oxidative damage and enhancing meat quality. The mechanisms by which this specific blend of polyphenols counteract oxidative stress will be presented to discuss their potential applications in animal health management, disease prevention and improvement of meat quality.

Sponsored by: Tecnosens

September 2nd at 15:45, Room: Auditorium

Tecnosens Sniffer for CO₂ and CH₄ monitoring: Our experience in smart agriculture

Greta Bonacina, Tecnosens Sales Department - gbonacina@tecnosens.it

Established in 1994, Tecnosens has always been involved in the latest technologies for gas monitoring, sensing technology and equipment. Also, environmental issues have always been a Leitmotiv in Tecnosens R&D. As a contribution to livestock research, thanks to the cooperation with several research institutes and the environmental sensitivity, Tecnosens could develop MooLogger, a robust and reliable Sniffer to be installed in farms to monitor the breath of the ruminants composed mainly by CO₂ and CH₄. Tecnosens provides a wide range of sensors and solutions for farm emissions monitoring and environmental control, to monitor NH₃ and other pollutants, for several farming and agriculture application: discover which solution may suit your needs.

Sponsored by: MSD

September 3rd at 10:15, Room: Sarda

Technology for farms: a crucial turning point for the sector

Massimiliano Intini - massimiliano.intini@msd.com

The introduction of technology in farms is a topic of crucial importance for the agricultural sector and represents a turning point for the sector for dairy cattle farming. We, at MSD Animal Health, feel responsible for promoting innovations that guarantee the sustainability of production and safety for consumers. Advanced monitoring systems allow real-time control of the health of cows, optimizing the use of resources and improving animal welfare. Sophisticated sensors can accurately detect vital parameters, allowing timely and targeted interventions. This not only increases productivity but also reduces the risk of diseases, improving the quality of the milk produced. Sustainability is another fundamental pillar. Thanks to innovative technologies, we can minimize the environmental impact of our activities. Advanced management systems allow more efficient use of water and energy, reducing waste and cutting greenhouse gas emissions. In this way, we not only respect the environment but also meet the needs of an increasingly attentive and aware consumer. Speaking of consumers, it is essential

to ensure them maximum transparency and safety. Traceability technologies allow us to follow every stage of the production process, from field to table, respecting the highest quality standards. Consumer trust is our most precious resource and technology is the tool that allows us to earn it every day. In conclusion, the introduction of technology in Italian dairy farms is not just an option, but a necessity: it is a path that we must follow with determination and vision, aware that every step forward is an investment in our future.

Sponsored by: Vetagro

September 3rd at 12:45, Room: Sarda

From mitigating environmental impact to antimicrobial reduction: how botanicals can improve animal production sustainability

Benedetta Tugnoli - benedetta.tugnoli@vetagro.com, Richard Paratte - richard.paratte@vetagro.com

The goal of our talk is to explore the potential of botanical compounds and organic acids to improve the sustainability of animal production. Two experts, one specialized in ruminant species and the other in monogastric species, will guide you through this analysis.

Key challenges

We will focus on two key challenges:

- Environmental impact: the use of functional nutritional strategies allows us to improve the metabolism of farmed animals in order to reduce its environmental impact.
- Antimicrobial resistance: Excessive use of antibiotics in animals threatens human and animal health.

Potential of botanical compounds

Botanical extracts offer various beneficial properties:

- Antimicrobial: fight pathogens and reduce the need for antibiotics.
- Antioxidants: protect cells from oxidative damage.
- Immunomodulatory: strengthen the immune system of animals.

Applications

The use of microencapsulated botanical compounds in animal diets has been shown to promote gut health, improve nutrient utilization and reduce dependence on antibiotics.

Our experts will delve into the specific applications of botanical compounds for:

- Ruminants: dairy cows
- Monogastric: pigs, poultry

Conclusion

Botanical compounds can play a key role in making animal production more sustainable. Using these solutions can reduce environmental impact, improve animal health and help fight antimicrobial resistance.

Question and answer session

At the end of the presentation, there will be the opportunity to ask questions to our experts.

Sponsored by: Illumina

September 4th at 15:45, Room: Auditorium

Genomics in Agriculture: Advancing Productivity and Sustainability through a One Health Framework

André Eggen: aeggen@illumina.com

The integration of genomics into the agricultural and food industries has ushered in a new era of innovation, promising to enhance productivity, sustainability, and food safety from farm to fork. Adopting a One Health framework ensures that the use of genomics tools considers the broader ecological impacts, promoting sustainable practices. For instance, reducing the prevalence of antimicrobial resistance (AMR) benefits both human and animal health. Furthermore, monitoring environmental DNA (eDNA) can assess the impact of farming practices on biodiversity, guiding more eco-friendly approaches.



**Together
for sustainable development**

On the market
for more than 30
years providing
technology and
solutions for gas
monitoring



**Ruminants breath and environmental gas *monitoring*
are essential to develop a *sustainable future* for our planet:**

Tecnosens works with Research institutes and Companies providing *gas sensing solutions* for Smart Agriculture field

Let's find a solution together!

Discover more at www.tecnosens.it

Agriculture and Animal Farming in Italy

Italy has a total extension of 302,068 Km² which is the eighth largest among European countries. Only 23.2% of the territory is classified as plain; the rest is classified as mountain (35.2%) or hill (41.6%). According to the 7th Agriculture Census (2020), the total utilised agricultural area is 12,535,448 hectares, whereas forests and semi-natural areas occupy 12,975,448 hectares. Due to its geographical position and longitudinal North-South expansion, Italy has different climatic conditions, varying from Alpine (Alps and northern Apennines) to the Po Valley, Peninsular (central Italy) and Mediterranean (southern Italy) climate. In 2020, 1,133,023 farms were registered in Italy, of which 21.7% were livestock farms (ISTAT). Family farming is the prevailing model, with an important role in the rural economy, for the supply of high quality products, but also for environmental and biodiversity preservation. In recent decades, many farms have experienced a process of diversification, offering services and secondary activities, such as product processing, renewable energy, handicrafts, and agritourism. Industrial farms are mainly located in the North, specialising in dairy cattle, beef cattle, pigs and poultry. Farms specialising in dairy buffalo breeding are located in Campania and Lazio. The breeding of small ruminants (dairy sheep and goats) is typical of Southern Italy and the islands (Sardinia and Sicily). The share of the livestock sector in the total national agricultural production accounts for 28%.

The Italian agri-food system represents 15% of the national economy's turnover, generating a total value of 549 billion euro in 2022 (CREA). The Italian agriculture has a well-known reputation for excellent, high quality production, with many PDO or PGI products (316 food products, 526 wines), which are part of the 'Made in Italy' label. Also typical of Italy are traditional agri-food products (pasta, vegetables, cheese, ham and cured meats), which are the result of diversified production systems, local genotypes and Italy's cultural heritage, with peculiar processing and ageing methods that have been consolidated over time.



Discover Florence



The capital city of the Italian region of Tuscany has nearly 400,000 inhabitants. Known as the capital of the Italian Renaissance, it has countless sculptures, squares, civil and religious buildings, palaces, markets, and museums that make it a unique destination.

World-famous for its perfect preservation, Florence looks as it did in the 15th century. However, thanks to the modernisation projects commissioned by the city council, Florence is a perfect mix of modernity and classicism.

Florence's museums, palaces, and churches are among the world's greatest artistic treasures. The most popular and important sites in Florence include the Duomo, the Baptistry, the Uffizi, the Bargello, Palazzo Pitti, Ponte Vecchio, the Boboli Garden, and the Accademia.

The churches of Santa Maria Novella and Santa Croce are true art galleries, while the library of San Lorenzo is a magnificent display of Michelangelo's architectural genius.

Anavrin[®]
INNOVATION BY NATURE

Inspired by nature,
to help nature.

- Increase in production performance
- Reduction of methane emissions
- Reduction of ingested dry matter
- Improvement of animal welfare

VetosEurope was founded by combining the expertise and savoir faire of one of the most important families in the world in live cattle trade and the technical and scientific knowledge of a group of scientists and researchers specialized in the research and development of **natural feed supplements and nature-identical substances for cattle**, aimed at increasing production while at the same time reducing **CH₄ and CO₂** emissions.

The research into an innovative technology aimed at protecting the environment by using nature has led **VetosEurope** to create **ANAVRIN**[®].

www.vetoseurope.ch

VetosEurope 



Anavrin is approved by **CARBON TRUST** for methane reduction in ruminants

Sites to visit in Florence

Santa Maria del Fiore

A city of artists, Florence offers visitors all kinds of beauty that is impossible not to fall in love with. First of all Santa Maria del Fiore, also known as the Duomo of Florence. It is a 153 metre long cathedral, built to compete with the churches of rival cities Pisa and Siena. Renowned names of Italian art participated in its creation: Giotto, Brunelleschi, Vasari and Ghiberti, to name but a few. Piazza del Duomo is also home to two other famous Florentine monuments, the Baptistery and the Bell Tower. While the former represents one of the oldest buildings in the city, the Campanile was designed by Giotto and is the bell tower of the Cathedral.



Ponte Vecchio

On the list of things to see in Florence, Ponte Vecchio cannot be missed. A peculiarity of this picturesque place, nowadays known not only for its beauty but also for its goldsmiths' shops, is that until 1565 it was the greengrocers and butchers' shops that were the main attraction of the place. Until 1218, the Ponte Vecchio was the only bridge crossing the River Arno in Florence. Above the goldsmiths' shops on Ponte Vecchio is the Corridoio Vasariano, built by Giorgio Vasari to allow these workers to go from Palazzo Vecchio to Palazzo Pitti in complete safety.

Palazzo Vecchio

Piazza della Signoria is home to another of the 10 things to see in Florence, Palazzo Vecchio. It is the political symbol of the Tuscan capital and is built on the ancient ruins of the Roman theatre of Florentia.

Built in the shape of a castle, it has a distinctive 94-metre high tower that makes it very difficult to photograph the palace in its entirety.

One of the most characteristic rooms in Palazzo Vecchio is the Sala dei Cinquecento, measuring 54 metres long, 22 metres wide and 17 metres high, making it the largest room in the whole of Florence.



Piazza della Signoria

Of all the things to see in Florence, Piazza della Signoria is a must-see. In addition to Palazzo Vecchio, in fact, this extraordinary city space also contains other wonders. In the square you can admire a copy of Michelangelo's 'David', which the sculptor placed in front of Palazzo Vecchio to symbolise the power of the Florentine Republic as opposed to the tyranny of the Medici. Other statues in the square include the 'Neptune' by Ammannati, the equestrian sculpture of Duke 'Cosimo I' by Giambologna and 'Hercules and Cacus' by Bandinelli. On the right-hand side of the Palazzo Vecchio, we can instead be dazzled by the beauty of the Loggia dei Lanzi, a small open-air gallery containing several artworks. These include the 'Rape of the Sabine Women' by Giambologna and the statue of Perseus with the head of Medusa by Benvenuto Cellini.

Find the best home for your research with Elsevier's Animal Science, Veterinary Science, and Veterinary Medicine journals





The Uffizi Gallery

The Uffizi Gallery is one of Florence's most important treasures. Its construction dates back to 1560, when Giorgio Vasari designed these spaces as a perspective structure to enhance the Palazzo Vecchio Tower. Today, the Uffizi is one of the most important museums in the world, with its extraordinary collections of ancient sculptures and paintings, ranging from the Middle Ages to the modern age. In addition to 14th century and Renaissance paintings by artists such as Giotto, Piero della Francesca, Botticelli, Leonardo and Michelangelo, the Uffizi Gallery also features an extraordinary collection of busts and sculptures of the Medici family.

The Church of Santa Maria Novella

Another must-see place in Florence is the Church of Santa Maria Novella. From an architectural point of view, this building represents one of the most important Gothic churches in the whole of Tuscany.

The exterior and façade of the church are the work of Fra Jacopo Talenti and Leon Battista Alberti. Inside, however, Santa Maria Novella contains magnificent artistic masterpieces, such as the 'Trinity' by Masaccio, the frescoes by Ghirlandaio and the 'Crucifix' by Giotto.



The Accademia Gallery

A cultural and artistic tour, in the company of friends or family, among the many beautiful sights in Florence must also include a stop at the Accademia Gallery. After the Uffizi Gallery, this museum is the most visited in the Tuscan capital.

The Accademia Gallery is also called the 'Michelangelo Museum': in fact, of all the museums in the world, this is the one that exhibits the largest number of statues by the famous Renaissance artist.

The Pitti Palace and the Boboli Gardens

By crossing the Ponte Vecchio you can easily reach the Oltrarno, where the first building that will catch your eye is Palazzo Pitti. This imposing palace was built by the Pitti family in 1457 based on a design by Filippo Brunelleschi. It is worth visiting this building because inside you will find some of the most important museums in Florence: the Palatine Gallery, the Gallery of Modern Art, the Porcelain Museum and the Fashion and Costume Museum. Besides the artistic beauties, the Palace also contains a natural marvel, the Boboli Gardens.

A true open-air green museum, home to ancient species of holm oaks, sculptures, fountains: its design was the original prototype that also inspired the gardens of Versailles.





#OneHealth



Salute degli animali, degli esseri umani e dell'ambiente.

La nostra natura è unica. Siamo tutti parte dello stesso ecosistema a cui dobbiamo dedicare attenzione e cura.

Per questo la ricerca scientifica di MSD Animal Health è impegnata a offrire trattamenti innovativi e a promuovere azioni concrete che proteggano gli animali, le persone e il nostro pianeta attraverso prevenzione, sostenibilità, sicurezza alimentare, tracciabilità, cura e benessere.

How to get to Florence

By plane

The easiest way to get to Florence is to fly to Florence Airport or to Pisa International Airport, located 62 miles (100 km) west of Tuscany's capital city. You will find a tramway connection with very high frequency of rides and limited cost to reach the congress venue and the city center.

- Pisa Airport (PSA) is the main airport in Tuscany.
- Florence Airport (Aeroporto di Firenze-Peretola) is the second most important airport of Tuscany.

By train

Another popular option is to fly directly to Rome or Milan and take a high-speed train from there to Florence's central railway station (Santa Maria Novella).

You can check timetables and prices in the TGV website or Ferrovie dello Stato website. If you book online, it is usually cheaper than buying the ticket directly on their website.

- The TGV Europe
- Ferrovie dello Stato

By car

Florence's historic centre is relatively small and has numerous pedestrian streets, making it difficult to travel to the city's centre by car. If you prefer this means of transport, take care not to park in a parking street belonging to residents, otherwise, your car will be towed away and you will get a heavy fine. If you would like to visit other towns and villages in Tuscany like Siena, Lucca or Pisa, you can either hire a car or book a half-day or full-day trip from Florence.

Public transports

Urban lines

Urban transport is managed by Autolinee Toscane.

The ticket is also valid on the tramway network: ordinary (a single-use 90-minute ticket) and multiple-ride tickets (one single ticket valid for four 90-minute rides) can be purchased from authorized sales points and at the train station.

Railway stations

- Santa Maria Novella, piazza Stazione, 1 - Florence
- Campo di Marte, via Mannelli, 12 - Florence
- Rifredi, via dello Steccuto, 1 - Florence

Technical Tours



1. Agroforestry system and Maremmana cattle for sustainable beef production

Cost: 95 €

Maximum number of tickets purchasable: 2
min. 25 people, max 48 people

Departure: 7:30/8:00

Return: 18:00/19:00

Morning activity: Visit of a silvopastoral system with long-horn Maremmana cattle beef farm.

Lunch: Health, biodiversity, and flavour taste the same! Small workshop carried out in a convivial way at mealtime tends to provide a different approach to food, highlighting the deep differences associated with meats of different origins by focusing on all our senses, which are too often underestimated in food evaluation.

Afternoon activity: Pig free range livestock system with Cinta Senese breed organic husbandry, from pasture to on-farm slaughtering system.



2. Discovering the Chianina cattle: the giant cattle breed

Cost: 110 €

Maximum number of tickets purchasable: 2
min. 30 people, max 48 people

Departure: 7:30/8:00

Return: 18:00/19:00

Morning activity: Visit of the genetic centre of beef cattle breeds from the Central Italy.

Lunch: Thematic meal based on regional products and Chianina beef.

Afternoon activity: visit to two Chianina cattle beef farms.



3. Chianina beef cattle, wine, and tourism: a multifunctional farm in the typical Tuscany landscape

Cost: 95 €

Maximum number of tickets purchasable: 2
min. 25 people, max 48 people

Departure: 7:30/8:00

Return: 18:00/19:00

Morning activity: Visit of a multifunctional, organic farm with Chianina cattle, wine production and agri-tourism activity.

Lunch: Thematic meal based on regional products and Chianina beef.

Afternoon activity: Discovery of San Gimignano town: the town of one hundred towers.



[CANCELLED]

4. Pecorino Toscano PDO cheese: tradition and innovation in dairy sheep farming and milk processing

Cost: 60 €

Maximum number of tickets purchasable: 2

min. 25 people, max 48 people

Departure: 7:30/8:00

Return: 18:00/19:00

Morning activity: Visit of a dairy sheep farm with Sarda breed and smart collars for animal monitoring

Lunch: Thematic meal based on regional products and Pecorino Toscano DOP cheese.

Afternoon activity: Visit of a Pecorino Toscano cheese factory.



5. Selection program of two Italian dairy sheep breed: Massese and Comisana

Cost: 95 €

Maximum number of tickets purchasable: 2

min. 25 people, max 48 people

Departure: 7:30/8:00

Return: 18:00/19:00

Morning activity: Visit of the genetic centre with two Italian dairy sheep breeds: Massese and Comisana

Lunch: Thematic meal based on regional products and Pecorino Toscano DOP cheese.

Afternoon activity: Visit of a dairy sheep farm with Lacaune breed and an on-farm cheese production.



6. A journey in Maremma: the regional natural park "Parco dell'Uccellina"

Cost: 95 €

Maximum number of tickets purchasable: 2

min. 25 people, max 48 people

Departure: 7:30/8:00

Return: 18:00/19:00

Morning activity: visit of the farm with Maremmana beef cattle breed, and opportunity to see the local herdsman at work riding the Maremmano horse.

Lunch: Thematic meal based on regional products.

Afternoon activity: discovery the Maremma regional park



7. Mediterranean buffalo and the taste of mozzarella cheese

Cost: 95 €

Maximum number of tickets purchasable: 2
min. 25 people, max 48 people

Departure: 7:30/8:00

Return: 18:00/19:00

Morning activity: visit to a farm with Mediterranean dairy buffalo

Lunch: Thematic meal based on regional products and mozzarella and other cheese based on buffalo milk.

Afternoon activity: discovery the Maremma regional park



8. The food triangle: discovering Parma cured ham PDO and Mortadella GPI

Cost: 100 €

Maximum number of tickets purchasable: 2
min. 25 people, max 48 people

Departure: 6:00/6:15

Return: 18:00/19:00

Morning activity: Visit to a Parma cured ham factory in Langhirano, a small village on the hills close to Parma.

Lunch/aperitivo: testing Parma cured ham.

Afternoon: visit to a Mortadella factory close to Bologna



9. Parmigiano Reggiano: the king of the cheeses

Cost: 100 €

Maximum number of tickets purchasable: 2
min. 25 people, max 48 people

Departure: 6:15/6:30

Return: 17:00/18:00

Morning activity: Visit of a Parmigiano Reggiano Cheese factory in the Parma province: cheese making activity, tour of the cheese plant and final degustation.

Visit of Parma old town.

Lunch: Thematic meal based on regional products in Parma.

Booking Conditions

Final information on departure times and meeting point will be published on the congress website and sent to each participant per email by September 1st .

All tours take place on September 5th. Please note that only one registration is permitted.

The chosen tour can be added to your registration during the online signup process.

Space is limited, and spots will be filled on a first-come, first-served basis. Register early to secure your place.

Only one accompanying guest per participant is allowed.

The tours offer convenient round-trip transportation, starting and ending at Firenze Fiera, the congress venue.

Please arrive 15 minutes prior to departure.

Rates include VAT.

Cancellation Policy

Bookings are non-refundable, any cancellation of reservations is subject to a 100% cancellation fee.

In the event we don't reach the minimum number of participants required to run the tour, we may offer you the option to transfer your booking to a different one or receive a full refund.

Booking Conditions for Registered Attendees

If you are interested in participating in a technical tour, please kindly contact our registration department at eaap2024registration@thetriumph.com. Upon receiving your email, we will provide you with detailed instructions on how to access the registration webpage and complete your enrollment.

Accompanying persons tours

A wide range of tours and experience are available for all accompanying persons wishing to discover Florence, Tuscany and Italy.

At this link you can purchase your tour: <https://www.caftours.com>

Benefit of the congress special fee, using this code: EAAP2024 to be added in the "Coupon" section.

Social events

WELCOME COCKTAIL

September 1st, from 20:00 to 22:00

A light cocktail will be organized in the garden of the Congress Center for registered participants only. Participants are kindly requested to wear their badge: no admittance will be allowed without badge.

ITALIAN DINNER

September 2nd – 20:00

Fortezza da Basso - V.le Filippo Strozzi, 1, 50129 Firenze

Embark on a Culinary Adventure through Italy: Explore Regional Flavours at the EAAP 2024 Italian Dinner, which will be held at Fortezza da Basso, the congress venue. This special dinner is a cultural journey, a celebration of Italy's rich culinary heritage, and a delightful way to experience the unique flavors and traditions from across the Country.

DJ set and live entertainment for a memorable evening.

The entrance is allowed only to those participants who have purchased the ticket: participants are kindly requested to wear their badges. No entrance allowed without badge

GALA DINNER

September 4th – 19:00

Teatro del Maggio Musicale Fiorentino - Piazza Vittorio Gui, 1, 50144 Firenze

The EAAP 2024 Gala Dinner will be a fitting conclusion to an exceptional conference, providing a platform for networking, celebration, and the creation of lasting memories. As you bid farewell to your colleagues and friends, you'll carry with you the cherished memories of an evening spent immersed in the rich cultural tapestry of Italy, all within the beautiful setting of the Teatro del Maggio Fiorentino. A tribute to Giacomo Puccini for the centenary of his death will be performed with live musicians.

The entrance is allowed only to those participants who have purchased the ticket: participants are kindly requested to wear their badges. No entrance allowed without badge.

FOOD FOR GOOD From meetings to solidarity

EAAP2024 adheres to the FOOD FOR GOOD project.

In collaboration with Banco Alimentare and Equoevento, EAAP2024 will donate the food prepared and not consumed during the congress, in compliance with current hygiene regulations, to local charity associations.

Support the project!!

We invite you to enjoy the food by serving yourself just what you think you're consuming. If you want more, you can come back and fill your plate.

So if there is any food left over, we can recover and donate it.

Thank you !!!





SOMMET DE L'ÉLEVAGE

WORLD'S #1 SUSTAINABLE LIVESTOCK SHOW

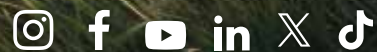


1 > 4 OCT. 2024

CLERMONT-FERRAND ★ FRANCE

1,700 exhibitors • 115,000 visitors • 2,000 animals

somet-elevage.fr



INTERNATIONAL VISITORS

- > Book your free entry badge
- > Register for our guided farm tours on www.somet-elevage.fr



agrilys study
tours in
agriculture
www.agrilys-incoming.com

Organize your visit to the SOMMET

Accommodation, transport,
pre-and postshow farm tours
Tel : +33 (0) 1 82 83 33 55 • somet@agrilys.fr

info@somet-elevage.fr • +33 (0) 4 73 28 95 10

Information for participants

LANGUAGE

The official language of the conference is English. No translation will be provided.

REGISTRATION DESK

The registration desk will be located at the entrance of the Congress Center and it will be open during the following days and times:

Saturday, August 31st	17:00 – 19:00
Sunday, September 1st	07:30 – 20:00
Monday, September 2nd	07:30 – 18:30
Tuesday, September 3rd	08:00 – 18:30
Wednesday, September 4th	08:00 – 18:00

REGISTRATION FEES

On-site registration is possible at the ONSITE REGISTRATION desk.

Payments are allowed only by credit card. Payment by cash or bank transfer will not be accepted.

Registration fee includes: congress kit, access to the sessions, admission to the exhibition and poster area, certificate of attendance, coffee breaks and working lunch as indicated in the programme, Welcome Cocktail on September 1st.

BADGES

Participants and exhibitors are kindly requested to wear their name badge during the entire conference and social events. No admittance to the scientific sessions and to the social events is allowed without badge. No exception will be made.

SLIDE CENTER

The Slide Center is available at Level 0 of Palazzo dei Congressi during the following hours:
August 31st: 17:00 – 19:00 / From September 1st to 4th: 08:00 – 18:00

CATERING AREA

There will be multiple Coffee points inside the Palazzo dei Congressi and the Palazzo degli Affari.

Catering area for lunches will be arranged in PADIGLIONE CAVANIGLIA at FORTEZZA DA BASSO. A gluten free buffet will be available.

WIFI

Wifi is available in all congress spaces for all registered participants.

MOBILE APP

The EAAP mobile app is available with information and extended programme: www.eaap.org/app

CERTIFICATE OF ATTENDANCE

Certificates of attendance will be sent by email after the conference.

EAAP GENERAL ASSEMBLY

The 68th EAAP General Assembly will be held in room Chianina on Tuesday 3rd September at 12:45. Representatives of the EAAP country members are invited to participate.

ORGANIZING SECRETARIAT

TRIUMPH ITALY SRL
Via Belfiore 9 , 50144 Florence
eaap2024@thetriumph.com
www.triumphgroupinternational.com

.TriumphGroup
experience.emotion.events

ABSTRACT BOOK

The Book of abstracts is now available and can be purchased online at the price of €50 each. If you wish to purchase it you can enter the registration link using your id and password: [75th EAAP 2024 European Federation of Animal Science - Login \(triumphgroupinternational.com\)](https://www.triumphgroupinternational.com) click on "registration" and buy the book (see screen shot below)



The book of abstract will then be available on site at EAAP booth. If you wish the book to be delivered at your home / work address, then shipment costs will be quantified separately.

POSTERS PRINTING

This year EAAP 2024 is pleased to make a special service available for all poster presenters! Enjoy the convenience of having your poster printed on-site. You will find it directly at the conference venue without the hassle of traveling with your poster.

Through this link you have the possibility to purchase this service and send your poster directly to the Organizers: [UPLOAD YOUR POSTER](#)

Use this password to submit your poster: **eaap24**

Once completed the procedure you will receive a receipt with a code: please bring this code with you at the Secretariat Desk at the congress venue to collect your poster.

Printing cost is € 55,00.

PLEASE NOTE: You have TIME until Wednesday, August 21, to submit your poster for printing, which will be available for pickup, starting from August 31st at the congress secretariat.

If you have any questions about this service, please email Customer Service at poster@ssdlab.it

PRESENTATIONS

Please note that all theatre presentations will be placed on the EAAP website following the meeting as a service to all delegates, unless the author requests EAAP not to do so.

If you do not wish to give the permission to have your pdf presentation or poster available on the EAAP website, you must send an email to eleonora@eaap.org (before September 30th), after that date presentation/poster will by default included on the EAAP website.

Only presentations uploaded in the Preview Room will be available on the website. Please do not send us presentation by email.

Poster presenters are asked to submit their posters in the preview room of the Florence venue.

EAAP will only accept presented papers/posters.

GUIDELINES FOR ORAL COMMUNICATION AUTHORS AND SPEAKERS

The Organising Committee of the 75th EAAP Annual Meeting will do its utmost to help authors for their presentations and to facilitate their arrival and stay at the congress.

Please take a few minutes to read the following guidelines regarding the on-site organisation of the congress for the smooth running of the sessions.

AUDIOVISUAL GUIDELINES FOR ORAL PRESENTATION

All presentations must be prepared in PowerPoint (file extension .pptx).

They will be displayed from a PC with Windows 10 and PowerPoint 2016 on a 16:9 format screen.

All presentation must be delivered at Speaker Ready Room at least 2 hours before your scheduled presentation time. If your presentation is scheduled early in the morning please deliver your presentation the day before.

In order to ensure an optimal delivery of your presentation, please stick to the following guidelines in the preparation of your presentation:

- Your presentation should be 16:9 formatted.
- Preferred page set-up is landscape orientation (portrait orientation will not be displayed correctly).
- Use standard Windows fonts only. Try to avoid use of non-standard Windows fonts or language specific fonts.
- Images: Do not copy and paste the images from another application, please use the "insert image from a file" functionality from PowerPoint (format JPG or PNG).
- Video: we strongly suggest WMV or MP4 as video formats. To avoid any issue with movies and loops, presentations should be saved as a .pptx files.
- Apple Keynote users: Please export your presentation and select pptx format in the advanced option dialog. Check your presentation on a Windows-operated computer (preferably Win 10).

ON SITE HELP

If you have technical questions regarding your presentation you can meet the technician in the Speaker Ready Room to either make sure that your presentation will run properly on the system or to anticipate a backup solution.

RESTRICTIONS

Personal laptop computers cannot be connected to the projectors. Presentations cannot be loaded directly onto the computer in the lecture rooms. Presentations must be uploaded via our service at the Speaker Service Centre

POSTER PRESENTATIONS

Posters will be presented in portrait format (100 cm high and 70 cm wide) with the title, the addresses of authors, the picture of the presenting author and the scientific content (introduction, methods, results, discussion, conclusion).

The poster should be printed by the participants or using to the online printing service.

Please indicate the number of your abstract to the staff in the poster room for installation.

The number of your poster will be displayed on the top of the panel.

During the poster session authors should be in attendance at their poster.

Posters	Room	Poster Presentation	Poster Session
Sess. 1 to 33	Palazzo Congressi floor -1	Sept. 1st, 8:00 am to Sept. 2nd, 3:00 pm	Sept. 2nd, 13:30 to 14:30
Sess. 34 to 55	Fortezza da Basso Cavaniglia	Sept. 1st, 8:00 am to Sept. 2nd, 3:00 pm	Sept. 2nd, 13:30 to 14:30
Sess. 56 to 76	Palazzo Congressi floor -1	Sept. 2nd, 5:00 pm to Sept. 4th, 3:00 pm	Sept. 3rd, 13:30 to 14:30
Sess. 77 to 98	Fortezza da Basso Cavaniglia	Sept. 2nd, 5:00 pm to Sept. 4th, 3:00 pm	Sept. 3rd, 13:30 to 14:30



animal family of journals

ALL ARTICLES ARE PUBLISHED BY ELSEVIER AS GOLD OPEN ACCESS

animal-journal.eu

Congress Venue: Firenze Fiera

Congress and Exhibitor Center, Piazza Adua, 1 - Florence (Italy)

www.firenzefiera.it/en

EAAP2024 conference will take place at Firenze Fiera Congress Center, a unique Congress Centre located in the heart of Florence, just a few steps away from the Duomo and adjacent to Santa Maria Novella Central Station.



HOW TO REACH THE CONFERENCE CENTRE

Tramway

Eco-friendly, fast, silent – the tramway is the ideal zero-emission transport to move around the city without worries. The Congress and Exhibition Center is connected to the motorway through line T1, and to the airport through line T2.

- LINE T1: Stop at Valfonda-Stazione Santa Maria Novella
- LINE T2: Stop at Alamanni - Stazione

Are you arriving from A1 motorway? Then you can park at Villa Costanza without exiting from the motorway. From there, the tramway will take you to the city centre in a few minutes.

Single Ticket	€ 1.70
Single SMS Ticket	€ 2.00
10 Ticket strip	€ 15.50

Where can I buy tickets?

- Authorized sellers (single ticket, passes and 10-ticket strip)
- Official Ticket Office in Via Santa Caterina da Siena, 50123, Firenze (single ticket, passes and 10-ticket strip)
- APP at-bus (single ticket, passes)
- Onboard, using credit, debit, or prepaid cards, smartphones, and compatible wearables, on to the ticket validation machine onboard
- Autolinee Toscane website www.at-bus.it (passes, registration required)
- APP TABNET (single ticket, passes)
- SMS (single ticket): send the word "Firenze" by SMS to 488 01 05. Wait for a reply and then get on the tram (only with Tim, Vodafone e Wind operators and an italian SIM)
- Automated ticket machines at stops (single ticket)

For further information visit website www.at-bus.it

Train

Thanks to high-speed railway, arriving in Florence by train is a matter of minutes, and the Congress and Exhibition Center is located just a few steps away from the main Santa Maria Novella railway station.

Florence Transportation

You can find your itinerary with public transport on the Autolinee Toscane website: <https://www.at-bus.it/en> in the section: "Plan your trip".

You can also download the Autolinee Toscane app: <https://www.at-bus.it/en/app>

Firenze Fiera Map



Room nickname	Building name	Room location
Auditorium	Palazzo Congressi	Floor -1
Calvana	Palazzo Congressi	Ground floor
Chianina	Palazzo Affari	First floor
Marchigiana	Palazzo Affari	Ground floor
Maremmana	Palazzo Affari	Second floor
Modicana	Palazzo Affari	Third floor
Piemontese	Palazzo Affari	Second floor
Pisana	Palazzo Congressi	Second floor
Podolica	Limonaia	Garden
Reggiana	Palazzo Affari	Second floor
Rendena	Palazzo Affari	Fourth floor
Romagnola	Palazzo Affari	First floor
Sarda	Palazzo Affari	Floor -1
Valdostana	Palazzo Affari	Third floor

Scientific programme

EXPLANATORY NOTES ON SESSIONS

Abbreviations after the title are (Organising Commission; Session Type)

Commissions are:

Cattle (C), Genetics (G), Health and Welfare (H+W), Horse (H), Insect (I), Livestock Farming Systems (LFS), Nutrition (N), Pig (P), Physiology (Ph), Precision Livestock Farming (PLF), Sheep and Goat (S+G), Animal Task Force (ATF)

Session types are:

Theme Sessions (T) are on key topics in animal science and consist of invited and offered papers.

Industry sessions (I) are led and supported by Industry and comprise invited and offered papers.

Free communications/Bottom-Up (B): these sessions will be created from submitted abstracts and titles will be announced in early April.

Discovery Sessions (D) are invited single/multiple presentations on hot/emerging topics.

Challenge Sessions (C) are free format (workshop, open committee, round table) to debate important issues, not theatre paper presentation.

Early-career (EC) scientist's Session.

Project session (P) are sessions based around a project which wants to share its results, often combined with submitted abstracts.

Working Group sessions (WG) are the results of an EAAP working group.

Room	Sunday 1st Sept 8.30 – 12.30	Sunday 1st Sept 14.00 – 18.00
Auditorium Palazzo Congressi Lower Ground Floor	1. Integrating mitigation and adaptation breeding strategies (G, T)	15. Role of bioinformatics applied to livestock data - exploiting structural variation and pangenome-based techniques for livestock (G, T)
Pisana Palazzo Congressi 2nd Floor	2. Breeding scheme optimization: balancing breeding goal(s), genetic progress and diversity (G, T)	16. Genomic selection tools for within- and across- herd management in livestock species (G, T)
Valdostana Palazzo Affari 3rd Floor	3. N, P and C efficient use and circularity in dairy farms – high utilization, minimal losses (C, T)	17. Global quality of animal products in 2024: stakeholders' perceptions, desires, and priorities in a changing world (C, P)
Reggiana Palazzo Affari 2nd Floor	4. Research on young stock care: the journey of calves from gestation onwards (C/H+W, T)	18. Sustainable and smart integration of the dairy and beef sectors in EU (C/CODABE, T)
Chianina Palazzo Affari 1st Floor	5. Innovative and emerging feed and forage resources (N, T)	19. Nutritional models development and applications in livestock farming (N, T)
Maremmiana Palazzo Affari 2nd Floor	6. Advances in ruminant nutrition, Part 1 (N, T)	23. Management measures to reduce production disease (H+W, D)
Romagnola Palazzo Affari 1st Floor	7. Emerging practices and tools in horse production (H, BU)	21. Heat stress in pig and poultry production: consequences and strategies to cope with global warming (P, T)
Piemontese Palazzo Affari 2nd Floor	8. Innovative approaches to pig and poultry production (P, EC)	22. Innovation in pig genetics (P/G, B)
Podolica Limonaia - Garden	9. Alternative production systems and free communications in animal behaviour and welfare (H+W, T)	27. Physiology of resilience and adaptation to climate change (Ph, T)
Marchigiana Palazzo Affari Ground floor	ONE-DAY SYMPOSIUM 10. Livestock are more than food; Part 1 (LFS/ATF, C)	ONE DAY SYMPOSIUM 24. Livestock are more the food; Part 2 (LFS/ATF, C)
Rendena Palazzo Affari 4th Floor	11. Insect nutrition (I, T)	25. Project session ADVAGROMED (I, P)
Calvana Palazzo Congressi Ground floor	12. Effectiveness of breeding programs for local breeds in the Mediterranean region and other harsh environments (S+G, WG)	26. Production potential and adaptation of camelid species to extensive, semi-intensive and intensive production systems in arid and semi-arid environments (S+G) WG)
Modicana Palazzo Affari 3rd Floor	13. Sensing physiology: Tools towards optimising livestock husbandry (Ph, T)	20. Functional feed additives in poultry nutrition (N/PWG, WG)
Sarda Palazzo Affari Below ground Floor	14. Integration of PLF and context data to improve decision making (PLF, T)	28. EU-LI-PHE: Livestock phenomics, incl. free communications on livestock phenotyping and phenomics (PLF/G, P)

Room	Monday 2nd Sept 8.30 – 12.30	Monday 2nd Sept 14.30 – 18.00
Auditorium Palazzo Congressi Lower Ground Floor	29. Plenary Session. Reassessing our relationship with farmed animals Leroy Award recipient presentation	30. Relationships between environmental efficiency traits – an interdisciplinary approach (G/N/C, T)
Pisana Palazzo Congressi 2nd Floor		31. Breeding schemes for development of small populations (G/ANGRWG, WG)
Valdostana Palazzo Affari 3rd Floor		32. The role of marbling in beef quality – development, importance, measurement, harmonisation (C, T)
Reggiana Palazzo Affari 2nd Floor		33. Mediterranean buffalo farming for sustainable milk and meat production (C, T)
Chianina Palazzo Affari 1st Floor		34. Nutrition management to reduce methane emissions and environmental impact, Part 1 (N, T)
Maremmana Palazzo Affari 2nd Floor		35. Advances in non-ruminant nutrition, Part 1 (N, T)
Romagnola Palazzo Affari 1st Floor		36. Slow-growing meat-type and dual purpose genotypes for conventional and alternative farming systems in the EU (PWG/WPSA-Italian Branch, WG)
Piemontese Palazzo Affari 2nd Floor		37. Rethinking the transition from suckling to weaning to prevent negative consequences of the stress on pig health (P, T)
Podolica Limonaia - Garden		38. Best-practice in addressing pig welfare on-farm (H+W, I)
Marchigiana Palazzo Affari Ground floor		39. Building quality into animal products to improve the sustainability of farming systems for the future (LFS, T)
Rendena Palazzo Affari 4th Floor		
Calvana Palazzo Congressi Ground floor		40. Zooarchaeological research lessons for contemporary livestock management, conservation and genetics (S+G/LFS, T)
Modicana Palazzo Affari 3rd Floor		41. Optimising reproductive physiology of livestock (Ph, I)
Sarda Palazzo Affari Below ground Floor		42. Digital technologies for management (PLF, C)

Room	Tuesday Sept 3rd 8.30 – 12.30	Tuesday Sept 3rd 14.30 – 18.00
Auditorium Palazzo Congressi Lower Ground Floor	43. Digital phenotyping sensors, 'omics' and genetics in enhanced sustainability (G/PLF, T)	57. Socio-economic approaches to address the contemporary issues of the horse industry (H, BU)
Pisana Palazzo Congressi 2nd Floor	44. Genetics of food quality (G, T)	58. The role of breeding and genetics in the sustainable transformation of the livestock sector (G/ANRWG, WG)
Valdostana Palazzo Affari 3rd Floor	45. Indicators, hi-tech solutions, and tools to effectively manage cattle (C, T)	59. Milk properties for the valorization of dairy (by-products) manufacturing (C/ADSA, T)
Reggiana Palazzo Affari 2nd Floor	46. Viable future dairy farming systems and products from production, feeding, environmental and consumer viewpoint, Part 1 (C, P)	60. Viable future dairy farming systems and products from production, feeding, environmental and consumer viewpoint Part 2 (C, P)
Chianina Palazzo Affari 1st Floor	47. Nutrition management to reduce methane emissions and environmental impact, Part 2 (N, T)	61. Advances in fish nutrition (N, T)
Maremmiana Palazzo Affari 2nd Floor	48. Horse genetics and genomics (H, BU)	62. Feeding for improving the nutritional, safety and organoleptic characteristics of animal-derived foods (N, T)
Romagnola Palazzo Affari 1st Floor	49. Nutrition in health and welfare of ruminants (N/H+W, T)	63. Improving animal welfare by optimising nutrition/feeding behaviour, Part 1 (H+W/N, T)
Piemontese Palazzo Affari 2nd Floor	50. Sustainable solutions to support and sustain gut health in monogastric livestock (with project MONOGUTHEALTH), Part 1 (P, P)	64. Sustainable solutions to support and sustain gut health in monogastric livestock (with project MONOGUTHEALTH), Part 2 (P, P)
Podolica Limonaia - Garden	51. Genetic progress vs animal welfare? (H+W/G/FABRE-TP, C)	65. PLF for health, behaviour and welfare, Part 2 (H+W/PLF, T)
Marchigiana Palazzo Affari Ground floor	52. Redesigning the trajectory: the contribution of research to the development of resilient Livestock Farming Systems and their role in climate change and biodiversity (LFS, T)	66. The current and future role of pasture production systems in the mitigation of and adaptation to climate change impacts in livestock farming systems (LFS, T)
Rendena Palazzo Affari 4th Floor	53. Insect genetics, reproduction, physiology and behaviour (I, T)	67. Innovative insect applications and technologies (I, T)
Calvana Palazzo Congressi Ground floor	54. Sustainable sheep and goat high-yield production systems: Management, nutrition, mechanization, health, and welfare aspects (S+G, T)	68. Small ruminant health and welfare aspects (S+G/H+W, T)
Modicana Palazzo Affari 3rd Floor	55. Host physiology/genetics and microbiome interactions – The holobiont concept (Ph/G, T)	69. Epigenetics, adaptation and intergenerational transmission (Ph/G, T)
Sarda Palazzo Affari Below ground Floor	56. PLF for health, behaviour and welfare, Part 1 (PLF/H+W, T)	70. RES4LIVE: (renewable) energy for livestock, incl. free communications on energy and sensors for thermal comfort of livestock (PLF, P)

Room	Wednesday Sept 4th 8.30 – 12.30	Wednesday Sept 4th 14.00 – 18.00
Auditorium Palazzo Congressi Lower Ground Floor	71. Genetic evaluations: new methods, new species, new proxies (G, BU) <i>Genetics Commission Business Meeting</i>	85. Genetics of novel health and welfare traits (G/H+W, T)
Pisana Palazzo Congressi 2nd Floor	72. Methods in prediction of genetic merit and assessment of genetic diversity (G, BU)	86. Tailored housing and management strategies from incubation to slaughter house, for poultry (P, WG)
Valdostana Palazzo Affari 3rd Floor	73. Targeting ecosystem services provision by grasslands and protein self-sufficiency in cattle production (C, T) <i>Cattle Commission Business Meeting</i>	87. Dairy herd management (C, EC)
Reggiana Palazzo Affari 2nd Floor	74. From horse welfare to social license to operate (H, T) <i>Horse Commission Business Meeting</i>	88. How the dairy sector copes with EU-Green deal (C, T)
Chianina Palazzo Affari 1st Floor	75. Advances in non-ruminant nutrition, Part 2 (N, T) <i>Nutrition Commission Business Meeting</i>	89. Free communications in animal nutrition (N, BU)
Maremmiana Palazzo Affari 2nd Floor	76. Advances in ruminant nutrition, Part 2 (N, T)	90. Nutrition and feeding in the circular economy (N, T)
Romagnola Palazzo Affari 1st Floor	77. Improving animal welfare by optimising nutrition/feeding behaviour, Part 2 (H+W/N, T)	91. Young EAAP session. Project writing: tools, opportunities and experiences (All, EC)
Piemontese Palazzo Affari 2nd Floor	78. Collaboration in experimental research for sustainable pig production (with PIGWEB) (P, P) <i>Pig Commission Business Meeting</i>	92. Good practices in experimental research for sustainable pig production (with PIGWEB) (P, P)
Podolica Limonaia - Garden	79. Welfare issues for small ruminants (H+W/S+G, EC) <i>H+W Commission Business Meeting</i>	93. Preventive approaches to livestock diseases to reduce drug resistance (H+W, T)
Marchigiana Palazzo Affari Ground floor	80. Technologies for GHG emission mitigation on farm: options, opportunities and challenges (LFS, T) <i>LFS Commission Business Meeting</i>	94. Living labs and demonstration farms: approaches to improve sustainability of LFS globally (LFS, T)
Rendena Palazzo Affari 4th Floor	81. Safety, sustainability and welfare in the insect (I, T) <i>Insect Commission Business Meeting</i>	95. Insects as food & feed (I/PWG, T)
Calvana Palazzo Congressi Ground floor	82. Optimization of pasture forage and by-product resources to improve sheep and goat production (S+G, T) <i>Sheep + Goat Commission Business Meeting</i>	96. Optimization of technical, economic, and environmental efficiency in sheep and goat production systems (S+G, T)
Modicana Palazzo Affari 3rd Floor	83. Early life nutrition and its latent impact on growth, lactational and reproductive physiology (Ph, I) <i>Physiology Commission Business Meeting</i>	97. Biological mechanisms regulating inflammatory and energy metabolism in livestock species (Ph, T)
Sarda Palazzo Affari Below ground Floor	84. PLF systems to face climate change and increase sustainability (PLF, T) <i>PLF Commission Business Meeting</i>	98. Nutrition in health and welfare in monogastric animals (N/H+W, T)

Scientific programme

Sunday 1 September

Session 1.

Integrating mitigation and adaptation breeding strategies

Room: Auditorium - Palazzo Congressi Lower Ground Floor

Chair: Sell-Kubiak / Gredler-Grandl

Session Type: Theme session

	Theatre Session 1	Book of Abstracts page
8:30	Global Methane Genetics: a global program to accelerate genetic progress for reduced methane emission in ruminants <i>invited</i> B. Gredler-Grandl, C. I. V. Manzanilla-Pech, R. Banks, H. Montgomery, R. F. Veerkamp	163
9:00	Are the most productive, the less thermotolerant animals in low input beef cattle populations? The case of the Avileña-Negra Ibérica beef cattle breed C. Diaz, M. Ramón, C. Meneses, M. J. Carabaño	163
9:15	Feed efficiency, performance, and methane emissions of finishing Hereford steers with high and low residual feed intake P. Peraza, C. G. Ciappesoni, A. La Manna, J. I. Velazco, E. A. Navajas	164
9:30	Trait definitions for methane production in Australian beef cattle T. Granleese, R. Hergenhan, S. Clark	164
9:45	Genotype by environment interaction for growth traits in the Italian Limousine population S. Simone, F. Tiezzi, M. C. Fabbri, C. Maltecca, R. Bozzi	165
10:00	Future emission reductions deliverable by Irish beef and dairy breeding indices D. Kenny, J. Sise, P. Amer, R. Evans, F. Hely	165
10:15	Coffee Break	
10:45	Exploring different definitions of methane concentration phenotypes in dairy cattle C. I. V. Manzanilla-Pech, A. E. Van Breukelen, O. Gonzalez-Recio, E. Teran, M. Pszczola, T. Strabel, R. F. Veerkamp, Y. De Haas, B. Gredler-Grandl	166
11:00	Relationships between methane emissions and milk production traits, an unfinished story N. Gengler, H. Atashi	166
11:15	Estimation of heritability and genetic correlation of methane phenotypes and yield traits in the Spanish Holstein population E. M. Teran, A. García-Rodríguez, J. A. Jiménez-Montero, O. Gonzalez-Recio	167
11:30	Genetic correlations between feed intake and GHG emissions measured on young bulls with production and reproduction traits measured in Italian Holstein cows F. Tiezzi, R. Finocchiaro, L. Benzoni, J. T. Van Kaam, M. Marusi, R. Bozzi, M. Cassandro	167
11:45	Genetic parameters for methane production, intensity, and yield predicted from milk mid-infrared spectra throughout the lactation in Montbéliarde cows S. Fresco, D. Boichard, S. Fritz, P. Martin	168
12:00	Sequence-based GWAS of heat tolerance traits in Holstein and Montbeliarde cattle A. Vinet, S. Mattalia, R. Vallee, A. Barbat, C. Bertrand, C. Hoze, S. Taussat, M. P. Sanchez, M. Boussaha, B. Cuyabano, D. Boichard	168
12:15	Drafting the genomic landscape of North African sheep and chicken adaptation to harsh environments P. Ajmone Marsan, B. Benjelloun, M. Ben Larbi, A. Carta, G. Chillemi, S. B. S. Gaouar, H. El-Hentati, A. Jannoune, C. Jerrari, H. Khemiri, V. Loywick, N. M'Hamdi, N. Tabet Aoul, A. Stella, M. Tixier-Boichard, R. Valentini, G. Zitouni	169
	Poster Session 1 Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00	
01.14	Characterization of a new heat tolerance phenotype in dairy cattle based on automatic milking systems and mid-infrared spectra T. Pook, M. Ramon, C. Diaz, M. J. Carabano Luengo, M. L. Van Pelt, L. Zetouni, C. Orrett, C. Kamphuis, Y. De Haas, B. Gredler-Grandl	169

01.15	Genetic parameters of feed efficiency, predicted methane-related, and carcass traits during fattening period in Japanese Black cattle <i>M. Takeda, F. Homma, K. Ichinoseki, N. Takei, H. Matsuda, S. Fujiwara, J. Hashiba, T. Kojima</i>	170
01.16	Sequencing of the GHRL gene by NGS reveals a multi-SNP cluster associated with feed efficiency <i>I. Trapina, S. Plavina, N. Krasnevska, J. Paramonova, D. Kairisa, N. Paramonova</i>	170
01.17	On the use of mid-infrared spectra and physiological measures for the characterization of dairy cattle thermotolerance <i>M. Ramon, C. Diaz, T. Pook, B. Gredler-Grandl, M. J. Carabaño</i>	171
01.18	A single-step genomic evaluation of maturing rate index in French beef breeds <i>A. Lepers, P. Martin, S. Taussat</i>	171
01.19	Genetic relationship between young bulls' feed intake and GHG emissions measured on cows' heat tolerance measures in Italian Holstein cows <i>R. Finocchiaro, F. Tiezzi, L. Benzoni, J. Van Kaam, M. Marusi, R. Bozzi, M. Cassandro</i>	172
01.20	Identification of functional SNPs linked to feed efficiency in Canadian Beef cattle <i>S. Lam, L. Guan, G. Plastow, Á. Cánovas</i>	172
01.21	Is methane emission the same trait genetically in young bulls and lactating dairy cows? <i>B. Heringstad, K. A. Bakke</i>	173
01.22	Genetic evaluation for feed efficiency in German Holsteins <i>E. Abdalla, J. Heise, S. Rensing, Z. Liu, H. Alkhoder, L. Polman, R. Reents</i>	173
01.23	Investigating Methane and Carbon Dioxide Emissions in Hanwoo Steers: Implication of Age and Genetic Traits <i>J. Berdos, S. H. Kim, C. M. Ncho, A. R. Son, M. Miguel, K. C. Nam, S. S. Lee</i>	174
01.24	Impact of Temperature-Humidity Index on Milk Production in Crossbred Dairy Cows <i>R. Chejj, G. Molina, V. Landi, W. Mancuso, P. R. Marini</i>	174
01.25	Modelling the environmental and genetic effects of climate conditions on the growth of a local cattle breed <i>E. Rulli, R. Mantovani, E. Mancin, G. Gomez-Proto, C. Sartori</i>	175
01.26	Exploring potential GxE interactions in the lifetime performance of suckling ewes <i>M. Hiltbold, R. Trépos, F. Douhard</i>	175
01.27	Genetic diversity of South American Criollo cattle adapted to a wide range of environmental conditions <i>E. Somenzi, J. Ramirez-Diaz, E. Armstrong, A. Villalobos-Cortès, A. Gutierrez, E. L. Aguirre, L. Echavarria, Y. T. Utsunomiya, J. F. Garcia, M. Poli, T. Sonstegard, L. Colli, R. Negrini, P. Ajmone Marsan</i>	176
01.28	Simplified workflow for faster genotyping-by-sequencing using partial combinatorial dual barcodes and optimized analysis pipeline <i>A. Burrell, K. Gujjula, S. Chadaram, J. Lavoie</i>	176
01.29	Assessment and distribution of Runs of Homozygosity and their relation to water stress in the Rasa aragonesa sheep breed <i>S. Pérez-Redondo, C. Calvete, M. Joy, A. Dominguez, S. Lobón, J. H. Calvo</i>	177

Session 2. Breeding scheme optimization: balancing breeding goal(s), genetic progress and diversity

Room: Pisana - Palazzo Congressi 2nd Floor

Chair: Berg / Rind Thomassen

Session Type: Theme session

	Theatre Session 2	Book of Abstracts page
8:30	Economic values for organic dairy cattle production systems in Denmark <i>H. M. Nielsen, J. Rind Thomassen, S. Østergård, L. P. Sørensen, M. Kargo</i>	177
8:45	Modelling the transition from conventional to genomic selection in German Merino sheep breeding by stochastic simulations <i>R. Martin, T. Pook, J. Bennewitz, M. Schmid</i>	178
9:00	Only 100% to share - breeding objectives revisited for improved sustainability and animal welfare <i>invited B. Fuerst-Waltl, A. Willam, C. Egger-Danner, C. Fuerst</i>	178
9:30	Stratified mating quota: a novel approach to effectively reduce the inbreeding rate <i>M. J. Steensma, H. P. Doekes, T. Pook, M. F. Derks, N. Bakker, B. J. Ducro</i>	179

9:45	Using alternative relationship matrices for genomic prediction and managing genetic diversity <i>X. Yu, P. Berg, T. Meuwissen</i>	179
10:00	Study of genetic progress in the context of disconnection between two originally connected populations <i>M. Wicki, A. Legarra, J. Raoul</i>	180
10:15	Coffee Break	
10:45	A comparison between phenotypic and genotypic strategies of crossbred individuals in a crossbred scheme of laying chickens <i>M. Sánchez Díaz, L. Varona, N. Ibáñez Escriche, D. López Carbonell, D. Cavero</i>	180
11:00	Selection for antagonistic traits must balance diversity in terms of genetic correlation <i>B. Cuyabano, S. Aguerre, S. Mattalia</i>	181
11:15	New insight in genomic inbreeding assessment in domestic animals <i>M. Shihabi, L. Vostry, V. Cubric-Curik, M. Ferenčaković, I. Curik</i>	181
11:30	Prediction of hidden individual inbreeding depression load in French dairy sheep <i>S. Antonios, S. T. Rodríguez-Ramilo, A. Legarra, J. M. Astruc, L. Varona, Z. G. Vitezica</i>	182
11:45	Genotype by environment interaction and response to selection for milk production traits in Lacaune sheep <i>S. Vouraki, S. Priskas, A. Argyriadou, P. D. Carvalho, J. M. Astruc, G. Lagriffoul, R. Rupp, G. Banos, G. Arsenos</i>	182
12:00	How dual-purpose is dual-purpose? The balancing act between fattening and laying performance: An index to describe dual-purpose poultry <i>H. Pluschke, P. Thobe, S. Lombard, M. Reverchon, S. Steinfeldt, K. Germain, D. Werner, A. Collin</i>	183
12:15	Inbreeding depression for litter size in a mice population divergently selected for environmental variability of birth weight <i>C. Ojeda-Marín, I. Cervantes, N. Formoso-Rafferty, J. P. Gutiérrez, S. T. Rodríguez-Ramilo</i>	183

Poster Session 2

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

02.14	Genome-wide variability and selection signatures in autochthonous Spanish cattle breeds <i>P. E. Milia, A. Cesarani, C. Díaz, C. Meneses, J. C. Parejo, N. P. P. Macciotta, C. Dimauro</i>	184
02.15	Networks of inbreeding in two lines of mice divergently selected for environmental birth weight variability <i>C. Ojeda-Marín, J. P. Gutiérrez, N. Formoso-Rafferty, I. Cervantes, S. T. Rodríguez-Ramilo</i>	184
02.16	Population dynamics of potentially harmful haplotypes: pedigree evidences <i>K. D. Arias, I. Fernández, J. P. Gutiérrez, I. Álvarez, F. Goyache</i>	185
02.17	Occurrence of haplotypes in low frequency is not explained by recombination and CNV regions only <i>K. D. Arias, I. Fernández, J. P. Gutiérrez, I. Álvarez, F. Goyache</i>	185
02.18	Genomic partitioning of inbreeding depression in Jersey cattle <i>C. Maltecca, F. Tiezzi, J. Jiang</i>	186
02.19	Impact of the DGAT1 mutation in a Bos Taurus x Bos Indicus crossbred population in India <i>M. A. Touchard, Y. Gaundare, S. Jadhav, V. Dhanikachalam, V. Podtar, N. Punde, T. Shirsath, A. Joshi, K. Bhawe, S. Joshi, M. Swaminathan, M. Boussaha, V. Ducrocq</i>	186
02.20	Footprints of balancing selection in the genome of Original Valachian sheep <i>N. Moravčíková, R. Kasarda, A. Halvonik, M. Chalupková, L. Vostrý, H. Vostrá-Vydrová, I. Pavlík</i>	187
02.21	How directional artificial selection has shaped the genome of Italian heavy pig breeds <i>J. Vegni, G. Schiavo, M. Ballan, S. Bovo, F. Bertolini, L. Buttazzoni, M. Gallo, L. Fontanesi</i>	187
02.22	Influence of inbreeding on reproduction traits in Swiss pig breeds <i>A. Burren, N. Khayat-zadeh, I. Haefliger, H. Joerg</i>	188
02.23	Rapid, low-input, targeted NGS workflow for DNA methylation in dogs <i>A. Burrell, K. Gujjula, J. Lavoie, S. Chadaram, A. Hatch, G. Yavas, L. Pickle</i>	188
02.24	SMARTER-database: a tool to explore genomic diversity in small ruminants <i>A. Stella, A. Manunza, B. Servin, R. Rupp, P. Cozzi</i>	189
02.25	Efficient calculation of linkage analysis based genomic relationship matrices for optimum contribution selection. <i>T. Meuwissen, X. Yu, P. Berg</i>	189

Session 3.**N, P and C efficient use and circularity in dairy farms - high utilization, minimal losses**

Room: Valdostana - Palazzo Affari 3rd Floor

Chair: Kuipers / Ruska

Session Type: Theme session

Theatre Session 3		Book of Abstracts page
8:30	Characterisation of grazing dairy cows differing in how they utilise their ingested nitrogen <i>E. Tavernier, L. Delaby, I. C. Gormley, M. O'Donovan, D. Berry</i>	190
8:45	Feed, nitrogen and phosphorus-use efficiency in organic and conventional dairy farming systems in The Netherlands <i>M. G. J. Edens, J. W. Peek, E. L. P. Guennoc, H. Bovenhuis, M. S. Gilbert, J. Dijkstra</i>	190
9:00	Carbon footprints result from livestock production in Poland based on NPC tools from CCCFarming project - limitations and perspectives <i>M. Szumacher-Strabel, P. Sidoruk, M. De Vries, D. Ruska, K. N. L. Naglis-Liepa, P. R. Hargreaves, R. M. Rees, X. Vergé, P. Robin, P. Galama, V. Juskiene, A. Kuipers</i>	191
9:15	The duration of outdoor stay affects the urinary and faecal nitrogen excretion in dairy cows <i>S. Arango, L. Bailoni, N. Guzzo, V. Trabacchin, E. Bianco, E. Simonetti, E. Zerbinati, S. Rainis, C. Sartori</i>	191
9:30	The characterization of microbiome and resistome in feces and slurry of dairy cows in different livestock production systems <i>I. Nejjam, A. Varsaki</i>	192
9:45	Response of early and late lactation dairy cows to diets differing in levels of human edible ingredients <i>A. Cushnahan, C. P. Ferris</i>	192
10:00	Reduced climate change impact of milk achieved with introduction of faba bean in dairy cows' diet <i>S. Hietala, A. Vanhatalo, K. Kuoppala, T. Kokkonen, A. Reinikainen, K. Vikki, A. L. Välimaa</i>	193
10:15 Coffee Break		
10:45	System level impacts of environmental and social economic optimization-expert analyses of different countries <i>P. Galama, B. Rees</i>	193
11:00	N, P and C efficient use and circularity <i>J. Roche</i>	194
11:15	New York dairy farms: their whole-farm nitrogen and phosphorus balances and greenhouse gas footprints <i>O. Godber, K. Czymmek, K. Workman, Q. Ketterings</i>	194
11:30	Potential use of drones and ICT in livestock farming to deal with environmental sustainability <i>V. Becciolini, M. Merlini, A. Mattia, G. Rossi, L. Conti, M. Barbari</i>	195
11:45	Reducing slurry temperature to lower NH ₃ , N ₂ O and CH ₄ emissions from fattening housing <i>N. Guingand, Y. Rousseliere, J. Thomas, A. Collin</i>	195
12:00	Response of grazing dairy cow production to different grass swards under varying nitrogen fertiliser rates <i>M. H. Bock, Z. C. Mckay, L. Delaby, D. Hennessy, B. Mccarthy</i>	196
12:15	White clover's positive impact in perennial ryegrass swards with reduced nitrogen inputs on milk production and nitrogen use efficiency <i>Á. Murray, H. Irish, L. Delaby, M. O'Donovan, D. Hennessy</i>	196
Poster Session 3 <i>Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00</i>		
03.15	Analysis of nitrogen fertilizer efficiency in rotational grazing: Impact on the quality and productivity of <i>Lolium multiflorum</i> Lam. Forage <i>C. Maduro-Dias, M. Machado, H. Nunes, A. Borba, J. Madruga, P. Monjardino</i>	197
03.16	Variation of in vitro utilisable crude protein in different red clover accessions <i>M. Vaga, D. Parsons, S. J. Krizsan</i>	197

Session 4.**Research on young stock care: the journey of calves from gestation onwards**

Room: Reggiana - Palazzo Affari 2nd Floor

Chair: Costa / Vestergaard

Session Type: Theme session

Theatre Session 4		Book of Abstracts page
8:30	Success with better calves starts well before birth <i>invited M. Winters</i>	198
9:00	Adequate milk feeding of dairy calves <i>H. M. Hammon, L. N. Neal</i>	198
9:15	Growth performance of calves fed milk replacer or dams milk during the first week of life <i>A. M. Vorndran, J. Steinhoff-Wagner</i>	199
9:30	Evaluating early life feeding strategies on the development and health of pre-weaned surplus calves <i>J. Echeverry Munera, S. Marti, M. A. Steele, M. Devant, J. Martin-Tereso, L. N. Leal</i>	199
9:45	Observations on neonatal calves' urine excretion during the first week of life <i>A. M. Vorndran, J. Steinhoff-Wagner</i>	200
10:00	Predicting pre-weaned dairy calf weight from morphometric measurements <i>F. Silva, E. Carreira, J. Ramalho, T. Correia, M. Meira, A. Pereira, C. Conceição, S. Silva, J. Cerqueira</i>	200
10:15 Coffee Break		
10:45	Ultrafiltration enhances the passive immunity properties of low-quality colostrum <i>T. Jarltoft, C. Jessen, T. Larsen, P. Raundal, M. Vestergaard</i>	201
11:00	Impact of growth rate of dairy heifers on long term performance: a quantile regression analysis <i>M. Lamérand, B. Ampe, E. Canniere, K. Goossens, L. Vandaele</i>	201
11:15	Tube ventilation systems for optimizing stable climate in calf barns <i>I. Mösenbacher-Molterer, E. Zentner, C. Schmied-Wagner, J. Neumayer</i>	202
11:30	Relationship between growth parameters of heifers at various stages of rearing and milk production in first lactation <i>A. Garus-Piętak, W. Jagusiak, J. Kański, Z. Kowalski, Z. Lach, P. Górka</i>	202
11:45	Selection for the price of young calves in Italian Simmental breed <i>L. Degano, D. Vicario, M. Wenter, A. Cesarani, N. Macciotta</i>	203
12:00	Effects of undernutrition and hydroxytyrosol supplementation during last third of pregnancy on the immune status of suckler cows and their calves <i>L. López De Armentia, A. Noya, J. L. Alabart, N. Escalera, B. Serrano-Pérez, O. Akesolo-Atutxa, J. Ferrer, A. Sanz</i>	203
Poster Session 4 <i>Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00</i>		
04.13	Undernutrition and hydroxytyrosol supplementation during the final third of gestation modulate immune response and redox balance in newborn beef calves <i>N. Escalera-Moreno, J. Álvarez-Rodríguez, M. J. Martín-Alonso, D. Villalba, E. Molina, L. López De Armentia, A. Sanz, B. Serrano-Pérez</i>	204
04.14	Interplay between pre-partum nutrition and hydroxytyrosol supplementation on calf behavior <i>N. Escalera-Moreno, L. López De Armentia, A. Sanz, A. Noya, I. Blanco-Penedo, E. Molina, B. Serrano-Pérez, J. Álvarez-Rodríguez</i>	204
04.15	Effects of polystyrene nanoparticles on bovine oocyte in vitro maturation <i>B. Merlo, A. M. Volza, P. M. Gugole, E. Iacono</i>	205
04.16	Effects of undernutrition and hydroxytyrosol during last third of pregnancy on newborn vitality and cortisol levels of cow-calf pair <i>L. López De Armentia, A. Noya, J. Ferrer, N. Escalera, B. Serrano-Pérez, G. Quintans, O. Akesolo-Atutxa, A. Sanz</i>	205
04.17	Serum and salivary immunoglobulins associations in newborn calves <i>F. Silva, E. Lamy, L. E. Hernández-Castellano, S. Silva, J. Cerqueira, J. Ramalho, M. González-Cabrera, P. Caetano, E. Carreira, L. Martins, A. Pereira, C. Conceição</i>	206
04.18	Salivary immunoglobulin concentrations (IgG, IgM, and IgA) in calves during the first week of life <i>F. Silva, E. Lamy, L. E. Hernández-Castellano, S. Silva, J. Cerqueira, J. Ramalho, M. González-Cabrera, P. Caetano, E. Carreira, L. Martins, A. Pereira, C. Conceição</i>	206

04.19	Impact of diarrhea and respiratory diseases in calves on reproductive performance in dairy breed heifers <i>M. Gicquel, A. Gaigeard, L. Danjou, F. Guillaume, S. Saille, S. Meier</i>	207
04.20	Pilot study to identify stress level at cow-calf separation after a few days of contact <i>N. Palladini, B. Serena, A. Tamburini, L. Bava</i>	207
04.21	Keeping up with changing standards: A survey on how Canadian farmers currently rear dairy calves <i>E. R. Russell, M. Vonkeyserlingk, D. Weary</i>	208
04.22	Enriching colostrum IgG concentration by ultrafiltration has no negative effects on in vitro cell viability and wound healing capacity <i>T. Jarltoft, S. Purup, M. Vestergaard, Y. Yue</i>	208
04.23	Saccharomyces cerevisiae fermentation products supplementation to dairy calves: effects on growth, metabolism, and immune status <i>M. Sfulcini, V. Lopreato, A. Zontini, I. Yoon, L. Cattaneo, F. Piccioli-Cappelli, E. Trevisi, A. Minuti</i>	209
04.24	Effect of age, undernutrition and hydroxytyrosol supplementation on metabolic stress markers during the last third of gestation in beef cattle <i>N. Escalera-Moreno, J. Álvarez-Rodríguez, M. J. Martín-Alonso, D. Villalba, E. Molina, L. López De Armentia, A. Sanz, B. Serrano-Pérez</i>	209
04.25	Interesting genes and effect of inbreeding depression over traits with economic and productive importance in Rubia Galega beef cattle breed <i>N. Mejuto-Vázquez, C. Hervás-Rivero, R. Rodríguez-Bermúdez, P. Martínez, M. Hermida, D. López-Carbonell, J. Altarriba, L. Varona</i>	210
04.26	Bovine faecal biomarkers of intestinal inflammatory process: calprotectin and lactoferrin, a comparative study <i>Y. Saco, N. Crusellas-Vallorbina, R. Pato, R. Peña, S. Martí, L. Pisoni, M. Devant, A. Pelegrí-Pineda, A. Bassols</i>	210

Session 5.

