

*American Embryo Transfer Association  
Canadian Embryo Transfer Association*

**REGISTRATION PACKET**



**2004 AETA & CETA/ACTE  
Joint Convention**



**October 14 - 16, 2004  
Marriott Tampa Westshore**

**Wednesday, October 13**

11:00 AM - 6:00 PM  
1:30 PM - 5:00 PM  
6:00 PM - 10:00 PM

AETA & CETA/ACTE Board of Directors Meeting  
CETA/ACTE and AETA Certification Exam  
AETA Board of Directors Meeting

**Thursday, October 14**

7:00 AM - 3:00 PM  
7:00 AM - 2:00 PM  
3:00 PM - 5:00 PM  
3:00 PM - 5:00 PM  
3:00 PM - 5:00 PM  
6:30 PM - 10:00 PM

Golf Tournament  
Charter Boat Fishing/Tour  
Equine Wet Lab  
Ultrasound Wet Lab  
Small Ruminant Wet Lab  
Starship Dinner Cruise

**Friday, October 15, 2004**

7:00 AM - 7:00 PM  
7:00 AM - 5:00 PM  
7:00 AM - 8:00 AM  
9:00 AM - 4:00 PM  
8:00 AM - 11:00 AM  
10:00 AM - 10:30 AM  
11:00 AM - 12:00 PM  
12:00 PM - 1:30 PM  
12:00 PM - 1:30 PM  
1:30 PM - 4:15 PM  
3:00 PM - 3:30 PM  
4:15 PM - 5:15 PM  
6:00 PM - 7:00 PM  
7:00 PM

Exhibits  
Registration  
Continental Breakfast  
Companion Tour - Busch Gardens  
Scientific Sessions  
Break  
AETA & CETA/ACTE Annual Business Meeting  
Lunch  
CETA/ACTE New Board of Directors Meeting  
Scientific Sessions  
Break  
Certification Session for AETA and CETA/ACTE  
Social Hour  
Banquet

**Saturday, October 16**

6:45 AM - 8:00 AM  
7:00 AM - 8:00 AM  
8:00 AM - 5:00 PM  
8:00 AM - 12:00 PM  
10:00 AM - 10:30 AM  
12:00 PM - 1:30 PM  
12:00 PM - 1:30 PM  
1:30 PM - 5:00 PM  
3:00 PM - 3:30 PM  
3:30 PM - 5:30 PM

Past Presidents/Board of Directors Breakfast  
Continental Breakfast  
Companion Tour - Ybor, Columbia Restaurant, Florida Aquarium  
Scientific Sessions  
Break  
Lunch  
2005 Joint Convention Committee Meeting  
Scientific Sessions  
Break  
Practitioners Forum

**2004 Convention Committee**

**AETA**

Convention Chairman: Tom Rea  
Exhibit Chairman: Pat Richards

**CETA/ACTE**

Convention & Exhibit Chairman: Ron Herron

## **AETA Board of Directors**

President	Dr. Larry Kennel, Mount Joy, Pennsylvania
Vice President	Dr. Thomas L. Rea, Berthoud, Colorado
Secretary-Treasurer	Dr. Pat Richards, Bliss, Idaho
Immediate Past President	Dr. Randall H. Hinshaw, Harrisonburg, Virginia

Directors	Dr. Dan Hornickel, Whitewater, Wisconsin
	Dr. Todd Bickett, Chickamauga, Georgia
	Dr. Cheryl F. Nelson, Versailles, Kentucky
	Dr. Ron Kling, Grantsville, Maryland
	Dr. Richard Whitaker, Turner, Maine

### **AETA Office**

1111 N. Dunlap  
Savoy, IL 61874  
Tel: 217-398-2217  
Fax: 217-398-4119  
Email: [aeta@assochq.org](mailto:aeta@assochq.org)  
Web site: [www.aeta.org](http://www.aeta.org)

## **CETA/ACTE Board of Directors**

President	Dr. Martin Darrow, Abbotsford, British Columbia
Vice President	Dr. Richard Remillard, Delta, British Columbia
Immediate Past President	Dr. Rod McAlister, Calgary, Alberta
Directors	Dr. Gary Morgan, O'Leary, Prince Edward Island
	Dr. Ron Herron, Belleville, Ontario
	Dr. Louis Picard, Ste-Foy, Quebec
	Dr. Jean Rene Paquin, Riviere-du-Loup, Quebec
	Dr. Don Miller, Didsbury, Alberta
	Dr. Alain Moreau, CFIA representative, Ottawa, Ontario
	Rick McDonald, CLGA representative, Guelph, Ontario

