

IVMA



UPDATE

December 2017  
Volume 25 | 12

## Iowa Leads Nation in VMLRP Awards for 2017

The State of Iowa is number one in the country for awards in the USDA's Veterinary Medicine Loan Repayment Program (VMLRP) for 2017. State Veterinarian Dr. Dave Schmitt identified and nominated seven Iowa shortage situations for federal designation. Of these seven, four offers have been extended to Iowa livestock veterinarians in 2017. If they accept the awards, they will receive up to \$25,000 per year for three years to help repay a portion of their veterinary school loans. In return they will practice for a minimum of three years covering specific species identified by Dr. Schmitt. The shortage areas where offers have been extended cover thirty-one Iowa counties. To review Iowa's VMLRP shortages visit: <https://nifa.usda.gov/program/veterinary-medicine-loan-repayment-program>.

Each year since 2006, VMLRP has been funded through the annual Agriculture spending bill. This year, when Congress finishes its work on fiscal 2018, it is expected that another \$6.5 million will be allocated for the program, bringing the grand total to \$51.5 million.

The AVMA is pushing for the passage of the VMLRP Enhancement Act (H.R. 1268 / S. 487) which would exempt VMLRP awards from the current 39% withholding taxes. Unfortunately, just two members of the Iowa congressional delegation – Reps. David Young and Dave Loebsack -- cosponsor the VMLRP Enhancement Act. This has prompted the AVMA to intensify its efforts in Iowa to win the support of Senators Chuck Grassley and Joni Ernst as well as Representatives Rod Blum and Steve King.

*Continued on page 9*

### A VMLRP Success Story



*Dr. Jeremi Wurtz, Richland, VMLRP Past Recipient.*

Dr. Jeremi Wurtz, of Richland is a past recipient of the VMLRP Award representing a shortage area of veterinarians specializing in food animal medicine in Southeast Iowa. "This program helped me immensely. The State of Iowa has a very good VMLRP award rate and to obtain it is very rewarding" he said. "The best part of

*Continued on page 9*

# 2017 Calendar

## DECEMBER

- 1 Lecture, "Career Development from a Veterinary Surgeon who Couldn't Keep a Job", by Earl Gaughan DVM, Dipl. ACVS. Classroom 226 Vet Med, Iowa State University CVM. 12:00 pm, lunch provided at 11:30 am. Funded by The Kramer-Marks Fund and open to all equine practitioners. No RSVP required.
- 11 Greater Des Moines VMA CE, Dr. Kristen Obbink will present "Beekeeping and the Veterinary Feed Directive", 7:00 pm Urbandale Public Library, Urbandale. 1 hour CE (pending approval), RSVP to board@gdvma.org
- 22 IVMA office closes at noon
- 25 IVMA office closed for Christmas

## JANUARY 2018

- 1 Office closed for New Year's Day
- 4-6 AVMA Veterinary Leadership Conference, Chicago
- 25 IVMA Executive Board and Administrative Committee Meeting, Gateway Hotel, Ames
- 25-27 Nebraska VMA Annual Meeting, La Vista Conference Center, La Vista, NE. For more information visit [www.nvma.org](http://www.nvma.org)

### SAVE THE DATE

**IVMA Winter Conference February 14-15, 2018**

**IVMA Legislative Day February 28, 2018**

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Medical Association  
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# Greetings,

I hope this finds everyone fresh off of a good Thanksgiving holiday. With any luck everyone got to spend some time with friends and family and didn't have too many exploratory surgeries related to turkey bones or cases of pancreatitis they had to treat!

Earlier in November the Veterinary Diagnostic Laboratory (VDL) at Iowa State received full accreditation following their site visit. This is great news for the university and our profession but does not minimize the fact that the VDL has outgrown their dated facilities. Currently a new stand-alone VDL facility is the university's number one capital project. The IVMA supports the university's efforts to gather funding and support for a new VDL and that will be one of the major issues we will be addressing at Legislative Day on February 28th. In the meantime, it never hurts to contact your local legislators and let them know why a new VDL is important to you and your practice! (Editor's note: See pages 10-11 for more information on the the VDL.)

