



# AETETE

Association Européenne des Technologies de l' Embryon  
Association of Embryo Technology in Europe

July 2019

AETETE Newsletter Issue 51

Editor: [Roger Sturmeij](#)

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## PRESIDENTS LETTER

Dear Friends, dear Colleagues,

It is with great pleasure that I invite you to our 35<sup>th</sup> Annual Scientific Meeting of the Association of Embryo Technology in Europe. This year we go to **Murcia, Spain**, where we will be welcomed by a fantastic Local Organizing Committee, chaired by Dr **Rakel Romar**. They have prepared a wonderful venue for us with a great social program, starting with a warm Welcome Reception on Thursday evening 12<sup>th</sup> of September and ending on Saturday 14<sup>th</sup> with a real beach party. Of course, between these two events a lot of scientific content is programmed as well.

We call it “scientific” program, while in real life, we do our utmost best to bring an ideal mix of fundamental science with very applied topics, ready to be used by practitioners and other stakeholders from the field.

The board of the AETETE now contains three scientific committee members, focusing on the scientific programs of the next meetings. If you have suggestions, please do not hesitate to advise us. For this year’s meeting we are pleased to announce 4 very interesting keynote speakers. Following our annual tradition, the SBTE will be represented by Dr **Felipe Perecin** (Faculty of Animal Sciences and Food Engineering, Veterinary Medicine Department, University of Sao Paulo, Brazil), who will speak about cellular interactions between the oocyte and somatic cells. Also, Dr Perecin promised us to provide sufficient hands-on advice translated from the great fundamental knowledge he and his team generated over the years. The intense collaboration between AETETE and SBTE is very well appreciated by the board and all members. As you know, this year we jointly publish already for the fifth time our abstract proceedings and invited lectures in Animal Reproduction. At the Affiliated Society meeting at IETS, this collaboration and joint publication efforts between AETETE and SBTE were mentioned and really acknowledged. This year our society will also be represented at the SBTE meeting in Brazil by Hilde Aardema and she will provide us with a short overview on the SBTE’s conference highlights of this year during our meeting in Murcia.

Following Dr Perecin, we will hear from Dr **Peter Hansen** (Department of Animal Sciences, University of Florida), who will expand on the importance of heat stress in cattle breeding and how a changing climate

may affect our embryo technology business. Dr Hansen promised us to focus on solutions and valuable advice. His lecture will be generously supported by our main sponsor Vétoquinol. This is of course very well appreciated by the Society.

Our third keynote speaker, Dr **Sylvie Chastant** (National Veterinary School of Toulouse, France), will speak about the importance of inflammation and disease on the quality of the oocyte and the embryo and on reproductive performances. Disease (clinical and subclinical) is often overlooked as a reason for subfertility and we need specialist attention to cover disease importance in the field of assisted reproduction. Dr **Olli Peltoniemi** (Faculty of Veterinary Medicine, University of Helsinki, Finland) is our fourth invited speaker, and will expand on recent advances in reproductive management and biotechnology in the pig industry. The pig industry is big in Spain and in many other European Countries. We think that reproduction and the importance of assisted reproductive techniques in swine industry deserves attention in our scientific program.

Next to the invited speakers, we will have 12 short oral presentations. Furthermore, I can already tell you that more than 30 abstracts were submitted in the Student Competition section. Only a shortlist of the best 5 abstracts will be selected by the board after a thorough and totally blinded reviewing process. These top quality abstracts will be presented during the meeting in our prestigious Student Competition session. Be there to help us to fuel the discussions! In total, this year, we have about 110 abstracts submitted. This is an absolute record and it shows that our AETE meeting is perceived as an attractive platform to present new data and to discuss with colleagues.

As every year, we will have two interactive workshops. The first workshop be moderated by Dr **Zvi Roth** (The Hebrew University of Jerusalem, Israel) and focuses on the practical aspects of heat stress in our embryo technology business. How can we anticipate and avoid the negative effects of climate change. This heat stress workshop is generously supported by Vétoquinol and by One Cause Biomedical. The importance of public opinion is increasing and we should, as a society, prepare ourselves and formulate a

strong opinion. Our second workshop, chaired by Dr **Roger Sturmey** (Hull-York Medical School, Hull, UK), will hopefully provide us the prompting and space to consider how our work might appear to members of the public. This workshop will be interactive and digital – so you are all encouraged to be on your ‘phones! Please be prepared to be active and share your ideas and opinion during our two workshops. Workshops form an essential part of our conference program and we, as a board, further want to build on the interactive character of these sessions. The board composed workshop guidelines for the organizers to make sure that our workshops are attractive for practitioners and stimulate interaction with the audience!

