



# Newsletter

AMERICAN ASSOCIATION OF BOVINE PRACTITIONERS

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## THE PRESIDENT'S MESSAGE

### Time in a Bottle

The holidays are a busy time at our house. We try and get a lot of extra things done around the usual activities and responsibilities of work and school. Buy gifts; send cards; visit friends and family; and, in between, squeeze in a visit to Santa's hut. For our young children, the eager anticipation of Christmas takes on a life all its own. Every day is one day closer to the "best day of the year", and the excitement and joy with which they view the world is contagious and inspiring. It makes me want to freeze each fragile, fleeting moment of beauty - to keep it and not let it go. The first line of an old Jim Croce song keeps running through my mind - "If I could save time in a bottle..."

This year, this holiday season has been especially poignant for me. I have spent the last two weeks telling my clients that as of the first of the year, I will be doing full time nutrition work, and will not be continuing as their regular veterinarian. For most of them, I have been working in the role of herd veterinarian for the last 20 or 25 years. I knew some of these conversations would be hard, but the emotional intensity of many has surprised me. With all of my clients, over the years, I am sure we have had our share of both failures and successes. We have maintained a business relationship that I hope was built on a sense of professionalism and commitment to providing value for the cost. But those farms where our parting was more emotional, and the relationship deeper, were farms where at key moments I think that I was able to provide a critical, valuable, and sometimes personal role that helped them through a difficult time. It may have been in a professional role, such as finding a way to check fresh cows for a month after the owner was in a car accident; or setting up a detailed mechanism to implement an effective Ovsynch - Resynch program for a client that was struggling with too little time to manage his reproductive program; or it may have involved a more personal role such as taking the time to listen and help as a client went through a difficult divorce or struggled with the family dynamics of farm succession planning.

Although I believe we need to look at our practices and our clients operations through an economic lens, I think we need to be careful not to look at the individuals who are our clients through that same purely economic perspective. I think we need to look at them primarily from a perspective that is more personal, and more profound. We need to be willing to offer needed advice and assistance - both professional, and, at times, personal. And not be afraid to look more deeply into their operations, and, sometimes, even their lives, to help provide the resource they need at a critical time, even if it is just a friendly ear. The rewards for going the extra mile seem almost always to be worth the price, personally if not always financially.

The last 25 years of my life have been filled with many fragile, fleeting, moments of beauty. I can't save them in a bottle, but woven together they make a rich set of memories. I am especially grateful for the memories of those opportunities and moments when I could make a real difference in my clients' lives, and the fact that we work in a profession where that has been possible is a great blessing. This holiday season has brought that home.

Brian Gerloff



## FUTURE MEETINGS

### American Association of Bovine Practitioners

|      |             |                   |
|------|-------------|-------------------|
| 2012 | Montreal    | September 20 – 22 |
| 2013 | Milwaukee   | September 19 – 21 |
| 2014 | Albuquerque | September 18 – 20 |
| 2015 | New Orleans | September 17 – 19 |
| 2016 | Charlotte   | September 15 – 17 |

### World Association for Buiatrics

|      |                    |                    |
|------|--------------------|--------------------|
| 2012 | Lisbon, Portugal   | June 4 – 8         |
| 2014 | Cairnes, Australia | July 27 – August 1 |

## DISCLAIMER

The AABP does not take responsibility for information contained in or accuracy of the abstracts published in this newsletter.



## A A B P NEWS

Thank You from Dan Upson

Many THANKS to the members of AABP for your help with my selection to the Cattle Production Veterinarian Hall of Fame. I am very grateful. My family and I cherish it very much. Now then the songs, but first more wine, God be with you, friends of mine.

Dan Upson



## DEADLINE REMINDERS

### CALL FOR ABSTRACTS: Student Case Presentation Competition

The AABP Program Committee is pleased to announce the call for abstract submissions for the Student Case/Research Presentation Competition, to be held Thursday, September 20, 2012, at the AABP 45<sup>th</sup> Annual Conference in Montreal, Quebec.

The purpose of the competition is to promote student interest in the AABP, encourage development of investigative and communicative skills, and allow veterinary students to actively participate in the annual meeting program. Students at any level in their veterinary program, as well as those that have graduated within 6 months prior to the competition, are eligible. If graduated, try to ensure that your prospective employer(s) will allow you to attend the meeting.

