

PROGRAM BOOK

38TH ANNUAL CONFERENCE OF THE
INTERNATIONAL EMBRYO TRANSFER SOCIETY

THEME:

*IMPROVING OUTCOMES THROUGH MANIPULATIONS OF THE
MATERNAL ENVIRONMENT*



JANUARY 7-10, 2012
RENAISSANCE GLENDALE HOTEL & SPA
PHOENIX, ARIZONA

Co-CHAIRS OF THE SCIENTIFIC PROGRAM:
PASCALE CHAVATTE-PALMER AND REBECCA KRISHER

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2010-2011 IETS BOARD OF GOVERNORS

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2012 ACKNOWLEDGMENTS AND PREFACE

The 38th Annual Meeting of the International Embryo Transfer Society will be held at the Renaissance Glendale Hotel & Spa in Phoenix, Arizona, USA, from January 7 to 10, 2012. The theme of this year's program is "Improving outcomes through manipulations of the maternal environment." This theme emphasizes the emerging realization that manipulations, in either maternal diet or embryo environment, made during early stages of development have lasting effects on offspring phenotype and health. Invited speakers, all recognized leaders in their fields, will examine how the maternal environment influences male and female gamete quality, follicular development, and fertility; how periconceptional events and maternal nutrition can alter embryo quality, offspring sex ratio, and subsequent long-term development; how the endometrium acts to mediate these responses; and how the placenta responds to environmental challenges to program the growth and health of the developing fetus and offspring. Our keynote speaker, Dr. Stephen Ford, will discuss the role of Developmental Origins of Health and Disease (DOHaD) in the context of animal production. We believe that basic scientists, practitioners, and students will find relevance in these important topics. Also of interest and not to be missed are the preconference symposia: "Recent Advances in Bovine Reproduction and Embryo Transfer," organized jointly with IETS and AETA, and "The Use of Domestic Animals as Biomedical Models," organized by the IETS Domestic Animal Biomedical Embryology (DABE) committee.

We have also made a few innovations this year in the program. There will be two concurrent sessions, giving attendees more options to personalize the meeting. Sessions directly aimed at practitioners include the annual Practitioners' Forum, which will discuss advances in the use of IVF and IVF frozen embryos in the commercial ET setting, and the new Practitioners' Think Tank, in which a discussion leader will moderate an interactive session on how to achieve high herd fertility. A Companion Animal, Non-Domestic and Endangered Species (CANDES) Symposium has also been included during the main meeting. It will include a featured speaker as well as oral abstract presentations that will highlight recent advances in these species. Finally, as in other years, sessions will include presentations of submitted high-quality abstracts on timely, cutting-edge research, and two poster sessions will allow for interaction and discussion between established scientists, new PIs, and student members and establishment of much new collaboration. Last but certainly not least, the Annual Student Competition will showcase the best research conducted by six of our outstanding student members.

Exciting new additions this year include events organized by and for our student members, the Morulas, and supported by the Society. These include a Morulas student mixer, a Morulas Journal Club luncheon, and the Morulas and Mentors luncheon. We are delighted that the Morulas have developed into an active and enthusiastic group, representing the bright future of our society. We invite and encourage you to participate in these events in their inaugural year.

Finally, there are many people to thank for making this meeting a reality. The invited speakers did an outstanding job in writing and editing their manuscripts on time so that we can all benefit from their information long after the meeting ends. Special thanks go to the cadre of colleagues who reviewed manuscripts and abstracts and to our section editors who coordinated this effort. We are thankful to so many of you who willingly gave of your time and effort to support the Society in this regard. In addition, the two preconference symposia came about solely because of the great efforts of Drs. Gabriel Bo, Reuben Mapletoft, Pascale Chavatte-Palmer, Matthew Wheeler, and Fulvio Gandolfi. Dr. Chuck Long and the local organizing committee did an outstanding job securing an excellent location and very importantly ensuring that we will have an excellent time both scientifically and socially. We must also gratefully acknowledge the support and guidance of the IETS Board of Governors in the preparation and presentation of this Annual Conference in every regard. Logistically, Ms. Debi Seymour of FASS, the executive secretary for IETS, has put great effort into looking after every detail of the conference, for which she has our sincere gratitude. Dr. Tony Flint must also be recognized and thanked for his continued interest in and support of the conference via the student poster competition and publication of our proceedings in Reproduction, Fertility and Development. We could not hold the meeting without our sponsors, and we would like to especially thank Bioniche, Pfizer Animal Health, IMV Technologies, MiniTube, INRA and PremUp for their support. Most importantly we thank YOU, attendees both old and new, for coming to the meeting, providing your scientific expertise, enjoying the fellowship, and making this a successful Society. Enjoy!

Co-Chairs
Pascale Chavatte-Palmer and
Rebecca Krisher

2012 RECIPIENT OF THE IETS PIONEER AWARD

O. J. GINTHER



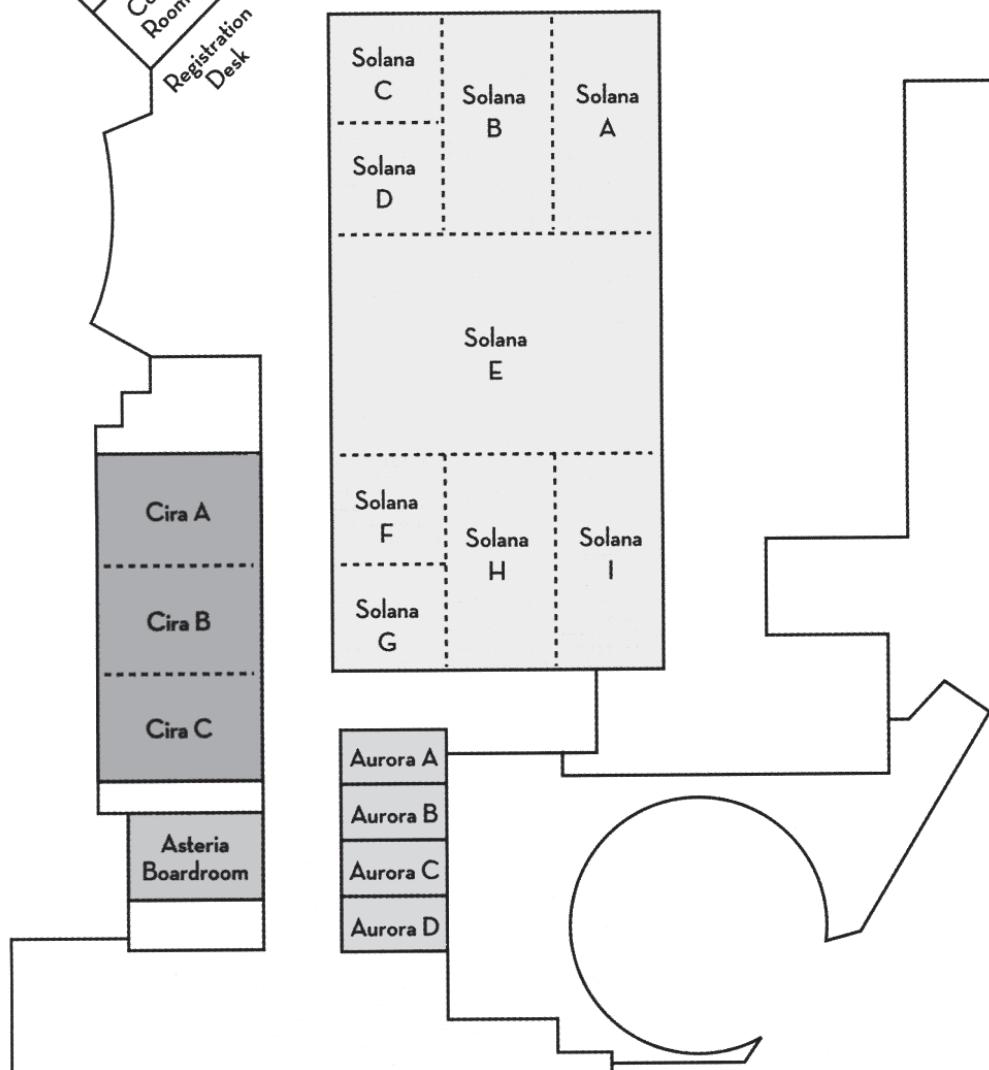
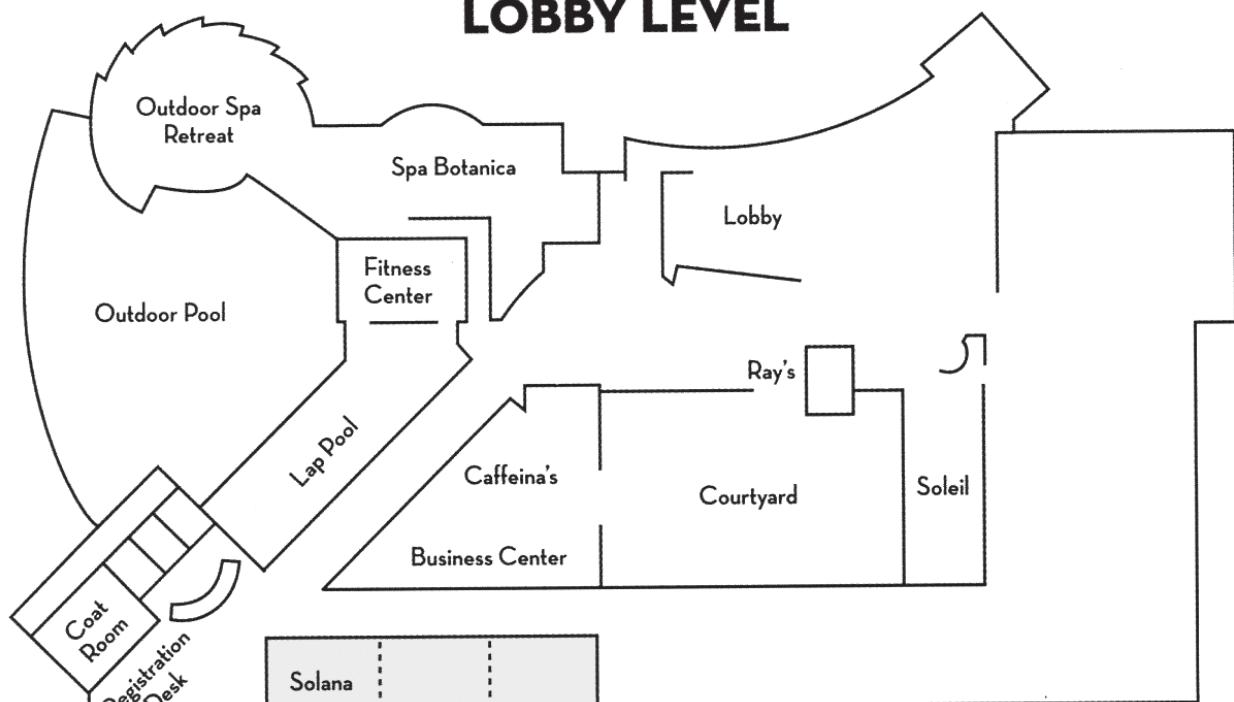
Award Presentation: Monday, January 9 at 16:30