The highlight of our meeting in Murcia is of course the AETE Pioneer Award. It is a great honor for all members of the AETE board, and for me personally, to present Prof Dr **Poul Hyttel** (Department of Veterinary and Animal Sciences, Faculty of Health and Medical Sciences, University of Copenhagen, Denmark) as the 2019 AETE Medalist winner. Since 1990, he has been the Professor of Anatomy at the Department of Anatomy and Physiology at the Royal Veterinary and Agricultural University; now Department of Veterinary and Animal Sciences (DVAS), Faculty of Health and Medical Sciences at University of Copenhagen. Poul Hyttel’s current research activities are directed towards pluripotent animal and human stem cells and in vitro embryo production. A fully equipped stem cell laboratory approved for genetically modified cells has been established at DVAS. The major contemporary projects focus on (1) establishment of human patient-specific neural in vitro cell models (“microbrains”) for modeling of neurodegenerative disorders by the use of induced pluripotent stem cells (iPSC); (2) establishment of animal iPSCs for the development of the domestic animals as a translational model for iPSC-based cell therapy; and (3) in vitro production of bovine embryos, where the technologies for oocyte maturation, fertilization and embryo culture in vitro are optimized and genomics is applied for precise selection of high quality embryos. He has authored more than 280 refereed international articles and has been the principal supervisor of more than 40 PhD-students and postdocs. In 1997-1998 Prof. Hyttel was President of the International

Embryo Transfer Society, in 2011 he was awarded Doctor Honoris Causa at University of Antwerp, Belgium, in 2015 he was knighted 1st Class Order for his services to Denmark, and in 2018 he was awarded Doctor Honoris Causa at Estonian University of Life Sciences, Tartu, Estonia.

I hope you have noticed: we have a brand new registration system. This system was also successfully used for the first time to review the abstracts. Furthermore, due to the new European rules on privacy (GDPR) we are obliged to ask you to subscribe again for our Newsletter. Please go to our website and indicate whether we can use your contact details for sending the Newsletter and all the info about our conference.

And finally, we cannot underestimate the great importance of our Sponsors in our Society. We are very grateful to (25th June 2019):

Main: [Vetoquinol]; General: [Ceva Santé Animal]; Exhibitors: [imv TECHNOLOGIES] [EGG TECH] [ivf BIOSCIENCE] [IVF tech] [Minitüb] [PETS] [CONTROLTECNICA Instruments] [SPARMED APS] [ART Lab Solutions] [SCR Europe srl] [WTA] [REPBIOTECH Marie-Sklodowska Curie ITN] [One Cause Biomedical]; Supporters: [IVI Murcia]. You can find the latest updates about our sponsors on our website. Please visit <https://www.aete.eu/sponsors/> !

Stay with us for the latest updates on the program at [www.aete.eu](http://www.aete.eu). Good luck for and thank you to all the speakers and poster presenters (please consult the guidelines on our website) as they are a vital part of our scientific program. Enjoy the summer holidays and I welcome you all in Murcia.

Jo Leroy, President of the AETE

July 2019

## AETE BOARD MEMBERS

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# WORKSHOP PREP – SOCIAL ACCEPTANCE OF REPRODUCTIVE TECHNOLOGY IN LIVESTOCK

Reproductive technology is a rare example of scientific research that has made immediate translational impact into society. However, it's position in society is more broad than 'science' since it touches on an emotive subject – about which almost everyone has an opinion. There are a number of studies that explore the societal and ethical aspects of reproductive technology in human clinical medicine, however its use in agriculture can present even more challenging topics for society. The concept of combining of reproductive technology with agricultural practices can stir evocative and powerful views in wider society. However, these views may arise from limited information, or sensationalist representation in the media and online.

It therefore becomes an imperative to take a proactive approach to defining and describing the use of reproductive technologies in a responsible and considered manner in livestock. Terms that are familiar to practitioners and researchers may be unclear and, even alarming to individuals with less understanding. The AETE seeks to embark on a journey to consider the representation and appearance of reproductive technologies as they

are used in livestock management and will run a workshop at the upcoming annual meeting.