Innovative and emerging feed and forage resources

Room: Chianina - Palazzo Affari 1st Floor

Chair: Ranilla García / Stergiadis

Session Type: Theme session

Theatre Session 5		Book of Abstracts page
8:30	Effects of goat willow's tannin profile on in vitro methane production and rumen fermentation <i>N. Sari, K. Kliem, L. Whistance, J. Smith, A. Natalello, K. Theodoridou, P. Ray, C. Rymer, S. Stergiadis</i>	211
8:45	Effects of ten freshwater microalgae on in vitro ruminal methane production and digestibility <i>Y. Li, M. Bagnoud, Y. Zhang, C. Kunz, S. Dubois, R. Peng, F. Wahl, M. Niu</i>	211
9:00	In vitro rumen fermentation characteristics of insect processed proteins compared to a conventional protein source <i>M. Ottoboni, I. Mateos, C. Saro, N. Merino, L. De Matos, L. Pinotti, M. J. Ranilla Garcia</i>	212
9:15	Screening of Mediterranean agro-industrial by-products on in vitro ruminal fermentation <i>B. Mora, A. Torrent, A. Vastolo, S. Calabrò, M. I. Cutrignelli, E. Barbier, H. Hoste, V. Niderkorn</i>	212
9:30	Effect of the use of Lactiplantibacillus plantarum strain 5BG and of a commercial mix of polygalacturonase and glucanase on the quality of artichoke bracts silage <i>R. Greco, M. Ferrara, P. De Bellis, F. Giannico, G. Mulè, A. Maggolino, P. De Palo</i>	213
9:45	Effect of conservation length on fermentation characteristics of teff as alternative forage for Mediterranean livestock farming systems <i>R. Primi, R. Spina, F. Luziatelli, M. Ruzzi, U. Bernabucci, F. Manganello, C. Evangelista, F. Lazzari, R. Ruggeri, F. Rossini, A. Benelli, R. Moschetti, A. Brunetti, I. Bottoni, S. Ceci, G. Fabbrizi, P. P. Danieli, B. Ronchi</i>	213
10:00	Understanding gastrointestinal tract transcriptomic adaptations in dairy cattle during lactation reveals molecular tissue and stage specific adaptations <i>invited R. Baldwin, Y. Gao, G. Liu, L. Ma, L. Fang, C. J. Li</i>	214
10:30	Coffee Break	
11:00	Nutritional value of Nannochloropsis oceanica for post-weaning piglets <i>A. Chaves, D. Ribeiro, C. Martins, M. Maia, A. Fonseca, A. Cabrita, R. Bessa, A. Almeida, J. Freire</i>	214
11:15	Growth performance and carcass traits of heavy pigs fed diets with a partial to total replacement of soybean meal with spirulina powder <i>L. Gallo, G. Don, D. Giannuzzi, A. Toscano, S. Schiavon</i>	215

11:30	Soybean meal fermentation: is it worth investigating in Europe? A review <i>V. Heuzé, E. Tormo, I. De La Borde, P. Carré, G. Tran</i>	215
11:45	Extruded or Enzyme-Treated <i>Chlorella vulgaris</i> in Broilers Diets: Effects on Performance and Digesta Viscosity <i>A. Mendes, C. Martins, D. Carvalho, O. Madacussengua, M. Spínola, M. Costa, J. Pestana, J. Ferreira, A. Fontes, A. Almeida, J. Prates, M. Lordelo</i>	216

Poster Session 5

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

05.12	Evaluation of different algae for ruminant feeding <i>C. N. Marcos, A. De Las Heras-Molina, T. De Evan, C. Gómez-Serrano, M. Terré, S. Pérez-Garnelo</i>	216
05.13	In vitro evaluation of discarded carrot and pepper as feed ingredients for ruminants <i>N. Merino, M. Ottoboni, L. G. De Matos, I. Mateos, C. Saro, M. J. Ranilla</i>	217
05.14	In vitro evaluation of discarded leek as feed ingredients for ruminants <i>N. Merino, M. Ottoboni, L. G. De Matos, I. Mateos, C. Saro, M. J. Ranilla</i>	217
05.15	Use of sunn hemp as forage for beef cattle <i>J. Vendramini, J. Lazarin, M. L. Silveira, H. Da Silva, H. De Oliveira, J. Garzon, D. Cook, D. Gardner, R. Cooke, P. Moriel</i>	218
05.16	Assessment of the potential of BSF meal in broiler chicken feed <i>A. Monteiro, T. Mariano, S. Botelho, A. Santos</i>	218
05.17	Intercropping cash and forage crops to improve the land equivalent ratio of Mediterranean organic cereal-based systems <i>D. Scordia, M. Oteri, F. Calderone, F. Gresta</i>	219
05.18	Nutritional quality of feed resources used by smallholder dairy farmers in the Northern Province of Rwanda <i>M. A. Mukasafari, M. Mutimura, E. Wredle, H. Gonda</i>	219

Session 6.

Advances in ruminant nutrition, Part 1

Room: Maremmana - Palazzo Affari 2nd Floor

Chair: Ranilla García / Foggi

Session Type: Theme session

Theatre Session 6

Book of Abstracts page

8:30	Cu, Zn, and Mn sources effect on 48 hour in-vitro fermentation and CH ₄ production <i>C. B. Peterson, G. M. Boerboom, J. S. Heldt, K. E. Griswold, J. Johnston</i>	220
8:45	Factors affecting the in vitro kinetics of total gas and methane in dairy cows using Gas Endeavor System <i>R. Iqbal, J. Bisello, S. Arango, N. Guzzo, F. Tagliapietra, L. Bailoni</i>	220
9:00	Impact of low-density polyethylene microplastic on ruminal degradability of feeds <i>S. Glorio Patrucco, K. Abid, S. Barbera, H. Kaihara, S. Tassone</i>	221
9:15	Rumen contents from slaughtered cattle and sheep to study in vitro degradation of selected feeds <i>A. Chaudhry</i>	221
9:30	Reducing lactating cows dietary sodium to reduce environmental cost of dairy farms <i>D. Espinoza, S. Mabeesh, Y. Ben Meir</i>	222
9:45	Replacing hexane by 2-methyloxolane for defatting soybean meal does not impair fattening performance of beef cattle supplemented with methionine <i>C. García-Vázquez, V. Menoury, P. Faure, L. Salis, A. Ferlay, P. Noziere, G. Cantalapiedra-Hijar</i>	222
10:00	2-methyloxolane can replace hexane for defatting soybean meal fed to cows without affecting dairy performance, rumen volatile fatty acid proportions and major fatty acid secretion in milk <i>V. Menoury, P. Nozière, G. Leday, J. Engel, A. Ferlay</i>	223
10:15	Coffee Break	
10:45	Effects of pre- and postpartum dietary management on performance in dairy cows <i>M. V. Sanz-Fernandez, D. J. Seymour, R. Rauch, J. B. Daniel, J. Doelman, J. Martin-Tereso</i>	223
11:00	Resilience to acute underfeeding in dairy ewes diverging in feed efficiency: rumen dimethyl acetal composition <i>P. G. Toral, S. Alves, R. J. B. Bessa, P. Frutos, G. Hervás</i>	224

11:15	How does lamb feeding management during early life and high-cereal finishing affect the rumen trans fatty acid profile at weaning and the end of the fattening period? <i>L. Fialho, O. Guerreiro, S. Alves, R. Bessa, E. Jerónimo</i>	224
11:30	Micronutrient Supply, Developmental Programming, and Strategic Supplementation <i>invited J. S. Caton</i>	225

Session 7.

Emerging practices and tools in horse production

Room: Romagnola - Palazzo Affari 1st Floor

Chair: De Palo / Tapprest / Vial / Auclair-Ronzaud

Session Type: Free communications (bottom-up)

	Theatre Session 7	Book of Abstracts page
8:30	How can the seasonal climate changes influence horse's health and welfare in the extensive farming system? <i>E. Atallah, F. Cerasoli, M. G. Riva, V. Antognoli, G. Saluti, F. Castellani, A. Manucci, G. Centorotola, M. Podaliri, L. Iannetti, E. Dalla Costa</i>	225
8:45	Omic evaluation of resilience and adaptation to the combination of heat and exercise stressors in horse athletes <i>S. Mecocci, F. Beccati, E. Chiaradia, M. Pepe, F. Passamonti, E. Porzio, A. Paris, G. Chillemi, K. Cappelli</i>	226
9:00	Agonistic interactions at straw racks in group-housed horses <i>N. Puttkammer, F. Hildebrandt, J. Krieter, I. Czycholl</i>	226
9:15	Milking procedure and frequency: what influence on mares and foals behaviour? <i>J. Auclair-Ronzaud, M. Bouchet, L. Wimmel, S. Henry</i>	227
9:30	Effect of antioxidant supplementation on faecal microbiota of horses at different exercise levels <i>A. Ramírez, S. Gómez Acata, O. Gaona-Pineda, L. Falcón Álvarez, A. Ramírez</i>	227
9:45	A possible mathematical approach to predict forage digestibility from faecal particle size distribution in horses <i>T. Danese, F. Martuzzi, M. Simoni, E. Valle, F. Righi</i>	228
10:00	Effect of phytochemicals on cyathostomins ecological interactions <i>J. Malsa, A. Chereau, F. Guégnard, D. Serreau, A. Gesbert, F. Reigner, N. Mach, G. Fleurance, A. Williams, G. Sallé</i>	228
10:15	Coffee Break	
10:45	Possibilities and prerequisites for digital-technical systems in horse husbandry <i>L. T. Speidel, U. Dickhoefer, D. Winter</i>	229
11:00	Air quality welfare factors in horse husbandry - Dusk pollution and digital technology <i>H. Unsel, E. Gallmann, D. Winter</i>	229
11:15	Evaluation of shelter design on equine rhythmicity <i>S. Rey, H. R. Nasser, M. Cockburn</i>	230
11:30	Time-controlled hay racks in group-housed horses: What ratio of horses to feeding places is appropriate? <i>M. Baumgartner, M. Erhard, M. Zeitler-Feicht</i>	230
11:45	Thermographic Images as a Diagnostic Tool for Equine Headshaking Syndrome <i>L. M. Stange, J. Krieter, I. Czycholl</i>	231
12:00	Anatomical bridles, do they really alter and reduce pressure distribution on the horse's head? <i>R. Clarke, G. Cross, M. Entwistle, M. Leftherioti</i>	231
12:15	The possibilities of using genomic information in the selection of horses for meat production <i>M. Šimon, A. Kaić, B. Luštrek, K. Potočnik</i>	232
	Poster Session 7 <i>Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00</i>	
07.15	Influence of head hair whorls on behavioral measurements assessed with infrared thermography and behavioral surveys <i>A. Encina, M. Valera, M. Liger, E. Bartolomé, M. J. Sánchez-Guerrero</i>	232

Session 8.

Innovative approaches to pig and poultry production

Room: Piemontese - Palazzo Affari 2nd Floor

Chair: Verschuren / Nilsson

Session Type: Early-career Scientists's session

	Theatre Session 8	Book of Abstracts page
8:30	Inter- and transgenerational impacts of in ovo nutriepigenetic intervention on chicken male gonadal transcriptome <i>M. Ibrahim, E. Grochowska, M. Bednarczyk, K. Stadnicka</i>	233
8:45	Early life profiling of weaning robustness using productive performance and gut microbiota composition <i>J. M Ortiz Sanjuán, M. As Ornelas, L. O'Neill, G. Lemonnier, M. N Rossignol, D. Leong, F. Crispie, P. D Cotter, E. G Manzanilla, J. Estellé</i>	233
9:00	Intestinal health status and dietary spray dried porcine plasma inclusion on faecal calprotectin and performance in weaned piglets <i>J. Suppi, E. Llauradó-Calero, P. Aymerich, A. Pelegrí-Pineda, Y. Saco, A. Bassols, D. Solà-Oriol</i>	234
9:15	In pursuit of a self-assembling protein decoy to counter Enterotoxigenic Escherichia coli F4+ strains causing piglet post-weaning diarrhea <i>T. Rossi, P. Trevisi, P. Costantini, M. Calvaresi, A. Carboni, A. Danielli</i>	234
9:30	Oral alternatives for intramuscular iron administration in suckling pigs <i>S. Goethals, K. Hertogs, K. Buyse, K. Hooyberghs, N. Buys, S. Janssens, J. Van Meensel, S. Millet</i>	235
9:45	Effect of authorized level of Zn supplied in three different forms on the physiology and performance of piglets weaned at different age <i>C. Negrini, D. Luise, F. Correa, S. Viridis, M. Mazzoni, A. Romeo, A. Monteiro, P. Trevisi</i>	235
10:00	Uncovering the genetic background of porcine congenital splay leg syndrome in piglets <i>J. De Kort, W. Gorssen, R. Meyermans, S. Janssens, N. Buys</i>	236
10:15	Coffee Break	
10:45	Interobserver reliability of different methods to evaluate sows' body condition <i>R. Carnevale, K. Segers, N. Nollet, A. Cools, G. Janssens, S. Millet</i>	236
11:00	The secret of each sow: exploring the impact of sow and litter features on within-litter uniformity <i>K. Hooyberghs, S. Goethals, W. Gorssen, L. Chapard, R. Meyermans, N. Aerts, S. Millet, S. Janssens, N. Buys</i>	237
11:15	Effect of top-dressed arginine supplementation in different gestation periods and seasons on the colostrum composition and productive performance of sows and piglets <i>S. Viridis, D. Luise, F. Correa, L. Laghi, F. Palumbo, C. Negrini, G. Orazzo, M. V. Graziosi, U. Rolla, P. Trevisi</i>	237
11:30	Impact of replacing diet soybean with spirulina on blood metabolic profile of heavy pigs <i>A. Toscano, D. Giannuzzi, G. Don, S. Schiavon, L. Gallo</i>	238
11:45	Effect of soybean reduction and crude protein restriction on the performance of fattening pigs <i>M. Graziosi, D. Luise, F. Correa, S. Viridis, F. Palumbo, F. Soglia, M. Petracci, C. Negrini, G. Biagi, P. Trevisi</i>	238
12:00	Analysis of the effects of temporary outdoor access during the fattening phase on pig welfare, health and growth <i>A. Jahoui, S. Gavaud, J. Lion, K. Haurogné, F. Guiraud, T. Terrasson, B. Lieubeau, C. Tallet, J. Hervé</i>	239
12:15	Effects of different olive cakes inclusion in the diet of the Bísaros pigs on the chemical composition and fatty acids profile of Biceps Femoris muscle <i>J. Paié-Ribeiro, V. Pinheiro, A. Teixeira, C. Guedes, M. J. Gomes, J. Teixeira, O. M. Divanildo</i>	239
	Poster Session 8 <i>Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00</i>	
08.15	In vitro metabolic footprint and interaction with intestinal cells of candidate probiotic and prebiotics for poultry <i>S. Zuo, K. Grudlewska-Buda, K. Skowron, W. Studziński, P. Kosobucki, K. Guinan, J. T. O'sullivan, K. Stadnicka</i>	240
08.16	Effects of maternal antioxidant supplementation on the development of the offspring's ovaries <i>A. Heras-Molina, G. Gómez, H. Laviano, M. Muñoz, J. García-Casco, R. Benítez, F. Sánchez-Esquiliche, A. González-Bulnes, A. Rey, C. López-Bote, C. Óvilo</i>	240

Session 9.**Alternative production systems and free communications in animal behaviour and welfare**

Room: Podolica - Limonaia - Garden

Chair: Holinger / Blanco-Penedo

Session Type: Theme session

Theatre Session 9		Book of Abstracts page
8:30	Farm animal health and welfare at the heart of agroecological livestock system priorities: proposed research questions to contribute to this objective <i>invited X. Fernandez</i>	241
9:00	Slow and local or fast and global – examining business opportunities to advance good welfare practices in organic and outdoor farming <i>J. Niemi, M. Väre, P. Thobe, A. Collin</i>	241
9:15	Behaviour and health of entire male pigs in a semi-natural habitat <i>H. Zobrist, B. Früh, M. Garcia, M. Holinger</i>	242
9:30	Assessment of welfare of dromedary camels kept under pastoralism in Pakistan <i>B. Padalino, A. Faraz, N. A. Tauqir, A. Waheed, A. R. Abbasi, N. Masebo, L. Menchetti</i>	242
9:45	Ensuring good animal welfare in extensive farming systems: lessons from dairy farmers in Canterbury, New Zealand <i>K. Alvåsen, K. Bicknell</i>	243
10:00	Organic pig production in mixed free-range systems: the ROAM-FREE project <i>D. Bochicchio, L. Deiana, A. Wibe, B. Blomstrand, T. Ruud, R. Helliwell, M. Koesling, A. G. Kongsted, M. Štukelj, M. Spinu, A. Vasiu, A. Williams, A. C. Pedersen, H. Mejer, S. Thamsborg</i>	243
10:15 Coffee Break		
10:45	On-farm animal welfare assessment in slaughter pigs across different production systems in four European countries <i>M. L. V. Larsen, L. J. Pedersen, Consortium mEATquality, T. Rousing</i>	244
11:00	Navigating the complexity of boar taint detection: Advancing towards a castration-free future for piglets <i>L. Morgan, T. Ignat, M. Font-I-Furnols, N. Panella-Riera, R. I. D. Birkler</i>	244
11:15	Automated monitoring of pig and chicken welfare at the slaughterhouse – tracing back to farm, transport and slaughter <i>F. Tuytens, J. Maselyne, & Awish-Consortium</i>	245
11:30	Reliability of different behavioral tests as welfare indicator for dairy cows <i>P. Hasenpusch, T. Wilder, C. Straßburg, S. Menke, J. Krieter, G. Thaller, I. Czyncholl</i>	245
11:45	Welfare protocols for rabbits <i>M. Almeida, S. Silva</i>	246
12:00	Behaviour of laying hens of two genotypes in a cage-free system enriched with hay bales <i>C. Ciarelli, F. Bordignon, G. Pillan, G. Xiccato, A. Trocino</i>	246
Poster Session 9 <i>Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00</i>		
09.13	Improvement of the welfare of Iberian cull sows fattened through the immunocastration <i>J. García-Gudiño, F. Hernández-García, M. Izquierdo, I. Blanco-Penedo</i>	247
09.14	Impact of outdoor farming on pig welfare: insights from a study in Italy <i>L. Deiana, S. Santini, D. Bochicchio</i>	247
09.15	Could a low input/low output forage-based system be the solution for future organic dairy production? An exploration of the concept of a LILO production system <i>A. Hägglund, K. Alvåsen, N. Fall, R. Danielsson, P. Tidåker</i>	248
09.16	First evaluation of the CLASSYFARM welfare assessment protocol applied in extensive farming systems in Central Italy <i>R. Primi, V. D'Onofrio, A. Macciocchi, G. De Vittoris, G. Saralli, T. Galli, C. Di Giovannantonio, B. Ronchi</i>	248
09.17	Season effects on somatic cell count as an indicator for mastitis in Romanian Spotted cows <i>D. E. Ilie, A. E. Mizeranschi, C. V. Mihali, R. I. Neamt, L. T. Csiszter</i>	249

- 09.18 Environmental enrichment in rabbit generations: Impact on behavior and performance 249
G. K. Nakamura, D. Alencar, K. G. Silva, L. B. Costa, R. R. Daros
- 09.19 Animal welfare: perceptions and practice evolution in the broiler production in France – A pilot study 250
C. Lesimple, T. Petit, C. Dezetter

Session 10.

Livestock are more than food, Part 1

Room: Marchigiana - Palazzo Affari Ground floor

Chair: Lee / O'Mara

Session Type: Challenge session

	Theatre Session 10	Book of Abstracts page
8:30	Livestock are more than food: welcome and introduction <i>invited F. O'Mara, M. R. Lee</i>	250
8:45	Role of livestock in circular bioeconomy systems <i>invited T. Mcallister, B. Amon, L. Tag, P. Becquet</i>	251
9:15	Beyond edibles: unveiling the full socio-economic value of animal production through non-food products in circular economy designs <i>invited L. Cembalo</i>	251
9:45	Genetic determinism of quality of lamb leather in Lacaune dairy sheep breed <i>L. Drouilhet, E. Dugas, F. Woloszyn, F. Plisson-Petit, J. Gayraud, J. C. Duchêne, J. Frayssignes, A. Gille, S. Brenot, D. Allain, H. Larroque</i>	252
10:00	A systemic description of the dairy value chain's contribution to inclusive sustainable development in highland 252 <i>A. Ceppatelli, C. Pozo, C. Bonnet, M. Vogg, P. Strankman, L. Wedderburn, E. Sturaro</i>	
10:15	Coffee Break	
10:45	What is the performance of a low-input sheep flock integrated into an agroecological field crop system? <i>M. Benoit, T. Boistard, O. Brodin, D. Marcon, L. Sagot, J. Boucherot</i>	253
11:00	Livestock manure for fertiliser and biofuels <i>invited H. Bjarne Møller</i>	253
11:30	Cow's Milk – Going beyond basic nutrition to harness functional components <i>invited P. Cotter</i>	254
11:45	Evolving standards: ethical perspectives on animal welfare in agroecology <i>invited J. Goracci</i>	254
12:00	Panel discussion <i>invited M. R. Lee, F. O'Mara</i>	255

Session 11.

Insect nutrition

Room: Rendena - Palazzo Affari 4th Floor

Chair: Bellezza Oddon / De Smet

Session Type: Theme session

	Theatre Session 11	Book of Abstracts page
8:30	Growth performance of black soldier fly (<i>Hermetia illucens</i>) reared on substrate mixtures from regional agricultural and food production side-streams <i>T. Freimuth, M. Mielenz, G. Das, L. Hüther, S. Dänicke, C. C. Metges</i>	255
8:45	Fortification of circular substrate for black soldier fly with zinc and/or selenium: effect on growth performances <i>A. Moradei, M. Ottoboni, C. Jucker, S. Savoldelli, S. Malabusini, A. Luciano, L. Pinotti</i>	256
9:00	Optimal balance between protein and carbohydrate in industrial diet for black soldier fly larvae (<i>Hermetia illucens</i>) <i>J. De Montigny, C. Brouzes, F. X. Boulanger</i>	256
9:15	Evaluating amino acid requirements of neonatal black soldier fly larvae <i>C. Sandrock, J. Wohlfahrt, T. Stadtländer, F. Schindler, M. Hardick, M. Terranova, C. Lambertz, A. Lemme</i>	257

9:30	Amino acid requirements of the black soldier fly larvae (<i>Hermetia illucens</i>) <i>I. E. Berggreen, M. L. Schön, J. V. Nørgaard, K. Jensen</i>	257
9:45	Growth performance of black soldier fly larvae on high fibrous residual streams pretreated by composting and fungi <i>T. Veldkamp, E. Hoek - Van Den Hil, P. Van Wikselaar, E. De Lange, L. Francuski, R. Zheng, S. Naser El Deen</i>	258
10:00	Fat chemical characteristics of the Black soldier fly larvae fed different diets <i>M. Tognocchi, S. Tinagli, G. Foggi, A. Serra, M. Mele, G. Conte</i>	258
10:15	Coffee Break	
10:45	Fatty acid profile of black soldier fly larvae reared on winery by-products <i>M. Renna, C. Lussiana, L. Livorsi, M. Mele, G. Conte, L. Gasco</i>	259
11:00	Efficiency of rearing yellow mealworms (<i>Tenebrio molitor</i> L.) on fibre-rich composted and mycoremediated residual streams <i>S. Naser El Deen, E. F. Hoek - Van Den Hil, P. Van Wikselaar, E. De Lange, N. Steeghs, T. Veldkamp</i>	259
11:15	New life for rice by-products through yellow mealworm bioconversion <i>A. Resconi, S. Bellezza Oddon, Z. Loiotine, R. L. Passaro, K. Y. Mendez Rondo, L. Gasco, J. Bacenetti, I. Biasato</i>	260
11:30	Optimizing the reproduction of <i>Tenebrio molitor</i> <i>D. Deruytter, J. Claeys, C. L. Coudron</i>	260
11:45	Comparative larval growth of <i>Alphitobius diaperinus</i> populations on various substrates <i>G. V. Baliota, N. Steeghs, C. I. Rumbos, C. G. Athanassiou</i>	261
12:00	Black soldier fly: progress and challenges <i>invited A. Van Huis</i>	261

Poster Session 11

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

11.14	Assessing the optimal carbon-to-nitrogen ratio to improve black soldier fly larvae production for future use as animal feed <i>T. Thiabching, S. Okrathok, C. Pukkung, M. Sirisopapong, S. Khempaka</i>	262
11.15	Promoting insect farming sustainability with the utilization of oilseed presscakes as nutrient-rich feed for <i>Tenebrio molitor</i> larvae <i>C. Chrysanthopoulou, C. Adamaki-Sotiraki, C. Rumbos, C. Athanassiou</i>	262
11.16	Performance and bioconversion of black soldier fly across different content of fiber and protein in the substrates <i>A. Hosseindoust, S. R. Park, S. D. Choi, P. Neves-Silvestre, H. Tajudeen, J. S. Kim</i>	263
11.17	Nutritional profiling and efficiency of black soldier fly bioconversion across different substrates and developmental stages <i>S. H. Ha, A. Hosseindoust, S. R. Park, S. A. Park, S. D. Choi, J. S. Kim</i>	263
11.18	Fatty acid composition of <i>Hermetia illucens</i> larvae grown on different expired wet pet-food <i>G. Secci, L. F. Pulido Rodriguez, M. V. Tignani, A. C. Lira De Medeiros, N. F. Addeo, F. Bovera, G. Parisi</i>	264
11.19	Effects of herbs dietary inclusion on growth performance and nutrient composition of <i>Tenebrio molitor</i> larvae <i>A. Moradei, T. Spranghers, D. Deruytter, M. Ottoboni, L. Pinotti</i>	264

Session 12. Effectiveness of breeding programs for local breeds in the Mediterranean region and other harsh environments

Room: Calvana - Palazzo Congressi Ground floor

Chair: Hadjipavlou / Ligda

Session Type: Working Group session

Theatre Session 12

Book of Abstracts page

8:30	Prospects of breeding programs for small ruminant breeds in the Mediterranean region <i>invited A. Carta, G. Hadjipavlou, C. Ligda</i>	265
9:00	Derivation of economic weights for sheep breeding goal traits considering production system characteristics <i>J. Oberpenning, K. Brügemann, S. König</i>	265

9:15	Intra-island patterns of genetic divergence in Cyprus Chios sheep: minimizing genetic background noise to enable more precise genetic improvement <i>G. Maimaris, A. C. Dimitriou, L. Koniali, T. Christofi, P. Markou, S. Andreou, S. Panayidou, P. Savvides, G. Hadjipavlou</i>	266
9:30	Genomic analysis of dominance and inbreeding effects on milk production traits in Pag sheep <i>C. Rochus, M. Špehar, A. Kasap, Z. Barač, J. Ramljak, I. Pocrnic</i>	266
9:45	Evaluation of crossbreeding potential in heavy suckling lambs obtained by crossbreeding Sarda dairy ewes with Dorper rams <i>M. F. Lunesu, A. Fenu, A. Mazza, R. Rubattu, M. R. Mellino, S. Carta, G. Battacone, A. Nudda</i>	267
10:00	Using genotypes from Australia's numerically smaller sheep breeds to expand the genomic reference population <i>P. Alexandri, P. Gurman, K. Gore, R. Macarthur-Onslow, D. Brown</i>	267
10:15 Coffee Break		
10:45	Phenotypic and genetic parameters of lactation persistency and milk yield of patch-faced Maritza sheep breed <i>P. Zhelyazkova, D. Dimov, H. Grosu</i>	268
11:00	Enhancing breeding programs for local breeds in challenging environments: insights and innovations <i>invited S. Savoia, A. Schurink, S. Kumar, B. Santos, T. Byrne, P. Amer</i>	268
11:30	Genomic insights into Milk Coagulation Properties and Curd Firmness in Pag Island Sheep: a Genome-Wide Association Study <i>F. Oštarič, M. Ferenčaković, L. Vostry, N. Amalfitano, G. Bittante, I. Držaić, V. Cubric-Curik, V. Brajković, I. Curik, N. Mikulec</i>	269
11:45	Estimation of genetic parameters for fertility and prolificacy in the Lacaune meat sheep population carrying a hyperprolific gene <i>E. Cobo, L. Bodin, J. Raoul</i>	269
12:00	Early-life trait effects on the reproductive performance of Cyprus Damascus goats <i>L. Koniali, S. Andreou, T. Christofi, G. Hadjipavlou</i>	270

Poster Session 12

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

12.12	Benefit of including female genotypes in the reference population of French Lacaune dairy sheep, a simulation study <i>B. De Laet, P. Arzac, J. Raoul</i>	270
12.13	Genetic diversity of related sheep breeds Sarda and Pag <i>L. Falchi, C. M. Rochus, M. Špehar, J. Ramljak, A. Kasap, N. P. P. Macciotta, A. Cesarani, I. Pocrnic</i>	271
12.14	Using cryptorchid rams to induce a ram effect in a flock of ewes and successful insemination upon natural heat <i>C. Nassif, L. Mara, F. Chessa, F. Melis, M. Gallus, A. Ledda, M. Dattena, A. Cannas</i>	271
12.15	Quantitative-genetic characterization of wool quality traits in German Merino <i>N. Zimmermann, M. Schmid, J. Bennewitz, W. Pflanz</i>	272
12.16	Evaluation of milk quantity and quality traits using BLUP models and longitudinal lactation records of a Cyprus Damascus Goat population <i>S. Andreou, L. Koniali, S. Panayidou, G. Hadjipavlou</i>	272

Session 13. Sensing Physiology: Tools towards optimising livestock husbandry

Room: Modicana - Palazzo Affari 3rd Floor

Chair: Montanholi / Garcia-Roche

Session Type: Theme session

Theatre Session 13

Book of Abstracts page

8:30	Adoption of computer vision algorithms to monitor respiratory rates in dairy cattle <i>invited P. Curti, A. Souza, D. Pinto, A. Ruiz, L. Kobayashi, J. Balieiro, A. Castanheira, E. Souza, F. Renno, R. Ventura</i>	273
9:00	A novel method to differentiate and profile ruminal vs. breath volatile organic compounds for metabolic assessment in dairy cows <i>M. Barrientos-Blanco, M. Islam, R. Peng, S. Räisänen, F. Wahl, R. Zenobi, S. Giannoukos, M. Niu</i>	273

9:30	Development of an HPLC method for the quantification of allantoin, creatinine and uric acid in Holstein cows' urine <i>E. Visentin, S. Magro, S. Sabbadin, G. Niero, M. De Marchi</i>	274
9:45	The volatilomic signature differs between primiparous and multiparous cows across different matrices <i>E. Jorge-Smeding, C. Martin, L. Volmerange, Y. Rochette, F. Violleau, N. Salah, M. Silberberg</i>	274
10:00	Individual response of dairy cattle to heat waves: phenotypic and genotypic characterization <i>R. Cresci, A. Cesarani, N. P. P. Macciotta, A. S. Atzori</i>	275
10:15	Coffee Break	
10:45	Supplementing Bovacillus to weaned beef steers during a 90-day grazing period <i>R. Cooke, S. Mackey, F. Cooke, A. Pickett, K. Harvey, B. Karisch, B. Cappellozza</i>	275
11:00	Development of a proxy to estimate individual daily DMI of Belgian Blue bulls using fecal NIR spectra <i>L. Le Gall, V. Decruyenaere, E. Henrotte, F. Gueret, N. Lorant, M. Khamassi, A. Vanlierde</i>	276
11:15	Early post-mortem discrimination between grass- and grain-fed beef cattle using muscle lipid biomarkers <i>D. S. Antonelo, M. E. O. Santos, L. R. Oliveira, W. Maccalman, C. F. Ramires, J. C. C. Balieiro</i>	276
11:30	Continuous monitoring of glycaemia to detect variations in intermediary metabolism during night and day cycles in growing pigs <i>C. Xavier, C. H. Malbert, S. Brajon, F. Gondret</i>	277
11:45	Faecal microbiota and stillbirth rate in sows <i>T. L. Nowland, R. J. Moore, T. T. H. Van, K. J. Plush</i>	277
12:00	Prediction of the daily nutrient requirements of gestating sows based on behavioural sensor data and machine-learning algorithms <i>M. Durand, C. Largouët, L. Bonneau, J. Y. Dourmad, C. Gaillard</i>	278
12:15	Comparison of stress markers for measuring heat stress of meat type ducks <i>S. J. Lim, S. N. Chun, K. Y. Yang, C. H. Kim, J. H. Jeon</i>	278

Poster Session 13

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

13.13	A meta-analysis assessed factors affecting milk components and intake in response to metabolizable methionine fortification using INRA 2007 <i>L. Bahloul, S. Lemosquet, C. Loncke</i>	279
-------	---	-----

Session 14. Integration of PLF and context data to improve decision making

Room: Sarda - Palazzo Affari Below ground Floor

Chair: Foy / Maroto

Session Type: Theme session

	Theatre Session 14	Book of Abstracts page
8:30	Moo-ving forward: AI's role in transforming dairy calf care <i>invited M. Cantor</i>	279
9:00	New directions on precision management for dairy cows <i>C. Gaillard, J. Abarnou, O. Martin</i>	280
9:15	Improved monitoring with historical data, expert knowledge and context measures integration applied to dairy cow heat stress <i>I. Adriaens, H. P. Doekes, M. Gote, B. Aernouts, J. Verwaeren</i>	280
9:30	Integrating IMU wearable sensor data for enhanced PLF in dairy calves <i>D. Foy, M. Brause, T. Smith, J. Reynolds</i>	281
9:45	Designing a local-level data space platform as a strategic approach to reduce human-wildlife conflicts in rural Italy <i>M. Odintsov Vaintrub, P. Di Giuseppe, D. Chavez, O. Corcho</i>	281
10:00	Quantifying beef cattle grazing behaviour using Sentinel-2 data in South Africa's Strandveld region <i>W. Hough, C. J. Harmse, T. S. Brand, J. H. Van Zyl</i>	282
10:15	Coffee Break	

10:45	LiDAR technology as a contactless tool for quantitative analysis of body condition score in beef cattle <i>S. Marchegiani, S. Chiappini, M. Pasquini, A. Ragaini, M. F. Trombetta, E. Marchegiani, S. Ceccobelli</i>	282
11:00	Early lactation body condition and milk production affects fertility performance in dairy cows <i>D. Meuwissen, M. J. Gote, I. Adriaens, B. Aernouts</i>	283
11:15	Digital and precision livestock farming (PLF) technologies: gaps between sheep and goat farmers' needs and existing solutions <i>C. Morgan-Davies, A. McLaren, L. Grova, V. Giovanetti, L. Depuille, T. W. J. Keady, B. Mcclern, R. Klein, A. Godo, I. Halachmi, P. Piirsalu, I. Llach, J. M. Gautier, F. Kenyon</i>	283
11:30	Using accelerometers for goat activity monitoring <i>M. Bonneau, L. Faillot, W. Troupe, L. Riaboff</i>	284
11:45	IntelliRAS – some results from a project on precision fish farming in recirculation aquaculture systems <i>L. Foldager, V. M. Thorup, M. Pastell, M. Frandsen, B. Bang Jensen, M. A. Krogh</i>	284
12:00	Optimizing Disease Risk Classification: A Data-Integrative Approach <i>C. Matzhold, K. Schodl, C. Egger-Danner</i>	285
12:15	Assessing the future uptake of digital tools and technologies by sheep and goat farmers in the meat and dairy industries <i>A. McLaren, L. Grøva, A. De Boer, T. W. Keady, B. Mcclern, G. Valeria, M. Acciaro, L. Depuille, R. Klein, A. Godo, P. Piirsalu, F. Kenyon, I. Halachmi, I. Llach, C. Morgan-Davies</i>	285

Poster Session 14

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

14.14	Web platform for technical and economic comparisons of environmentally beneficial practices and investments in pig, poultry, and cattle farming <i>P. Levasseur, V. Blazy, L. Jarrige De La Sizeranne, S. Bourrin</i>	286
14.15	CowBase: a Python package for streamlining data management in dairy farming <i>M. J. Gote, M. Ceccarelli, D. Meuwissen, L. D'Anvers, B. Aernouts, I. Adriaens</i>	286
14.16	Improving conception rates for farms with a milk progesterone sensor <i>D. Meuwissen, M. J. Gote, I. Adriaens, B. Aernouts</i>	287

Session 15. Role of bioinformatics applied to livestock data - Exploiting structural variation and pangenome-based techniques for livestock

Room: Auditorium - Palazzo Congressi Lower Ground Floor

Chair: Pocrnic / Bickhart

Session Type: Theme session

	Theatre Session 15	Book of Abstracts page
14:00	Genotyping complex structural variants using a Chicken Pangenome reference <i>invited D. Bickhart, E. Rice, L. Frantz, W. Warren</i>	287
14:30	Construction of a cattle pangenome for 14 French dairy and beef breeds provides new insights into their genetic diversity <i>V. Sorin, M. P. Sanchez, C. Iampietro, C. Ech�, A. Suin, C. Marcuzzo, L. Drouilhet, D. Milan, G. Tosser-Klopp, C. Donnadieu, C. Gaspin, C. Birbes, C. Klopp, D. Boichard, M. Bousaha</i>	288
14:45	Construction and characterization of a comprehensive ovine pangenome from 11 breeds provides new insights into their genetic diversity <i>V. Sorin, C. Birbes, C. Ech�, C. Marcuzzo, J. Sarry, A. Suin, C. Donnadieu, C. Gaspin, C. Iampietro, D. Milan, C. Klopp, M. Bousaha, L. Drouilhet, M. P. Sanchez, G. Tosser-Klopp</i>	288
15:00	Translocations associated with gonadal hypoplasia and colour-sidedness are common in northern Swedish cattle breeds <i>J. Hinken, T. Vanhala, M. G�dia, M. Johnsson, A. M. Johansson</i>	289
15:15	Uncovering functional INDELS leading to alternative splicing in grazing sheep with different immune profiles exposed to gastrointestinal nematode infection <i>S. Cunha, F. Schenkel, B. Mallard, N. Karrow, �. C�novas</i>	289
15:30	SNP-based identification of Robertsonian translocation 1;29 in 32 Italian cattle breeds <i>M. Cortellari, A. Bionda, L. Liotta, P. Parma, P. Crepaldi</i>	290
15:45	Coffee Break	

16:15	Determining differential splice junction usage in the suckling lamb adipose transcriptome by comparing perirenal and tail fat	290
	<i>M. Alonso-García, B. Gutiérrez-Gil, P. A. Fonseca, R. Pelayo, J. J. Arranz, A. Suárez-Vega</i>	
16:30	Exploiting WGCNA to analyse the suckling lamb liver transcriptome profiles of males and females	291
	<i>M. Vrcan, A. Suarez-Vega, P. A. S. Fonseca, M. Alonso-García, J. J. Arranz, B. Gutierrez-Gil</i>	
16:45	The genotypes of Myostatin gene are associated with weight gain indicators of intensively fattened lambs of Latvian sheep	291
	<i>I. Trapina, S. Plavina, N. Krasnevskā, J. Paramonovs, D. Kairisa, N. Paramonova</i>	
17:00	Estimating haplotype and mutation effects in the context of genome sequence via ancestral recombination graphs	292
	<i>G. Mafra Fortuna, J. Obšteter, A. Moškrič, G. Gorjanc</i>	
17:15	Genomic prediction using functional annotations and QTL features in dairy and beef cattle breeds	292
	<i>P. Croiseau, F. Mollandin, A. Rau, M. P. Sanchez, D. Boichard</i>	
17:30	A genome-wide association study to identify novel genomic regions associated for aviary with winter garden usage by laying hens	293
	<i>K. Hoeksema, C. Baes, S. Gebhardt-Henrich, M. Petelle, M. Toscano, B. Mankanjuola</i>	
17:45	Detecting NGT Products: The Role of the GenEdit Database	293
	<i>F. Debode, V. Gelhay, G. Cartik, A. Granados, E. Clark, H. Mbaya, J. Hulin</i>	

Poster Session 15

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

15.14	The Genome sequence of the Nguni Sheep, <i>Ovis aries</i>	294
	<i>L. T. Nesengani, S. Mdyogolo, T. Ebenezer, A. Djikeng, T. Masebe, A. Muigai, J. Rees, N. Mapholi</i>	
15.15	Whole Genome Sequencing of Aosta cattle to assess breed genomic diversity	294
	<i>F. Bernini, M. Vevey, V. Blanchet, A. Bagnato, M. G. Strillacci</i>	

Session 16. Genomic selection tools for within- and across- herd management in livestock species

Room: Pisana - Palazzo Congressi 2nd Floor

Chair: Kargo / Lourenco

Session Type: Theme session

	Theatre Session 16	Book of Abstracts page
14:00	Genetic diversity of local chickens in the Mediterranean area: Morocco, Algeria and Tunisia	295
	<i>S. Ait Tizi, S. Simma, A. Ouhrouch, M. Milanese, B. Badaoui, M. Benbati, B. El Amiri, M. Ibbelbachyr, E. M. Sekkour, O. Mahir, N. Tabet-Aoul, F. Z. Mahammi, S. B. S. Gaouar, M. Ben Larbi, E. Somenzi, M. Tixier-Boichard, P. Ajmone Marsan, B. Benjelloun</i>	
14:15	A genomic-based approach to redefine herd book information in two local cattle breeds	295
	<i>G. Schiavo, S. Bovo, F. Bertolini, A. Ribani, V. Taurisano, S. Dall'Olio, M. Bonacini, L. Fontanesi</i>	
14:30	Effects of indirect genetic effects on fish breeding programs	296
	<i>G. Rovere, F. Phocas</i>	
14:45	Selection for protein digestibility in pigs	296
	<i>R. Bergsma, H. Lei, K. Hov Martinsen, Q. Hui, A. Rodas-Gonzalez</i>	
15:00	Genetic variability for key biomarkers involved in body reserves dynamics in meat ewes	297
	<i>A. Nyamiel, E. González-García, D. Marcon, C. Durand, A. Tesnière, D. Hazard</i>	
15:15	Genome-wide SNP markers from ddRAD reveals the population structure of Italian donkey populations	297
	<i>G. Chessari, A. Criscione, A. Cesarani, M. Ablondi, V. Asti, D. Bigi, S. Bordonaro, R. Ciampolini, C. Cipolat-Gotet, M. Congiu, P. De Palo, V. Landi, N. P. P. Macciotta, D. Matassino, B. Portolano, S. Riggio, A. Sabbioni, M. T. Sardina, G. Senczuk, S. Tumino, M. Vasini, E. Ciani, S. Mastrangelo</i>	
15:30	Comparison of milk-related traits' heritability evaluated by functional controls vs Automatic Milking Systems	298
	<i>R. Moretti, E. Ponzio, S. Chessa, F. Masia, E. Vrieze, P. Sacchi</i>	
15:45	Coffee Break	
16:15	Polygenic selection in Finnish Ayrshire cows	298
	<i>K. Sarviaho, P. Uimari, K. Martikainen</i>	

16:30	Phenotype-Genotype Linkage through Modern Data Logging: Developing a Protocol Application for Animal Research <i>M. Volk, D. Hinrichs</i>	299
16:45	Development of an analytical tool for animal genetic progress assessment based on gEBVs and results of its on-farm implementation <i>Y. Tavryikov, Y. Pekov, D. Iakovishina, A. Dekin, A. Vasina</i>	299
17:00	Beef-on-Dairy leads to increased longevity of Holstein cows <i>L. Hüneke, J. Heise, S. Rensing, C. Schmidtman</i>	300
17:15	Assessing genome complementarity in beef-on-dairy crosses through selection scans, runs of homozygosity and genomic variation <i>D. Lindtke, S. Lerch, I. Morel, M. Neuditschko</i>	300
17:30	Milk yield, weight gain, feed intake, and feed efficiency in second lactation Holstein x Red Dairy Cattle F1 crossbreds compared to Holstein and Red Dairy Cattle <i>L. Hein, J. Clasen, M. Vestergaard, M. Kargo</i>	301
17:45	Performance of purebred dairy cows and crossbreds between Swedish Red, Swedish Holstein, Jersey, and Montbéliarde in Swedish herds <i>S. Liedgren, W. F. Fikse, K. Nilsson, E. Strandberg</i>	301

Poster Session 16

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

16.15	Heritability and Genetic Correlations of Resilience Indicators in Beef Cattle <i>J. N. S. G. Cyrillo, G. R. Rodrigues, V. T. Rezende, R. C. Canesin, J. P. S. Valente, M. E. Z. Mercadante</i>	302
16.16	Genomic-based genetic parameters for resilience indicators and pregnancy in beef cattle <i>J. N. S. G. Cyrillo, G. R. D. Rodrigues, V. T. Rezende, J. P. S. Valente, M. E. Z. Mercadante</i>	302
16.17	Estimation of genomic inbreeding coefficients based on SNP markers in Serbian Holstein cows <i>S. Trivunović, D. Stanojević, L. Štrbac, N. Gligović, M. Despotov, M. Šaran, D. Janković, R. Đedović</i>	303
16.18	CapraGEN project: managing genetic variability in Alpine and Saanen goats through genomic approach <i>C. Ferrari, C. Punturiero, A. Delledonne, R. Milanesi, M. G. Strillacci</i>	303
16.19	Genome-wide scan for lethal haplotypes in Nellore cattle <i>G. R. D. Rodrigues, L. F. M. Mota, J. N. S. G. Cyrillo, P. I. Schmidt, J. P. S. Valente, L. G. Albuquerque, M. E. Z. Mercadante</i>	304
16.20	AgriseqPI 1.0 & AgriSeqRI 1.0: Reporting utilities for SNP based parentage determination and testing for traits and disorders with Targeted Genotyping by Sequencing panels <i>S. Chadaram, A. Burrell, K. R. Gujjula, C. Carrasco, S. Daly, S. Udumudi, N. Anjuri, V. H. Kema, A. Udumudi</i>	304
16.21	Resilience indicators in beef cattle selected for high performance <i>S. F. M. Bonilha, G. R. D. Rodrigues, V. T. Rezende, R. C. Canesin, J. P. S. Valente, M. E. Z. Mercadante, J. N. S. G. Cyrillo</i>	305
16.22	Genetic background of beef-on-dairy calving ease <i>A. O. Garcia, J. B. Cole, A. A. Mikush, S. Tsuruta, S. E. F. Guimarães, I. Misztal, D. Lourenco</i>	305
16.23	The use of cooperative herds in the promotion of genetic resources of cold-blooded horses in Poland <i>A. Chelmińska, B. Smulska, G. Polak, E. Sosin, J. Wójtowicz</i>	306
16.24	Genome-wide association study for milk and blood indicators of hyperketonemia in Holstein dairy cattle <i>S. Magro, G. Visentin, A. Costa, J. T. Van Kaam, R. Finocchiaro, M. Marusi, M. Cassandro, M. De Marchi</i>	306
16.25	An association study with dairy traits confirms the importance of three SNPs for the assisted selection in the Mediterranean river buffalo <i>A. Pauciullo, G. Gaspa, Y. Zhang, Q. Liu, G. Cosenza</i>	307
16.26	Exploring the resilience of an intensive Holstein farm in Lombardy, Italy <i>C. Punturiero, A. Delledonne, A. Bagnato, M. G. Strillacci</i>	307

Session 17. Global quality of animal products in 2024: stakeholders' perceptions, desires, and priorities in a changing world

Room: Valdostana - Palazzo Affari 3rd Floor

Chair: Martin / Anastasi

Session Type: Project session

Theatre Session 17

Book of Abstracts page

14:00	Exploring the sustainability aspects of innovative livestock systems in Europe <i>E. Diaz Vicuna, N. Adams, L. Smith, C. Forte, A. Hessle</i>	308
-------	--	-----

14:15	Adopting low carbon practices: a cost-effective strategy for French dairy farms <i>E. Castellan, M. Gregoire, N. Gaudilliere, L. Benoist, F. Tattevin, T. Perez</i>	308
14:30	Life Cycle Assessment of different poultry production systems around Europe: mEATquality project <i>C. Reyes-Palomo, S. Sanz-Fernández, J. Marchewka, P. Sztandarski, A. Jaszczyk, M. Solka, H. Louton, L. Quirin, L. Vogt, C. Díaz-Gaona, V. Rodríguez-Estévez</i>	309
14:45	Life cycle assessment of two common dairy cattle farming systems in an Alpine area <i>G. Fichter, S. Hörtenhuber, T. Zanon, G. Peratoner, W. Zollitsch, M. Gauly</i>	309
15:00	Quick sustainability scan calculator for intensive and extensive broiler farms <i>S. Sanz-Fernández, C. Reyes-Palomo, J. Marchewka, P. Sztandarski, A. Jaszczyk, M. Solka, H. Louton, L. Quirin, L. Vogt, C. Díaz-Gaona, V. Rodríguez-Estévez</i>	310
15:15	A case study on carbon neutrality of Podolian beef productions in the marginal area of Southern Italy <i>E. Sabia, C. Pacelli, A. Di Trana, R. Paolino, A. Coppola, A. Braghieri</i>	310
15:30	Animal Welfare Status in Dairy Cattle Farms of the Parmigiano Reggiano Consortium <i>M. Odini, G. Esposito, G. Cappelli, M. Nocetti, A. D. Whetton, N. Geifman, C. Dadousis</i>	311
15:45	Coffee Break	
16:15	Effect of extensification factors on broiler welfare and meat quality <i>I. De Jong, J. Van Der Eijk, S. Yigitturk, S. Erasmus</i>	311
16:30	Consumer expectations for beef in the French region Auvergne-Rhône-Alpes <i>S. Chriki, J. Normand, F. Noël, V. Payet, J. F. Hocquette</i>	312
16:45	Consumer preferences for cheeses derived from the milk of goats reared under different farming systems <i>V. Korelidou, A. I. Gelasakis, I. Bossis, T. Moschakis, E. Jamieson, P. Refinetti, C. Montagnese, A. Pennachio, M. Anastasi, A. Giusti</i>	312
17:00	Identification of breast defects in broilers with short-wave pocket near-infrared spectrometer <i>C. L. Manuelian, S. Magro, A. Goi, J. C. Parisse, A. Travel, C. Berri, M. De Marchi</i>	313
17:15	Does breeding for A2 cows alter milk yield and composition? <i>S. Serhan, C. L. Manuelian, A. A. K. Salama, G. Caja, X. Such</i>	313
17:30	Lipid oxidation and physical quality characteristics of beef as affected by storage condition <i>M. Tognocchi, S. Tinagli, R. E. Amarie, F. Narra, A. Serra</i>	314

Poster Session 17

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

17.14	Potential use of a pocket near-infrared spectroscopy device to directly discriminate local chicken meat <i>N. Stoppani, C. L. Manuelian, S. Sciuto, E. E. Cappone, M. Gariglio, P. Acutis, A. Schiavone, D. Soglia</i>	314
17.15	Feasibility of near-infrared spectroscopy to predict dry matter digestibility in broilers <i>O. Tej, E. Albanell, I. Kaikat, J. F. Pérez, C. L. Manuelian</i>	315
17.16	Health status of Skopelos goats and its impact on milk yield <i>V. Korelidou, A. I. Kalogianni, G. Arsenos, A. I. Gelasakis</i>	315

Session 18. Sustainable and smart integration of the dairy and beef sectors in EU