PREVIOUS RECIPIENTS

- | | |
|-------------------------------|-----------------------------------|
| I. Wilmut (2011) | W.K. Whitten (1996) |
| R. J. Mapletoft (2010) | C.R. Austin (1995) |
| S. P. Leibo (2009) | N.W. Moore (1994) |
| G. Seidel, Jr. (2008) | R.G. Edwards (1993) |
| A. Iritani (2007) | R.L. Brinster (1992) |
| D. Kraemer (2006) | A.K. Tarkowski (1991) |
| S. Willadsen (2005) | J.D. Biggers (1990) |
| B. Brackett (2004) | C. Thibault (1989) |
| K. Betteridge (2003) | A.L. McLaren and D. Michie (1988) |
| R.H. Foote (2002) | E.J.C. Polge (1987) |
| P.J. Dziuk (2001) | T.M. Sugie (1986) |
| R. Yanagimachi (2000) | L.E.A. Rowson (1985) |
| R.M. Moor (1999) | L.E. Casida (1984) |
| I. Gordon (1998) | M.C. Chang (1983) |
| S. Wintenberger-Torres (1997) | R.O. Berry (1982) |

MAP OF THE VENUE

LOBBY LEVEL



RENAISSANCE GLENDALE HOTEL & SPA

38TH IETS ANNUAL CONFERENCE

CALENDAR OF EVENTS

THURSDAY, JANUARY 5, 2012

- Noon–18:00 IETS Board of Governors meeting (Asteria Boardroom)
16:00–20:00 AETA Board meeting (Aurora C)

FRIDAY, JANUARY 6, 2012

- 07:30–17:00 AETA Board meeting (Aurora C)
09:00–18:00 IETS Board of Governors meeting (Asteria Boardroom)
09:00–18:00 HASAC Research Subcommittee meeting (Aurora B)
13:00–20:00 W2171 meeting (Aurora A)
16:00–19:00 Registration

SATURDAY, JANUARY 7, 2012

- 07:00–18:00 Registration
08:00–17:30 Preconference symposium—Recent Advances in Bovine Reproduction and Embryo Transfer (Cira AB)
08:00–17:30 Preconference symposium—The Use of Domestic Animals as Biomedical Models (Cira C)
13:00–18:00 Commercial exhibit setup and poster setup (Solana E)
13:30–17:00 IETS Foundation Board of Trustees meeting (Astoria Boardroom)
17:00–18:00 IETS student group (The Morulas) business meeting (Aurora A)
18:30–19:30 Morulas Student Mixer (Hospitality Suite)

SUNDAY, JANUARY 8, 2012

- 06:30–08:00 Poster setup (Solana E)
07:00–08:30 HASAC Food Safety Subcommittee meeting (Aurora B)
07:00–18:00 Registration
07:00–08:30 IETS Foundation Education Committee meeting (Aurora A)
07:30–08:30 Past Presidents' breakfast (Aurora C)
07:30–08:30 Student competition presenters breakfast with Foundation Education Committee (Aurora D)
08:00–17:00 Commercial exhibition (Solana E)
08:00 – Noon AETA Certification Tests
08:45–09:00 Opening and welcome (Solana AB)
09:00–10:30 Session I—Environmental Effects on Gamete Quality
10:30–11:00 Refreshment break and poster exhibit and exhibition (Solana E)
11:00–12:30 IETS Foundation Student Competition Presentations (Solana AB)
12:30–14:00 Lunch break
12:30–14:00 IETS Board luncheon with affiliate society representatives (Aurora C)
12:30–14:00 HASAC Forms and Certificates Subcommittee meeting (Aurora B)
12:30–13:30 Morulas Journal Club luncheon (Aurora D)
14:00–15:30 Session II—Nutrition, Obesity and Fertility (Solana AB)
15:30–16:00 Refreshment break and poster exhibit and exhibition (Solana E)
16:00–17:30 Session III—Periconceptional Events Alter Subsequent Development (Solana AB)
17:30–18:00 Short presentations from submitted abstracts
18:00–20:00 Domestic Animal Biomedical Embryology (DABE) open meeting (Solana AB)
18:00 -19:00 Morulas Event: An interactive discussion of work in a human IVF laboratory (Aurora B)
20:00 Welcome reception (Cira Ballroom)

MONDAY, JANUARY 9, 2012

07:30–16:00 Registration
07:30–9:30 HASAC Regulatory Subcommittee meeting (Aurora A)
08:00–18:00 Commercial exhibits (Solana E)
08:30–10:30 Poster exhibit and exhibition (Solana E)
09:30 – 18:00 Affiliates Meeting Room (Cascade A)
10:00–10:30 Break (Solana E)
10:30–12:00 Session IV—Embryo Quality and Implantation (Solana AB)
12:00–12:30 Short presentations from submitted abstracts (Solana AB)
12:30–14:00 Lunch break
12:30–14:00 IETS Data Retrieval Committee meeting (Aurora B)
12:30–14:00 Exhibitors' luncheon with the IETS Board (Aurora D)
12:30–13:30 Morulas and Mentors luncheon (Solana F)

Concurrent Sessions

14:00–15:30 Practitioners' Think Tank—How Can We Achieve the Highest Fertility in Our Herds? (Solana HI)
14:00–16:00 Session V—Development of the Embryo and Feto-Placental Unit (Solana AB)
15:30–16:00 Short presentations from submitted abstracts (Solana AB)
16:00–16:30 Refreshment break and poster exhibit and exhibition (Solana E)
16:30–16:45 Tribute to Peter W. Farin (Solana AB)
16:45–17:15 IETS Pioneer Award presentation (Solana AB)
17:15–18:00 IETS annual business meeting (Solana AB)
18:00–20:00 Companion Animal, Non-Domestic and Endangered Species (CANDES) open meeting (Solana HI)
18:00–20:00 HASAC open meeting (Solana AB)