Ahead of this workshop, think about some of the terms and words that we use in our every day business and think about how you would explain these words to non-expert members of the public. Think also about how the word and descriptors that we use in our every day specialist language might be misinterpreted or misunderstood.

At the workshop, we will be doing some online interactive work, so please do ensure that you have an internet enabled device with you.

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## SPONSORS & PRACTITIONERS FORUM

**Parallel session Friday 14.45- 15.45 Room Mediodía**

The board members Daniel Le Bourhis, Jan Detterer and Helene Quinton have prepared a new session for practitioners with the title "**Networking for practitioners and sponsors: What is new in ART business?**". Seven sponsors will present interesting new products or protocols and practitioners can share their experiences.

We also want to discuss ideas for this forum for the next meetings.

Hey you...  
Have you registered for the AETE  
meeting in Murcia yet? No?  
Well, what are you waiting for?  
Head to  
<https://www.conftool.net/aete2019>



# INVITATION TO MURCIA 2019!

On behalf of the European Embryo Transfer Association, the local organizing committee cordially invites you to the 35th scientific meeting in Murcia, Spain, from the 13<sup>th</sup>-14<sup>th</sup> September 2019.



The Local Organizing Committee will be chaired by **Dr. Raquel Romar**, University of Murcia, Murcia (rromar@um.es).

## Welcome Reception and Congress Venue

For those of you who will be arriving on the 12<sup>th</sup> the welcome reception will take place at the Hotel Nelva where registration and the AETE scientific program will be held. We will all meet and enjoy a fantastic cocktail of “tapas” in the outside gardens of this comfortable and elegant hotel.



*Hotel Nelva – Conference Venue*

## Gala Dinner

After a first day of science on Friday 13<sup>th</sup>, we will walk from congress venue to Royal Casino (<http://realcasinomurcia.com/>), an architecturally unique building built in the late 19<sup>th</sup> century. This iconic spot in Murcia contains many different styles including a classical and modernist facade and Moorish and Pompeian patios. After visiting this emblematic building we will be served a tasteful dinner based on local Murcian gastronomy and we will enjoy live music and dancing. The Casino is located 1 minute walking from Cathedral’s square so do not miss to visit that!



*Casino Fascade*



*Casino's indoor area*

## Farewell party

On Saturday 14, we will take the bus to Campoamor beach (45 minutes) where we will be meeting at Montepiedra Playa Restaurant, located right by the beach sand to enjoy typical dinner and a get-together party with live music. Buses will take us back to Murcia but for those of you who prefer to spend the night in Campoamor and enjoy the beach please visit the option at the hotels page.



*Montepiedra Playa Restaurant (Farewell Party)*

## How to get Murcia

The city of Murcia, the sixth most populated city in Spain, is located to the southeast of the Iberian Peninsula. It is the capital of the Autonomous Community of the same name with an area of 11,317 km<sup>2</sup>.

## By plane

Alicante-El Altet International airport (70 km from Murcia downtown). [www.aena.es/en/alicante-airport/index.html](http://www.aena.es/en/alicante-airport/index.html)  
Once landed you can reach Murcia by bus ([www.alsa.com/en](http://www.alsa.com/en); Single ticket for 5.19€ and Roundtrip ticket for 9.34€), by taxi (around 50€) or by transfer.

Corvera airport (Murcia) is another option with connections to the city by taxi (29€ fixed fair) or bus transfer (5€ - Interbus). The airport is located at 25 km from Murcia downtown.

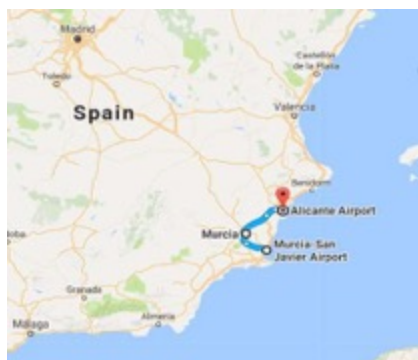
<https://www.corveraairporttravel.com>

For special deals on transfers from airports to Murcia you can contact our partner [congresosmurcia@viajeseci.es](mailto:congresosmurcia@viajeseci.es).