**All submissions for the 2012 Student Case Presentation Competition should be submitted online at [www.aabp.org/students/case](http://www.aabp.org/students/case), by February 1, 2012.** Abstracts for submission will be limited to 250-300 words. All required information can be submitted via the website; receipt of submissions will be confirmed by email. Ten presentations will be selected. Notification will be made by March 1, 2012 so that adequate time is available for travel and class/clinic coverage arrangements. Further instructions will follow notification.

Presentations will fall into the categories of either Research Reports or Clinical Case Reports. However, **research projects should not be part of a graduate program.** Students enrolled in masters or doctoral graduate programs should submit their abstracts to the Research Summaries portion of the program. **Clinical cases submitted should be practical and representative of those most likely to be encountered with some frequency by recent graduates. The research entries**

**should be applied in nature and directly undertaken by the presenter. Submissions which adhere to these guidelines will receive higher rankings during the selection process.**

The contestants will be judged on both the quality of their case investigation or research and the quality of the presentation. This year, the AABP Board of Directors has again agreed to provide \$500 for travel for the participants. Three or four awards will be made, according to number of entries in each category (Research versus Case Report). For a category involving four or fewer entries, one award of \$1,500 will be provided. For a category involving 5 or more entries, a first place award of \$1,500 and a second place award of \$750 will be presented.

**No more than one student may be involved with the submission or presentation of a case or research project, therefore abstracts submitted with multiple names of presenters will not be considered.** Please contact your AABP faculty representative for more information and for assistance in preparing your abstract. You may also contact Dr. Sarah Wagner via the contact information listed below or the AABP Headquarters at [aabphq@aabp.org](mailto:aabphq@aabp.org) or 800-269-2227. We look forward to receiving your submissions and appreciate your participation in the program.

Sarah Wagner, DVM  
701-231-5393  
[sarah.wagner@ndsu.edu](mailto:sarah.wagner@ndsu.edu)

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### Call for AABP Research Assistantship Proposals

Do you have an idea for a research project related to bovine practice but don't have monetary support for the idea? If you do, the AABP may be able to help you out. The AABP, with generous support from Merck Animal Health and the AABP Foundation, funds research assistantships on a competitive basis in the general field of bovine health and management. This is the call for project proposals for fiscal year 2012-2013. The amount of these awards is up to \$10,000 and is awarded for a period of one year. A successful candidate may re-apply in the competition in a following year.

Eligible candidates must be AABP members and must fulfill one of the two following criteria:

- 1) A candidate shall be a North American bovine practitioner conducting a scientific research project.
- 2) A candidate must be registered in a masters or doctoral program at an accredited North American veterinary college (school) or a college with a veterinary science department. Students enrolled at an accredited North American veterinary college (school) who are pursuing a concurrent masters or doctoral degree and are student AABP members are also eligible. University educators/researchers that are not in an advanced degree program are ineligible for this funding.

**All proposals must be submitted electronically via the AABP website.** More complete details, instructions and the online application can be found on the AABP website at [www.aabp.org/students/assistantship](http://www.aabp.org/students/assistantship). **To be considered, your application must be submitted on the website before February 1, 2012.** Thank you and address any questions to:

Jim Brett, Chair AABP Research Assistantship Committee  
District 3 Director  
[jbrett@cvm.msstate.edu](mailto:jbrett@cvm.msstate.edu)

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### AABP Bovine Veterinary Student Recognition Award

Merck Animal Health is once again sponsoring the AABP Bovine Veterinary Student Recognition Award. Eight (8) awards of \$1,500 will be given this year. In addition to the amount of the award, Merck Animal Health will also reimburse the award winners for all travel and lodging expenses to the 45<sup>th</sup> AABP Annual Conference in Montreal, Quebec, September 20-22, 2012. The award winners will receive a plaque recognizing this achievement. The administration of each applicant's school and the applicant's faculty sponsor need to be aware that the awards will be given at the AABP Annual Conference and it is preferred that the award winners be present and take advantage of the opportunity afforded by Merck Animal Health.