TUESDAY, JANUARY 10, 2012

07:00–08:30 Organizational meeting of the IETS Board of Governors (Astoria Boardroom)
08:00–15:00 Registration
08:00–13:30 Commercial exhibits (Solana E)
08:30–10:30 Poster Session II and exhibition (Solana E)
08:30 – 18:00 Affiliates Meeting Room (Cascade A)
10:00–10:30 Break (Solana E)

Concurrent Sessions

10:30–12:30 Practitioners' Forum—Recent Advances in the Use of IVF and IVF Frozen Embryos in Commercial Embryo Transfer (Solana AB)
10:30–12:30 CANDES Scientific Session—Advances in Reproductive Technologies in CANDES (Solana HI)
12:30–13:30 Lunch break
12:30–13:30 2012, 2013, 2014 Program Committee luncheon (Aurora C)
12:30–13:30 Organizational lunch meeting of the IETS Foundation (Aurora D)
13:30–17:00 Commercial exhibit and poster teardown (Solana E)
13:30–14:00 IETS Foundation Student Competition Awards, CANDES, DABE, and HASAC updates (Solana AB)
14:00–14:45 IETS Distinguished Service Award presentation (Solana AB)
15:00–15:45 Session VII—Keynote Address (Solana AB)
15:45–16:00 Closing ceremony (Solana AB)
16:30–17:30 10th IETS annual running competition (TBA)
19:00–22:30 Closing party (Ciro Ballroom)

GENERAL INFORMATION

MEETING ROOM DIRECTORY

Main Conference Sessions Solana AB and Solana HI

Exhibits Solana E

Poster Displays Solana E

Please see the Calendar of Events for additional room assignments.

REGISTRATION DESK HOURS

The registration desk is located in the main foyer.

Pickup of preregistration packets only

Friday, January 6 16:00–19:00

On-site registration hours

Saturday, January 7 07:00–18:00

Sunday, January 8 07:00–18:00

Monday, January 9 07:30–16:00

Tuesday, January 10 08:00–15:00

EXHIBIT INFORMATION

Solana E

Setup

Saturday, January 7 15:00–18:00

Exhibits Open

Sunday, January 8 08:00–17:00

20:00 (Reception)

Monday, January 9 08:00–18:00

Tuesday, January 10 08:00–13:30

Teardown

Tuesday, January 10 13:30–17:00

Details on the exhibitors can be found in the Exhibit Directory on page 52.

BADGES

As a security requirement, we request that all participants wear their conference name badges to all sessions and social functions.

CERTIFICATES OF ATTENDANCE AND PRESENTATION

If you requested a Certificate of Attendance or Certificate of Presentation with your registration, it will be included in your badge packet. If you did not request a certificate and need one, please come to the registration desk.

CURRENCY

The US Dollar is the legal tender in the United States. There are currency exchange centers located in Phoenix Airport. For up-to-date currency exchange information, check the Universal Currency Converter at <http://www.xe.net/ucc/>. International credit cards are accepted throughout the country, and traveler's checks can be changed at banks, hotels, resorts, and most city stores.

MESSAGE BOARD

Any messages received for conference delegates will be posted on the message board located near the registration desk.

REFRESHMENTS

Morning and afternoon refreshments are included in your registration fee and are provided during the scheduled break times in the Exhibition area located in Solana E.

DINING AND ENTERTAINMENT

Guests of the Renaissance Glendale Hotel & Spa can quench their thirst and delight their palates with poolside cuisine from Refresco's. Other exquisite fare may be found throughout the hotel, including Soleil, an upscale-casual dining option serving contemporary American favorites, Ray's lounge, and Caffeina's marketplace café. Those who wish to replenish their senses may treat themselves at the two-story oasis Spa Botanica, a spectacular indoor-outdoor spa. As the sun plunges below the Sonoran Desert horizon for its retreat, the nightlife continues where the day left off, emanating energy and desert flair. At Westgate City Center, restaurants, shops, music, and entertainment hotspots carry on long after the sun makes its descent. Within walking distance from the hotel you will find an exotic array of restaurants with offerings from a light meal to a Southwestern feast.

SERVICES AND AMENITIES

The Renaissance Hotel is a family-friendly hotel offering guests the most relaxing, entertaining, and carefree time in Phoenix. We welcome you to enjoy the many miles of trails Glendale has to offer. Information is available on trail locations and safety. You may also come and enjoy the vast and truly spectacular Sonoran Desert in one of the most unique, off-road opportunities of a lifetime. Families and business travelers alike can enjoy a full-service spa with outdoor treatment rooms, and a fitness center with an indoor lap pool and exercise equipment.

THE PROGRAM CO-CHAIRS ACKNOWLEDGE AND THANK THE FOLLOWING PEOPLE

SECTION EDITORS

Ken Bondioli, *Student Competition*
Osamu Dochi, *Artificial Insemination*
Chuck Long, *Cloning/Nuclear Transfer*
Yuksel Agca, *Cryopreservation*
Erdogan Memili, *Developmental Biology*
Charlotte Farin, *Early Pregnancy/Pregnancy Recognition*
Rocio Rivera, *Embryo Culture*
Carol Keefer, *Embryo Manipulation*
Gabriel Bo, *Embryo Transfer*
Ann Van Soom, *Epidemiology/Diseases*
Naida Loskutoff, *Exotic Species*
John Gibbons, *Folliculogenesis/Oogenesis*
Christine Wrenzycki, *Gene Expression*
Jason Herrick, *IVF/IVP*
Patrick Blondin, *Male Physiology*
Ken White, *Oocyte Activation*
Katrín Hinrichs, *Oocyte Maturation*
John Hasler, *Sexing*
Cesare Galli, *Sperm Injection*
Jorge Piedrahita, *Stem Cells*
Gabriel Bo, *Superovulation*
Jianbo Yao, *Transgenesis*

MANUSCRIPT AND ABSTRACT REVIEWERS

Jonathan Aaltonen	Elaine M. Carnevale	Ali Eroglu
Gregg P. Adams	Fidel Ovidio Castro	Jillian Fain
Yuksel Agca	Teresa de Castro	Trudee Fair
Carlos Ambrosio	Pascale Chavatte-Palmer	Charlotte Farin
Haydar Bagis	Young-Ho Choi	Peter Farin
Jennifer Barfield	Jose Cibell	Richard Fayer-Hosken
Pablo Bermejo-Alvarez	Marcos Colazo	Alireza Fazeli
Keith Betteridge	Adrienne Crosier	Manoel Sa Filho
Zeki Beyhan	Erin Curry	Hiroaki Funahashi
Patrick Blondin	Nathalie Debus	Cesare Galli
Gabriel Bo	Eve Devinoy	Fulvio Gandolfi
Tiffany Bohlender	Brad Didion	Julie Gard
Ken Bondioli	Scott Dindot	Duane Garner
Ralph Brehm	Osamu Dochi	Glen Gentry
Tiziana Brevini	Sule Dogan	John Gibbons
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Jennifer Wood
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Jianbo Yao

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MAIN SCIENTIFIC PROGRAM

THURSDAY, JANUARY 5, 2012

09:00–18:00 IETS Board of Governors meeting

16:00 – 20:00 AETA Board Meeting

FRIDAY, JANUARY 6, 2012

07:30 – 17:00 AETA Board Meeting

09:00–18:00 IETS Board of Governors meeting

09:00–18:00 HASAC Research Subcommittee meeting

13:00–20:00 W2171 meeting

16:00–19:00 Registration

SATURDAY, JANUARY 7, 2012

07:00–18:00 Registration

08:00–17:30 Preconference symposium—Recent Advances in Bovine Reproduction and Embryo Transfer

08:00–17:30 Preconference symposium—The Use of Domestic Animals as Biomedical Models

11:00–18:00 Commercial exhibit setup

13:00–18:00 Poster setup

13:30–17:00 IETS Foundation Board of Trustees meeting

17:00–18:00 IETS student group (The Morulas) business meeting

18:30 – 19:30 Morulas Student Mixer

SUNDAY, JANUARY 8, 2012

06:30–08:00 Poster setup

07:00–08:30 HASAC Health and Safety Subcommittee meeting

07:00–08:00 Registration

07:00–08:30 IETS Foundation Education Committee meeting

07:30–08:30 Past President's breakfast

07:30–08:30 Student competition presenters breakfast with Foundation Education Committee