Room: Reggiana - Palazzo Affari 2nd Floor

Chair: Vestergaard / Devant

Session Type: Theme session

	Theatre Session 18	Book of Abstracts page
14:00	Addressing the challenges of the European dairy beef production system <i>invited M. Devant</i>	316
14:15	Longitudinal retrospective study of intake recovery and growth in unweaned dairy beef calves subjected to fasting, transport, and entire commercialization at farm arrival <i>S. Marti, L. Pisoni, M. Blanch, A. Bassols, Y. Saco, J. Pujols, M. Devant</i>	316
14:30	Total protein and hemoglobin levels of veal calves at arrival are associated with antibiotic use and mortality <i>invited A. Willemsma, I. Carvalho, M. Van De Vosse, P. Mölder</i>	317

14:45	A proteomics-machine learning approach to unravel the impact of protozoan infection on calves' intestinal morphology and development	317
	<i>M. Bonnet, F. Dengler, L. Bachmann, W. Liermann, C. Helm, R. Ulrich, C. Dellling, H. M. Hammon</i>	
15:00	Portable nanosensor for rapid detection and characterization of botulinum neurotoxins in cattle	318
	<i>N. D. Kumar, G. Shtenberg</i>	
15:15	Effects of milk supplementation with different levels of soy protein isolate on growth performance and health indicators of the Holstein calves	318
	<i>V. Yekani, H. Khalilvandi-Behroozyar, R. Pirmohammadi, M. Donyadoost-Chelan, M. Hosseini Ghaffari</i>	
15:30	Impact of breed and colostrum intake on serum IgG, growth, health, and blood lymphocyte profiles in preweaning dairy and crossbred bulls	319
	<i>H. Mccarthy, M. Kovacs, T. Chapelain, J. Leão, D. Renaud, M. Steele</i>	

15:45 Coffee Break

16:15	Genetic parameters for calf resilience and milk feeding traits recorded by automated milk feeding machines and their relationship with bovine respiratory disease in North American Holstein calves	319
	<i>L. F. Brito, J. Graham, L. Gloria, J. Boerman, M. Taghipoor</i>	
16:30	Prevalence and distribution of foot lesions in French slaughter dairy and beef young bulls housed in indoor feedlot	320
	<i>S. Ishak, R. Guatteo, A. Lehébel, N. Brisseau, A. R. Entraygues, M. Gall, A. Duvauchelle Waché, A. Relun</i>	
16:45	Updating preliminary study of multiphase diet for dairy beef cattle	320
	<i>P. Guarnido Lopez, M. Benaouda, L. Llonch, S. Marty, M. Devant, L. Tedeschi</i>	
17:00	Carbon footprint of Holstein bull calves fed two different total mixed rations from 4 to 12 months	321
	<i>L. Mogensen, M. Vestergaard</i>	
17:15	Innovative sustainable organic beef production system where quality replaces quantity	321
	<i>L. Mogensen, T. Kristensen, M. Therkildsen, I. A. Christiansen, K. F. Jørgensen, C. Kramer, B. V. Andersen, T. Dorca-Preda, M. Vestergaard</i>	
17:30	Novel administration of meloxicam to surgically castrated bull calves via medicated lick blocks	322
	<i>S. Rudd, D. Van Der Saag, S. Lomax</i>	
17:45	Sustainability, Animal Welfare and Surplus Calves in the Australian Dairy Industry: Perspectives from the public – a focus group study	322
	<i>S. Bolton, B. Vandresen, M. Von Keyserlingk</i>	

Poster Session 18

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

18.15	The use of gamma-glutamyl transferase as potential biomarker of colostrum consumption to evaluate the maternal antibody interference with subcutaneous and intranasal vaccines against BRD in unweaned dairy beef calves. An exploratory field study	323
	<i>C. García-Vázquez, L. Llonch, A. Bassols, Y. Saco, J. Pujols, M. Campas, M. Devant, S. Marti</i>	
18.16	Evaluation of milk replacer acidification according to the cattle origin as a feeding strategy during preweaning period on diarrhea incidence and performance in dairy beef calves	323
	<i>M. Verdú, X. Soldevila, M. Villarte, D. Villalba, G. De La Fuente, J. Cucurull</i>	
18.17	Effect of a phytogenic feed additive (POWERJET®) on calves' growth performance and intestinal permeability	324
	<i>M. Verdú, X. Soldevila, J. Cucurull, A. Pérez, J. Grau, M. S. Gómez</i>	
18.18	Use of foster cows to produce rosé veal of spring-born dairy calves in an organic setting	324
	<i>M. Vestergaard, T. Kristensen, L. Mogensen, B. V. Andersen, I. A. Christiansen, K. F. Jørgensen, C. Kramer, M. Therkildsen</i>	
18.19	Can cakes rich in polyunsaturated fatty acids substitute palm oil and reduce methane emissions in dairy beef calves fed high-concentrate diets? In vitro screening	325
	<i>M. Devant, L. Llonch, S. Martí, G. Verge, J. Riera, C. Medinyà, J. Cucurull, A. Pérez, B. Fernández</i>	
18.20	Effect of substituting palm oil by sunflower oil in fattening dairy beef bulls fed high-concentrate diets on performance and enteric methane emissions	325
	<i>L. Llonch, S. Martí, M. Devant</i>	
18.21	Can algae rich in polyunsaturated fatty acids reduce methane emissions when substituting palm oil in dairy beef calves fed high-concentrate diets? In vitro screening	326
	<i>L. Llonch, S. Martí, G. Verge, J. Riera, C. Medinyà, J. Cucurull, A. Pérez, B. Fernández, M. Devant</i>	
18.22	Carcass traits of Lidia breed heifers: preliminary results	326
	<i>M. Cantarero, E. Angón, J. Claros, L. Jiménez, J. Caballero, J. Perea</i>	

Session 19. Nutritional Models development and applications in livestock farming

Room: Chianina - Palazzo Affari 1st Floor

Chair: Atzori / Munoz

Session Type: Theme session

Theatre Session 19		Book of Abstracts page
14:00	The 11th Modelling Nutrient Digestion and Utilization in Farm Animals (MODNUT) Workshop amidst the majestic Swiss Alps <i>invited</i> M. Lautrou, S. Lerch, A. Cannas, J. Dijkstra, M. D. Hanigan, E. Kebreab, R. Muñoz-Tamayo, A. Remus, I. A. M. A. Teixeira, N. Mehaba	327
14:15	From the biochemical pieces to the nutritional puzzle: using meta-reactions in teaching and research <i>invited</i> J. Van Milgen	327
14:45	Hybrid local and global sensitivity analysis: Evaluation of dairy cow response predicted through INRA 2018 feeding system according to feed characteristics S. Jeon, T. Senga Kiese, S. Lemosquet, P. Nozière	328
15:00	Predictive modelling of dry matter intake in lactating dairy cows based on routinely available variables N. Mehaba, S. Schrade, F. Dohme-Meier, L. Eggerschwiler, P. Schlegel	328
15:15	Dynamic sensitivity analysis of a mathematical model describing the effect of the macroalgae <i>Asparagopsis taxiformis</i> on methane production in a rumen in vitro continuous system P. Blondiaux, T. Senga Kiessé, M. Eugène, R. Muñoz-Tamayo	329
15:30	Using risk analysis to compare the accuracy of enteric methane emissions models of dairy cattle P. Blondiaux, E. H. Cabezas-Garcia, T. Senga Kiessé, R. Muñoz-Tamayo, K. F. Reed, M. Eugène	329
15:45	Coffee Break	
16:15	Byproducts in Ruminant Feeding: Exploring their Mitigating Effects on Enteric Methane Emissions T. Akinropo, J. S. Adjassin, D. Morgavi, M. Eugène	330
16:30	Hybrid Intelligent Mechanistic-Dynamic Models: Mathematical Animal Nutrition Models to Predict Enteric Methane Emissions of Grazing Beef Cattle H. Menendez, J. R. Brennan, A. S. Atzori, P. Guarnido Lopez, L. O. Tedeschi	330
16:45	Systemic modelling application in animal science: archetypes for teaching and research in animal nutrition A. S. Atzori, B. Atamer Balkan, H. Menendez, B. Turner, A. Gallo, L. O. Tedeschi	331
17:00	Enhancing Agricultural Sustainability: An Optimization Model for Crop Rotation and Diet Formulation in Dairy Farms under European Union Common Agricultural Policy (EU CAP) Y. Gong, A. Bellingeri, F. Fumagalli, G. Sechi, A. Atzori, F. Masoero, A. Gallo, V. Cabrera	331
17:15	Assessment of amino acid requirements by crossbreed and sex of growing pigs based on sequential measurements of body weight and feed intake N. Quiniou, M. Launay	332
17:30	OCaLM: A new dynamic model to simulate the fate of calcium and phosphorus in laying hens B. Méda, E. Pampouille, T. Burlot, M. J. Duclos, C. Guerini, M. Quentin, A. Narcy, Y. Guyot	332
17:45	Evaluation of a mechanistic model predicting phosphorus and calcium requirements for bone mineralization of growing broilers M. Reis, A. Narcy, N. Sakomura, I. Bouvarel, C. R. Angel, M. P. Létourneau Montminy	333

Session 20. Functional feed additives in poultry nutrition

Room: Modicana - Palazzo Affari 3rd Floor

Chair: Kreuzer-Redmer / Camarinha Silva

Session Type: Theme session

Theatre Session 20		Book of Abstracts page
14:00	Effects of dietary supplementation with cocrystals of thymol and carvacrol on quality, nutrient composition, and oxidative stability of broiler meat Y. Li, S. Jiang, W. Yang	333
14:15	Replacing Vitamin E in Broiler Diets with Polyphenolic-Rich Greek Vinification By-Products A. Mavrommatis, P. Kyriakaki, S. Koulocheri, A. Pappas, E. Tsiplakou	334

14:30	Modulation of broiler gut microbiota by dietary particle size, exogenous phytase and calcium concentration <i>I. Rubio-Cervantes, S. Wolfrum, M. Rodehutschord, A. Camarinha-Silva</i>	334
14:45	Effects of <i>Saccharomyces Cerevisiae</i> hydrolysate on Growth performance and gut health of broilers <i>M. Comi, J. Lin, H. J. Zhang, A. Agazzi, V. Perricone</i>	335
15:00	Carnosine in broiler diet: A promising nutritional strategy to reduce the prevalence of breast muscle myopathies <i>A. Askri, L. Saucier, N. Alnahhas</i>	335
15:15	The effect of a phytogenic on broiler performance and feed costs in normal and reduced energy diets <i>M. De Kock, M. Verdú, S. Van Kuijk, X. Soldevila, G. Farré</i>	336
15:30	Effects of yeast nucleotides administration via drinking water on broiler chickens <i>V. Perricone, S. Sandrini, N. Irshad, C. Lecchi, Y. Dadi, L. Aidos, P. Cremonesi, B. Castiglioni, F. Biscarini, G. Savoini, A. Agazzi</i>	336

15:45 Coffee Break

16:15	Vertical transmission of gut bacteria in chickens and the implications of growing chicks in the absence of adults 337 <i>E. Mills</i>	
16:30	Development of eco-friendly feeding approaches in poultry. Assessment of different dietary zinc sources <i>A. Sarmiento-García, O. Olgun</i>	337
16:45	The inclusion of microalga <i>Dunaliella salina</i> in the diet of laying hens: effects on production performance and egg quality <i>O. Madacussengua, M. Lordelo, A. Almeida, R. Mendes, C. Martins, B. Tavares, D. Carvalho, T. Guerra, A. Pagarete</i>	338
17:00	Unveiling the Immunomodulatory Potential of Probiotic <i>Bacillus</i> Strains in Chicken Peripheral Blood Mononuclear Cells <i>F. Larsberg, M. Spreichert, D. Hesse, C. Falker-Gieske, G. Loh, G. A. Brockmann, S. Kreuzer-Redmer</i>	338
17:15	Chicken immune cell assay to evaluate the immune-modulating effect of grape by-products <i>M. Manoni, F. Larsberg, L. Pinotti, S. Kreuzer-Redmer</i>	339
17:30	Investigating the impact of Sodium Butyrate on gene expression profiles in chicken intestinal organoids <i>E. Pietrzak, S. Knaga</i>	339

Poster Session 20

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

20.14	Supplemental effect of <i>Aspergillus oryzae</i> phytase on growth performance, nutrient digestibility, and health parameters in Ross 308 broilers <i>S. Y. Jang, J. H. Park, S. B. Cho, D. K. Kang, I. H. Kim</i>	340
20.15	Growth performance, nutrient digestibility and intramuscular fatty acid composition of chickens fed Camelina Cake <i>V. Juskiene, R. Juodka, R. Leikus, G. Kadziene, D. Stankeviciene, R. Nainiene, A. Urbšys, R. Juska</i>	340
20.16	Silvafeed® ATX efficacy in improving performance of broiler chickens <i>V. A. R. D. Castilho Heiss, C. M. Komiyama, R. G. Garcia, M. F. D. C. Burbarelli, B. B. Przybulinski, J. R. F. Vieira, J. B. Lancini</i>	341
20.17	Influence of L-Glu and L-Gln supplementation in broilers subjected to an <i>Eimeria</i> challenge on performance <i>E. Kim, S. Lecuelle, A. Simongiovanni, E. Kiarie, W. Lambert</i>	341
20.18	Production results and carcass characteristics of Cherry Valley broiler ducks fed with halloysite <i>S. Właźlak, M. Banaszak, J. Biesek</i>	342
20.19	Assessment of Natural Silicate-Based Minerals Effects on Compound Feed Pelletizing Processes <i>M. Hankare, A. Vigh, C. Careme</i>	342
20.20	Effect of dietary micelle quercetin on growth performance, egg production, and blood profile in Hy-line brown laying hens <i>S. Y. Jang, G. S. Ahammad, I. H. Kim</i>	343
20.21	Dietary incorporation of Zinc-Beta glucan improves immune status, gut microbial composition, egg quality, and mitigates gas emissions in laying hens' diets <i>S. Y. Jang, S. T. Wahid, S. Cho, D. K. Kang, I. H. Kim</i>	343

20.22	The supplementation of a mixed- phytase and xylanase product on older laying hens for improved phosphorus retention and ileal phosphorus digestibility <i>H. Walker, K. Bauer, D. Cvejić, J. D. Keegan, J. Taylor-Pickard, I. Nikodinoska, C. A. Moran</i>	344
20.23	The effect of different calcium sources on eggshell mineral content and breaking strength in laying hens <i>O. Demehin, M. Bouwhuis, K. Kozłowski, S. O'connell</i>	344
20.24	Dietary Arginine Supplementation as a Mitigative Strategy Against Mycotoxin-Induced Adverse Effects in Laying Hens <i>S. Y. Yoon, H. Tajudeen, P. Neves-Silvestre, J. Y. Mun, S. H. Ha, J. S. Kim</i>	345
20.25	Evaluation of the Efficacy of a Yeast Mannan Product on the Performance of Laying Hens <i>J. Taylor-Pickard, D. Currie, J. Keegan, C. Moran</i>	345

Session 21.

Heat stress in pig and poultry production: consequences and strategies to cope with the consequence of the global warming

Room: Romagnola - Palazzo Affari 1st Floor

Chair: Chalvon-Demersay / Stadnicka

Session Type: Theme session

	Theatre Session 21	Book of Abstracts page
14:00	Overview of heat stress management in fattening pigs: impact, influencing factors, and control strategies <i>invited L. De Prekel, D. Maes, A. Van Den Broeke, M. Aluwé</i>	346
14:30	Antioxidant-enriched or energy-dense diet in heat stressed fattening pigs <i>L. De Prekel, D. Maes, A. Van Den Broeke, M. Aluwé</i>	346
14:45	A dietary phytogenic solution mitigates heat stress indicators in pigs <i>A. Morales, P. Sakkas, M. Soto, N. Arce, N. Quilichini, M. Cervantes</i>	347
15:00	Maternal supplementation with betaine or amino acids during lactation improves the viability of Iberian piglets under heat stress <i>C. Garcia-Contreras, I. Fernández-Figares, M. Lachica, F. Sánchez-Esquiliche, L. Ramírez, F. Gómez-Carballar, R. Nieto</i>	347
15:15	Heat stress effects on the gut microbiome profile of Iberian purebred and Duroc x Iberian crossbred weaned piglets <i>A. Heras-Molina, J. M. García-Casco, E. Gomez-Izquierdo, J. Gómez-Fernández, H. Laviano, F. García, C. Óvilo, M. Muñoz</i>	348
15:30	Maternal resveratrol improves sow's performance and the intestinal health and weight gain of suckling piglets under high summer temperature <i>H. Xiao, X. Yang, L. Wang, Z. Jiang</i>	348
15:45	Coffee Break	
16:15	Thermal adaptation in chicks: epigenetic regulation of resilience and vulnerability <i>invited N. Meiri, P. Malini, T. Kislouk</i>	349
16:45	Trend analyses revealed increasing heat stress situations in German regions with intensive turkey production <i>N. Volkmann, B. Sake, N. Kemper, J. Schulz</i>	349
17:00	The potential of in ovo-fed amino acids to alleviate the detrimental effects of heat stress on broiler chickens <i>M. Yehia, V. Ouellet, N. Alnahhas</i>	350
17:15	Impacts of betaine and feed restriction on blood parameters in heat-stressed laying hens <i>R. De Baets, K. Buyse, G. Antonissen, E. Delezie</i>	350
	Poster Session 21 <i>Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00</i>	
21.11	Impact of on-farm temperature on feed intake in Duroc pigs <i>T. Okamura, M. Tomiyama, M. Kimata, K. Ishii</i>	351
21.12	Effects of mineral interactions on oxidative stress in lactating sows subjected to heat stress <i>J. Y. Mun, A. Hosseindoust, S. H. Ha, S. A. Park, S. Y. Yoon, J. S. Kim</i>	351
21.13	Effect of heat stress on genetic evaluations for maternal traits in Iberian pigs <i>J. M. García Casco, P. Palma Granados, L. Ramírez Hidalgo, F. Sánchez Esquiliche, M. Muñoz Muñoz</i>	352

21.14	Heat stress effects on the growth and metabolism profile of Iberian purebred and Duroc x Iberian crossbred weaned piglets <i>A. Heras-Molina, J. García-Casco, E. Gómez-Izquierdo, J. Gómez-Fernández, H. Laviano, C. López-Bote, S. Astiz, C. Óvilo, M. Muñoz</i>	352
21.15	Heat tolerance in Polish local pigs: preliminary results of metabolomics analysis of blood <i>E. Sell-Kubiak, M. Pszczoła</i>	353

Session 22.

Innovation in pig genetics

Room: Piemontese - Palazzo Affari 2nd Floor

Chair: Verschuren / Nilsson

Session Type: Free communications (bottom-up)

	Theatre Session 22	Book of Abstracts page
14:00	Breed Differences in Semen Quality Characteristics in Commercial Boars <i>N. Lewis, J. A. Calderon Diaz, C. R. G. Lewis, P. Ellis</i>	353
14:15	On the genetics of farrowing duration in pigs <i>M. S. Lopes, H. S. Wendling, E. Grindflek, E. F. Knol</i>	354
14:30	Dam parity is associated with reproductive performance in primiparous sows <i>J. A. Calderon Diaz, S. Casiro, I. Huerta, C. R. G. Lewis</i>	354
14:45	Validation of a Piétrain sire breeding program on crossbred piglets' vitality and congenital defects <i>W. Gorssen, C. Winters, R. Meyermans, L. Chapard, K. Hooyberghs, J. Depuydt, S. Janssens, N. Buys</i>	355
15:00	Genetic trends in the lysine requirements of growing-finishing pigs and reproductive sows, due to genetic trends in production traits <i>P. Knap</i>	355
15:15	Genetic Effects on Weight in Growing Piglets (prae iPig project) <i>E. M. Strucken, E. M. Saliu, J. Schulze Holthausen, L. Grześkowiak, J. Zentek, G. A. Brockmann</i>	356
15:30	Differentially expressed genes in Piétrain sired pigs when feeding a high-fat high-fibre diet <i>E. U. Nwosu, B. Chakkingal Bhaskaran, R. Meyermans, E. Kowalski, W. Gorssen, S. Janssens, S. Millet, M. Aluwe, S. De Smet, N. Buys</i>	356
15:45	Coffee Break	
16:15	Sires of low ad libitum-residual feed intake progeny have no undesirable effects on growth performance, gain composition and carcass traits of restricted-fed heavy pigs <i>S. Faggion, L. Gallo, S. Schiavon, P. Carnier</i>	357
16:30	Impact of selection for birth weight uniformity in meat quality traits in SRC Iberian pigs <i>J. P. Gutierrez, N. Formoso-Rafferty, F. Sánchez-Esquiliche, A. Márquez, M. Muñoz, J. M. García-Casco, I. Cervantes</i>	357
16:45	Differential Cold Adaptation Mechanisms: Adipose Tissue Subpopulation Variances in Tibetan and Bama Pigs <i>J. Liu, T. Liu, C. Chen, C. Tao, J. Zhao, Y. Wang</i>	358
17:00	Exploring the potential of genetic selection for enhanced pork belly quality <i>Z. Mozduri, G. Plastow, B. Kemp, M. Juarez</i>	358
17:15	Sire selection for infrared prediction of ham weight-loss during dry-curing affects green ham traits, and measured ham weight-loss in heavy pigs <i>K. Ivanov, V. Bonfatti, S. Faggion, L. Gallo, S. Schiavon, P. Carnier</i>	359
	Poster Session 22 <i>Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00</i>	
22.13	Association between feed efficiency traits and disease resistance genes in pigs <i>K. Ishii, T. Okamura, M. Tomiyama, M. Kimata</i>	359
22.14	A study on the effect of not approved semen doses on fertility traits <i>I. Andersen-Ranberg, A. H. Gaustad, R. M. Godinho</i>	360

Session 23.

Management measures to reduce production disease

Room: Maremmana - Palazzo Affari 2nd Floor

Chair: Lewis / Lopreiato

Session Type: Discovery session

	Theatre Session 23	Book of Abstracts page
14:00	Keel bone lesions in laying hens: occurrence and risk factors <i>invited</i> A. Trocino, G. Di Martino	360
14:30	Effects of a Bacterial Compound on Litter to reduce Footpad Lesions in Broilers L. Galosi, A. R. Attili, A. M. Tambella, G. Rossi, L. Biagini, F. Gigli, M. Guarino, G. M. Provolo, R. Falconi, G. Castiglione, A. Roncarati	361
14:45	Effects of genotype and husbandry system on pododermatitis and plumage soiling in organic turkey production D. Haug, R. Schreiter, B. Thesing, L. Rathmann, C. Lambertz, P. Hofmann, M. Erhard, G. Bellof, E. Schmidt	361
15:00	Incomplete Milking for metabolic relief of dairy cows R. Joest, K. .. Südekum, U. Müller	362
15:15	Influence of incomplete milking on the metabolic and oxidative stress status in early-lactating cows with high lipolysis U. Müller, R. Joest, K. . H. Südekum, S. Häußler	362
15:30	Insights into Mastitis Management: Unveiling the Drivers and Goals Behind Swedish Dairy Farmers and Veterinarians Decision-Making N. Lind, H. Hansson, U. Emanuelson, C. J. Lagerkvist	363
15:45	Coffee Break	
16:15	Impact of early life experiences on the development of ear necrosis in weaned pigs L. Markland, K. O'Driscoll, F. Leonard, L. Boyle	363
16:30	Identifying risk factors of piglet mortality at birth, before and after weaning B. Garré, D. Maes, M. Aluwé	364
16:45	Environmentally enriched housing reduces disease severity in pigs after co-infection, with stronger effects when applied from birth than from weaning B. De Bruijn, I. Van Dixhoorn, J. Bolhuis, N. Stockhofe-Zurwieden, M. Kluivers, J. Rebel	364
17:00	Relationship between animal-based on-farm indicators and meat inspection data in pigs J. Witt, J. Krieter, K. Büttner, T. Wilder, M. Hasler, R. Bussemas, S. Witten, I. Czycholl	365
17:15	Identifying barriers and facilitators to implementing veterinary telemedicine in swine, poultry, and bovine production using a COM-B approach A. Guintard, L. Lefèvre, S. Assié, M. Delsart, N. Millar	365
17:30	Implementation of sustainable parasite control strategies on extensively managed sheep farms E. Geddes, C. Morgan-Davies, A. McLaren, P. J. Skuce, J. M. Duncan, N. Sargison, F. Kenyon	366
17:45	Feed intake, growth performance and gut health parameters of broiler chickens are positively affected by the supplementation of chestnut tannins in a dose-dependent manner C. Techer, Q. Pagé, W. Lambert, A. Mayer, E. Berwanger, J. Fernandes	366
	Poster Session 23 <i>Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00</i>	
23.14	Use of infrared thermography for predicting the infectious etiology of subclinical bovine mastitis in a robotic milking system using machine learning L. F. Zafalon, R. C. M. Santana, M. V. Santos, T. C. Alves, A. R. Garcia, S. C. M. Niciura, F. D. Caracuschanski	367
23.15	Prevalence and characterization of rib injuries in dairy cows: a neglected welfare issue of dairy production J. M. Pankratz, I. C. Colaço Bez, J. L. Sviech Ratim, D. A. Duarte Santana, R. D. Ollhoff	367
23.16	Fertility and health traits of dairy cows on farms with short versus long productive lifespan profiles A. Bieber, M. Lozano-Jaramillo, M. Walkenhorst, R. Eppenstein	368
23.17	The influence of sample size on fitting the true flock prevalence in animal welfare assessment impressively presented L. Jung, B. Kulig, B. Schäfer, S. Addo, D. Hinrichs	368

- 23.18 Introducing blood gas and ionogram analysis in swine farms for diagnostic and studies : sows reference values and practical aspects 369
M. Couteau, M. Chabane, E. Cantaloube, M. Delsart, V. Prodhomme, C. Guilloton, P. Y. Moalic
- 23.19 Fecal biomarkers in piglets: assay validation 369
A. Pelegrí-Pineda, Y. Saco, R. Pato, R. Peña, J. Suppi, E. Llauradó-Calero, D. Solà-Oriol, A. Bassols

Session 24.

Livestock are more than food, Part 2

Room: Marchigiana - Palazzo Affari Ground floor

Chair: Lee / O'Mara

Session Type: Challenge session

	Theatre Session 24	Book of Abstracts page
14:00	Influence of pastoral management on the conservation of the cultural landscape and biodiversity of mountain pastures <i>invited M. Probo, C. Pauler</i>	370
14:30	Trends in the association of herbivores and pigs in the Massif Central <i>C. Roguet, S. Honor, H. Rapey, B. Dounies</i>	370
14:45	Contribution of livestock in organic agriculture development: a study on nitrogen flows in expansion scenarios in France <i>F. Vergely, A. Wilfart, J. Aubin, S. Harchaoui</i>	371
15:00	The representations and attractiveness of livestock farming professions under the influence of societal issues. The French situation in a European perspective <i>invited A. C. Dockes</i>	371
15:30	Life cycle and ecosystem services assessments provide opposite evaluations of the food and non-food contributions of livestock farming systems <i>F. Joly, P. Roche, J. Dewulf, H. M. Van Der Werf, L. Boone</i>	372
15:45	Coffee Break	
16:15	Beyond the Pigs: Socio-Economic Impacts of African Swine Fever (ASF) on Indigenous Breeds in Bulgaria and Eastern EU <i>G. Angeloni, E. Lazzaro, A. Cristalli, R. Doneva, D. Dimitrova</i>	372
16:30	Biopolymers of animal origin: production, properties and applications <i>invited V. Khutoryanskiy</i>	373
16:45	Valorization of a waste from food industry: bovine hide to leather <i>S. Zanchin, G. Zorzi</i>	373
17:00	Cross-analysis of crop-livestock integration, sustainability and biodiversity on 10 French experimental farms <i>G. Martel, J. Pourias, J. Bernier</i>	374
17:15	Bee friendly livestock systems <i>L. Garcia, J. C. B. Dubeux, M. A. Bernardini, A. Cuminale, W. Piwowarek</i>	374
17:30	Closing remarks <i>M. R. Lee, F. O'Mara</i>	375

Session 25.

Project session ADVAGROMED

Room: Rendena - Palazzo Affari 4th Floor

Chair: Rumbos / Biasato

Session Type: Project session

	Theatre Session 25	Book of Abstracts page
14:00	Formulating balanced diets with local agricultural by-products from Greece as sustainable feed ingredients of <i>Tenebrio molitor</i> larvae <i>F. Kokonaki, C. Adamaki-Sotiraki, C. I. Rumbos, C. G. Athanassiou</i>	375
14:15	Yellow mealworm larvae fed on Italian by-products <i>S. Bellezza Oddon, I. Biasato, Z. Loiotine, A. Resconi, L. Gasco</i>	376

14:30	WP2 – Local agricultural by-products as substrate for insects: results in Portugal <i>R. Antunes, R. Fantatto, C. Ligeiro, D. Murta</i>	376
14:45	Effect of different diets on the larvae growth performance of Black Soldier Fly « <i>Hermetia illucens</i> » <i>L. Gasco, I. Biasato, C. Athanassiou, C. Rumbos, R. R. García, S. Bellezza Oddon, I. Giannenas, R. Antunes, D. Murta, T. Ainane, A. Lamaadli, S. Cherroud, A. El Yaacoubi</i>	377
15:00	Effect of agro-industrial by-products-based diet on the gene expression of antimicrobial peptides in <i>Tenebrio molitor</i> L. (Coleoptera: Tenebrionidae) larvae <i>V. Candian, S. Bellezza Oddon, I. Biasato, L. Gasco, R. Tedeschi</i>	377
15:15	WP3 – The use of live insect larvae as feed ingredients for local poultry strains <i>I. Biasato, S. Bellezza Oddon, R. García, I. Giannenas, A. El-Yaacoubi, C. Athanassiou, C. Rumbos, R. Antunes, D. Murta, L. Gasco</i>	378
15:30	Responses of Pita pinta laying hens fed live black soldier fly (<i>Hermetia illucens</i>) larvae in Northern Spain <i>R. Rosa-García, R. Antunes, M. Menéndez-Miranda, L. Royo, A. Somoano, D. Murta, F. Vicente, A. Perez-Arcoiza</i>	378
15:45	Coffee Break	
16:15	Insect frass and poultry manure: a novel circular economy approach for sustainable vegetable production in the Mediterranean regions. The PRIMA project ADVAGROMED experiences <i>A. Parente, A. El Yaacoubi, R. Rosa-García, C. G. Athanassiou, C. Rumbos, L. Gasco</i>	379
16:30	The effect of added insect frass as a soil amendment in the NPK content of two pepper varieties <i>G. Thalassinou, N. Papadimitriou, V. Antoniadis, E. Levizou, C. Rumbos, C. Athanassiou</i>	379
16:45	<i>Hermetia illucens</i> frass and Pita pinta laying hens manure as biofertilizers for Asturian crops: effects on seed germination and growth <i>A. Perez-Arcoiza, C. S. E. Souza, I. Feito, G. Gonzalez, R. F. P. Antunes, R. Rosa-García</i>	380
17:00	Effect of insect frass on the growth of barley crop <i>S. Khuli, L. Gasco, I. Biasato, C. Athanassiou, C. Rumbos, R. R. García, S. Bellezza Oddon, I. Giannenas, R. Antunes, D. Murta, T. Ainane, S. Cherroud</i>	380
17:15	Insect Frass Fertilizer: A Green Solution for Tomato and Brassica Microgreens <i>M. D'Imperio, G. Di Cuia, A. Marzulli, F. Baruzzi, M. Ferrara, G. Mulè, M. Gonnella, F. Gai, A. Parente</i>	381
17:30	Metagenomic insights into the effect of frass fertilizer application on rhizosphere microbial community: the case study of Italian turnip <i>G. Di Cuia, M. D'Imperio, G. Mulè, M. Gonnella, F. Gai, A. Parente, M. Ferrara</i>	381
17:45	Social LCA of a small-scale insect-fed broiler farm <i>D. Ristic, V. Khieya, S. Smetana</i>	382

Poster Session 25

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

25.15	ADVanced AGROecological approaches based on the integration of insect farming with local field practices in MEDiterranean countries. The PRIMA project ADVAGROMED <i>L. Gasco, S. Smetana, A. Parente, A. El Yaacoubi, R. Rosa-García, D. Murta, C. Athanassiou</i>	382
25.16	Local agri-food wastes and by-products in Asturias (NW Spain): current situation and potential role as substrates for insect rearing <i>R. Rosa-García, M. Menéndez-Miranda, I. Feito, S. Baizán, A. Martínez, F. Vicente, A. Perez-Arcoiza, G. García</i>	383

Session 26. Production potential and adaptation of camelid species to extensive, semi-intensive and intensive production systems in arid and semi-arid environments

Room: Calvana - Palazzo Congressi Ground floor

Chair: Nagy

Session Type: Working Group session

Theatre Session 26

Book of Abstracts page

14:00	The state of camel genetics: recent phenotyping approaches and genetic findings <i>invited H. Alhaddad, B. H. Alhajeri</i>	383
14:30	The relevance of camel research and development for One Health <i>P. Burger</i>	384

14:45	Recent discoveries in two milk proteins genes (CSN1S2 and LALBA) revealed useful markers for gene's assisted selection in camels <i>N. Letaief, G. Gaspa, A. Pauciullo</i>	384
15:00	Genome-wide Association Study of Hair Shape Variation in Dromedaries from Kuwait <i>H. Alhaddad, S. Bruno, K. Akbar, E. Ciani</i>	385
15:15	Case/Control Association Study on Trypanosome Infection in Algerian Dromedaries: Unraveling Genetic Determinants <i>S. Bruno, I. Meghelli, E. Ciani, A. Sharaf, S. B. S. Gaouar</i>	385
15:30	Glycosylation dependent cell adhesion molecule, first genetic diversity investigation in dromedary camels <i>N. Letaief, G. Gaspa, A. Pauciullo</i>	386

15:45 Coffee Break

16:15	Fragility and challenges in the development of the camel milk sector worldwide <i>invited B. J. Faye, G. Konuspayeva</i>	386
16:45	Alpacas in Austria: Survey on current situation on management and breeding <i>L. Bauer-Feiertag, B. Fuerst-Waltl, M. Braitto, M. Wurzingler</i>	387
17:00	Lessons learned from the intensification of milk production in dromedaries and how it advances the camel dairy industry in arid, semi-arid countries <i>P. Nagy, J. Juhasz</i>	387
17:15	Study on anatomical structures of the dromedary udder <i>A. Mueller, U. Wernery, J. Kinne, P. Nagy, J. Juhasz, M. De Bont, C. Booth, P. Azmanis, A. Appelt, T. Wittek</i>	388
17:30	Insights into Dromedary Camel Pregnancy: Practical Applications of Dromedary Placenta Anatomy in Abortion Prevention Strategies <i>M. Chemin, U. Wernery, P. Nagy, J. Juhasz, M. Sobczak-Filipiak, M. Kulka</i>	388
17:45	Effect of pasteurization and simulated digestion on insulin content of camel milk <i>R. S. Aljumaah, M. Ayadi, M. M. Abdelrahman, A. M. Matar, M. Alshaikh, G. Caja, A. A. K. Salama</i>	389

Poster Session 26

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

26.13	Adaptive evolution patterns in the genome of dromedary camels <i>H. Bahbahani</i>	389
26.14	Genetic parameters of fibre density in alpacas <i>A. Cruz, A. Burgos, A. Yucra, R. Morante, G. Gutierrez-Reynoso, M. Quispe, E. Quispe, J. P. Gutierrez</i>	390
26.15	Time budgets in stabled dairy dromedary camels <i>C. Chaouch Aoun, M. Atigui, M. Brahmi, E. Gherairi, W. Ben Salem, M. Hammadi</i>	390

Session 27.

Physiology of resilience and adaptation to climate change

Room: Podolica - Limonaia - Garden

Chair: Zachut / Bernabucci

Session Type: Theme session

Theatre Session 27

Book of Abstracts page

14:00	Dairy cows' diversity of responses to heat stress: between resilience and adaptation <i>E. Vanbergue, L. Brun-Lafleur, P. Massabie, M. Prezelin, B. Vaillant, V. David</i>	391
14:15	Genetic mechanism of brain-gonad axis regulating sex differentiation in sex-biased zebrafish families <i>S. Hosseini, A. R. Sharifi, B. Brenig</i>	391
14:30	Physiological and Productive responses to a natural short-term heat wave in Holstein Friesian and Brown Swiss lactating cows <i>A. Maggiolino, A. Aloia, E. Trevisi, U. Bernabucci, C. Lecchi, V. Landi, P. De Palo</i>	392
14:45	Effects of Heat Stress on energy and protein metabolism in Iberian and crossbred pigs <i>L. Sarri, É. Labussière, J. Balcells, G. De La Fuente</i>	392
15:00	Can we breed cattle with more efficient rumen microbiome? <i>L. L. Guan, T. Mcallister, Á. Cánovas</i>	393
15:15	Characterization of physiological responses in Rasa Aragonesa ewes under water restriction <i>S. Pérez, C. Calvete, M. Joy, A. Domínguez, J. H. Calvo, S. Lobón</i>	393

- 15:30 Links between gills genes expressions during moderate heat stress and resistance to acute hyperthermia using rainbow trout isogenic lines 394
H. Lagarde, D. Lallias, M. Marchand, F. Phocas, L. Goardon, M. Bideau, F. Guyvarc'H, L. Labbé, S. Pouil, M. Dupont-Nivet, I. Leguen

15:45 Coffee Break

- 16:15 Time-dependent molecular adaptation of immune and platelet function to heat stress in PBMC of Holstein dairy cows 394
F. Koch, B. Kuhla, C. Kühn

- 16:30 How does ewe age affect reproductive performance relative to rainfall conditions? 395
P. Theron, T. Brand, S. Cloete, J. Van Zyl

- 16:45 Sperm mitochondrial gene-dependent activity mediated the stress capacity in young and old Holstein bulls 395
K. Anwar, G. Thaller, M. Saeed-Zidane

- 17:00 Modeling the changes in daily rumination time and milk yield to detect the onset of heat stress in lactating dairy cows 396
A. M. Serviento, Y. Chang, G. Guo, A. Wang, K. Wang, H. Zhang, D. E. Rico, Y. Wang, M. Niu

Poster Session 27

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

- 27.12 Rumen-protected dry grape extract supply during natural heat stress improves the whole-blood immune response of Simmental cows 396
M. Forleo, A. Amato, C. Cavallo, E. Gugliandolo, L. Liotta, E. Trevisi, A. Minuti, H. Bui, P. Engler, V. Lopreato

- 27.13 Individual variability in trajectories of key plasma biomarkers involved in body reserves dynamics in meat ewes 397
A. Nyamiel, E. González-García, D. Marcon, C. Durand, A. Tesnière, D. Hazard

- 27.14 Differences Between Swiss Dairy Breeds in the Relationship Between Milk Urea Nitrogen and Urine Nitrogen Excretion 397
A. Burren, M. Terranova, M. Kreuzer, T. Kupper, S. Probst

Session 28.

EU-LI-PHE: Livestock phenomics, incl free communications on livestock phenotyping and phenomics

Room: Sarda - Palazzo Affari Below ground Floor

Chair: Fontanesi / Tiezzi

Session Type: Project session

Theatre Session 28

Book of Abstracts page

- 14:00 European Network on Livestock Phenomics (EU-LI-PHE): boosting phenotyping in livestock 398
L. Fontanesi, T. Norton, A. Ašić, L. Boyle, E. Clark, I. Djurkin Kušec, J. Maselyne, H. Soyeurt, M. Toscano

- 14:30 Structured resilience phenotyping using big dairy data 398
J. I. Ohlsson, T. Klingström, L. M. Tamminen, M. Johnsson, A. Englund, J. Svensson, R. Ginlund, M. Zhou, D. J. De Koning

- 14:45 Large-scale phenotyping through milk infrared spectroscopy for enhancing resilience in dairy cattle: the contribution of LEO 'Livestock Environment Opendata' project 399
A. Cecchinato, M. A. Ramírez Mauricio, L. F. Macedo Mota, L. Gallo, S. Schiavon, S. Pegolo, E. Trevisi, M. Nocetti, E. Sturaro, R. Negrini, D. Giannuzzi

- 15:00 Ensemble Learner Enhances Prediction Accuracies for Extreme Body Condition Classes in Jersey Dairy Cattle in a 3D Image High-Throughput System 399
R. Stephansen, G. Gebreyesus, G. Sahana, J. Lassen

- 15:15 Phenotyping of beef calves BW and morphological scores based on 3D imaging and AI 400
T. Dechaux, Y. Do, M. El Jabri, E. Deste, C. Allain, L. Delattre, C. Gillé-Perrier, M. Bruyas, A. Lebreton

- 15:30 Molecular phenotyping through metabolomic analyses in pig breeds 400
M. Bolner, S. Bovo, G. Schiavo, G. Galimberti, F. Bertolini, A. Ribani, M. Gallo, S. Dall'Olio, L. Fontanesi

15:45 Coffee Break

16:15	Integrating genomic information in metabolomic networks to dissect molecular phenotypes in pigs <i>S. Bovo, G. Schiavo, F. Bertolini, M. Bolner, M. Gallo, L. Fontanesi</i>	401
16:30	Novel resilience indicators based on egg production in laying hens <i>I. Fodor, P. Duenk, B. Visser, D. Janssen, M. P. L. Calus, M. Van Der Sluis, C. Kamphuis</i>	401
16:45	Towards a 24hr chicken surveillance system <i>J. Geibel, H. Schomburg, O. Sanders, C. Reimer, S. Weigend</i>	402
17:00	A tracking tool for monitoring activity in broilers <i>J. Tarres, J. P. Sanchez</i>	402
17:15	Computer-vision based analysis of turkey locomotion <i>Z. Wang, H. Doekes, P. Langenhuizen, B. Visser, P. De With, P. Bijma</i>	403
17:30	Inertial measurement unit technology for gait detection: a comprehensive evaluation of gait traits in two Italian horse breeds <i>V. Asti, A. Sabbioni, M. Vasini, M. Ablondi</i>	403
17:45	LIPH4SAS (« Livestock Phenotyping for Sustainable Agroecological Systems »): a national research infrastructure for livestock phenotyping <i>J. P. Bidanel, M. Loucif, Y. Billon, S. Ingrand</i>	404

Poster Session 28

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

28.14	Exploring the potential of an image analysis mobile app to estimate horse body morphometric measurements <i>C. Bordin, M. Greppi, T. Danese, V. Asti, M. Ablondi, F. Raspa, E. Valle</i>	404
28.15	Phenotool: An information-sharing platform for livestock phenotyping methods and tools <i>M. Loucif, G. Pairault, Y. Billon, S. Ingrand, J. P. Bidanel</i>	405
28.16	Feature identification for fattening pig body weight prediction: insights from correlation analysis <i>J. Sloomans, J. Maselyne, T. Norton</i>	405

Monday 2 September

Session 29. Plenary Session: Reassessing our relationship with farmed animals

Room: Auditorium - Palazzo Congressi Lower Ground Floor

Chair: Rosati / Jacobs

Session Type: Plenary session

	Theatre Session 29	Book of Abstracts page
8:30	Animal Science and Production in Italy <i>invited N. P. P. Macciotta, M. Mele, B. Ronchi, G. Pulina</i>	406
9:00	Scientific perspectives on the sustainable development of our relationship with farm animals <i>invited L. J. Keeling</i>	406
9:30	Perspectives from the Animal Advocacy Movement <i>invited E. Nalon</i>	407
10:00	Industry Insights <i>invited C. Cucurella</i>	407
10:30	Coffee Break	
11:00	The Consumer-Citizen Dilemma of Animal Welfare amid Farmer Protests and Agricultural Policy Failures <i>invited A. Spiller</i>	408
11:30	Influence of early nutrition and nutritional programming on performance and physiological parameters of pigs <i>invited C. C. Metges</i>	408

Room: Auditorium - Palazzo Congressi Lower Ground Floor

Chair: Pszczola / Pinotti

Session Type: Project session

	Theatre Session 30	Book of Abstracts page
14:30	How to reduce enteric methane from dairy cows <i>invited</i> P. Lund, C. Børsting, G. Giagnoni, M. Kjeldsen, M. Larsen, M. Maigaard, M. Nielsen, D. Olijhoek, M. Thorsteinsson, W. Wang, M. Weisbjerg	409
15:00	A holistic approach for monitoring the environmental sustainability of the Italian Holstein cattle population R. Finocchiaro, L. Benzoni, G. Visentin, M. Dorigo, F. Tiezzi, M. Marusi, J. Layton, A. Bracchi, G. Bonacina, Z. Maddalena, G. Gilson, M. Cassandro	409
15:15	Measuring the Environmental Impact of a Local Cattle Breed via DHI Longitudinal Data E. D'Anza, S. Albarella, F. Luongo, G. Ferronato, F. Luisi, V. Peretti, R. Negrini	410
15:30	Comparison of different residual carbon dioxide formulations for selection of feed efficient dairy cows A. Chegini, E. Negussie, A. R. Bayat, T. Stefanski, M. H. Lidauer	410
15:45	Coffee Break	
16:15	Circadian variation and animal-wise association between methane and a new feed efficiency trait in Nordic Red dairy cows E. Negussie, A. Chegini, T. Stefanski, A. Bayat, M. Lidauer	411
16:30	Correlation between mid-infrared-based predicted methane production and milk urea in Walloon Holstein dairy cows H. Atashi, Y. Chen, N. Gengler	411
16:45	Estimating Direct and Maternal Effects on Residual Metabolizable Energy Intake in Holstein Calves R. E. Jahnle, K. Hoeksema, B. O. Makanjuola, C. M. Rochus, F. Miglior, F. S. Schenkel, M. A. Steele, C. F. Baes	412
17:00	Genetic relationships between methane emissions, dry matter intake, bodyweight, and milk yield of dairy cows A. Van Breukelen, M. Aldridge, Y. De Haas, R. Veerkamp	412
17:15	The potential of residual feed and energy intake as direct selection traits for Fleckvieh cows S. J. Burn, B. Fuerst-Waltl, C. Egger-Danner, G. Terler, A. Steinwider, W. Zollitsch	413
17:30	Genetic correlation between body weight and methane emission in Norwegian Red K. A. Bakke, B. Heringstad	413
17:45	Describing feed efficiency using metabolomic data in pigs F. Bertolini, S. Bovo, M. Bolner, G. Schiavo, M. Cappelloni, M. Gallo, L. Fontanesi	414
	Poster Session 30 <i>Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00</i>	
30.12	Network analysis unraveled the complex interactions in the rumen microbiome associated with methane emission in dairy cattle X. Ye, G. Sahana, M. Lund, B. Li, Z. Cai	414
30.13	Investigating microbiability and microbiome-wide association analysis across diverse gut sections in growing-finishing pigs fed nitrogen- and phosphorus-restricted diets B. Bonhoff, C. Große-Brinkhaus, W. Seel, E. Tholen	415
30.14	Genetic architecture of feed efficiency traits in American mink P. Davoudi, D. Ngoc Do, S. Colombo, B. Rathgeber, M. Sargolzaei, Z. Wang, G. Plastow, Y. Miar	415
30.15	Effect of paternal breeding values for residual feed intake on reproductive performance of Hereford heifers T. Devincenzi, M. Lema, L. Del Pino, E. A. Navajas	416
30.16	Deep phenotyping of feed efficiency in individual dairy cattle using longitudinal and average feed quality data N. Adhikari, A. Van Der Linden, B. Gredler-Grandl, R. F. Veerkamp	416

Room: Pisana - Palazzo Congressi 2nd Floor

Chair: Hiemstra / Fernández

Session Type: Working Group session

Theatre Session 31		Book of Abstracts page
14:30	Cosmopolitan and local Italian beef cattle breeds uncover common patterns of heterozygosity related to fitness traits <i>M. C. Fabbri, F. Tiezzi, A. Crovetto, C. Maltecca, R. Bozzi</i>	417
14:45	Estimating effective population size from genomic rates of coancestry and inbreeding <i>R. López De La Torre, J. Fernández, E. Morales-González, M. Á. Toro, A. Caballero, B. Villanueva</i>	417
15:00	Genomic analysis of diversity and population structure of baroque horse breeds in Czech Republic and Slovakia 418 <i>H. Vostra-Vydrova, N. Moravcikova, R. Kasarda, M. Shihabi, V. Brajkovic, B. Hofmanova, V. Cubric-Curik, L. Vostry, I. Curik</i>	
15:15	Identifying genetic loci influencing body weight in the endangered dual-purpose German Black Pied (DSN) cattle breed <i>P. Korkuc, M. Reißmann, G. A. Brockmann</i>	418
15:30	The benefits of genomics in small populations: case study of type traits in the Dual-Purpose Blue cattle breed 419 <i>K. Wijnrocx, H. Wilmot, S. Vanderick, G. Glorieux, N. Gengler</i>	
15:45 Coffee Break		
16:15	Genetic analysis of calf survival in a critically endangered antelope (Nanger dama mhorri) <i>S. Domínguez, I. Cervantes, E. Moreno, J. P. Gutiérrez</i>	419
16:30	Towards a generic measure of genetic relatedness of populations <i>J. Ten Napel, J. Windig, M. Schoon, M. Spoelstra, S. J. Hiemstra</i>	420
16:45	Derogations in breeding programmes for endangered breeds according to EU animal breeding legislation (EU 2016/1012) <i>H. Göderz, L. Balzar, J. Wider, C. Danchin, M. Spoelstra, M. Schoon, S. J. Hiemstra</i>	420
17:00	Simulation of genetic rescue from a gene bank using a complex load structure <i>C. Reimer, J. Geibel, T. Pook, S. Weigend</i>	421
17:15	Sheep along the trading routes: what may we tell from their demographic history? A case study from Hungary 421 <i>A. Manunza, J. Ramirez-Diaz, B. Guldbrandtsen, A. A. Schönherz, P. Cozzi, S. Kusza, G. Sahana, A. Stella</i>	
17:30	First insights in the genetic structure of Cyprus's indigenous cattle <i>A. C. Dimitriou, A. Spyrou, G. Hadjipavlou</i>	422
17:45	Exploring genomic selection opportunities in Italian local cattle breed <i>E. Mancin, C. Sartori, A. Bagnato, M. G. Strillacci, F. Bernini, G. Schiavo, S. Bovo, L. Fontanesi, R. Mantovani</i>	422
Poster Session 31 <i>Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00</i>		
31.13	Genome-wide approaches reveal novel genetic markers potentially involved with Visna Maedi virus infection in Valle del Belice sheep <i>S. Riggio, M. Tolone, G. Sottile, S. Tumino, B. Portolano, A. M. Sutura, M. T. Sardina, A. Cesarani, S. Mastrangelo</i>	423
31.14	ARDI2: Towards the consolidation of joint work in research, development and innovation in sheep <i>C. Pineda-Quiroga, I. Granado-Tajada, J. M. Astruc, F. Fidelle, Z. Vitezica, S. Rodriguez-Ramilo, I. Beltran De Heredia, M. Lasarte, E. Ugarte</i>	423
31.15	GEREMES: a project to improve the genomic insight on the resilience background in Mediterranean sheep breeds <i>S. Mastrangelo, G. Senczuk, A. Cesarani</i>	424
31.16	Insight into the genetic composition of the South African Bonsmara breeds using whole-genome sequencing data <i>D. Alberts, E. Van Marle-Köster</i>	424
31.17	Genomic evaluation for persistence of lactation in Girolando cattle <i>M. V. G. B. Silva, J. C. C. Panetto, R. Negri, S. Kluska, P. I. Otto, M. A. Machado, E. Ferreira Junior, J. A. Cobuci, D. S. Dalto</i>	425

31.18	Genetic Characterization and Pathway Analysis of Carcass Weights in a Jeju Native Black×Hanwoo Crossbred Population <i>M. Won, Y. K. Kim, S. M. Sin, T. H. Kim, H. B. Park</i>	425
31.19	Selection signature analyses revealed multiple genomic regions associated with milk production in Girgentana breed <i>A. Criscione, S. Ben-Jemaa, G. Chessari, S. Riggio, G. Cammilleri, A. Lastra, A. Cesarani, M. T. Sardina, S. Bordonaro, S. Mastrangelo</i>	426
31.20	Genomic analysis of longevity with productive and reproductive traits in Girolando cattle <i>M. V. Silva, E. Kern, R. Negri, S. Kluska, P. Otto, M. Martins, J. C. Panetto, D. Daltro</i>	426
31.21	Calvana breeding scheme using genomic information and optimal contribution selection <i>M. C. Fabbri, R. Bozzi</i>	427
31.22	Genomic characterization of the Montanina cattle <i>M. Cortellari, A. Bionda, M. Barbato, V. Florida, V. Chiofalo, N. A. Virga, C. Cavallo, P. Crepaldi, L. Liotta</i>	427
31.23	Evaluation of genetic diversity in beef cattle breeds of Centre-Italy <i>E. Mancin, C. Sartori, F. Sbarra, A. Quaglia, E. Rulli, G. Gomez-Proto, R. Mantovani</i>	428
31.24	Genomic Landscape of a Newly Unveiled Meleagris gallopavo Population in South Italy: A Leap Toward Understanding Turkey Biodiversity <i>M. Saleh, A. Camarda, P. De Palo, N. Pugliese, E. Circella, M. G. Strillacci, A. Bagnato, C. Abatino, N. Perrone, P. Arthur, G. Fiorentino, M. Groenen, M. Derks, V. Landi</i>	428
31.25	Next-Generation sequencing errors lessens the estimation of recent inbreeding <i>L. Gomez-Raya, W. M. Rauw, O. Torres, M. G. Gil, R. Peiro</i>	429
31.26	Bayesian Genome-wide Association Study of udder-type traits in Alpine Grey Cattle <i>G. Gomez Proto, E. Mancin, E. Rulli, C. Sartori, R. Mantovani</i>	429

Session 32. The role of marbling in beef quality - development, importance, measurement; harmonisation

Room: Valdostana - Palazzo Affari 3rd Floor

Chair: Pethick

Session Type: Theme session

	Theatre Session 32	Book of Abstracts page
14:30	Italian deli meats quality perspective with focus on best practices and commitments towards a new business model <i>D. Calderone</i>	430
14:45	Understanding the development of intramuscular fat in cattle – a mini review <i>J. F. Hocquette, D. W. Pethick</i>	430
15:00	Transforming chemical intramuscular fat% into MSA and AUS-MEAT marbling scores and potential application in the Australian beef industry <i>S. Stewart, G. Gardner, G. Tarr</i>	431
15:15	Prediction of consumer palatability in beef using visual marbling scores and chemical intramuscular fat percentage <i>G. Tarr</i>	431
15:30	Flavour drives consumer eating quality acceptability as intramuscular fat increases in Australian lamb <i>S. Moyes, G. Gardner, D. Pethick, L. Pannier</i>	432
15:45	Coffee Break	
16:15	Effects of live yeast and selenium supplementation on rumen parameters in long-transported Charolais bulls <i>M. Santinello, I. Lora, C. Villot, G. Cozzi, M. Penasa, E. Chevaux, B. Martin, A. Guerra, M. De Marchi</i>	432
16:30	An evaluation of muscle cut, maturation and meat quality of beef using Rapid Evaporative Ionisation Mass Spectrometry (REIMS) analysis <i>L. Perkins, W. Jia, T. Rowe, R. Polkinghorne, P. Nicholas-Davies, A. Koidis, N. Scollan</i>	433
16:45	REIMS (Rapid Evaporative Ionisation Mass Spectrometry) prediction of beef sensory quality and its relationships to fat level <i>J. Liu, N. Birse, C. Álvarez, J. Liu, I. Legrand, M. P. Elies-Oury, D. Durand, S. Prache, D. Pethick, N. Scollan, J. F. Hocquette</i>	433

17:00	A cuts-based Meat Standards Australia grading system for sheepmeat <i>L. Pannier, T. Pleasants, G. E. Gardner, G. Tarr, A. Ball, P. Mcgilchrist, D. W. Pethick</i>	434
17:15	Exploring the meat quality of Lidia heifer meat: preliminary results <i>M. Cantarero, E. Angón, J. Claros, L. Jiménez, I. Garzón, J. Perea</i>	434
17:30	Characterisation of Meat Quality Attributes in Different Cattle Breeds: Implications for Labelling and Consumer Choice <i>L. Grispolodi, E. Costanzi, C. Truzzi, M. Tassinari, B. Cenci Goga</i>	435
17:45	Evolution of animal and meat research over the past 50 years <i>Y. Cui, J. F. Hocquette</i>	435

Poster Session 32

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

32.13	Meat quality for once-calved heifers and heifers of Holstein-Friesian × Limousine crossbreds <i>Z. Nogalski, M. Sobczuk-Szul</i>	436
32.14	Impact of immunocastration on meat quality and muscle transcriptome of Angus × Nellore cattle <i>S. Pereira Junior, F. Soares, R. Ribeiro, H. Souza, J. Galvão, W. Baldassini, R. Curi, L. A. Chardulo, M. R. Chiaratti, O. Machado Neto</i>	436
32.15	Investigating tissue specific differences in the adipogenic cascade in bovine preadipocytes differentiation <i>B. Soret, J. A. Mendizabal, A. Arana, L. Alfonso</i>	437
32.16	On-farm preconditioning affects cattle stress, immune, and respiratory microbiota responses after transportation and feedlot placement <i>T. Alexander, S. M. Uddin, K. Schwartzkopf-Genswein, J. Ortiz Guluarte, O. Lopez-Campos, D. Holman</i>	437

Session 33. Mediterranean buffalo farming for sustainable milk and meat production

Room: Reggiana - Palazzo Affari 2nd Floor

Chair: Neglia / Niero

Session Type: Theme session

Theatre Session 33

Book of Abstracts page

14:30	Use of a commercial feed supplement based on diatom earth and yeast products on oxidative status and in vitro immune response in buffaloes during peripartum <i>A. Maggolino, E. Casalino, T. Latronico, G. M. Liuzzi, M. F. Sgarro, P. De Palo</i>	438
14:45	Effects of a nutritional supplement in Italian Mediterranean Buffalo exposed to heat stress <i>F. Petrocchi Jasinski, C. Evangelista, R. Steri, M. Iacurto, C. Petricca, L. Basiricò, D. Meo Zilio, U. Bernabucci</i>	438
15:00	Feasibility of visible/near-infrared spectroscopy to predict the chemical composition of feces and total-tract apparent nutrients digestibility in lactating buffaloes <i>A. Guerra, M. Simoni, V. Longobardi, A. Goi, G. Mantovani, T. Danese, G. Neglia, M. De Marchi, F. Righi</i>	439
15:15	Influence of an Automatic milking system on milk yield and quality in Italian Mediterranean buffaloes <i>R. Matera, A. Calanni Macchio, F. D'Acerno, M. T. Verde, F. Bonavolontà, S. Lauriola, G. Neglia</i>	439
15:30	Transcriptomic characterization of buffalo's extracellular vesicles from colostrum and milk: cargo comparison for potential applications <i>S. Mecocci, D. Pietrucci, M. Milanesi, S. Capomaccio, L. Pascucci, C. Evangelista, L. Basiricò, U. Bernabucci, G. Chillemi, K. Cappelli</i>	440
15:45	Coffee Break	
16:15	Prediction of blood parameters of buffaloes from the milk mid-infrared spectra <i>S. Magro, S. Esposito, G. Neglia, G. Niero, M. De Marchi</i>	440
16:30	Cortisol concentrations in different matrices: predictive potential and relationship with productive level, lactation stage and parity in dairy buffaloes <i>A. Cotticelli, F. Aragona, T. Peric, I. Pividori, A. Salzano, V. Longobardi, G. Campanile</i>	441
16:45	Characterization of buffalo faecal microbiome depending on ration concentrate level <i>C. Evangelista, D. Pietrucci, M. Milanesi, L. Basiricò, F. Gabbianelli, U. Bernabucci, G. Chillemi</i>	441

17:00	Assessment of infrared spectroscopy for the quantification of protein fractions in buffalo milk <i>E. Visentin, G. Niero, A. Guerra, R. Matera, V. Longobardi, G. Neglia, M. De Marchi</i>	442
17:15	Biosecurity correlation with Antimicrobial Use and Animal Welfare in buffalo farm evaluated by ClassyFarm System <i>D. Vecchio, F. Scali, A. M. Maisano, F. Fusi, V. Lorenzi, G. Di Vuolo, C. D. Ambra, M. Serrapica, G. Cappelli, C. R. Romeo, C. Lecchi, L. Bertocchi, A. J. Zanella, E. De Carlo</i>	442
17:30	A new version of buffalo SNP array to support Mediterranean breed genomic improvement <i>M. Milanese, D. Pietrucci, L. Picarone, G. Vignali, G. Cosenza, M. Gomez, G. Chillemi</i>	443
17:45	Influence of udder type traits on stayability in the Italian Mediterranean buffalo <i>D. Altieri, Y. Gombia, N. Piscopo, F. Carnovale, M. Neri, R. Di Palo</i>	443

Poster Session 33

Palazzo Congressi floor -1, from September 1st at 8:00 until September 2nd at 15:00

33.13	How old is too old? Effects of parity in dairy water-buffalo on milk and reproduction efficiency <i>M. Mincu, I. Nicolae, A. Bota, D. Gavojdian, T. Constantin</i>	444
33.14	Accuracy of a fast low-priced device based on 2D image analysis in predicting body weight of Italian Mediterranean buffalo <i>D. Meo Zilio, G. Bianconi, C. Petricca, P. Negretti, F. Petrocchi Jasinski, C. Evangelista, R. Steri</i>	444
33.15	Analysis to the microbiome of buffalo milk and mozzarella cheese using next generation sequencing techniques <i>C. Ferrari, L. Basiricò, U. Bernabucci, M. Ruzzi</i>	445
33.16	Effect of seasonality and farm management on the buffalo's milk lipidome <i>L. Basiricò, P. Bonini, C. Evangelista, U. Bernabucci, M. Ruzzi</i>	445
33.17	Influence of breeding techniques during the dry period on welfare in buffalo species <i>A. Cotticelli, L. Borzacchiello, G. Pacelli, G. Bifulco, M. Giombolini, T. Peric, G. Neglia</i>	446
33.18	Meat and milk from dual-purpose water buffalo production systems in Greece <i>G. Arsenos, I. Tsakmakidis, D. Roustemis, D. Patousis, S. Vouraki, V. Papanikolopoulou, A. Lymperopoulos</i>	446

Session 34.