A full description of the award, the requirements and selection criteria are available on the AABP website at [www.aabp.org](http://www.aabp.org) (click on "Students", then "Grants/Scholarships", then "Student Recognition Award"). Any interested student, currently in their 2<sup>nd</sup> or 3<sup>rd</sup> year, is encouraged to apply. **All application materials must be submitted online by March 15, 2012.** The online application form will be available on or before February 1, 2012. Only applications and supporting letters submitted via the AABP website will be considered.

This is a tremendous opportunity for students interested in careers in bovine medicine and provides a great opportunity to attend an outstanding continuing education meeting. Please contact the AABP office with any questions that you might have.

**CALL FOR ABSTRACTS**  
**Research Summaries and Scientific Poster Sessions**  
**45<sup>th</sup> Annual Conference of the AABP**  
**September 20-22, 2012 in Montreal, Quebec**

The 45<sup>th</sup> Annual Conference of the American Association of Bovine Practitioners will once again feature scientific sessions focused on cutting-edge research that is directly applicable to the health, welfare and productivity of cattle as well as food and environmental safety associated with cattle production. These sessions provide the opportunity for researchers from around the world to disseminate state-of-the-art information to bovine practitioners who can then utilize it to improve the cattle industry.

Research projects having direct application to bovine practitioners are being solicited for presentation at the Oral and Scientific Poster Sessions for the 2012 Annual Conference of the AABP. Project summaries focused on all areas of bovine health, welfare and production are welcome including pharmacology, epidemiology, medicine, surgery, economic analysis, pathology, pre-harvest food and environmental safety, diagnostics, and health monitoring. Projects should have relevance to bovine practitioners and may be broadly applicable to the cattle industry or more specifically applicable to the beef or dairy industry.

**Oral presentations made by graduate students in the AABP Research Summaries will be eligible to compete in the “AABP Graduate Student Research Summary Presentation” competition.** The top three presenters from the graduate student competition will receive cash awards.

**To be considered for the AABP Research Summary sessions (either the oral or poster sessions) and publication in the annual meeting proceedings, your abstract must be submitted to AABP by May 1, 2012.** Abstracts submitted after May 1, 2012, will be considered for the POSTER SESSION ONLY, but those abstracts will NOT be published in the meeting proceedings. **Abstracts must be submitted electronically.** For more information and to submit an abstract, go to [www.aabp.org](http://www.aabp.org) and select the “*Conference*” link located on the top of the page and then click on the “*Abstract Submission*” link located in the “*Conference*” submenu. If you have questions about the research summaries program, contact Drs. David Smith (dsmithr@unlnotes.unl.edu) or Roxanne Pillars (rpillars@avma.org).



**GENERAL INFORMATION**

Anim Repro Sci  
Vol. 129, No. 12, pp. 7-13

November 2011

**Superstimulation of Ovarian Follicular Development in Beef Cattle with a  
Single Intramuscular Injection of Folltropin-V**