#### **By car**

Spain has a modern road system so if you prefer to take the car here you have some distances and connections to Murcia:

- From Barcelona the trip takes around 5h 45min (578 km) by AP-7 highway.
- From Madrid the trip takes around 3h 45min (400 km) by A-3 and A-30 highways.
- From Valencia the trip takes around 2h 20min (218 km) by A-33 highway.
- From Alicante the trip takes around 1h (60 km) by A-7 highway.



#### **Accommodation**

You can find many options for accommodation in Murcia and some nice hotels 5-10 minutes walking from the venue. Our partner offers special prices for all AETE attendants. Please log in

<http://viajeselcorteingles.symposium.com/24198/section/14197/35th-scientific-meeting-of-the-aete-2019.html> to make your choice or to ask for more options.

Hotel Nelva\*\*\*\*sup (Congress Venue)

[www.hotelmurcianelva.com/en/](http://www.hotelmurcianelva.com/en/)

Hotel Agalia \*\*\*\*

[www.agaliahotel.es/en/](http://www.agaliahotel.es/en/)

Hotel Azarbe \*\*\*\*

[www.hotelazarbe.com/en/](http://www.hotelazarbe.com/en/)

Hotel El Churra \*\*\*

[www.elchurrahotelmurcia.com/](http://www.elchurrahotelmurcia.com/)

More information at

[www.turismodemurcia.es/en/dormir](http://www.turismodemurcia.es/en/dormir).

You can find more detailed information about the scientific and social program of the AETE

meeting on the AETE website. The Local Organizing Committee encourages you to join us in this meeting that we are sure will be worth it both scientifically and professionally speaking. In addition, the organized social events will allow us to meet and enjoy good moments together. We will do our best to make your stay in Murcia as pleasant as possible.

We all look forward to seeing you in September 2019 in Murcia.

#### **The LOC (in alphabetical order)**

Estefanía ALCAZAR TRIVIÑO

Sebastián CÁNOVAS BERNABÉ (Co-chair)

Pilar COY FUSTER

Joaquín GADEA MATEOS

Josep GINER TORRES

María JIMÉNEZ MOVILLA

Pablo LARROSA MORALES (El Barranquillo SL)

Carmen MATÁS PARRA

Daniel MARTÍNEZ BELLO

Juan Eladio OLIVA TRISTANTE

Raquel ROMAR ANDRÉS (Chair)

Salvador RUIZ LÓPEZ

#### **Some reasons to come to Murcia**

Region of Murcia is located on the Mediterranean arc in the area known as *Costa Calida*, one of the lesser known tourist spots in Spain what makes it the ideal place to travel to get an authentic Spanish experience without the usual crowds. Murcia is a city made to measure by its inhabitants, perfect for long walks to allow visitors to uncover its great exuberant personality and Islamic soul. Come and explore the *Murcia* region, known as the garden of Spain and the orchard of Europe.

Some of the areas in the city that deserve a visit are:

#### *The Cathedral and its tower*

It was built over the course of five centuries (14<sup>th</sup>-18<sup>th</sup>), and its various styles (Gothic, Renaissance and Baroque) are an impressive testimony to the history of Murcia. Construction began on the building in 14<sup>th</sup> century, on the ground that formerly housed the largest mosque in the city.



### *The Bishop's Palace*

In the same Cathedral Square, next to the magnificent façade of the Cathedral, stands the Bishop's Palace. The official seat of the Diocese of Cartagena, it was constructed in the 18<sup>th</sup> century, and today is one of the most important buildings of the city of Murcia's monumental heritage.



### *The Malecon esplanade*

"El Malecón" is an embankment wall to protect against the flow of the river Segura. It dates back to 1420 when, following two major floods, the City Council decided to demolish the old and damaged houses in order to build a wall, which was built on the same boundaries of the current esplanade.



### *Flowers Square*

This beautiful and vivacious square, in the center of the city is surrounded by nineteenth-century buildings and is the place of "tapas" par excellence.



You cannot leave "Plaza de las Flores" without a stop at the pastry shop Bonache, one of the most famous in the city, and try a unique Murcian speciality: the meat pie.

### **Gastronomy**

Murcia is known as the Orchard of Europe. If look at the label of the fruit and vegetables that you find in your supermarket you will probably find it

comes from Murcia region. Tasting fruits and vegetables from Murcia and its traditional recipes of rice dishes, grilled meats and fish, is a pleasure.

Some of our traditional dishes from "la huerta" (orchard) include Paparajotes, a typical Murcian sweet treat, made with lemon leaves.