08:00 – 12:00 AETA Certification Exam

08:00–17:00 Commercial exhibition

08:45–09:00 Opening and welcome (Pascale Chavatte-Palmer and Rebecca Krisher, Chuck Long)

Session I—Environmental Effects on Gamete Quality

Session Co-Chair: Carol Keefer, University of Maryland

Session Co-Chair: Georgia Pennarossa, Instituto Degli Animali Domestici

09:00–09:45 *Intrafollicular conditions as a major link between maternal metabolism and oocyte quality: A focus on dairy cow fertility*

Jo Leroy, University of Antwerp, Belgium

09:45–10:30 *Modification of spermatozoa in mature small ruminants*
Graeme Martin, University of Western Australia, Australia

10:30–11:00 Poster exhibit, Exhibition, Refreshment break

IETS Foundation Student Competition Presentations

Session Chair: Kenneth R. Bondoli, Louisiana State University

- 11:00 *Replication of somatic micronuclei in bovine oocytes*
N. G. Canel, R. J. Bevacqua, M. I. Hiriart, and D. F. Salamone (Abstract 1)
- 11:15 *The in vivo developmental potential of porcine skin-derived progenitors*
M. T. Zhao, X. Yang, K. Lee, J. Mao, J. M. Teson, K. M. Whitworth,
M. S. Samuel, L. Spate, C. N. Murphy, and R. S. Prather (Abstract 2)
- 11:30 *Meganuclease transgenesis in IVF and cloned bovine preimplantatory embryos*
R. J. Bevacqua, N. Canel, M. I. Hiriart, R. Fernandez-Martin, and D. F. Salamone
(Abstract 3)
- 11:45 *Effect of a prolonged aromatase inhibitor treatment on pre-ovulatory ovarian follicles in cattle*
J. Yapura, J. Singh, R. J. Mapletoft, R. Pierson, D. Rogan, and G. P. Adams (Abstract 4)
- 12:00 *Parthenogenetic embryonic stem cells are connected by functional intercellular bridges*
G. Pennarossa, G. Tettamanti, F. Gandolfi, M. deEguileor, and T. A. L. Brevini (Abstract 5)
- 12:15 *Production of gonadotropin-releasing hormone II receptor knockdown swine*
A. T. Desaulniers, A. M. Voss, R. A. Cederberg, C. Lee, G. A. Mills, M. D. Snyder,
and B. R. White (Abstract 6)
- 12:30–14:00 Lunch break
- 12:30–14:00 IETS Board luncheon with affiliate society representatives
- 12:30–14:00 HASAC Forms and Certificates Subcommittee meeting
- 12:30 – 13:30 Morulas Journal Club Luncheon

Session II: Nutrition, obesity and fertility

Session Co-Chair: John Gibbons, Brazos Valley Genetics

Session Co-Chair: Amy Desaulniers, University of Nebraska

- 14:00–14:45 *Growth hormone regulation of follicular growth*
Matt Lucy, University of Missouri, USA
- 14:45–15:30 *The impact of obesity on oocytes: Evidence for lipotoxicity mechanisms*
Rebecca Robker, University of Adelaide, Australia
- 15:30–16:00 Refreshment break/poster exhibit and exhibition

Session III: Periconceptional events alter subsequent development

Session Co-Chair: Jennifer Wood, University of Nebraska

Session Co-Chair: Mingtao Zhao, University of Missouri

- 16:00–16:45 *Adaptive responses of the embryo to maternal diet and consequences for post-implantation development*
Tom Fleming, University of Southampton, United Kingdom
- 16:45–17:30 *Periconceptional influences on offspring sex ratio and placental responses*
Cheryl Rosenfeld, University of Missouri, USA
- 17:30 *Application of quantum dot conjugates for investigating mammalian spermatozoa*
J. M. Feugang (Abstract 73)

- 17:40 *Comparison between static and dynamic culture results using a novel air actuation system*
 K. Matsuura (Abstract 88)
- 17:50 *Transcriptome analysis of single bovine embryos by RNAseq*
 P. J. Ross (Abstract 139)
- 18:00–20:00 Domestic Animal Biomedical Embryology (DABE) Open Meeting
- 18:00– 19:00 Morulas Event: An interactive discussion of work in a human IVF laboratory
- 20:00 Welcome reception

MONDAY, JANUARY 9, 2012

- 07:30–16:00 Registration
- 07:30--9:30 HASAC Regulatory Subcommittee meeting
- 08:00–18:00 Commercial exhibits
- 08:30–10:30 Poster session I/exhibition
- 10:00 -10:30 Break

Concurrent Sessions

Session IV: Embryo quality and implantation

Session Co-Chair: Anna Grazul-Bilska, North Dakota State University

Session Co-Chair: Jimena Yapura, University of Saskatchewan

- 10:30–11:15 *The role of fatty acids in oocyte and early embryo development*
 Roger Sturmey, University of Hull, United Kingdom
- 11:15-12:00 *Novel aspects of endometrial function: A biological sensor of embryo quality and driver of pregnancy success*
 Olivier Sandra, INRA, France
- 12:00 *Lipid Fingerprinting of Individual Bovine Blastocysts by Desorption Ionization Electrospray Mass Spectrometry*
 C. R. Ferreira (Abstract 39)
- 12:10 *Stage specific effects of the progesterone receptor antagonist, RU486, on early bovine embryo development*
 C. M. O'Meara (Abstract 58)
- 12:20 *Utilization of Endogenous Fatty Acid Stores for Energy Production in Bovine Pre-Implantation Embryos*
 M. Sutton-McDowall (Abstract 92)
- 12:30–14:00 IETS Data Retrieval Committee meeting
- 12:30–14:00 Lunch break
- 12:30–14:00 IETS Data Retrieval Committee meeting
- 12:30–13:30 Exhibitors' luncheon with the IETS Board
- 12:30 – 13:30 Morulas and Mentors Luncheon

Session V: Development of the Embryo and Feto-placental Unit

Session Co-Chair: Marcelo Bertolini, University of Fortaleza

Session Co-Chair: Romina Bevacqua, Universidad De Buenos Aires

- 14:00–14:45 *Environmental regulation of placental phenotype: Implications for fetal growth*
 Abby Fowden, Cambridge, United Kingdom

- 14:45–15:30 *Programming the offspring through altered uteroplacental hemodynamics: How maternal environment impacts uterine and umbilical blood flow in cattle, sheep and pigs*
 Caleb Lemley, Kim Vonnahme, North Dakota State University, USA
- 15:30 *Dietary CLA supplementation affects luteal gene expression and peripheral blood progesterone concentration in cattle.* H. Stinshoff (Abstract 57)
- 15:40 *Differential gene regulation of steroidogenic transcripts and estradiol production following in vitro pig embryo elongation in alginate hydrogel three-dimensional matrix*
 J. R. Miles (Abstract 99)
- 15:50 *Relationships between preovulatory follicle and corpus luteum blood flow in mares*
 A. Wischral (Abstract 124)
- 14:30–15:30 Practitioner's Think Tank: How can we achieve the highest fertility in our herds?
 Chair/Discussion Leader: Patrick Blondin
- 16:00–16:30 Refreshment break/exhibition
- 16:30 – 16:45 Tribute to Peter W. Farin
- 16:45–17:15 IETS Pioneer Award Presentation
- 17:15–18:00 IETS annual business meeting
- 18:00–20:00 Companion Animal, Non-Domestic and Endangered Species (CANDES) open meeting
- 18:00–20:00 HASAC Open Meeting
Outlines of the International Regulations and Requirements for the Import /Export of Reproductive Biomaterials
 Dr. Jacek Taniewski, Assistant Director of Live Animal Exports at the National Center for Import and Export

TUESDAY, JANUARY 10, 2012

- 07:00–08:30 Organizational meeting of the IETS Board of Governors
- 08:00–15:00 Registration
- 08:00–13:30 Commercial exhibits
- 08:30–10:30 Poster Session II/exhibition
- 10:00 – 10:30 Break

Concurrent Sessions

Practitioners' Forum: Recent Advances in the Use of IVF and IVF Frozen Embryos in Commercial Embryo Transfer