Nutrition management to reduce methane emission and environmental impact, Part 1

Room: Chianina - Palazzo Affari 1st Floor

Chair: Bruggeman / Pinotti

Session Type: Theme session

Theatre Session 34

Book of Abstracts page

14:30	The use of coproducts to mitigate the environmental footprint of pigs and broiler chicken production <i>S. Cisse, H. Bui, J. Laurain, M. E. A. Benarbia</i>	447
14:45	Methane emissions from beef fed different protein sources and a forage-based diet <i>C. Christodoulou, K. E. Kliem, M. D. Auffret, D. J. Humphries, J. R. Newbold, N. Davison, P. Kirton, L. Smith, S. Stergiadis</i>	447
15:00	Effect of dietary protein concentrations on feeding efficiency and methane emissions of dairy cows across lactation <i>S. Ormston, T. Yan, X. Chen, A. W. Gordon, K. Theodoridou, S. Huws, S. Stergiadis</i>	448
15:15	Dietary crude protein reduction in poultry diets allows to decarbonize poultry meat and egg production with different levels of expected benefits across segments <i>M. Durand, A. Mathiaud, C. Raybaud, P. Moquet, W. Lambert</i>	448
15:30	Effect of fresh hemp and savory leaves on feed intake and rumen fermentation: in vitro and in vivo trials <i>S. Massaro, N. Amalfitano, D. Giannuzzi, F. Tagliapietra</i>	449

15:45 Coffee Break

16:15	Effect of β -mannanase on growing-finishing pig performance, economics, and carbon footprint <i>A. Huting, M. L. Augé, Q. Bringas, F. Molist</i>	449
16:30	Exploring Kaempferol 3-O-Glucoside as a Potential Feed Additive: In vitro Assessment for Mitigating Methane Emissions in Livestock Nutrition <i>A. Vastolo, M. Formato, S. Piccolella, S. Calabrò, S. Pacifico, M. I. Cutrignelli</i>	450

16:45	Quantifying methane emissions and animal performance from zero-grazed beef steers supplemented with <i>Ascophyllum nodosum</i> via a water-based delivery system <i>A. Casey, S. Vigors, T. Boland, F. Godwin, J. O'Sullivan, M. O'Donnell</i>	450
17:00	Effect of rape seed fat and saturated fat on milk production and enteric methane, when added to diets with different ratios between grass-clover and maize silage <i>C. F. Børsting, S. Lashkari, M. H. Kjeldsen</i>	451
17:15	Mango and Avocado Byproducts as Feed Ingredients and Additives in Ruminant diet <i>H. Jalal, E. Sucu, M. Giammarco, G. Vignola, M. Z. Akram, I. Fusaro</i>	451
17:30	Effect of <i>Cymbopogon citratus</i> on Enteric Methane Emission and Energy Partitioning in Growing Beef Cattle <i>M. F. Vázquez-Carrillo, M. González-Ronquillo, R. Zaragoza-Guerrero</i>	452
17:45	Including dried algae in dairy cow diets decreases emissions, yield and intensity of enteric methane <i>C. Benchaar</i>	452

Poster Session 34

Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00

34.13	Phenotypic traits related to methane yield in dairy cows <i>M. H. Kjeldsen, T. De Evan Rozada, S. J. Noel, A. A. Schönherz, A. L. F. Hellwing, P. Lund, M. R. Weisbjerg</i>	453
34.14	Effects of high-fat oats, rapeseed cake, and 3-NOP on milk production and methane emissions of dairy cows <i>P. Fant, G. Mantovani, M. Vadroňová, M. Ramin</i>	453
34.15	Repeatability of enteric methane measurements using GreenFeed systems on upland pastures <i>M. Bouchon, M. Coppa, Y. Rochette, C. Pichon, R. Chadaigne, B. Martin, C. Martin</i>	454
34.16	Quebracho condensed tannins fed to dairy goats: effect on milk fatty acids and their use for CH ₄ prediction <i>M. Battelli, F. Scicutella, G. M. Crovetto, A. Buccioni, L. Rapetti</i>	454
34.17	Dietary incorporation of Zinc-Beta glucan improves immune status, gut microbial composition, and mitigates gas emissions in weaning pigs <i>S. T. Wahid, S. Cho, M. H. Oh, K. Han, D. K. Kang, I. H. Kim</i>	455
34.18	<i>Enterococcus gallinarum</i> Reduce Methane Production in Rumen Fermentation In Vitro <i>M. A. Park, D. J. Lim, S. Park, S. Son, S. Choe, D. H. Kim, Y. Kim</i>	455
34.19	Insights into Effects of Combined Capric and Lauric Acid on Rumen Microbial Composition <i>M. Vadroňová, A. Štoviček, K. Jochová, A. Výborná, Y. Tyrollová, D. Tichá, M. Joch</i>	456
34.20	Enhancing Ruminant Fermentation Efficiency: Mitigating Methane Emissions through Persistent Peroxide Addition <i>A. Bartle, C. Thorn, P. Abberton, S. Mills, S. O'Connor, M. McDonagh, V. O'Flaherty</i>	456
34.21	Performance evaluation and enteric methane emission in bovines treated with natural Fator P additive <i>L. Fernandes, L. Ferreira, W. Araújo, A. D'Aurea, G. Moura, V. Fonseca, A. Maia</i>	457
34.22	Utilizing a Feed Additive to Mitigate Methane Emissions from Dairy Cows: On-Farm Trial Employing Methane Laser Detector <i>E. Senatore, G. Foggi, A. Silvi, M. Schiera, G. Mattera, A. Mantino, M. Mele</i>	457
34.23	In vitro and in vivo assessment of a blend of chestnut and quebracho tannins on rumen fermentation, methane production and digestibility in ruminants <i>E. Ramos-Morales, I. Rivelli, E. Soussan, M. García, S. Danesh, R. Rauch, P. Lund, D. Yanez-Ruiz</i>	458
34.24	Can almond hulls reduce in vitro ruminal methane production? <i>T. De Evan, A. Recalde, C. Fernández, R. Jiménez, S. Calero, M. D. Carro</i>	458
34.25	Anti-methanogenic feed additives in pasture-based dairy systems <i>H. Costigan, B. Lahart, L. Shalloo, C. Dwan, V. O'Flaherty</i>	459
34.26	The Effect of Ensiling Alfalfa with Acacia (<i>Robinia pseudoacacia</i>) Tree Leaves and Sugar Beet Molasses on Silage Fermentation Quality, In-vitro Ruminal Fermentation and Methane Production <i>M. U. Hassan, M. Gül</i>	459
34.27	Temporal effects of botanicals on total gas and methane production in ruminal fermentation in vitro <i>F. Ferrero, B. Tugnoli, V. Sáinz De La Maza-Escolà, R. Majer, F. Ghiaccio, A. Federiconi, A. Palmonari, A. Formigoni, A. Piva, E. Grilli</i>	460
34.28	High throughput in vitro screening of natural essential oils, rumen buffers, and plant extracts for enteric methane mitigation in cattle <i>I. Hodge, P. Quille, M. Ayyachamy, S. O'Connell</i>	460

34.29	Effect of using essential oils blend on performance in dairy cows <i>M. Agovino, C. Moran, C. Necula, H. Warren, K. Spengler</i>	461
34.30	Culture and growing conditions has an impact on methane mitigation properties in red algae <i>M. Angellotti, M. Lindberg, S. J. Krizsan, R. Danielsson</i>	461
34.31	Freshly cut grass-clover vs. grass-clover silage and grass-clover pulp silage for organic growing-finishing pigs <i>M. Eskildsen, E. Jørgensen, L. Stødilde-Jørgensen</i>	462

Session 35.

Advances in non-ruminant nutrition, Part 1

Room: Maremmana - Palazzo Affari 2nd Floor

Chair: Alvarez-Rodriguez / Kar

Session Type: Theme session

	Theatre Session 35	Book of Abstracts page
14:30	Variation of zinc release from phytate by phytase is dependent on the level of dietary Zn supplementation in pig: a meta-analysis <i>J. Labarre, P. Schmidely, C. Loncke, M. P. Letourneau-Montminy</i>	462
14:45	The combination of an alternative zinc source and low ABC-4 diets can replace the high levels of ZnO in nursery piglet diets <i>J. Riedmüller, J. E. G. Faccin, S. Durosoy, Y. J. Manaig, J. Zentek, J. M. Derouchey, J. T. Gebhardt, R. D. Goodband, J. C. Woodworth, M. D. Tokach</i>	463
15:00	Nursery pigs kept in poor sanitary housing conditions benefit from diets with low buffer capacity <i>T. Hulshof, H. Van Hees, L. Fabà</i>	463
15:15	Effect of zinc on phosphorus and calcium digestibility in post-weaning pigs: a meta-analysis <i>J. Labarre, P. Schmidely, C. Loncke, M. P. Letourneau-Montminy</i>	464
15:30	Effect of full matrix application of a novel phytase without or with a multi-enzyme complex containing xylanase, β -glucanase, amylase and protease on performance of piglets <i>R. Lizardo, H. Quesada, A. Ghane, G. Nguyen, E. Vinyeta, D. Velayudhan, Y. Dersjant-Li</i>	464
15:45	Coffee Break	
16:15	Kinetics of bone mineralization and allometric changes in response to calcium and phosphorus deficiency in broiler chickens <i>F. Piterson, A. R. Alfonso Avila, M. D. P. Reis, A. Narcy, M. P. Letourneau-Montminy</i>	465
16:30	Assessment of new phytase products through an in-vitro digestion model alongside a broiler chicken trial <i>M. Mireaux, F. Richard, F. Czernikar, F. Robert</i>	465
16:45	In vitro prediction of calcium and phosphorus availability in monogastric feed using marine sourced calcium and limestone <i>O. Demehin, T. Higgins, M. Bouwhuis, S. O'connell</i>	466
17:00	Impacts of <i>Saccharomyces</i> yeast postbiotics on intestinal response and growth of nursery pigs <i>S. W. Kim, M. E. Duarte</i>	466
17:15	Effect of hydrolyzed yeast from <i>Kluyveromyces fragilis</i> replacing high-dose zinc oxide on growth performance, diarrhea incidence and intestinal health of weaned piglets <i>C. Yin, M. Comi, W. Chen, V. Perricone, W. Sun, Y. Pi, Y. Li, A. Agazzi, X. Li, X. Jiang</i>	467
17:30	In vitro and in vivo evaluation of L-Lysine solid lipid microcapsules for swine <i>C. Bonnici, M. F. Marchesi, R. Majer, G. Gallina, A. Piva, E. Grilli</i>	467
17:45	Effect of a botanical-based feed additive in vitro on cultured enterocytes and in vivo on weaned piglets challenged with F4+ enterotoxigenic <i>Escherichia coli</i> <i>A. Bonetti, B. Tugnoli, A. Piva, A. Middelkoop, F. Molist, E. Grilli</i>	468
	Poster Session 35 <i>Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00</i>	
35.13	Evaluation of dietary selenium nanoparticles and curcumin nanospheres on growth, feed utilization and fecal gas emissions in weaned piglets <i>M. Moniruzzaman, T. Min</i>	468

35.14	The use of levan in laying hens nutrition - influence on the microflora of the gastrointestinal tract <i>D. Konkol, M. Kuźmińska-Bajor, Z. Lazar, E. Popiela, M. Korczyński</i>	469
35.15	Mint oils: ability to perform in vitro anti-inflammatory and their antimicrobial effect <i>M. Hejna, L. Kovanda, L. Rossi, Y. Liu</i>	469

Session 36.

Slow-growing meat-type and dual purpose genotypes for conventional and alternative farming systems in the EU

Room: Romagnola - Palazzo Affari 1st Floor

Chair: Stadnicka / Petracci / Das

Session Type: Project session

	Theatre Session 36	Book of Abstracts page
14:30	Update on the use of slow-growing chicken genotypes for conventional and alternative farming systems in the EU <i>invited C. Castellini</i>	470
15:00	Crossbreeding as an innovative way to preserve local chicken breeds through use in organic farming <i>S. Weigend, I. Tiemann, S. Hillemacher, J. Stuff, J. Tetens, P. Hoffmann, W. Vogt-Kaute, D. Hinrichs</i>	470
15:15	The biodiversity of local poultry breeds: characterisation of two Tuscany breeds to save them from extinction <i>F. Mannelli, I. Galigani, L. Versino, M. Biagi Arroyo, L. Fantechi, M. Daglio</i>	471
15:30	Multiperformance of slow-growing and dual-purpose strains in organic chicken production: learning from the PPILOW project <i>invited C. Bonnefous, C. Castellini, S. Mattioli, S. Mignon-Grasteau, J. Collet, L. A. Guilloteau, B. Méda, T. De Rauglaudre, H. Pluschke, P. Thobe, D. Werner, L. Calandreau, V. Guesdon, S. Steinfeldt, K. Germain, L. Ravon, C. Berri, S. Lombard, M. Reverchon, E. Le Bihan-Duval, A. Collin</i>	471
16:00	Coffee Break	
16:30	What do dual purpose cockerels feed on in the range area? <i>S. Hübner, D. Werner</i>	472
16:45	An index for adaptability evaluation of slow-growing chicken genotypes reared in free-range system <i>S. Mattioli, L. Menchetti, E. Angelucci, A. Cartoni Mancinelli, A. Dal Bosco, L. Madeo, D. Chiattelli, F. Di Federico, C. Castellini</i>	472
17:00	Application of Quality of Life approach to evaluate the behavior of four slow growing chicken genotypes reared in free range <i>A. Cartoni Mancinelli, D. Chiattelli, L. Menchetti, A. Trocino, C. Ciarelli, C. Castellini</i>	473
17:15	Productive performance and nitrogen excretion of fast-, medium- and slow-growing chicken genotypes fed diets varying in protein-to-energy ratio <i>M. Zampiga, M. Petracci, R. Piscitelli, F. Volpe, F. Ceccaroni, F. Sirri</i>	473
17:30	Feather's transcriptome analysis in local chickens fed with two different diets: a possible marker to study lipid metabolism <i>N. Stoppiani, F. Raspa, E. Fiorilla, S. Maione, C. Mugnai, A. Schiavone, D. Soglia</i>	474
	Poster Session 36 <i>Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00</i>	
36.10	Suitability of commercial crossbred dual-purpose male chicks for capon production <i>D. Murawska, M. Gesek, D. Witkowska, J. Błażejczak-Grabowska</i>	474
36.11	Exploring the influence of alternative feed ingredients on meat production and quality in a slow-growing autochthonous chicken breed <i>M. Gariglio, E. E. Cappone, V. Bongiorno, C. Bianchi, V. Zambotto, A. Schiavone</i>	475
36.12	Genetic characterization of Collo Nudo Italiana and Millefiori Piemontese chicken breeds through high-density SNP genotyping <i>F. Cendron, F. Perini, E. Lasagna, D. Soglia, A. Schiavone, M. Cassandro, M. Penasa</i>	475
36.13	How does the diversification of farming methods in Europe influence the main indicators of the technological and sensory quality of chicken meat? <i>E. Baéza, M. Petracci, S. De Smet, R. Eppenstein, M. Bourin, A. Cartoni Mancinelli, E. Kowalski, C. Berri</i>	476

Session 37. Rethink the transition from suckling to weaning to prevent negative consequences of the stress on pig health

Room: Piemontese - Palazzo Affari 2nd Floor

Chair: Trevisi / Chalvon-Demersay

Session Type: Theme session

	Theatre Session 37	Book of Abstracts page
14:30	Getting weaned pigs off to a great start: What we have learned to reduce stress and improve performance <i>invited</i> J. C. Woodworth, M. D. Tokach, R. D. Goodband, J. M. Derouchey, J. T. Gebhardt, K. N. Gaffield	476
15:00	Effects of early socialisation on growth, health and welfare of piglets raised on commercial farms S. Gavaud, C. Perrier, A. Nalovic, J. Lion, A. Jahoui, V. Müller, D. Marchand, C. Belloc, B. Lieubeau, J. Hervé	477
15:15	Spray dried plasma improves piglets' performance and gut function in the first week post-weaning Z. W. Ng'Ang'A, J. Tarradas, R. Beltrán-Debón, J. Polo, D. Torrallardona	477
15:30	Effects of maternal probiotic, and/or piglet dietary tryptophan supplementation pre-weaning, on gene expression in the pre-weaned pigs stomach D. P. Kiernan, J. V. O'Doherty, M. Ryan, T. Sweeney	478
15:45	Coffee Break	
16:15	The leucine-derived gut microbiota metabolite isovalerate enhances the epithelial barrier function in cell monolayers derived from pig ileum organoids M. Beaumont, C. Lencina, E. Jones, A. Simongiovanni, T. Chalvon-Demersay	478
16:30	The impacts of resistant potato starch and Lactiplantibacillus plantarum on growth and health of post-weaned pigs K. R. Connolly, T. Sweeney, J. V. O'Doherty	479
16:45	Impact of Deoxynivalenol in a Nutritional Calcium Depletion and Repletion Protocol in Piglets B. Sauvé, F. Guay, M. P. Létourneau-Montminy	479
17:00	Welfare is the best medicine: Management strategies to prepare piglets for weaning <i>invited</i> L. Boyle	480
17:30	The effect of increased energy and amino acid levels in lactation diets on the performance of sows' piglets S. Millet, S. Goethals	480
17:45	Conventional farrowing crates vs. Loose housed system. Effects on performances of sows and piglets S. Querido, M. Parreiras, V. Pinheiro, D. Monteiro	481
	Poster Session 37 <i>Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00</i>	
37.11	Effects of uncutting piglets tails on tail biting S. Querido, M. Vieira-Pinto, M. Parreiras, D. Monteiro	481

Session 38. Best-practice in addressing pig welfare on-farm

Room: Podolica - Limonaia - Garden

Chair: Quinn / Nilsson

Session Type: Industry session

	Theatre Session 38	Book of Abstracts page
14:30	WelFarmers: The best practices in welfare for pigs <i>invited</i> A. Quinn, P. Ferrari, J. Lorente	482
15:00	Is it possible to end piglet castration forever? <i>invited</i> L. Morgan	482
15:30	The influence of fibre sources on tail damage in docked pigs K. Plush, S. Small, S. Tritton, L. Staveley, R. Hewitt, E. Clayton, D. D'Souza	483
15:45	Coffee Break	

16:15	Tail lesions monitoring in weaned undocked tail pigs <i>A. Zoratti, G. Chiarelli, A. Zuliani, M. Corazzin, E. Piasentier</i>	483
16:30	The effect of stocking density on performance, lesions and soiling <i>M. Aluwé, E. Kowalski, L. De Prekel, A. Van Den Broeke, S. Millet</i>	484
16:45	Effects of light spectrum on health and behaviour of growing-finishing pigs <i>A. Scailherez, S. Van Nieuwamerongen-De Koning, I. Boumans, R. Van Der Tol, E. Bokkers</i>	484
17:00	Use of an outdoor run by group-housed sows in the mating area depending on weather conditions <i>S. Geisler, A. Van Asten, N. Kemper, I. Traulsen</i>	485
17:15	Study of the attractiveness and longevity of enrichment materials and wood species in a blocked farrowing house and a large gestation group setting <i>A. Poissonnet, L. Parra-Sourdeau, V. Courboulay</i>	485
17:30	Evaluating the impact of enrichment material in farrowing pens on sow and piglet performance <i>M. Cupido, S. Mullan, L. Boyle, K. O'Driscoll</i>	486
17:45	Positive effect of nesting material on crushing losses in free farrowing pens with short-term fixation <i>J. Wahmhoff, N. Kemper, A. Van Asten, I. Traulsen</i>	486

Poster Session 38

Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00

38.11	Can black soldier fly live larvae improve postweaned piglets' welfare? <i>S. Belperio, G. Martelli, M. Meneguz, E. Nannoni, D. Ventrella, N. I. Vannetti, N. Govoni, L. Sardi</i>	487
38.12	Effects of deck height during transport of weaners: in-vehicle conditions and clinical indicators <i>L. Foldager, K. Thodberg, G. Chen, J. K. Kristensen, L. D. Jensen, M. Kaiser, C. Kobek-Kjeldager, L. Rong, M. S. Herskin</i>	487
38.13	Determination of social interactions in a group of gestating sows based on location, posture and orientation <i>A. Blanc, M. De La Bourdonnaye, V. Courboulay, A. Poissonnet, N. Quiniou, J. Thomas, C. Gaillard</i>	488
38.14	Strategies for minimizing dust in straw-based-systems for pigs <i>I. Mösenbacher-Molterer, M. Kropsch, E. Zentner, B. Heidinger, C. Auinger</i>	488

Session 39. Building quality into animal products to improve the sustainability of farming systems for the future

Room: Marchigiana - Palazzo Affari Ground floor

Chair: Thenard / da Silva

Session Type: Theme session

	Theatre Session 39	Book of Abstracts page
14:30	Building sustainable systems at the era of farm-to-fork and agroecology: Unraveling the interplay of quality attributes of animal-source foods <i>invited B. Lebret, M. Gagaoua, C. Van Baelen, S. Prache</i>	489
15:00	Dairy Milk vs Plant-Based Milk Alternatives: Exploring Fat Nutritional Indices in Retail Products <i>G. Papatzimos, Z. Basdagianni, M. A. Karatzia, P. Mitlianga, E. Kasapidou</i>	489
15:15	Case study of the market situation of calves from Alpine dairy farms and the effect of dams' grazing during the last three months of gestation on auction parameters <i>T. Zanon, L. Degano, M. Gauly, P. Sartor, G. Cozzi</i>	490
15:30	Truly superior? Consumer ratings of meat from an endangered German pig breed <i>A. Olschewsky, D. Hinrichs, D. Mörlein</i>	490
15:45	Coffee Break	
16:15	Informing about higher levels of animal welfare increases sensory consumer liking of pork <i>N. Gier, R. Harms, D. Moerlein</i>	491
16:30	Implementing sustainability frameworks on product level- exploring the usability <i>A. Woodhouse, B. Aspehølen Åby, H. Fjerdingsby Olsen</i>	491
16:45	Economic sustainability and resilience of extensiveness in fattening pig farms <i>L. Giglio, P. Ferrari</i>	492
17:00	Green willow biomass as feed source for pigs <i>A. G. Kongsted, S. Ugilt Larsen, L. Dinesen Jensen, K. Horsted, M. Eskildsen</i>	492

17:15	Organic pig farming: from feeding strategy to meat organoleptic quality <i>C. Van Baelen, E. Vossen, L. Montagne, A. Prunier, S. De Smet, B. Lebret</i>	493
17:30	Land use efficiency to protein production of French dairy cattle contrasted in their feeding systems <i>M. Allix, B. Rouillé, R. Baumont</i>	493
17:45	Characterization of small egg producers in the O'Higgins region, Chile <i>P. Toro-Mujica, F. Gálvez, J. Aldana, P. Lisboa</i>	494
18:00	Farm level economic effects of introducing forage crop silage in the feed regimen to fattening pigs <i>M. Presto Åkerfeldt, E. Owusu Sekyere, J. Friman, S. Zira, H. Hansson</i>	494

Poster Session 39

Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00

39.13	Evaluation of milking attitude and milk quality in native Ciuta sheep breed <i>A. Lopez, B. Marcolli, M. Greco, S. Mattiello, V. M. Moretti, F. Bellagamba</i>	495
39.14	Milk production in Rubia Gallega suckler cows: estimation methods and correlation with morphological and anatomical measurements <i>T. Moreno, C. Montes, S. Crecente</i>	495
39.15	Total phenolic content and antioxidant profile – A comparative study between retail goat and cow milk <i>G. Papatzimos, P. Mitlianga, M. A. Karatzia, Z. Basdagianni, E. Kasapidou</i>	496
39.16	Valorisation of the triple attitude in Ciuta sheep through the characterization of productions: the VAL3CIUTA project <i>A. Lopez, V. M. Moretti, S. Mattiello, C. Mazzocchi, F. Bellagamba</i>	496
39.17	Dietary supplementation of orange peel ingredient in lactating ewes: effect on yoghurt physicochemical characteristics <i>E. Kasapidou, G. Papatzimos, P. Mitlianga, Z. Basdagianni, S. Mai, E. M. Barampouti, M. A. Karatzia</i>	497
39.18	Dietary supplementation of orange peel ingredient in lactating ewes: effect on yoghurt sensory characteristics <i>E. Kasapidou, P. Mitlianga, Z. Basdagianni, G. Papatzimos, S. Mai, E. M. Barampouti, M. A. Karatzia</i>	497
39.19	Discrimination of organic goat retail milk by fatty acid biomarkers <i>E. Kasapidou, P. Mitlianga, G. Papatzimos, Z. Basdagianni, M. A. Karatzia</i>	498
39.20	Application of NIR spectroscopy coupled with DA-PCA for the authentication of lamb meat <i>S. Parrini, M. C. Fabbri, A. Crovetto, C. Aquilani, C. Pugliese, R. Bozzi</i>	498
39.21	Characterization and typology of egg consumers in the Central zone of Chile <i>P. Toro-Mujica, F. Gálvez, J. Aldana</i>	499
39.22	The effect of gender on meat quality of the longissimus lumborum muscle in growing-finishing pigs <i>K. Dobiesz, W. Kozera, U. Czarnik, A. Okorski, G. Żak, M. Dąbrowski, Ł. Zielonka, K. Karpiesiuk</i>	499
39.23	Effect of sex on the quality and fatty acid profile of the longis muscle in danbred hybrid pigs <i>K. Dobiesz, W. Kozera, A. Okorski, G. Żak, J. Krzysztoń, K. Karpiesiuk</i>	500
39.24	Comparison of the slaughter weight, slaughter characteristics and carcass composition of South African Boer Goats and Dohne Merino sheep <i>T. Brand, J. Van Der Westhuizen, R. Swart, P. Strydom, B. Van Zyl</i>	500
39.25	Beef x dairy crossbreeding in mountain farms: major effects on carcass weight and retail cuts <i>N. Amalfitano, M. Berton, I. Bazzoli, G. Bittante, L. Gallo, E. Sturaro</i>	501
39.26	Rheological and protein thermal denaturation properties of eggs from different farming systems <i>K. Kotsiou, C. Mouzakitis, A. Lazaridou, C. Biliaderis, I. Stavropoulos, N. Van Leuffen, J. Smits, Z. Basdagianni, I. Bossis</i>	501

Session 40. Zooarchaeological research lessons for contemporary livestock management, conservation and genetics

Room: Calvana - Palazzo Congressi Ground floor

Chair: Pouloupoulou / Rahmatalla

Session Type: Theme session

Theatre Session 40

Book of Abstracts page

14:30	Some genomic insights into the spatio-temporal dynamics of domestication and dispersal of sheep <i>invited I. Medugorac, J. Peters</i>	502
15:00	What does the past tell us about the future – examinations of remains from domestic livestock <i>R. Schafberg</i>	502

15:15	From Wild to Tamed and Back: demographic reconstruction of Sardinian sheep from whole-genome sequences <i>V. Floridia, M. Dehasque, P. Morell Miranda, P. Mereu, M. Pirastru, N. Columbano, S. Naitana, G. G. Leoni, T. Günther, M. Barbato</i>	503
15:30	Differential trajectories of the annual reproductive cycle in sheep and cattle from Neolithic to modern times <i>M. Balasse, P. Chemineau, A. Sierra, E. Gutierrez, P. Pignaut, L. Garbé, M. Brummelhuis, S. Bréhard, S. Michalopoulou, L. Gourichon, D. Binder, J. Guilaine, M. Ivanova, U. Leuzinger, C. Manen, M. Keller</i>	503
15:45	Coffee Break	
16:15	African indigenous cattle genealogy revealed by whole-genome tree sequences <i>I. Houaga, G. Mafra Fortuna, J. Obsteter, S. Kambal, A. Tijjani, O. Hanotte, I. Pocrnic, G. Gorjanc</i>	504
16:30	Unravelling the genetic diversity among Nubian, Old English, and Anglo-Nubian goat breeds <i>S. Rahmatalla, G. Neumann, D. Arends, P. Korkuč, G. Tarekegn, S. Gaouar, H. Abdel-Shafy, J. Conington, M. Reissmann, M. Nassar, G. Brockmann</i>	504
16:45	Genetic diversity of eight local Belgian sheep breeds using pedigree and SNP data <i>N. Aerts, R. Meyermans, W. Gorssen, L. Chapard, K. Hooyberghs, N. Buys, S. Janssens</i>	505
17:00	Integrating zooarchaeological, historical and genomic data to explore potentials for conserving the indigenous cattle breed of Cyprus <i>A. Spyrou, G. Hadjipavlou, A. C. Dimitriou, D. G. Bradley</i>	505
17:15	Evolution of genetic parameters for production traits and conception rate in the Dutch Holstein population <i>J. Vandenplas, Y. Wientjes, P. Bijma, M. Schrauf, M. Van Pelt</i>	506
17:30	Genetic diversity and population structure of the endangered Tanzanian Mpwapwa cattle breed <i>I. Houaga, Z. Nziku, A. Nguluma, G. Msuta, O. Opoola, M. Okeyo, R. Mrode, A. Djikeng, G. Gorjanc, C. M. Rochus</i>	506

Poster Session 40

Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00

40.11	Genomic analysis of Greek mouflon <i>E. Tarsani, S. Katsipodas, I. Hadjigeorgiou, A. Kominakis</i>	507
40.12	Morphostructural and phaneroptic variability of creole goats in the Southern Highlands of Peru <i>E. A. Sessarego, F. C. Trillo, D. J. Godoy, J. A. Cruz</i>	507
40.13	Genetic analysis of Mediterranean wild rabbit populations (<i>Oryctolagus cuniculus</i>) using whole genome sequencing data <i>A. Kominakis, J. M. Alves, I. Hadjigeorgiou</i>	508

Session 41.

Optimising reproductive physiology of livestock

Room: Modicana - Palazzo Affari 3rd Floor

Chair: Kenny / Randi

Session Type: Industry session

Theatre Session 41

Book of Abstracts page

14:30	Estimated output from assisted reproductive techniques (OPU/IVF) in Holstein cattle associated with the genetic background <i>F. Guillaume, S. Brard-Fudulea, B. Desnoues, H. Grothmann, S. Meier</i>	508
14:45	Effects of moderate exercise regimen on reproductive development of replacement beef heifers reared in drylots at a high stocking density <i>R. Cooke, F. Cooke, S. Mackey, A. Pickett, K. Harvey</i>	509
15:00	Seminal cytokine profiles as markers of bovine sperm quality <i>J. Statham, N. Gahir, K. Burton, C. Freer, G. Mappa, C. Smalley, A. Lancaster, N. Orsi</i>	509
15:15	From womb to bloom: conception, early life and maternal effects on boar semen production <i>P. Sá, R. M. Godinho, M. Gòdia, C. A. Sevillano, B. Harlizius, O. Madsen, H. Bovenhuis</i>	510
15:30	Effect of grazing pastures with rich tannin legumes on ovarian activity in suckling anoestrous beef cows <i>G. Quintans, M. Lema, G. Fernandez-Turren, G. Banchemo</i>	510

15:45 Coffee Break

- 16:15 Relationship between sperm DNA fragmentation, semen quality and serum mineral concentration of bulls 511
A. Benito-Diaz, A. Sarmiento-García, M. Montañes-Foz, R. Bodas-Rodríguez, J. J. García-García, P. Vicente-Galindo
- 16:30 Genomics of boar semen quality traits in U.S. Large White and Duroc breeds 511
M. Terribile, G. Visentin, A. Costa, D. Bucci, Y. Huang, J. Jiang, F. Tiezzi, C. Maltecca

Poster Session 41

Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00

- 41.08 Effects of prolactin on serum hormones and related genes of ewes in the estrus cycle 512
S. Yue, R. Yang, Y. Liu, Y. Zhang
- 41.09 Effect of storage time in epididymis at 5°C on motility, viability and morphology of spermatozoa of European red deer (*Cervus elaphus elaphus*) 512
A. Dziekońska, N. M. Neuman, M. Kozirowska-Gilun, P. Gilun
- 41.10 Effect of oxidative stress on reproduction of dairy cattle 513
J. Sekaninová, M. Janků, L. Luhová, M. Petřivalský, J. Bezdíček, J. Ducháček, L. Stádník
- 41.11 The effect of adding penicillin on the quality of pig semen 513
T. Sitorus, A. Tarigan
- 41.12 Correlated response to divergent selection for litter size variability in rabbits' semen quality 514
D. Serrano-Jara, M. J. Argente, M. D. L. L. García
- 41.13 Reproductive tract morphology and symmetry of farmed common eland (*Tragelaphus oryx*) bulls, and their relationship with secondary sexual traits and social rank 514
J. Consolacion, F. Ceacero, A. S. Musa, V. Ny, R. Kotrba, J. Illek, M. Škorič, T. Needham
- 41.14 Effect of food restriction on rabbit ovarian functions 515
I. Hadjadj, Z. Fabova, M. D. L. L. García, B. Loncova, M. Morovic, D. Serrano-Jara, P. Makovicky, M. J. Argente, A. V. Sirotkin
- 41.15 Camelina sativa L cake as a source of n-3 fatty acids does not affect the reproductive traits of HF heifers 515
R. Poplawski, K. Szkudelska, M. Pszczola, M. Murawski, D. Fabian, B. Nowak, P. Sidoruk, P. Kolodziejewski, D. Lechniak-Cieslak
- 41.16 Implementation of an Artificial Intelligence system for morphological evaluation of spermatozoa in routine bull semen analysis 516
S. Urli, F. Corte Pause, T. Dreossi, G. Stradaoli
- 41.17 Combined transcriptome analysis reveals the effect of prolactin inhibition on epididymal function in cashmere goats 516
X. Liu, Y. Liu, Y. Zhang
- 41.18 Morphometric study of the goat cervix during stages of natural estrus cycle 517
S. Kanthawat, F. Thatsanabunjong, P. Raksaseri, S. Panyaboriban, S. Srisuwatanasagul
- 41.19 Timing of Pregnancy Loss in Lactating Holstein Cows 517
P. Carvalho, V. Santos, S. Priskas, V. Papanikolopoulou, C. Maia, A. Souza, G. Arsenos

Session 42.

Digital technologies for management

Room: Sarda - Palazzo Affari Below ground Floor

Chair: Morgan-Davies / Gautier

Session Type: Challenge session

Theatre Session 42

Book of Abstracts page

- 14:30 The impact of virtual fence on cattle's learning curve over several weeks with multiple borders 518
L. Wahlund, P. Nielsen, A. Jansson, L. Rönnegård
- 14:45 Virtual and electrical fences – perspectives from a survey for cattle farmers in Norway and Sweden 518
F. Petters, P. P. Nielsen, L. Wahlund
- 15:00 Drone RGB Image-Derived Vegetation Indices to Predict Yield in Humidicola (*Brachiaria humidicola*) Grass 519
A. Astillero, E. C. Lin
- 15:15 Advancing Agricultural Efficiency: Unmanned Aircraft Vehicle in Soil and Pasture Management 519
G. Menezes, A. Franco, J. Dorea
- 15:30 Can we use open data to track grazing intensity? 520
E. Padrón-Tejera, M. J. García-García, D. C. Pérez-Marín, F. Aranda-Viana, F. Maroto-Molina

15:45 Coffee Break

16:15	Digital ear tags in remote monitoring – exploring new (ab)use cases <i>K. Ueda, A. Ingham, G. Bishop-Hurley, S. Rieder</i>	520
16:30	Tracking bull reproductive dominance by measuring male-female interactions using Bluetooth Low Energy <i>M. J. García García, E. Padrón Tejera, D. C. Pérez Marín, F. Maroto Molina</i>	521
16:45	Improving animal health and welfare by using sensor data in herd management and dairy cattle breeding – a joint initiative of ICAR and IDF <i>C. Egger-Danner, I. Klaas, L. Brito, K. Schodl, J. Bewley, V. Cabrera, N. Charfeddine, N. Gengler, M. Haskell, B. Heringstad, M. Hostens, M. Iwersen, R. Linde, K. Stock, A. Stygar, E. Vasseur</i>	521
17:00	TechCare: Technologies to manage the welfare of sheep and goats – from pilots to large-scale studies <i>C. Morgan-Davies, G. Tesniere, C. M. Dwyer, G. Jorgensen, E. Gonzalez-Garcia, J. M. Gautier, L. Grova, M. Decandia, F. Kenyon, G. Caja Lopez, I. Halachmi, A. Godo, E. Sossidou, S. Patsios, L. T. Czyszter, T. W. Keady, B. Mcclearn, G. Lagriffoul, N. Litalien, L. Riaguas</i>	522
17:15	Transferring a 3D imaging POC to beef cattle breeding stakeholders to do on-farm high-throughput phenotyping: the PHENO3D example <i>A. Lebreton, C. Gillé-Perrier, L. Delattre, C. Allain, M. Bruyas</i>	522
17:30	Guideline to validate sensor output of animal-based measurements <i>J. Maselyne, A. Stygar, M. Pastell, Q. Allueva Molina, A. Ramon Pérez, P. Llonch, H. L. Ko</i>	523
17:45	AgrifoodTEF's pioneering EU service provider from research to industry for the development of Artificial Intelligence and robotic solutions <i>Z. Guy, J. M. Gautier, J. Contreras</i>	523

Poster Session 42

Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00

42.13	Innovative Orchestration in Sheep Farming-IOSheep 4.0: Ensuring complete welfare, ecofriendly, quality and traceability of lambs <i>B. Odevci, E. Emsen</i>	524
42.14	The current use and demand for tracking systems on German grazing cattle farms <i>J. Maxa, S. Thurner</i>	524
42.15	Veterinarians' perceptions on Precision Livestock Farming application in pig health management <i>L. Dieste-Pérez, X. Zhou, B. Garcia-Morante, A. Burrell, K. Eenink, C. Correia-Gomes, J. Segalés, M. Sibila, T. Tobias, C. Vilalta, A. Bearth</i>	525
42.16	Optimizing Low-Frequency Ultrasound for Enhanced Sow Pregnancy Diagnosis Using Vision Transformer-High (ViT-H) Approach <i>T. K. Kim, Y. H. Choi, J. S. Hong, H. J. Park, J. E. Kim, Y. D. Jeong, C. H. Kim, S. H. Back, S. J. Sa, J. H. Lee, J. S. Kim, H. C. Cho</i>	525
42.17	Predicting the botanical composition of pastures using Near Infrared Spectroscopy <i>C. Reyes-Palomo, S. Gil-Domínguez, S. Sanz-Fernández, C. Díaz-Gaona, P. Rodríguez-Hernández, V. Rodríguez-Estévez, N. Núñez-Sánchez</i>	526

Tuesday 3 September

Session 43. Digital phenotyping, sensors, 'omics' and genetics in enhanced sustainability

Room: Auditorium - Palazzo Congressi Lower Ground Floor

Chair: Egger-Danner / Lebreton

Session Type: Theme session

Theatre Session 43

Book of Abstracts page

8:30	Genomic selection in the era of digital phenotyping <i>invited D. Lourenco, M. Bermann, M. K. Hollifield, M. Billah, C. Y. Chen, E. Psota, J. Holl, S. Tsuruta, I. Misztal</i>	526
9:00	Comparison of the potential of cow-side blood tests, MIR spectra and wearable sensor devices for breeding for metabolic health in dairy cows <i>K. Schodl, B. Fuerst-Waltl, D4Dairy Consortium, C. Egger-Danner</i>	527

9:15	Can daily rumination time be used to breed for resilient Holstein cows? <i>W. Lou, B. Ducro, A. Van Der Linden, Y. Wang</i>	527
9:30	Use of machine learning methods to predict feed efficiency traits in dairy cows using phenotypic and genomic information <i>A. Seidel, L. Stahmer, G. Thaller</i>	528
9:45	Comparison of methods to identify resilience indicator phenotypes using across lactation robot milk yield dynamics in the Nordic Red cows <i>A. Kavlak, E. Negussie, M. Lidauer, M. Pastell</i>	528
10:00	Genetic correlation between residual feed intake and easily measurable plasma parameters in early-fattening young bulls <i>S. Taussat, H. Aboshady, P. Martin, G. Cantalapiedra-Hijar</i>	529
10:15 Coffee Break		
10:45	Genetic parameters for novel climatic resilience indicators derived from automatically-recorded vaginal temperature in lactating sows under heat stress conditions <i>L. F. Brito, H. Wen</i>	529
11:00	The relationship between microbial composition and feed efficiency in Iberian pigs <i>P. Nuñez, C. Casto-Rebollo, S. Negro, J. Casellas, L. Varona, R. Pena, N. Ibáñez-Escriche</i>	530
11:15	Machine learning approaches for classifying the Iberian pig strains based on microbiome <i>L. Azougagh, C. Casto-Rebollo, L. Varona, J. Casellas, S. Negro, M. Martínez-Álvaro, N. Ibáñez-Escriche</i>	530
11:30	In-abattoir 3D measurements of beef carcasses for the prediction of saleable meat yield and novel carcass traits <i>H. Nisbet, N. Lambe, G. Miller, A. Doeschl-Wilson, D. Barclay, A. Wheaton, C. A. Duthie</i>	531
11:45	Pixels to feed: Digital phenotyping potential for genetic analysis of feed intake and efficiency in Atlantic salmon <i>A. Ahmad, A. Sonesson, B. Hatlen, G. Bæverfjord, P. Berg, A. Norris, G. Difford</i>	531
12:00	Genotype-by-environment interaction with high-dimensional environmental data: an example in pigs <i>F. Bussiman, D. Lourenco, C. Y. Chen, J. Holl, I. Misztal, Z. G. Vitezica</i>	532

Poster Session 43

Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00

43.13	Association analysis of daily rumination time with hindgut microbiota and metabolites in dairy cows <i>H. Lu, F. Li, Y. Wang</i>	532
43.14	Sensitive pathogens detection using nanozyme-based catalysis amplification on Ag-PSi SERS scaffold <i>G. Shtenberg, N. R Nirala</i>	533
43.15	Usability of raw phenotypic data in selective breeding of dairy cattle on health traits in Slovakia <i>M. Chalupková, N. Moravčíková, A. Halvoník, J. Candrák, L. Zavadilová, R. Kasarda</i>	533
43.16	Machine learning and parametric methods for genomic prediction of feed efficiency-related traits <i>L. F. M. Mota, L. M. Arikawa, S. W. Boer, M. E. Z. Mercadante, J. N. S. G. Cyrillo, H. N. Oliveira, L. G. Albuquerque</i>	534
43.17	Prediction of blood β -hydroxybutyrate and hyperketonemia based on milk mid-infrared spectra in dairy cows <i>S. Gruber, A. Köck, C. Egger-Danner, M. Iwersen, B. Fuerst-Waltl, J. Sölkner</i>	534
43.18	Dissecting production traits using metabolomics in pigs <i>S. Bovo, G. Schiavo, F. Bertolini, M. Bolner, M. Cappelloni, M. Gallo, P. Zambonelli, S. Dall'Olio, L. Fontanesi</i>	535
43.19	Longitudinal feed intake deviations at the pen level as a resilience indicator for pigs <i>W. Gorssen, C. Winters, R. Meyermans, L. Chapard, K. Hooyberghs, J. Depuydt, S. Janssens, N. Buys</i>	535
43.20	Genetic analysis of milk FTIR spectra in Italian Simmental Cattle <i>R. Negrini, G. Gaspa, L. Degano, D. Vicario, A. Cesarani, N. P. P. Macciotta</i>	536
43.21	Prediction of nutritional content of black soldier fly (BSF) larvae using multispectral imaging <i>G. Gebreyesus, K. Jensen, A. Luca</i>	536
43.22	Comprehensive analysis of whole-transcriptome and metabolome provides insights into estrus expression in Holstein cattle <i>T. Yang, Y. Chang, Y. Wang</i>	537
43.23	Unraveling metabolic stress response in dairy cows: genetic control of plasma biomarkers throughout lactation and the transition period <i>M. M. Passamonti, M. Milanese, L. Cattaneo, J. Ramirez Diaz, A. Stella, M. Barbato, C. Urbano Braz, R. Negrini, D. Giannuzzi, S. Pegolo, A. Cecchinato, E. Trevisi, J. L. Williams, P. Ajmone Marsan</i>	537

43.24	Phenotyping tools and data collection for the agroecological transition <i>G. Pairault, C. Allain, R. Baumont, Y. Billon, S. Brard-Fudulea, M. Brochard, B. Dumon-Saint-Priest, N. Gaudillière, L. Griffon, L. Journaux, J. Magadray, T. Morin, M. Tabouret, M. Sourdioux, A. Travel, J. P. Bidanel</i>	538
43.25	Blood metabolic biomarkers predicted from milk spectra are heritable in Holstein transition cows <i>S. Magro, A. Costa, R. Finocchiaro, M. Marusi, M. Cassandro, M. De Marchi</i>	538
43.26	Evaluating the Efficiency of Phenomic Selection in Dairy Cattle <i>E. O. Odah, M. P. Sanchez, B. Cuyabano, P. Croiseau</i>	539
43.27	Genomic evaluation of SA Holsteins incorporating local and foreign genetic markers under two production systems <i>M. Van Niekerk, E. D. Cason, F. W. C. Nester, J. B. Van Wyk, V. Ducrocq</i>	539
43.28	Evaluation of muscle transcriptome of beef cattle after intramuscular application of vitamin A <i>W. Baldassini, C. Costa, M. Tagiarioli, L. Camargo, R. Curi, G. Pereira, G. Ramírez-Zamudio, O. Machado Neto, M. Ladeira, L. A. Chardulo</i>	540

Session 44.

Genetics of food quality

Room: Pisana - Palazzo Congressi 2nd Floor

Chair: Schiavo / Pocrnic

Session Type: Theme session

	Theatre Session 44	Book of Abstracts page
8:30	Deciphering the Genomic Architecture of Intramuscular and Subcutaneous Fat Composition in Iberian Pigs <i>C. Hervás-Rivero, H. Srihi, D. López-Carbonell, J. Casellas, N. Ibáñez-Escriche, S. Negro, L. Varona</i>	540
8:45	Single marker and haplotype-based GWAS for meat quality and carcass traits in Italian heavy pigs <i>P. Zambonelli, S. Bovo, G. Schiavo, M. Ballan, J. Vegni, F. Bertolini, A. Ribani, V. Taurisano, M. Gallo, M. Zappaterra, S. Dall'Olio, L. Fontanesi</i>	541
9:00	A promising genetic background of pork hemorrhages occurring at slaughter <i>J. Gelhausen, T. Friehs, J. Knöll, I. Wilk, D. Mörlein, J. Tetens</i>	541
9:15	Characterization of the relationship between olfactory perception and quantified compounds as phenotypes for genetic selection against boar taint using a recursive model <i>A. Markey, C. Große-Brinkhaus, D. Mörlein, E. Tholen, N. Gengler</i>	542
9:30	The effect of myostatin gene mutation on productive traits in Marchigiana young bulls in performance test <i>D. Colombi, F. Perini, V. Polifroni, F. Sbarra, A. Quaglia, E. Lasagna</i>	542
9:45	Genetic parameters, genome-wide associations and single-gene effects for intramuscular fat content in a local dual-purpose cattle breed <i>I. Giambra, S. König, M. Bohlouli, K. Halli</i>	543
10:00	Genotype by management-system interaction on origin group of milk fatty acids in Holsteins <i>Y. Masuda, N. Yamamoto, D. A. L. Lourenco, S. Tsuruta, I. Misztal</i>	543
10:15	Coffee Break	
10:45	Investigating the effect of animal genotype on milk fat production in grazing dairy cows <i>C. Heffernan, R. Fitzgerald, J. A. O'Mahony, T. O'Callaghan, M. Dineen</i>	544
11:00	Colostrum yield is heritable and genetically correlated with immunoglobulins concentration in Holstein cows <i>A. Goi, M. De Marchi, M. Cassandro, R. Finocchiaro, M. Marusi, A. Costa</i>	544
11:15	Heritability of traditional milk coagulation properties in Manchega dairy sheep <i>I. Heddi, A. Garzón, R. Arias, L. Jiménez, A. Cecchinato, N. Amalfitano, J. Caballero-Villalobos, M. Ramon</i>	545
11:30	Effect of protein polymorphisms on milk composition, coagulation properties, and protein profile in dairy sheep <i>A. C. Marshall, V. Vigolo, M. De Marchi, N. Lopez-Villalobos, S. M Loveday, M. Weeks, W. Mcnabb</i>	545
11:45	Heritability of milk Fourier transform infrared spectra in sheep <i>S. Casu, M. G. Usai, S. Salaris, M. Caredda, M. Addis, A. Carta</i>	546
12:00	The genetic background of goat milk oligosaccharides content <i>R. Gonzalez-Prendes, R. Crooijmans, B. Dibbits, K. Laport, S. Breunig, P. Keijzer, L. Pellis, H. Bovenhuis</i>	546

- 12:15 Uncovering environmental effects and genetic parameters on the mineral composition of sheep milk 547
J. Ramírez-Díaz, G. Stocco, C. Cipolat-Gotet, M. Ablondi, A. Summer, A. Negro, A. Lotto, S. Blotta, F. Tiezzi, S. Biffani

Poster Session 44

Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00

- 44.15 Molecular detection for *Coxiella burnetii* in bovine milk collected from bulk tank of small dairy farms in São Paulo, Brazil 547
S. Lucheis, T. Bertozzo, A. Paes, A. Flamínio, A. Valim, A. Bertolini, I. Aires, S. Manzini, M. Mioni, V. Pereira, M. Medeiros
- 44.16 Single-step genomic prediction for live animal ultrasound measures of carcass traits in Czech Aberdeen Angus 548
Z. Veselá, M. Brzdková, A. Novotná, L. Vostrý
- 44.17 Evaluation of texture properties and consumer perception of pork from high-marbled Duroc leptin receptor genotypes 548
R. Suárez-Mesa, L. Salvia-Trujillo, R. Soliva-Fortuny, J. Estany

Session 45. Indicators, hi-tech solutions, and tools to effectively manage cattle

Room: Valdostana - Palazzo Affari 3rd Floor

Chair: Aernouts

Session Type: Theme session

	Theatre Session 45	Book of Abstracts page
8:30	Estimation of individual CH ₄ emissions using fecal near infrared spectra for young, dairy and beef cattle <i>A. Vanlierde, C. Martin, A. Mertens, N. Lorant, L. Le Gall, I. Morel, G. Renand, Y. Rochette, F. Picard, F. Dehareng, D. Andueza</i>	549
8:45	Learning behavior of dairy cows in automatic milking systems <i>J. Stuhlträger, F. Rosner, S. König, K. May, L. Behren, L. Breitmeier, H. H. Swalve</i>	549
9:00	Identification of SNPs affecting conformation traits of dairy cows <i>M. Kolenda, M. Gozdek, D. Piwarczyński, B. Sitkowska</i>	550
9:15	Optimize the individual insemination strategy in extended lactations of dairy cattle using a neural net to predict phenotypic lactation curves <i>L. Polman, J. Wabbersen, J. Braunleder, S. Schierenbeck, R. Reents</i>	550
9:30	Real-Time Milk Yield Prediction and Health Monitoring System for Dairy Cows <i>M. J. Gote, D. Meuwissen, L. D'Anvers, I. Adriaens, B. Aernouts</i>	551
9:45	Modern Genetic Evaluation Systems: A Python-Based Programming Approach <i>K. Lee, R. Ventura, F. Schenkel, G. Vandervoort, A. Cánovas</i>	551
10:00	Immunomodulatory effect of small extracellular vesicles from the plasma of heat-stressed cows on bovine immune cells <i>L. G. De Matos, G. Salvi, Y. Dadi, F. Ceciliani, V. Martini, A. Agazzi, A. Maggiolino, P. Depalo, C. Lecchi</i>	552
10:15	Coffee Break	
10:45	Coupling remote sensing techniques and Virtual Fencing in Alpine dairy production system: enhancing livestock management and environmental conservation <i>A. Confessore, C. Aquilani, L. De Guttry, N. Staglianò, G. Argenti, C. Dibari, E. Simonetti, F. Sirtori, C. Pugliese</i>	552
11:00	The confidence ratio: an approach to calculate the confidential learning of the virtual fencing system <i>D. Hamidi, N. A. Grinnell, M. Komainda, L. Wilms, F. Riesch, J. Horn, M. Hamidi, I. Traulsen, J. Isselstein</i>	553
11:15	Effectiveness of energy dispersive X-ray fluorescence (ED-XRF) for the prediction of mineral elements in individual cow urine <i>E. Visentin, M. Pozza, A. Guerra, S. Sabbadin, G. Niero, S. Magro, M. De Marchi</i>	553
11:30	Effects of unplanned regrouping on activity, feed intake and milk yield of dairy cows <i>T. Wilder, P. Hasenpusch, A. Seidel, G. Thaller, J. Krieter</i>	554
11:45	Insights into monitoring livestock on the move <i>T. Collins, E. Dunston-Clarke, E. Schoonens, R. O'reilly, E. Taylor, L. Pannier, A. Barnes</i>	554
12:00	Development of a multidimensional and customizable decision support tool for dairy culling management <i>H. Simon, E. Reding, C. Grelet, M. N. Tran, C. Wallesmart, F. Dehareng</i>	555

Poster Session 45

Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00

45.14	Genetic correlations between udder conformation and milking traits of Holstein-Friesian cows milked by milking robots <i>K. Siatka, M. Kolenda, G. A. Iwuchukwu, D. Piwczyński, B. Sitkowska</i>	555
45.15	The effects of bed cleanliness on the lying postures of Japanese Black fattening cattle <i>S. Dan (Tan), H. Kato, T. Nakayama, T. Chiba, M. Fukasawa</i>	556
45.16	Studies on in vitro Embryo Splitting as a method for Sex-Selective Production of cattle <i>S. Y. Lee, Y. G. Ko, S. R. Cho, M. R. Park, S. M. Ha, N. T. Kim</i>	556
45.17	Effect of Milking pulsators efficiency on Udder Health <i>L. Pascarella, S. Biffani, M. Fioretti, C. Melilli, F. Luisi, R. Negrini</i>	557
45.18	Genetic identification to ensure blockchain-based traceability in beef supply chain <i>S. Youraki, V. Papanikolopoulou, V. Fotiadou, G. Batikas, T. Kallitsis, M. J. Arrizubieta, T. Dimitraki, G. Arsenos</i>	557
45.19	Automated measurement of milk yield in suckler cows <i>B. Sepchat, M. Barbet</i>	558
45.20	Behaviour and welfare monitoring of cattle using computer vision and machine learning <i>B. Aernouts, M. Perneel, I. Adriaens, J. Verwaeren</i>	558
45.21	Climate change indicators as proxy for economic efficiency of dairy farming <i>M. D. G. Azzena, D. Zaccari, S. Curreli, A. Cannas, A. S. Atzori</i>	559
45.22	Effects of an automatic feeding system on Swiss dairy farms <i>K. Kamber, A. Burren, M. Schwager, C. Giger, S. Probst</i>	559

Session 46. Viable future dairy farming systems and products from production, feeding, environmental and consumer viewpoint, Part 1

Room: Reggiana - Palazzo Affari 2nd Floor

Chair: Galama / Brocard

Session Type: Project session

	Theatre Session 46	Book of Abstracts page
8:30	R4D project - 100 best practices for resilient dairy farming in Europe <i>invited E. Castellan, J. Fagon, S. Debevere, N. Browne, F. Launay</i>	560
9:00	Resilient future dairy farming systems <i>invited J. Roche</i>	560
9:30	Towards future sustainable dairy farming systems: An integrated, adapted and circular approach <i>invited X. Díaz De Otálora, A. Wilfart, J. Fratzczak-Müller, L. Balaine, G. Ragolini, F. Dragoni, B. Amon</i>	561
10:00	Perspectives on further integration of dairy and arable crop production <i>G. Van Duinkerken</i>	561
10:30	Coffee Break	
11:00	Farmer logics – motivations and driving forces influencing a sustainable and resilient Swedish dairy production <i>invited U. Nordling, S. Widgren, N. Lind, L. Ekman</i>	562
11:15	True Cost Accounting for sustainable livestock production <i>C. Van Wagenberg, M. Van Galen, L. Vissers, F. Bunte</i>	562
11:45	Evaluation of the environmental efficiency of innovative dairy cattle housing and management systems in Germany <i>J. Drews, I. Edebohls, C. Deblitz, A. Roemer, P. Sanftleben</i>	563
12:00	Environmental challenges with intensive dairy production <i>P. Galama, A. Kuipers</i>	563
12:15	Dear Dairy, is it love or is it over? Australian public attitudes to the dairy industry <i>S. Bolton, B. Vandresen, M. Von Keyserlingk</i>	564

Room: Chianina - Palazzo Affari 1st Floor

Chair: Bruggeman / Pinotti

Session Type: Theme session

Theatre Session 47		Book of Abstracts page
8:30	Effects of hydrolysable tannin metabolites on rumen microbiota and enteric methane production <i>M. Manoni, F. Gschwend, S. Amelchanka, M. Terranova, L. Pinotti, F. Widmer, P. Silacci, M. Tretola</i>	564
8:45	Assessing the potential of six plants from Auvergne region to reduce in vivo methane emissions and nitrogen excretion by dairy cows <i>M. Bouhafs, F. Anglard, F. Fournier, S. Guillaume, T. Chabrilat, S. Kerros, D. Macheboeuf, C. Martin</i>	565
9:00	Development, in-vitro and in-vivo assessment of novel feed additives to reduce enteric ruminant methane emissions <i>A. Graham, C. Thorn, C. O'Donnell, M. Mcdonagh, S. Nolan, S. F. Kirwan, S. O'Connor, C. O. Nzeteu, A. C. V. Montoya, A. Bartle, A. Hall, S. M. Waters, V. O'Flaherty</i>	565
9:15	The effect of an essential oil blend on performance, feed efficiency, methane emission and rumen microbiome in lactating dairy cows <i>C. F. Børsting, S. J. Noel, S. Lashkari, A. L. F. Hellwing</i>	566
9:30	Does processing of the straw have an effect on methane production from feedlot beef cattle? <i>A. Arbaoui, G. Gonzalo, A. Belanche, A. De Vega</i>	566
9:45	Effect of prickly pear (<i>Opuntia ficus-indica</i>) in diets on growth performance and methane emissions of yearling male PEDI goats <i>T. T. Magonyane, J. W. Ng'Ambi, M. Mabelebele, T. G. Manyelo</i>	567
10:00	Effects on methane emissions and growth performance in beef cattle supplemented with oil macerate of <i>Asparagopsis taxiformis</i> <i>D. M. Soares, I. Gama, N. Rodrigues, A. Oliveira, H. Ramos, G. M. Marques, J. Santos-Silva, R. J. B Bessa, T. Domingos</i>	567
10:15 Coffee Break		
10:45	Impact of fucosidase on pig growth performance and enteric methane production <i>D. Georgaki, M. E. Van Der Heide, L. Foldager, C. Poulsen, D. Velayudhan, J. Værum Nørgaard, N. Canibe, O. Højberg</i>	568
11:00	Nitrogen use efficiency from beef fed different protein sources and a forage-based diet <i>C. Christodoulou, K. E. Kliem, M. D. Auffret, D. J. Humphries, J. R. Newbold, N. Davison, P. Kirton, L. Smith, S. Stergiadis</i>	568
11:15	Effect of alpine plant species on in vitro ruminal fermentation characteristics <i>A. Cabbia, A. Romanzin, M. Braidot, M. Spanghero</i>	569
11:30	Replacement of total mixed ration with fresh alfalfa on productive performance, nutrient utilization, ruminal environment, and methane emissions of dairy cows <i>G. Fernández-Turren, J. L. Repetto, P. Veliz, J. Montini, J. Bigot, D. Fontes, C. Simon, J. Mariotta, V. Ciganda, C. Cajarville</i>	569
Poster Session 47		
<i>Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00</i>		
47.12	Enteric methane and digestibility: are these phenotypes correlated in dairy cows? <i>G. Giagnoni, W. Wang, M. Maigaard, M. Johansen, P. Lund, M. Riis Weisbjerg</i>	570
47.13	Herd-level greenhouse gas emissions of dairy rations optimized for reduced carbon footprint <i>M. Managos, U. Sonesson, C. Lindahl, S. Agenäs, M. Lindberg</i>	570
47.14	How much of the between-cow variation in enteric methane production can performance and digestibility measures explain <i>G. Giagnoni, W. Wang, M. Maigaard, M. Johansen, P. Lund, M. Riis Weisbjerg</i>	571
47.15	Development of an Effective Microbial Agent Utilizing Beneficial Microorganisms for Odor Reduction and its On-Site Evaluation in Pig Farms <i>Y. J. No, Y. S. Choi, M. R. Lee</i>	571
47.16	Effect of a molasses based liquid feed on diet digestibility, volatile fatty acid production and methane emissions in lactating dairy cows <i>G. Chapman, P. Holder, D. Humphries</i>	572

47.17	Dose effects of feed supplemented calcium peroxide as a methane inhibitor on feed intake and digestibility in beef cattle <i>A. Graham, S. Kirwan, A. Bartle, C. Thorn, M. Mcdonagh, A. C. V. Montoya, A. Hall, S. M. Waters, V. O'Flaherty</i>	572
47.18	Development of an odor-reducing probiotic Bacillus strains isolated from swine feces and Korean fermented soybean pastes <i>Y. J. No, M. R. Lee</i>	573
47.19	The updated FEEDAP Guidance on the assessment of efficacy of feed additives: additives which favourably affect the environmental consequences of animal production <i>J. Ortuño, J. Galobart, M. Innocenti, A. Navarro-Villa</i>	573
47.20	A review of dairy production performance on different methane reducing dietary treatments: 3-NOP, nitrate, linseed and rapeseed <i>J. Vandicke, J. Van Mullem, N. Peiren, S. De Campeneere, L. Vandaele</i>	574
47.21	Effects of Anavrin® on dry matter intake, ruminal environment, and methane emissions of finishing steers <i>J. Montini, A. Santana, G. Fernández-Turren, J. Bigot, C. Cajarville, J. L. Repetto, J. Gere</i>	574
47.22	Substitution of soybean meal with rapeseed meal decreases the ratio of urinary to fecal nitrogen excretion in growing pigs <i>I. Kaikat, L. Piquer, A. Cerisuelo, E. López, J. F. Pérez</i>	575
47.23	Reduction of CH ₄ production in ruminants using encapsulated feed additives in vitro <i>L. G. De Matos, N. Merino, I. Mateos, A. Martin, C. Saro, M. J. Ranilla, E. Bacchin, M. Perissinoto, M. Lorenzon, Y. Dadi, C. Lecchi, F. Cecilian</i>	575
47.24	Do cows visit the GreenFeeder randomly? <i>A. L. F. Hellwing, C. F. Børsting</i>	576
47.25	Effect of pastures with rich tannin legumes on ruminal environment and methane emissions of beef cattle <i>G. Fernandez-Turren, M. Lema, G. Banchemero, G. Quintans</i>	576
47.26	Effects of biochar in lactating dairy cows diet <i>M. Dittmann, C. Baki, M. Terranova, S. Amelchanka, S. Dubois, A. Wiget, F. Leiber, H. Krause, S. Baumann</i>	577
47.27	Metabolomic Approach for the Quality Assessment of <i>Ulva australis</i> as a Promising Feed Supplement for Reduction of Methane Emission in Livestock <i>H. Hyeon, E. B. Jang, M. Kwon, D. J. Oh, E. Kim, W. J. Yoon</i>	577
47.28	Exploring Microbial Community Dynamics in Cow Gastric Juice with Seaweed-Enhanced Feed: Implications for Methane Reduction Strategies <i>Y. H. Jo, M. R. Kang, E. Kim, W. J. Yoon</i>	578
47.29	Evaluating the potential of 3-nitrooxypropanol to reduce enteric methane emissions of autumn-calving cows <i>N. Maher, B. Lahart, A. Lawless, H. Costigan, C. Dwan, K. Pierce, M. Dineen</i>	578
47.30	Effects of oxidising methane inhibitors on emissions, fermentation patterns, and rumen microbial communities in vitro using the rumen simulation technique <i>C. O'Donnell, C. Thorn, A. C. V. Montoya, S. Waters, V. O'Flaherty</i>	579

Session 48.

