



The AABP Conference Newsletter is Sponsored by Hoard's Dairyman. 

AABP Offers “Science with Practice” at 2021 Annual Conference

After a year’s hiatus from an in-person conference, the American Association of Bovine Practitioners (AABP) 2021 54th Annual Conference was held in Salt Lake City, Utah, Oct. 7-9, with preconference seminars held Oct. 3-6. Beef and dairy veterinarians



were able to get high-quality CE and interact with speakers in person as well as via the AABP virtual conference platform, livestreaming and Zoom.

“As an organization, we made great strides in moving forward from the creation of the Diversity,

Equity and Inclusion Task Force, the Mental Health Task Force, acceptance of robust Vaccination Guidelines, and the inclusion of veterinary technicians into our organization,” notes now-AABP Past President Dr. Carie Telgen.

With the theme “Science with Practice”, the conference gave in-person and virtual attendees up to 22.50 hours of continuing education on beef, dairy, clinical skills, practice management, student and other sessions, plus preconference seminars and clinical forums. Awards, a scholarship auction and \$247,000 in scholarships were also high points of the conference.

“This conference demonstrates the resiliency and determination of bovine practitioners to continue with offering CE to members,” says AABP Executive Director Dr. K. Fred Gingrich, II. “Our volunteers put together a great scientific program and our board supported offering the conference to both in-person attendees and those who chose to participate virtually.”

“The program committee did a great job in creating a scientific program that was applicable to

our members,” states current AABP President and 2021 Program Chair Dr. Pat Gorden.

Also at the conference, keynote speaker Dr. Carrie Journey, president of Not One More Vet (NOMV), addressed the issue of depression and suicide in the veterinary profession.

“Dr. Journey did a great job of connecting with our audience and pointing out that there is mental illness throughout the profession,” Gorden says. “If her talk moves the needle on recognizing mental health within the bovine veterinary industry, it was a huge success.”

Introduction of the 2022 AABP vice president candidates, Drs. Fred Muller and Dave Sjeklocha, gave members a chance to get to know their potential leadership. Members can vote through Dec 30, 2021, at 5pm Eastern at <http://aabp.org/ballot/>.

“It’s been very nice to be in-person,” Telgen added. “It’s been fantastic to see everyone face-to-face. Prior to the keynote address, we did a ‘word cloud’ where attendees, through the Sli.do app, indicated their reasons for attending, and the number one reason was networking. There has been a lot of enthusiasm and people conferencing in the hall and reconnecting with each other.”

2021 AABP Annual Conference Meeting Stats

- 1083 total registrants
- 736 attendees on-site
- 335 virtual attendees
- 241 veterinary students
- 149 members of the American Association of Small Ruminant Practitioners
- 8 countries represented
- 5 registered veterinary technicians
- 260 exhibitor booth representatives

2021 AABP Annual Conference Program Committee

The Annual Conference may have been in-person, but planning the conference starts almost a year in advance, and at the time the 2021 program committee met in 2020, Zoom was the only way for everyone to get together.



Top Row (L-R): 2021 AABP President-Elect Dr. Pat Gorden (Chair), Dr. Pat Gorden again (!), Dr. Terry Engelken (Cow-calf); Dr. Derek Foster (Research Summaries)

Second Row from Top (L-R): Dr. Jonathan Garber (Dairy), 2021 AABP Vice President Dr. Sandra Godden (Preconference Seminars), Dr. Joyce Van Donkersgoed (Feedlot), Dr. Nicole Costello (Students/New Graduates)

Second Row from the Bottom: (L-R): Dr. Kelly Still-Brooks (Small Ruminants); Dr. Clair Windeyer (Research Summaries), Dr. Kevin Jacque (Practice Tips), Dr. David Welch (VPS)

Bottom Row (L-R): Dr. Lowell Midla (Clinical Skills)

**Find more conference recaps and photos
on the AABP Facebook page!
#AABP2021**

2021 AABP Awards

Most award winners were able to be present at the 2021 Annual Conference and celebrate their recognition with their colleagues and peers. Two infrequent awards were also given – the Amstutz Williams Award and an Honorary Life Membership.

**Boehringer Ingelheim
Bovine Practitioner of the Year**
Dr. Kelly Barratt
Listowel, Ontario



**Boehringer Ingelheim
Excellence in
Preventive Medicine
Dairy**
Dr. Jim Bennett
Plainview, Minn.



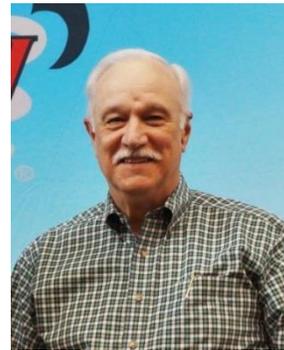
**Boehringer Ingelheim
Excellence in
Preventive Medicine
Beef**
Dr. Christine Navarre
Baton Rouge, La.