Chair: Peter Hansen, University of Florida

- 10:30 – 12:30 John Schmidt, TransOva. Incorporation of OPU, IVF and sexed semen in commercial ET programs in the USA
 Claire Ponsart, Association Européenne de Transfert Embryonnaire. Adoption or lack of adoption of IVF technologies in the European ET industry
 Joao Henrique Viana, Embrapa Dairy Cattle Research Center. Use of IVF technologies in South America

CANDES Scientific Session: 'Advances in reproductive technologies in CANDES'

Chair: Naida Loskutoff, Omaha's Henry Doorly Zoo

Moderators: Barbara Durrant, Institute for Conservation Research, San Diego Zoo

Duane Kraemer, Texas A&M University

- 10:30 – 11:00: *Reproductive Uniqueness and Diversity of Canids*

Nucharin Songsasen, Smithsonian Conservation Biology Institute, USA

Short Communications from Poster Abstracts:

11:00 – 11:15: *In vitro production of bison embryos*

J. P. Barfield, Colorado State University, Fort Collins, CO, USA

11:15 – 11:30: *Propagation of multiple cat hereditary disease models following assisted reproduction with frozen semen and embryos*

W.F. Swanson, Cincinnati Zoo & Botanical Garden, Cincinnati, OH, USA

11:30 – 11:45: *Inducing pluripotency in somatic cells from the snow leopard (*Panthera uncia*), an endangered felid*

R Verma, Monash Institute of Medical Research, Melbourne, Australia

11:45 – 12:00: *Birth of black-footed cat kittens after transfer of cryopreserved embryos produced by in vitro fertilization of oocytes with cryopreserved sperm*

C. E. Pope, Audubon Nature Institute Center for Research of Endangered Species, New Orleans, LA, USA

12:00 – 12:15: *Cryopreservation of snake semen: Are we frozen in time?*

R. Zacariotti, Universidade Cruzeiro do Sul, Sao Paulo, Brazil

12:15 – 12:30: *Development of assisted reproduction technologies for the endangered Mississippi gopher frog (*Rana sevosa*) and sperm transfer for in-vitro fertilization*

A. Kouba, Memphis Zoo Conservation and Research, Memphis, TN, USA

12:30–13:30 Lunch break

12:30- 13:30 2012, 2013, 2014 Program Committee Luncheon

12:30–13:30 Organizational lunch meeting of the IETS Foundation

13:30–17:00 Commercial exhibit and poster teardown

13:30–14:00 IETS Foundation Student Competition Awards, CANDES, DABE and HASAC Updates

14:00–14:45 IETS Distinguished Service Award Presentation

Session VII: Keynote address

Session Co-Chair: Rebecca Krisher, National Foundation for Fertility Research

Session Co-Chair: Pascale Chavatte-Palmer, INRA

15:00–15:45 *Evidence for similar changes in offspring phenotype following either maternal undernutrition or overnutrition: Potential impact on fetal epigenetic mechanisms*
Stephen Ford, University of Wyoming, USA

15:45–16:00 Closing ceremony

16:30-17:30 10th IETS annual running competition

19:00– 22:30 Closing party

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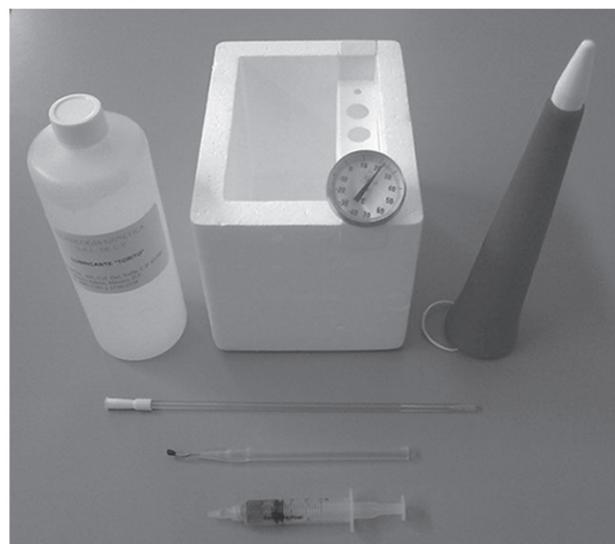
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POSTER SESSIONS

Location

Posters are located in Solana E of the Renaissance Glendale Hotel & Spa. (See map on page 51.)

Poster Numbers

Posters are identified by the number corresponding to the abstract number in *Reproduction, Fertility and Development* 2012; 24 (1). Numbering of the posters begin at 1 and ends at 240.

Setup

Posters can be put up from 13:00 to 18:00 Saturday, January 7, 2012, and 6:30 to 8:00 Sunday, January 8, 2012. All posters must remain up throughout the meeting. Authors of posters that are not put up by 8:00 on Sunday will be reported to the IETS President for possible disciplinary action.

Poster Session I

Presentations by authors of odd-numbered abstracts (i.e., 7, 9, 11, etc.) in *Reproduction, Fertility and Development* 2012; 24 (1) and the Student Competition finalist poster presentations will take place Monday, January 9, 2012, from 8:30 to 10:30.

Poster Session II

Presentations by authors of even-numbered abstracts (i.e., 8, 10, 12, etc.) in *Reproduction, Fertility and Development* 2012; 24 (1) will take place Tuesday, January 10, 2012, from 8:30 to 10:30.

Teardown

Poster teardown must take place from 13:30 to 17:00 Tuesday afternoon (January 10, 2012). Posters that are not taken down by 17:00 on Tuesday will be taken down and thrown away.

POSTER SESSION ORDER BY TOPIC

Poster Number = Abstract number in *Reproduction, Fertility and Development* 2012; 24 (1)

STUDENT COMPETITION

- 1 REPLICATION OF SOMATIC MICRONUCLEI IN BOVINE OOCYTES
N. G. Canel, R. J. Bevacqua, M. I. Hiriart, and D. F. Salamone
- 2 THE IN VIVO DEVELOPMENTAL POTENTIAL OF PORCINE SKIN-DERIVED PROGENITORS
M. T. Zhao, X. Yang, K. Lee, J. Mao, J. M. Teson, K. M. Whitworth, M. S. Samuel, L. Spate, C. N. Murphy, and R. S. Prather
- 3 MEGANUCLEASE TRANSGENESIS IN IVF AND CLONED BOVINE PREIMPLANTATORY EMBRYOS
R. J. Bevacqua, N. Canel, M. I. Hiriart, R. Fernandez-Martin, and D. F. Salamone
- 4 EFFECT OF A PROLONGED AROMATASE INHIBITOR TREATMENT ON PRE-OVULATORY OVARIAN FOLLICLES IN CATTLE
J. Yapura, J. Singh, R. J. Mapletoft, R. Pierson, D. Rogan, and G. P. Adams
- 5 PARTHENOGENETIC EMBRYONIC STEM CELLS ARE CONNECTED BY FUNCTIONAL INTERCELLULAR BRIDGES
G. Pennarossa, G. Tettamanti, F. Gandolfi, M. deEguileor, and T. A. L. Brevini
- 6 PRODUCTION OF GONADOTROPIN-RELEASING HORMONE II RECEPTOR KNOCKDOWN SWINE
A. T. Desaulniers, A. M. Voss, R. A. Cederberg, C. Lee, G. A. Mills, M. D. Snyder, and B. R. White

ARTIFICIAL INSEMINATION

- 7 COMPARISON OF TIMED ARTIFICIAL INSEMINATION PROTOCOLS USING PROSTAGLANDIN F_{2α} + ESTRADIOL OR PROSTAGLANDIN F_{2α} + ESTRADIOL + GONADOTROPIN-RELEASING HORMONE IN DAIRY COWS
J. K. Jeong, H. G. Kang, and I. H. Kim
- 8 EFFECT OF SUPPLEMENTATION WITH ESTRADIOL OR ESTRADIOL PLUS GONADOTROPIN-RELEASING HORMONE AFTER PROSTAGLANDIN F_{2α} ADMINISTRATION ON THE PREGNANCY RATES FOLLOWING TIMED ARTIFICIAL INSEMINATION IN DAIRY COWS
J. K. Jeong, H. G. Kang, and I. H. Kim
- 9 EFFECTS OF MECLOFENAMIC ACID ON LUTEAL FUNCTION OF BEEF CATTLE
C. A. Messerschmidt, F. M. Abreu, L. H. Cruppe, M. V. Biehl, M. L. Day, C. R. F. Pinto, and M. A. Coutinho da Silva
- 10 TRACEABILITY SYSTEM FOR AN INDIVIDUAL FROZEN SEMEN STRAW BY A TINY RADIO FREQUENCY IDENTIFICATION CHIP
Y. Hoshino, K. Mukojima, N. Minami, and H. Imai
- 11 SEASONAL EFFECT ON PREGNANCY RATES AND EARLY EMBRYONIC MORTALITY IN PLURIPAROUS MEDITERRANEAN BUFFALOES (*BUBALUS BUBALIS*) FOLLOWING ARTIFICIAL INSEMINATION WITH SEXED SEMEN
D. Vecchio, G. Neglia, A. Bella, P. Rossi, E. M. Senatore, G. A. Presicce, and B. Gasparrini