Horse genetics and genomics

Room: Maremmana - Palazzo Affari 2nd Floor

Chair: Tan / Mantovani

Session Type: Free communications (bottom-up)

	Theatre Session 48	Book of Abstracts page
8:30	Deriving genotypes of non-genotyped horses <i>C. Jansen-Noordijk, R. Bergsma</i>	579
8:45	Single-step GWAS of factors for young horse test traits in Swedish Warmblood horses <i>A. Nazari-Ghadikolaie, W. F. Fikse, Å. Gelinder Viklund, S. Eriksson</i>	580
9:00	Development and Genetic Architecture of White Markings in Heavy Warmblood Horses <i>M. Schafflik, F. Rosner, M. Wensch-Dorendorf, R. Fischer, C. Kubitz, W. Nolte</i>	580
9:15	Evaluation of genetic variants proposed as myopathy risk factors in relation to sport performance in riding horses <i>J. Mayer, K. F. Stock, H. H. Swalve</i>	581

9:30	Comparison between SNP array and imputed data to estimate population structure in horse breeds <i>G. Chessari, P. Reich, A. Criscione, C. Falker-Gieske, S. Mastrangelo, S. Tumino, S. Bordonaro, D. Marletta, J. Tetens</i>	581
9:45	Comparison of genomic signatures of selection in Icelandic horses and Exmoor ponies <i>H. Sigurdardottir, M. Ablondi, T. Kristjansson, G. Lindgren, S. Eriksson</i>	582
10:00	Genomic Dive into Nordic Horse Breeds <i>N. Almaas Smogeli, I. Shutava, S. K. Joensen, S. Mikko, S. Eriksson, P. Berg</i>	582
10:15 Coffee Break		
10:45	Genomic characterization of three indigenous Slovenian horse breeds <i>B. Luštrek, M. Šimon, K. Potočnik</i>	583
11:00	Predicting show jumping performance in Belgian Warmbloods using combinations of early life jumping traits <i>L. Chapard, W. Gorssen, R. Meyermans, K. Hooyberghs, N. Aerts, N. Buys, S. Janssens</i>	583
11:15	Heritability of the ability to race barefoot in Swedish trotters <i>P. Berglund, S. Andonov, A. Jansson, T. Lundqvist, C. Olsson, E. Strandberg, S. Eriksson</i>	584
11:30	Genetic parameters of summarizing performance traits for evaluating selection approaches for dressage and show jumping sport performance in riding horses <i>K. F. Stock, J. Mayer, P. Eitenmüller, I. Workel</i>	584
11:45	Conformational limbs defects of Pura Raza Menorquina horses: prevalence, heritability and relationship to functionality <i>M. Ripollés-Lobo, D. Perdomo-González, M. Valera, M. D. Gómez</i>	585
12:00	From fertility to longevity and climate adaptability: genetics of fitness traits in horses <i>C. Sartori, E. Mancin, E. Rulli, A. Oian, G. Gomez-Proto, R. Mantovani</i>	585
12:15	Structural variants and tandem repeats in horses and their potential impact on withers height <i>P. Reich, C. Falker-Gieske, G. Chessari, A. Criscione, K. F. Stock, C. Kühn, G. Thaller, J. Tetens</i>	586

Poster Session 48

Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00

48.15	Current and Past Development of White Markings in Heavy Warmblood Horses <i>M. Schafflik, M. Wensch-Dorendorf, F. Rosner, R. Fischer, C. Kubitz, W. Nolte</i>	586
48.16	How to combine microsatellite and SNP for parentage verification in horses? <i>M. Ablondi, S. Biffani, G. Stocco, A. Summer, C. Fontana, V. Asti, A. Sabbioni</i>	587
48.17	Genomic inbreeding based on runs of homozygosity in the regional German horse breed Schleswig coldblood <i>M. Wobbe, H. Alkhoder, C. Schmidtman, K. F. Stock, H. H. Swalve</i>	587
48.18	Single nucleotide polymorphisms in four indigenous horse breeds from Poland <i>A. Bieniek, A. Piestrzynska-Kajtoch, A. Radko</i>	588
48.19	The genomic homozygous landscape reveals selection sweeps in Argentinean Polo ponies <i>F. Azcona, A. Karlau, N. Laseca, A. Molina, S. Demyda-Peyras</i>	588
48.20	Genetic relationship between Neck and Conformational Limb defects in Pura Raza Española Horses for Improved Breeding and Performance Management <i>M. Ripollés-Lobo, D. I. Perdomo-González, M. Ligerio, M. J. Sánchez-Guerrero, M. Valera</i>	589
48.21	Population structure of the Pura Raza Española horse Europe vs America <i>A. Encina Martínez, D. I. Perdomo-González, M. J. Sánchez-Guerrero, A. Rodríguez-Sainz De Los Terreros, M. Valera Córdoba</i>	589
48.22	A protocol to detect early selection criteria for jumping longevity: first results on blood parameters <i>A. Ricard, S. Harari, B. Dumont-Saint-Priest, S. Deretz, E. Richard</i>	590
48.23	The possibilities of using genomic information in the selection of mares for milk production <i>M. Šimon, B. Lušterek, K. Potočnik</i>	590

Room: Romagnola - Palazzo Affari 1st Floor

Chair: Kreuzer-Redmer / Foris

Session Type: Theme session

Theatre Session 49		Book of Abstracts page
8:30	Mineral metabolism and health status of dairy cattle fed adjusted mineral supplementation <i>R. Balegi, A. Boudon</i>	591
8:45	Nutritional epidemiology sheds light on the effects of alfalfa on dairy cow health, reproduction, and productivity <i>M. Caillat, N. Bareille, J. M. Ariza</i>	591
9:00	Effect of sampling method, oral-stomach sampling vs. sampling through ruminal cannula, on pH and concentrations volatile fatty acids and mineral of rumen fluid during an acidogenic challenge in dairy cows <i>D. Kwiatkowski, V. Niderkorn, E. Forano, P. Nozière, M. Silberberg</i>	592
9:15	Effect of a blend of natural isoquinoline alkaloids on production efficiency, health, and cortisol levels in dairy cows during summer <i>S. Grossi, A. Pastor, C. A. Sgoifo Rossi</i>	592
9:30	Bacillus coagulans supplementation in Holstein Friesian female calves' diet <i>L. Marchetti, R. Rebucci, C. Piantoni, D. Bertarelli, S. Bertani, B. Castiglioni, P. Cremonesi, M. Severgnini, C. Ceccarani, V. Bontempo</i>	593
9:45	Effects of live yeast <i>Saccharomyces cerevisiae boulardii</i> on gut permeability and milk performance in transition in dairy cows <i>A. Pineda, C. Villot, K. Dekraker, S. Kvidera, S. Jantzi, S. Cartwright, M. Boerefyn, M. Steele</i>	593
10:00	Reducing the omega-6-to-omega-3 ratio in milk replacers modulates feed intake behavior and growth in calves fed ad libitum <i>E. Pellissier De Féligonde, J. N. Wilms, J. Echeverry-Munera, M. H. Ghaffari, H. Sauerwein, J. Martín-Tereso, L. N. Leal</i>	594
10:15 Coffee Break		
10:45	Incorporation of butyric and caproic acids in milk replacers modulates postprandial metabolism in calves <i>A. Henry, J. N. Wilms, M. Sanz-Fernandez, M. Steele, J. Martín-Tereso, L. N. Leal</i>	594
11:00	Evaluating the effects of rumen originated lipopolysaccharide on the pathogenesis of rumen acidosis <i>X. Dai, G. Menni, S. Colombini</i>	595
11:15	In vitro effects of mycotoxin Enniatin B on bovine PMNs immune function <i>S. Sandrini, G. Salvi, D. Ravanelli, V. Perricone, L. G. De Matos, F. Cecilian, C. Lecchi, A. Agazzi</i>	595
11:30	Phenolic Compounds in Animal Nutrition and Health: Chronic Kidney Disease <i>F. Baptista, J. Paié-Ribeiro, M. Almeida, A. N. Barros</i>	596
11:45	Protective effect of chlorogenic acid on liver injury in heat-stressed meat rabbits <i>R. Ji, J. Chen, J. Xu, L. Zhang, L. Liu, F. Li</i>	596
12:00	In vitro nutritional interventions to enhance rumen fermentation during the post-weaning process <i>J. Muñoz-Grein, M. Fondevila, M. Á. Latorre, A. Belanche</i>	597
12:15	The form of administration and dose of astaxanthin on calves' growth and health <i>E. Sosin, A. Burmańczuk</i>	597
Poster Session 49		
<i>Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00</i>		
49.15	Development of suitable exterior indicators of milk-deprived and milk-fed suckling calves dependent on age <i>J. Kurek, T. Liegsalz, A. M. Vorndran, A. Kurek, V. Huber, G. Hammerl, H. Spiekers, J. Steinhoff-Wagner</i>	598
49.16	Survivability of LACTIFERM® as a direct fed microbials for calves: application to feeding practices <i>R. Gresse, B. Ieda Cappelozza, P. Fantinati, E. Forano, G. Copani</i>	598
49.17	Daily fluctuation in voluntary dry matter intake effects on feedlot performance of Nellore cattle <i>S. F. M. Bonilha, J. A. Muñoz, R. C. Canesin, M. E. Z. Mercadante, J. N. S. G. Cyrillo</i>	599
49.18	TMR quality preservation supports milk production performance <i>T. Fumagalli, A. Lopez Karolys</i>	599
49.19	Effect of a blend of essential oils on rumen microbiota for relieving sub-acute ruminal acidosis <i>G. Menni, X. Dai, K. Palanisamy, L. Rapetti</i>	600

49.20	Bromide: A water quality constituent of concern <i>N. Casey</i>	600
49.21	Evaluation of tannins supplementation as functional feed additive on neonatal diarrhea in calves <i>M. Dell'Anno, R. Carminati, O. Desrues, L. Rossi</i>	601
49.22	Does <i>Saccharomyces cerevisiae</i> postbiotic affect hay in vitro digestibility? A comparison between inclusion in the rumen fluid inoculum and dietary supplementation in the donor Chianina bullocks <i>S. Bettini, D. Colombi, F. Perini, M. Ghilardi, M. Trabalza Marinucci, E. Lasagna</i>	601
49.23	Assessing the colostrum proteome of Holstein cows, and its effect on calf passive immunity acquisition <i>E. Castillo-Lopez, S. Kreuzer-Redmer, P. Biber, A. Sener-Aydemir, K. Hummel, E. Razzazi-Fazeli, N. Reisinger, Q. Zebeli, T. Hartinger</i>	602
49.24	Changes in calves' immune response affected by herbs and their blends – ex vivo study <i>E. Kowalczyk-Vasilev, J. Fabjanowska, O. Witkowska-Piłaszewicz, R. Klebaniuk</i>	602
49.25	Effect of supplementing a <i>Saccharomyces cerevisiae</i> fermentation product from dry-off through 90 days of lactation on the metabolic adaptations of dairy cows with previous lactation high somatic cell count <i>M. Mezzetti, A. M. Zontini, A. Minuti, L. Cattaneo, I. Yoon, E. Trevisi</i>	603
49.26	Effects of supplementation with vitamin E or plant extracts on immune and mammary epithelium integrity after a LPS challenge in lactating dairy cows <i>A. Corset, A. Boudon, A. Remot, S. Philau, K. Reis-Santos, O. Dhumez, J. F. Ricouleau, B. Graulet, P. Germon, M. Boutinaud</i>	603
49.27	Phenotypic variation of colostrum yield and its association with immunoglobulin G content in Simmental cows <i>A. Goi, M. De Marchi, A. Costa</i>	604
49.28	Plant extracts to optimize rumen fermentation from artificially reared lambs <i>J. Muñoz-Grein, M. Fondevila, M. Á. Latorre, A. Belanche</i>	604
49.29	Characterizing rumen fermentation profiles associated with early lactation feed efficiency at different levels of milk production in transition dairy cows <i>G. G. Begalli, L. D. P. Maldonato, V. A. De Oliveira, L. Buraschi, A. F. Souza Lima, J. Halfen, T. Fernandes, J. S. Osorio</i>	605
49.30	Effect of a citrus-based sensory feed additive on heat-stressed dairy cows <i>Q. Tiqui, G. Desrousseaux</i>	605

Session 50. Sustainable solutions to support and sustain gut health in monogastric livestock (with project MONOGUTHEALTH), Part 1

Room: Piemontese - Palazzo Affari 2nd Floor

Chair: Bee / Trevisi

Session Type: Project session

	Theatre Session 50	Book of Abstracts page
8:30	MonoGutHealth: An Interdisciplinary approach for enhancing livestock resilience through nutritional strategies <i>invited G. Bee, M. Siwek, C. Metges, P. Lawlor, M. Therkildsen, N. Everaert</i>	606
8:45	Differences between low and high body weight broilers and strategies for catch up growth of low performing chickens <i>invited M. Z. Akram, A. Dunislawaska, N. Everaert</i>	606
9:15	Effects of in-ovo stimulation on gut health and production of broiler chickens <i>invited R. N. Wishna - Kadawarage, M. Mangan, A. Dunislawaska, C. C. Metges, R. Hickey, M. Siwek</i>	607
9:45	Transcriptional and metabolic responses in chickens infected with mixed parasite species <i>O. J. Oladosu, B. S. B. Correia, B. Grafl, D. Liebhart, H. Reyer, R. Weikard, H. C. Bertram, C. Kühn, C. C. Metges, G. Daş</i>	607
10:00	Monoguthealth in Denmark: Early interventions in pigs and broilers to improve their health and welfare <i>invited N. Canibe, T. Ketrukut, K. Jerez Bogota, M. Jensen, O. Højberg, R. Engberg, M. Therkildsen</i>	608
10:30	Coffee Break	
11:00	Pre- and post-weaning liquid feeding of pigs <i>invited P. Lawlor, S. Vasa, E. Arnaud, G. Gardiner</i>	608
11:30	Glutamine supplementation during the suckling period and its influence on piglet growth and intestinal metabolism <i>invited Q. L. Sciascia, J. Buchallik-Schregel, J. Schulze Holthausen, Z. Li, D. De Leonardis, S. Goers, J. Zentek, C. C. Metges</i>	609

12:00	Effect of creep feeding on pre-weaning growth of suckling pigs <i>W. O. Izedonmwen, R. Muns, C. Mulvenna, A. Jones, P. Cormican, G. Gardiner, P. Lawlor</i>	609
12:15	Feeding a gestation diet to sows in early lactation and liquid creep feeding of suckling pigs <i>S. R. Vasa, M. Girard, G. E. Gardiner, K. O'driscoll, G. Bee, P. G. Lawlor</i>	610

Poster Session 50

Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00

50.10	Maternal and/or direct feeding of organic acid-preserved grain improves pig lifetime growth performance <i>S. Maher, J. Ryan, J. O'Doherty</i>	610
50.11	Organic acid-preserved grain improves growth performance and gut health of post-weaned pigs <i>S. Maher, T. Sweeney, S. Vigors, K. Connolly, J. Ryan, J. O'Doherty</i>	611
50.12	Effects of multi-strain probiotic supplementation on microbiota and performance in pigs <i>S. Park, D. Lim, M. Park, M. A. Park, H. J. Jang, S. Son, D. H. Kim, Y. Kim</i>	611
50.13	Effects of Lactobacillus pentosus supplementation on growth performance and short-chain fatty acids in feces of growing to finishing pigs <i>J. H. Lee, H. J. Park, J. E. Kim, C. H. Kim, J. S. Hong, Y. D. Jeong, S. H. Back, Y. M. Kim, S. J. Sa</i>	612
50.14	Effects of valerate glycerides in vitro using porcine cell culture models <i>L. Kovanda, M. Hejna, S. Rengman, S. Tawde, J. Pos, Y. Liu</i>	612
50.15	Evaluation of the effects of a standardized citrus extract on the intestinal microbiota and welfare of peripartum sows under commercial breeding conditions <i>B. Gabinaud, E. Belz, P. Chicoteau, M. E. A. Benarbia, O. Zemb</i>	613
50.16	Effects of maternal probiotic, and/or piglet dietary tryptophan supplementation pre-weaning, on sow and offspring performance <i>D. P. Kiernan, J. O'Doherty, T. Sweeney</i>	613

Session 51.

Genetic progress vs animal welfare?

Room: Podolica - Limonaia - Garden

Chair: Gottardo / Duijvesteijn

Session Type: Challenge session

	Theatre Session 51	Book of Abstracts page
8:30	Genetic progress vs animal welfare? <i>invited F. Gottardo, L. Boyle, F. Miglior, N. Duijvesteijn</i>	614
8:45	Reversing the detrimental impact of genetic selection on farm animal welfare <i>invited P. Stevenson</i>	614
9:15	The evolution of dairy cattle breeding objectives <i>R. Finocchiaro, F. Tiezzi, M. Cassandro</i>	615
9:45	Predicting the agility of breeding programs to adapt to future societal demands <i>M. P. L. Calus, T. Pook, E. Hanenberg, B. C. Perez, C. Orrett, J. Ten Napel</i>	615
10:00	Breeding goal scenarios to quantify consequences of EFSA recommendations on pig reproductive traits <i>E. H. Hanenberg, L. Vargovic, T. Pook, E. F. Knol</i>	616
10:15	Coffee Break	
10:45	Do pig farms reconcile sow prolificacy, pre-weaning piglet survival and weaned litter size? Typology and results of French herds <i>invited S. Boulot, A. Aubry, S. Honor</i>	616
11:00	HenTrack: Improving breeding programs with superior behavior and welfare phenotypes <i>M. Toscano</i>	617

Session 52.**Redesigning the trajectory: the contribution of research to the development of resilient Livestock Farming Systems and their role to climate change and biodiversity**

Room: Marchigiana - Palazzo Affari Ground floor

Chair: Pouloupoulou / Sturaro

Session Type: Theme session

	Theatre Session 52	Book of Abstracts page
8:30	Agroecological assessments as an opportunity for more resilient and sustainable livestock systems <i>invited</i> L. Merbold, S. Paunovic, S. Baumgartner, P. Ndung'u, A. Gilgen	617
9:00	Effects of Supplementation with Tannins and Saponins Blend on Methane Emissions in High-Emitting Dairy Cows R. Colleluori, D. Cavallini, G. Buonaiuto, J. De Matos Vettori, F. Ghiaccio, G. Canestrari, L. M. E. Mammi, A. Palmonari, N. Panciroli, A. Formigoni	618
9:15	Relationship between environmental impact and on-farm dairy cow welfare in Parmigiano Reggiano farms M. Berton, M. Nocetti, L. Gallo, A. Cecchinato, E. Sturaro	618
9:30	Modeling interactions within dairy farms using regular vine-copula models N. Ouachene, C. Czado, M. S. Corson, T. Senga Kiessé	619
9:45	Global forecasted scenarios of THI and HLI anomalies G. Grossi, A. Vitali, N. Lacetera	619
10:00	Measuring farm resilience attributes: The study of three small ruminant systems A. Prat-Benhamou, M. Meuwissen, T. Slijper, A. Bernués, P. Gaspar-García, J. Lizarralde, J. Mancilla-Leytón, N. Mandaluniz, Y. Mena, B. Soriano, D. Martín-Collado	620
10:15	Coffee Break	
10:45	How resilience attributes contribute to specific resilience at farm level? The case of small ruminants in Spain J. Lizarralde, B. Soriano, L. Yanore, P. Gaspar-García, A. Prat-Benhamou, R. Ruiz, J. M. Mancilla-Leytón, Y. Mena, D. Martín-Collado, R. Ripoll-Bosch, N. Mandaluniz	620
11:00	Climate Change and Livestock Production: Revisiting Strategies to Ensure Sustainable Livestock Farming Systems <i>invited</i> V. Sejian, M. Silpa, J. Gaughan, F. R. Dunshea	621
11:15	Remote monitoring of pasture and animals in extensive farming is functional to genetic improvement D. Pietrucci, M. Milanese, C. Evangelista, R. Spina, B. Ronchi, U. Bernabucci, N. Lacetera, G. Chillemi	621
11:30	Restoration of abandoned Alpine Summer Pastures: Insights into Vegetation, Soil Conditions, and Microbial Communities S. Raniolo, C. Pornaro, E. Basso, S. Da Re, A. Squartini, M. Ramanzin, E. Sturaro	622
11:45	Reciprocal help, river flooding and a "Flying Herd". A project for the rehabilitation of Mongolian rangeland in a changing climate N. Imoli, L. Battaglini	622
12:00	Roles, difficulties and needs of advisors in Climate-Smart Farming Transformations. Results from focus groups in 10 different European countries C. Evrat-Georgel, F. Bedoin	623
12:15	On-farm measurements of enteric methane emissions: Relationships between cow traits and emission intensity C. Rossi, G. Grossi, F. Cesarini, N. Lacetera, A. Vitali	623
	Poster Session 52 <i>Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00</i>	
52.14	Global prediction of heat stress-related risk in dairy cattle A. Vitali, G. Grossi, N. Lacetera	624
52.15	The Cyprus Bovine Breed: zootechnical characteristics of a valuable indigenous cattle breed M. Kyriakou, O. Tzamaloukas, D. Miltiadou	624

52.16	Evaluating the potential of methane reduction effects of different extracts from Chestnut and Quebracho in in vitro ruminal fermentation <i>F. Ghiaccio, A. Palmonari, C. G. Vecchiato, A. Federiconi, R. Colleluori, G. Canestrari, N. Pancioli, A. Formigoni</i>	625
52.17	Animal genetic resources in Western Africa to support the agroecological transformation towards sustainable peri-urban farming systems <i>G. Manassis, Z. Basdagianni, I. Bossis</i>	625
52.18	Multifunctionality of sheep grazing in marginal areas: a remote sensing approach in Eastern Italian Alps <i>S. Da Re, S. Raniolo, C. Pornaro, E. Basso, M. Ramanzin, E. Sturaro</i>	626
52.19	Genome-wide scan reveals candidate genes related to milk production and adaptive traits in Sicilian cattle breeds <i>S. Tumino, D. Marletta, G. Chessari, S. Di Bella, S. Mastrangelo, A. Guercio, A. Cesarani, A. Criscione, S. Bordonaro</i>	626
52.20	National Livestock Biobank: an initiative supporting the valorisation of the Italian Livestock genetic diversity <i>F. Luongo, L. Pascarella, C. Fontana, C. Melilli, M. Fioretti, F. Luisi, R. Negrini, D. Matassino</i>	627
52.21	Participatory workshops to design innovative mixed farming systems based on the synergy between livestock and viticulture in Burgundy <i>R. Ibdhi, W. Queyrel, O. Aguirre-Saavedra, S. Ambrosino, A. R. Jo, G. Houndafoche, M. Seignon, Y. Tanguy-Roump, C. Husson, C. Philippeau</i>	627
52.22	Landscape characterization of Italian small ruminant populations <i>A. Bionda, M. Cortellari, A. Negro, S. Grande, P. Crepaldi</i>	628
52.23	Evolution, typology and issues of pig farms in France: lessons from the 2020 agricultural census <i>C. Roguet</i>	628
52.24	Two methods for detecting roe deer fawns before and during mowing, resp. <i>J. Mačuhová, Z. Pfeiffer, T. Wiesel, S. Thurner</i>	629
52.25	A survey on young post-graduated farmers: profiles, motivations, and difficulties <i>A. L. Jacquot, F. Gondret, Y. Le Cozler, M. Le Luel, A. Petrowick, V. Landais, S. Brajon</i>	629

Session 53.

Insect genetics, reproduction, physiology and behaviour

Room: Rendena - Palazzo Affari 4th Floor

Chair: Sandrock / Petersen

Session Type: Theme session

	Theatre Session 53	Book of Abstracts page
8:30	Dechoriation of Honey Bee Embryos by Alkaline Solutions <i>A. G. Onal, A. Gul, Y. Z. Guzey, M. Guney</i>	630
8:45	The effect of a regional legislative act on the distribution of honey bee mitochondrial DNA lineages <i>V. Taurisano, A. Ribani, D. Sami, K. E. Nelson Johnson, G. Schiavo, V. J. Utzeri, L. Fontanesi</i>	630
9:00	A Genomic Approach for the Creation Of Isolated Mating Areas for the Conservation of Italian Ligustica and Carnica Honey Bees <i>G. Minozzi, M. G. De Iorio, G. Gandini, G. Pagnacco</i>	631
9:15	Using genomic information to monitor diversity of the Australian honeybee genetic resources <i>P. Alexandri, S. Miller, N. Chapman, E. Frost, K. Bunter</i>	631
9:30	Exploring shifts in the microbial community when rearing different genetic lines of black soldier fly in a single production facility. <i>F. Ijdema, L. Broeckx, L. Froominckx, S. Van Miert, J. De Smet</i>	632
9:45	Consecutive mating of black soldier fly males to produce full- and half sibling offspring <i>K. Jensen, S. F. Thormose, N. K. Noer, T. M. Schou, M. Kargo, A. Gligorescu, J. V. Nørgaard, R. M. Zaalberg, H. M. Nielsen, T. N. Kristensen</i>	632
10:00	A bio-economic model for estimating economic values of important production traits in the black soldier fly (<i>Hermetia illucens</i>) <i>R. Zaalberg, H. M. Nielsen, N. K. Noer, T. M. Schou, K. Jensen, S. Thormose, M. Kargo, M. Slagboom</i>	633
10:15	Coffee Break	
10:45	FLYgene: Advancing Sustainable Breeding Programs and Genomic Tools for Black Soldier Fly (<i>Hermetia illucens</i>) in Kenya and Uganda <i>G. Sahana, G. Gebreyesus, R. C. Bett, J. Kinyua, N. Roos, C. M. Tanga, C. Mwikirize, R. Akol, F. M. Khamis, H. Karstoft, K. Bjerger, C. Kunyanga, L. S. Hansen, H. M. Nielsen, M. S. Lund, G. Ssepuyua, S. Walusimbi, D. Nakimbugwe</i>	633

11:00	Exploring genetic architecture of larval body weight in Black Soldier Fly <i>A. Michenet, A. Vereijken, J. De Vos, E. Facchini, D. Bickhart, K. Peeters, E. Schmitt, K. Shrestha</i>	634
11:15	Genetic parameters for house fly larval performance in two dietary environments <i>M. D. Georgalas, L. S. Hansen, S. F. Laursen, S. Bahrndorff, J. G. Sørensen, M. Kargo, T. N. Kristensen, B. Guldbrandtsen, H. M. Nielsen</i>	634
11:30	The effect of adult's sex ratio on the reproductive output of <i>Tenebrio molitor</i> <i>C. Adamaki-Sotiraki, S. Zafeiriadis, M. Krzyżaniak, C. I. Rumbos, C. G. Athanassiou</i>	635
11:45	Response of selected full-sib yellow mealworms to diet and density modifications : a GxE analysis <i>Q. Li, P. Lesueur, K. Paul, A. Masseron, F. Gagnepain-Germain, A. Chauveau, R. Barral-Arca, M. A. Madoui, T. Lefebvre, E. Sellem</i>	635
12:00	Genetic parameters estimation in yellow mealworms: A comparison of pedigree and genomic approaches <i>K. Paul, A. Donkpegan, Q. Li, A. Masseron, F. Gagnepain-Germain, A. Chauveau, K. Labadie, S. Haddad, R. Barral-Arca, M. A. Madoui, T. Lefebvre, E. Sellem</i>	636
12:15	Genome-wide association study in <i>Tenebrio molitor</i> reveals reproduction, development and growth quantitative trait loci <i>L. Rocha Ferreira, S. Haddad, L. Panunzi, K. Labadie, Q. Li, K. Paul, T. Lefebvre, E. Sellem, M. A. Madoui</i>	636

Poster Session 53

Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00

53.15	Comparing expected and observed relationships among a sample of Slovenian honey bees <i>L. Strachan, J. Bubnič, J. Prešern, G. Gorjanc, J. Obšteter</i>	637
53.16	Genetic resources conservation programme of the Carniolan honeybee (<i>Apis mellifera carnica</i>) of the Dobra line in Poland <i>A. Chelmińska, M. Kolasa, E. Sosin</i>	637
53.17	Morphological evolution of the female reproductive system of <i>Hermetia illucens</i> (Diptera: Stratiomyidae) after mating <i>Y. Riabtseva, B. Grodzki, M. Tejada, M. Bolard</i>	638
53.18	Small scale rearing for the development of genomic resources in black soldier fly (<i>Hermetia illucens</i> , Linnaeus, 1758) <i>G. Dufresne, M. H. Deschamps, G. Vandenberg, C. Bolduc, C. Warburton, N. Alnahhas</i>	638
53.19	Impact of Low-Quality parent and interchanged diets on Black Soldier Fly (<i>Hermetia illucens</i>) Larval Traits and Microbiome Composition <i>A. Gligorescu, S. Nazipi Bushi, A. Schramm, J. Sørensen</i>	639
53.20	Effect of broodstock breeding density on mortality and reproductive performances of <i>Tenebrio molitor</i> (L.) <i>B. F. Palumbo, M. Cullere, Y. Singh, E. Pontalti, A. Dalle Zotte</i>	639
53.21	Effects of light regime and starvation on immune parameters in house crickets (<i>Acheta domesticus</i>) <i>F. A. Lindberg, I. Waern, E. Nilsson, A. Jansson, L. Holm, E. Roman</i>	640

Session 54. Sustainable sheep and goat high-yield production systems: Management, nutrition, mechanization, health, and welfare aspects

Room: Calvana - Palazzo Congressi Ground floor

Chair: Hernández-Castellano

Session Type: Theme session

	Theatre Session 54	Book of Abstracts page
8:30	Exploring Antibiotic Alternatives for Improved Health in Goat Kids <i>K. Digiaco, A. W. N. Cameron, B. J. Leury, F. Zamuner</i>	640
8:45	Sustainable Sheep Milk: Exploring Udder Health Traits and Antioxidant Activity <i>G. Stocco, S. Biffani, C. Cipolat-Gotet, M. Ablondi, A. Negro, A. Summer, P. Kyriakaki, A. Mavrommatis, E. Tsiplakou</i>	641
9:00	Changes in lactating dairy goat body composition <i>J. Kirkham, F. Zamuner, A. Cameron, E. Carpenter, B. Leury, K. Digiaco</i>	641
9:15	Effect of the replacement of wheat straw by spent mushroom substrate on milk yield, composition, fatty acid profile, oxidation stability and udder health in dairy ewes during the final stage of lactation <i>A. Karageorgou, A. L. Hager-Theodorides, M. Goliomytis, I. Politis, T. Massouras, S. Papanikolaou, P. Diamantopoulou, P. Simitzis</i>	642

9:30	Camelina and cardoon cakes supplementation on blood metabolic profile and colostrum quality in dairy goats during the transition period	642
	<i>G. Meli, D. Lanzoni, V. Fumo, C. Giromini, G. Savoini, A. Buccioni, G. Invernizzi</i>	
9:45	Impact of somatic cell score on milk composition, curd firming, and cheese-making traits of Manchega sheep	643
	<i>I. Heddi, N. Amalfitano, A. Cecchinato, A. Garzón, J. Caballero-Villalobos, M. Ramon, J. M. Perea, E. Angón, M. Cantarero, L. Jiménez, R. Arias</i>	
10:00	Mammary gland modulation on metabolic and immune status of dairy goats and their offspring	643
	<i>invited M. González-Cabrera, A. Morales-Delanuez, A. Argüello, N. Castro, L. Hernández-Castellano</i>	
10:30	Coffee Break	
11:00	The role of colour indexes for the assessment of species-specific and breed-specific differences in quality traits of milk from domestic ruminants	644
	<i>J. Caballero-Villalobos, J. M. Perea, E. Angón, R. Arias, E. G. Ryan, O. M. Keane, M. Cantarero-Aparicio, A. Garzón</i>	
11:15	Impact of reproduction on longevity of ewes	644
	<i>L. S. Kierkegaard, N. C. Friggens, G. Steinheim, Ø. Holand, G. Klemetsdal, L. Puillet, B. A. Åby</i>	
11:30	Assessment of mineral composition in sheep milk: which effects should we include?	645
	<i>J. Ramírez-Díaz, G. Stocco, C. Cipolat-Gotet, M. Ablondi, A. Summer, A. Negro, A. Lotto, S. Blotta, F. Tiezzi, S. Biffani</i>	
11:45	Could morphological traits assist towards increasing goat milk productivity in Cyprus?	645
	<i>P. Savvides, A. C. Dimitriou, T. Christofi, G. Maimaris, L. Koniali, S. Panayidou, S. Andreou, P. Markou, G. Hadjipavlou</i>	
12:00	Effects of age at first joining and genotype on ewe performance from 2 to 8 years of age	646
	<i>T. W. J. Keady, J. P. Hanrahan</i>	

Poster Session 54

Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00

54.13	Doses of chromium propionate in lamb diets and their effects on metabolic parameters	646
	<i>B. M. Maioli, A. De Carvalho, D. Lázara De Almeida, M. Márcia Da Silva, P. R. Leme, S. Bonagurio Gallo</i>	
54.14	Does dairy sheep breed influence the environmental impact of farm?	647
	<i>I. Sodi, M. Martini, S. Saia, I. Altomonte, A. Andreucci, B. Fronte, F. Pedonese, L. Giuliotti, R. Ciampolini, F. Salari</i>	
54.15	Analysis of fattening traits of black-headed lambs in Poland in 2015-2020 assessed by the BLUP method	647
	<i>M. Puchała, A. Kawęcka, M. Pasternak</i>	
54.16	Effect of rearing sucking lambs in mountaing areas on carcass quality and meat fatty acid profile	648
	<i>C. Vieira, B. Martinez, J. J. García, A. Benito, R. Bodas</i>	
54.17	Effects of Cysteine on Secondary Hair Follicle Growth and Hair Dermal Papilla Cell Proliferation in vitro in Yanshan Cashmere Goats	648
	<i>Y. Zhang, J. Kang, Y. Liu</i>	
54.18	Diurnal variation in circulating blood metabolites in lactating dairy goats	649
	<i>J. Kirkham, F. Zamuner, A. Cameron, B. Leury, K. Digiacomo</i>	
54.19	Lambs fed Kraft lignin, ionophore and vitamin e with selenium on performance, meat quality and rumen health	649
	<i>A. De Carvalho, A. Vaz Vedovate, I. Tomaz Nascimento, V. Braun Klein, P. R. Leme, S. Bonagurio Gallo</i>	
54.20	Particle size distribution of total mixed rations in Spanish Assaff dairy sheep farms	650
	<i>T. Manso, T. Castro, A. R. Mantecón, P. Lavín</i>	
54.21	Doses of chromium propionate on the performance of finishing lambs	650
	<i>B. M. Maioli, A. De Carvalho, D. Lázara De Almeida, P. Roberto Leme, S. Bonagurio Gallo</i>	
54.22	Manure management in dairy sheep farms	651
	<i>B. Gallardo, T. Manso, Á. R. Mantecón, P. Lavín</i>	
54.23	HereForEwe: Implementation of sheep production system of minor dairy breeds through community-based breeding, genomics and phenomics: the example of Delle Langhe breed	651
	<i>A. Zanotti, G. Stocco, C. Cipolat-Gotet, A. Summer, T. Cannizzo, P. Cornale, R. Moretti, S. Sartore, S. Chessa</i>	
54.24	Age at first lambing and ewe longevity as mitigation options in sheep production	652
	<i>B. A. Åby, L. S. Kierkegaard, S. Samsonstuen, L. Aass</i>	
54.25	Slaughter results and evaluation of carcass quality of meat-type breed lambs in Latvia	652
	<i>D. Kairiša, L. Šenfelde, D. Bārziņa, I. Trapiņa, N. Paramonova, I. Miķelsone, H. Eglīte, V. Leska</i>	
54.26	Essential oils effects in in vitro sheep proliferation and cytokine secretion	653
	<i>M. G. Ciliberti, M. Albenzio, A. Sevi, L. Frabboni, A. Della Malva, A. Santillo, M. Di Corcia, R. Marino, M. Caroprese</i>	

- 54.27 Feeding management in Spanish Assaf dairy sheep farms 653
P. Lavin, B. Gallardo, A. R. Mantecon, T. Manso
- 54.28 Methionine balancing diet during transition and early lactation periods increased milk yield and composition in dairy ewes improving commercial farm profitability 654
S. Richards, D. Batonon Alavo, B. Mallmann, E. Fraile, L. Bahloul

Session 55. Host physiology/genetics and microbiome interactions – The holobiont concept

Room: Modicana - Palazzo Affari 3rd Floor
 Chair: Kenny / Tiezzi
 Session Type: Theme session

Theatre Session 55		Book of Abstracts page
8:30	Host genes shape the lower gut microbiota of Holstein cows: evidence from sequence-based GWAS <i>L. Brulin, M. P. Sanchez, Z. Cai, S. Ducrocq, G. Even, S. Martel, S. Merlin, C. Audebert, J. Estellé, G. Sahana, P. Croiseau</i>	654
8:45	Decoding the Genetic Dialogue: Rumen Microbiome and Host Genome Interaction in Enteric Methane Emission <i>G. Sahana, Z. Cai</i>	655
9:00	Impact of microbiome on genomic predictions for methane emissions in Holstein cows <i>R. Bonifazi, D. Flossdorf, B. Gredler-Grandl, H. Honerlagen, M. N. Aldridge, M. Spoelstra, A. E. Van Breukelen, Y. De Haas, A. C. Bouwman</i>	655
9:15	Why should we care about the rumen microbiome in next animal breeding strategies <i>O. Gonzalez-Recio, C. N. Marcos, J. Lopez-Paredes, M. Martínez-Alvaro</i>	656
9:30	Cattle genetics influences the abundance of ruminal pathogenic microbes <i>R. Roehe, T. Q. Nguyen, M. D. Auffret, J. Lima, J. Mattock, M. Watson, R. J. Dewhurst, M. A. Cleveland, M. Martinez-Alvaro</i>	656
9:45	Large scale analysis of the cattle rumen microbiome in relation to methane emissions <i>D. Flossdorf, R. Bonifazi, B. Gredler-Grandl, H. Honerlagen, M. N. Aldridge, M. Spoelstra, A. E. Van Breukelen, Y. De Haas, A. C. Bouwman</i>	657
10:00	Host genetics and hindgut microbiome jointly associate with daily milk yield in Holstein cows <i>H. Lu, K. Wang, Y. Wang</i>	657
10:15 Coffee Break		
10:45	Investigation of the Interrelationship between Ruminal and Oral Microbiomes of Angus Bulls <i>U. Lamichhane, M. Dycus, J. Lourenco</i>	658
11:00	Genetic selection for pig faecal enterotypes affects host upper gut microbiota and immune traits <i>F. Blanc, C. Larzul, G. Lemonnier, N. Bruneau, C. Niort, M. N. Rossignol, C. Rogel-Gaillard, J. Estellé</i>	658
11:15	Exploring the role of microbiota on phenotype expression under different biological assumptions <i>C. Maltecca, E. Mancin, F. Tiezzi</i>	659
11:30	EU-CIRCLES project: Evolution of pig microbiota and health under different farming conditions <i>F. Correa, G. Palladino, D. Luise, D. Schicchitano, B. Giulia, S. Rampelli, P. L. Martelli, P. Trevisi</i>	659
11:45	Exploring mortality and culling causes of breeding does through gut microbiome analysis <i>I. Biada, M. A. Santacreu, N. Ibáñez-Escriche</i>	660
12:00	Rumen microbiome, methane emission and blood analytes in grain-fed bison <i>S. Poothong, B. Thomas, X. Wu, D. Yaa, L. Guan, C. Neungjamnong, Y. Montanholi</i>	660
12:15	Fecal microbiota of pregnant mice in a divergent selection experiment <i>L. El-Ouazizi El-Kahia, N. Formoso-Rafferty, J. P. Gutiérrez, J. J. Arranz, C. Esteban Blanco, I. Cervantes</i>	661
Poster Session 55 <i>Fortezza da Basso Cavaniglia, from September 1st at 8:00 until September 2nd at 15:00</i>		
55.15	The lung-gut axis during polymicrobial respiratory infections in calves holobionts: the impact of microbiota dynamics on disease outcomes <i>M. Monié-Ibanes, F. Z. Sikht, M. C. Hygonenq, G. Pot, H. Robert, J. Malsa, L. X. Nouvel, E. Baranoski, C. Citti, A. Meynadier, E. Richard, M. Ducatez, G. Meyer, N. Mach</i>	661
55.16	Optimizing Piglet Growth and Meat Quality: The effect of Dietary Additives (KMAX, Solumarin) in Gut Microbial Balance <i>M. Yu, J. Jeong, S. Mun, I. H. Kim, K. Han</i>	662

55.17	Rational Designed Microbial Consortia for Chicken: an in silico approach <i>P. Stege, D. Schokker</i>	662
55.18	Dynamic Distribution of Gut Microbiota in Pigs at Different Growth Stages <i>M. A. Park, H. J. Jang, M. Park, D. H. Kim, Y. Kim</i>	663
55.19	Unraveling the influence of the host genetic on vaginal microbiota composition in Holstein cows <i>A. A. M. Sabuj, M. P. Sanchez, S. Ducrocq, G. Even, S. Martel, S. Merlin, C. Audebert, J. Estellé, P. Croiseau, L. Brulin</i>	663
55.20	Study of holobiont resilience following symbiotic transmission disruption in two rabbit lines selected for feed efficiency <i>H. Garreau, M. Renevey, L. Cauquil, P. Aymard, V. Helies, C. Larzul, J. Ruesche, S. Combes, O. Zemb</i>	664
55.21	Both age and genetic predisposition to mastitis influence the digestive microbiota in ewes <i>L. Arnalot, A. Zened, C. Allain, R. Rupp, G. Foucras, A. Meynadier</i>	664
55.22	Ruminant microbiome data are skewed and unFAIR, undermining their usefulness for improving sustainable production <i>A. Ortiz-Chura, M. Popova, D. P. Morgavi</i>	665
55.23	Genetic-Microbiota Interplay in Laying Hens: Enhancing Vaccine Response and Reducing Antibiotic Reliance in Poultry Production <i>A. Racanati, A. Lecoeur, F. Blanc, N. Bruneau, D. Gourichon, T. Burlot, F. Calenge, M. H. Pinard-Van Der Laan</i>	665
55.24	Can semen microbiome contribute to improved prediction of bulls' fertility? <i>P. Alexandre, S. Rodriguez-Ramilo, N. Mach, A. Reverter</i>	666
55.25	Spray dried plasma protein as functional protein source enhanced gut health in post-weaned pigs <i>S. K. Kar, D. Schokker, C. Van Vuure, H. Van Iersel, A. C. Harms, L. Kruijt, M. A. Smits, A. J. M. Jansman</i>	666
55.26	Reduced α -diversity of bacteria in refrigerated compared to non-refrigerated colostrum from primi and multiparous dairy cows <i>S. Scully, P. Smith, B. Earley, M. McCabe, C. Mcaloon, D. Kenny, S. Waters</i>	667
55.27	DonKeyWorld: a comprehensive study on Equus asinus from biodiversity management to milk nutraceutical and technological properties <i>C. Cipolat-Gotet, M. Ablondi, E. Ciani, S. Chessa, F. Tiezzi</i>	667
55.28	Relationship between performance phenotypes and rumen microbiome and liver transcriptome data of beef cattle using a systems biology approach <i>K. Keogh, D. Kenny, P. Alexandre, S. Waters, E. Mcgovern, M. Mcgee, A. Reverter</i>	668

Session 56.

PLF for health, behaviour and welfare, Part 1

Room: Sarda - Palazzo Affari Below ground Floor

Chair: Foy / Morgan

Session Type: Theme session

	Theatre Session 56	Book of Abstracts page
8:30	Automated real-time activity monitoring in infectious disease experiments with various livestock species <i>H. P. Doekes, R. De Jong, I. Adriaens, N. Stockhofe-Zurwieden</i>	668
9:00	Self-contained unit for remotely monitoring bison: ID, performance, welfare and health cues <i>B. Thomas, J. Church, J. Galbraith, Y. Montanholi</i>	669
9:15	Detection of multiple feeding behaviours in calves – a comparison of sensor positions and window sizes <i>S. Addo, M. Safari, K. A. Zipp, F. Freytag, U. Knierim</i>	669
9:30	Early prediction of declining health in small ruminants with accelerometers and machine learning <i>A. Montout, R. Bhamber, E. Morgan, C. Ioannou, T. Terrill, J. A. Van Wyk, T. Burghardt, A. W. Dowsey</i>	670
9:45	Prediction of behavior activity of donkeys at pasture using data from a tri-axial accelerometer <i>M. Congiu, P. E. Milia, S. P. Rassu, A. Cesarani, C. Dimauro</i>	670
10:00	Monitoring of nest use through RFID tracking in cage-free laying hens <i>F. Bordignon, C. Ciarelli, A. Trocino, G. Xiccato, A. Pezzuolo, F. Marinello</i>	671
10:15	Coffee Break	
10:45	ModBehav, a supervised classification algorithm to predict goat behaviour from accelerometer data <i>S. Mauny, J. Kwon, N. Friggens, C. Duvaux-Ponter, M. Taghipoor</i>	671
11:00	Exploring the retention of learning in dairy cows exposed to Virtual Fencing after 90 days of non-use <i>C. Aquilani, A. Confessore, V. Cecchini, E. Bianco, S. Bovolenta, S. Parrini, C. Pugliese</i>	672

11:15	Rumen pH changes over a lactation of dairy cows in commercial farm environments <i>V. Ambriz-Vilchis, D. Shaw, A. Macrae</i>	672
11:30	Integrating Infrared Thermography to Assess Thermal Stress and Behavior in Dairy Goats <i>N. Thomas Masebo, M. Bolcato, M. Zappaterra, V. Bocchi, B. Padalino, L. Nanni Costa</i>	673
11:45	From MIR predicted fatty acids in bulk tank milk to a herd health monitoring tool for farmers <i>C. Fastré, C. Nickmilders, D. Santschi, D. Warner, M. Bahadi, C. Bertozzi, D. Veselko, F. Dehareng, N. Gengler, H. Soyeurt</i>	673
12:00	Constitution of an international dataset on blood biomarkers in dairy cows: a preliminary study to develop milk MIR models <i>C. Grelet, L. Millot, V. Wolf, M. Lidauer, D. Santschi, F. Huot, H. Naya, A. Meikle, B. Martin, M. Coppa, J. Leblois, M. Crowe, B. Bapst, A. Köck, A. Mensching, M. Gelé, Gpluse Consortium, F. Dehareng</i>	674
12:15	In-line milk analysis: how accurate can we get? <i>B. Aernouts, J. Diaz Olivares, A. Van Nuenen, M. Gote, X. Fu, J. Xie, I. Adriaens</i>	674

Poster Session 56

Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00

56.14	A Deep-Learning Model to Identify Call-type and Individuality of Dairy Cattle <i>D. Gavojdian, M. Mincu, I. Nicolae, T. Lazebnik, A. Zamansky</i>	675
56.15	TechCare: Monitoring semi-intensive meat sheep welfare through EID and weight <i>F. Kenyon, J. Duncan, G. Mitchell, L. Andrews, C. M. Dwyer, M. Reeves, H. Mcdougall, A. Hayward, A. McLaren, A. Thomson, S. Beechener, C. Morgan-Davies</i>	675

Session 57. Socio-economic approaches to address the contemporary issues of the horse industry

Room: Auditorium - Palazzo Congressi Lower Ground Floor

Chair: Evans / Tapprest

Session Type: Free communications (bottom-up)

	Theatre Session 57	Book of Abstracts page
14:30	Labour: a key issue for the long-term future of French equine businesses <i>S. Boyer-Lafaurie</i>	676
14:45	Self-organized equestrian users: towards services adapted to the demand <i>C. Vial, C. Eslan</i>	676
15:00	Riding teachers can affect horse and rider biomechanics in the design of their lesson <i>A. Byström, A. Egenvall, M. Eisersjö, M. T. Engell, S. Lykken, S. Lundesjö Kwart</i>	677
15:15	Farms with Equines in French Agriculture: Reflections on the Evolution of the Equine Sector in the 21st Century <i>J. Veslot, G. Bigot</i>	677
15:30	Income prediction in riding schools and boarding stables in France – 1st assessment <i>G. Mathieu, S. Boyer-Lafaurie</i>	678
15:45	Coffee Break	
16:15	Lessons Learned from Horses for School Practice <i>R. Mickelsson</i>	678
16:30	Composting as a sustainable way of utilization of horse manure <i>M. Meyer, C. Eiberger, T. Schilling, D. Winter, L. E. Hölzle</i>	679
16:45	Nice to know you – Effects of human expectation on horse behaviour depending on the human-horse familiarity – preliminary findings <i>M. Schiefer, U. Müller, J. Stracke</i>	679
17:00	EUNetHorse - setting the base: results on characterization questionnaires at EU level <i>A. Santos, M. Fradinho, M. Leitão, A. Monteiro, A. Rousset, J. Lejeune</i>	680
17:15	Italian heavy draft horse management: practices and welfare issues <i>B. Benedetti, G. Pigozzi, F. Patroncini, B. Padalino</i>	680
17:30	To eat or not to eat horsemeat? - a review of cultural, ethical, and practical considerations <i>B. Luštrek, M. Šimon, A. Kaić</i>	681
17:45	Production and consumption of horse meat in France: overview and perspectives <i>C. Vial</i>	681

18:00 Study on winter indoor jumping championships 682
L. T. Csiszter, F. L. Bochiş

Poster Session 57

Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00

57.14 Portuguese equine production characterization: results from the EUNetHorse thematic network 682
M. Leitão, B. Rocha, M. Fradinho, A. Monteiro, A. Santos

Session 58. The role of breeding and genetics in the sustainable transformation of the livestock sector

Room: Pisana - Palazzo Congressi 2nd Floor

Chair: Baumung / Leroy

Session Type: Working Group session

	Theatre Session 58	Book of Abstracts page
14:30	The role of locally adapted breeds in the sustainable transformation of the livestock sector: examples from Italy <i>invited E. Sturaro, G. Gandini, F. Pilla, L. Buttazoni</i>	683
15:00	The role of the private (breeding) sector in sustainable transformation: an example of small scale poultry production in Africa <i>invited N. Duijvesteijn, J. Van Arendonk</i>	683
15:30	Anticipating future genetic needs for French dairy and suckler cattle sectors <i>H. Lagarde, P. Martin, D. Boichard</i>	684
15:45	Coffee Break	
16:15	Investigating genomic adaptation to climate in local Mediterranean sheep breeds <i>C. Persichilli, G. Senczuk, F. Biscarini, S. Mastrangelo, E. Ciani, P. Orozco-Terwengel, F. Pilla, M. Barbato</i>	684
16:30	Breeding for sustainability: development of an index to reduce GHG in dairy cattle <i>invited C. Richardson, P. Amer, T. Oliveria, K. Grant, J. Crowley, C. Quinton, F. Miglior, A. Fleming, F. Malchiodi</i>	685
17:00	How much animal genetic improvement can contribute to the economic and environmental multiperformance in dairy sheep farming systems? <i>A. Irunal Veedu, R. Rupp, J. Raoul, F. Douhard</i>	685
17:15	Shaping the Future Towards Responsible and Balanced Breeding:Code EFABAR <i>G. Cartick, A. Granados</i>	686
17:30	Breeders' vision to meet future livestock sustainability goals through novel technologies – a Delphi study <i>M. Chase-Topping, G. Gorjanc, J. Burns, I. Fletcher, D. Moran, A. Doeschl- Wilson</i>	686
17:45	Native breeds for agroecological dairy farming: a farmer's perspective <i>G. Bonekamp, M. A. Schoon, J. Bal, J. J. Windig, S. J. Hiemstra</i>	687
	Poster Session 58 Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00	
58.10	Egg production of local Spanish breeds of laying hens and their physiological stress response to heat stress <i>W. M. Rauw, M. García-Gil, O. Torres, J. Santiago-Moreno, A. Toledano-Diaz, L. Gomez-Raya</i>	687
58.11	Combining GWAS via meta-analysis identifies metabolic factors involved in phenotypic plasticity for reproductive efficiency traits <i>L. F. M. Mota, L. G. D. Albuquerque, H. N. D. Oliveira</i>	688
58.12	Genotype by environment interaction for milk production traits in Dutch dairy cows in conventional and organic systems <i>E. L. P. Guennoc, J. Hinken, M. G. J. Edens, M. S. Gilbert, J. Dijkstra, H. Bovenhuis</i>	688
58.13	Mining big data to fit animals to climate change, improve welfare and mitigate the environmental impact of livestock productions (BIG Fit Project) <i>G. Gaspa, R. Negrini, A. Cesarani, C. Ferrari, L. Falchi, N. P. P. Macciotta</i>	689

58.14	Genetic parameters of Methane emission in Danish Jersey dairy cows <i>G. Sahana, C. Manzanilla-Pech, P. Løvendahl, T. M. Villumsen</i>	689
58.15	Reducing methane emissions through crossbreeding Holstein-Friesian dairy cows with Jerseys <i>C. Dwan, B. Horan, A. Jezequel, B. Lahart</i>	690

Session 59.