*"Paparajotes", traditional Murcian sweet.*

### **Weather**

Finally, our prevailing good weather is yet another reason to visit us any time of year. One of the most characteristic aspects of Murcia is its constant blue skies, and the bright sunlight that permeates the city.

In September temperatures typically ranges from 18° to 31°C. Bring light clothes and swimming dress!

With two seas on one coastline, the Mar Menor and the Mediterranean sea, beaches of endless white sand and wild coves with crystal-clear water, the Costa Calida has the beaches you have to visit no matter which (Calbanche, La Manga, San Pedro, Mazarrón, Aguilas, ...).

### **Outside Murcia city**

Murcia Region retains innumerable vestiges of the past in different places such as **Cartagena**, a port fronting on the Mediterranean Sea, **Lorca**, the town of a Hundred Coats of Arms, or **Caravaca**, the Holy Town. The abundant remains and archaeological sites include rock-paintings in cave-shelters dating back to the Iberian period, the splendour of Roman antiquity, Visigothic cities, Arab medinas, Christian castles, watch-towers or churches and temples. Just 45 minutes by car from Murcia, in Cartagena, a city with more than 3,000 years of history, you can visit the Roman Theatre, built in the 1<sup>st</sup> century before Christ by Emperor Augustus.

For special deals on trips and visits to touristic spots please contact our partner [congresosmurcia@viajeseci.es](mailto:congresosmurcia@viajeseci.es)



## **UPCOMING EVENTS**

### **SBTE**

**15-18 August, 2019**

Comandatuba, Bahia, Brazil  
<http://www.sbte.org.br/index>

### **EAAP 2019 –EUROPEAN FEDERATION OF ANIMAL SCIENCE**

**26-30 August, 2019**

Ghent, Belgium  
<https://www.eaap2019.org>

### **INTERNATIONAL SYMPOSIUM ON RUMINANT PHYSIOLOGY**

**3-6 SEPTEMBER, 2019**

Leipzig, Germany  
<http://www.isrp2019.com>

### **AETE**

**13-14 September 2019**

Murcia, Spain  
<http://www.aete.eu/images/PDF/Invitation35thAETEMeeting.pdf>

### **ESDAR**

**19-22 September 2019**

St. Petersburg-Pushkin, Russia  
<http://www.esdar.org/esdar-conference-2019/announcement-2019-gb-1.html>

### **SIET – 11<sup>TH</sup> INTERNATIONAL MEETING/28<sup>TH</sup> ANNUAL MEETING**

**10-12 October, 2019**

Garda (Verona), Italy  
<http://www.sietitalia.it>

### **AETA & CETA/ACTE JOINT ANNUAL CONVENTION**

**24-26 October 2019**

Colorado Springs, Colorado, USA  
[https://www.aeta.org/mtg\\_future.asp?autotry=true&ULnotkn=true](https://www.aeta.org/mtg_future.asp?autotry=true&ULnotkn=true)

### **IETS – 46<sup>TH</sup> ANNUAL MEETING**

**16-19 January 2020**

New York, USA  
<https://www.iets.org/2020/>

### **ICAR**

**28 June – 2 July 2020**

Bologna, Italy  
<http://animalreproduction.org/current/>

# PRELIMINARY PROGRAMME – AETE 2019



# AETE

Association Européenne des Technologies de l' Embryon

Association of Embryo Technology in Europe

## 35<sup>th</sup> SCIENTIFIC MEETING

HOTEL NELVA

Murcia, Spain

PROGRAM

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13<sup>th</sup> and 14<sup>th</sup> September 2019  
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## THURSDAY, September 12<sup>th</sup> 2019

- 13:30-19:30: Preconference workshop: *OPU, vitrification and use of reproductive fluids in bovine species*  
Veterinary Farm, University of Murcia.  
18.30-20.00: Registration  
20.00-22.00: Welcome Reception