### **CETA/ACTE Office**

Karen McDermott, Secretary-Manager  
Box 2000, 595 County Road #44  
Kemptville, Ontario  
Canada K0G 1J0  
Tel: 613-258-5944  
Fax: 613-258-3719  
Email: [ceta@ebi.ca](mailto:ceta@ebi.ca)  
Web site: [www.ceta.ca](http://www.ceta.ca)

## Convention Registration

Please see the attached registration form.

- Early registration deadline is Friday, September 10.
- Student registration is for people enrolled in school full-time.
- Refunds - Early registration fee will be refunded if notification is received prior to September 10.
- There is no extra charge for the Wet Labs being held on Thursday, October 14, but **please indicate on the registration form the number that will be attending each session.** There will be a limited number of participants for the wet labs (first in - first served).

## Continuing Education Hours

There will be 15 hours of continuing education for the 2004 AETA&CETA/ACTE Joint Convention. *This course has been approved for 14.5 hours of continuing education credit in jurisdictions which recognize AAVSB's RACE approval; however, participants should be aware that some boards have limitations on the number of hours accepted in certain categories and/or restrictions on certain methods of delivery of continuing education. Call AETA at 217-398-2217 for more information.*

## Accommodations

The 2004 AETA & CETA/ACTE Joint Convention will be held at the Marriott Tampa Westshore, in Tampa Bay, Florida. Rooms are being held at a group rate of \$112 per night for single/double. Reservations must be made prior to **September 27, 2004**. After this date, reservations will only be accepted upon availability and at the current rack rate. The convention rate will **not** apply for reservations after September 27. Please give the hotel the AETA/CETA group name when making a reservation.

**\*\*\*RESERVE YOUR ROOM NOW\*\*\***

Marriott Tampa Westshore  
1001 North Westshore Blvd.  
Tampa, Florida 33607  
Tel: 800-564-3489

## PRE-CONFERENCE EVENTS

*Thursday, October 14*

**Golf Tournament** Tee time: 8:00 am

**7:00 am - 3:00 pm**

**Sponsored by: Schering Animal Health Products-makers of ESTRUMATE®**

The golf tournament fee includes green and cart fees, use of driving range, transportation, and lunch.

The Golf Tournament will be held at the Tournament Players Club on Thursday, October 14, please see the attached registration form for more details and prices. The bus will depart from the hotel lobby at 7 am.

*Thursday, October 14*

**Large Deep Sea Fishing Boat**

**7:00 am - 2:00 pm**

Join a public deep sea-fishing program on a 90 foot Catamaran. Your captain and crew will be there to assist you. Tackle, bait and fishing license are included in the cost, please see the attached registration form for more details. Participants should be in the lobby no later than 1/2 hour prior to the event time.

*Thursday, October 14*

**Starship Dinner Cruise Pre-Conference Social**

**6:30 pm - 9:30 pm**

**Sponsored by: Bioniche Animal Health**

Sail into the sunset during the pre-conference social on Thursday, October 14, is from 6:30 pm - 9:30 pm on the StarShip Dinner Yacht. Hors d'oeuvres and dinner will be served, there will be a cash bar and the local band Luna Soleil Band will perform on the Top Deck. Transportation will be provided from the conference site to the Starship dock. ***There will only be a minimal charge for this evening, thanks to the very generous sponsorship of Bioniche Animal Health.*** This evening is limited to registered members and a companion. Children may attend if space is available. Registered exhibit representatives may attend, if space permits. This event is limited to the capacity of the ship, so please send in your registration form early if you wish to attend.

## Companion Tours

***Friday, October 15***

### **BUSCH GARDENS**

**9:00 am – 4:00pm**

Busch Gardens has something to offer everyone. For the thrill seekers, there is *Gwazi, Montu, Kumba*, and *Rhino Rally*. Rhino Rally will blend up-close animal encounters with an unpredictable off-road safari that ends with a raging river thrill ride. For the animal lovers, Busch Gardens is home to the *Edge of Africa*, the most up close animal experience in the South along with the *Myombe Reserve*, the renowned Chimpanzee and gorilla Habitat.