In other news related to the College of Veterinary Medicine, the search for a new Dean is well underway. We have several IVMA members on the committee dedicated to finding the best person to continue to lead the College in their pursuit to educate future veterinarians.

We can't get through a month without a plug about IVMA events and deadlines coming up. If you haven't already renewed your membership, please remember to do that before the end of the year. If you have already renewed thank you for your continual support! The Winter Conference will be held at Prairie Meadows on February 14th and 15th so be sure to get registered and get it on your calendar. We have some great speakers lined up and you won't want to miss it.

Last but not least I hope everyone has a very Merry Christmas and Happy New Year! If your holiday plans include traveling I wish you safe travels!

See you soon,



Kylee Thomas, DVM

## PRESIDENT'S COLUMN



# PUBLIC HEALTH



## RESCUING PETS FROM HURRICANE - AFFECTED AREAS - GOOD INTENTIONS WITH DISEASE RISKS

BY: ABBEY CANON, DVM, MPH, DACVPM, CENTER FOR FOOD SECURITY AND PUBLIC HEALTH

Recent Hurricanes Harvey, Irma, and Maria devastated areas of the continental United States, U.S. Virgin Islands, and Puerto Rico, displacing human and animal residents. Animal rescue organizations throughout the country have offered aid, including relocation, to displaced companion animals and shelter pets. Adoptable animals have been evacuated and relocated to other states, including Iowa, and bring different health challenges which may not be seen commonly in your practice. When stressed during transportation or relocated to a new environment, animals may be more likely to shed infectious agents.

Some infectious diseases that pets may arrive with can be zoonotic and are reviewed briefly below.

**Leptospirosis** is common in many of the hurricane-affected areas. Large outbreaks have occurred after floods. Signs of infection in dogs may include fever, vomiting, abdominal discomfort, diarrhea, lethargy, anorexia, depression, and myalgia. *Leptospira* spp. are secreted in the urine and can be transmitted directly between hosts or indirectly through the environment. A variety of serovars can affect humans.

**Chagas disease** (American trypanosomiasis) is caused by *Trypanosoma cruzi*, and is typically transmitted to dogs through the feces of the biting “kissing bug”. In humans, transmission typically requires a vector, although cross-placental and lactation transmission are possible.

**Rabies** is present in the United States and other Caribbean countries (Dominican Republic and Haiti), and all dogs coming from hurricane-affected states, the Dominican



Republic, or Haiti must have a valid rabies certificate. However, several Caribbean countries affected by the hurricanes are rabies-free, and dogs that have lived in one of these countries since birth or for the last six months may not have been vaccinated. Be sure to update all displaced animals’ rabies vaccines once they arrive in your clinic.

Intestinal parasites, such as roundworms and hookworms, can cause visceral or cutaneous larva migrans in humans.

Other non-zoonotic infectious diseases that may appear in animals relocated from hurricane-affected areas include

- Canine H3N2 influenza,
- Parvovirus,
- Heartworm,
- *Heterobilharzia americana* (flatworm and the cause of canine schistosomiasis), and
- Screwworm.

Other non-infectious diseases that may appear include

- Histoplasmosis,
- Coccidiomycosis, and
- Pythiosis (a fungal infection causing “swamp cancer”) or other skin or wound infections.

When examining animals rescued from hurricane-affected areas, remember to add diseases that are uncommon in Iowa but common in other areas to your differential list. A newly adopted pet should be quarantined from others in the household until it can be evaluated by a veterinarian.

As with any pet, remind clients to practice good hygiene.

- Dispose of animal feces promptly.
- Wash hands before handling food.
- Wash hands after playing with pets or handling feces, urine, or cat litter.
- Be aware of the risk of using shared areas such as dog parks.
- Restrict animal access to children’s play areas.
- Supervise children around pets.