- 12 FERTILITY OF FROZEN EQUINE SPERM IN SYSTEMS FOR CRYOPRESERVATION
R. R. D. Maziero, P. N. Guasti, I. D. P. Blanco, I. Martin, G. A. Monteiro, M. J. Sudano, M. D. Guastali,
T. S. Rascado, F. C. Landim-Alvarenga, and F. O. Papa

CLONING/NUCLEAR TRANSFER

- 13 ULTRASOUND EVALUATION OF FETAL AND PLACENTAL DEVELOPMENT IN SOMATIC
CELL NUCLEAR TRANSFER AND ARTIFICIAL INSEMINATION BOVINE PREGNANCIES
N. Le Cleac'h, C. Richard, H. Kiefer, E. Lecarpentier, V. Hallé, O. Morel, D. Le Bourhis, H. Jammes,
and P. Chavatte-Palmer
- 14 EQUINE CLONING AND EMBRYO AGGREGATION: EFFECT OF BOVINE, PORCINE, FELINE,
AND EQUINE OOPLAST
A. Gambini, J. Jarazo, A. De Stefano, F. Karlanian, and D. Salamone
- 15 EFFECTS OF DEMECOLCINE ON THE MEIOTIC CELL-CYCLE AND MICROTUBULAR
KINETICS OF ACTIVATED BOVINE OOCYTES SUBMITTED TO CHEMICAL ENUCLEATION
N. Z. Saraiva, C. S. Oliveira, T. A. D. Tetzner, M. R. de Lima, S. C. Méo, and J. M. Garcia
- 16 EFFECT OF DONOR CELL AND TRICHOSTATIN A ON DEVELOPMENT OF CLONED DAIRY
CATTLE EMBRYOS
Z. Mei-Ling, Z. Yun-Hai, T. Yong, L. Ya, C. Hong-Guo, L. Yun-Sheng, H. Oto, K. Josef,
and Z. Xiao-Rong
- 17 CELL CYCLE SYNCHRONIZATION OF BOVINE FIBROBLASTS BY *AZADIRACHTA INDICA*
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- 18 TOTAL PARENTERAL NUTRITION DURING NEONATAL CARE OF THE FIRST BITRANS-
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N. Mucci, G. Kaiser, A. Mutto, S. Wacholder, J. Aller, F. Hozbor, J. Manes, and R. Alberio
- 19 CHANGES IN PLASMA STEROID CONCENTRATIONS DURING GESTATION IN COWS WITH
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M. Hirako, H. Takahashi, K. Kimura, N. Adachi, and S. Akagi
- 20 ALTERED GENE EXPRESSION IN BOVINE SOMATIC CELL NUCLEAR-TRANSFERRED
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- 21 EFFECT OF SECOND TIME XENOPUS EGG EXTRACT TREATMENT ON COLONY FORMA-
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- 23 DEVELOPMENTAL POTENTIAL OF CLONED TRANSGENIC PORCINE EMBRYOS PRO-
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- 25 THE DEVELOPMENTAL COMPETENCE AND PLURIPOTENT GENE EXPRESSION OF PORCINE SOMATIC CELL NUCLEUS TRANSFER EMBRYOS IMPROVED BY M-CARBOXY-CINNAMIC ACID BISHYDROXAMIDE
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- 26 PRODUCTION OF CLONED KOREAN RACCOON (*NYCTEREUTES PROCYONOIDES KORENSIS*) EMBRYOS BY INTERSPECIES SOMATIC CELL NUCLEAR TRANSFER USING ENUCLEATED PIG OOCYTES
S.-A. Cheong, Y. Jeon, S.-S. Kwak, R. Salehi, Y.-H. Nam, and S.-H. Hyun
- 27 THE HISTONE DEACETYLASE INHIBITOR 4-IODO-SUBEROYL ANILIDE HYDROXAMIC ACID IMPROVES TOTAL CELL NUMBER IN PIG NUCLEAR TRANSFER BLASTOCYSTS
K. M. Whitworth, J. M. Teson, K. Lee, J. Mao, K. J. Tessanne, L. D. Spate, and R. S. Prather
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- 30 EFFECT OF THE CYTOPLAST SOURCE AND KARYOPLAST TYPE ON THE DEVELOPMENT OF HANDMADE CLONED EMBRYOS IN GOATS
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- 31 EFFECT OF ACTIVATION METHOD ON IN VIVO DEVELOPMENT FOLLOWING SOMATIC CELL NUCLEAR TRANSFER IN GOATS
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- 32 NEURON-SPECIFIC EXPRESSION OF THE RED FLUORESCENCE PROTEIN IN CLONED DOGS
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- 34 DIFFERENTIALLY EXPRESSED PROTEINS OF EARLY-STAGE PLACENTA DERIVED FROM CLONED CAT EMBRYOS USING PROTEOMICS ANALYSIS
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- 35 DYNAMICS OF PERICENTRIC REPETITIVE SEQUENCES IN PREIMPLANTATION RABBIT EMBRYOS UNDERLINES INADEQUATE SPATIO-TEMPORAL REORGANIZATION AFTER NUCLEAR TRANSFER
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- 47 ROLE OF INSULIN-LIKE GROWTH FACTOR-I ON THE FUNCTIONAL PARAMETERS AND FERTILITY OF OVINE FROZEN-THAWED SEMEN
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- 48 EFFECT OF TREHALOSE ADDITION ON IN VITRO VIABILITY OF COOLED RAM SPERMATOZOA
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- 50 EFFECTS OF VITAMINS ON THE QUALITY AND FERTILITY OF BOAR SEMEN AFTER LIQUID PRESERVATION AT 5°C
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- 51 CHANGING ROOSTER SPERM MEMBRANES TO FACILITATE CRYOPRESERVATION
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- 52 HYALURONIC ACID IMPROVES CRYOTOLERANCE OF BUFFALO (*BUBALUS BUBALIS*) IN VITRO-DERIVED EMBRYOS
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- 53 VITRIFICATION OF HANDMADE CLONED BUFFALO EMBRYOS USING ETHYLENE GLYCOL AND DIMETHYL SULPHOXIDE AND SUBSEQUENT EFFECT ON CRYOSURVIVAL AND APOPTOSIS
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- 55 PROPAGATION OF MULTIPLE CAT HEREDITARY DISEASE MODELS FOLLOWING ASSISTED REPRODUCTION WITH FROZEN SEMEN AND EMBRYOS
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- 57 DIETARY CLA SUPPLEMENTATION AFFECTS LUTEAL GENE EXPRESSION AND PERIPHERAL BLOOD PROGESTERONE CONCENTRATION IN CATTLE
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- 58 STAGE-SPECIFIC EFFECTS OF THE PROGESTERONE RECEPTOR ANTAGONIST, RU486, ON EARLY BOVINE EMBRYO DEVELOPMENT
C. M. O'Meara, T. Fair, and P. Lonergan

- 59 HISTONE DEACETYLASE 1 KNOCK-DOWN IN BOVINE FIBROBLAST CELLS AND CLONED EMBRYOS
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- 60 TELOMERE LENGTH DYNAMICS DURING BOVINE PREIMPLANTATION EMBRYO DEVELOPMENT
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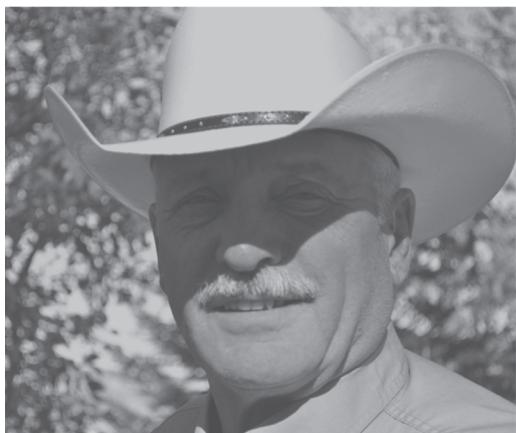
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2012 RECIPIENT

IETS DISTINGUISHED SERVICE AWARD



Dr. Larry Delver graduated from the Ontario Veterinary College in 1961 and engaged in mixed practice and ranch management in Western Canada until 1969, when he was hired by the Chicago Union Stockyards to work with their herd of Charolais imported from France. He first became aware of embryo transfer at that time while working in the Bahamas with those cattle. He then returned to Alberta as the farm manager for a cattle importing company and then set up an insurance adjusting company dealing with livestock claims, at the same time again engaging in mixed practice.