**Zoetis
Distinguished Service Award**
Dr. Dale Moore
Pullman, Wash.





AABP Award of Excellence
Dr. Nigel Cook
Waunakee, Wis.



AABP Honorary Lifetime Membership
Dick Lewis
Orono, Minn.



Dr. James A. Jarrett Award for Young Leaders
Dr. Elizabeth Homerosky
Rocky View County, Alberta

Other awards given at the 2021 54th AABP Annual Conference include:

2021 AABP Foundation Competitive Research Grant Awards

Assessment of systemic inflammation following oral calcium supplementation in postpartum dairy cows
Dr. Stephen LeBlanc, Ontario Veterinary College



Merck Animal Health Mentor of the Year Award
Dr. Mark Hilton
West Lafayette, Ind.

2021 AABP Foundation Cattle Welfare Grant Awards*



• *Evaluating the efficacy of two local anesthetic options to reduce pain in calves after cauterization*
dehorning
Dr. Abbie Viscardi, Kansas State University

Amstutz-Williams Award
Dr. Dee Griffin
Lincoln, Neb.



- *Determination for the need for analgesics in day-old calves following cauterization*
disbudding
Dr. Pat Gorden, Iowa State University



**These grants are supported by an anonymous donor with matching funds from the AABP Foundation.*

2021 AABP Research Summaries Graduate Student Awards

- First Place – Lisa Gamsjäger, University of Calgary
Do volume, immunoglobulin G content and feeding method of the first colostrum meal impact subsequent nursing behavior and transfer of passive immunity in beef calves?
- Second Place – Dr. Clair Seely, Cornell University
Effect of Hyperketonemia on Circadian Patterns of Blood Metabolites and Milk Predicted Constituents in Dairy Cows
- Third Place – Dr. Ainhoa Valldecabres, UC-Davis
Associations of Serum Calcium and Subclinical Hypocalcemia at Calving with Productive, Reproductive and Health Outcomes in multiparous Jersey Cows

2021 Student Case Presentation Competition Winners

- Overall Winner – Monika Dzuiba, Michigan State University
Negatively Controlled Trial Investigating the Effect of Dry Cow Therapy on Clinical Mastitis and Culling
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- Research Report Winners
 - Research Project – First Place
Monika Dzuiba, Michigan State University
Negatively Controlled Trial Investigating the Effect of Dry Cow Therapy on Clinical Mastitis and Culling
 - Research Project – Second Place
Megan McMahon, University of Minnesota
Effect of water tank sanitation on water quality, bacterial and viral contamination, and feed intake of cattle in a midwestern feedlot
 - Clinical Case – Jessica Garcia, The Ohio State University
Management of a zoonotic emerging multidrug resistant Salmonella enterica serotype 4, 5, 12, i- on dairies in the Midwest

“Overherd” at AABP

“Mindfulness – learning to cultivate a skill and silence your inner critic. Stop being angry at yourself for being angry.”

*Dr. Carrie Journey
President, Not One More Vet
AABP Keynote Address*

AABP Keynote Speech Addresses Mental Health and Veterinarians

In the 2021 Keynote Address from Not One More Vet (NOMV) President Dr. Carrie Journey, a packed crowd learned how mental health is critical in veterinary medicine and what some tools are available to help. Journey started off with some sobering statistics on suicide in the profession. “Too many of us know someone who has been touched by suicide,” Journey said. Three of Journey’s 86 classmates have died from suicide since graduation in 2005. “If you are in that dark place, I want to help you up and out,”



Dr. Carrie Journey

NOMV offers peer support, resource and education, and was born when veterinarians started talking about why veterinary medicine is hard. NOMV started on Facebook and grew to 33,000 veterinary professionals across the world, at least one follower in every single continent. Most people connect through the online support forum, but Journey says that now as a registered 501c3, they make available peers to talk to and other resources, including lecture. “I do lectures because knowledge is power,” she says. “That’s how we make real change.”

Is suicide really a problem in the profession? Journey noted a study that looked at suicide, cancer and other causes of death among 450 California veterinarians from 1960-92. Male veterinarians were

2.5 times and female veterinarians 5.9 times as likely to die by suicide than the general population. "It's not a millennial problem, it's a veterinary medicine problem that persists to this day," she notes. A paper in 2014 looked at violent deaths for veterinary



professionals; males were 1.6 times and females 2.4 times likely to die by suicide, and female veterinary technicians were 2.3 times and male veterinary technicians five

times more likely to die by suicide. "It's not just a vet problem, it's a vet med problem."

Secondary trauma stress is the emotional duress that results when an individual hears about the first-hand trauma experiences of another, including clients. "A lot of us hold onto too much of that trauma," Journey says. In a poll, 58.9% of U.S. veterinarians had high secondary trauma out of 5,000+ veterinarians.

So, what can we control? When we look at how we handle stress, we have a lot of research that says that your personality and personal coping mechanisms matter more. Veterinarians are quite a bit more neurotic than the general public, but that can make you a good doctor. That part of your brain helps you quickly identify and sort risk, a really important thing in veterinary medicine. Being able to think about worst-case scenarios and how you are going to deal with them, that's really important in surgery.