## FRIDAY, September 13<sup>th</sup> 2019

- 08.00-18.00: Registration  
08.30-08.45: Opening meeting: AETE President Jo Leroy and Chair of the LOC Raquel Romar  
**SESSION 1: Chairpersons: HILDE AARDEMA & DANIEL LE BOURHIS**  
08.45-09.30: *First invited lecture:*  
**Felipe Perecin**, Veterinary Medicine Department, University of Sao Paulo, Brazil:  
*Cellular interactions during oocyte development and maturation*  
09.30-10.15: *Second invited lecture: Supported by VETOQUINOL*  
**Peter J Hansen**, Department of Animal Sciences, University of Florida, United States of America:  
*Reproductive physiology of the heat-stressed cow: implications for fertility and assisted reproduction*  
10.15-11.15: POSTER SESSION 1 (even numbers) and coffee break  
**STUDENT COMPETITION SESSION: Chairpersons: LOTTE STROEBECH & JO LEROY**  
11.15-12.30: Short oral communications  
**M. Moya-Jódar et al.**; *Generation of vascular deficient porcine embryos*  
**I. Hyder et al.**; *Vital tagging of potential naive pluripotency in a mouse model*  
**C. Banliat et al.**; *A proteomic approach to decipher embryo-maternal interactions in the oviduct*  
**L. Martínez-Fresneda et al.**; *Proteomic analysis of ejaculated and epididymal sperm associated with freezability in Iberian ibex (Capra pyrenaica)*  
**S. García-Martínez et al.**; *Culture under the physiological temperature registered along the reproductive tract of female pigs improves the blastocysts yield in vitro*  
12.30-12.45: Sponsor presentation  
12.45-14.00: Lunch  
**SESSION 2: Chairpersons: MARJA MIKKOLA & ROGER STURMEY**  
14.00-14.45: *Third invited lecture:*  
**Sylvie Chastant-Maillard**, National Veterinary School of Toulouse, France:  
*Inflammation: friend or foe of cow reproduction?*  
14.45-15.45: Short oral communications: Cloning, transgenesis and cryobiology  
**C. Cuello et al.**; *Transcriptome of porcine blastocysts stored in liquid state for up to 48 h*  
**L. Richter et al.**; *Intracytoplasmic sperm injection using sex-sorted sperm in the bovine*  
**S. Navarro-Serna et al.**; *First production of Calpain3 KO pig embryo by CRISPR/Cas9 technology for human disease modelling: efficiency comparison between electroporation and intracytoplasmic microinjection*  
**M. Serrano Albal et al.**; *SNP based Preimplantation Genetic Testing for Aneuploidy (PGT-A) to improve pregnancy outcomes in cattle IVP: a blind retrospective study*  
14.45-15.45: Sponsors and practitioners forum (Parallel session): **Chairpersons: DANIEL LE BOURHIS, JAN DETTERER & HELENE QUINTON**  
*Networking for practitioners and sponsors: What is new in ART bussiness? (Room Mediodía)*  
15:45-16.45: POSTER SESSION 2 (even numbers) and coffee break  
16.45-18.30: Workshop I: *The impact of heat stress on dairy cows fertility-The management point of view*  
chaired by Zvi Roth, The Hebrew University of Jerusalem, Israel  
*Supported by VETOQUINOL & ONE CAUSE BIOMEDICAL*  
**Zvi Roth**, The Hebrew University of Jerusalem, Israel: *Efficient cooling management and remedial hormonal treatment to alleviate the effect of heat stress on ovarian function in dairy cows*  
**Peter J Hansen**, University of Florida, United States of America: *Embryo transfer- a promising tool for improving fertility during heat stress*  
**Fabiola Freitas de Paula-Lopes**, Federal University of Sao Paulo, Brazil: *Using thermoprotective factors to alleviate the effects of heat stress on the ovarian pool of oocytes: lessons from the lab bench to the field*  
**Pol Llonch**, Autonomous University of Barcelona, Spain: *Adaptation to heat stress in sows: an unfinished business*  
20.00-02:00: Gala Dinner. Royal Casino

## SATURDAY, September 14<sup>th</sup> 2019

08:00-17:00: Registration

### SESSION 3: Chairpersons: JANE MORRELL & HELENE QUINTON

09.00-09.45: *Fourth invited lecture*

**Olli Peltoniemi**, Faculty of Veterinary Medicine, University of Helsinki, Finland:

*Developments of reproductive management and biotechnology in the pig*

09.45-10.45: Short oral communications: OPU/IVF and ET - Physiology and Reproduction in male semen technology

**X. Lin et al.**; *Bta-miR-10b secreted by bovine embryos negatively impacts preimplantation embryo development*

**P. Salvetti et al.**; *Prediction of pregnancy after transfer of bovine in vitro produced embryos based on recipients' blood plasma metabolomics*

**N. Ghanem et al.**; *Transcript abundance and antioxidant biomarker of buck semen cryopreserved with melatonin supplementation*