The newest addition to open is *R.L. Stine's Haunted Lighthouse*. The Haunted Lighthouse is a spine-tingling new 4-D movie experience that awaits you! Spun from an old fisherman's tale, mischievous children take you on a stormy adventure and dare you to discover the ghostly truth behind the legend of a haunted lighthouse. The movie's 4-D effects will surely keep you on the edge of your seat – just don't get caught between what is real and what is not!

There are also 350 different species of animals throughout the park. Last but not least, there are entertainment shows that will surely *WOW* all of your attendees.

Participants should be in the lobby no later than 1/2 hour prior to the event time.

***Saturday, October 16***

### **TAMPA CITY AND FLORIDA AQUARIUM TOUR**

**8:00 am – 5:00 pm**

The city of Tampa and Ybor City comes to life as your Tour Guide highlights the area. Enjoy the smell of fresh Cuban bread being baked as you tour the La Segunda Bakery in Ybor City. Hear the history of Cuban bread and how it is being made the same way now as it was over 100 years ago. Depart the bakery and then it is on to the Ybor City State Museum and Restored House. Here you will learn of the influence of the immigrants that settled in this part of Tampa and so influenced life here. Have time to explore the shops at Centro Ybor before arriving at your lunch destination, The Columbia Restaurant.

Built in 1905 as a Café serving café Con Leche and Cuban bread, the restaurant has expanded and now incorporates a full city block. Lunch will consist of ½ Cuban sandwich, ½ 1905 Salad, beverage and flan.

After lunch, depart Ybor City for The Florida Aquarium. Today you will experience Florida's finest Aquarium in conjunction with an outdoor experience that will take you "up close" with much of Florida's Flora and Fauna. Your journey will begin at the aquarium and will take you through Florida's aqua system from the aquifer, down rivers and streams and finally to the shores of the Gulf of Mexico and a life sized coral reef! Discover river otters, American alligators, and dozens of species of free-flying birds in the Wetlands Gallery. Explore the Bays and Beaches Gallery and see bonnet head sharks, sea horses, and octopus. Witness a kaleidoscope of color in the Coral Reefs Gallery. Encounter live sharks, rays and a giant sea turtle in the Offshore Gallery.

From the Aquarium you will board a 64' Caribbean catamaran, the Bay Spirit, for an hour and a half Eco tour of Tampa Bay. This guided tour will take you by many of the spoil islands within the bay, beyond the Port of Tampa and up close to the Alafia Bird Sanctuary where you will be able to see first hand many of the wild birds which inhabit Florida's waterways.

The bus will depart from the hotel lobby at 7 am.

### ***Tourist Information:***

For tourist information for Tampa Bay and surrounding areas,  
please visit [www.gotampa.com](http://www.gotampa.com)



## 2004 AETA & CETA/ACTE JOINT CONVENTION PROGRAM



### Wednesday, October 13

8:00 AM - 10:30 AM	CETA/ACTE Certification Committee Meeting
11:00 AM - 6:00 PM	AETA/CETA Board of Directors Meeting
1:30 PM - 5:00 PM	CETA and AETA Certification Exam
6:00 PM - 10:00 PM	AETA Board of Directors Meeting

### Thursday, October 14

7:00 AM - 2:00 PM	Golf Tournament
7:00 AM - 2:00 PM	Charter Boat Fishing/Tour
3:00 PM - 5:00 PM	Equine Wet Lab - Dr. Ed Squires, Ph.D. and Dr. Elaine Carnevale, DVM, Ph.D. Colorado State University - Embryo Morphology and Grading, Embryo Freezing, Superovulation
3:00 PM - 5:00 PM	Ultrasound Wet Lab - Dr. Bill Beal, Ph.D, Virginia Tech
3:00 PM - 5:00 PM	Small Ruminant Wet Lab - Dr. Hernan Baldassarre, DVM
6:30 PM - 10:00 PM	Starship Dinner Cruise