A Merck study showed the risk factors for wellbeing and mental health, and they included neuroticism, having a higher debt, being younger, being female and having a dissatisfaction with hours. "You can't read the label front inside the jar, sometimes you need help to not get in your own way."

You can view Journey's full presentation at <http://aabp.org/meeting/2021/journey.mp4> and find out more at www.nomv.org.

Scholarships

In 2021, the AABP Foundation received 127 scholarship applications and awarded 51 scholarships to veterinary students, totaling \$247,000.

2021 AABP Foundation-Zoetis Scholarship

Veterinary students graduating in 2022 were eligible for the AABP Foundation-Zoetis Scholarship. This year 13 students received the \$5,000 award which is generously funded by Zoetis. The 2021 recipients are:

- Alexandra Colton, Oregon State University
- Patrick Crannell, Michigan State University
- R. Jordan Farrell, Auburn University
- Lucas Heimmermann, University of Wisconsin
- Maryana Hudson, Mississippi State University
- Hanna Jarvis, The Ohio State University
- Marisa Klister, University of Wisconsin
- Montana Lins, University of Wisconsin
- Logan Murray, University of Georgia
- Allyson Patterson, North Carolina State University
- Marina Sweet, The Ohio State University
- Adam Wiegand, Western University
- Lyle Wielenga, Iowa State University

2021 Amstutz Scholarship

Nine veterinary students received the \$10,000 2021 Harold E. Amstutz Scholarship. Funding sources are AABP member contributions, investment fund interest and dividends, AABP 5k Stampede registrations sponsored by Boehringer Ingelheim, and proceeds from the AABP Live and Silent Auctions and raffle. The 2021 recipients are:

- Trevor Copes, Tufts University
- Monika Dziuba, Michigan State University
- Lindsey Fenster, University of Georgia
- Madison Kelly, Auburn University
- Ened McNett, Oregon State University
- Jessica Meseck, Iowa State University
- Tyler Oxley, Ross University
- Jared Sanderson, Michigan State University
- Kara Valasek, Iowa State University

2021 AABP Foundation -Merck Animal Health Bovine Veterinary Student Recognition Awards

Eighteen 3rd and 4th year veterinary students have been chosen to receive this \$5,000 scholarship generously sponsored by Merck Animal Health. The 2021 recipients are:

- Kathryn Blair, Washington State University
- Julia Brigandi, Cornell University
- Alexandra Colton, Oregon State University
- Jordan Cornwall, Washington State University
- Monika Dziuba, Michigan State University
- Lindsey Fenster, University of Georgia
- Juli Henderson, Iowa State University
- Kalene Johnson, Ohio State University
- Montana Lins, University of Wisconsin
- Jessica Meseck, Iowa State University
- Alexandra Preszler, Iowa State University
- Lexie Reed Ontario, Veterinary College
- Jared Sanderson, Michigan State University
- Artemis Sapountzi, Cornell University
- Jared Schenkels, Atlantic Veterinary College
- Anna Schmidt, University of Pennsylvania
- Isabell Stamm, Western University
- Kara Valasek, Iowa State University

2021 Dr. Francis Welcome Future Dairy Practitioner Scholarship

The purpose of the Francis Welcome Memorial Scholarship is to support a superior 3rd year veterinary student who demonstrates the character, knowledge and potential to become an outstanding dairy veterinarian upon graduation. The award is \$2,000.

The Francis Welcome Memorial Scholarship was endowed by the Welcome family, and supported through member donations, to honor the memory of AABP Honor Roll member Dr. Francis (Frank) Welcome who was actively involved in the AABP organization throughout his career.

- Blossom DeBruin, Western University

Telgen's President's Address Notes Accomplishments and Work Needing to be Done

AABP Outgoing President Dr. Carie Telgen discussed the ups and downs of the past year when COVID-19 affected all facets of the industry. "For many of us, COVID-19 didn't change our day-to-day," Telgen said. "There were still cows to care for, businesses to run and clients to serve. Although my role may have been significantly different than those who have come before me, as an organization and an entire Board, we were still able to make great strides in moving forward." These strides included the creation of a Diversity, Equity and Inclusion Task Force, the Mental Health Task Force, creation of vaccination guidelines and the inclusion of veterinary technicians as members.

While those activities will enrich AABP members personal lives as well as their professional endeavors, Telgen noted there are many who are struggling. We are losing far too many of our members within the first five years of practice. We need to figure out why, and then figure out a way to change this statistic. Our educational debt and the stresses of the job still weigh heavily on our members. Providing support and resources where we are able is a task we are working on. We are constantly facing the challenges of a society that doesn't understand and continually tries to undermine our profession and the industry we serve."



