

TABLE OF CONTENTS

TWENTY-FIRST TECHNICAL PROCEEDINGS

Welcome	6
<i>Dennis A. Funk</i>	
History and Evolution of the French Straw Method	8
<i>Bertrand Cassou</i>	
Source of Infertility in the Postpartum Dairy Cow	12
<i>Matthew C. Lucy</i>	
Sperm Shape Research: An Update	19
<i>John Parrish, Abdullah Kaya, Chatinaya Pawshe, Mohammed Siddiqui and Mohammed Shamsuddin</i>	
Current Status of Implementing the National Animal Identification System	27
<i>Robert Fourdraine</i>	
Emergency Action Plan for AI Centers	31
<i>Charles E. Brown, II</i>	
Protecting Intellectual Property through Contracts: How to Shrink-Wrap a Bull	33
<i>Erin R. Ogden and Kent A. Weigel</i>	
Analysis of the Sensitivity and Specificity of PCR Testing of Smegma Samples for <i>T. foetus</i> and <i>C. fetus venerealis</i> in Experimentally Infected Bulls	35
<i>Eduardo R. Cobo, Pedro H. Favetto, Mike Lane, Karen VanHoseer, Alex Friend, Jere R. Mitchell and Robert H. BonDurant</i>	
Common Errors in Sperm Morphology and Concentration Assessments	41
<i>Chris E. Kuster and Gary C. Althouse</i>	
Setting Up and Validating a CASA System for Use with Milk-Extended Semen	46
<i>Bryan Krick, Melissa Clark and Mike Kaproth</i>	
Forensics for the Bull Stud and Semen Processing Lab: Interpreting Tank, Straw and Semen Quality Clues	54
<i>Michael Kaproth</i>	
Mechanisms of Cryopreservation: The Effect of Membrane Cholesterol	64
<i>James K. Graham, Phillip H. Purdy, Amanda I. Moore and Eva Mocé</i>	
Campylobacter and Trichomonas Testing, Sampling and Transport Techniques	68
<i>Roger E. Weigle</i>	
Metrics to Monitor Sperm Harvests	71
<i>Glen Gilbert</i>	

Managing Young Sires: Pre-Pubertal Bull Care	77
<i>Donald R. Monke</i>	
Limitations of Field Evaluation for Semen Quality	82
<i>Guidance prepared by the NAAB Technical Committee</i>	
Establishment of the Bovine Oviductal Sperm Reservoir	85
<i>George G. Igotz</i>	
Swine AI Overview	91
<i>Timothy J. Safranski</i>	
Custom Collection Biosecurity	95
<i>Robert Fair</i>	
Logistics-Setting Up Semen Sexing Lab	98
<i>Rick Lenz</i>	
<hr/>	
Student Session Abstracts	
<hr/>	
Fertility Related Protein and its Association with Holstein Bull Sperm in Fertilization and Capacitation	101
<i>David Erikson</i>	
Effects on Conception Rates of Lactating Dairy Cows by Altering the Time of the Second GnRH and AI During Ovsynch	102
<i>D. J. Brusveen, A P. Cunha, C.D. Silva, P.M. Cunha, R.A. Steery, E.P.B. Silva, J.N. Guenther and M.C. Wiltbank</i>	
Association of Timing of Chorioallantoic Membrane Development with Age in Dairy Cattle	103
<i>J.D. Rhinehart, R.A. Dailey, D.H. Poole and E.K. Inskeep</i>	
<hr/>	
Testis Development and Spermatogenesis In Vivo and In Model Systems	104
<i>J. Parks, M. Kaproth, S. Huang and B. Sartini</i>	
Artificial Insemination and the Dairy Industry in India	111
<i>Herb Rycroft</i>	
Post-Insemination Strategies to Improve Pregnancy Rates	115
<i>Jeffrey S. Stevenson</i>	
Laser-Mediated Isolation of Bovine Embryonic Stem Cells: An Alternative to Enhance the Production of Transgenic Livestock	126
<i>Gabriela G. Cezar and Jessica Quam</i>	
Closing Comments	129
<i>Mike Kaproth</i>	
<hr/>	
MEMORIALS	
Christopher Polge	133
George W. Trimberger	135