### Friday, October 15

7:00 AM - 7:00 PM	Exhibits
7:00 AM - 5:00 PM	Registration
7:00 AM - 8:00 AM	Continental Breakfast
9:00 AM - 4:00 PM	Companion Tour - Busch Gardens
8:00 AM - 8:30 AM	Introduction of Sponsors
8:30 AM - 9:00 AM	USDA-APHIS Updates BSE, Japan
9:00 AM - 10:00 AM	Dr. Peter Hansen, Ph.D., University of Florida - Can ET Be Used to Improve Pregnancy Rate in Heat Stressed Dairy Cattle
10:00 AM - 10:30 AM	Break
10:30 AM - 11:00 AM	Dr. John Hasler, Ph.D. - Vitrification Update
11:00 AM - 12:00 PM	AETA & CETA Annual Business Meeting
12:00 PM - 1:30 PM	Lunch
1:30 PM - 2:15 PM	Dr. Elaine Carnevale, DVM, Ph.D., Colorado State University - Assisted Reproduction in the Horse
2:15 PM - 3:00 PM	Dr. Hernan Baldassarre, DVM, Nexiatechnologies Inc. - State of the ART (Assisted Reproductive Technology) in Goats
3:00 PM - 3:30 PM	Break
3:30 PM - 4:15 PM	Dr. Charles Looney, Ph.D., Ovagenix - Environmental Influences on ET, Breed Differences
4:15 PM - 5:15 PM	Certification Session for AETA/CETA
6:00 PM - 7:00 PM	Social Hour
7:00 PM	Banquet

## Saturday, October 16

6:45 AM - 8:00 AM	Past Presidents/Board of Directors Breakfast
7:00 AM - 8:00 AM	Continental Breakfast
8:00 AM - 5:00 PM	Companion Tour - Ybor, Columbia Restaurant, Florida Aquarium/ Catamaran tour of Tampa Bay
8:00 AM - 9:00 AM	Dr. Cliff Lamb, Ph.D., University of Minnesota - The Use of GnRH and CIDRS to Synchronize Ovulation in Recipients
9:00 AM - 10:00 AM	Dr. Paul Greenough, Ph.D. - Stress, Management, and Nutritional Mismanagement; Their Affect on Reproductive Inefficiency and Lameness
10:00 AM - 10:30 AM	Break
10:30 AM - 12:00 PM	Dr. Paul Greenough, Ph.D. - Continued
12:00 PM - 1:30 PM	Lunch
1:30 PM - 2:15 PM	Dr. Randy Prather, Ph.D., University of Missouri - Genetic Modi fication of Swine for Medicine and Agriculture
2:15 PM - 3:00 PM	Dr. Bob Godke, Ph.D., Louisiana State University - Trans Vaginal Ultrasound Guided Oocyte Recovery in Species Other than Cattle
3:00 PM - 3:30 PM	Break
3:30 PM - 5:30 PM	Practioners Forum Moderator - Dr. Reuben Mapletoft, DVM, Ph.D., University of Saskatchewan Practioners - Dr. Bill Beal USA Dr. Roger Suave CAN Dr. Gordon McDonald CAN Dr. Brad Stroud USA

## The Convention Speakers

**Hernan Baldassarre, DVM**  
**Senior Scientist, Transgenic Production**  
**Nexiabiotecnologies Inc.**

Dr. Baldassarre's technical expertise is in assisted reproduction technologies in small ruminants (sheep and goat). He obtained his veterinary degree from the Faculty of Veterinary Sciences, University of Buenos Aires in 1982. He has received training in different assisted reproduction technologies from different labs, including Dr. Gareth Evans (U. of Sydney, Australia), Dr. Xavier Legendre (IMV, France) and Dr. Robin Tervit (AgResearch, New Zealand), to name some of the most influential.

He joined Nexia Biotechnologies in 1998 where he has had a significant contribution to outstanding achievements including the first transgenic livestock produced in Canada; world's first goats produced from prepubertal oocytes recovered from live donors by laparoscopic ovum pick-up; world's first transgenic goat produced by nuclear transfer technology using in vitro transfected cells; and world's first animals capable to produce spider silk proteins in their milk. Prior to joining Nexia, Dr. Baldassarre spent 12 years working on research with main areas of interest being semen and artificial insemination, superovulation and embryo transfer, ovum pick-up and in vitro embryo production. He has also applied said technologies to genetic improvement programs in thousands of animals. He served as President of the Argentinean Chamber of Biotechnology of Reproduction (1995 to 1997) and is a member of the Executive Committee of the International Congress on Animal Reproduction (ICAR) since 1996. Has over 50 publications in peer-reviewed journals and current research interests are focused on maximizing the efficiencies in the generation and propagation of transgenic animals.