Incoming AABP President Dr. Pat Gorden and President Dr. Carie Telgen

Telgen encouraged all members, especially the younger set, to get involved in the organization. “The AABP Board was never on my radar as a young veterinarian,” she explained. “When a friend of mine asked if I would be willing to run for a director position, I figured I didn’t have anything to lose and a whole lot to gain. I didn’t do anything special to get here. I was a small-town farm girl from Vermont, who truly said ‘Why not?’ when she was asked, and then again, when asked to run for the Executive Committee. Are you a seasoned practitioner who knows someone who should be here? Encourage them, nominate them, support them. The future of our organization is up to them.”

Telgen concluded with this challenge: “How are you going to take what you have learned here this week, the connections you have made and the interactions you have had, and make an impact in your community upon your return? What can you do to make your practice better, your job more impactful and the bread-and-butter of our careers, cattle and agriculture, sustainable for generations to come?”



Conference Spotlight: 2021 Food Animal Educators Symposium

The annual AABP Food Animal Educators Symposium was held Wednesday afternoon in Salt Lake City. There were 22 bovine educators in attendance, including five joining through Zoom, and they represented 17 different colleges from the U.S. and Canada.



Photo Courtesy of Dr. Emmanuel Rollin

“Many bovine educators are not formally trained in education, so coming together to share their experiences is highly valuable to allow them to improve their ability to train the next generation of bovine practitioners,” said Symposium Chair Dr.

Emmanuel Rollin. “Attendees came away with new knowledge as it relates to OSCEs, or Objective Structured Clinical Examinations, that veterinary schools are implementing to create more formal evaluations of student technical mastery.”

This year’s symposium also allowed bovine educators to share lessons learned over the last few years, as they adjusted to new methods in educating students, and learned to navigate new obstacles.

“Overheard” at AABP

“We’ve been working for decades to get producers to get colostrum into calves so they don’t have failure of transfer of passive immunity, but now we want them to get optimal transfer of passive immunity.”

*Dr. Amelia Woolums
on calf immunology*



Conference Spotlight: Immunity in the Preweaning Beef Calf

The calf’s immune system begins developing before the calf is born. There is thymus (T cells) development at 40 days gestation, and response to some viruses is possible at 70 days gestation, noted Dr. Amelia Woolums. By the third trimester, the fetus can respond to many different infections.

At birth, a calf has no antibody in the serum unless it was infected before birth. “If you want to know if a calf was infected in utero, one way is to get a blood sample before it nurses colostrum,” Woolums said. The calf’s serum complement levels are lower than adults, as are cell functions.

Looking at passive transfer, Woolums says Dewell’s 2006 study discovered that a calf that had 2,400 mg/dl or more of serum IgG was more likely to stay healthier. Calves with less than that were 1.6 times as likely to become sick, and 2.7 times as likely to die. “So, while 1000 mg/dl is good to aim for, 2400 is much better in terms of having calves that were healthier and less likely to die.”

Transfer of passive immunity is talked about now not just as a failure or passing, but as optimal or suboptimal. New recommendations (2020) have

come out from a panel of experts for passive antibody cutoffs for dairy calves:

≥ 2500 mg/dl	excellent
2499-1800 mg/dl	good
1799-1000 mg/dl	fair
<1000 mg/dl	poor

Woolums said studies have shown optimal transfer of passive immunity can improve health vs. adequate transfer, and there is definitely room for improvement on some cow-calf operations to achieve optimal passive transfer.



Dr. Amelia Woolums and Dr. Eric Rooker

Conference Spotlight: First Masterminds Session to Combat Burnout

Burnout and stress are the #1 and #2 reasons veterinarians give for leaving large animal and mixed animal practice. However, there are many ways to manage this! Dr. Eric Rooker, of Operators to Owners, discussed how a small four-to-six-person peer-based mentorship group called a Mastermind can accomplish this.

“By connecting members more meaningfully and allowing an open forum of facilitated discussion, participants can help each other pursue meaningful work,” Rooker said about the Mastermind idea. “This ultimately results in greater enjoyment of their career as well as reducing their perceived levels of stress and subsequent burnout.”

Griffin Honored by Beef Attendees

After receiving AABP’s highest honor, the Amstutz-Williams Award, attendees at the Saturday beef session congratulated their peer and mentor, Dr. Dee Griffin.



“Overherd” at AABP

“Buying vs. raising heifers is one of the most important management decisions for a cow-calf operation. Replacement economics should be based on long-term profitability, but we very much live in a short-term world where profitability varies widely from year-to-year.”

Dr. Lee Schulz discussing replacement heifer economics

Conference Spotlight: BRD in Group-housed Young Calves

Dr. Sandra Godden spoke on preventing BRD in group-housed, pre-weaned dairy calves. At what age should calves be introduced to a group? Older is better according to studies, Godden said. Day 1 vs. Day 5 – younger calves (Medrano-Galarz et al, 2018):

- Took longer to learn to drink unassisted and needed more guidance
- Drank less milk in the first days of life
- Had an increased risk of severe diarrhea



Another study (Svensson et al, 2006) showed if calves were introduced to the group at 12 days of age or less, there was a 50% increased risk of BRD. Calves introduced to a group at Day 1 vs Day 21 had a higher rate of scours and pneumonia (Curtis et al, 2016). "Most of the scours events occurred before three weeks of age, and most of the pneumonia events occurred after three weeks of age," Godden said. "There's something about grouping them early that sets them up for pneumonia events. Later is better."