A. Tríbulo\*, D. Rogan, H. Tribulo, R. Tribulo, R. Alasino, D. Beltramo, I. Bianco, R. Mapletoft, G. Bó

**The need to inject FSH twice daily for superstimulation of ovarian follicular development in cattle necessitates frequent attention by farm-personnel and increases the possibility of failures due to mishandling and errors in administration of treatments.** A series of three experiments were designed to evaluate the feasibility of superstimulation in beef cattle with a single intramuscular (IM) injection of Folltropin-V diluted in a hyaluronan-based slow-release formulation (SRF). In Experiment 1, cows were assigned to one of three treatment groups to compare two methods of injection as compared to the twice daily IM injection protocol. Superovulatory response of cows ( $n = 6$ ) treated with twice daily IM injections over 4 days (Control) was greater than of cows treated with a single subcutaneous (SC) injection in SRF ( $n = 6$ ), while superovulatory response of cows treated with a single IM injection in SRF ( $n = 6$ ) was intermediate. Experiment 2 was designed to compare two concentrations of SRF (20 mg/mL hyaluronan, 100% compared to 10 mg/mL hyaluronan, 50%) in a single IM injection protocol. The mean number of corpora lutea (CL) were not significantly different ( $P \geq 0.05$ ), but the numbers of total ova/embryos ( $P < 0.05$ ), fertilized ova ( $P < 0.01$ ) and transferable embryos ( $P < 0.001$ ) were greater in cows treated with FSH in 100% SRF ( $n = 20$ ) than cows treated with FSH in 50% SRF ( $n = 20$ ). Experiment 3 was designed to compare superovulatory response in Red Angus donor cows treated with a single IM injection of Folltropin-V diluted in 100% solution of SRF with those treated with the traditional twice-daily IM injection protocol over 4 days. Mean ( $\pm$ SEM) numbers of CL ( $13.7 \pm 1.2$  compared to  $13.8 \pm 1.2$ ), total ova/embryos ( $12.3 \pm 1.5$  compared to  $13.7 \pm 2.1$ ), fertilized ova ( $7.2 \pm 1.1$  compared to  $8.4 \pm 1.4$ ) and transferable embryos ( $4.9 \pm 0.8$  compared to  $6.4 \pm 1.3$ ) were not significantly different between Control ( $n = 29$ ) and Single injection ( $n = 29$ ) groups, respectively. **In summary, superstimulation of beef donor cows with a single IM injection of Folltropin-V diluted in 100% solution of SRF resulted in a comparable superovulatory response to the traditional twice-daily IM administration of Folltropin-V diluted in saline over 4 days.**

\*Instituto de Reproducción Animal Córdoba (IRAC), Zona Rural General Paz, 5145 Córdoba, Argentina



**A Review of Pain Assessment Techniques and Pharmacological Approaches to Pain Relief after Bovine Castration: Practical Implications for Cattle Production within the United States**

J. Coetzee\*

Castration of male calves destined for beef production is a common livestock management practice in the United States amounting to approximately 7 million procedures per year. Recently there has been renewed interest in identifying methods to reduce pain associated with dehorning and castration. Although several studies have reported that analgesic drug administration prior to castration attenuates plasma cortisol response, there are currently no compounds specifically approved for pain relief in livestock in the U.S. Validated pain assessment tools are needed to support regulatory approval of analgesic compounds. This may include use of accelerometers, videography, heart rate variability determination, electroencephalography, thermography and plasma neuropeptide measurement to assess behavioral, physiological and neuroendocrine changes associated with a pain response. Extra-label drug use (ELDU) for pain relief is regulated under the Animal Medicinal Drug Use Clarification Act (AMDUCA) and requires that drugs be administered by or under the supervision of a veterinarian. Agents that may provide preemptive analgesia include local anesthetics, nonsteroidal anti-inflammatory drugs (NSAIDs), opioids,  $\alpha 2$ -agonists, and *N*-methyl D-aspartate (NMDA) receptor antagonists. **A review of the published literature suggests that a significant decrease in plasma cortisol concentration after castration was associated with preemptive administration of a NSAID and local anesthesia.** Local anesthesia alone tended to decrease peak plasma cortisol concentrations more than NSAIDs. **However NSAIDs alone tended to decrease the area under the plasma cortisol–time curve more than local anesthesia alone. These findings suggest that multimodal analgesic regimens that extend into the post-operative period are more effective at mitigating pain and distress associated with castration than a single drug modality. Regulatory approval of safe and cost effective analgesic compounds with convenient routes of administration is needed for routine use of pain relieving drugs to be considered as standard practice at the time of castration.**

\*Veterinary Diagnostic and Production Animal Medicine, College of Veterinary Medicine, Iowa State University, Ames, IA 50011-1250