**Bill Beal**  
**Virginia Tech**

Bill Beal is a professor in Animal and Poultry Science at Virginia Tech. He and his wife, Linda, have two children and live in Blacksburg. Dr. Beal teaches the Introduction to Animal and Poultry Science at Virginia Tech, advises undergraduate and graduate students and conducts research in reproductive physiology of beef cattle. Dr. Beal is in charge of the Virginia Tech Research Herd, a 120-cow herd of registered and commercial Angus cows at Virginia Tech's Kentland Farm. Bill has published numerous scientific and popular press articles and received many university and national awards for teaching and advising students. His enthusiasm for teaching and his expertise in estrus synchronization, embryo transfer and the use of ultrasound technology have earned him a national reputation.

**Bob Godke**  
**Louisiana State University**

Dr. Godke's research areas include: The effect of growth factors on early embryo development in farm animals; Embryo transfer and embryo/gamete cryopreservation in cattle, sheep, goats, swine and horses; Embryo micro-manipulation and gene insertion into farm animal embryos (cattle & goats); *Transvaginal ultrasound-guided oocyte aspiration, in vitro* fertilization and nuclear transfer (cloning) in cattle, swine, goats, horses and exotic animals; Embryo microsurgery and embryo reconstruction.

His awards include: 1983 "NACTA Outstanding Teacher of the Year In the South"; 1985 NACTA AVI-Tressler "Outstanding Teacher-Researcher for Agriculture in North America"; 1988 State of Louisiana "Professor of the Year"; 1986 Elected President of the International Embryo Transfer Society (IETS); 1985-87 IETS Board of Directors; 1987-2004 IETS Past Presidents Board; 2003, 2004 IETS Foundation Vice President; 1988 "CASE Teaching Professor of the Year"; 1990 Received the Doyle Chamber Research Award; 1990 Distinguished Research Master and 1990 University Medal for Research at Louisiana State University; 1991 Nominated for the Japanese Prize for Research; 1992 USDA "Distinguished Re-

search Award” in Washington, D.C.; 1993 J. Sedberry and the 1993 Millard Perkins Awards for Outstanding Graduate Teaching (LSU); 1994 USDA “Outstanding University Teacher of the Year” award; 1995 LSU “University Medal for Research, Teaching and Community Service”; 1996 Presented the university’s highest honor - awarded the title of *Boyd Professor* .

Research and Graduate Student Advisement: At present serving as the major advisor to 13 MS or PhD graduate students (Department of Animal Sciences & School of Veterinary Medicine) working in the areas of Reproductive Physiology, Embryology and Genetic Engineering in farm and exotic animals. Results from experiments have been reported annually at nation and international meetings. Over 180 refereed scientific research papers, book chapters, research proceedings, abstracts and technical articles have been published since 1980.

## **Paul Greenough** **Saskatchewan**

Paul Greenough graduated from the Royal Veterinary College, London, UK in 1947. He spent the next 19 years in general dairy practice in the United Kingdom where he began a life-long interest in bovine lameness. In 1962 he was made a Fellow of the Royal College of Veterinary Surgeons for a thesis entitled *Observations on some of the diseases of the bovine foot*.

In 1966 he joined the faculty of the Western College of Veterinary Medicine in Saskatoon, Canada. During the years that followed he engaged in research projects including surgery of the bovine digit, bovine conformation, lameness in beef cows and in laminitis in dairy cows. During recent years he has had an increasing interest in the relationship of various forms of lameness to pasture management, mineral supplementation, errors in the management of nutrition as well as the role of cow comfort and behavior on the incidence of lameness.

Paul retired in 1992 and was made a Professor Emeritus of Veterinary Surgery. He started a private consulting company, VetAgro International. He has lectured on his subject extensively in North America and other countries in the world and conducts consultation visits on farms with lameness problems. In November 1996 the third edition of ‘Lameness in Cattle’ of which he was co-editor, was published. Paul Greenough has also published numerous booklets, chapters in books and papers in scientific journals on various topics related to bovine lameness.