How big should the group be? Smaller is better. "Most studies are showing 7-8 calves or less is your ideal group size for health," she noted. "The bigger the group, the more opportunity to 'wear and share' pathogens." If the group is big enough there's the opportunity to introduce competition which can cause limited intakes for some. "Distributors are telling producers they can put 25-30 calves per feeding station, but it's just not true."

UPenn Secures 2021 Quiz Bowl Championship

What's better than the University of Pennsylvania Quiz Bowl team winning the 2021 AABP Quiz Bowl Championship? A few hours later beating the AABP "Dream Team" made up of AABP leadership!



Front Row (L-R): University of Pennsylvania veterinary students Mary Wright, Veronica Daugherty and Sarah Ressler.

Back Row (L-R): AABP "Dream Team", President Dr. Carie Telgen, District 8 Director Dr. Arn Anderson, District 11 Director Dr. Elizabeth Kohtz, District 13 Director Dr. Ryan Rademacher and Quiz Bowl emcee Dr. Allen Hodapp.

"Overherd" at AABP

"Dr. Aaron Pospisil said, 'Failure is an event, not an adjective or characteristic of you.' Your first year out of school, you will fail eventually, but it doesn't define who you are, it just defines the moment."

*Dr. Kevin Jacque in
the students and new grads session*

Amstutz Scholarship Fund Auctions Raise \$85,000

Auction donations and purchasing was back in high gear at the 2021 conference, and raised a total of \$85,000 between the live and silent auctions. Many items were re-donated on the spot which raised the dollar amount. In the spirit of cooperation, the Kansas State Great Plains Beef Syndicate, Ohio Dairy Veterinarians, and the Southern Crescent Bull Buyers combined funds to purchase the Mark Hopkins Bronze Bull Statue for \$26,000.

Vacation homes, art, tools, student chapter bundles, food and more were donated by students, members and AABP exhibiting partners.

New this year was a 50:50 raffle, raising \$9,200, \$4,600 of which went to Dr. Tanner Leon. Leon donated \$1,000 back to the AABP Foundation.

Amstutz and Foundation Raffle Winners

Amstutz Raffle

- First Place (free Recent Grad or Annual Conference registration), Dr. Matthew Brink
- Second Place (Carhartt vest), Dr. Dusti Small

Foundation Raffle

- First Place (free Recent Grad or Annual Conference registration), Dr. Jason Bravos
- Second Place (Carhartt vest), Dr. Ben Abbey

AABP thanks everyone who donated, bid, and/or purchased items and raffle tickets!

5K Stampede Race Results

Almost 60 conference attendees participated in the 5K Stampede Fun Run held on October 9. The run/walk, sponsored by Boehringer Ingelheim, supports the Amstutz Scholarship Fund.

It was a rainy chilly morning in Salt Lake, but that couldn't stop the enthusiastic crowd of runners in five age groups!

- Overall Winner
Ben Laudermilch
- Overall Male Winner
Ben Laudermilch
- Overall Female Winner
Caitlin Wiley

Find all 5K Stampede Race Results at <http://aabp.org/meeting/5K.asp>.



Conference Spotlight: *How do you get started in financial consulting?*

Dr. Brian Reed, DVM, MBA, offered some useful tips and information on getting started with financial consulting for dairy clients.

Getting started:

- Show interest (have empathy) with your clients.
- Ask questions – try to find out what their burdens and concerns are.
- Basic accounting knowledge is helpful and even necessary. Get training if you need it.
- Understanding financial statements is important.
- Start by answering questions via partial budgeting techniques

- Gain abilities and confidence in facilitation and project management.
- Network and learn from accountants, tax preparers and lenders.
- Add a financial focus to client education meetings.

Reed added that there are two key concepts in dairy financial consulting:

- Confidentiality in all aspects!
- Beware of the human emotions involved, the deeper you get into these areas. It's not just about the numbers, but the people involved. You should be mentally and psychologically prepared for it.