At that time he spent some time at the Western College of Veterinary Medicine catching up on advances that had occurred while he was in the Caribbean and also took an ET course from Reuben Mapletoft. In 1984 Dr. Delver joined the Health of Animals Branch of Agriculture Canada and specialized in import/export for the Canadian Food Inspection Agency, which led him to travel throughout the world. In 1995 he was given the AI and ET file by Dr. Brian Evans (currently chief food safety officer and chief veterinary officer for Canada) and began participating in the International Embryo Movement committee, eventually taking over from Dr. Brian Evans as chair of the HASAC Regulatory subcommittee, where he has remained ever since, even after retiring from Agriculture Canada.

Dr. Larry Delver's dedication to the IETS has never failed. He has been selflessly working for HASAC, and the IETS has benefited from his wide experience in the field of import/export of gametes and embryos. He has been dealing with issues regarding the regulatory aspects of ET, while also being a cattle breeder and chair of the Cattle Industry Council of Alberta Beef Producers, thus always keeping at heart the practical interests of practitioners and breeders as well as understanding the national or even worldwide consequences of any change in regulatory laws. As a person, Dr. Delver has always been very accessible and friendly and a great colleague to work with within HASAC and the IETS.

SPECIAL EVENTS

MORULAS (IETS STUDENT GROUP) BUSINESS MEETING

Saturday, January 7

17:00–18:00

Aurora A

OPEN MEETING OF THE DOMESTIC ANIMAL BIOMEDICAL EMBRYOLOGY (DABE) COMMITTEE

Sunday, January 8

18:00–20:00

Solana AB

WELCOME RECEPTION

Sunday, January 8

20:00

Renaissance Glendale Hotel & Spa

The Welcome Reception will take place on January 8 at 20:00. Wines, cocktails, and hors d'oeuvres will be served at the Cira Ballroom.

PRACTITIONERS' THINK TANK—HOW CAN WE ACHIEVE THE HIGHEST FERTILITY IN OUR HERDS?

Monday, January 9

14:00–15:30

Solana HI

OPEN MEETING OF THE HEALTH AND SAFETY ADVISORY COMMITTEE

Monday, January 9

18:00–20:00

Solana AB

OPEN MEETING OF THE COMPANION ANIMALS, NON-DOMESTIC AND ENDANGERED SPECIES COMMITTEE

Monday, January 9

18:00–19:00

Solana HI

PRACTITIONERS' FORUM—RECENT ADVANCES IN THE USE OF IVF AND IVF FROZEN EMBRYOS IN COMMERCIAL EMBRYO TRANSFER

Tuesday, January 10

10:30–12:30

Solana AB

CANDES SCIENTIFIC SESSION—ADVANCES IN REPRODUCTIVE TECHNOLOGIES IN CANDES

Tuesday, January 10

10:30–12:30

Solana HI

10TH IETS ANNUAL RUNNING COMPETITION

Tuesday, January 10

16:30–17:30

We look forward to seeing you participate in this year's fun run.

CLOSING PARTY

Tuesday, January 10

19:00–22:30

Come and join us for some delicious food, conversation, and dancing. There will be music for all those wishing to stay late and dance. (Tickets are required.)

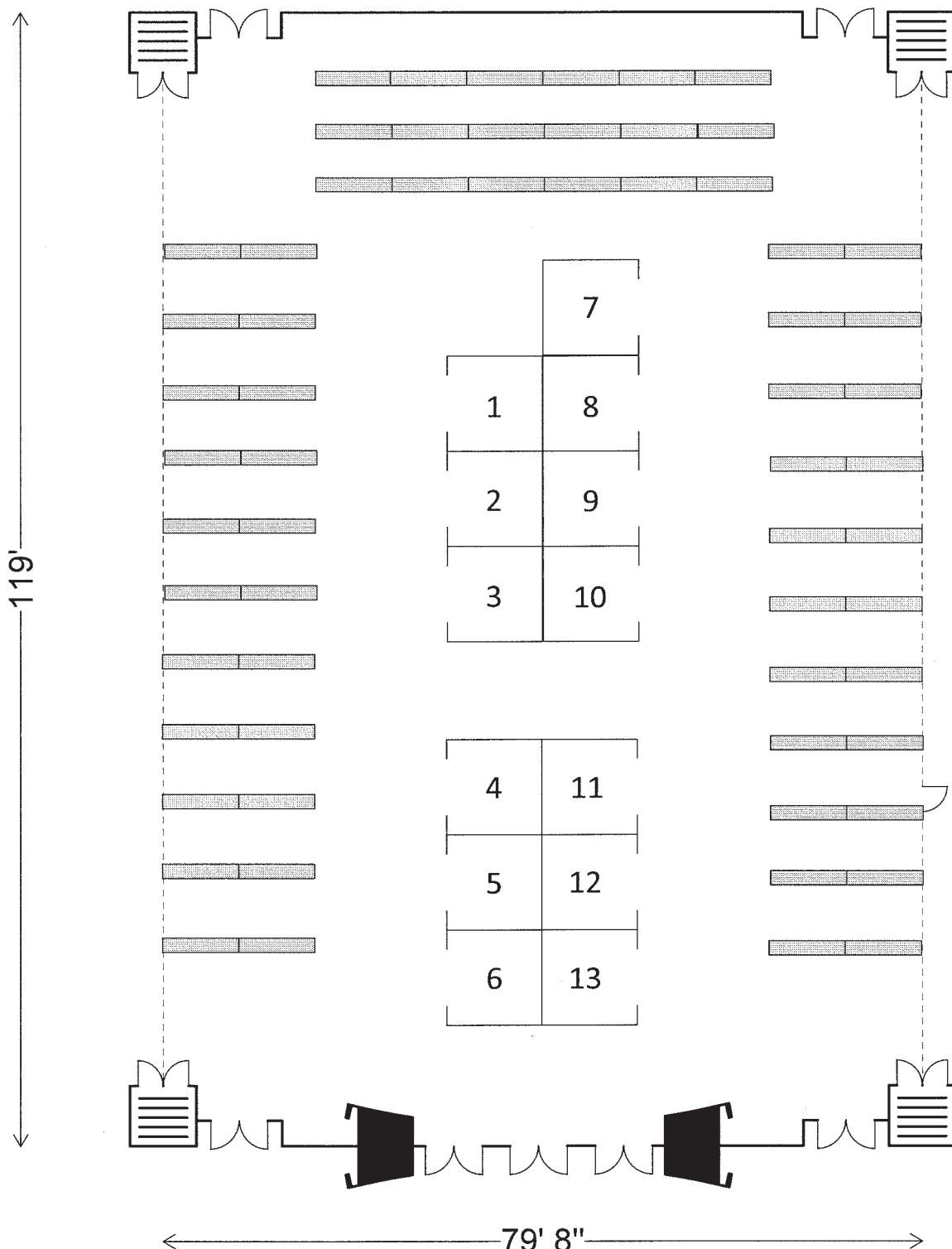
EXHIBIT ROOM LAYOUT

International Embryo Transfer Society

Saturday, January 7, 2011

BEO#: _____

(13) 10'x10' Booths



Solana Ballroom E

38TH IETS ANNUAL CONFERENCE

EXHIBIT DIRECTORY

BOOTH LISTING BY NUMBER

Booth# Company

- #1..... Professional Embryo Transfer Supply Inc.
(PETS)
- #2..... National Swine Resource and Research
Center
- #3..... IMV Technologies
- #4..... Minitube of America Inc.
- #5..... CSIRO Publishing

ALPHABETICAL LISTING OF COMPANIES

Agtech Inc.