**F. Martínez Pastor et al.**; *Season affects refrigerated-stored semen doses from a commercial stud AI centre: A flow cytometry study of sperm physiology and chromatin status*

10.45-11.45: POSTER SESSION 3 (odd numbers) and coffee break

11.45-12.15: General Assembly

12.15-13.30: Lunch/Student Lunch

### SESSION 4: Chairpersons: TERESA MOGAS & JO LEROY

13.30-14.15: *Fifth invited lecture*

**Poul Hyttel**, Department of Veterinary and Animal Sciences, University of Copenhagen, Denmark:

*Oocytes, embryos and stem cells in a one health perspective*

14.15-14.30: Pioneer award 2019 - Poul Hyttel AETE Medalist Presentation

introduced by Trudee Fair (Ireland)

14.30-15.30: Short oral communications: Embryology, Developmental Biology and Physiology of Reproduction

**S. Yaacobi-Artzi et al.**; *Using a time-lapse system to study the morphokinetics of blastocysts derived from heat-shocked oocytes*

**S. Baldovská et al.**; *Anti-cancer potential of pomegranate peel on human ovarian carcinoma cells OVCAR-3*

**J. De Bie et al.**; *Trolox during in vitro maturation of bovine oocytes can protect embryos from palmitic acid induced lipotoxicity during development: effects on mRNA transcript abundance*

**V.A. van der Weijden et al.**; *Dynamic transcriptome changes during embryonic diapause and reactivation in the embryo and endometrial epithelium of the European roe deer*

15:30-16.30: POSTER SESSION 4 (odd numbers) and coffee break

16.30-18.00: Workshop II: *Social acceptance of reproductive technologies in livestock* chaired by Roger Sturmeay, Hull York Medical School, United Kingdom.

**Darren Griffin**, University of Kent, UK and **Roger Sturmeay**, Hull York Medical School, UK: *Reproductive technology - why is current and future practice important for agriculture?*

**Ann Van Soom**, Ghent University, Belgium and **Roger Sturmeay**, Hull York Medical School, UK: *Reproductive technologies; what is current and what is tomorrow?*

18.00-18.30: Closing session: Results for Student competition, best oral presentation and best poster presentation. invitation to the AETE Conference in 2020

20.00-24:00: Farewell party. Campoamor beach



## **SPEAKER BIOGRAPHIES – AETE 2019**

### **Dr. Sylvie Chastant-Maillard**



Dr. Sylvie Chastant-Maillard is a French veterinarian, graduated from Alfort National Veterinary School (near Paris, France) and Diplomate of the European College of Animal Reproduction. She spent 15 years teaching reproduction in Alfort National Veterinary School and since 2010, in Toulouse National Vet School, in the South of France. Her real passion is teaching, especially to share knowledge on reproduction. Her second professional interest is applied research (in the field of reproduction, of course), trying to answer field questions. I have a special interest in bovine endometritis, ovarian resumption of cyclicity and precision livestock farming.

### **Dr. Peter J. Hansen**



Dr. Peter J. Hansen is a Distinguished Professor and L.E. “Red” Larson Professor of Animal Sciences at the University of Florida. His research focuses on the biology of pregnancy and embryonic survival and development of methods to improve fertility and assisted reproductive technologies in livestock (particularly dairy cattle). Particular emphasis is placed on elucidating effects of elevated temperature on pregnancy, characterizing the nature of maternal control of early embryonic development and identifying genes controlling embryonic survival and fertility. In addition, work is underway to develop methods to improve dairy cow fertility during heat stress and to increase profitable uses of embryo transfer. Hansen received the B.S. in Agricultural Sciences

from the University of Illinois in 1978 and the MS and PhD degrees from University of Wisconsin (M.S., 1980; Ph.D., 1983). Hansen served as President of the International Embryo Technology Society (2013-2014) and other organizations.

### **Dr. Poul Hyttel**

Dr. Poul Hyttel graduated as Doctor of Veterinary Medicine (DVM) in 1979 from the Royal Veterinary and Agricultural University in Copenhagen. He received his PhD degree in 1982 and his degree as Doctor of Veterinary Sciences in 1988 from the same university, where he also lectured as an Assistant and later Associate Professor until 1990. Since 1990, he has been the Professor of Anatomy at the Department of Anatomy and Physiology at the Royal Veterinary and Agricultural University; now Department of



Veterinary and Animal Sciences (DVAS), Faculty of Health and Medical Sciences at University of Copenhagen.