AABP Leadership and Board of Directors



Front Row, L-R: Incoming District 11 Director Dr. Elizabeth Kohtz, District 8 Director Dr. Arn Anderson, District 10 Director Dr. Paul Cook, District 11 Director Dr. Dale Moore, Past President Dr. Calvin Booker, District 1 Director Dr. Elizabeth Brock

Back Row, L-R: Incoming Vice President Dr. Michael Capel, Parliamentarian Dr. Dick Wallace, District 7 Director Carl Meyer, President-Elect Dr. Pat Gorden, President Dr. Carrie Telgen, District 4 Director Dr. Mark Hardesty, District 3 Director Dr. Lee Jones, District 13 Director Dr. Ryan Rademacher, Treasurer Dr. Brian Reed, District 12 Director Dr. Murray Gilles

Not Pictured: Vice President Dr. Sandra Godden, District 2 Director Dr. Randall Hinshaw, District 5 Director Dr. Wilfred Schuler, District 6 Director Vickie Cooper, District 9 Director Jeff Ondrak

Conference Spotlight: Food Animal Residue Avoidance Databank (FARAD)



FARAD is a food safety program funded by the USDA-NIFA since 1981. It is a resource for drug residue information, including approved uses. Dr. Fiona Maunsell explained that FARAD is a centralized resource that provides residue avoidance advice for veterinarians practicing extralabel drug use (ELDU) in food animals under AMDUCA, and withdrawal advice for contamination cases such as feed mill errors and accidental exposures to environmental toxins, chemicals and pesticides.



FARAD research and publications focus on drugs or toxins of high importance (violative residues, withdrawal interval requests, requests from industry) for which pharmacokinetic data in food animals is lacking.

How does FARAD respond to specific WDI requests? Trained doctoral-level professional FARAD staff members respond. Call centers rotate duty, and there is a supervising FARAD director at year institute. If the caller is not a veterinarian, they are advised to have their veterinarian (or find a veterinarian) to contact FARAD. It is asked if the question is about a prohibited ELDU, or an FDA-approved (labeled) use (often requested by non-food animal veterinarians). Databank searches and a variety of models are used to get to an answer if possible.

Maunsell cautioned, however, that data continuously changes. As it changes, answers and recommendations can change. "So, there can be a scientifically justifiable reason why the answer you got 10 years ago for a drug is different than what you might get told today," she said.

FARAD offers many tools on ELDU in cattle, swine, goats and sheep, including species topics/pages, FDA-prohibited and restricted drugs, VFD regulations and links, FARAD Digests, a bibliographic citations database and a Commercial Drug Residue Screening Test database. For more information, visit www.farad.org.

New Simple Way to Get Your CE Certificate!

The 2021 54th AABP Annual Conference offered 22.50 RACE-approved continuing education (CE) credits. RACE approval is one benefit in addition to having online CE free of charge for AABP members.

If you attended the 2021 AABP Annual Conference in-person or virtually, you can access and print your CE certificate by logging on to the AABP website at <https://aabp.org>, and in the upper righthand corner at "Member Log On", click on "My CE Certificates". You can edit the certificate and check the presentations you watched, then click Create Your CE Certificate and print.

Conference Spotlight: Skills for success in dairy and mixed animal practice



Dr. Kevin Jacque spoke in the students and new graduates session on skills for success in dairy and mixed animal practice. The following are a few of the technical skills in which Jacque suggests students and new graduates become proficient.

Technical skills

- Palpation – be astute in various pregnancy stages, ovarian structures and different classes of animals. There are people on the farm who can probably do this, but you need to know if they are wrong or right, or if you need to train someone such as a veterinary student, how to do this. As a dairy practitioner, you still need to know how to palpate cows, even though there is a lot of technology out there.
- Ultrasound – you should know how to use within the first year of practice. It's much easier to use ultrasound if you already know by hand where things are located.

Tip: Shoulder guards are almost a necessity, but you can also use over-the-head slip-on sleeves that give you a little extra protection. They are also great for calvings. Put your calving suit on first then put your sleeve over the top.

- Displaced abomasum corrective surgery – a mainstay of dairy veterinary medicine, know multiple surgical approaches; over many cases will come efficiency and proficiency; DA surgery is a

gateway to surgical confidence for all bovine surgery and other species.

- Communication – this is probably more important than any other skill. “Farmers in general are probably the most difficult subset to talk to. Be aware not every accepts communication the same way.” Jacque said people are different, there are multiple approaches to communicating, use different avenues for different purposes, and non-verbal clues are always important.
- Diagnosing and treating – know the most common dairy cow ailments. Treatments should be scientific, not swayed by opinion.
- Necropsy and sampling techniques.
- Lab submissions, CVI, VFD.
- Know how to fill out the paperwork.
- Problem work-ups – know how to solve problems of any size. This leads to increased rapport and trust. Involve all people related to the problem.

“Remember why you chose this profession,” Jacque noted. Professional growth will take time working with colleagues and peers. Accept feedback even if it is negative. Adjust your working routine to work best for the clinic, and play nice with your staff and clients.



Conference Spotlight: Practice Tip: *Squeeze me alive*

Dr. Tera Barnhardt demonstrated a practical way to stimulate “dummy calves” in the practice tips session by using the Madigan Squeeze.

The Madigan Squeeze was developed by Dr. John Madigan to address neonatal maladjustment syndrome, or “dummy foals”. It’s estimated to occur in horses in 3-5% of births. It can also be used in calves.