Animal movement from U.S. Territories (U.S. Virgin Islands and Puerto Rico) to the continental United States is considered interstate movement and requires coordination with the State Animal Health Official. Import requirements change frequently and may be relaxed during emergencies. Always be sure to talk with your State Animal Health Official when assisting with the interstate movement of animals.



For more suggestions on how to aid veterinarians in disaster-stricken areas, visit the AVMA website at [https://www.avma.org/KB/Resources/Reference/disaster/Pages/hurricane-harvey.aspx?utm\\_source=email-optout&utm\\_medium=alert1709&utm\\_campaign=disaster&utm\\_term=link&utm\\_content=harvey-webpage](https://www.avma.org/KB/Resources/Reference/disaster/Pages/hurricane-harvey.aspx?utm_source=email-optout&utm_medium=alert1709&utm_campaign=disaster&utm_term=link&utm_content=harvey-webpage).

References:

- <http://www.cfsph.iastate.edu/DiseaseInfo/>
- <https://www.cdc.gov/importation/bringing-an-animal-into-the-united-states/dogs.html>
- <https://www.aphis.usda.gov/aphis/pet-travel/bring-pet-into-the-united-states/pet-travel-dogs-into-us>

Paid Advertisement

*Registration is Open for the 2018*

# Chicagoland Veterinary Conference

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# Bat Rabies Education and Survey

**NEVER TOUCH A BAT**  
**BATS CAN HAVE RABIES**



**You can't tell by looking!**

- Bats are shy animals that avoid human contact
- Any bat can have rabies, a deadly disease
- You could get rabies from a bat bite
- If you get bitten by a bat, wash the wound with soap and see a doctor

**Avoid being bitten or scratched by a bat:**

- Do not make contact with any bat while hiking or playing outdoors
- Bat proof your home

**If you can touch a bat, don't!**

- We need bats so don't hurt them
- A bat that lets you touch it may be sick
- If you see a bat, do not touch it
- Call animal control or the health department for help



[www.rabiesalliance.org](http://www.rabiesalliance.org)

The One Health Commission's Bat Rabies Education Team (BRET) is conducting a survey on current awareness and educational activities about bat rabies. This team is passionate about raising awareness around the need for bat rabies education in the Americas and utilization of free educational resources. Its first survey is meant to gather information in the Americas from professionals and health organizations who may be doing bat rabies education or have first-hand knowledge and wisdom that can be used to further these educational efforts.

How can you help? If you live in the Americas and work in the health sector (human, animal, environmental), please consider participating in this first survey at <https://www.surveymonkey.com/r/batrabies>.

The survey itself will only take 5 to 10 minutes. Responses will not be released publicly but will only be used for the purposes of improving the Bat Rabies Educational program.

The BRET program works to promote bat rabies education and awareness in the Americas, especially for K-12 children and their parents, starting in the U.S. The message is, we need our bats so don't hurt them. But don't touch them either.

The educational poster at left is Free and downloadable in English, Spanish, and Portuguese. If you would like to learn more about BRET, please visit the BRET webpage at [https://www.onehealthcommission.org/en/one\\_health\\_resources/bat\\_rabies\\_education/](https://www.onehealthcommission.org/en/one_health_resources/bat_rabies_education/).

## SPEED INTERVIEWS **IVMA** **VBMA** WINTER CONFERENCE

“ *This was an excellent event and very helpful for getting to know potential hires.* ”  
-Speed Interview participant

### Meet Your New Associate!

Come participate in Speed Interviews at the 2018 IVMA Winter Conference. You will spend 5 minutes with VM4 students seeking employment and VM1-3s seeking externships, summer jobs, preceptorships.

This is a great opportunity for students to get practice interviewing and for you to meet potential employees. Even if you are not actively seeking new associates, come and join the veterinary students in a great networking opportunity!