Milk properties for the valorization of dairy (by-products) manufacturing

Room: Valdostana - Palazzo Affari 3rd Floor

Chair: De Marchi / Zanon

Session Type: Theme session

	Theatre Session 59	Book of Abstracts page
14:30	From Waste to Worth: Repurposing Dairy by-products as Source of Innovative Nanosystems <i>F. A. Soares, B. Salinas, S. Reis, C. Nunes</i>	690
14:45	Nano can be Big(ger): bringing added value to milk fat <i>J. Albuquerque, F. Soares, A. Granja, C. Nunes, A. R. Cabrita, A. Mira Fonseca, S. Reis</i>	691
15:00	Standardization method, testing scenario, and accuracy of the infrared prediction model affect the standardization accuracy of milk mid-infrared spectra <i>W. Lou, H. Lu, X. Ren, X. Zhao, Y. Wang, V. Bonfatti</i>	691
15:15	Assessment of the proteins from whey and its microparticulate and fermented products <i>S. Khazzar, S. Currò, L. Da Dalt, F. Fontana, S. Segato, S. Balzan, E. Novelli</i>	692
15:30	Investigating the effect of total and differential somatic cell counts on bovine milk mineral content <i>D. Valoppi, G. Stocco, A. Summer, G. Niero, M. Penasa, M. Ablondi, C. Cipolat-Gotet</i>	692
15:45	Coffee Break	
16:15	Multiplex pathogenic bacteria detection in milk with the nanoparticle-assisted porous silicon-based SERS microarray biosensor <i>D. Muthukumar, G. Shtenberg</i>	693
16:30	Are MIR calibration datasets representative enough of cow milk MIR spectra real population? <i>C. Nickmilder, J. Leblois, O. Christophe, C. Grelet, H. Consortium, H. Soyeurt</i>	693
16:45	Valorization of bioactive components in milk: exploring environmental and animal factors affecting the variability of milk minerals in dairy cattle <i>A. Zanotti, G. Stocco, A. Summer, A. Lotto, S. Blotta, S. Biffani, M. Ablondi, C. Cipolat-Gotet</i>	694
17:00	Bulk milk quality traits differ according to the ClassyFarm welfare assessment score <i>S. Sabbadin, S. Magro, A. Costa, V. Lorenzi, F. Fusi, L. Bertocchi, M. De Marchi</i>	694
17:15	Evaluation of MIR predicted milk components as biomarkers of heat stress in dairy cows using a residual approach <i>P. Lemal, M. N. Tran, C. Grelet, H. Soyeurt, M. Schroyen, N. Gengler</i>	695
17:30	Analysis of antioxidant activity in bovine milk to valorize its nutraceutical properties <i>I. Tedeschi, G. Stocco, M. Ablondi, A. Summer, G. Anagnostou, A. Skourtis, F. F. Satolias, E. Tsiplakou, M. Malacarne, C. Cipolat-Gotet</i>	695
	Poster Session 59 <i>Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00</i>	
59.12	Evaluation of Shiga toxin-producing Escherichia Coli (STEC) in Traditional Dairy farms in Trentino <i>G. Secchi, A. Mancini, G. Iussig, E. Partel, M. Mazzucchi, I. Roner, N. Sandri, N. Cologna, M. Nardelli, M. Ramelli, E. Franciosi</i>	696
59.13	Identification of apathogenic bacteria as a reservoir for antibiotic resistance genes in bulk tank milk samples and in-line milk filters <i>J. A. Schwenker, T. Sievers, I. Staack, C. Hölzel</i>	696
59.14	Development of a sandwich ELISA for the detection of bovine A1 beta-casein <i>A. Watanabe, T. Kobayashi, A. Okamoto, D. Oka, T. Noguchi, M. Matsuyama, T. Kuramoto</i>	697
59.15	Characterization of Dual-Purpose Blue milk compared to Holstein milk based on mid-infrared spectrometry <i>H. Wilmot, S. Franceschini, N. Gengler, C. Nickmilder, H. Soyeurt</i>	697

- 59.16 Does the halloumi cheese production process change the fatty acid profile of milk used? 698
M. Neofytou, D. Miltiadou, D. Sparaggis, O. Tzamaloukas
- 59.17 Public awareness of iodine in human health and diet as assessed by cross cultural survey 698
M. Santinello, G. Niero, S. Censi, M. De Marchi, C. L. Manuelian, C. Mian

Session 60. **Viable future dairy farming systems and products from production, feeding, environmental and consumer viewpoint, Part 2**

Room: Reggiana - Palazzo Affari 2nd Floor

Chair: Galama / Roche

Session Type: Project session

Theatre Session 60		Book of Abstracts page
14:30	Assessing solutions for resilient dairy farming in Europe <i>A. Kuipers, S. Ostergaard, R. Loges, J. Zijlstra</i>	699
14:45	WELL-E: Enhancing Animal Welfare & Longevity through Artificial Intelligence and Internet of Things Dedicated to Dairy Farming <i>invited E. Vasseur, A. Baniré Diallo</i>	699
15:30	Viable future dairy farming systems: a comprehensive nutritional approach to minimize methane emission and phosphorus and nitrogen excretion <i>invited J. Dijkstra, J. T. Schonewille, S. Van Gastelen, K. Nichols, A. Bannink</i>	700
16:00	Coffee Break	
16:30	Breeding for resilience in the Netherlands and Flanders <i>invited N. Meijer, J. Bouwmeester-Vosman, M. L. Van Pelt, G. De Jong</i>	700
17:00	If you were a cow? <i>D. Pomies, B. Dumont, N. Rebout, C. Chassaing</i>	701
17:15	Mitigation of environmental impacts in dairy farming: potential synergies and trade-offs <i>M. Seiringer, S. J. Hörtenhuber, W. J. Zollitsch</i>	701
17:30	Regional feed and energy centre <i>P. Galama, N. Verdoes</i>	702
17:45	Simulating environmental sustainability of Dutch dairy farms towards 2030 <i>M. De Vries, M. H. A. De Haan, A. G. Evers, P. J. Galama, J. W. Reijs</i>	702
18:00	Advancing precision extensive livestock farming through AI-based species recognition from camera trap recordings <i>R. Primi, P. Girotti, P. Viola, M. Zaccaroni, F. Spada, B. Ronchi, L. Ortenzi</i>	703
18:15	What are the limits for agricultural collectives under Geographical indications (GI) to take action in transitions? Six case studies in French cheese sector from the ADAOPT project <i>D. Neumeister, F. Bedoin, S. Dernas</i>	703
Poster Session 60		
<i>Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00</i>		
60.11	Effect of feeding a garlic-citrus extract on milk production of dairy cows and sensory perception of milk <i>R. Khurana, J. M. Bowen, L. Czeglédi, E. Török, M. Kokas, L. D. Brasso, B. M. Tas, S. A. Salami</i>	704
60.12	Effects of thermally processed linseed on meat quality traits of fattening Holstein calves <i>V. Papanikolopoulou, S. Priskas, S. Dokou, V. Fotiadou, P. Chantzi, I. Dalla, G. Arsenos</i>	704
60.13	REGENEMILK: Innovative strategies and techniques for monitoring and treatment of mastitis in local and cosmopolitan breeds <i>E. Sangalli, V. Andreoli, G. Stocco, S. Grolli, A. Summer, R. Ramoni, G. Basini, V. Conti, A. Zanotti, C. Cipolat-Gotet</i>	705

Session 61.

Advances in fish nutrition

Room: Chianina - Palazzo Affari 1st Floor

Chair: Pinotti / Ottoboni

Session Type: Theme session

	Theatre Session 61	Book of Abstracts page
15:00	Effectiveness of a commercial Diatomaceous earth feed additive in mitigating transport stress in Sea Bass (<i>Dicentrarchus labrax</i>) <i>A. Prete, A. Maggiolino, M. Deflorio, G. Incampo, G. Calzaretti, G. Centoducati</i>	705
15:15	Diet digestibility and growth performance of African catfish fed diets with blends of poultry PAP <i>C. Fanizza, A. Trocino, V. Stejskal, M. Prokěšová, M. Zare, H. Quang Tran, F. Brambilla, G. Xiccato, F. Bordignon</i>	706
15:30	Feed and carbon footprint in aquaculture – an industry perspective <i>U. Luzzana</i>	706
16:00	Coffee Break	
16:30	The sustainable “4 F” for rainbow trout (<i>Oncorhynchus mykiss</i>) feeding: Feedstuffs from the Fish Farmer Farmhouse <i>A. Roncarati, L. Galosi, G. E. Magi, F. Mariotti</i>	707
16:45	Predicting fillet lipid composition of <i>Oncorhynchus mykiss</i> using different statistical tools <i>F. Tiezzi, L. Pulido-Rodriguez, G. Secci, G. Parisi</i>	1055
17:00	Environmental impact of the inclusion of alternative raw materials in diets for gilthead seabream <i>F. Bordignon, G. Vélez Calabria, S. Martínez-Llorens, A. Tomás-Vidal, F. Gabriel Acien Fernandez, A. Trocino, M. Berton</i>	707
17:15	Microplastics manifestation and their potential impact on freshwater fish species <i>F. Jabeen, M. H. Raza, A. S. Chaudhry</i>	708
17:45	Traceability and characterization of nanoplastics on novel feed/food sources: the case of microalgae <i>D. Lanzoni, M. Sarria Pereria De Passos, R. Gonçalves, S. Gioria, A. C. Pinheiro, A. Vicente, C. Giromini</i>	708
	Poster Session 61 <i>Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00</i>	
61.08	Effect of the low level dietary inclusion of queen bee larvae meal on the fatty acid profile of the fillets and livers of European seabass <i>M. V. Tignani, G. Secci, N. F. Addeo, F. Bovera, G. Parisi</i>	709

Session 62.

Feeding for improving the nutritional, safety and organoleptic characteristics of animal-derived foods

Room: Maremmana - Palazzo Affari 2nd Floor

Chair: Stergiadis / Foggi

Session Type: Theme session

	Theatre Session 62	Book of Abstracts page
14:30	Effect of feeding a garlic-citrus extract on milk production and fatty acid profile of milk <i>R. Khurana, C. Resch-Zafra, L. González-González, M. P. Martínez-Diz, A. Botana, M. Veiga-López, B. Tas, S. Salami</i>	709
14:45	The benefits of feeding <i>Himantalia elongata</i> to dairy cattle on nitrogen utilisation and end-product quality <i>K. Barnes, X. Chen, T. Yan, M. Hayes, S. Ormston, S. Kanathigoda, E. E. Newton, S. Stergiadis, S. Huws, K. Theodoridou</i>	710
15:00	Effect of the addition of plant galactogogues in the dairy cows rations on the quality parameters and protein profile of milk <i>E. Kowalczyk-Vasilev, H. Gümüş, R. Klebaniuk, J. Fabjanowska</i>	710
15:15	Does feeding hay versus grass silage impact milk composition? <i>K. Bauer, S. P. Van Den Oever, M. Schreiner, A. Haselmann, W. Zollitsch, B. Fuerst-Waltl, Q. Zebeli, H. Mayer, W. Knaus</i>	711
15:30	Cheese quality from grazing sheep supplemented with agro-industrial by-products <i>V. Bolletta, E. Lilli, M. Pauselli, B. Sordini, M. Mele, G. Foggi, B. Valenti</i>	711
15:45	Coffee Break	

16:15	Dairy cows' diet has a marked impact on vitamin B content in milk but less in yogurts <i>L. Auzance, B. Martin, C. Delbes, I. Verdier-Metz, M. Bouchon, G. Jan, V. Gagnaire, M. C. Michalski, M. Duplessis, M. Popova, J. Ronholm, B. Graulet</i>	712
16:30	Ensiled artichoke bracts in beef cattle diet: meat quality during dry aging <i>L. Forte, A. Seccia, R. Greco, F. Giannico, G. Natrella, A. Maggiolino</i>	712
16:45	The inclusion of almond hulls in lamb diets improves the fatty acid composition of intramuscular fat <i>L. Cachucho, S. P. Alves, O. Guerreiro, M. Varregoso, C. Costa, K. Paulos, J. Santos-Silva, M. T. P. Dentinho, E. Jerónimo</i>	713
17:00	Feeding hazelnut skin and linseed to lambs: effect on meat oxidative stability <i>A. Bertino, M. Musati, G. Luciano, M. S. Cannone, A. Natalello, A. Priolo</i>	713
17:15	Dietary pistachio skin improves lipid profile and lipid oxidation of lamb <i>F. Mangano, M. Musati, A. Bertino, M. S. Cannone, L. Biondi, M. Lanza, A. Natalello, A. Priolo, G. Luciano</i>	714
17:30	Influence of a waxy corn diet and sex on growth performance, carcass characteristics and meat quality of heavy pigs <i>R. E. Amarie, S. Tinagli, M. Tognocchi, A. Serra</i>	714
17:45	Chemical and physical quality traits of meat from heavy pigs fed diets with a partial to total replacement of soybean meal with spirulina powder <i>G. Don, D. Giannuzzi, A. Toscano, S. Schiavon, L. Gallo</i>	715
18:00	Dietary leucine modulate pork quality via adjusting muscle fiber type conversion and intramuscular fat deposition in Huanjiang mini-pigs <i>L. Zhang, F. Li, Y. Yin</i>	715

Poster Session 62

Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00

62.14	Milk yield and composition of Cinisara grazing cows supplemented with a low- and a high-polyphenols faba bean varieties <i>M. Avondo, M. Ponte, M. Pipi, M. Lanza, A. Bonanno, A. Di Grigoli, S. Tumino</i>	716
62.15	Study of the effect of Fabaceae plants on the meat quality of heavy fattening pigs Żłotnicka Spotted breed <i>M. Szyndler-Nędza, M. Świątkiewicz, G. Żak, M. Tyra, A. Mucha, M. Małopolska</i>	716
62.16	Effects of dietary supplementation with enriched olive cake on meat quality traits of Limousine bulls <i>M. Oteri, V. Chiofalo, G. Dipasquale, M. E. Furfaro, B. Tuvè, L. Liotta, V. Lopreiato</i>	717
62.17	Effect of incorporating protected soya lecithin in a high oleic finishing diet of oxen on fatty acid profile of subcutaneous and intramuscular fat <i>C. Vieira, A. Sarmiento, G. Giner, J. J. García, B. Martínez</i>	717
62.18	Impact of protein source on pork quality and production parameters: a comparative study of biorefined grass-clover protein and soy-cake protein for organic growing-finishing pigs <i>M. Eskildsen, E. Jørgensen, L. Stødkilde-Jørgensen</i>	718
62.19	Seasonal quality variation of Bresaola from grass-fed Angus beef <i>V. Bolletta, E. Lilli, B. Valenti, V. Roscini, M. Pauselli</i>	718
62.20	Effects of dietary supplementation of oregano essential oil to feedlot cattle on their meat quality and muscle fiber histomorphometry <i>S. Dokou, A. Tsitsos, I. Stylianaki, T. Chatzimanou, V. Economou, I. Giannenas, M. E. Filippitzi, G. Arsenos</i>	719
62.21	Effects of the incorporation of sainfoin as hay or included in the concentrate on carcass and meat quality of young bulls <i>M. Blanco, D. Villalba, E. Molina, I. Casasús, G. Ripoll</i>	719
62.22	Antibacterial activity and functional characteristics of lactic acid bacteria isolated from green tea and their application in producing dry-cured ham <i>M. H. Oh, J. H. Kim, E. S. Lee, B. M. Kim</i>	720
62.23	Effect of feed mixtures contamination with low doses of antibiotics on meat quality of broiler chickens <i>K. Połtowicz, A. Arczewska-Włosek, J. Nowak, P. Adamczyk, P. Zawisza, K. Szczepanik, M. Olszewska-Tomczyk, M. Olejnik</i>	720
62.24	The use of grape pomace in rabbit diet improves the oxidative stability of the meat <i>S. Carta, R. Chessa, R. Rubattu, F. Correddu, A. Nudda, G. Battacone</i>	721
62.25	Tomato and pepper waste in sustainable laying hens diet for improving nutritional and organoleptic characteristics of eggs <i>F. Accetta, C. Cavallo, L. Liotta, G. Pace, A. R. Di Rosa</i>	721
62.26	Fattening and slaughter characteristics and meat quality parameters of merino lambs fed with fodder with herbs <i>A. Kawęcka, M. Pasternak, M. Puchała, I. Peist</i>	722

Session 63. Improving animal welfare by optimising nutrition/feeding behaviour, Part 1

Room: Romagnola - Palazzo Affari 1st Floor

Chair: Trocino / Kar

Session Type: Theme session

	Theatre Session 63	Book of Abstracts page
14:30	Feeding behaviour: The missing link between pig welfare and pig nutrition research <i>invited</i> M. Holinger, F. Leiber	722
14:45	When do ad libitum fed lactating sows choose to eat? S. C. Gorr, T. D. Parsons, C. Winckler, W. Zollitsch, C. Leeb	723
15:00	Piglet suckling behaviour in relation to fibre type in the maternal diet M. Girard, P. Lin, C. Hildebrand	723
15:15	Can stocking density and feeding space influence weaned piglet performance and behaviour? A. Huting, J. Van Renswoude, F. Molist	724
15:30	Feed taste variety within days in nursery pigs: effect on animal's preferences and performance R. Palomo, C. Escobillana, D. Luna, E. Huenul, J. Figueroa	724
15:45	Coffee Break	
16:15	Peat pellets as enrichment material had positive effects on growth and intestinal microbiota of weaned piglets H. Kettunen, J. Vuorenmaa, K. Partanen	725
16:30	Housing systems and dietary interventions can affect health, performance and microbiome of pigs from weaning to the growing D. Luise, G. Palladino, F. Correa, F. Palumbo, G. Orazio, M. Graziosi, E. Perez-Calvo, G. Litta, G. Scicchitano, G. Babbi, A. Castagnetti, S. Rampelli, P. Martelli, P. Trevisi	725
16:45	Dietary GABA supplementation in nursery pigs can improve object recognition memory regardless of their coping style E. Huenul, V. Vertus, K. Rochina, J. F. Pérez, S. M. Martin-Orue	726
17:00	Laying hen preference for different pecking blocks in floor pens depends on strain and time of day V. Hipkin, A. Harlander, E. Kiarie, M. Edwards, T. Widowski	726
17:15	Do Mineral Pecking Blocks Support Laying Hens' Ca Appetite? A. K. Rentsch, S. V. Komarova, E. G. Kiarie, A. Harlander, T. M. Widowski	727
17:30	Effects of reduced energy and essential amino acid diets on plumage damage and skin injuries of male slow- (Auburn) and fast- (B.U.T. 6) growing turkey strains A. I. Kirn, P. A. Weindl, C. Lambertz, P. Hofmann, G. Bellof, R. Schreiter	727
17:45	Polyphenols influences neurotransmitter associated with well-being and allometric growth of broiler chickens V. A. R. D. Castilho Heiss, C. M. Komiyama, R. G. Garcia, M. F. D. C. Burbarelli, I. C. D. L. Almeida Paz, F. C. Serpa, E. Santin	728
Poster Session 63		
<i>Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00</i>		
63.13	Effects of using a sound signal as a call to feeding on the behavior and welfare of gestating sows A. Blanc, C. Deroiné, C. Clouard, C. Gaillard	728
63.14	Effect of a flavouring additive on cow performance in automatic milking system Q. Tiqui, M. Gex Fabry, G. Desrousseaux	729
63.15	Comparative Study of Ruminant Feeding: Nutritional Implications C. Maduro-Dias, H. Nunes, C. Vouzela, J. Madruga, A. Borba	729
63.16	Colostrum administration quickness and farmer's characteristics affect calves' survival A. Costa, G. Visentin, M. Masi, Y. Vecchio, A. Goi, M. De Marchi	730
63.17	Supplemental rumen-protected dry grape extract alters the metabolic response and rumen fermentation of Simmental cows during heat stress A. Amato, M. Forleo, C. Cavallo, L. Liotta, E. Trevisi, A. Minuti, H. Bui, P. Engler, V. Lopreiato	730
63.18	Evaluation of conventional and cow-calf bonded rearing systems in southern Germany J. Kurek, T. Hautzinger, J. Harms, E. Zeiler, J. Steinhoff-Wagner	731

Session 64.

Sustainable solutions to support and sustain gut health in monogastric livestock (with project MONOGUTHEALTH), Part 2

Room: Piemontese - Palazzo Affari 2nd Floor

Chair: Bee / Trevisi

Session Type: Project session

	Theatre Session 64	Book of Abstracts page
14:30	Performances of primiparous rabbit does subjected of dietary restriction during gestation <i>V. Pinheiro, J. Teixeira, D. Monteiro</i>	731
14:45	Effects of dietary valerate glycerides on diarrhea, inflammatory status, and intestinal barrier integrity in weanling piglets infected with Enterotoxigenic Escherichia coli <i>L. Kovanda, S. Rengman, S. Tawde, J. Pos, Y. Liu</i>	732
15:00	Parabacteroides distasonis alleviates intestinal barrier injury induced by ETEC in piglets <i>J. Wang, Z. Wu, B. Tan</i>	732
15:15	Intrauterine growth restriction, defined by a high brain-to-liver weight ratio, affects fecal microbiota composition and, to a minimal extent, plasma metabolomics in pigs <i>R. Ruggeri, G. Bee, F. Correa, P. Trevisi, C. Ollagnier</i>	733
15:30	Impact of moderate CP restriction and additive combination on N balance and hindgut microbiota in pigs <i>L. Sarri, E. Fuertes, E. Pérez-Calvo, A. R. Seradj, J. Balcells, G. De La Fuente</i>	733
15:45	Coffee Break	
16:15	Microbial architecture and enterotypes for improved nitrogen utilization efficiency in fattening pigs <i>N. Sarpong, J. Seifert, J. Bennewitz, M. Rodehutsord, A. Camarinha-Silva</i>	734
16:30	Effect of dietary inclusion of a herbal extract blend on nutrient digestibility, faecal Nitrogen emission and growth performance in growing-finishing pigs <i>M. Fornós, M. Verdú, X. Soldevila, M. Balart, X. Solvas, J. A. Crespo, S. Fernández, J. Rafael</i>	734
16:45	From gut to tail: The effect of a fermented herbal extract on aspects of health and (tail-in-mouth) behaviour of pigs <i>N. Noellenburg, B. Metzler-Zebeli, C. Winckler, C. Leeb</i>	735
17:00	Vitamin E reduce adipose tissue fibrosis and lipid metabolism disorder in oxidized fish oil-fed pigs <i>Q. Guo, Q. Wu, J. Pan, Y. Duan, F. Li</i>	735
	Poster Session 64 <i>Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00</i>	
64.10	Effect of oat milling (ground vs. flaked) and age on the fecal microbiome of piglets <i>D. Monteiro, N. Guedes, J. Teixeira, V. Pinheiro, E. Pereira</i>	736
64.11	Effects of vinegar intake on piglet performances and gut health <i>V. Pinheiro, K. Bahia, J. Teixeira, M. Parreiras, E. Pereira, D. Monteiro</i>	736
64.12	Effects of 20% Lactose Supplementation in Liquid Creep Feed on Piglet Growth <i>M. H. Eskildsen, E. M. H. Christensen, C. Larsen, A. P. Rasmussen, C. M. Crone, L. V. De Knegt, J. G. Madsen</i>	737
64.13	The effect of Benzoic Acid supplementation on growth performance and small intestine integrity of artificially reared suckling piglets <i>C. M. Crone, A. P. Rasmussen, C. Larsen, M. H. Eskildsen, E. M. H. Christensen, L. V. De Knegt, J. G. Madsen</i>	737

Session 65.

PLF for health, behaviour and welfare, Part 2

Room: Podolica - Limonaia - Garden

Chair: Morgan / Morgan-Davies

Session Type: Theme session

	Theatre Session 65	Book of Abstracts page
14:30	Computational and Experimental Framework for Tracking Cow Personalities and Their Impact on Personalized Welfare <i>L. Oscar, B. Valníčková, D. Papinutti, S. Mordechay, Y. Salzer, O. Forkosh</i>	738

14:45	Validation of an indoor positioning system for automated personality assessment in dairy cows <i>P. Hasenpusch, T. Wilder, K. Dannen, A. Seidel, J. Krieter, G. Thaller</i>	738
15:00	Automatically monitoring dyadic relationships in dairy cows <i>B. Foris, K. Sheng, D. M. Weary, M. A. G. Von Keyserlingk</i>	739
15:30	Assessing Dairy Cows' Welfare Status through Social Behavior Indicators Using an Automatic Real-Time On-Farm Positioning System <i>D. Papinutti, I. Zeev, B. Valnickova, S. Mordechay, R. Palme, O. Forkosh, Y. Salzer</i>	739
15:45 Coffee Break		
16:15	Full-flock-full-pregnancy monitoring of liveweight progression in Romane meat ewes, using a walk-over-weighing system in rangelands <i>I. Llach, G. Bonnafé, C. Durand, S. Douls, I. Sanchez, B. Cloez, M. Lamarque, E. González-García</i>	740
16:30	Tracking sheep indoors or on pasture using Bluetooth and UHF RFID for welfare management: feedback from trials conducted in Scotland and France <i>G. Tesnière, C. Morgan-Davies, F. Kenyon, A. McLaren, T. Waterhouse, S. Duroy, U. Jean-Louis, C. Dwyer, A. Walker, M. Reeves, J. Duncan, J. M. Gautier</i>	740
16:45	Milking order of healthy and subclinically mammary infected dairy ewes in mid lactation <i>A. Recio, A. Elhadi, A. Salama, R. Costa, X. Such, J. Piedrafita, G. Caja</i>	741
17:00	How to define good mothering ability using computer vision of free farrowing sows? <i>L. Van Der Zande, V. Lei, E. Grindflek</i>	741
17:15	Improvement of an algorithm performance to estimate the physical activity of group-housed sows based on videos <i>C. Gaillard, M. Simon</i>	742
17:30	Computer vision based monitoring of fattening pigs: how well do pigs behave? <i>J. Sloomans, A. Parmiggiani, D. Liu, J. Maselyne, T. Norton</i>	742
17:45	The effect of colostrum supplementation on milk intake and performance when administered at the time of a diarrhea alert <i>A. Welk, M. C. Cantor, J. H. C. Costa, J. Morrison, C. B. Winder, D. L. Renaud</i>	743
18:00	Redefining lameness assessment using crowd-sourced data <i>K. Sheng, B. Foris, M. A. G. Von Keyserlingk, T. A. Timbers, V. Cabrera, D. M. Weary</i>	743

Poster Session 65

Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00

65.13	Genetic relatedness impact on social behavior in dairy cows within Automated Milking Systems <i>R. Moretti, E. Ponzio, L. Ozella, S. Chessa, F. Masia, E. Vrieze, P. Sacchi</i>	744
65.14	Automatic detection of lame weaner pigs by evaluating their drinking behaviour <i>P. Hesecker, N. Volkmann, G. F. Thimm, U. Hartmann, N. Kemper</i>	744
65.15	Requirements for implementing a European knowledge platform for multidimensional animal welfare assessment on farm, during transport and at the slaughterhouse <i>J. Zehmzi, C. Reverté, Y. P. Van Der Stede, S. Ashe, E. Caro, A. Velarde</i>	745
65.16	The effect of precision lighting system on laying hen welfare <i>D. Witkowska, D. Murawska, J. Baran, T. Przytarski, S. Łazarski, P. Wasielewski, A. Lemański</i>	745

Session 66. **The current and future role of pasture production systems in the mitigation of and adaptation to climate change impacts in livestock farming systems**

Room: Marchigiana - Palazzo Affari Ground floor

Chair: Boland

Session Type: Theme session

Theatre Session 66

Book of Abstracts page

14:30	Engineering resilient grazing systems to improve adaptation to climate change and helping to mitigate its adverse effects <i>invited J. C. Dubeux, Jr.</i>	746
-------	---	-----

15:00	Carbon footprint of sheep farms in France: first results of the LIFE Green Sheep project <i>S. Throude, B. Rouillé, J. B. Dollé</i>	746
15:15	Greenhouse gas emission intensity of Irish Sheep meat: Irish Data Component of LIFE Green Sheep Project <i>L. Bragina, C. Buckley, T. W. J. Keady</i>	747
15:30	Quantifying the impact of weather environment across three timescales on lamb performance <i>P. Theron, T. Brand, S. Cloete, J. Van Zyl</i>	747

15:45 Coffee Break

16:15	Effect of sward type on urinary nitrogen excretion of late lactation dairy cows <i>E. Wims, B. Mccarthy, J. P. Murphy, T. F. O'Callaghan, M. Dineen</i>	748
16:30	Dairy cows reduce drinking water intake when offered different fresh-cut pasture species <i>C. T. Minogue, T. M. Boland, S. Vigors, M. Dineen, N. A. Walsh, Z. C. Mckay</i>	748
16:45	Factors influencing impacts of drought on grass yields in Dutch dairy farms <i>M. De Vries, J. Van Riel</i>	749
17:00	Generation of a livestock value of grasslands for the mitigation and adaptation to climate change impacts in Chilean Patagonia <i>S. Radic-Schilling, R. Muñoz, S. Valle, P. Corti, C. Glucevic, M. Navarro, M. Gonzalez-Ronquillo</i>	749
17:15	The effect of sward botanical diversity on feed intake, growth performance and methane emissions of beef steers <i>M. O'Rourke, D. A. Kenny, A. K. Kelly, S. Waters</i>	750
17:30	Understanding impacts of scale changes on efficiency gains of pasture-based beef production systems in the Massif Central, France: a modeling approach <i>H. Nguyen-Ba, A. Van Der Linden</i>	750

Poster Session 66

Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00

66.11	Assessing extensive pasture-based beef production in South Africa under future climate change <i>C. Magona, A. Hassen, E. Tesfamariam, C. Visser, S. Oosting, A. Van Der Linden</i>	751
66.12	Sheep grazing on peat grassland in a free-field photovoltaic system <i>D. Hamidi, F. Sieve, C. Siede, L. Wilms, L. Zinken, M. Kayser, M. Hamidi, J. Isselstein</i>	751
66.13	Preliminary survey of the quality and pastoral value of different grazing areas in the park of the Campania Region <i>M. Iacurto, R. Steri, E. Rossi, F. Perna, A. Lullo, D. Meo Zilio</i>	752
66.14	Greenhouse gas balance of livestock systems and carbon footprint of livestock products: two methodologies for assessing livestock contribution to climate change <i>J. Vayssieres, D. Sasi, M. H. Assouma, M. Vigne, A. Ickowicz</i>	752
66.15	Carbon footprint of Sardinian dairy goats reared in extensive farming systems <i>S. Sechi, M. Lunesu, G. Pulina, C. Satta, G. Battacone</i>	753
66.16	Dry matter intake and calf performance on grass pastures in monoculture and silvopastoral systems in a subhumid tropical climate, Brazil <i>J. L. Izidro, A. Mello, V. Silva, M. Cunha, M. Santos, N. Costa, S. Costa</i>	753
66.17	Carbon dynamics and greenhouse fluxes in subtropical grazing lands <i>M. Silveira, J. Vendramini, R. Bracho</i>	754
66.18	Methane production in grazing sheep in the Magallanes region as a function of type of pasture <i>M. Gonzalez-Ronquillo, L. Robles, S. Radic-Schilling, C. Glucevic, M. Navarro</i>	754
66.19	Pasture and animal production in integrated crop-livestock-forestry systems in the tropics <i>M. Sousa</i>	755

Session 67.

Innovative insect application and technologies

Room: Rendena - Palazzo Affari 4th Floor

Chair: Gligorescu / Lefebvre

Session Type: Theme session

	Theatre Session 67	Book of Abstracts page
14:30	Collaborations between research and industry in insect sector: case study illustrated by a black soldier fly producer <i>invited</i> C. Trespeuch	755
15:00	StayPrime: Prolonging Larval Shelf Life for Efficient Insect Farming Integration A. Gligorescu	756
15:15	Automatization of abdominal color assessment in honey bees J. Prešern	756
15:30	Microbiome Dynamics and Waste Reduction Capabilities of Black Soldier Flies (<i>Hermetia illucens</i>) as Biosolid Consumers S. Escobar-Correas, A. Ruffell, G. Wijffels, H. Koch, A. Paten, M. Morgan	757
15:45	Coffee Break	
16:15	Exploitation of <i>Tenebrio molitor</i> , <i>Rhizopus oryzae</i> and <i>Trichoderma reesei</i> for the detoxification of contaminated bran with aflatoxins B1 E. Daniso, G. Pascon, C. Uboni, C. Conchione, S. Moret, F. Tulli	757
16:30	The effect of different wet fractionation methods on the yield of <i>Hermetia illucens</i> larval fractions and the distribution of the main constituents E. Gleeson, I. Fraeye, E. Pieterse	758
16:45	Subcritical Solvents for the Biorefinery of Chitin from Black Soldier Fly Larvae (<i>Hermetia illucens</i>) – Expanding the Scope towards other Insect Biomass E. Vervoort, R. Smets, B. Sels, M. Van Der Borght	758
17:00	Preliminary results on the control of <i>Fusarium</i> wilt on lettuce and tomato by insect frass L. Alfarano, S. Bellezza Oddon, L. Gasco, M. Pugliese	759
17:15	Effects of insect frass fertilizer on tomato fruits untargeted metabolomics F. Gai, G. Di Cuia, M. D'Imperio, M. Gonnella, C. Medana, A. Affricano, M. Ferrara, A. Parente	759
17:30	A Fly for a Fly – Frass to control cabbage root fly in cauliflower production systems in Belgium J. Claeys, C. Coudron, F. Temmerman, E. Formeseyn, E. Dendauw, D. Deruytter	760
17:45	Assessment of insect frass as biofertilizer for fava bean cultivation under Mediterranean climate conditions S. Khuli, E. Ettaleby, A. Elgharbi, C. I. Rumbos, C. G. Athanassiou	760
	Poster Session 67 <i>Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00</i>	
67.12	Non-absorption of ferulic acid by the Black Soldier Fly larvae (<i>Hermetia illucens</i>) M. Papin, L. Morand-Laffargue, C. Halimi, D. Sabatier, A. Sefah, E. Engel, C. Planche, P. Borel	761
67.13	Agronomic potential of BSF frass in the cultivation of ryegrass using distinct soils I. Rehan, I. Lopes, D. Murta, F. Lidon, P. Fareleira, C. Esteves, O. Moreira, R. Menino	761

Session 68.

Small ruminant health and welfare aspects

Room: Calvana - Palazzo Congressi Ground floor

Chair: Campion / Almeida

Session Type: Theme session

	Theatre Session 68	Book of Abstracts page
14:30	Welfare Challenges in Small Ruminants <i>invited</i> M. Reeves	762
15:00	Genomic analyses of parasite resistance traits in German crossbred Merino M. Schmid, R. Martin, C. Piefke, V. Stefanski, J. Bennewitz	762

15:15	Health traits as a way to estimate faecal egg count in dairy goats? – preliminary results <i>M. Bernau, S. Goth, H. Eßlinger, L. Hölzle, T. Schilling</i>	763
15:30	Novel mRNA isoforms identified in abomasal tissue of sheep affected by <i>Teladorsagia circumcincta</i> gastrointestinal nematode <i>K. Sinhalage, S. Lam, V. Asselstine, A. Cánovas</i>	763
15:45	Coffee Break	
16:15	Investigating farmers and crofters' experiences of unexplained lamb loss in the Highlands and Islands of Scotland <i>F. Mcauliffe, A. McLaren, A. Kent, F. Brülisauer, N. Sargison, D. Mccracken</i>	764
16:30	A longitudinal study into predisposing factors for lamb loss and photosensitisation on a Scottish hill sheep farm <i>F. Mcauliffe, A. McLaren, S. Brocklehurst, F. Brülisauer, N. Sargison, D. Mccracken</i>	764
16:45	Functional Longevity of Cyprus Chios Sheep: Insights from Reproductive Data <i>T. Christofi, S. Panayidou, G. Hadjipavlou</i>	765
17:00	Assessment of Subclinical Mastitis in Cyprus Chios Sheep Using Milk Electrical Conductivity <i>S. Panayidou, G. Hadjipavlou</i>	765
17:15	Metagenomic and Genome-Wide Association Analysis in Ewe Fertility: A Comprehensive Study <i>E. L. Reinoso-Peláez, M. Saura, C. González, M. Ramon, J. H. Calvo, I. Beltrán De Heredia, M. Serrano</i>	766
17:30	Differences in the mammary gland transcriptomes between sheep with different SRLV infection status and TMEM154 E35K genotype <i>E. Grochowska, M. Ibrahim, P. Guz, K. Pokrzywka, Z. Cai, G. Lühken</i>	766
17:45	Identification of recessive lethal mutations in sheep using homozygosity deficiency <i>S. Fabre, M. Ben Braiek</i>	767

Poster Session 68

Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00

68.12	Problems related to ear-tagging goats <i>F. Tuytens, L. De Flou, B. Ampe</i>	767
68.13	A pilot study of resistome characterization by using long read whole genome sequencing: from sheep faeces to soil fertilised with composted manure <i>B. Alcalá, M. S. García, J. M. González, B. Lahoz, M. Serrano, E. L. Reinoso-Peláez, T. Juan, M. P. Jimenez De Bagües, R. C. Mainar, C. Calvete, C. M. Marín, J. H. Calvo</i>	768
68.14	Prevalence of gastrointestinal parasitic infections in goat flocks in the Coastal Valley of Lima, Peru <i>D. Godoy Padilla, M. Paredes Chocce, K. Robles Noriega, L. Gómez Puerta, H. Castillo Doloriert</i>	768
68.15	Assessment of ovine reproduction performances under solar grazing in Belgium: a pilot study <i>V. Simon, J. M. Vandeweerd, A. Houtart, V. Carnoy, F. Posschelle, M. L. Vandeweerd, F. Hontoir</i>	769
68.16	Effect of progressive weaning on growth performance and cortisol levels of D'man lambs <i>E. Gherairi, M. Atigui, C. Chaouch Aoun, M. Brahmi, L. Doghbri, M. Hammadi</i>	769
68.17	Use of whole-genome resequencing for the study of genes associated with small ruminant lentiviruses susceptibility in two Spanish dairy sheep breeds <i>A. Suárez-Vega, M. Vrcan, P. A. S. Fonseca, H. Marina, B. Gutiérrez-Gil, J. J. Arranz</i>	770
68.18	Influence of a prepubertal dietary protein restriction on ewes' blood transcriptome in response to an intramammary inflammatory challenge <i>M. Alonso-García, A. Suárez-Vega, R. Pelayo, J. J. Arranz, B. Gutiérrez-Gil</i>	770
68.19	Correlation between genetic values for resistance to gastrointestinal nematode infection and growth traits in sheep <i>S. Cunha, F. Schenkel, Á. Cánovas</i>	771
68.20	Effect of shearing ewes during the first third of gestation on body weight and testicular development of male offspring <i>C. López-Mazz, M. Regueiro, F. Baldi, A. Bielli, G. Banchemo</i>	771
68.21	Identification of infectious abortion issues and the changes in flock performance before and after diagnosis <i>F. P. Champion, M. G. Diskin, T. Coll, C. O. Lynch</i>	772

Session 69.

Epigenetics, adaptation and intergenerational transmission

Room: Modicana - Palazzo Affari 3rd Floor

Chair: Kiefer / Keogh

Session Type: Theme session

	Theatre Session 69	Book of Abstracts page
14:30	In utero heat stress alters calf phenotype: the role of programming <i>invited</i> G. E. Dahl, J. Laporta	772
15:00	Transgenerational effects of heat stress in dairy sheep M. G. Usai, S. Casu, S. Salaris, T. Sechi, S. Miari, G. Mulas, A. Carta	773
15:15	Genetic determinism of sperm DNA methylation in French Holstein cattle C. Fouéré, C. Hozé, V. Costes, M. Boussaha, A. Chaulot-Talmon, F. Ali, D. Boichard, H. Kiefer, M. P. Sanchez	773
15:30	Genetic evaluations in dairy cattle incorporating an epigenetic source of information A. López-Catalina, A. Reverter, O. González-Recio	774
15:45	Coffee Break	
16:15	Separating genomic imprinting effects and maternal effects in birth weights in Large White pigs R. E. Jahnel, N. Reinsch, A. Lepori, C. Kasper	774
16:30	Exploring the repertoire of regulatory regions on bovine blood cells methylome G. C. m. Moreira, V. Costes, H. Kiefer, G. Foucras, H. Jammes	775
16:45	Transmission of sperm DNA methylation patterns to the embryo in cattle: a genome-wide analysis A. Raja-Ravi-Shankar, A. Chaulot-Talmon, O. Dubois, M. C. Deloche, A. Bonnet, S. Jean-René, L. Laffont, C. Archilla, V. Costes, C. Fouéré, C. Le Danvic, H. Jammes, V. Duranthon, H. Kiefer	775
17:00	Identifying the rules for defining CpG epigenetic bovine diversity. A study on public RRBS data from sperm isolated from Montbéliarde and Holstein bulls A. Stella, B. Lazzari, P. Ajmone Marsan, P. Cozzi, E. Capra	776
17:15	Effect of supplementation during the rearing phase on the DNA methylation of Longissimus thoracis muscle in F1 Angus-Nellore cattle at weaning L. Rodrigues, M. Magistri, R. Rodrigues, Y. Madio, G. Pereira, G. Ramírez-Zamudio, O. Machado Neto, L. A. Chardulo, W. Baldassini, R. Curi	776
	Poster Session 69 Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00	
69.10	Comparison between indicine and taurine cattle DNA methylation patterns across different tissues M. M. Passamonti, E. Capra, B. Lazzari, M. Milanese, G. De Paula Nogueira, J. F. Garcia, Y. T. Utsunomiya, A. Stella, P. Ajmone Marsan	777

Session 70.

RES4LIVE: (renewable) energy for livestock, incl free communications on energy and sensors for thermal comfort of livestock

Room: Sarda - Palazzo Affari Below ground Floor

Chair: Maselyne / Odintsov Vaintrub

Session Type: Project session

	Theatre Session 70	Book of Abstracts page
14:30	Energy Use in the EU Livestock Sector: A Review Recommending Energy Efficiency Measures and Renewable Energy Sources Adoption B. Paris, F. Vandorou, D. Tyriss, A. Balafoutis, K. Vaiopoulos, G. Kyriakarakos, D. Manolakos, G. Papadakis	777
14:45	Utilizing energy auditing in intensive livestock farming facilities M. Moraitis, A. Balafoutis, D. Tyriss, D. Manolakos, J. Maselyne, T. Amon, S. Benni, S. Kalogridis	778
15:00	Simulation model for renewable energy systems in livestock barns: three case studies M. Everaert, P. Tegenaw, J. Maselyne, S. Leconte	778
15:15	The AgEnergy platform – a tool to search and assess fossil-energy-free technologies and strategies A. Balafoutis, M. Moraitis, M. Kaminiaris, Z. Tsiropoulos, D. Manolakos	779

15:30 Sustainable livestock sector under climate transition 779
A. Rontogianni, P. Grammelis

15:45 Coffee Break

16:15 An integrated renewable energy system for the de-fossilization of a commercial swine nursery barn 780
S. Benni, C. A. Perez Garcia, M. Bovo, A. Barbaresi, F. Tinti, P. Tassinari, D. Torreggiani

16:30 Heat Pump HVAC System as Part of an Integrated RES System for the Indoor Climate Control of a Laying Hen House 780
D. Tyriss, A. Gkountas, P. Bakalis, M. Goliomytis, D. Manolakos

16:45 Geothermal energy concepts for livestock applications, analysis of energy savings, life cycle cost and animal welfare 781
H. Hoes, J. Pauwels, S. Willems

17:00 Life Cycle Impact Assessment of an Integrated PVT-BTES-Heat Pump System for a Commercial Swine Farm in Italy 781
D. Tyriss, V. Anestis, S. Benni, F. Tinti, T. Bartzanas, D. Manolakos

17:15 Modeling of thermal status at animal level – Swine and Cattle: A Review 782
L. Rong, J. Maselyne, G. Zhang

17:30 The effect of renewable energy transition on the thermal comfort in a pig farm – animal compartment level experimental investigation 782
P. D. Tegenaw, M. Everaert, M. Aluwé, J. Maselyne, S. Lecompte

17:45 Compact Bio-CNG farm filling fuel production from anaerobic digestion: Hollow fibre permeation and Hybrid compression for technically and economically feasible small scale biofuel production 783
L. Wannasek, D. Tyriss, J. Hoeckner, D. May, C. Ammon, B. Amon, O. Marchand, D. Manolakos, T. Amon

Poster Session 70

Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00

70.13 Air temperature measured by embedded sensors adopted by pig transporting vehicles in a scaled compartment model 783
L. Rong, J. K. Kristensen, S. Jung, G. Zhang, C. Kobek-Kjeldager, K. Thodberg, L. Foldager, M. S. Herskin

Wednesday 4 September

Session 71. Genetic evaluations: new methods, new species, new proxies

Room: Auditorium - Palazzo Congressi Lower Ground Floor

Chair: Miglior / Martin

Session Type: Free communications (bottom-up)

Theatre Session 71

Book of Abstracts page

8:30 Weighted SNP enhances the genomic prediction accuracy for milk citrate predicted by milk mid-infrared spectra of Holstein cows in early lactation 784
Y. Chen, H. Atashi, C. Grelet, N. Gengler

8:45 Estimation of heritabilities and genetic correlations in very large datasets using predictivities within and across traits 784
S. Tsuruta, Z. Trujano, M. K. Hollifield, D. Lourenco

9:00 Multi-breed multi-trait single-step genomic predictions for Holstein and Jersey including crossbred animals 785
R. Bonifazi, S. Aivazidou, J. Ten Napel, M. Schrauf, G. De Jong, J. Vandenplas

9:15 Over-time genetic correlations based on accuracy in GEBV for 18 linear type traits in US Holsteins 785
S. Tsuruta, D. Lourenco, T. Lawlor, I. Misztal

9:30 Genome-wide association study for stature for Holstein cattle based on whole genome sequence, using a mixed linear model 786
D. Słomian, K. Żukowski, M. Skarwecka, K. Kotlarz, J. Szyda

- 9:45 Exploring dynamics of breeding values under non-random mating and imprinting: A real example with Rubia Gallega breeding program 786
D. López-Carbonell, G. Gorjanc, R. C. Gaynor, J. Altarriba, L. Varona
- 10:00 Genomic evaluation of litter size variability in Large White pigs 787
G. Cieleń, M. Derks, A. Boshove, E. Sell-Kubiak

10:15 Coffee Break

- 10:45 Effect of the number of sibs measured in commercial conditions on the response to selection for body weight in turbot 787
E. Morales-González, B. Villanueva, S. García-Ballesteros, J. Fernández
- 11:00 Single-step genomic BLUP breeding value estimation in multi population Atlantic Salmon data 788
G. T. Gebregiweris, T. K. Belay, B. S. Dagnachew, S. A. Boison, T. Meuwissen
- 11:15 Supporting the implementation of genomic selection in a guide dogs' population using simulation 788
A. A. Martin, T. Lewis, J. Schoenenbeck, P. Wiener, D. N. Clements, G. Gorjanc

Poster Session 71

Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00

- 71.11 Integrating foreign estimated breeding values into the national single-step genomic evaluation of German beef cattle breeds 789
D. Adekale, Z. Liu, R. Evans, T. Pabiou, R. Reents, D. Segelke, J. Tetens
- 71.12 The effect of correlated herd effects on the variance component estimate 789
B. Cuyabano, C. Gondro, G. Rovere
- 71.13 Exploring Genetic Trends in Elite Canadian Rams 790
S. Lazaro, H. Oliveira, F. Schenkel
- 71.14 Impact of season and genetic line on honeybee gut microbial composition 790
F. Tiezzi, M. G. De Iorio, G. Minozzi
- 71.15 Utilisation of dense longitudinal records from automatic milking to assess heat stress effects in dairy cows 791
E. Frenken, K. Brügemann, S. König
- 71.16 Genotype by environment interactions for carcass traits in Icelandic sheep 791
J. H. Eiríksson
- 71.17 Identifying candidate variants for cumulative egg number by analyzing 1005 fully sequenced layers 792
A. Ni, Y. Sun, H. Bovenhuis, M. P. L. Calus, J. Yuan, Y. Li, Y. Wang, J. Chen
- 71.18 Using CADD scores as prior information to improve genomic prediction accuracy in pigs and mice 792
C. Fu, P. Duenk, M. Calus
- 71.19 Survival Analysis of Iranian Holstein Dairy Cattle with BLUP and ssGBLUP Using Random Regression Model 793
M. Afrazandeh, A. Rashedi Dehsahraei, F. Nazari, A. Kazemi, A. Akbari Sharif
- 71.20 Implementation of longevity genetic index in Italian Jersey 793
A. Fabris, F. Tiezzi, R. Finocchiaro, M. Marusi, M. Cassandro
- 71.21 Estimating time-dependent genetic parameters and SNP effects for longitudinal body weights in Holstein cattle 794
Y. Chang, Z. Ma, Y. Wang
- 71.22 Study of LSR, proxy for robustness of fattening pig, in several environments and the link with tail biting 794
L. Flatres-Grall, N. Friggens, I. David, G. Lenoir
- 71.23 Genetic variation of HSP70.1 locus in Cinisara and Modicana cattle breeds 795
S. Tumino, L. Basiricò, A. Criscione, G. Chessari, S. Bordonaro, D. Marletta, U. Bernabucci
- 71.24 Variance components and Genetic parameters for live weight in Dairy heifers in New Zealand 795
A. Ismael, L. McNaughton, R. Sherlock, B. Harris, V. Boerner, R. Spelman
- 71.25 Single-step genome-wide association for lameness and BCS in Walloon Holstein dairy cows 796
H. Atashi, Y. Chen, H. Hu, K. Wijnrocx, N. Gengler
- 71.26 Patterns of occurrence of mendelian errors in snp array genotypes in a src iberian pig population 796
K. D. Arias, N. Formoso-Rafferty, F. Sánchez-Esquiliche, L. El-Ouazizi El-Kahia, C. Ojeda-Marin, M. A. Pérez-Cabal, F. Goyache, J. P. Gutiérrez, I. Cervantes
- 71.27 GWAS for productive traits in Italian Alpine and Saanen goats 797
A. Negro, A. Bionda, M. Cortellari, A. Cesarani, P. Fresi, N. P. P. Macciotta, S. Grande, S. Biffani, P. Crepaldi

71.28	Exploring the genomic basis of shank and eggshell coloration in Italian native chicken breeds <i>F. Perini, F. Cendron, E. Lasagna, M. Cassandro, M. Penasa</i>	797
71.29	RESILTROUT investigates the trout genome to identify marker associated to resilience to diseases and heat stress <i>G. Riccioni, S. Colussi, L. Fariano, V. Valenzano, P. L. Acutis, E. Bozzetta, C. Ghittino, A. Dondo, M. Prearo, P. Pastorino, P. Ajmone Marsan, L. Colli</i>	798
71.30	Culling reasons for end of career dairy cows in northern Italy <i>F. Fusi, S. Gabriele, T. Bernardo, G. Valli, L. Bertocchi, V. Lorenzi</i>	798
71.31	Prioritizing markers for stayability in beef cattle and its impact on genomic predictions <i>N. Leite, A. Garcia, R. Veroneze, G. Menezes, D. Lourenco, F. Silva</i>	799
71.32	Genomic study of milk performance in fat-tailed and thin-tailed Mediterranean dairy sheep <i>A. Argyriadou, S. Michailidou, S. Vouraki, G. Banos, G. Arsenos</i>	799
71.33	Preliminary investigation of the reaction norm model for the milk yield in Taiwan's Dairy Herd Improvement data <i>Y. X. Lan, K. H. Lin, P. A. To, E. C. Lin</i>	800

Session 72. Methods in prediction of genetic merit and assessment of genetic diversity

Room: Pisana - Palazzo Congressi 2nd Floor

Chair: Egger-Danner / Tenhunen

Session Type: Free communications (bottom-up)

	Theatre Session 72	Book of Abstracts page
8:30	Including QTL information in GBLUP and machine learning models for genomic prediction <i>J. Yang, M. Calus, T. Meuwissen, Y. Wientjes, P. Duenk</i>	800
8:45	A Nonlinear Recursive Model for Predicting Calving Difficulty and Birth Weight in Cattle <i>L. Varona, D. López-Carbonell, C. Hervás-Rivero, M. Sánchez, M. Hermida, P. Martínez, J. Altarriba</i>	801
9:00	Effect of genotyping density on the detection of runs of homozygosity and heterozygosity <i>L. Falchi, A. Cesarani, A. Criscione, J. Hidalgo, A. Garcia, S. Mastrangelo, N. P. P. Macchiotta</i>	801
9:15	Exploiting properties of the H-Matrix as an aid to identify Metafounders <i>C. Anglhuber, C. Edel, E. C. G. Pimentel, R. Emmerling, K. U. Götz, G. Thaller</i>	802
9:30	The effective number and profile of causative markers in GWAS <i>I. Pocrnic, D. A. L. Lourenco, I. Misztal</i>	802
9:45	Modeling unknown parents in single-step genomic BLUP: Metafounders vs. unknown parent groups in a simulated cattle population <i>J. Himmelbauer, H. Schwarzenbacher, C. Fuerst, B. Fuerst-Waltl</i>	803
10:00	Confidence intervals for validation statistics with data truncation in genomic prediction <i>M. Bermann, A. Legarra, A. Alvarez Munera, I. Misztal, D. Lourenco</i>	803
10:15	Coffee Break	
10:45	Multibreed single-step GBLUP evaluations for fertility traits in US dairy cattle <i>J. M. Tabet, D. Lourenco, M. Bermann, I. Misztal, P. Vanraden, A. Legarra</i>	804
11:00	Comparative transcriptomic profiling of mRNA isoforms linked to feed efficiency in Holstein dairy cattle <i>F. Muhammad, S. Lam, V. Asselstine, C. Baes, F. Miglior, F. Schenkel, Á. Cánovas</i>	804
11:15	Exploring modelling approaches to address the dynamic nature of animal health <i>P. Martin, G. Foucras, R. Muñoz-Tamayo, N. C. Friggens</i>	805
	Poster Session 72 <i>Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00</i>	
72.11	The impact of truncating historical data on the prediction ability of selection candidates <i>I. Granado-Tajada, E. Ugarte</i>	805
72.12	Genetic diversity of German and Irish Beef cattle breeds <i>D. Adekale, A. Bloom, R. Evans, D. Segelke, J. Tetens</i>	806

72.13	An evaluation of using Runs of Homozygosity to detect Identity by Descent <i>O. B. Wæge, T. Druet, P. Berg, T. Meuwissen</i>	806
72.14	Screening continent-wide genomic diversity for local adaptation reveals strong signals of spatially divergent selection in European sheep <i>M. Barbato, E. Vajana, O. Selmoni, E. Somenzi, M. M. Passamonti, M. Tixier-Boichard, B. Lazzari, L. Colli, A. Stella, P. Ajmone Marsan</i>	807
72.15	Genetic markers to differentiate domestic pigs and wild boars <i>A. Koseniuk, G. Smolucha, M. Natonek-Wiśniewska, A. Radko</i>	807
72.16	The usefulness of a panel of STR markers recommended for pig identification for pork traceability <i>A. Radko, A. Koseniuk, G. Smolucha</i>	808
72.17	Species identification of cervid using common pair of primers <i>M. Natonek-Wiśniewska</i>	808
72.18	Detection of heterozygosity-rich regions in sheepdogs and cattedogs <i>A. Halvoník, N. Moravčíková, G. Mészáros, M. Chalupková, R. Kasarda</i>	809
72.19	Using genomic and transcriptomic information for complex trait prediction <i>V. Haas, R. Wellmann, M. P. L. Calus, J. Bennewitz</i>	809
72.20	Accelerating Average Information REML: An algorithm using incremental model for (co)variance component estimation in the genomic Era <i>H. Gao, E. Mäntysaari, M. Lidauer, R. Thompson, I. Strandén</i>	810
72.21	A sizable putative inversion detected in the chicken genome <i>S. Qanbari, P. Shahsavari, S. Casillas, J. Martinez-Urtaza, A. Barbadilla</i>	810
72.22	Uncovering the architecture of production-driven introgression in Cinisara cattle breed <i>V. Florida, A. Bionda, M. Cortellari, A. Amato, V. Lopreiato, E. D'Alessandro, P. Crepaldi, L. Liotta, M. Barbato</i>	811
72.23	The deconvolution of bulk rat brain cell types using scRNA-seq data as reference <i>K. Żukowski, W. Hunter, B. Szymczyk, M. Świątkiewicz, M. Oczkiewicz</i>	811
72.24	Genetic structure and hybridization between red and sika deer in northern Italy <i>M. Tolone, S. Riggio, E. Mori, S. Mastrangelo, P. Galluzzo, S. Migliore, M. Baratti, G. R. Loria, M. Ferri, M. T. Sardina, F. De Filippi</i>	812
72.25	Influence of inbreeding on fertility traits in Braunvieh and Original Braunvieh cows <i>A. Bonifazi, M. Rust, F. Schmitz-Hsu, H. Jörg, A. Burren</i>	812
72.26	Phenotypic characterisation of Sardinian local cattle breed <i>F. Sirtori, M. C. Fabbri, A. Confessore, A. Crovetti, R. Bozzi</i>	813
72.27	Dissecting the genetic basis of pigmentation anomalies in flatfish through imputed genotypes <i>D. Costas-Imbernón, S. Otero, P. García-Fernández, P. Touriñán, R. Tur, D. Chavarrías, J. Rotllant, M. Saura</i>	813
72.28	DHGLMF90: a tool for estimating genetic heterogeneity of residual variance using the double hierarchical generalized linear models <i>A. Alvarez Munera, M. Bermann, N. Ibáñez Escriche, C. Casto Rebollo, I. Misztal, D. Lourenco</i>	814
72.29	Influence of inbreeding on semen parameters in Swiss pig breeds <i>A. Burren, I. Häfliger, A. Hofer, N. Khayat-zadeh</i>	814

Session 73. Targeting ecosystem services provision by grasslands and protein self-sufficiency in cattle production

Room: Valdostana - Palazzo Affari 3rd Floor

Chair: Frigga / Probo

Session Type: Theme session

	Theatre Session 73	Book of Abstracts page
8:30	Multicriteria performance of five grass-based cattle farms along a gradient of stocking rate <i>invited B. Dumont, F. Joly, C. Blaix, J. Bloor, M. S. Corson, O. Huguenin-Elie, H. M. Van Der Werf</i>	815
8:45	Agroecological transition may reduce the fat content of Fourme de Montbrison cheese <i>M. Coppa, M. Chabrut, A. Passel, B. Martin</i>	815
9:00	Meat production from organic suckler cattle fed on grass <i>B. Sepchat, M. Barbet, M. Kentzel</i>	816
9:15	Predation on cattle: between the wolf's responsibility and the absence of damage reports <i>M. Virapin, S. Jabouille, G. Brunschwig, E. Sturaro</i>	816

9:30	Ways to achieve protein autonomy in cattle feeding <i>invited</i> F. Schori, I. Morel, T. Haak, O. Huguenin-Elie	817
9:45	Effect of concentrate crude protein and amino acid supplementation on milk production of mid-lactation, grazing dairy cows R. Van Emmenis, M. Chaize, R. Fitzgerald, M. Dineen	817
10:00	Green-cut sorghum fed indoor to dairy cows: a strategy to mitigate herbage shortages? E. Manzocchi, L. Viry, L. Eggerschwiler, B. Hayoz, P. Schlegel, F. Dohme-Meier	818

10:15 Coffee Break

10:45	Effect of dietary forage proportion and crossbreeding on dairy cows' feeding efficiency and methane emissions S. Ormston, T. Yan, X. Chen, A. W. Gordon, K. Theodoridou, S. Huws, S. Stergiadis	818
11:00	Emission measurements in a naturally ventilated dairy housing: How does the crude protein level of the diet affect ammonia and nitrous oxide emissions? S. Schrade, K. Zeyer, J. Mohn, M. Zähner	819
11:15	Willow (<i>Salix</i> spp) tannin-rich tree fodder: The potential to reduce methane and improve productivity of grazing beef cattle J. Thompson, S. Stergiadis, O. Cristobal-Carballo, T. Yan, F. Lively, J. Gilliland, S. Huws, S. Cameron, K. Theodoridou	819

Poster Session 73

Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00

73.11	Virtual Fencing for alpine grazing and resource conservation: opportunities and challenges A. Confessore, C. Aquilani, L. De Guttry, N. Staglianò, G. Argenti, C. Dibari, S. Rainis, C. Pugliese	820
73.12	Effect of silage species and concentrate crude protein level on early-lactation milk production in grazing dairy cows M. Chaize, M. Egan, R. Fitzgerald, R. Van Emmenis, A. Y. Ikoyi, N. Byrne, T. F. O'Callaghan, M. Dineen	820
73.13	Protein self-sufficiency and nitrogen use efficiency in beef-on-dairy crossbred bulls I. Morel, F. Dohme-Meier, R. Siegenthaler, B. Hayoz, C. Xavier, S. Lerch	821
73.14	Milk production of Holstein cows grazing fescue at different defoliation intensities C. Dorao, A. Van Der Peet, D. A. Mattiauda, P. Chilibroste, G. Menegazzi	821
73.15	Meat quality of extensively reared beef cattle in Greece V. Papanikolopoulou, S. Vouraki, S. Priskas, S. Dokou, V. Fotiadou, A. Tsitsos, I. Dalla, G. Arsenos	822
73.16	Toasted Faba Bean and wheat mixture as an alternative protein source in a low protein diet for dairy cattle L. Vandaele, T. Van Den Bossche, J. De Boever, K. Goossens, D. Van Wesemael	822

Session 74.