## **Peter Hansen** **University of Florida**

Dr. Peter J. Hansen is Professor of Animal Sciences at the University of Florida. He received the B.S. degree in 1978 from the University of Illinois - Urbana-Champaign and the M.S. and Ph.D. degrees in 1980 and 1983, respectively from the University of Wisconsin-Madison. After completing a postdoc in the Department of Biochemistry and Molecular Biology at the University of Florida, Dr. Hansen joined the faculty of the College of Veterinary Medicine at Florida in 1984. He transferred to the Dept. of Dairy Science (now part of Animal Sciences) in 1986. His research focuses on two areas: regulation of uterine immune responses by progesterone and cellular responses of preimplantation embryos to cellular stress. He has over 150 refereed publications and has been the recipient of several awards including the Upjohn Physiology Award from the American Dairy Science Assn (1997), the Physiology and Endocrinology Award from the American Society of Animal Science (2002), and the Doctoral Dissertation/Mentoring Award from the University of Florida (2003). He is President-Elect of the American Society for Reproductive Immunology and has served as Panel Manager, Enhancing Reproductive Efficiency Panel, USDA Competitive Grants Program (1995), and as Editor (1996-1999) and Senior Editor (1999-2000) of the Physiology and Management Section of the *Journal of Dairy Science*, and Section Editor, *Journal of Reproductive Immunology* (2002- present).

**Cliff Lamb**  
**University of Minnesota**

Dr. Lamb is currently an Associate Professor and Beef Cow/Calf Specialist at the University of Minnesota. He earned his B.S. degree in Animal Science at Middle Tennessee State University, and his M.S. and Ph.D. degrees from Kansas State University in Reproductive Physiology. In 1998 Dr. Lamb moved to Minnesota to become an Assistant Professor at the University of Minnesota. His primary research efforts focus on applied reproductive physiology in beef and dairy cattle emphasizing synchronization of estrus in replacement heifers and postpartum suckled cows. Recently, Dr. Lamb has spent much of his time developing fixed-time artificial insemination and embryo transfer protocols with the use of the CIDR, GnRH and PGF. In addition to research and extension, Dr. Lamb coordinates the NCROC Reproductive Biotechnology Center, an assisted reproductive technology center that provides research and commercial services to the cattle industry in the area of embryo transfer, IVF, and ultrasound technology.

**Charles Looney**  
**Ovagenix**

Native of Southern Arkansas, Dr. Looney received his Bachelors and Masters at the University of Arkansas. He received his Ph.D. at Louisiana State University under the direction of Dr. Robert A Godke. Entering the industry in '83, Dr. Looney served Granada Biosciences for 10 yrs as Senior Scientist. Much time has been spent traveling and promoting our industry both in the United States and around the world. From Granada Days, he consulted with several groups for a year before taking a position with Trans Ova. Dr. Looney came back to Texas in '96 to start Ultimate Genetics. He has spoken and/or worked in over 15 countries, setting up programs in Australia, Brazil, Venezuela, and France. Dr. Looney has been published in every industry publication, most on several occasions. In 1999 he left Ultimate Genetics and started his current company, OvaGenix. He has three children, the oldest of which is a junior at the University of Arkansas College of Agriculture and Life Sciences.

**Reuben Mapletoft**  
**University of Saskatchewan**

Dr. Mapletoft is a graduate of the Ontario Veterinary College in Guelph, Ontario, Canada. He received his MS and PhD degrees from the University of Wisconsin in the Endocrinology – Reproductive Physiology Program. Dr. Mapletoft has been active in research in reproductive biology and the application of reproductive technologies in cattle for 25 years. He is a Past-president of the International Embryo Transfer Society (IETS) and Founding President of the Canadian Embryo Transfer Association (CETA); he was Chairman of the Import/Export Committee of the IETS for 10 years, and he is currently a member of the Certification Committee of CETA and several IETS committees. He is past-chairman of the Male Evaluation Committee of the Society for Theriogenology. Much of Dr. Mapletoft's recent work has revolved around the manipulation of ovarian follicular wave dynamics for superovulation, estrus synchronization and timed-breeding. He also has an active research program utilizing in vitro fertilization technology to evaluate oocyte competence and the effect of sperm morphology on fertilization and zygote development. His team is also researching the use of non-biological additives in the culture of oocytes and embryos and the cryopreservation of sperm, oocytes and embryos. Dr. Mapletoft is very active in Continuing Veterinary Education and technology transfer; he has lectured in more than 25 countries around the world and is a regular speaker in the AABP Embryo Transfer Seminars. Dr. Mapletoft is a Full-Professor, Department of Large Animal Clinical Sciences, Western College Of Veterinary Medicine, University of Saskatchewan, Saskatoon, SK, Canada. In 2003, the University of Saskatchewan honored Dr. Mapletoft with its Distinguished Researcher Award.