**Animal Welfare in Cross-ventilated, Compost-bedded Pack, and Naturally Ventilated Dairy Barns in the Upper Midwest**

K. Lobeck\*, M. Endres, E. Shane, S. Godden, J. Fetrow

The objective of this cohort study was to investigate animal welfare in 2 newer dairy housing options in the upper Midwest, cross-ventilated freestall barns (CV) and compost-bedded-pack barns (CB), compared with conventional, naturally ventilated freestall barns (NV). The study was conducted on 18 commercial dairy farms, 6 of each housing type, in Minnesota and eastern South Dakota. The primary breed in all farms was Holstein; 1 CV and 1 NV herd had approximately 30% Jersey-Holstein crossbreds. All freestall herds used sand for bedding. Farms were visited 4 times (once in each season) between January and November 2008, and approximately 93% of all animals in each pen were visually scored on each visit. **Outcome-based measurements of welfare (locomotion, hock lesions, body condition score, hygiene, respiration rates, mortality, and mastitis prevalence) were collected on each farm.** Lameness prevalence (proportion of cows with locomotion score  $\geq 3$  on a 1 to 5 scale, where 1 = normal and 5 = severely lame) in CB barns (4.4%) was lower than that in NV (15.9%) and CV (13.1%) barns. Lameness prevalence was similar between CV and NV barns. **Hock lesion prevalence (proportion of cows with a lesion score  $\geq 2$  on a 1 to 3 scale, where 1 = normal, 2 = hair loss, and 3 = swelling) was lower in CB barns (3.8%) than in CV (31.2%) and NV barns (23.9%). Hygiene scores (1 to 5 scale, where 1 = clean and 5 = very dirty) were higher for CB (3.18) than CV (2.83) and NV (2.77) barns, with no differences between CV and NV barns.** Body condition scores, respiration rates, mastitis prevalence, culling, and mortality rates did not differ among housing systems. The CV and NV barns were evaluated using the cow comfort index (proportion of cows lying down in a stall divided by all animals touching a stall) and the stall usage index (proportion of cows lying divided by all animals in the pen not eating). The CV barns tended to have greater cow comfort index (85.9%) than the NV barns (81.4%) and had greater stall usage index (76.8% and 71.5%, respectively). Dairy cattle housed in CB barns had reduced lameness and hock lesions compared with those housed in freestall barns and had no adverse associations with body condition, respiration rates, mastitis prevalence, culling, or mortality. **When**

comparing the 2 freestall housing options, CV barns had improved cow comfort indices compared with NV barns. Although cows in CB barns had better feet and leg health, as indicated by the reduced lameness and hock lesion prevalence, acquiring bedding and managing the bedded pack could limit their use.

\* Department of Animal Science, University of Minnesota, St. Paul, MN 55108



## BEEF

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December 2011

### Associations between Response to Handling and Growth and Meat Quality in Frequently Handled *Bos taurus* Beef Cattle

S. Turner\*, E. Navajas, J. Hyslop, D. Ross, R. Richardson, N. Prieto, M. Bell, M. Jack, R. Roehe

Fearful behavioral responses to handling (temperament) are undesirably associated with ADG and meat quality in infrequently handled *Bos indicus* cattle. It has never been assessed whether these relationships exist in calmer *Bos taurus* breeds in systems where handling is more frequent. Such systems predominate in some countries where beef production is a major agricultural activity. During fattening, 144 crossbred cattle from Limousin and Aberdeen Angus sires were assessed for temperament using 4 approaches: response to movement along a race (race score; 4 occasions), restraint in a crush (crush score; 4 occasions), flight speed from the crush (flight speed; 4 occasions), and isolation in a pen with a human (isolation score; 1 occasion in yr 1, 2 occasions in yr 2). Measurements of ADG were made between birth and slaughter and between 16 and 18 mo of age during fattening. Fattening occurred indoors on a complete mixed diet fed for ad-libitum intake. Meat quality was measured by pH, color, and Volodkevitch shear force and by a sensory panel. The repeatability of temperament traits was 0.17 (race score), 0.35 (crush score), 0.51 (flight speed), and 0.36 (isolation score). The proportion of the total variance of temperament traits attributable to the sire and the social group was low (0.003 to 0.402). However, the sire did affect behavior in all tests apart from the crush score (ranging from  $P = 0.02$  to  $P < 0.001$ ). Correlations between behavior in the different tests (ranging from  $r = 0.21$  to 0.54, and  $P = 0.02$  to  $P < 0.001$ ) apart from between-flight speed and isolation score indicate that fearful behavior was consistently shown across assessment methods. **A calm response in the crush score test was associated with a greater ADG during fattening ( $P = 0.05$ ), whereas a calm response during the isolation test was associated with a greater ADG in cold carcass weight ( $P = 0.02$ ). Animals with a calm isolation score had less tender meat as judged by the sensory panel ( $P = 0.03$ ), but no other effects were apparent between temperament and meat quality measures, although several tendencies ( $0.06 \leq P \leq 0.10$ ) were found. Temperament did not appear to relate to meat quality in this study of frequently handled *Bos taurus* genotypes, which is in contrast to other studies using different beef production systems.** Genetic correlations between temperament and meat quality under these conditions could, although not measured in this study, still exist in the absence of phenotypic correlations.