From horse welfare to social license to operate

Room: Reggiana - Palazzo Affari 2nd Floor

Chair: Evans / Vial / Neveux

Session Type: Theme session

Theatre Session 74

Book of Abstracts page

8:30	Animal Welfare and Animal Production Systems, the Case of Horses R. Evans	823
8:45	Mind the Gap: Leveraging Human Behaviour Science to improve Animal Health and Welfare <i>invited</i> T. Furtado	823
9:15	The end of life of equidae in France V. Deneux - Le Barh	824
9:30	Enhancing Health and Welfare of Non-for-human-consumption (non-DPA) Horses: An Online Investigation G. Matteucci, F. Cerasoli, L. Iannetti, P. Migliaccio, M. Podaliri Vulpiani	824
9:45	Swedish dairy farmers' and trotting-horse trainers' perceptions of animal welfare inspections F. Lundmark Hedman, I. R. Ewerlöf, J. Frössling, C. Berg	825
10:00	Horse welfare in semi-extensive system: the case of the Italian Catria horse breed reared for meat production F. Raspa, E. Valle, C. Bordin, L. Ozella, D. Bergero, M. Tarantola, A. Necci, L. Bertocchi, N. D'Avino, M. Paniccià, P. De Palo, C. Forte	825

10:15	Coffee Break	
10:45	Does the dominance hierarchy in a large group of horses influence locomotor activity and area utilization? <i>G. Weidling, J. Krieter, R. Lübben, I. Czycholl</i>	826
11:00	Equids welfare in Italian traditional equestrian events: comparison between 2022 and 2023 <i>S. Gabriele, T. Bernardo, G. Valli, V. Lorenzi, F. Fusi, L. Bertocchi</i>	826
11:15	Quantifying the effect of loading density and gender on selected blood components and carcass bruises of slaughter horses <i>N. Čobanović, M. Radaković, I. Vičić, B. Suvajdžić, N. Grković, N. Karabasil</i>	827

Poster Session 74

Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00

74.10	Is observation of horses when they are outdoors adequate for detecting stereotypic individuals? <i>E. K. Jastrzębska, K. Wytrzązek, B. Earley, A. Górecka-Bruzda</i>	827
74.11	The influence of selected factors on the behavior of horses outside the stable during different seasons <i>E. Jastrzębska, A. Pawłowska</i>	828

Session 75.

Advances in non ruminant nutrition, Part 2

Room: Chianina - Palazzo Affari 1st Floor

Chair: Alvarez-Rodriguez / Kar

Session Type: Theme session

	Theatre Session 75	Book of Abstracts page
8:30	Effect of starch source in pelleted diets on growth performance of pigs <i>A. Agouros, L. Montagne, M. Le Gall, K. Quéméneur, E. Labussière, N. Quiniou</i>	828
8:45	Empirical validation of implementing high energy in soybean meal: soybean oil equivalence of soybean meal in diets fed to growing pigs <i>J. Ibagon, S. A. Lee, H. Stein</i>	829
9:00	Dietary fiber supplementation during gestation promotes placental angiogenesis by gut microbiota regulation of serotonin signaling pathway in sows <i>Y. Li, D. Wu, N. Everaert</i>	829
9:15	Effects of high fibre on gas production and net energy in diets fed to group-housed pigs <i>S. A. Lee, D. Rodriguez, H. Stein</i>	830
9:30	A review on the lysine requirements of weaned piglets <i>S. Goethals, P. Bikker, J. H. Rijpert, B. Ampe, J. W. Spek, S. Millet</i>	830
9:45	Estimating the efficiency of amino acid use using chemical composition data from growing pigs <i>M. Lautrou, G. Bee</i>	831
10:00	Optimal protein concentration in diets for multiparous sows during the transition period <i>J. Johannsen, M. Sørensen, T. Bruun, C. Farmer, T. Feyera</i>	831

10:15	Coffee Break	
10:45	Evaluation of the soybean replacement as protein source with Mediterranean legumes in the performance of growing pigs <i>M. Rodríguez, I. Fernández-Figares, R. Nieto, J. Morales</i>	832
11:00	Sustainable protein sources field peas and blue lupines replace soy protein in piglet diets <i>A. Van Enckevort, A. Sijmonsbergen, I. Van As</i>	832
11:15	Metabolism of phytoestrogens in red clover and effects on sow reproduction <i>E. Vu, J. Chagas, T. Lundh, Y. Sjunnesson, M. Presto Åkerfeldt</i>	833

Poster Session 75

Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00

75.11	A comparison of Devamine and traditional protein sources on the post-prandial release of blood metabolites in weaned pigs <i>M. Quinn, G. Brychkova, M. D. Scott, J. M. O'Connell</i>	833
-------	--	-----

75.12	Seaweed formulation enhances sow performance through reduced stillborn piglets and improved vitality	834
	<i>M. Bouwhuis, T. Gall, S. O'Connell</i>	
75.13	The Microbial Profiling of the Boschveld Chickens Fed Sorghum-Based Diets	834
	<i>N. Nemukonden, C. A. Mbajjorgu, T. Mafuna, M. Mabelebele</i>	
75.14	Spirulina as alternative protein source in diets for gestating and lactating sows – effects on litter characteristics and piglet growth	835
	<i>K. Giller, P. Tschannen, W. Pendl, D. Kümmerlen, M. Terranova</i>	
75.15	Effect of consumption of A1 and A2 milk, biofortified or not, on weight gain and carcass yield of piglets	835
	<i>D. C. M. Fonseca, A. N. Vasconcellos, L. M. Oliveira, J. G. Oliveira, T. H. Silva, A. Saran Netto, A. M. C. Vidal</i>	
75.16	Golden mussels meal with varying particle sizes in broiler chicken diets	836
	<i>D. Jablonski, A. P. G. C. Costa, M. S. D. Pavlak, N. Rohloff Junior, G. L. S. Tesser, C. Eyng, C. Kaufmann, R. V. Nunes</i>	
75.17	Digestibility assessment of various protein sources in cat feed	836
	<i>H. J. Jang, J. H. Seo, E. R. Oh, S. H. Lee, Y. B. Park, Y. Kim</i>	

Session 76.

Advances in ruminant nutrition, Part 2

Room: Maremmana - Palazzo Affari 2nd Floor

Chair: Stergiadis / Ranilla García

Session Type: Theme session

	Theatre Session 76	Book of Abstracts page
8:30	Bioactive compound research in ruminant nutrition: From Reductionism to Holism <i>invited R. Khiaosa-Ard</i>	837
9:00	The impact of probiotic live yeast in a barley grain-based diet on rumen microbiome and histology of artificially reared lambs <i>A. Mavrommatis, P. Cremonesi, M. Severgnini, C. Christodoulou, K. Petropoulos, L. Dunière, B. Castiglioni, B. Kotsampasi, C. Balaskas, E. Chevaux, E. Tsiplakou</i>	837
9:15	Rutin and Quercetin Biotransformation in Ruminants Revealed by Molecular Networking <i>D. Aldian, L. D. Harisa, H. Tomita, K. Tian, A. Iwasawa, M. Yayota</i>	838
9:30	Preliminary study on some innovative rumen-bypass micro-encapsulation techniques for essential oils <i>A. Maggolino, N. Denora, A. Lopodota, A. Di Grigoli, P. Marialetizia, C. Maria Giovanna, M. Rosaria, P. De Palo</i>	838
9:45	How can drinking water may be used to increase milk yield? <i>Y. Ben Meir, D. Espinoza</i>	839
10:00	Water intake and productivity responses of lactating dairy cows offered saline drinking water <i>L. Managos, S. Agenäs, M. Åkerlind, P. Peetz Nielsen, A. Jansson</i>	839
10:15	Coffee Break	
10:45	Does Exhalomics Reveal the Dynamics of Rumen Fluid Metabolites in Dairy Cows? <i>M. Z. Islam, S. Räisänen, J. Lan, Y. Li, F. Wahl, R. Zenobi, E. C. Slack, S. Giannoukos, M. Niu</i>	840
11:00	Is tributyrin a good replacement for sodium butyrate to stimulate epithelial growth in sheep? <i>S. Świerk, M. Przybyło, K. Szczepanik, P. Górka</i>	840
11:15	Identification of natural methane inhibitor based on molecular docking techniques and evaluation its effect on rumen fermentation and prokaryotic communities in vitro <i>Y. Liu, X. Li, Y. Tu</i>	841
11:30	Supplemental rumen-protected methionine and lysine increase energy-corrected milk production by early postpartum Holstein cows <i>M. M. Efil, F. C. Cardoso, L. Bahloul, J. K. Drackley</i>	841
11:45	Dietary guidelines for Zn, Cu, Mn, and Fe in bovines, by integrating net requirements, native dietary occurrence, and homeostatic regulation boundaries <i>J. B. Daniel, J. Martín-Tereso</i>	842
12:00	uNDF240 and fiber digestibility as important parameters for balancing diets: comparison of wheat hay vs. wheat straw in high producing dairy cows <i>J. De Matos Vettori, D. Cavallini, L. Mammi, I. Fusaro, A. Formigoni</i>	842

Poster Session 76

Palazzo Congressi floor -1, from September 2nd at 17:00 until September 4th at 15:00

- 76.13 Effects of dietary supplementation of oregano essential oil on performance, rumen microbiota and morphometrics of feedlot cattle 843
S. Dokou, A. Tsisos, I. Stylianaki, V. Economou, I. Giannenas, M. E. Filippitzi, G. Arsenos
- 76.14 Rumen fermentation and predicted methane emissions from dairy cows fed *Ascophyllum nodosum* 843
N. Sari, K. Theodoridou, M. Terre, K. Kliem, S. Huws, N. Prat, P. Ray, C. Rymer, S. Stergiadis
- 76.15 Effects of different feed processing forms on in vitro rumen fermentation characteristics 844
H. R. Park, D. Lee, B. Chae, I. Cheon, E. Jeong, Y. Mun, C. Kim, H. Kwon, N. J. Choi
- 76.16 Effects of combination of garlic powder/attapulgitite hybrid mixture and citrus by-product on performance and enteric methane production in Hanwoo steers 844
R. Bharanidharan, B. M. Tomple, R. Ibdhi, S. H. Beak, J. H. Lim, A. Jo, H. K. Kim, K. H. Kim
- 76.17 Short-chain fatty acids transporters expression in ruminal epithelium of growing rams depends on the source of butyrate used in a diet 845
S. Świerk, M. Przybyło, J. Flaga, P. Górka
- 76.18 Relationship between the natural 15N enrichment of plasma and feed conversion efficiency in fattening young bulls 845
D. Villalba, G. Cantalapiedra-Hijar, C. Chantelauze, I. Casasús, M. Blanco, E. Molina
- 76.19 Effects of feeding rumen-protected lysine on milk performance in lactating Holstein dairy cows 846
V. Sáinz De La Maza-Escolà, G. Giovagnoni, G. Petroni, R. Paratte, G. Bonacini, A. Piva, E. Grilli
- 76.20 Evaluation of plasma parameters in fattening beef cattle fed hexane vs 2-methyloxolane defatted soybean meal 846
C. J. Garcia-Vazquez, V. Menoury, M. Gauthier, L. Salis, A. Ferlay, P. Nozière
- 76.21 Modulatory effects of HMTBa and sea buckthorn oil on milk fat depression in dairy sheep 847
E. Barrio, P. G. Toral, R. Gervais, M. Musati, A. Della Badia, D. R. Yáñez-Ruiz, G. Hervás, P. Frutos
- 76.22 Impact of Tall Fescue defoliation intensity on energy expenditure of mid-lactation dairy cows 847
H. Bueno-Larroque12, B. Morales, G. Menegazzi, D. Mattiauda, P. Chilibroste, M. Carriquiry
- 76.23 The effect of energy and nitrogen source and their interaction on rumen fermentation and methane formation in a RUSITEC system 848
Y. X. Zhang, S. L. Amelchanka, V. Hanke, W. T. Yip, R. Peng, Y. Li, M. Niu, S. E. Räisänen
- 76.24 Evaluation and development of analytical procedures to assess buffering capacity of ruminant feed buffers 848
T. Higgins, P. Quille, E. Neville, K. Regan, S. O'Connell
- 76.25 An in vitro alternative to the in sacco method to determine ruminal starch degradation 849
M. P. Arias-Benavides, R. Delagarde, P. Nozière, G. Maxin
- 76.26 Meta-analysis explores factors affecting milk component responses to metabolizable methionine fortified evaluated using NRC2001 849
N. Whitehouse, L. Bahloul
- 76.27 Meta-analysis explores factors affecting milk component responses to metabolizable methionine fortified evaluated using CNCPS 850
N. Whitehouse, L. Bahloul
- 76.28 Energy requirements are affected by posture and activity in dairy cows 850
D. Talmón, G. Menegazzi, A. Jasinsky, M. Carriquiry
- 76.29 Metabolic status of feed restricted grazing dairy cows during early and mid-lactation 851
M. Carriquiry, A. L. Astessiano, P. Chilibroste, D. Custodio, G. Ortega, M. Garcia-Roche
- 76.30 Evaluating the relationship between undigestible neutral and acid detergent fiber and implications for cell wall components in forages 851
A. B. P. Fontoura, C. Heffernan, P. A. Lapierre, A. C. Benoit, M. E. Van Amburgh
- 76.31 Post-grazing sward height affects resting time on pasture 852
D. Talmón, G. Menegazzi, A. Jasinsky, M. Carriquiry
- 76.32 Effects of anthocyanin-rich Napier grass silage in growing goats 852
P. Paengkoum, S. Paengkoum, P. Suong
- 76.33 Comparison of dietary digestibility of dairy ewes and goats during early lactation 853
M. F. Lunesu, M. Decandia, G. Molle, V. Giovanetti, R. Rubattu, A. Cannas
- 76.34 The supplementation with Omega 3 fatty acids enhances the reproductive performance in dairy cattle 853
J. López-Paredes, M. Cadie, M. Puyalto, J. J. Mallo

Session 77. Improving animal welfare by optimising nutrition/feeding behaviour, Part 2

Room: Romagnola - Palazzo Affari 1st Floor

Chair: Gottardo / Kreuzer-Redmer

Session Type: Theme session

	Theatre Session 77	Book of Abstracts page
8:30	Feeding dairy cows in the morning or in the evening during the summer season: effects on milk production, feeding behavior, and rumen activity <i>L. Cattaneo, M. M. Passamonti, L. Benedetti, M. Sfulcini, F. Piccioli-Cappelli, E. Trevisi, A. Minuti</i>	854
8:45	Effects of residual sward height on grazing behaviour and milk production of dairy cows <i>G. Menegazzi, C. Dorao, D. Mattiauda, C. Genro, W. Gerrits, J. Dijkstra, P. Chilibroste</i>	854
9:00	Effect of feeding system on lying behavior of mid-lactation dairy cows <i>A. Jasinsky, D. Talmón, M. Carriquiry</i>	855
9:15	The effect of mineral-vitamin free choice blocks on transition cows' feeding behavior and health <i>G. Esposito, M. Simoni, T. Danese, G. Krabbe, R. Pitino, G. Mantovani, F. Righi</i>	855
9:30	Mineral-vitamin free choice blocks impact on productivity and oxidative status of transition and lactating cows <i>M. Simoni, T. Danese, G. Esposito, R. Pitino, G. Mantovani, P. Kyriakaki, A. Mavrommatis, E. Tsiplakou, F. Righi</i>	856
9:45	Changes in plasma metabolic profile of long-transported Charolais young bulls <i>M. Santinello, I. Lora, C. Villot, G. Cozzi, M. Penasa, E. Chevaux, B. Martin, A. Guerra, M. De Marchi</i>	856
10:00	Effects of rumen protected dry grape extract supply on milk performance, body temperature, and breathing behavior of Simmental cows during heat stress <i>A. Amato, C. Cavallo, E. Trevisi, A. Minuti, H. Bui, P. Engler, M. Forleo, L. Liotta, V. Lopreiato</i>	857
10:15	Coffee Break	
10:45	Could the inclusion of grape pomace in the diet of dairy ewes in late gestation influence the quality of colostrum and its microbiota? <i>A. Nudda, S. Carta, D. Licastro, N. P. Mangia, T. Stefaniak, J. Bajzert, G. Pulina</i>	857

Session 78. Collaboration in experimental research for sustainable pig production (with PIGWEB).

Room: Piemontese - Palazzo Affari 2nd Floor

Chair: Bee / Millet

Session Type: Project session

	Theatre Session 78	Book of Abstracts page
8:30	Application of individual piglet birth weight and within-litter birth weight variation as proxy predictors for pre-weaning survival <i>J. M. Mbuthia, C. Kasper, M. Zenk, G. Bee, C. C. Metges, G. Daş</i>	858
8:45	Deciphering the Impact of Feeding Behavior on Growth Performance and Nutrient Efficiency in Grower-Finisher Pigs <i>V. Halas, H. Nagyné Kiszlinger, G. Kövér, G. Bee</i>	858
9:00	Optimizing lactation performance of hyperprolific sows through <i>Scutellaria baicalensis</i> supplementation <i>D. Gardan-Salmon, A. Hamard, F. Robert, J. V. Nørgaard, T. Feyera</i>	859
9:15	Piglet response to L-leucine supply during the post-weaning phase depends on piglet birth weight <i>A. Simongiovanni, C. De Cuyper, E. Kowalski, S. Millet</i>	859
9:30	Oro-caecal transit time measured with the lactose-13C-ureide breath test in pigs fed high and low fiber diets <i>M. Cavalleri, Q. L. Sciascia, S. Goers, S. Dänicke, C. C. Metges</i>	860
9:45	Bones and meat quality of pork from early and late immunocastrated male pigs <i>I. Božičković, R. Savić, D. Radojković, N. Panella-Riera, A. Brun, M. Font-I-Furnols</i>	860

10:00 The space allowance affects selected pork physicochemical traits of native Polish Pulawska pig breed 861
A. Ludwiczak, J. Składanowska-Baryza, A. Zaworska-Zakrzewska, M. Kasprowicz-Potocka, W. Goździejewska, D. Łodyga, E. Sell-Kubiak

10:15 Coffee Break

10:45 People want research to improve pig welfare & health, says survey 861
J. Kleinig, J. Van Milgen

11:00 Conceptualisation of “animal discomfort” using the domesticated pig (*Sus scrofa*) as model 862
G. Franchi, M. Bagaria, H. Boswijk, E. Fàbrega, M. Herskin, R. Westin

11:15 Towards a self-initiated and automated judgement bias task for pigs 862
I. Reimert, J. E. Bolhuis, A. F. Ipema, M. A. Van Marwijk, S. Hintze, V. Neville, M. Mendl

Poster Session 78

Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00

78.11 State-of-the-art heart rate sensors for grouped-housed pigs 863
B. Callens, M. Everaert, J. Maselyne

Session 79.

Welfare issues for small ruminants

Room: Podolica - Limonaia - Garden

Chair: Almeida / Campion

Session Type: Early-career Scientists's session

Theatre Session 79

Book of Abstracts page

8:30 From pen to pasture: customizing welfare protocols for small ruminants in different production systems 863
invited M. Almeida

9:00 Effect of suckling method on the response of lambs to social isolation and weaning 864
L. Lachemot, S. Serhan, X. Such, J. Piedrafita, G. Caja, A. A. K. Salama

9:15 Supporting breeders to better manage animal pain: the case of sheep tail docking 864
A. Aupiais, M. Doucet, D. Gautier, L. Sagot, S. Lavigne, U. Jean-Louis, N. Devriendt, P. Venet

9:30 Ovine lameness in Ireland – An assessment of farmer management practices via survey 865
J. W. Delaney, E. T. Kelly, J. W. Angell, F. P. Campion

9:45 The impact of lameness on the body condition score of ewes on three Irish farms 865
J. W. Delaney, E. T. Kelly, J. W. Angell, F. P. Campion

10:00 Relationships between on-farm animal welfare assessment and milk yield in dairy sheep farms 866
L. Turini, E. Gasparoni, A. Mantino, G. Conte, A. Silvi, G. Foggi, M. Mele

10:15 Coffee Break

10:45 Tree shade reduces heat stress in pregnant ewes 866
K. Mafunga, K. Dzama, A. J. Scholtz, S. W. P. Cloete

11:00 Human perception of the vocal expression of the emotions in goats 867
S. Celozzi, M. Battini, S. Ntalampiras, L. A. Ludovico, G. Presti, E. Prato Previde, S. Mattiello

11:15 Is welfare of sheep kept in marginal areas influenced by seasonal climatic condition? 867
E. Atallah, M. Comin, F. Cerasoli, G. Saluti, M. Ricci, R. Rosato, G. Centorotola, M. Podaliri, L. Iannetti, E. Dalla Costa

Poster Session 79

Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00

79.10 Development of an operational tool for assessing and managing the welfare of sheep and goats on farms in France 868
A. Aupiais, M. Marois, R. De Crémoux, U. Jean Louis, M. Legris, R. Faugeras, M. A. Billiez, X. Boivin, M. M. Mialon, D. Gautier, L. Sagot, C. Bailly, M. Berthelot

79.11 On farm animal welfare self-assessment tool for dairy goats 868
M. Romero-Huelva, A. Gomez, I. Rivelli, J. Fernandez-Alvarez, D. Yanez-Ruiz

79.12 Effects of drinking diluted seawater on behavioral and physiological responses in crossbred dairy goats under tropical condition 869
T. Nguyen, K. V. Truong, K. K. T. Nguyen, N. T. Nguyen, N. Chaiyabutr, S. Thammacharoen

79.13	The influence of shearing on the growth performance of feedlot lambs under high temperatures <i>T. Brand, P. Theron, S. Cloete, B. Van Zyl</i>	869
79.14	Parity, lamb weight, and litter size influence the delivery stance of ewes: standing or lying <i>M. Regueiro, E. Jorge-Smeding, C. López-Mazz</i>	870
79.15	Animal welfare and microbiological meat safety at religious and conventional slaughtering: a comparative study <i>L. Iannetti, T. Bogdanova, S. Rota Nodari, S. Amati, G. Finazzi, G. Matteucci, V. Di Marzio, M. Ferrara, G. Centorotola, L. Di Marcantonio, S. Scattolini, V. A. Acciari, M. Podaliri Vulpiani</i>	870

Session 80. Technologies for GHG emission mitigation on farm: options, opportunities and challenges

Room: Marchigiana - Palazzo Affari Ground floor

Chair: Salami

Session Type: Theme session

	Theatre Session 80	Book of Abstracts page
8:30	Reducing Methane Emissions: A Win-win Solution for Climate and Livestock Agrifood Systems <i>invited A. Uwizeye, D. Wisser</i>	871
9:00	The integration of manure, soil, diet and animal management to reduce GHG emissions on farm <i>invited K. Johnson</i>	871
9:15	New York dairy greenhouse gas mitigation: progress made and future potential <i>O. Godber, K. Czymmek, K. Workman, Q. Ketterings</i>	872
9:30	Trade-offs between methane and ammonia emissions after nutritional interventions in dairy cows <i>G. Miller, C. A. Duthie, J. Newbold</i>	872
9:45	Milk mid-infrared prediction of methane emission using handheld laser methane detector in smallholders' dairy cattle <i>A. Ehsani, S. Meseret, O. Mwai, R. Mrode</i>	873
10:00	Assessment of methane emission on a Simmental dairy farm <i>C. Pavanello, A. Romanzin, M. Franchini, M. Corazzin</i>	873
10:15	Coffee Break	
10:45	Using GWP* to assess the livestock emission impact: the Italian case study <i>F. Correddu, M. F. Lunesu, M. F. Caratzu, G. Pulina</i>	874
11:00	Development of a Simplified Tool for Assessing Climate Change Impact in Dairy Cattle Farms <i>G. Gislon, M. Zucali, V. Ferrari, M. Marusi, A. Sandrucci, A. Tamburini, S. Mondini, R. Finocchiaro, M. Cassandro</i>	874
11:15	Development of Mitigation Engine for specialized dairy farms <i>S. H. Pishgar-Komleh, T. Vellinga</i>	875
11:30	Inclusion of a robust estimation method of carbon soil sequestration in the carbon footprint analysis of dairy sheep farms <i>M. F. Caratzu, M. F. Lunesu, F. Correddu, S. Sechi, G. Pulina</i>	875
	Poster Session 80 <i>Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00</i>	
80.11	A preliminary overview of methane emissions in the Italian dairy sector using DHI data <i>F. Luisi, G. Ferronato, M. Moliso Mekonnen, M. Fioretti, L. Pascarella, C. Melilli, R. Negrini</i>	876
80.12	Circles EU project: Slurry treatment with a protocol of bioactivators can reduce air and wastewater pollution in growing pigs <i>P. Trevisi, F. Correa, N. Secchi, S. Viridis, M. V. Graziosi, D. Luise</i>	876
80.13	Methane emissions of two contrasting pasture-based dairy systems in Uruguay <i>C. Loza, G. Menegazzi, C. Dorao, M. Cerón, D. Custodio, C. Genro, V. Ciganda, P. Chilibroste, J. Gere</i>	877
80.14	Exploring Greenhouse Gas Emissions in Sub-Saharan Africa: Are Camels a Neglected Source? <i>L. Lanzoni, J. Otte, D. Wisser, G. Tempio, G. Cinardi</i>	877
80.15	Analyzing Seasonal Emissions from Goat and Cow Manure in Cyprus <i>K. Philippou, K. Kaikiti, A. Savvides, A. Phokas, G. Themistokleous, G. Hadjipavlou, D. Sparangis</i>	878

Session 81.

Safety, sustainability and welfare in the insect

Room: Rendena - Palazzo Affari 4th Floor

Chair: Deruytter / Smetana

Session Type: Theme session

	Theatre Session 81	Book of Abstracts page
8:30	Decision Support System for Insects Production <i>A. Bhatia, N. Mouhrim, A. Green, D. Peguero, A. Tonda, A. Mathys, V. Heinz, S. Smetana</i>	878
8:45	Safe insect rearing on residual streams <i>E. F. Hoek- Van Den Hil, N. Meijer, A. Antonis, M. Bruins, F. Schaafstra, T. Veldkamp, M. Appel</i>	879
9:00	Determination of microplastics in reared black soldier fly larvae (<i>Hermetia illucens</i>) and yellow mealworms (<i>Tenebrio molitor</i>) using polarized light optical microscopy <i>N. Dam, G. Van Der Borg, N. Meijer</i>	879
9:15	Chemical and microbiological safety of black soldier fly larvae reared on sewage and industrial sludges <i>W. Tao, K. Van Dongen, S. Naser El Deen, D. Van De Kamer, K. Van Rozen, P. Van Wikselaar, E. Hoek Van Den Hil</i>	880
9:30	Investigating an invisible enemy: the problem of ammonia in insect farming <i>F. Boatta, C. Brouzes, A. Dignan, J. Lucas, I. Oubrier, D. Deruytter, C. Coudron</i>	880
9:45	Sustainability of complex insect production chains: from food waste to feed and food <i>S. Smetana, D. Ristic, V. Khieya, J. Petrusan, V. Heinz</i>	881
10:00	Response to mechanical stress in yellow mealworms (<i>Tenebrio molitor</i>) with regards to welfare considerations <i>T. Bailly-Bechet, E. Looren, Q. Li, K. Paul, E. Sellem, A. Rios, T. Lefebvre</i>	881
10:15	Coffee Break	
10:45	Enhancing Poultry Sustainability: Black Soldier Fly Effects on Laying Hen Welfare and Microbiota <i>A. Cattaneo, F. Cattapan, R. Malinverni, R. Rosà, D. Santori, S. Cucci, E. Macchi, I. Manenti, M. Meneguz, E. Sezzi, S. Dabbou</i>	882
11:00	Welfare assessment of managed honey bee colonies: a preliminary study <i>C. Montagnin, M. Frasnelli, F. Fusi, G. Formato, F. Mutinelli, C. Roncoroni, T. Bernardo, S. Gabriele, G. Valli, L. Bertocchi, V. Lorenzi</i>	882
11:15	Scaling Up Bioremediation of Livestock Manure Using Black Soldier Fly Larvae (<i>Hermetia illucens</i>) <i>C. Ligeiro, A. M. Machado, R. Fantatto, L. G. Guilgur, D. Murta</i>	883

Session 82.

Optimization of pasture forage and by-product resources to improve sheep and goat production

Room: Calvana - Palazzo Congressi Ground floor

Chair: Tsiplakou / Rahmatalla

Session Type: Theme session

	Theatre Session 82	Book of Abstracts page
8:30	By-products for small ruminants: benefits and limitations <i>invited A. Nudda</i>	883
9:00	Dehydrated sulla forage to improve sustainability of sheep milk production <i>M. Ponte, A. Di Grigoli, M. Pipi, G. Maniaci, R. Gannuscio, A. Di Trana, M. Alabiso, M. Todaro, A. Bonanno</i>	884
9:15	Carob germ: An alternative protein source in feeding lamb <i>G. Mangione, M. Musati, F. Mangano, A. Bertino, L. Biondi, M. S. Cannone, A. Nataello, G. Luciano</i>	884
9:30	Sodium bicarbonate limited milk fat depression of lactating dairy ewes fed ryegrass herbage rich in water soluble carbohydrates <i>M. A. Porcu, A. Ledda, D. Duras, A. Mattu, E. Ruggiu, S. Pinna, A. Mazza, A. Fenu, R. Rubattu, A. Cannas</i>	885
9:45	Total replacement of soybean meal with lupine seed in lamb diet: effects on growth performance <i>M. Musati, F. Mangano, A. Bertino, G. Luciano, L. Biondi, M. S. Cannone, G. Mangione, A. Nataello, M. Lanza</i>	885
10:00	Effect of feeding prickly pear by-products silage on dairy ewe's performance <i>R. Gannuscio, M. U. Hassan, G. Maniaci, M. Todaro, S. Calabrò, A. Vastolo, M. I. Cutrignelli</i>	886
10:15	Coffee Break	

- 10:45 Sheep grazing preferences on pastures in the Montado: effect of soil amendment and grazing systems 886
E. Carreira, J. Serrano, F. Silva, C. Gomes, J. Castro, M. Carvalho, A. Pereira
- 11:00 Composition and fatty acids profile of colostrum, transition milk and mature milk in dairy ewes fed grape byproduct during late gestation 887
S. Carta, M. F. Caratzu, A. Fenu, A. Mazza, G. Cadau, A. Nudda
- 11:15 Inclusion of poplar leaves and Sstems in ewes' diet: effect on milk yield and quality and oxidative status 887
M. Re, P. Barberi, G. Conte, P. Kyriakaki, A. Mavromamtis, E. Tsiplakou, M. Mele, A. Mantino

Poster Session 82

Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00

- 82.10 Effect of forage source (peanut vine and extruded rapeseed stalk) on growth, nutrient digestibility, rumen fermentation parameters of fattening lambs 888
D. Yang, Y. Zheng, T. Sun, Y. Tu, T. Ma
- 82.11 Carcass traits in lambs from local Shumen copper-red sheep, slaughtered at weaning in 90 days of age 888
Z. Vanchev, A. Vuchkov
- 82.12 Effect of the inclusion of ensiled pomegranate by-product in the diet of dairy goats on milk production and its macro-composition 889
G. Romero, M. Gálvez-López, A. Roca, M. Ramón, C. Peris, J. R. Díaz
- 82.13 Evaluation of energy content and protein value of tomato pomace for feeding ruminants 889
C. Navarro Marcos, T. De Evan, C. Fernández, M. D. Carro
- 82.14 Effects of feeding almond hulls to light lambs on meat quality and fatty acid profile 890
A. Recalde, T. De Evan, A. Cabezas, M. T. Díaz Chirón, J. De La Fuente, S. López Feria, R. Roldán, M. D. Carro
- 82.15 Influence of feeding agroindustrial by-products to sheep on ruminal fermentation and plasma metabolites 890
T. De Evan, D. Bueno, H. Pérez De Benito, C. N. Marcos, M. D. Carro
- 82.16 Evaluation of lactic acid bacteria as additive for wet brewer's grains and citrus pulp silage 891
A. Alcamí-Aguado, J. M. Arroyo, A. Recalde, M. D. Carro
- 82.17 Effect of silage from different Festulolium cultivars on lamb growth performance 891
C. Purwin, P. Pogorzelska-Przybyłek, M. Borsuk-Stanulewicz
- 82.18 Optimizing herbage utilization in dairy sheep with a polyphenol-rich supplement 892
M. A. Porcu, A. Ledda, S. Puddu, M. E. Canu, A. Zontini, A. Cannas, A. S. Atzori
- 82.19 Effects of the inclusion of different percentages of red grape pomace on productive factors, milk quality and SCC in dairy goats 892
M. Gálvez, G. Romero, E. Pérez, R. Muelas, N. Fernández, J. R. Díaz
- 82.20 Baled silage long term conservation: Microbiological and physical-chemical properties 893
F. Fancello, L. Nieddu, A. Ledda, F. Ghilardelli, S. Zara, A. Gallo, A. S. Atzori
- 82.21 Pasture water-soluble carbohydrates reduced milk fat concentration of lactating ewes by reducing rumen fermentations 893
F. Satta, M. A. Porcu, S. Carta, R. Rubattu, A. Nudda, A. Cannas
- 82.22 Seasonal nutritional values of Rubus fruticosus leaves as a sustainable alternative feed for goat in mountain regions 894
K. Abid, S. Barbera, H. Kaihara, S. Glorio Patrucco, S. Tassone
- 82.23 In vitro ruminal fermentation of dairy diets including dried brewers' grains 894
A. Alcamí-Aguado, J. M. Arroyo, A. Recalde, V. Jimeno, M. D. Carro
- 82.24 Variability in chemical composition of barley rootlets from different malting' plants 895
J. L. Lema-Hurtado, M. D. Carro, J. M. Arroyo
- 82.25 Ruminal fermentation and biohydrogenation in ewes fed with sainfoin pellets under water restriction 895
C. Baila, M. Joy, S. Pérez, J. H. Calvo, C. Calvete, S. Lobón
- 82.26 Effects of protein sources and microbial addition to potato waste on silage fermentation and in vitro digestibility 896
N. Douglas, M. Thamsanqa, I. Malebana, T. Langa, F. Foh
- 82.27 Performance from birth to slaughter of single and twins Merilin Plus® lambs under native grassland conditions 896
J. Olivera-Muzante, G. Antúnez-Tort, J. Franco, R. Delpiazzo, G. Oliveira, M. L. Adrien

Session 83.**Early life nutrition and its latent impact on growth, lactational and reproductive physiology**

Room: Modicana - Palazzo Affari 3rd Floor

Chair: Kenny / Kelly

Session Type: Industry session

	Theatre Session 83	Book of Abstracts page
8:30	Effect of early life nutrition on the growth, metabolic and carcass characteristics of beef cattle <i>invited</i> A. Kelly, D. Kenny	897
9:00	Effects of undernutrition and hydroxytyrosol supplementation during the last third of gestation on growth and physiological profiles of male beef offspring O. Akesolo-Atutxa, L. López De Armentia, A. Noya, G. Ripoll, N. Escalera-Moreno, J. Álvarez-Rodríguez, B. Serrano, A. Sanz	897
9:15	Changes in the plasma metabolome of Holstein heifers from birth to first insemination K. J. Hemmert, M. H. Ghaffari, C. S. Ostendorf, S. Schuchardt, C. Koch, H. Sauerwein	898
9:30	Serum lipidome profiling of dairy calves fed high-fat milk replacers containing animal or vegetable fats M. H. Ghaffari, J. N. Wilms, D. Caruso, H. Sauerwein, L. N. Leal	898
9:45	Phenotyping the trans-10 shift in the rumen of finishing lambs C. Manuel, C. Xavier, F. Duarte, S. Moradi, A. Víctor, D. Soares, A. Manuel, L. Fialho, L. Cachucho, A. Silva, D. Soldado, O. Guerreiro, C. Garrine, E. Jerónimo, S. Alves, R. Bessa	899
10:00	A common database to study the efficiency of the mother-young pair in suckling animals J. Auclair-Ronzaud, E. Peugny, B. Sepchat, C. Douine, M. Bernard, L. Wimel, A. De La Torre	899
10:15	Coffee Break	
10:45	Incorporation of butyric and caproic acids into milk replacers for calves fed twice daily Í. R. R. Castro, J. N. Wilms, G. B. C. Leite, M. I. Marcondes, L. N. Leal	900
11:00	Incorporation of butyric and caproic acids into milk replacer fed to newborn calves Í. R. R. Castro, J. N. Wilms, G. B. C. Leite, M. I. Marcondes, L. N. Leal	900
11:15	Dietary lysine and protein for organic grower-finishing pigs T. F. Pedersen, M. Eskildsen, E. T. Jørgensen, L. Stødkilde-Jørgensen	901

Session 84.**PLF systems to face climate change and increase sustainability**

Room: Sarda - Palazzo Affari Below ground Floor

Chair: Lebreton / Karatzia

Session Type: Theme session

	Theatre Session 84	Book of Abstracts page
8:30	Precision Livestock Farming technologies could reduce greenhouse gas emissions on beef farms L. McNicol, J. Bowen, H. Ferguson, J. Bell, R. Dewhurst, C. A. Duthie	901
9:00	PLF-assisted quantification of carbon footprint; Preliminary analysis of Agroforestry system M. Odintsov Vaintrub, P. Di Giuseppe, A. Ilari, G. Toscano	902
9:15	Projection of Thermal Humidity Index (THI) and Frequency of Severe Heat Events for Broilers and Layers in the Context of Climate Change in Brittany, France Y. Guyot, M. Quentin, M. Pertusa	902
9:30	Coupling precision livestock farming technologies with artificial intelligence for mitigating heat stress in Mediterranean dairy cattle systems X. Díaz De Otálora, D. A. Méndez, A. R. Arnau, S. Sanjuan, J. M. Calabuig, A. Villagrà, N. Hlel, F. Estellés	903
9:45	Hot topic: novel weather features to quantify heat stress in dairy cows in moderate climatic conditions I. Adriaens, M. J. Gote, T. Pook, I. Fodor, H. Doekes, J. Verwaeren, B. Aernouts	903
10:00	Variation among individual beef cattle in methane measurements with laser methane detector G. Gaspa, R. Steri, A. Albera, F. Abbona, A. Pauciullo, D. Meo Zilio	904
10:15	Coffee Break	
10:45	Towards automated monitoring of ammonia emissions from naturally ventilated pig houses S. Calvet Sanz, M. Jarque Durán, D. A. Méndez Reyes, B. Fajardo Viloria	904

11:00	Estimation of NH3 emission factors for pig fattening buildings thanks to Machine Learning methods and ELFE database <i>J. Thomas, N. Guingand, S. Espagnol</i>	905
11:15	Designing a thermoregulated unit for studying the impact of temperature on zootechnical and environmental performance of growing pigs <i>Y. Rousseliere, N. Guingand, J. Thomas, A. Collin</i>	905

Session 85.

Genetics of novel health and welfare traits

Room: Auditorium - Palazzo Congressi Lower Ground Floor

Chair: Martin / Sell-Kubiak

Session Type: Theme session

	Theatre Session 85	Book of Abstracts page
14:00	From genetic correlation to causation between milk yield, mastitis and and health traits in German Holstein cattle <i>H. Schneider, V. Haas, A. M. Krizanac, C. Falker-Gieske, J. Heise, J. Tetens, G. Thaller, J. Bennewitz</i>	906
14:15	Milk somatic cell transcriptome profile of high and low RFI Holstein cows and the pleiotropic effect on immunity <i>V. Asselstine, F. S. Schenkel, F. Miglior, C. F. Baes, P. Stothard, A. Cánovas</i>	906
14:30	Development of a selection index for resilience in German Holstein <i>F. Keßler, R. Wellmann, J. Bennewitz</i>	907
14:45	Large scale transmission experiment reveals substantial genetic variation in both host susceptibility and infectivity affecting disease spread and survival <i>J. Prentice, C. Pooley, R. Pong-Wong, G. Marion, R. Houston, S. Cabaleiro, B. Villanueva, A. Doeschl- Wilson</i>	907
15:00	Genetic analysis of anogenital distance in dairy cattle <i>G. R. Dodd, F. Miglior, F. S. Schenkel, T. C. Bruinje, M. Gobikrushanth, J. E. Carrelli, M. Oba, D. J. Ambrose, C. F. Baes</i>	908
15:15	Analysis of aggressive behaviour in high-production dairy cows through differential expression transcriptome analysis <i>K. Żukowski, M. Herudzińska, K. Piórkowska, K. Ropka-Molik, J. M. Jaśkowski</i>	908
15:30	Combatting psoroptic mange susceptibility in Belgian Blue cattle: can breeding provide a solution? <i>R. Meyermans, S. Janssens, W. Gorssen, X. Hubin, P. Mayeres, W. Veulemans, E. Claerebout, C. Charlier, N. Buys</i>	909
15:45	Coffee Break	
16:15	Development of novel traits for genetic evaluation of maternal fertility in extensively farmed beef cattle <i>F. Weik, G. Jenkins, J. Archer</i>	909
16:30	Genetic determinism of resilience to unrecorded challenges in pigs <i>T. Tusingwiire, C. Garcia-Baccino, C. Carillier, B. Lignesche, C. Larzul, Z. Vitezica</i>	910
16:45	Comparison of the cytokine profiles after LPS injection between two lines of goats selected for functional longevity <i>T. Fassier, R. Rupp, G. Foucras, M. Ithurbide</i>	910
17:00	Using antibody response to Maedi Visna Virus as selection criterion in sheep <i>S. Salaris, M. G. Usai, T. Sechi, G. Mulas, S. Miari, S. Casu, A. Negro, C. Ligios, A. Carta</i>	911
17:15	Evaluating the influence of selection for disease resistance on the spread of infections in a simulated aquaculture population when underlying epidemiological traits are correlated <i>S. García-Ballesteros, J. Fernández, A. B. Doeschl-Wilson, B. Villanueva</i>	911
17:30	Genetic markers associated with bone properties in White Leghorn laying hens <i>K. Kurta, A. B. Rodriguez Navarro, T. Enrich-Essvein, L. Crespo-Lopez, P. W. Wilson, I. C. Dunn, B. Andersson, M. Schmutz, D. Caverio, D. J. De Koning, M. Johnsson</i>	912
17:45	A substitution in the porcine glucocorticoid receptor changes gene expression in the brain and consequently behavior <i>E. Murani, N. Trakooljul, A. Krause, E. Kanitz, K. Wimmers</i>	912

Poster Session 85*Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00*

- 85.15 Genetic analysis of keel bone fractures in laying hens housed in a commercial aviary 913
P. Duenk, H. Bovenhuis, B. O. Makanjuola, M. B. Patelle, S. G. Gebhardt-Henrich, C. F. Baes, M. J. Toscano
- 85.16 Genetic analyses of blood metabolites and amino acids in blood serum in pigs 913
K. H. Martinsen, C. Brekke, A. Nordborg, E. Grindflek
- 85.17 Prediction of energy balance of Holsteins in Japan from milk traits including fatty acids 914
A. Nishiura, O. Sasaki, T. Tanigawa, Y. Saito, R. Tatebayashi, T. Yamazaki
- 85.18 Genetic analysis of temperament in Italian Simmental bulls 914
A. Cesarani, L. F. Brito, J. Hidalgo, L. Degano, D. Vicario, N. P. Macciotta
- 85.19 Variance components estimation for semen parameters of boars involved in the PDO ham production in Italy 915
M. Cappelloni, M. Gallo, G. Pozzato, A. Cesarani
- 85.20 Twin birth rate in German Holsteins: related to increased milk yield and fertility level? 915
L. Hüneke, C. Schmidtman, H. Alkhoder, D. Segelke, J. Heise, S. Rensing, G. Thaller
- 85.21 Genetic perspectives on feeding traits in beef cattle 916
J. P. S. Valente, L. F. M. Mota, G. R. D. Rodrigues, R. C. Canesin, M. E. Z. Mercadante
- 85.22 Antioxidant enzymes mRNA expression in male reproductive tract tissues of European red deer (Cervus elaphus elaphus) during rut 916
M. Koziorowska-Gilun, N. M. Neumann, A. Dziekońska, P. Gilun
- 85.23 Development of a genomic evaluation for teat and udder scores in Angus cattle 917
A. Garcia, R. Mcewin, S. Miller, K. Retallick
- 85.24 Variance of daily milk yield as an indicator trait in Czech Holstein cows 917
E. Kašná, L. Zavadilová, J. Vařeka
- 85.25 A genome-wide association study to identify the genetic origin of dermatosparaxis in South African Drakensberger cattle 918
E. Cason, J. Van Wyk, P. Vermeulen, R. Van Der Westhuizen, J. Reding, L. Foster, F. Nesor, L. Du Preez
- 85.26 A stayability approach for the longevity evaluation of Italian Holstein cattle 918
A. Fabris, F. Tiezzi, R. Finocchiaro, M. Marusi, M. Cassandro
- 85.27 Impact of SNPs for Somatic Cell Count on the Presence of Mastitis Specific Pathogens in Milk 919
U. Müller, E. M. Strucken, M. Reissmann, G. A. Brockmann
- 85.28 Genome-Wide Association Study on Somatic Cell Count and Health Status of Dairy Sheep 919
R. Kasarda, N. Moravčíková, M. Chalúpková, A. Halvoník, V. Tančín, K. Tvarožková, B. Gancárová, L. Vostrý, H. Vostrá Vydrová
- 85.29 Serological and molecular diagnosis of Coxiella burnetii in cows from rural settlements in Brazil 920
S. Lucheis, A. Valim, A. Flaminio, A. Paes, T. Bertozzo, I. Aires, M. Mioni, M. Labruna, I. Silito, L. Gregory, M. Aleman, F. Morelli
- 85.30 Litter weight gain in pigs has a moderate heritability and favorable genetic correlations to multiple breeding goal traits 920
L. B. Jensen, T. Ostersen, O. F. Christensen
- 85.31 Direct and maternal genetic analysis for survival at weaning in divergent lines selected for homogeneity in mice 921
N. Formoso-Rafferty, L. El-Ouazizi El-Kahia, I. Cervantes, J. P. Gutiérrez
- 85.32 Heritability of cumulative mastitis events across productive life in Austrian Fleckvieh cows 921
A. Costa, H. Bovenhuis, C. Egger-Danner, B. Fuerst-Waltl, M. Boutinaud, J. Guinard-Flament, W. Obitzhauser, G. Visentin, M. Penasa
- 85.33 Embryo production efficiency in divergent lines selected for homogeneity in mice 922
L. El-Ouazizi El-Kahia, I. Cervantes, J. P. Gutiérrez, N. Formoso-Rafferty
- 85.34 BERV-K1 like element and viral infection in Italian Mediterranean River Buffalo: preliminary results 922
E. D'Anza, M. Barbato, F. Ciotola, M. Pugliano, M. Riccardi, J. L. Williams, V. Peretti, S. Albarella
- 85.35 TNF α expression at mRNA and protein levels in quarters adjacent to the infected with staphylococci in dairy cattle udder parenchyma 923
A. Szprynca, M. Zalewska, M. Rzewuska, T. Sakowski, K. Pawlina-Tyszko, T. Ząbek, E. Bagnicka
- 85.36 Indicators for energy balance "hidden" in historic data to improve current breeding models in cows 923
H. Honerlagen, T. Pook, M. Van Pelt, L. Zetouni, C. Orrett, B. Gredler-Grandl, C. Kamphuis
- 85.37 Genetics of twinning rate in Italian Holstein cattle 924
J. S. Katende, A. Costa, M. Santinello, F. Galluzzo, M. Marusi, R. Finocchiaro, M. Cassandro, M. Penasa

85.38	Genetics of Body Condition Score in five Italian beef cattle <i>F. Sbarra, A. Quaglia, G. Bittante, R. Mantovani</i>	924
85.39	Genetics of milkability obtained from milking machine in the local dual-purpose Rendena cows <i>A. Oian, N. Guzzo, E. Mancin, C. Sartori, R. Mantovani</i>	925
85.40	Correlations between early-in-life fertility traits and linear type traits in Holstein-Friesian dairy cattle <i>R. Handcock, C. Burke, N. Steele, S. Meier, C. Phyn, D. Garrick, M. Stephen</i>	925
85.41	Effects of low doses of antibiotics on the chicken transcriptome <i>M. Siwek, A. Dunislawski, A. Slawinska, S. Knaga, M. Olejnik</i>	926
85.42	Identification of functional SNPs causing alternative splicing events linked to subclinical intramammary infection in Holstein cattle <i>A. Vanzin, V. Bisutti, D. Giannuzzi, A. Cecchinato, L. Gallo, S. Lam, A. Cánovas, S. Pegolo</i>	926
85.43	Genetic analysis of predicted negative energy balance and its biomarkers of first-parity Holstein cows in early lactation <i>H. Hu, H. Atash, C. Grelet, K. Wijnrocx, S. Franceschini, H. Soyeurt, N. Gengler</i>	927
85.44	Effect of E35K TMEM154 variants on the genetic variability of antibody response to Maedi Visna Virus in Sarda sheep <i>S. Salaris, M. G. Usai, T. Sechi, G. Mulas, S. Miari, S. Casu, A. Negro, C. Ligios, A. Carta</i>	927
85.45	Genetic analysis of longevity in three sheep breeds <i>N. Frioni, E. Abdalla, W. Ruten</i>	928
85.46	A multi-breed genome-wide association study for temperament in three Italian beef cattle breeds <i>D. Colombi, F. Perini, F. Sbarra, A. Quaglia, R. Costilla, E. Lasagna</i>	928

Session 86. Tailored housing and management strategies from incubation to slaughter house, for poultry

Room: Pisana - Palazzo Congressi 2nd Floor
Chair: De Grande / Druyan
Session Type: Working Group session

	Theatre Session 86	Book of Abstracts page
14:00	Advances in improving chicken welfare from hatch to slaughter <i>invited M. F. Giersberg</i>	929
14:30	Perinatal management and dietary strategies improving embryonic and post-hatch development of broilers <i>invited N. Everaert</i>	929
15:00	Study of inter- and transgenerational effects of in ovo nutriepigenetic stimulation on chicken cecal mucosa transcriptome <i>E. Grochowska, M. Ibrahim, Z. Cai, P. Guz, M. Bednarczyk, K. Stadnicka</i>	930
15:15	Changes in gene expression and DNA methylation in the liver of broiler chickens after in ovo stimulation with sodium butyrate <i>A. Beldowska, A. Dunislawski</i>	930
15:30	Influence of Hypoxia During Incubation on Broiler Embryo Metabolism and Development: A Tale of Two Genetic Lines <i>A. Haron, R. Rafaeli, D. Shinder, S. Druyan</i>	931
15:45	Coffee Break	
16:15	Classification, Evaluation, and Control of Myopathies in the Broiler Chicken <i>invited M. Petracchi, M. Bordini, M. Zampiga, F. Sirri, F. Soglia</i>	931
16:45	Multicriterion assessment of two scenarios designed to improve animal welfare in French conventional broiler production <i>B. Méda, M. Le Goff, A. Foreau, I. Bouvarel, L. Warin</i>	932
17:00	ProBioHuhn: Variations in the gut microbiome of three organic chicken types across different fattening periods and environments <i>Y. C. Cheng, A. Camarinha-Silva</i>	932

17:15	Synchronizing feed availability with the natural rhythm improves productivity and health in laying hens <i>G. Levkovich, R. Shmulevitch, I. Halachmi, D. Sagi</i>	933
17:30	Effect of recycled litter on broiler growth performances <i>J. Teixeira, J. L. Mourão, A. Alves, V. Pinheiro</i>	933

Poster Session 86

Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00

86.11	Enhancing Chick Health: Exploring Egg Quality Variation and Maternal Performance in the Fayoumi Breed Raised in Tunisia <i>C. Chaouch Aoun, A. Hammouda</i>	934
86.12	Lysozyme activity and viscosity of albumen and amniotic fluid of incubated eggs stored for up to a week <i>J. Biesek, Z. Brzycka, W. Ragus, S. Wlazlak, M. Adamski</i>	934
86.13	Changes in brain gene expression after in ovo stimulation by sodium butyrate during embryo development of chicken <i>A. Beldowska, B. Dunisławska</i>	935
86.14	Interaction of probiotic Bifidobacterium and Bacillus strains with intestinal cells in co-culture models for in ovo application <i>S. Zuo, K. Grudlewska-Buda, K. Skowron, G. Gardiner, P. Lawlor, K. Stadnicka</i>	935
86.15	Synchronizing feed availability with the natural rhythm improves productivity and health in laying hens <i>G. Levkovich, R. Shmulevitch, I. Halachmi, D. Sagi</i>	936
86.16	Probiotic and prebiotic compounds as in ovo vaccine adjuvants <i>K. Stadnicka, G. Gardiner, P. Lawlor, K. Guinan, J. T. O'Sullivan, A. Dunisławska, N. Akhavan, K. Hryniewicz, M. Bednarczyk</i>	936
86.17	Validation of a macroscopic classification at the processing plant of breast muscles affected by growth-related abnormalities through meat quality evaluation in broilers <i>M. Bordini, E. L. Antenucci, M. Petracci, F. Soglia</i>	937
86.18	The optimal bedding for broiler health – characterization of various bedding materials for an optimal broiler environment <i>T. Liegsalz, J. Steinhoff-Wagner</i>	937

Session 87.

Dairy herd management

Room: Valdostana - Palazzo Affari 3rd Floor

Chair: Kuipers / Maggiolino

Session Type: Early-career Scientists's session

Theatre Session 87

Book of Abstracts page

14:00	Periparturient supplementation of postbiotics on lactation performance in transition dairy cows <i>G. G. Begalli, L. D. P. Maldonado, V. A. De Oliveira, L. Buraschi, A. F. Souza Lima, J. Halfen, T. Fernandes, I. Yoon, J. S. Osorio</i>	938
14:15	The influence of societal issues on representations of the breeder's profession and perceptions of change <i>M. Fuselier, E. Delanoue</i>	938
14:30	The need for tailored breeding goals by farm type and agro-ecological zone in crossbred dairy cattle in Oromia and Sidama, Ethiopia <i>M. Spoelstra, G. Dhuguma, A. Ebro, J. Ten Napel, A. Bouwman</i>	939
14:45	Cow characteristics associated with lactation performance of cows with customized lactation lengths on commercial dairy farms <i>E. E. A. Burgers, B. G. C. De Bruijn, R. M. A. Goselink, A. T. M. Van Kneegsel</i>	939
15:00	Impact of Inbreeding on Dairy Cow Survival <i>S. Tenhunen, J. R. Thomasen, L. P. Sørensen, P. Berg, M. Kargo, H. M. Nielsen</i>	940
15:15	Investigation of culling of primiparous cows in Swedish herds <i>A. Edvardsson Rasmussen, W. F. Fikse, M. Lindberg</i>	940
15:30	The diversity in dairy cattle reticuloruminal temperature: Exploring the influence of temperature humidity index <i>A. Shirley, P. Thomson, A. Chlingaryan, C. Clark</i>	941

15:45 Coffee Break

16:15	Compost-bedded pack systems: the importance of tilling on manure microbial populations <i>E. Fuertes, A. R. Seradj, J. Balcells, G. De La Fuente</i>	941
16:30	Use of a Quality Cost Delivered approach in dairy cattle farm <i>G. S. Sechi, A. Cannas, A. S. Atzori</i>	942
16:45	Milk haptoglobin detection using chemiluminescence imaging with smartphone camera <i>N. R. Nirala, G. Shtenberg</i>	942
17:00	Infrared thermography in dairy goats to define health traits – preliminary results <i>S. Goth, M. Bernau</i>	943
17:15	A novel hydrogel system for ambient transport of bovine germplasm <i>K. Burton, A. Lancaster, S. Swioklo, S. Marsh, R. Stables, J. Statham</i>	943
17:30	Water Quality: Manganese in drinking water for dairy cattle <i>O. Moreira, J. Martins, R. Lucas, R. Branco</i>	944
17:45	Systematic review of serious games on livestock and how they consider sustainability <i>G. Martel, M. Grillot, S. Dernas</i>	944

Poster Session 87

Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00

87.15	Heath stress effects on milk yield, milk components and udder health in early lactation dairy cows <i>D. Gavojdian, M. Mincu, I. Nicolae</i>	945
87.16	Seasonal Patterns in Dairy Cattle Pregnancy Rates under European Temperate Conditions <i>I. Nicolae, D. Gavojdian</i>	945
87.17	Goat grazing restores plant diversity in an abandoned field by inducing photo environmental heterogeneity <i>M. Yayota, R. Yamada, A. Kuboi, S. Kato, N. Kudo</i>	946
87.18	Changes in milk constituents in dairy cows fed diets with high concentrate content <i>R. Danielsson, B. O. Rustas, Y. Shrestha, S. Hägglund, J. F. Valarcher, T. Eriksson, M. Åkerlind, H. Gonda</i>	946
87.19	Rumen fermentation parameters prediction model using mid-infrared spectra of rumen fluid collected from Simmental dairy cows <i>C. Cavallo, A. Amato, M. Forleo, A. Minuti, M. Sfulcini, V. Lopreiato, M. Tolone</i>	947

Session 88.