Foals with neonatal maladjustment syndrome:

- Appear healthy at birth
- Occurs in long births with possible hypoxia, short births without adequate time in the birth canal, cesareans (have seen in beef and dairy calves)
- Are weak, uncoordinated, lethargic, absent suckle -- translates to failure of passive transfer in calves
- Have been shown to have increased neurosteroids which are responsible for keeping foals/calves quiet in utero.
- “Foals don’t gallop in utero” – John Madigan

- Detachment issues which is being compared to the autism spectrum in humans.

How to use the Madigan Squeeze:

- Use a $\frac{5}{8}$ ” to $\frac{3}{4}$ ” diameter soft rope, 15 feet long
- Tie a bowline knot to make a fixed loop so that the loose end of the rope can slide through it like a honda on a lariat.
- Barnhardt said you can also buy the E-Z Squeeze Foal Rope for less than \$50 at AnimalReproductionSystems.com which comes with a laminated sheet with a foal as an example.
 - The first loop runs through front legs of the calf and the honda sits on withers.
 - Make a half-hitch underneath the thorax, second loop sits on spine.
 - Repeat and spread loops across thoracic cavity.



- Apply pressure until calf lays down, or if already down, you win.
- Continue pressure for 20 minutes. It mimics the pressure the calf experiences in the birth canal. At the end of this time release the rope. Most of the time they will stand right up which is impressive, or they may rest for a little while.

“During those 20 minutes, the calf goes in a very deep sleep, the respiratory rate is lower and usually the heart rate stays about the same as when you started,” Barnhardt said. “It’s a powerful tool for non-drug sedation in calves if you need.”

What should you squeeze?

Optimally, the calf should be less than 3 days old. “Realistically, everything can be squeezed including neonatal patients in need of drug-free sedation and neonatal dummy calves without suckle reflex. It’s cheap and it’s worth trying.”

Conference Spotlight: *Overcoming Imposter Syndrome*



Imposter syndrome is also referred to as the imposter phenomenon, explained Dr. Audrey Ruple speaking to students and new graduates. “It affects high-achieving individuals and is a cognitive bias. The way we should reason is different than the way we actually reason or rationalize things.”

When someone is feeling like an imposter, they have a belief set that make them feel less competent than they are perceived to be, despite the external measures of their success. Our confidence level decreases as we learn more about a new competency, then it increases over time. “It occurs when people feel incompetent even when they are competent in that skill set,” Ruple said.

It can be different for everyone, but there are consistent themes of imposter syndrome which makes one believe:

- You don’t deserve success
- You’ll never be enough
- You don’t need anyone
- Your accomplishments don’t matter
- You are alone

“How it manifests is that every time we are faced with an achievement task such as a test, we can be paralyzed with self-doubt and anxiety and respond such as in over-preparation, spending too much time on a task or procrastination,” Ruple said. “We discount positive feedback despite having overcome things, we feel fraudulent and have increased self-doubt which can lead to depression and anxiety.”

Who has imposter syndrome?

Imposter syndrome can happen to people who are already successful and seem to appear like they have everything together. “Imposter syndrome is not a psychological disorder, but these beliefs can lead to psychological stress which can lead to anxiety and depression. All of us can suffer from imposter syndrome,” Ruple said.

Why does it happen?

“It was seen as being a problem of the individual, that something is wrong with us,” Ruple explained. Perfectionists, women, minorities, type A people were seen to be the individuals with imposter syndrome. “But now there has been a shift in thinking, and it’s looked at instead as a reaction to

external situations. Imposter syndrome is an appropriate response to external stimuli.”

Using veterinary school as an example, one research study over 10 years measured personal distress and empathy as students progressed through the didactic portion of their program. Veterinary students had the highest level of empathy and lowest level of personal distress when they started vet school. By their clinical year, personal distress was at the top and empathy was at the bottom, opposite from when entering vet school.

Burnout is a symptom that can be caused by imposter syndrome. In another study looking at veterinary students, levels of burnout increased and emotional exhaustion was highest at the end of the year when they were emotionally depleted. This has also been seen in medical students.

Dealing with Imposter Syndrome

We need to recognize it is an external, not internal problem. It’s a totally normal and natural human response. If you can overcome the feeling that imposter syndrome is a lack of grit or determination, it will help you overcome it. “Build your professional support network,” Ruple encouraged. “It starts the day you set food in vet school until you end your career.”

Low-consequence peer assessment can help as well. Have someone give you technique or communication critique and feedback. “Integrate the idea of who you are as a professional and as a human being.”

Don’t say you’re doing okay if you’re not. “Find your tribe – any people who support you, whether in veterinary medicine or not.”

Hear the positive feedback, which people have a hard time doing. Integrate that positive feedback. Stop the negative self-talk as soon as you recognize that voice. Find hobbies that may have nothing to do



with vet med. Many of them are exercise-focused which is an important part of life-balance as well.

“Overheard” at AABP

“Sometimes the people who seem to be the most put-together and successful are the ones suffering the most with imposter syndrome.”