\* Sustainable Livestock Systems Group, Scottish Agricultural College, West Mains Road, Edinburgh, EH9 3JG, United Kingdom

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December 2011

### The Environmental Impact of Beef Production in the United States: 1977 Compared with 2007

J. Capper\*

Consumers often perceive that the modern beef production system has an environmental impact far greater than that of historical systems, with improved efficiency being achieved at the expense of greenhouse gas emissions. The objective of this study was to compare the environmental impact of modern (2007) US beef production with production practices characteristic of the US beef system in 1977. A deterministic model based on the metabolism and nutrient requirements of the beef population was used to quantify resource inputs and waste outputs per billion kilograms of beef. Both the modern and historical production systems were modeled using characteristic management practices, population dynamics, and production data from US beef systems. **Modern beef production requires considerably fewer resources than the equivalent system in 1977, with 69.9% of animals, 81.4% of feedstuffs, 87.9% of the water, and only 67.0% of the land required to produce 1 billion kg of beef. Waste outputs were similarly reduced, with modern beef systems producing 81.9% of the manure, 82.3% CH<sub>4</sub>, and 88.0% N<sub>2</sub>O per billion kilograms of beef compared with production systems in 1977. The C footprint per billion kilograms of beef produced in 2007 was reduced by 16.3% compared with equivalent beef production in 1977.** As the US population increases, it is crucial to continue the improvements in efficiency demonstrated over the past 30 yr to supply the market demand for safe, affordable beef while reducing resource use and mitigating environmental impact.

\*Department of Animal Sciences, Washington State University, PO Box 646310, Pullman, WA 99164

**Comparison of Results for Commercially Available Microbiological Media Plates with Results for Standard bacteriologic Testing of Bovine Milk**

J. Wallace, É. Bouchard\*, L. DesCôteaux, S. Messier, D. Tremblay, J. Roy

The objective of this trial was to compare results for 3 commercially available microbiological media plates with those for standard bacteriologic testing of bovine milk. Milk samples from postpartum cows and cows with a high somatic cell count (SCC) or clinical mastitis (CM) were utilized in the protocol. Sample-ready *Staphylococcus* culture medium (SRSC) plates were used to detect *Staphylococcus aureus* in milk samples obtained from postpartum cows and cows with a high SCC or CM. Rapid coliform count (RCC) plates were used to detect coliforms in milk samples obtained from cows with CM. Aerobic count (AC) plates were used to detect streptococci in CM samples. Fresh mastitic milk samples were frozen and then thawed to evaluate the effects of freezing for the SRSC and RCC plates. The effects of dilution (1:10) of samples were determined. Agreement of results between the commercially available plates and standard bacteriologic testing was evaluated. **The ability of SRSC plates to detect *S aureus* in milk samples was highest with diluted samples from postpartum cows and cows with a high SCC or CM. Sensitivity of the RCC plate for detection of coliforms was highest with diluted mastitic milk samples.** The AC plates had a poor positive predictive value for detection of streptococci in mastitic milk samples. **Freezing increased *S aureus* detection. Overall, the SRSC and RCC plates were accurate, were easy to use, and yielded results comparable to those of standard bacteriologic testing for the detection of *S aureus* and coliforms in bovine milk.**

\*Département de Sciences Cliniques, Faculté de Médecine Vétérinaire, Université de Montréal, Saint-Hyacinthe, QC J2S 2M2, Canada

**The Effect of Sire Selection on Cow Mortality and Early Lactation Culling in Adverse and Favorable Cow Survival Environments**