Poul Hyttel's current research activities are directed towards pluripotent animal and human stem cells and in vitro embryo production. A fully equipped stem cell laboratory approved for genetically modified cells has been established at DVAS. The major contemporary projects focus on (1) establishment of human patient-specific neural in vitro cell models ("microbrains") for modeling of neurodegenerative disorders by the use of induced pluripotent stem cells (iPSC); (2) establishment of animal iPSCs for the development of the domestic animals as a translational model for iPSC-based cell therapy; and (3) in vitro production of bovine embryos, where the technologies for oocyte maturation, fertilization and embryo culture in vitro are optimized and genomics is applied for precise selection of high quality embryos.

In 1997-1998 Prof. Hyttel was President of the International Embryo Transfer Society, in 2011 he was awarded Doctor Honoris Causa at University of Antwerp, Belgium, in 2015 he was knighted 1st Class Order for his services to Denmark, and in 2018 he was awarded Doctor Honoris Causa at Estonian University of Life Sciences, Tartu, Estonia.

### **Dr, Olli Peltoniemi**



Dr. Olli Peltoniemi graduated as a veterinarian from the Faculty of Veterinary Medicine at the University of Helsinki in 1992. He then studied reproduction in domestic animals at the University of Sydney, Australia (1993-1994) leading to a Master of Veterinary Sciences degree in 1995. He completed the requirements as a National specialist in Production Animal Medicine in 1997 and was awarded a PhD in domestic animal reproduction by the University of Helsinki in 1999. Olli became a Diplomate of the European College of Animal Reproduction in 2001 and the European College of Porcine Health Management in 2005.

Olli joined the staff of the Faculty of Veterinary medicine in Helsinki in 1995 and has held various roles, mainly in clinical sciences and domestic animal reproduction, culminating in a Full Professorship in domestic animal reproduction in 2010. Regarding leadership, in addition to leading his own pig research group for 20 years, he has had a number of leading roles at the Faculty including the deputy head of the Production Animal medicine Department from 2007-2009, chairing the research community from 2010-2012, and has been the Vice-dean for research since 2010. He was appointed as a board member of TINE, the Research Council of the University of Helsinki in 2014. Olli has served on the ECAR examination committee from 2003-2005, chairing the committee in 2005, served as secretary from 2009-13 and is currently the President of ECAR as well as being a member of the EBVS Board. The most recent challenge is that of a director of Helsinki One Health at the University of Helsinki.

Further details:

[https://tuhat.helsinki.fi/portal/en/persons/olli-peltoniemi\(8545e559-66fb-4b1f-b47b-accd36e64f3b\).html](https://tuhat.helsinki.fi/portal/en/persons/olli-peltoniemi(8545e559-66fb-4b1f-b47b-accd36e64f3b).html)

## Dr. Felipe Perecin



Dr. Felipe Perecin received a bachelor's Degree in Veterinary Medicine in 2002 and a PhD in Animal Reproduction- Veterinary Medicine in 2007, both from the Sao Paulo State University in Brazil. He completed his post-doctoral studies (2007-2008) at the University of Sao Paulo at Pirassununga (Brazil).

Since 2016, Dr. Perecin is an Associate Professor at the Veterinary Medicine Department at the Faculty of Animal Sciences and Food Engineering of the University of Sao Paulo although he started lecturing in the same department as an Assistant Professor in 2009. Since 2017, he is the Head of the Graduate Program in Animal Bioscience at the University of Sao Paulo. He was member of the board (Scientific director- 2016-2017) of the Brazilian Embryo Technology Society (SBTE) and since 2015 he is the Academic Editor of the Animal Reproduction journal. His research group is dedicated to understanding cellular and molecular mechanisms underlying oocyte and embryo development. They investigate metabolic and signaling pathways leading to the acquisition of oocyte competence as well as the disturbances caused by in vitro culture conditions on oocytes and embryos. In the last years, they increased their interest in mechanisms that allows intercellular communication within the ovarian follicle and between the embryo and maternal tissues (i.e. transzonal projections and extracellular vesicles). The group goals include the development of strategies aiming improvements on assisted reproduction technologies and fertility in domestic animals.

Have a  
wonderful  
summer and  
see you in  
MURCIA!