**Randy Prather**  
**University of Missouri**

Dr. Prather's research has focused on the early mammalian embryo for the past 22 years. He earned his BS and MS from Kansas State University, and PhD and Postdoc from the University of Wisconsin-Madison. He is best known for his work on cattle and pig cloning by nuclear transfer. While at Wisconsin he cloned some of the first cattle by nuclear transfer. His group at the University of Missouri has created miniature pigs that have the alpha 1,3 galactosyltransferase gene knocked out. In addition to his transgenic pig research, he and his collaborators have funding to conduct two EST projects (one in swine and another in bovine) with the final goal of transcript profiling of reproductive tissues in pigs and cattle. Other projects in his laboratory continue to describe the cellular and molecular program of events that occurs during development of the preimplantation pig embryo.

**Ed Squires**  
**Colorado State University**

Dr. Squires is a Professor in the Department of Biomedical Sciences at Colorado State University. He received his B.S. degree in Animal Science (1969) and M.S. degree in Reproductive Physiology (1971) from West Virginia University, and his Ph.D. in Endocrinology/Reproductive Physiology at the University of Wisconsin in 1974 under the direction of Dr. O.J. Ginther. He taught at the University of New Hampshire for 2 years before coming to Colorado State University in 1976.

In 1984, Dr. Squires was awarded the Young Scientist Award from the American Society of Animal Science, and he was recipient of the Colorado State University Faculty Alumni Award in 1985. He served as President of the Equine Nutrition and Physiology Society (ENPS) from 1985 to 1987. In 1989, he received the Distinguished Service in Equine Science Award from ENPS; in 1991 he was chosen by Colorado State University for the Oliver P. Pennock Distinguished Service Award; in 1993-94 he received the Jack E. Cermak Outstanding Advisor Award for Graduate School from Colorado State and in 1997 the Fellows Award from ENPS. In 1999, Dr. Squires was presented with the Animal Physiology and Endocrinology Award from the American Society of Animal Sciences, was named the Sigma Xi Honored Researcher at Colorado State University and elected as an honorary diplomate in the College of Theriogenology.

Dr. Squires is supervisor of the Equine Reproduction Laboratory. His involvement includes teaching undergraduates, graduates and veterinary students. Service activities include 13 annual continuing education programs at Colorado State for veterinarians and breeders, and numerous speaking engagements nationally and internationally. He has spoken numerous times at the AAEP Convention and the Society for Theriogenology. Clinical duties include reproductive evaluation of mares and stallions, commercial embryo transfer and freezing stallion semen. Dr. Squires was a pioneer in developing the techniques of embryo transfer. Subsequently, techniques were developed for storage of equine embryos for 24 hr at 5EC. This technology is now used to ship hundreds of embryos nationally each year. Other areas of research include reproductive endocrinology of the non-pregnant and pregnant mare, hormonal regulation of the estrous cycle and preservation of stallion semen. His most recent research has centered on development of assisted reproductive techniques such as oocyte collection and transfer, oocyte maturation, in vitro fertilization, embryo freezing, superovulation and sexed semen.

Dr. Squires's research efforts have resulted in 226 refereed publications, 238 non-refereed publications, 27 chapters in books, 12 books and 115 popular articles. He has lectured extensively nationally and internationally to veterinary and scientific groups and horse breeders.

**Elaine Carnevale, DVM, Ph.D.**  
**Colorado State University**

Elaine Carnevale graduated from Colorado State University's School of Veterinary Medicine in 1985. She continued at CSU to obtain a Master of Science degree in Equine Reproduction studying methods to transport equine embryos. After working on stud farms for two years, Dr. Carnevale returned to academia to obtain a Ph.D. in Reproductive Physiology from Dr. O.J. Ginther at the University of Wisconsin. Dr. Carnevale taught at Southern Illinois University and spent time in a private practice, before joining the faculty at Colorado State University. Dr. Carnevale is an Assistant Professor in the Department of Biomedical Sciences and participates in research and clinical programs in equine assisted reproduction.