C. Dechow\*, R. Goodling, S. Rhode

The objective of this study was to determine the extent that genetic selection can help reduce dairy cow mortality and early lactation culling in adverse cow survival environments. Two datasets were constructed. The first contained 100,911 mortality records and 171,178 sixty-day culling records from 1,467 herds. Cows that left the herd (culled or died) from 21 days prior to a due date through 60 days in milk were considered a 60-day cull. Cows were classified as belonging to herds with adverse cow survival environments ( $\geq 4.4\%$  mortality rate and  $\geq 7.1\%$  60-day cull rate) or favorable cow survival environments ( $< 4.4\%$  mortality rate and  $< 7.1\%$  60-day cull rate). The second dataset included 20,438 mortality records and 34,942 sixty-day culling records from 314 herds with a known herd management system. Cows from both datasets were stratified into quartiles based on their sire's predicted transmitting ability (PTA) for productive life and other traits. Cows in the first dataset were also stratified into high ( $> 50$ th percentile) and low ( $\leq 50$ th percentile) groups based on their sire's PTA for daughter calving ease and daughter stillbirth rates. Mortality and 60-day culling in the first dataset were evaluated with logistic regression models with the independent effects of sire PTA quartile, cow survival environment (adverse or favorable), the interaction of sire PTA quartile with cow survival environment, lactation number, age within lactation number, and herd-calving-cluster. The second dataset was analyzed in the same manner, but with cow survival environment replaced by herd management system. The estimated proportion of lactations that ended in death declined from 9.0% to 6.8% and 60-day culling incidence from 7.6% to 4.9% as sire productive life PTA went from the lowest to highest quartile in adverse cow survival environments. The corresponding reduction in mortality (0.7%) and 60-day culling (0.9%) were also significant in favorable cow survival environments. Mortality and 60-day culling both declined by 2.0% from low to high sire productive life PTA quartile in complete confinement free-stalls, which was the most unfavorable herd management system for cow survival. **Daughters of bulls with high somatic cell score PTA and low daughter pregnancy rate PTA had higher incidences of mortality and 60-day culling, and 60-day culling was higher for daughters of sires with high milk and protein yield PTA.** Selection to reduce stillbirth risk was associated with less mortality and 60-day culling, whereas mortality risk was reduced in favorable cow survival environments with selection to lower the incidence of stillbirths and calving difficulty. **In conclusion, this study provides evidence that sire selection can play an important role in reducing the incidence of mortality and early lactation culling, particularly in herds with adverse cow survival environments.**

\* Department of Dairy and Animal Science, The Pennsylvania State University, University Park, PA 16802



## ACADEMIC OPPORTUNITIES

### Dairy Food Safety and Security Fellowship Program

The California Animal Health & Food Safety Laboratory System (CAHFS), School of Veterinary Medicine, University of California, Davis, is offering a two-year Fellowship Program in Dairy Food Safety and Security. The goal of this program is to train diagnosticians who will assume leadership roles that require an in-depth understanding of food animal diagnostic medicine. The Fellow will gain a thorough understanding of the different diagnostic disciplines by rotating through three core areas of the CAHFS Laboratory System: Microbiology (Bacteriology/Immunology/Virology), Pathology, and Toxicology. The Pathology and Microbiology rotations will involve the CAHFS and the Veterinary Medical Teaching Hospital. The Fellowship training schedule will include blocks of time on-site at the Veterinary Medical Teaching and Research Center at Tulare, dairy facilities, food processing/manufacturing plants and externships in selected government agencies. Courses selected from relevant School of Veterinary Medicine and Animal Science disciplines will be supplemented by weekly diagnostic case conferences, discipline rounds and seminars. Requirements include: DVM or equivalent degree and one-year of food animal medicine practice preferably with emphasis in dairy practice.

The current salary for the first year of the residency program is \$38,424. Continuation in the program is contingent upon mutual satisfaction on the part of both the Fellow and the CAHFS.

Applicants must request a special application form and prepare to submit (1) a curriculum vitae, (2) a letter of intent, (3) transcripts from veterinary school(s), and (4) three letters of recommendation to: Sharon Hein, Administrative Analyst, California Animal Health & Food Safety Laboratory System, P.O. Box 1770, University of California, Davis, CA 95617, (530) 752-8709, email: [slhein@ucdavis.edu](mailto:slhein@ucdavis.edu). Program inquiries for Davis can be directed to Dr. Hailu Kinde at [hkinde@ucdavis.edu](mailto:hkinde@ucdavis.edu). **Application material is due by January 31, 2012.** Position will be open until filled.