February 14, 2018 - 5:15 pm • The Meadows Conference Center Altoona

Sign up when you register for the Winter Conference or contact the IVMA directly at (800) 369-9564 or [ivma@iowavma.org](mailto:ivma@iowavma.org)



# 2017 State of Pet Health Report

Banfield Pet Hospital recently released its 2017 State of Pet Health Report, highlighting a widespread trend of overweight pets nationwide. This is the largest report of its kind, capturing medical data from more than 2.5 million dogs and 505,000 cats cared for by Banfield in 2016. According to this year's report, one in three pets that visited a Banfield hospital last year was diagnosed as overweight or obese—and in the past 10 years, Banfield witnessed a 169 percent increase in overweight cats and a 158 percent increase in overweight dogs.

## What does an increase of overweight pets mean for me as a veterinary professional?

This massive increase in overweight pets demonstrates the importance of the partnership between you and your clients as well as the need for pet owner education on the topic—see below for some resources to help you have these conversations.

### • Download the State of Pet Health Report client education infographic

- Visit <https://www.banfield.com/state-of-pet-health/obesity> and scroll to the bottom of the page to access a client education tool that educates pet owners on the signs of overweight/obesity, the costs associated with these extra pounds and what they can do at home and in partnership with their veterinarian to keep their pets at a healthy weight

### • Let pet owners know that being overweight has serious consequences

- Being overweight has been linked with over 20 ailments<sup>1</sup>
- Owning an overweight pet doesn't only impact the health of the pet—it also carries financial ramifications. One estimate indicates that an additional \$2,026 per year for dogs and \$1,178 per year for cats is spent on obesity-related disease conditions<sup>2</sup>

### • It can be difficult to understand a pet's unique nutritional needs, but there are tools available to help.

- Using a body condition score can be a quick reference when determining whether a pet might be an unhealthy weight
- Treats can add up quickly. Calorie counters can help determine how many calories pets receive from treats so that owners can adjust food at mealtimes accordingly

### • Partner with your client throughout their pet's life stages

- Pets 3 to < 10 years of age had the highest overweight prevalence (41 percent in dogs and 38 percent in cats) compared to other age groups (i.e. < 1 year, 1 to < 3 years, and ≥ 10 years.) Nutritional and lifestyle counseling should be provided throughout all stages of a pet's life to help prevent and treat overweight pets

### • Prevalence of overweight pets differs across the United States and across age groups

- Understanding your state's risk level can help you have conversations with pet owners. Visit <https://www.banfield.com/state-of-pet-health/us> for state-specific information

For additional information and resources, visit [StateofPetHealth.com/obesity](http://StateofPetHealth.com/obesity).

#### References

- German AJ. The growing problem of obesity in dogs and cats. J Nutr 2006; 136:1940S-1946S.
- Bomberg E. Birch L. Enderburg N, et al. The financial costs, behaviour and psychology of obesity: A one health analysis. J Comp Path 2017;1-16.





## Update on Senecavirus A

**BY: HOUSTON ER; GIMENEZ-LIROLA LG; PIÑEYRO PE - IOWA STATE UNIVERSITY COLLEGE OF VETERINARY MEDICINE, VETERINARY DIAGNOSTIC LABORATORY, DEPARTMENT OF VETERINARY DIAGNOSTIC AND PRODUCTION ANIMAL MEDICINE**

Senecavirus A (SVA) is an RNA virus associated with idiopathic vesicular disease in swine (IVD) and epidemic transient neonatal losses (ETNL). While SVA has been documented in United States' herds dating back to 1980s, the causative association of IVD with the presence of SVA was not reported until 2007. Since then, sporadic outbreaks of IVD have been reported in the United States. SVA was identified in 2014 in association in numerous simultaneous outbreak of vesicular disease, and increased neonatal mortality in the United States, Brazil, and China. The circulation of the virus has also been reported in Thailand, and Colombia.