Agtech is proud to be the embryo transfer supply source for thousands of reproduction professionals worldwide. We offer a large selection of cattle embryo transfer and artificial insemination products and equipment. With more than 400 items to choose from, Agtech has the reproduction supplies and equipment you need to succeed.

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Booth #12

American Embryo Transfer Association

The purpose of the American Embryo Transfer Association is to unite those organizations and individuals in the United States engaged in the embryo transfer industry into an affiliated federation operating under self-imposed standards of performance and conduct;

To present a unified voice of the industry to promote the mutual interests and ideals of its members;

To protect the users of the embryo transfer industry to the extent technically and ethically possible;

To educate the public properly to the status and capability of the United States embryo transfer industry; and to encourage others to engage in the pursuit of this industry.

1800 South Oak Street
Suite 100
Champaign, IL 61820
www.aeta.org
Booth #9

Booth# Company

- #6..... Bioniche Animal Health USA Inc.
- #7..... Tecnologia Genetica (TecnoGen)
- #8..... Partnar Animal Health
- #9..... American Embryo Transfer Association
(AETA)
- #10..... Biogenics
- #11..... Diamondback Drugs
- #12..... Agtech Inc.
- #13..... Bioniche Animal Health USA Inc

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A pioneer in product improvement and innovation, Biogenics understands the technical complexities of products used in cryopreservation, cryobiology, and assisted reproductive technology. Because of our long experience with these sophisticated products including IVF and embryo transfer instruments, supplies and equipment, we offer our customers the kind of unparalleled support that is available only from the most trusted expert.

2797 Napa Valley Corporate Drive
Napa, CA 94558
USA
www.biogenics.com
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ADDRESS
www.diamondbackdrugs.com
Booth #11

IMV Technologies

The world's leading player in the reproductive biotechnology market, IMV is present in 120 countries. IMV Technologies develops solutions designed to simplify the processes involved in herd improvement programmes. It has five main areas of expertise:

Semen collection and analysis
Sample preparation and dilution
Packaging and cryopreservation
Assisted insemination
Embryo transfer
www.imv-technologies.com
Booth #3

Minitube of America Inc.

Minitube of America Inc. is a leading provider of assisted reproduction technologies for porcine, bovine, equine, and canine. Minitube was established in 1986 to better serve the needs of customers in North America. Minitube of America is active in research and development and has produced many products that are now considered industry standards. Minitube's International Center for Biotechnology was

founded in 2004 to continue Minitube's commitment to learning and innovation. Visit the Minitube booth to learn more about the available products for IVF, embryo transfer, and embryo cryopreservation.

Phone: 800-646-4882
Fax: 608-845-1522
www.minitube.com
Booth #4

National Swine Resource and Research Center

Swine are the optimal model species for investigation of a large number of human diseases and have made valuable contributions to almost every field of human medicine. Swine share anatomic and physiologic characteristics with humans that make them ideal models for research. In addition, the anatomy and physiology make pig organs likely candidates for xenotransplantation.

The National Swine Resource and Research Center (NSRRC) was established in 2003 to develop the infrastructure to ensure that biomedical investigators across a variety of disciplines have access to critically needed swine models of human health and disease. The NSRRC will also serve as a central resource for reagents, information and training related to use of swine models in biomedical research.

S134B ASRC
University of Missouri
920 E. Campus Drive
Columbia, MO 65211
www.nsrrc.missouri.edu
Booth #2

Partnar Animal Health

Partnar Animal Health is pleased to present its range of embryo transfer and OPU products. We will present information on Stimufol (pFSH) and eMP3, our own range of embryo flush, hold and freeze media. For OPU, we also have the Ibex Portable Ultrasound with an OPU probe, aspiration pumps, and retrieval needles and the MicroQ controlled temperature shipping device for oocyte, embryo and fresh extended sexed semen transport.

3560 Pine Grove Avenue
Unit 227
Port Huron, MI 48060-1994
www.partnaranimalhealth.com
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Professional Embryo Transfer Supply Inc. (PETS)

PETS has been a world leading embryo transfer supply company for the bovine and equine industries for over 2 decades. Our goal all this time has been your success and we work every day to achieve this with quality service and quality E.T. supplies and equipment such as emCare, Vigro, emCon, EZ Way, Wesco, ECM and many more. Come visit with us for more details.

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www.pets-inc.com
Booth # 1

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The artificial insemination (AI) products that Tecnologia Genetica (TecnoGen) provides are the simplest and most effective in the industry, allowing highly effective and affordable insemination in cattle, sheep, and deer

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10029 Bodega Hwy
Sebastopol, CA 95472
tecnogen@prodigy.net.mx
info@tecnogenglobal.com
www.tecnogenglobal.com
Booth #7



Recent Advances in Bovine Reproduction and Embryo Transfer

IETS 2012 Preconference Symposium
Phoenix, Arizona
Saturday, January 7, 2012

- | | |
|-------|---|
| 08:00 | Opening remarks and introductory comments |
| 08:30 | The physiology of multifactorial problems limiting the establishment of pregnancy in dairy cattle – Alex Evans (Ireland) |
| 09:15 | Improving fertility to timed-AI by manipulation of circulating progesterone concentrations in lactating dairy cattle – Milo Wiltbank (USA) |
| 10:00 | Coffee break |
| 10:30 | The use of endocrine treatments to improve pregnancy rates in cattle – Jose Santos (USA) |
| 11:15 | Impact of circulating concentrations of progesterone and antral age of the ovulatory follicle on fertility of high producing lactating dairy cows – Richard Pursley (USA) |
| 12:00 | Lunch |
| 13:30 | Embryo death in cattle: An update – Michael Diskin (Ireland) |
| 14:15 | Coffee break |
| 14:45 | The effects of endometritis on the establishment of pregnancy in cattle – Robert Gilbert (USA) |
| 15:30 | Treatments for the synchronization of bovine recipients for fixed-time embryo transfer and improvement of pregnancy rates – Gabriel Bo (Argentina) |
| 16:15 | The evolution of superovulation protocols in cattle – Reuben Mapletoft (Canada) |
| 17:00 | General discussion |

Preconference DABE Symposium

January 7, 2012

Renaissance Glendale Hotel & Spa

The Use of Domestic Animals as Biomedical Models

- 08:00–08:15 Opening and welcome: Fulvio Gandolfi (University of Milan, Italy), Matt Wheeler (University of Illinois, Urbana, USA), Pascale Chavatte-Palmer (INRA, PremUp, France)
- 08:15–08:45 **Animal models for the study of human ovarian function** (Gregg Adams, University of Saskatoon, Canada)
- 08:45–09:15 **The pig as a biomedical model—How the National Swine Resource and Research Center can help you** (Eric Walters, University of Missouri, Columbia, USA)
- 09:15–09:45 **Progress towards the derivation of porcine induced pluripotent stem cells** (Stoyan Petkov, Institute of Farm Animal Genetics, Germany)
- 09:45–10:15 Coffee break
- 10:15–10:45 **Generation and characterization of induced pluripotent stem cells (iPSCs) from adult canine fibroblasts** (Jorge Piedrahita, North Carolina State University, Raleigh, USA)
- 10:45–11:15 **Introducing pluripotency in ruminants** (Paul Verma, South Australian Research and Development Institute, Australia)
- 11:15–11:45 **Generation of rabbit pluripotent stem cell lines** (Andras Dinnyes, BioTalentum Ltd., Hungary)
- 11:45–13:15 Lunch break
- 13:15–13:45 **The use of ruminants for biomedical research in perinatology** (Pascale Chavatte-Palmer, INRA, France)
- 13:45–14:15 **The horse as a large animal model for extra-fetal derived cell therapy of chronic respiratory diseases** (Anna Lange Consiglio, University of Milan, Italy)
- 14:15–14:45 **The importance of large animal models for translational research in bone tissue engineering** (Matt Wheeler, University of Illinois, Urbana, USA)
- 14:45–15:15 Coffee break
- 15:15–15:45 **Impact of large mammals models in immunology** (Isabelle Schwartz, INRA, France)
- 15:45–16:15 **Neurodegenerative diseases** (Anthony Chan, Emory University, Atlanta, GA, USA)
- 16:15–16:45 **Reprogramming of porcine epiblast-derived neural progenitor cells to pluripotency** (Mikkel A. Rasmussen, University of Copenhagen, Denmark)
- 16:45–17:00 Conclusion and closure

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