Dr. Audrey Ruple speaking on imposter syndrome to students and new graduates.



Conference Spotlight: Case submissions for abortion diagnostics

Some definitions:

Abortion – expulsion of a fetus prior to the time of expected viability

Still birth – expulsion of a dead fetus within the period of expected viability

Weak-born calves – expulsion of a live, but non-viable fetus

In the AABP beef session, Dr. Larry Holler said case submission for abortion diagnosis is critical, starting with a complete history, including:

- Herd history and details about the current abortion problem including an estimate on the gestational age
- Recent purchase or exposure to outside animals
- Illness in the dam or the herd
- History of vaccinations and treatments
- Additional information on nutritional management, feedstuffs and feeding practices is also useful when evaluating risks for feed-associated opportunistic pathogens

The quality of submission will impact diagnostic success. “Strive to do the best job possible with good samples and good history, working together as a team,” Holler said. He noted that a fetus and placenta are preferred, as well as pieces and parts, fresh and formalin-fixed. You can submit serum samples for serology, but individual cow serology may not be

useful. As far as BVD testing, other BVD diagnostics may be run before ear notches are recommended.

The most important tissue to submit for diagnostics is placenta. Second is the lung, and third is stomach content. “If I only got those three, I could probably do 90% of the cases I get,” Holler said. “Placenta is by far the most valuable tissue to submit. Nothing gets to the fetus without affecting the placenta.”

There are a lot of genetic and non-infectious abortion causes making it difficult for a diagnostic lab to get a handle on a case. Infectious causes of abortion include bacteria, fungal agents, viruses and protozoa. *Truperella pyogenes* is the most common bacterial cause of abortions, and other bacteria include *Leptospira interrogans*, *Listeria*, *Bacillus* sp., *Campylobacter* sp and bacteria such as *E. coli* and *Salmonella*. Fungal agents include *Aspergillus*, *Mucor*, *Absidia* and more. Viruses include IBR and BVD, and *Neospora* is a common protozoa involved in abortions.

Opportunistic pathogens include *Bacillus* sp., which are common environmental flora and are associated with late-term abortions, still births and possibly weak-born calves. Lesions are often only present in the placenta. Risk factors are bale processing including spoiled hay, silage piles, TMR rations, feeding on the ground, drought hay and dirty corn stover.

Mycotic abortion vs. mycotoxins – the mycotoxin is not the agent that causes the mycotic abortion – mycotoxins are the byproduct of the growth of a fungus. “Mycotic abortion is from the actual fungal organism such as *Aspergillus*,” Holler explained. “It is mainly sporadic, but may appear to have a higher incidence in some herds.” The spores are ingested or inhaled and penetrate the mucosa, disseminating to various tissues including the placenta via the bloodstream. Diagnostics for mycotic abortion from a placenta can be difficult if it is contaminated. If the same mycotoxin is found, for instance, in the stomach contents as well as the placenta, it may be more likely to be the cause.

Conference Spotlight: Practice Tip: Trans-tracheal washes

A trans-tracheal wash allows you to take a sample directly from the trachea of an animal, said Dr. Aaron Pospisil in the Practice Tips session. It provides targeted therapy options and is relatively easy and



cheap to perform. It is valuable in a monetarily-valuable animal such as a flush cow, a show steer or a pet that has a lot of intrinsic value. “It provides an extra layer beyond what your stethoscope can hear and what your ultrasound can see,” Pospisil said.

Materials needed:

- Large bore needle (12 ga 3”) (such as a milk fever needle)
- Red rubber catheter (5 fr)
- 60cc syringe
- Sterile gloves
- Scalpel blade
- Lidocaine
- Sterile saline
- Restraint

Restraint will be your biggest key, Pospisil said. “If you need to sedate, sedate. There is no advantage of getting thrown around by a loose head.” The steps Pospisil uses for the wash are:

- Palpate the trachea – put the needle straight in halfway between the larynx and where the tracheal rings are underneath the muscle layers, about mid-way down the neck.
- Clip and scrub the site – use some discretion if it is a show animal.
- Block with some lidocaine, nick the skin and insert needle – you’ll feel the characteristic “pop, pop” through the two layers.
- Once you’re in the trachea you’ll hear air through the needle as the animal breathes, feed your catheter through – you want to get it as caudal as you can. If the animal coughs as you introduce the catheter, you probably want to pull it out and put it back in. What happens is when they cough, it pushes it up and it flips rostrally and you sample the area you don’t want.
- Hook your sterile saline up, flush and suck up some sample, about 15-20cc calf, 40-50cc adult.
- Recovery of 3-5cc is a win.

The animals may cough with the fluid which is normal – it is really not that much fluid that is put in. The fluid sample should have some cloudiness from mucus and cellular debris. If you don’t see that, you may want to try to get a different sample. “Ideally, you’ll put some on a slide right away and put some in a red top tube for culture and sensitivity if that is what you’re after.”

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