The diagnosis of the disease is based on the presence of clinical signs, virus detection, and presence of specific antibodies against SVA. Outbreaks of SVA IVD are characterized by abrupt onset of vesicles that progress to ulcerative dermatitis on the nostril (Figure 1) and the coronary bands (Figure 2) that affects a high percentage of sows or finisher pigs. Animal present transient fever, off feed and, lameness. SVA can be difficult to diagnose, as clinical signs and lesions are transient. Most importantly, lesions associated with SVA are clinically indistinguishable from those observed in foot-and-mouth disease (FMD), vesicular stomatitis (VS), swine vesicular disease (SVD), and vesicular exanthema of swine (VES). Outbreaks reported in 2015 and 2016 shows recurrent seasonal patterns, with increased cases load in mid-summer tapering through the fall (Figure 3).

Etiological diagnosis of SVA can be achieved by qRT-PCR, virus isolation from vesicular material, in situ hybridization, and immunohistochemistry. Viremia is short, lasting approximately



Figure 1

10 days. Viral shedding can persist for up to 28 days, but appears to be intermittent. For PCR testing, multiple samples including serum, tonsil, feces, oral fluids, and vesicular fluids, may assist in diagnosis of SVA.

Antibody detection methods currently available includes indirect immunofluorescence assay (IFA), virus neutralization assays (VN), competitive enzyme-linked immunosorbent assays (cELISAs), and indirect ELISAs targeting different structural proteins (i.e., VP1, VP2). It has been demonstrated that animals can shed virus and develop a specific SVA IgG antibody response without evidence of clinical disease, which correlates with subclinical infection. Affected breeding herds reported an increase in neonatal morbidity and mortality ranging from 30% to 70%, mainly affecting piglets 1 week old. SVA-associated mortality in neonatal pigs did not present specific clinical signs, and no suggestive lesions were



# Iowa Leads Nation in VMLRP Awards for 2017

*Continued from page 1*

In early November the AVMA released a brief radio spot in Iowa featuring AVMA president Dr. Mike Topper in support of the VMLRP Enhancement Act. A link to the spot can be found on the IVMA website under "Latest News".

**You can help!** Please contact Iowa Senators Grassley and Ernst and Representatives Blum and King and encourage them to support the VMLRP Enhancement Act (H.R. 1268 / S. 487). The AVMA has an online form that you can complete and it will be sent to your legislators. <http://avmacan.avma.org/avma/app/write-a-letter?0&engagementId=391393>.

For more information about the VMLRP, visit <http://nifa.usda.gov/program/veterinary-medicine-loan-repayment-program>.

## A VMLRP Success Story

*Continued from page 1*

VMLRP is I am able to not worry so much about money, loan payments, interest on loans and debt and focus on learning the ins and outs of the profession and applying the skills in the field. It took away a lot of the worry that came with a large monthly student loan payment."

Dr. Wurtz strongly encourages other veterinarians to apply for the award. "I would absolutely encourage and support other veterinarians/students to apply for this program. It greatly reduces the stress and the financial burden associated with our education," he said.

Although Dr. Wurtz said the application process was time consuming; the USDA office in charge of the VMLRP program was very helpful to make sure he had the proper paperwork. A personal essay is also part of the application process. "One tip of advice is to definitely give the application process its due diligence and time and to not rush through it. It is a competitive application process. Make sure to reach out to past VMLRP awardees for guidance, which is very beneficial," he said.

### Have you received a VMLRP award?

Please let the IVMA office know at [ivma@iowavma.org](mailto:ivma@iowavma.org) or 800-369-9564. Thank you!



observed. SVA was consistently detected in multiple tissues (i.e., brain, lung, spleen, kidneys, intestine, feces, and blood).

It has been demonstrated clinically and experimentally that SVA infection induces antibodies that can last for at least 6 weeks post-infection, where antibody kinetics (time and duration of the detection) depended on the antigen used as target for the serological test. The presence of IgG against VP1 protein was reported as early as 7-10 days post infection (dpi), while antibody response against VP2 seems to appear earlier (5 dpi), and lasting for at least 60 dpi. The IgG response against VP3 has been demonstrated to be weak and short, lasting approximately 14 dpi. The detection of SVA IgG by IFA has been reported between 10-40 dpi. The presence of neutralizing antibodies also seems to appear early during the infection phase and last for approximately 7 weeks post-infection.