*The University of California is an affirmative action/equal opportunity employer.*



### Thank You for Supporting the Future Generation of Veterinarians

On behalf of the AABP Foundation and Pfizer Animal Health, we'd like to thank all of the veterinarians who donated to the AABP Foundation – Pfizer Animal Health Veterinary Student Scholarship Program in 2011. As a result of the 2011 Spring Performance Pays program, Pfizer Animal Health contributed \$894,251 to FFA and AABP. Veterinarians, dealers and distributors were able to contribute to the Spring FFA and AABP Foundation Support Program by allocating a 1 percent rebate on qualifying Pfizer Animal Health product purchases during the Performance Pays sales promotion. Donations like this allow Pfizer Animal Health and its partners to promote animal agriculture and the veterinary profession.



In 2011, with the help of the support program, Pfizer Animal Health and the AABP Foundation presented 23 veterinary medicine students from across the nation with a \$5,000 scholarship. These scholarship recipients were also provided a stipend for travel and lodging to the 44<sup>th</sup> AABP Annual Conference in St. Louis, MO. In the last three years, the AABP Foundation – Pfizer Animal Health Veterinary Student Scholarship Fund has awarded \$315,000 in scholarships to 63 veterinary students.

AABP and Pfizer Animal Health are committed to the future of large-animal veterinarians and that support starts long before a veterinarian is in practice. Financial assistance to veterinary students translates into a more robust and sustainable large-animal veterinary community tomorrow. Thank you for your continued support and remember to allocate your funds to the AABP Foundation – Pfizer Animal Health Veterinary Student Scholarship Fund during the 2012 Spring Performance Pays program.

Walt Guterbock  
Chair, AABP Foundation

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### **AABP Foundation Request for Proposals**

The AABP Foundation announces two grants supporting clinical research in cattle. Each grant will be for up to \$25,000. One will be for subjects related to beef cattle, and the other for dairy cattle, although some proposals may address both. Proposals should be aimed at providing practical solutions that practitioners can use.

Each proposal should include a list of the investigators and their brief resumes, a brief description of the trial, a detailed experimental protocol, and a tentative budget. If appropriate, more than one project may be funded in each category, but the total for each category will be limited to \$25,000. At least one of the investigators must be an AABP member. In judging between proposals of similar merit, preference will be given to proposals from researchers who are starting their careers or from practitioners. Preference will also be given to projects where AABP Foundation funds can serve as seed money to attract other grants. Results of the studies are expected to be reported in the research summaries at an AABP Annual Conference and submitted to a peer-reviewed publication upon completion. Twenty percent of the granted funds will be withheld until the results are presented and the article is submitted.

#### Topics for Dairy Proposal:

1. Development of beef and milk withdrawal times for xylazine and its antagonists.
2. Efficacy and economics of universal treatment with antibiotics at dryoff in dairy herds with low prevalence of *Streptococcus agalactiae* and *Staphylococcus aureus*.
3. Risk factors and preventive strategies for respiratory disease in preweaned dairy calves.

#### Topics for Beef Proposal:

1. Design of cattle flow systems to minimize or mitigate bovine respiratory disease.
2. Prevalence and economic impact of Anaplasmosis in beef herds in the southern United States.
3. Risk factors and preventive strategies for respiratory disease in nursing calves.

Proposals will be ranked by the Board of the AABP Foundation. Top ranking proposals will also be reviewed by experts in the area of study. The identities of the researchers will not be revealed to the outside reviewers.

**Proposals must be received by January 31, 2012. Proposals must be submitted online** at [foundation.aabp.org/research\\_proposal](http://foundation.aabp.org/research_proposal). Questions may be addressed to [wmguterbock@earthlink.net](mailto:wmguterbock@earthlink.net), any other AABP Foundation Board Member or to the AABP Office at [aabphq@aabp.org](mailto:aabphq@aabp.org).

Walt Guterbock  
Chair, AABP Foundation