How the dairy sector copes with EU-Green deal

Room: Reggiana - Palazzo Affari 2nd Floor

Chair: Klopčič / Cieslak

Session Type: Theme session

	Theatre Session 88	Book of Abstracts page
14:00	Livestock farmers knowledge and attitudes regarding agroforestry planning and management <i>D. Enriquez-Hidalgo, K. Tenffen De-Sousa, M. Wright, J. R. Dittrich, M. Deniz, M. J. Hötzel, L. Cárdenas</i>	947
14:15	Environment as a challenge for intensive livestock farming <i>invited A. Kuipers, P. Galama</i>	948
14:45	Climate adaptive solutions? Public views on dairy cattle heat stress management strategies <i>L. Sirovica, B. Vandresen, D. Weary, M. Von Keyserlingk</i>	948
15:00	Cell-based food: Promises and reality <i>invited J. F. Hocquette, S. Chriki, M. P. Ellies-Oury</i>	949
15:30	Challenges related to the introduction of the EU Green Deal in Poland <i>P. Sidoruk, B. Nowak, M. Szumacher-Strabel</i>	949
15:45	Coffee Break	
16:15	Changes of Eurobarometer as a tool for collecting EU citizens' opinion on animal welfare <i>G. Riuzzi, B. Contiero, S. Segato, G. Cozzi, F. Gottardo</i>	950
16:30	Testing feeding levers to decrease the carbon footprint of dairy farms <i>P. Lambert, E. Tranvoiz</i>	950
16:45	The effect of dairy farming system on GHG emission estimations in Latvia pilot farms <i>D. Ruska, L. Berzina, L. Paura, E. Aplocina, L. Cielava</i>	951

17:00	Assessing the climate impact of Norwegian dairy production <i>M. Olsen Wedaa, S. Samsonstuen, H. Bonesmo, B. Aspehølen Åby, E. Kjesbu, M. Bergfjord, R. Okstad, E. Gribbestad Gustafsson, J. Wiik, K. Gran Bergsholm</i>	951
17:15	Assessing 'CO ₂ -warming-equivalent' emissions from Slovenian cattle production using GWP* <i>Ž. Pečnik, J. Verbič</i>	952
17:30	Public acceptance of microbiome management practices in dairy cows <i>A. Ait-Sidhoum, A. Stygar, F. Bedoin, J. Niemi</i>	952
17:45	Crossing grazing calendars and bulk milk analysis: is on-field validation for grass-diet in cattle possible? <i>K. Dichou, C. Nickmilder, A. Tedde, G. Conter, A. Marvuglia, H. Soyeyurt</i>	953

Poster Session 88

Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00

88.13	Summarizing contributions dealing with environment and Green Deal <i>M. Klopčič, A. Kuipers</i>	953
88.14	Trade-offs between biochemical methane potential of manure and enteric methane mitigation in dairy cows fed Bovaer®10 or Acacia mearnsii <i>M. Z. Islam, S. E. Räisänen, X. Ma, T. He, C. Kunz, Y. Li, A. Leytem, M. Niu</i>	954

Session 89.

Free communications in animal nutrition

Room: Chianina - Palazzo Affari 1st Floor

Chair: Ottoboni / Kar

Session Type: Free communications (bottom-up)

	Theatre Session 89	Book of Abstracts page
14:00	Lysine requirements of pigs divergent in breeding value for nitrogen efficiency <i>L. Verschuren, S. L. Thingnes, J. Merkesvik, K. Hov Martinsen, R. Bergsma, E. Grindflek</i>	954
14:15	Effect of dietary P depletion-repletion on pig bone characteristics <i>R. Palacios-Duchicela, A. Brun, M. P. Létourneau-Montminy, C. Pomar, M. Font I Furnols</i>	955
14:30	Impact of precision feeding during gestation on the productive career of sows over three reproductive parities <i>B. Sauvé, L. Cloutier, L. Galiot, F. Guay, G. Dumas, C. Gaillard, J. Y. Dourmad, A. Simongiovanni, P. Gagnon</i>	955
14:45	Impact of long-term precision feeding based on energy and lysine on the productive, economic and environmental performance of gestating sows <i>C. Ribas, N. Quiniou, C. Gaillard</i>	956
15:00	Effects of functional ingredients on intestinal health and growth performance of weaned piglets <i>S. K. Kar, E. Zaccaria, G. Binnendijk, P. Van Wikselaar, A. J. M. Jansman</i>	956
15:15	Nutraceutical Potential of Lentinula edodes' Spent Mushroom Substrate: A Comprehensive Study on Phenolic Composition, Antioxidant Activity, and Antibacterial Effects <i>F. Baptista, J. Campos, V. Costa-Silva, A. R. Pinto, M. J. Saavedra, L. M. Ferreira, M. Rodrigues, M. Almeida, A. N. Barros</i>	957
15:30	Peptidomic profile of in vitro digested hemp-based products and their effect on intestinal epithelial cells <i>D. Lanzoni, F. Grassi Scalvini, E. Petrosillo, G. Tedeschi, S. Nonnis, A. Baldi, C. Giromini</i>	957
15:45	Coffee Break	
16:15	Long-term effects of oregano essential oil supplementation in new born dairy calves <i>S. Andreas, C. Gini, F. Cecilian, D. Gutiérrez-Expósito, N. Arteché-Villasol, A. Martín, P. Cremonesi, F. Faré, M. Hosseini Ghaffari, F. Javier Giráldez, L. Abdennebi-Najar</i>	958
16:30	Production efficiency during the early postpartum of dairy cattle supplemented with live <i>Saccharomyces cerevisiae boulardii</i> live yeast <i>C. Villot, A. Bart, E. Chevaux, K. Goossens</i>	958
16:45	Detecting microplastics in feces of pig fed former food products <i>P. Lin, S. Mazzoleni, A. Luciano, M. Tretola, L. Pinotti</i>	959
17:00	Effect of microplastic on rumen metabolism <i>F. Scicutella, A. Lira De Medeiros, M. Daghighi, F. Mannelli, G. Rughetti, A. Buccioni</i>	959
17:15	Dairy cows' diet discrimination through SIFT-MS-based volatolome of different matrices <i>E. Jorge-Smeding, C. Martin, L. Volmerange, Y. Rochette, F. Violleau, N. Salah, M. Silberberg</i>	960

- 17:30 Application of Faecal Near Infrared Spectroscopy to Measure Nutrient Utilisation in Horses, Cattle and Sheep 960
É. Murphy, B. A. Younge
- 17:45 A 7-Year Survey on corn silage nutrient composition in Po Valley (Italy) 961
R. Abbate, M. Ottoboni, A. Luciano, E. Grandi, L. Pinotti

Poster Session 89

Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00

- 89.15 Analysis of the sieve distribution of feces in dairy cows fed a starch-rich and a fiber-rich diet 961
H. Scholz, P. Kühne, M. Zschieche, T. Engelhard
- 89.16 Discovery and functionality of bioactive peptides contained in the porcine intestinal mucosa hydrolysate product Palbio HP 962
S. Segarra, C. De La Torre, J. J. Bech Serra, A. Vaquero, A. Marazuela-Duque, B. Cucurull, M. De La Riva, D. Martínez-Puig, J. Velasco-Alvarez
- 89.17 Impact of Precision Feeding and the "Bump Feeding" Strategy During Gestation on the Performance of Post-Weaning Pigs 962
B. Sauvé, L. Cloutier, L. Galiot, C. Pierre, F. Guay
- 89.18 Glutamate simultaneously increases the lean percentage and IMF content of Shaziling pigs probably via modulating the Spirochaetae-acetic acid axis 963
Y. Duan, C. Zheng, Y. Yin, Q. Guo
- 89.19 Supplemental effect of dietary Almond hull on sows' and their offspring performance 963
S. T. Wahid, G. S. Ahammad, S. Y. Jang, D. K. Kang, I. H. Kim
- 89.20 The use of near-infrared spectroscopy (NIRS) to predict feed value of Alfalfa (*Medicago sativa* L.) 964
M. Oh, J. H. Woo, B. H. Lee, S. M. Jeong, S. H. Moon, K. C. Jo, H. S. Park
- 89.21 Impact of Incorporating Hydrolysed Feather Meal on the Microbiota of Dogs Across Different Time Points 964
F. Balouei, R. Armone, A. Randazzo, B. Chiofalo
- 89.22 Diets rich in fiber during the transition period decreases sows' constipation prior to farrowing 965
R. Carnevale, B. Muro, M. Saliba, D. Leal, C. Garbossa
- 89.23 Rumen content composition as an indicator of selective grazing patterns within three native South African sheep breeds 965
W. Hough, T. S. Brand, E. Swart, J. J. Cloete, J. H. Van Zyl
- 89.24 Silage Preservation Dynamics: Inoculant and Temperature Influence 966
I. Nikodinoska, E. Wambacq, G. Haesaert, C. A. Moran
- 89.25 Detoxification of deoxynivalenol and its derivatives by lactic acid bacteria in whole-crop maize silage 966
I. Nikodinoska, E. Wambacq, S. Landschoot, C. A. Moran
- 89.26 Effect of different Se-sources on milk biofortification: Performance and milk composition 967
F. Shiozaki, M. Serrasqueiro, D. Fonseca, T. Silva, M. Salles, A. M. Vidal, A. Saran Netto
- 89.27 A multi-screening method based on ultra-high-performance liquid chromatography tandem high-resolution mass spectrometry (UHPLC-HRMS) to detect both regulated and emerging mycotoxins in different feed matrices 967
M. Lapris, M. Errico, G. Rocchetti, A. Gallo
- 89.28 Effects of processing with Ozone on nutritional value of Grape pomace in sheep 968
B. Asadhezhad, R. Pirmohammadi, Y. Alijoo, H. Khalilvandi-Behroozyar
- 89.29 Effect of feeding hay or sugar beet pulp containing diets to gestating and lactating gilts on piglet plasma and ileum digesta metabolite concentrations after conventional and late weaning 968
C. C. Metges, L. Grzeskowiak, E. M. Saliu, J. Schulze Holthausen, Q. L. Sciascia, J. Mbuthia, G. Das, B. Kuhla, J. Zentek
- 89.30 In vitro fermentation parameters of intensive beef fattening diets with sainfoin as hay or pellets in the concentrate 969
M. Joy, C. Baila, I. Casasús, S. Lobón, D. Villalba, M. Blanco
- 89.31 Correlation with plasma leptin levels and body fat mass in mature beef cows grazing different herbage allowances of grasslands 969
A. Casal, P. Soca, M. Carriquiry
- 89.32 Water Quality: Farmers' perception of the importance of the quantity and quality of water used for dairy cattle in Portugal 970
O. Moreira, J. Martins, R. Lucas, R. Branco
- 89.33 Effect of pastures with rich tannin legumes on milk production and beef calves' performance 970
M. Lema, G. Fernandez-Turren, G. Banchemo, G. Quintans

89.34	Apparent digestibility of cull chickpeas and whole grain of corn meal in growing pigs <i>J. M. Uriarte, H. Guemez, J. Romo, J. M. Romo, D. Jimenez</i>	971
89.35	Leucine regulates lipid deposition by promoting the secretion of adipokines and the SIRT1-PPAR γ pathway <i>L. Zhang, F. Li, Y. Yin</i>	971
89.36	Dairy and plant-based proteins as FBS alternative in muscle cell cultivation <i>T. S. Sundaram, C. Giromini, R. Rebucci, D. Lanzoni, C. Messina, F. Cheli</i>	972
89.37	NX pig-derived lactobacillus modulates host intramuscular fat deposition via branched-chain amino acid metabolism <i>M. Yang, Q. Xie, J. Wang, A. Zha, J. Chen, Q. Jiang, M. Kang, Q. Deng, Y. Yin, B. Tan</i>	972
89.38	The use of Maillard Reaction Products and reduced CP in pig finishing diets <i>M. Pons, M. Marchesi</i>	973

Session 90.

Nutrition and feeding in the circular economy

Room: Maremmana - Palazzo Affari 2nd Floor

Chair: Alvarez-Rodriguez / Bruggeman

Session Type: Theme session

	Theatre Session 90	Book of Abstracts page
14:00	Decreasing feed-food competition by use of cereal by-products in grower-finisher pig diets <i>M. Schop, N. Kerssen, P. Bikker</i>	973
14:15	Cereal by-products in diets for weaned piglets <i>R. Gerritsen, J. Fledderus, P. Bikker</i>	974
14:30	Effect of sire type and a by-products based diet on performance and meat quality in growing-finishing pigs <i>E. Kowalski, M. Aluwé, S. Janssens, N. Buys, S. De Smet, S. Millet</i>	974
14:45	The impact of white sorghum inclusion in growing-finishing pig diets on growth performance and feed digestibility <i>F. González-Solé, R. Vinyes-Cormina, O. Cano, J. F. Pérez, D. Solà-Oriol</i>	975
15:00	Effect of two phases olive cake on diet digestibility and parameters productive in Bísara breed pigs <i>J. Paié-Ribeiro, V. Pinheiro, A. Teixeira, C. Guedes, J. Teixeira, D. Outor Monteiro, M. J. Gomes</i>	975
15:15	Effects of peat and lignocellulose on the colonic fermentation of pigs in an ex vivo simulation model <i>H. Kettunen, T. Rinttilä, J. Vuorenmaa, J. Apajalahti</i>	976
15:30	Partial or complete replacement of soybean meal with local protein sources in the diet of slow-growing broilers <i>A. Rezaei Far, J. Van Harn, S. Naser El Deen, P. Van Wikselaar, I. Fodor, T. Veldkamp</i>	976
15:45	Coffee Break	
16:15	Influence of supplementing bakery by-products and cocoa bean shells to a herbage-based diet on rumen microbiota and gas emissions of early-lactating dairy cows <i>invited M. Tretola, A. M. Reiche, J. Eichinger, R. Siegenthaler, L. Eggerschwiler, A. L. Hutten, F. Fumagalli, F. Dohme-Meier, L. Pinotti</i>	977
16:30	Evaluation of ensiled fruit wastes with crop by-products as feeds for ruminants <i>R. Khiaosa-Ard, T. Hartinger, M. Mahmood, Q. Zebeli</i>	977
16:45	Effect of feed ingredient based on processed former foodstuff in dairy cow diet: performance and environmental impact <i>M. Pavesi, L. Bava, G. Galassi, M. Battelli, G. Gambarini, A. Giorgino, S. Colombini</i>	978
17:00	Environmental impact and productivity of Reggiana dairy herds fed hay or fresh forage <i>G. Mantovani, T. Danese, M. Simoni, R. Pitino, G. Carone, I. Galasso, G. Esposito, F. Righi</i>	978
17:15	Feeding dairy ewes with a diet containing agri-food co-products: Implications on rumen metabolism <i>G. Foggi, M. Daghigh, B. Valenti, S. Tinagli, A. Silvi, L. Turini, F. Scicutella, V. Bolletta, C. Viti, A. Buccioni, M. Pauselli, M. Mele</i>	979
17:30	Utilization of orange peels as a high value secondary feedstuff for dairy sheep <i>M. A. Karatzia, V. Kotsampasi, Z. Basdagianni, S. Mai, E. M. Barampouti, E. Kasapidou</i>	979
17:45	Effect of pre and postnatal learning strategies in extinction of conditioned taste aversion for pine leaves in sheep <i>J. Figueroa, M. Quezada, L. Quezada, M. Gonzalez, R. Angulo</i>	980

Poster Session 90*Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00*

- 90.15 Effects of olive cake and gender on the performances and hematology of fattening pigs 980
V. Pinheiro, J. Paié-Ribeiro, C. Guedes, M. J. Gomes, J. Teixeira, D. Monteiro
- 90.16 Effect of dietary hybrid rye inclusion on growth performance of growing-finishing pigs 981
F. González-Solé, R. Vinyes-Cormina, O. Cano, J. F. Pérez, D. Solà-Oriol
- 90.17 Bakery products in diets for weaned piglets 981
R. Gerritsen, J. Fledderus, P. Bikker
- 90.18 Seaweeds: An Alternative Feed Source in Bovine Production in the Azores 982
H. Nunes, C. Dias, A. Borba
- 90.19 Nutritional and functional evaluation of *Euglena gracilis*, *Porphyridium purpureum* and *Arthrospira platensis* for feed application 982
E. Petrosillo, D. Lanzoni, R. Rebucci, V. Perricone, A. Agazzi, G. Savoini, F. Cheli
- 90.20 Evaluation of the in vitro Antioxidant Capacity of Microbial, Plant-based and Insect Protein Sources 983
E. Petrosillo, D. Lanzoni, C. Giromini, A. Baldi, F. Cheli
- 90.21 Chemical and in vitro pineapple by-products characterization for sustainable small ruminant production 983
D. D. Kiatti, I. B. Koura, A. Vastolo, M. I. Cutrignelli, S. Calabrò
- 90.22 Herbal supplementation in dairy cows' diet: impact on rumen, milk and cheese microbiota 984
G. Dallavalle, S. Massaro, J. Andersen, A. Mancini, L. Palmieri, U. Vrhovsek, A. Angeli, D. Giannuzzi, F. Tagliapietra, E. Franciosi
- 90.23 Chemical characterization and phenolic content of winery and grape by-products as potential feed supplement 984
K. Simeonidis, G. Pastorelli, L. Pinotti, M. Ottoboni, E. Attard
- 90.24 Effects of the inclusion of grape stem at different rates in intensive fattening cattle diets on in vitro fermentation parameters 985
C. Baila, M. Joy, I. Casasús, S. Lobón, D. Villalba, M. Blanco
- 90.25 Avocado (*Persea Americana*) seed as an alternative ingredient in the diet of replacement goats. In vivo digestibility, N balance and energy balance 985
A. Sanchez Garcia, M. Romero Huelva, I. Rivelli, A. I. Martín Garcia
- 90.26 The impact of incorporating avocado (*Persea Americana*) seed into the diet of replacement goats on ruminal fermentation and blood parameters 986
A. M. Sanchez-Garcia, M. Romero-Huelva, I. Rivelli, A. I. Martín-García
- 90.27 Can the use of dietary oilseeds improve the nutritional and sensory properties of Podolian x Limousine meat? 986
R. Marino, M. Caroprese, A. Della Malva, A. Santillo, M. G. Ciliberti, F. Dangelo, A. Sevi, M. Albenzio
- 90.28 Effects of dietary supplementation with enriched olive cake on growth, rumen fermentation, and metabolic status in Limousine bulls 987
C. Cavallo, A. Amato, G. Ferronato, V. Lopreiato, L. Liotta
- 90.29 In vitro rumen fermentation of forage-based diets supplemented with hydroxytyrosol extracts 987
J. Alvarez-Rodriguez, N. Escalera-Moreno, B. Serrano-Pérez, L. López De Armentia, O. Akesolo-Atutxa, A. Sanz
- 90.30 Evaluation of formic acid as additive for almond hulls silage 988
A. Recalde, J. M. Arroyo, A. Alcamí Aguado, M. D. Carro
- 90.31 Variability in energy content and protein value for ruminants of brewers' grains from different breweries 988
A. Alcamí-Aguado, J. M. Arroyo, V. Jimeno, M. D. Carro
- 90.32 Effects of drying and pelleting on ruminal fermentation of brewers grains 989
A. Alcamí-Aguado, J. M. Arroyo, P. García-Rebollar, M. D. Carro
- 90.33 Variability in chemical composition of wet brewers' grains from a single brewery plant 989
J. L. Lema-Hurtado, M. D. Carro, J. M. Arroyo
- 90.34 Effect of mineral and organic fertilisation on the biodiversity and nutritional value of Azorean pastures 990
S. Teixeira, H. Rosa, J. Madruga, M. D. Silveira, A. Borba
- 90.35 Nutrients recycling to soil by grazing beef cattle in Catalonia region 990
M. Terré, N. Prat, M. Vilarrassa, B. Perramon
- 90.36 Effect of diet and season on Reggiana dairy cattle milk production and quality 991
M. Simoni, R. Pitino, T. Danese, G. Carone, I. Galasso, G. Mantovani, F. Righi
- 90.37 Further exploration of calcium oxide to improve the quality of indigestible feeds 991
S. Terry, T. Mcallister, E. Stephens, K. Schwartzkopf-Genswein

Session 91.

Young EAAP session. Project writing: tools, opportunities and experiences

Room: Romagnola - Palazzo Affari 1st Floor
Chair: Adriaens / Obsteter / Gislon
Session Type: Early-career Scientists's session

	Theatre Session 91	Book of Abstracts page
14:00	Young EAAP session: project writing and speed dating <i>invited</i> J. Adriaens, G. Gislon, J. Obsteter	992

Session 92.

Good practices in experimental research for sustainable pig production (with PIGWEB)

Room: Piemontese - Palazzo Affari 2nd Floor
Chair: Bee / Millet
Session Type: Project session

	Theatre Session 92	Book of Abstracts page
14:00	Guidelines for designing pig trials on performance, digestibility, meat and carcass quality C. De Cuyper, B. Ampe, R. Westin, S. Millet	992
14:15	Common mistakes in experimental design and analysis of pig trials: an overview <i>invited</i> B. Ampe, C. De Cuyper, S. Millet	993
15:00	Identifying key pitfalls in experimental design of pig trials: a group discussion C. De Cuyper, B. Ampe, R. Westin, S. Millet	993
15:45	Coffee Break	
16:15	Improving research quality and collaboration by developing standard operating procedures M. Girard, N. Le Floc'H, M. Font-I-Furnols, L. R. Moscovice, V. Ács, R. Westin	994
16:30	Streamlining pig microbiome studies: Improving efficiency through reproducibility and comparability S. Enokela, T. Yergaliyev, A. Camarinha-Silva	994
16:45	How to score diarrhoea in piglets? Fecal consistency scoring at piglet or pen level M. Aluwé, S. Millet, B. Ampe	995
17:00	PIGWEB Map of European research infrastructures working on pig experimentation for farm applications S. Rios, S. Bosch, P. Domingo, C. De Cuyper, S. Millet, J. Van Milgen, C. Reverté	995
17:15	The strengths, weaknesses, and missing techniques or equipment of Research Infrastructures, assessed from a user's perspective S. Rios, J. Van Milgen, P. Domingo, C. De Cuyper, S. Millet, C. Reverté	996
	Poster Session 92 <i>Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00</i>	
92.09	Is the ABCD standard appropriate for comprehensive metadata description for pig data? N. Melzer, S. Fischer, R. E. Jahnel, J. Holetschek, C. Kasper	996

Session 93.

Preventive approaches to livestock diseases to reduce drug resistance

Room: Podolica - Limonaia - Garden
Chair: Minozzi / Holinger
Session Type: Theme session

	Theatre Session 93	Book of Abstracts page
14:00	Antibiotics consumption in animal production in Europe – on the path to 2030 goals J. Sarraçuca, M. Leitão, M. Taghouti, A. C. Gonçalves Monteiro, A. S. Santos	997

14:15	Dry-off practices on dairy farms as a tool for the reduction of antimicrobial use and improvement of cow health and welfare <i>F. Gottardo, B. Contiero, L. Magrin, O. Martinic, F. Rigo</i>	997
14:30	Treated and untreated cows housed side by side in tie-stalls and their respective risk of harboring E. coli resistant to antimicrobials <i>B. Köchle, V. Bernier Gosselin, H. Kaspar, J. Becker</i>	998
14:45	Evaluating the effect of motivational interviewing and farmer training on effectively delivering the UK levy board mastitis control plan <i>J. Onyango, K. Burton, J. Statham</i>	998
15:00	Predicting impaired postpartum health of dairy cows with prepartum blood serum profiles <i>B. De Bruijn, S. Van Der Drift, R. De Mol, J. Van Der Werf, C. Van Weeghel, E. Bokkers, C. Van Reenen, I. Van Dixhoorn</i>	999
15:15	Effects of supplementation with vitamin E or plant extracts on redox and immune status in early lactating dairy cows <i>A. Corset, A. Boudon, A. Remot, S. Philau, M. Lemarchand, C. Mustiere, L. Le-Normand, O. Dhumez, J. F. Ricouneau, B. Graulet, P. Germon, M. Boutinaud</i>	999
15:30	Navigating antimicrobial stewardship in dairy farming: A cross-contextual study of dairy veterinarians' perspectives in Alberta, Canada and Northern Italy <i>J. Ida, E. Russell, S. Allodi, P. Buniotto, P. Moroni, D. Nydam, H. Barkema</i>	1000

15:45 Coffee Break

16:15	Antimicrobial activity of bacteriocin producing <i>Lactobacillus</i> spp. against multidrug resistant bacteria <i>H. Smith, R. Murphy</i>	1000
16:30	The effect of feed additives on the impact of liver fluke infection in dairy cows <i>I. Van Dixhoorn, J. Verkaik, C. Van Schoote, E. Graat, L. Le Roux-Pullen</i>	1001
16:45	Effect of a natural solution on gastrointestinal parasitism modulation in heifers <i>M. Halgrain, S. Julliard, E. Coudert, S. Point, A. Euzenot, T. Chalvon-Demersay, C. Omphalius</i>	1001
17:00	Host Defense Peptides-based nanoparticles for the treatment of Bovine Respiratory Disease <i>R. Balta-Foix, J. Seras-Franzoso, F. Andrade, D. Rafael, J. Atienza, N. Ferrer-Miralles, I. Abasolo, S. Martí, E. Garcia-Fruitós, A. Arís</i>	1002
17:15	European Swine Influenza Network (ESFLU) for the benefit of One Health <i>L. Dieste Pérez, T. Tobias, G. Simon, D. Novosel, R. Dias, S. Fereidouni, G. Richard, L. E. Larsen, G. Dauphin</i>	1002
17:30	The use of targeted selective treatment in lambs to reduce wormer resistance <i>J. Duncan, E. Gascoigne, L. Stubbings, G. Mitchell, M. Colston, M. Blyth, A. McLaren, A. Thomson, C. Morgan-Davies, F. Kenyon</i>	1003

Poster Session 93

Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00

93.14	Comparative analysis of antimicrobial usage in Swiss farms housing pigs exclusively or cattle alongside <i>L. Fleischer, J. Becker, D. Kümmerlen</i>	1003
93.15	Effect of dietary microbial muramidase supplementation on weaned pigs' performance, health status and intestinal microbiota <i>P. Trevisi, F. Palumbo, F. Correa, A. Zurru, D. Luise</i>	1004
93.16	Addition effects of MGM-P, Quebracho Tannin Product, from weaning to finishing pig <i>Z. Yang, K. Wang, P. Shi, M. Ma, X. Li, Y. Enomoto, T. Takahashi, M. Kuwahara, J. Li</i>	1004
93.17	Development of a multi-class and multi-residue methodology through UHPLC coupled with high-resolution Orbitrap mass spectrometry to detect veterinary antimicrobials in bovine milk <i>S. Sabbadin, M. Penasa, M. De Marchi</i>	1005
93.18	Intramammary Platelet Lysate Preparation as a Dry-off Treatment Tool for Dairy Cows <i>F. Rigo, M. Soncin, A. Stefani, L. Magrin, O. Martinic, A. Barberio</i>	1005
93.19	Lactic acid fermentation - an alternative for disinfection in case of an animal epidemic? <i>I. Lehnert, T. Schilling, L. E. Hoelzle</i>	1006
93.20	Associations of Swiss national reporting system's antimicrobial use data and management practices in tie stall dairy farms <i>B. Köchle, V. Bernier Gosselin, G. A. Schnidrig, J. Becker</i>	1006

Session 94.**Living labs and demonstration farms: approaches to improve sustainability of LFS globally**

Room: Marchigiana - Palazzo Affari Ground floor

Chair: Sturaro / Rivero

Session Type: Theme session

	Theatre Session 94	Book of Abstracts page
14:00	Innovative approaches to assessing sustainability: A case study of sheep and beef systems at North Wyke Farm Platform <i>invited</i> M. J. Rivero, M. R. Lee	1007
14:30	Choreographed interactions with cows on a demonstration farm to rethinking livestock subjectivity and Human-animal collaborations M. F. De Torre, A. Farruggia, L. Daranlot, S. Mouret, P. Roux, M. Prieur, C. Sébastien	1007
14:45	Future sustainable grazing systems at the UCD Lyons Farm Long Term Grazing Platform T. Boland, H. Sheridan, F. Monahan, P. Murphy, Z. C. Mckay, O. Schmidt, F. Godwin, A. Evans, A. Kelly	1008
15:00	Impact of temperature on milk yield: a multiyear analysis from Harper Adams University Future Farm J. Onyango, K. Robinson, E. Harris, M. Lee	1008
15:15	Living labs concept towards GHG emissions reduction targets, growing market access and creating industry value in Australia P. Vercoe, Z. Durmic, B. Hayes	1009
15:30	A grazing living lab in Northern Sweden a case study M. Hetta, J. Chagas, H. Lindgren	1009
15:45	Coffee Break	
16:15	Katanning Research Farm Demonstration of Carbon Neutral by 2030 and Natural Capital Accounting M. Curnow, J. Hardy, D. Devos	1010
16:30	The living lab approach in the ecological transition of livestock farming: the case of the Abruzzo mountains F. Di Iacovo, L. Forzoni, S. Righi, C. Vincenzina, F. Riccioli, M. Moretti	1010
16:45	Living labs for assessing the overall sustainability of livestock systems through Life Cycle Assessment - SOLSTICE M. Birolo, M. Petracci, N. Lacetera, M. Marconi, F. Di Iacovo, F. Bonavolontà, M. T. Verde, G. Provolo, A. Cartoni Mancinelli, E. Sturaro	1011
17:00	INnovative Tools for Assessment and Authentication of chicken meat, beef and dairy products' QualiTies: a living lab approach R. C. Eppenstein, C. Berri, D. Berry, A. Cartoni Mancinelli, C. Couzy, C. Laithier, F. Leiber, B. Martin, E. Sturaro	1011
17:15	The "Cheese Valley" Initiative: co-design innovations in the Pecorino Toscano DOP Value Chain M. Re, S. Burbi, P. Barberi, M. Mele, A. Mantino	1012
17:30	Co-designing livestock-based circular agri-food systems in developing countries rural areas: The CLiMiT living lab approach T. Teixeira Da Silva Siqueira, J. M. Sadaillan, M. Feillet, M. Vigne, A. Benoist, M. Miralles-Bruneau, J. Vuattoux, M. Allix, P. Yoan, T. Donnah Razafinarivo, L. Rasolofo Irintsoa, M. Hanitriainaina Razafimahatratra, A. Barimalala, G. Parizet, J. Vayssières	1012
17:45	LivingLab - Effluents and coproducts of the livestock activity O. Moreira, I. Rehan, R. Fragoso, H. Trindade, V. Fitas Da Cruz, D. Figueiro, E. Duarte	1013
Poster Session 94		
<i>Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00</i>		
94.14	Universal bovine identification with depth cameras and deep metric learning to underpin the John Oldacre Centre dairy research platform A. Sharma, L. Randewich, W. Andrew, S. Hannuna, N. Campbell, R. Bruce, D. Enriquez-Hidalgo, M. Smith, T. Burghardt, M. Hansen, A. W. Dowsey	1013
94.15	Insights and experiences of two Living Labs in Tuscany (Italy) A. Silvi, G. Foggi, M. Moretti, L. Ortolani, S. Righi, A. Mantino, G. Brunori, M. Mele	1014
94.16	Climate Farm Demo: A European-wide network of pilot farmers implementing and demonstrating climate smart solutions for a carbon neutral Europe F. Lusi, M. Giacomoni, E. Bortolazzo, S. Carè	1014

94.17	FERTY-Feed fertilization crops and energy: an example of co-design for the implementation of climate smart solutions in Italy <i>D. Bochicchio, A. Zatta, S. Carè</i>	1015
94.18	Steps for sustainable livestock: our multidisciplinary global farm platform journey <i>M. J. Rivero</i>	1015
94.19	Transformative rumen microbiome research for on-farm implications <i>L. L. Guan, T. Mcallister</i>	1016
94.20	Owned vs borrowed data: lessons learned from data collection on commercial dairy farms <i>T. Klingström, I. Ohlsson, D. J. De Koning</i>	1016
94.21	Promoting rotational stocking in beef cattle pastures: insights from the Alberta AgriSystems Living Lab <i>E. Santos, G. Boffen Yordanov, B. Asante-Badu, C. Wade, E. Bork</i>	1017
94.22	University of Wisconsin-Platteville (USA) Living Laboratory / Global Farm Platform <i>D. L. Busch, K. Mahmud, A. D. Cartmill</i>	1017

Session 95.

Insects as food & feed

Room: Rendena - Palazzo Affari 4th Floor

Chair: Boatta / Naser El Deen

Session Type: Theme session

	Theatre Session 95	Book of Abstracts page
14:00	Application of insects in poultry diets <i>invited T. Veldkamp</i>	1018
14:30	Application of less processed insect protein in broiler pelleted feed <i>A. Rezaei Far, J. Van Harn, S. Naser El Deen, P. Van Wikselaar, I. Fodor, T. Veldkamp</i>	1018
14:45	Meat quality in broiler chickens fed a mixture of <i>Hermetia illucens</i> and <i>Tenebrio molitor</i> meals <i>I. Biasato, S. Bellezza Oddon, K. Mendez Rondo, C. Caimi, L. Gasco, A. Schiavone, A. Brugiapaglia</i>	1019
15:00	Fecal Metabolome of Chicken Fed Black Soldier Fly and Yellow Mealworm-Based Diets <i>Á. Kenéz, I. Biasato, A. Schiavone, L. Gasco</i>	1019
15:15	Black soldier fly meal inclusion in broiler and turkey diets: effects on growth performances, meat quality and health <i>C. Guidou, C. Trespeuch, F. Sirri, A. Bonaldo, F. Ceccaroni, B. Orn Smarason, M. Zampiga</i>	1020
15:30	Full-fat silkworm-based diets for laying quails: impact on egg fatty acid profile <i>Y. Singh, M. Cullere, S. Cappellozza, A. Dalle Zotte</i>	1020
15:45	Coffee Break	
16:15	Evaluation of dietary inclusion of <i>Tenebrio molitor</i> larvae on gut microbiota modulation in growing pigs <i>I. Ferri, M. Dell'Anno, A. Quiese, P. Cremonesi, F. Biscarini, M. Santoru, B. Canala, B. Castiglioni, L. Rossi</i>	1021
16:30	Increasing inclusion levels of <i>Alphitobius diaperinus</i> meal in juvenile rainbow trout diets <i>S. Bellezza Oddon, I. Biasato, L. Sanchez, L. Marengo, M. Tosco, L. Gasco</i>	1021
16:45	Black soldier fly meal and dehydrated larvae inclusion in shrimp diets: effects on growth and health performances <i>C. Guidou, C. Trespeuch, M. Costil, L. Gerardo Sisco Allen, A. C. Boutet, E. De Swaef, J. Dantas Lima, J. Alfredo Avila, F. Soller</i>	1022
17:00	Nutrient uptake, growth performance, blood metabolites and bone properties of broilers fed a ration containing mineral-enriched black soldier fly larvae <i>M. M. Seyedalmoosavi, G. Das, M. Mielenz, C. C. Metges</i>	1022
17:15	Black soldier fly oil in the diet of dairy cows: effects on fatty acids of rumen digesta <i>P. G. toral, L. Rastello, G. Hervás, L. Gasco, M. Gerbelle, M. Coppa, C. Lussiana, A. Galli, C. Guidou, C. Trespeuch, P. Frutos, M. Renna</i>	1023
	Poster Session 95 <i>Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00</i>	
95.12	Different EP-BSF levels and their effect on connexins, serum reproductive hormones, cytokine expression and the laying performance of hen at different stages <i>H. Tajudeen, S. Y. Yoon, P. Neves-Silvestre, S. H. Ha, J. Y. Mun, J. S. Kim</i>	1023

- 95.13 Application of artificial senses to evaluate the effects of vacuum packaging on the organoleptic profile of dehydrated *Tenebrio molitor* larvae 1024
A. R. Di Rosa, M. V. Tignani, G. Secci, F. Accetta, G. Parisi

Session 96. Optimization of technical, economic, and environmental efficiency in sheep and goat production systems

Room: Calvana - Palazzo Congressi Ground floor

Chair: Cannas / Dadousis

Session Type: Theme session

Theatre Session 96		Book of Abstracts page
14:00	Exploiting big data for small ruminants <i>invited</i> R. Negrini, L. Pascarella, C. Melilli, F. Luisi, M. Tolone, M. Milanese, D. Pietrucci, M. Fioretti, L. C. Leo Consortium	1024
14:30	Virtual fencing vs physical fencing - grazing behaviour of goats L. Wilms, D. Hamidi, C. H. U. Lüntzel, J. Isselstein, S. Waiblinger, M. Egerbacher	1025
14:45	Animal counting in outdoors systems based on drones and Computer Vision: from a review to the presentation of a new framework L. Helary, A. Lebreton, E. Nicolas, T. Dechaux	1025
15:00	Implementing an autodrafter-weighing scale for assessing the body weight changes and grouping dairy sheep and goats during lactation G. Caja, A. Elhadi, R. Costa	1026
15:15	Predicting dry matter intake in sheep using greenhouse gas measurements from portable accumulation chambers G. F. Difford, G. Steinheim, I. Dønnem, J. Jakobsen, B. A. Åby	1026
15:30	Digital tools and technologies: Irish sheep stakeholder opinions before and after training B. McLearn, T. W. Keady, C. Morgan-Davies, A. McLaren, L. Grova, A. De Boer, V. Giovanetti, M. Acciaro, L. Depuille, R. Klein, A. Godo, P. Piirsalu, F. Kenyon, I. Llach	1027
15:45	Coffee Break	
16:15	Budget process linked to partial indicators in dairy sheep farm G. S. Sechi, A. Cannas, A. S. Atzori	1027
16:30	Is there any interaction between feed efficiency and resilience in dairy ewes subjected to underfeeding? 1) Feed intake and milk yield E. Barrio, P. Frutos, P. G. González-Merino, A. G. Mendoza, N. C. Friggens, P. G. Toral, G. Hervás	1028
16:45	Environmental impact drivers of mixed dairy sheep farms: insights from a combined LCA and multivariate statistical analysis approach M. Finocchi, A. Mantino, R. Villani, F. G. Cella, A. Cappucci, F. Vichi, G. Conte, G. Foggi, M. Mele	1028
17:00	The effect of feeding a calcium peroxide feed additive to mitigate enteric methane emissions in lambs G. Pugh, O. Cristobal Carballo, T. Yan, S. Huws	1029
17:15	Reproductive performance of a new cervical fix-timed insemination protocol in ewes based on three doses of prostaglandin F2α J. Olivera-Muzante, F. Negrin, M. Burutaran, J. Gil, S. Fierro	1029
17:30	Factors affecting differences in goat milk yield and composition between evening and morning samples H. Bovenhuis, P. Wolters, C. Van Den Broek, J. Ten Napel, R. Crooijmans	1030
17:45	Polyphenols from <i>Sulla</i> (<i>Hedysarum coronarium</i>) affects rumen fluid microbiota of dairy sheep ewes S. Tinagli, M. Tognocchi, R. E. Amarie, G. Foggi, A. Serra	1030
Poster Session 96 <i>Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00</i>		
96.14	Development of a minisequencing integrated method to genotype PRNP gene in goats C. López-Maroto, M. Martínez-Galiana, V. De La Cruz, E. García-Curbelo, L. Quintanilla, T. Mayoral, J. A. Bouzada	1031
96.15	Data driven Innovation in Sheep Sector: APPàre, a platform to map technical and environmental performances from life cycle assessment (LCA) and costing (LCC) M. D. G. Azzena, A. Ledda, A. Palimodde, F. Pedes, D. Fois, G. Seddaiu, A. S. Atzori	1031

96.16	Is there any interaction between feed efficiency and resilience in dairy ewes subjected to underfeeding? 2) Ruminal fermentation parameters <i>E. Barrio, G. Hervás, A. G. Mendoza, N. C. Friggens, P. G. Toral, P. Frutos</i>	1032
96.17	Using image analysis to estimate goats live weight <i>M. Almeida, A. C. Batista, F. Silva, C. Guedes, V. Santos, S. Silva</i>	1032
96.18	Is there any relationship between feed efficiency and milk fatty acid composition in dairy ewes subjected to underfeeding? <i>E. Barrio, P. Frutos, P. G. González-Merino, A. Della Badia, P. G. Toral, G. Hervás</i>	1033
96.19	Assessing the feasibility of Near Infrared Spectroscopy for the rapid detection of Aflatoxin M1 in goat milk <i>N. Núñez-Sánchez, N. Ayala-Soldado, R. Mora-Medina, S. De La Cruz-Ares, A. Molina-López, A. J. Lora-Benítez, R. Moyano-Salvago</i>	1033
96.20	Water footprint assessment of by-products based diet for sheep production in Tunisia: potential of low water use diets <i>R. Ibdhi</i>	1034
96.21	Effect of the starch source on body fat deposition, carcass traits and meat quality of culling Sarda dairy ewes <i>G. Battacone, M. F. Lunesu, A. Fenu, A. Mazza, R. Chessa, A. Nudda</i>	1034
96.22	ARIES: Advanced Research on the Impact of Environment on Sheep <i>D. Valoppi, C. Cipolat-Gotet, G. Stocco, B. Castiglioni, S. Biffani, F. Tiezzi</i>	1035

Session 97.

Biological mechanisms regulating inflammatory and energy metabolism in livestock species

Room: Modicana - Palazzo Affari 3rd Floor

Chair: Sauerwein / Louveau

Session Type: Theme session

	Theatre Session 97	Book of Abstracts page
14:00	Somatotropic axis of Holstein cows of diverging genetic origin under two pasture-based systems <i>I. Benoit, M. García-Roche, A. Mendoza</i>	1035
14:15	Phenomic data integration for the identification of biomarkers of subclinical intramammary infection in Holstein cattle <i>V. Bisutti, A. Lisuzzo, D. Giannuzzi, M. E. Gelain, E. Fiore, M. Ganesella, L. Laghi, A. Cecchinato, S. Pegolo</i>	1036
14:30	Effects of feeding different microencapsulated sources of long and very-long chain unsaturated fatty acids on production and blood parameters in response to an immune challenge <i>V. Sáinz De La Maza-Escolà, A. Celemin, M. Da Silva, L. Boback, A. Piva, E. Grilli, J. E. Rico</i>	1036
14:45	Alternative splicing mRNA isoforms linked to subclinical intramammary infection in Holstein cattle <i>A. Vanzin, V. Bisutti, D. Giannuzzi, A. Cecchinato, L. Gallo, V. Asselstine, A. Cánovas, S. Pegolo</i>	1037
15:00	Preservation of milk in liquid nitrogen during collection does not affect RNA quality for RNA-seq analysis <i>L. Jiménez Montenegro, L. Alfonso Ruiz, B. Soret Lafraya, J. A. Mendizabal Aizpuru, O. Urrutia Vera</i>	1037
15:15	Hepatic mitochondrial function in dairy cows with different levels of pasture inclusion during lactation <i>M. Garcia Roche, M. Carriquiry</i>	1038
15:30	Oleic Acid Promotes Lipogenesis and Improves Mitochondrial Function in Bovine Adipocytes: The Role of PPAR α Activity <i>A. L. Lock, G. A. Contreras</i>	1038
15:45	Coffee Break	
16:15	The Stressogenic Effect of Bacteria Secretome is Modulated by the Size of the Milk Fat Globule Used as a Substrate <i>N. Tzirkel-Hancock</i>	1039
16:30	Immunometabolic responses of porcine blood immune cells to endotoxin and glucocorticoid stimulation <i>W. Ma, J. Brenmoehl, N. Trakooljul, K. Wimmers, E. Murani</i>	1039
16:45	Associations between social behavior and immune cell transcriptome in pregnant sows <i>M. Mescouto Lopes, C. Clouard, N. Villain, C. Gerard, A. Vincent, I. Louveau, E. Merlot</i>	1040

- 17:00 Acetyl-CoA Carboxylase 1 Inhibition Reduces Fat Deposition Through a Histone Acetylation Signaling Axis in Pigs 1040
C. Tao, L. Zhang, J. Xu, Y. Wang

Poster Session 97

Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00

- 97.12 The hepatic gene expression of specific transporters of the BCAA and mTOR differs between North American and New Zealand Holstein cows under grazing conditions 1041
A. L. Astessiano, M. Carriquiry, A. Mendoza, A. Kenes, A. I. Trujillo, E. Jorge-Smeding
- 97.13 Prediction of ad libitum dry matter intake rebound after a feed restriction through cerebrospinal fluid amino acids concentration in dairy cows 1041
A. I. Trujillo, M. N. Viera, E. Jorge-Smeding, A. L. Astessiano
- 97.14 Optimizing the bioenergetic parameters of peripheral blood mononuclear cells in dairy cows 1042
A. Casal, M. Garcia-Roche

Session 98.

Nutrition in health and welfare in monogastric animals

Room: Sarda - Palazzo Affari Below ground Floor

Chair: Trocino / Khiaosa-ard

Session Type: Theme session

	Theatre Session 98	Book of Abstracts page
14:00	Diet-induced changes in the jejunal microbiota of broilers during development, greatly affecting <i>Enterococcus hirae</i> and <i>Enterococcus faecium</i> <i>P. Stege, D. Schokker, F. Harders, S. K. Kar, N. Stockhofe, V. Perricone, J. M. J. Rebel, I. De Jong, A. Bossers</i>	1042
14:15	Studying The Impact Of A Standardized Dry Grape Extract On Pullets' Metabolome <i>F. Z. Aberkane, P. Engler, S. Boisard, D. Guilet, A. Benarbia</i>	1043
14:30	Antibiotic resistome of commercial Lohman classic layers with and without mannan rich fraction supplementation <i>A. Corrigan, P. McCooley, R. Murphy</i>	1043
14:45	Boosting underperforming broilers: feed structure strategies for better gut development and health, and microbiota <i>M. Z. Akram, E. A. Sureda, N. Everaert</i>	1044
15:00	Effect of <i>Urtica dioica</i> and <i>Urtica urens</i> on survival in broilers chickens <i>J. Teixeira, Â. Martins, J. L. Mourão, A. Alves, V. Pinheiro</i>	1044
15:15	Nurturing Progeny: Probiotics' Influence on Sow Gestation Performance and Piglet Weaning Weight <i>I. C. C. Bez, E. V. Orellana, A. C. De Oliveira, K. M. Monteiro, S. H. Weber, L. B. Costa</i>	1045
15:30	Effect of replacement of soybean by Mediterranean legumes on intestinal health of growing pigs <i>I. Fernández_Fígares, M. Rodríguez, R. Nieto, J. Morales</i>	1045
15:45	Coffee Break	
16:15	Effect of dietary supplementation of <i>A. nodosum</i> and <i>L. calcareum</i> combination on piglets' health <i>S. Frazzini, M. Dell'Anno, S. Reggi, I. Ferri, L. Rossi</i>	1046
16:30	Use of apple pomace in pigs diet <i>D. Lodyga, M. Kasproicz-Potocka, A. Zaworska-Zakrzewska, A. Ludwiczak, J. Składanowska-Baryza, E. Sell-Kubiak</i>	1046
16:45	Butyric acid with resistant potato starch improved growth and health of weaned pigs <i>K. R. Connolly, T. Sweeney, J. V. O'Doherty</i>	1047
17:00	Intestinal barrier function of piglets fed AGP free diets supplemented with an association of fatty acids, prebiotics and zinc proteinate <i>J. S. Martins, M. S. S. Pozza, A. E. Murakami, E. Gasparino, G. A. Araújo, A. H. N. Ferreira, P. C. Pozza</i>	1047
17:15	Dietary inclusion of fibrous corn silages reduces the severity of gastric mucosa damage in heavy pigs <i>M. Spanghero, A. Romanzin, M. Braidot, M. Orioles, L. Campidonico, C. Sarnataro, I. Pividori</i>	1048
17:30	Algal-based extracts and their mixes: ability to perform antimicrobial and antioxidant activities <i>M. Hejna, M. Dell'anno, L. Rossi, A. Jóźwik</i>	1048
17:45	Development of nanocarrier for engineered <i>L. lactis</i> delivery as edible vaccine against swine <i>E. coli</i> <i>M. Dell'Anno, S. Reggi, M. Guagliano, C. Cristiani, A. Baldi, L. Rossi</i>	1049

Poster Session 98*Fortezza da Basso Cavaniglia, from September 2nd at 17:00 until September 4th at 15:00*

- 98.15 Relationship between CF or NDF in feed and content of fatty acids in sow feces 1049
H. Scholz, K. Schlegel
- 98.16 Improving lactational performance in primiparous sows through targeted dietary supplementation for liver health 1050
C. Landry, D. Gardan-Salmon, V. Bégos, P. Sakkas
- 98.17 The impact of glutathione precursors on growth performance, nutrient digestibility, and blood profile in weaning pigs 1050
S. T. Wahid, M. H. Oh, K. Han, I. H. Kim
- 98.18 Carry-on effect of fenugreek cotyledons on sows to their piglets during lactation 1051
H. Bui, M. Le Bot, P. Engler, A. Benarbia
- 98.19 Effect of dietary *Bacillus subtilis* and *Bacillus licheniformis* probiotic on growth performance, nutrient digestibility and fecal microbiota in weaning pigs 1051
I. H. Kim, S. Y. Jang, S. Cao, J. H. Park
- 98.20 The efficacy of the emulsifier DiNAMIC in growing pig diets 1052
M. D. Scott, V. E. Beattie, M. E. E. Ball, E. Magowan
- 98.21 Phytase supplementation on weaned piglet diets: impacts on short-chain fatty acid production and gastrointestinal pH 1052
I. C. C. Bez, E. M. E. Hernandez, G. Z. De Paula, L. B. De Azevedo, S. H. Weber, J. Genova, P. L. O. Carvalho, L. B. Costa
- 98.22 In ovo postbiotic stimulation of broiler chicken and impact on intestinal health 1053
A. Dunisławska, A. Bełdowska, E. Pietrzak, S. Knaga
- 98.23 Physiological response of piglets at weaning according to daily growth during lactation 1053
A. Ausere, M. A. Latorre, F. J. Miana-Mena, M. S. Gomez
- 98.24 The effect of diets containing low doses of antibiotics on the growth and slaughter performance of broiler chickens 1054
A. Arczewska-Włosek, K. Połtowicz, J. Nowak, P. Adamczyk, P. Zawisza, Ł. Gala, M. Olszewska-Tomczyk, M. Olejnik

EAAP Study commissions



Commission on Animal Genetics

Filippo Miglior	President	Guelph University, Canada	fmglior@uoguelph.ca
Marcin Pszczola	Vice-President	Poznan University of Life Sciences, Poland	marcin.pszczola@gmail.com
Morten Kargo	Vice-President	Aarhus University, Denmark	morten.kargo@qgg.au.dk
Ewa Sell-Kubiak	Vice-President	Poznan University of Life Sciences, Poland	ewa.sell-kubiak@puls.edu.pl
Francesco Tiezzi Mazzoni Della Stella Maestri	Secretary	University of Florence, Italy	francesco.tiezzi2@unifi.it
Christa Egger-Danner	Industry rep.	Zuchtdata, Austria	egger-danner@zuchtdata.at
Ivan Pocrnic	Young Club	Roslin Institute, UK	ivan.pocrnic@roslin.ed.ac.uk
Pauline Martin	Young Club	INRAè, France	pauline.martin@inrae.fr
Giuseppina Schiavo	Young Club	University of Bologna, Italy	giuseppina.schiavo2@unibo.it



Commission on Animal Nutrition

Luciano Pinotti	President	University of Milan, Italy	luciano.pinotti@unimi.it
Susanne Kreuzer- Redmer	Vice-President	Vetmed Vienna, Austria	susanne.kreuzer-redmer@vetmeduni.ac.at
Latifa Abdenneby- Najar	Vice-President	IDELE, France	latifa.najar@idele.fr
Maria José Ranilla García	Secretary	Universidad de León, Spain	mjrang@unileon.es
Sokratis Stergiadis	Secretary	University of Reading, UK	s.stergiadis@reading.ac.uk
Javier Alvarez Rodriguez	Secretary	University of Lleida, Spain	javier.alvarez@udl.cat
Kar Soumya	Secretary	Wageningen University & Research, Netherlands	soumya.kar@wur.nl
Geert Bruggeman	Industry Rep	Nusciencgroup, Belgium	geert.bruggeman@nusciencgroup.com
Eric Newton	Young Club	University of Reading, UK	Newtoeri000@gmail.com
Giulia Foggi	Young Club	University of Pisa, Italy	giulia.foggi@agr.unipi.it



Commission on Health and Welfare

Laura Boyle	President	Teagasc, Ireland	laura.boyle@teagasc.ie
Flaviana Gottardo	Vice-President	University of Padova, Italy	flaviana.gottardo@unipd.it
Giulietta Minozzi	Vice-President	University of Milan, Italy	giulietta.minozzi@unimi.it
Isabel Blanco Penedo	Secretary	University of Lleida, Spain	isabel.blancopenedo@udl.cat
Mirjam Holinger	Secretary	Research Institute of Organic Agriculture FiBL, Switzerland	mirjam.holinger@fibl.org
Angela Trocino	Secretary	University of Padova, Italy	angela.trocino@unipd.it
Julia Adriana Calderon Diaz	Industry Rep	Genusplc, Spain	juliaadriana.calderondiaz@genusplc.com
Mariana Dantas de Brito Almeida	Young Club	University of Tras-os-Montes and Alto Douro, Portugal	mdantas@utad.pt
Vincenzo Lopreiato	Young Club	University of Messina Italy	vincenzo.lopreiato@unime.it
Liat Morgan	Young Club	University of Tel Aviv Israel	liatmorgan@gmail.com



Commission on Animal Physiology

David Kenny	President	Teagasc, Ireland	david.Kenny@teagasc.ie
Kate Keogh	Vice-President	Teagasc, Ireland	kate.keogh@teagasc.ie
Alan Kelly	Secretary	University College Dublin, Ireland	alan.kelly@ucd.ie
Yuri Montanholi	Secretary	Lakeland College Alberta, Canada	yuri.montanholi@lakelandcollege.ca
Maya Zachut	Secretary	Volcani Institute, Israel	mayak@volcani.agri.gov.il
Federico Randi	Industry Rep.	Ceva Sante Animale, France	federico.randi@ceva.com
Olaia Urrutia	Young Club	University of Navarra, Spain	olaia.urrutia@unavarra.es



Commission on Livestock Farming Systems

Michael Lee	President	Harper Adams University, UK	MRFLee@harper-adams.ac.uk
Enrico Sturaro	Vice-President	University of Padova, Italy	enrico.sturaro@unipd.it
Tommy Boland	Secretary	University College Dublin, Ireland	tommy.boland@ucd.ie
Ioanna Pouloupoulou	Secretary	Agriculture University of Athens, Greece	ioanna.pouloupoulou@aua.gr
Vincent Thenard	Secretary	INRAe, France	vincent.thenard@inra.fr
Jordana Rivero-Viera	Secretary	Rothamsted Research, UK	jordana.rivero-viera@rothamsted.ac.uk
Saheed Salami	Industry Rep.	Alltech, UK	sayodeji14@yahoo.com
Tiago T. da Silva Siqueira	Young Club	Cirad, France	siqueira@cirad.fr



Commission on Cattle

Massimo De Marchi	President	University of Padova, Italy	massimo.demarchi@unipd.it
Paul Galama	Vice-President	Wageningen Livestock Research, The Netherlands	paul.galama@wur.nl
Joel Berard	Vice-President	Agroscope, Switzerland	joel.berard@agroscope.admin.ch
Jean François Hocquette	Secretary	INRAe, France	jean-francois.hocquette@inra.fr
Poulad Pourazad	Industry Rep.	Delacon Biotechnik GmbH, Austria	poulad.pourazad@delacon.com
Saskia Meier	Industry Rep.	SYNETICS, Germany	saskia.meier@synetics.world
Angela Costa	Young Club	University of Bologna, Italy	angela.costa2@unibo.it



Commission on Sheep and Goat Production

Georgia Hadjipavlou	President	Agricultural Research Institute, Cyprus	ghadjipavlou@ari.moa.gov.cy
Lorenzo E Hernandez Castellano	Vice-President	Universidad de Las Palmas de Gran Canaria, Spain	lorenzo.hernandez@ulpgc.es
Antonello Cannas	Secretary	University of Sassari, Italy	cannas@uniss.it
Siham A. Rahmatalla	Secretary	Albrecht Daniel Thaer Institut for Agricultural and Horticultural Sciences, Germany	rahmatas@hu-berlin.de
Francis Champion	Secretary	Teagasc, Ireland	francis.champion@teagasc.ie
Ebru Emsen	Industry Rep	ERGEN R&D company, Turkey	ebru.emsen@er-gen.com
Christos Dadousis	Young Club	University of Parma, Italy	christos.dadousis@unipr.it



Commission on Pig Production

Sam Millet	President	ILVO, Belgium	sam.millet@ilvo.vlaanderen.be
Paolo Trevisi	Vice-President	Bologna University, Italy	paolo.trevisi@unibo.it
Giuseppe Bee	Vice-President	Agroscope Liebefeld Posieux ALP, Switzerland	giuseppe.bee@alp.admin.ch
Katja Nilsson	Secretary	Swedish University of Agricultural Science, Sweden	katja.nilsson@slu.se
Katarzyna Stadnicka	Secretary	Nicolaus Copernicus University in Torun, Poland	katarzyna.stadnicka@cm.umk.pl
Grzegorz Brodziak	Industry Rep	Goodvalley Agro S.A., Poland	grzegorz.brodziak@goodvalley.com
Tristan Chalvondemersay	Industry Rep	CMI ROULLIER, France	tristan.chalvondemersay@roullier.com
Lisanne Verschuren	Young Club	Topigs Norsvin, The Netherlands	lisanne.verschuren@topignorsvin.com



Commission on Horse Production

Rhys Evans	President	Norwegian University College of Green Development, Norway	rhys@hgut.no
Celine Vial	Vice-President	INRAe, France	celine.vial@inrae.fr
Roberto Mantovani	Vice-President	University of Padua DAFNAE, Italy	roberto.mantovani@unipd.it
Isabel Cervantes Navarro	Vice-President	Complutense University of Madrid, Spain	icervantes@vet.ucm.es
Pasquale De Palo	Secretary	University of Bari, Italy	pasquale.depalo@uniba.it
Jackie Tapprest	Secretary	Animal health laboratory (ANSES), France	jackie.tapprest@anses.fr
Claire Neveux	Industry Rep	Ethonova, France	ethonovaep2i@gmail.com
Juliette Auclair-Ranzaud	Young Club	Institut français du cheval et de l'équitation, France	juliette.auclair-ronzaud@ifce.fr
Kirsty Tan	Young Club	Christian-Albrechts- Universität zu Kiel, Germany	kirsty.tan89@gmail.com



Commission on Insects

Laura Gasco	President	University of Turin, Italy	laura.gasco@unito.it
Anton Gligorescu	Vice-President	Aarhus University, Denmark	angl@bio.au.dk
Christoph Sandrock	Secretary	Research Institute of Organic Agriculture FiBL, Switzerland	christoph.sandrock@fibl.org
David Deruytter	Secretary	INAGRO, Belgium	david.deruytter@inagro.be
Maria Martinez Castillero	Industry Rep	Betabugs, UK	maria@betabugs.uk
Ridmantas Zelionka	Industry Rep	ENTOGAMA, Lithuania	ridmantas@entogama.com
Thomas Lefebvre	Industry Rep	Ynsect, France	thomas.lefebvre@ynsect.com
Marisa Santos	Industry Rep	ThunderFoods, Portugal	marisa.santos@thunderfoods.pt
Francesco Boatta	Industry Rep	Agronutris France	francesco.boatta@agronutris.com
Christophe Trespeuch	Industry Rep	Mutatec France	c.trespeuch@mutatec.com
Sara Bellezza Oddon	Young Club	University of Turin, Italy	sara.bellezzaoddon@unito.it
Cassandra Maya	Young Club	University of Copenhagen, Denmark	casma@nexs.ku.dk
Ilaria Biasato	Young Club	University of Turin, Italy	ilaria.biasato@unito.it
Somaya Naser El Deen	Young Club	Wageningen Livestock Research, The Netherlands	somaya.nasereldeen@wur.nl



Commission on Precision Livestock Farming

Jarissa Maselyne	President	ILVO, Belgium	jarissa.maselyne@ilvo.vlaanderen.be
Francisco Maroto Molina	Vice-President	University of Cordoba, Spain	g02mamof@uco.es
Claire Morgan-Davies	Vice-President	Scotland's Rural College (SRUC), UK	claire.morgan-davies@sruc.ac.uk
Jean-Marc Gautier	Vice-President	IDELE, France	jean-marc.gautier@idele.fr
Maria-Anastasia Karatzia	Secretary	Research Institute of Animal Science, Greece	karatzia@elgo.gr
Daniel Foy	Industry Rep	AgriGates, USA	d.foy@agrigates.io
Michael Odintsov Vaintrub	Industry Rep	Regrowth s.r.l.s, Italy	m.odintsov.vaintrub@gmail.com
Adrien Lebreton	Young Club	Institut de l'élevage, France	adrien.lebreton@idele.fr



VETAGRO[®]
LIKE NO ONE ELSE[®]