SVA can cause outbreak of vesicular disease in sow herds and finisher barns and an increment in neonatal mortality. The transience and variability of clinical signs, absence of vesicles (gross lesions) in many SVA-infected animals, and the variability of PCR results among specimens present a challenge to diagnosticians. Herd diagnosis based on a single diagnostic method might result in inaccurate diagnosis of the SVA herd situation. We recommend that the diagnosis of SVA should be based on a combination of clinical observations, PCR testing of a variety of diagnostic specimens, and serum antibody testing

References available on request.

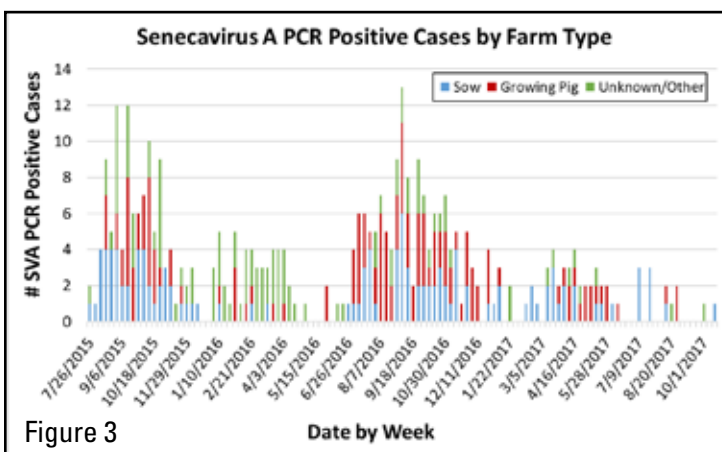


Figure 3

ISU-VLD (Jordan Kraft)

# Help Push for VDL Building Project Funding



Dr. Rodger Main explains the condition of the current VDL building to Iowa Senator Bill Dix.

*In September, several Iowa Legislators took a tour of the VDL led by Interim Dean Dr. Pat Halbur and VDL Director Dr. Rodger Main. Tour participants viewed the present state of the current VDL facility and were given information about the economic support the VDL provides the State of Iowa and the animal industry in the United States.*

*The following article by The Alliance for Iowa State highlights a study done on ISU's outdated Veterinary Diagnostic Laboratory (VDL). Iowa State University needs your help to make sure the VDL Building Project receives adequate funding in the 2018 Iowa budget. Share this article with your local State Legislator to help them understand the importance of funding for a new VDL facility. The IVMA lobbyists and leaders have been meeting with Legislators this fall as they prepare for the 2018 Legislative Session which begins January 8.*

The Veterinary Diagnostic Laboratory (VDL) at Iowa State University serves to protect animal and human health and advance Iowa's \$32.5 billion dollar animal agriculture economy. According to the recent study "Economic Contribution of the Iowa State University Veterinary Diagnostic Laboratory," the state's animal agriculture industry generates \$10,487 of direct economic output for each of Iowa's 3.1 million people.

As the State of Iowa's official veterinary diagnostic lab, the only fully accredited and full service veterinary diagnostic lab in Iowa and one of only 14 Level 1 labs in the National Animal Health Laboratory Network, the ISU VDL is essential to the early detection and effective response to diseases. It's imperative that ISU's VDL continues to receive full accreditation by meeting standards set forth by the American Association of Veterinary Laboratory Diagnosticians.

Last month, the ISU VDL received full accreditation status for all species; however, the site visit team reported significant concerns for the current VDL facility.

"The space and structural limitations of this aging facility

combined with the rapid growth of the laboratory will, in the opinion of this site team, limit the laboratory's ability to adequately respond to a large scale foreign animal disease outbreak," the report states.

In addition to the lack of space at the VDL, the report emphasized that biocontainment and biosafety are compromised due to poor control of airflow, loss of negative room pressure, humidity, inadequate layout, and less than optimal workflow patterns.

The 40+ year-old facility is grossly outdated and potentially hazardous. Originally built for 11 faculty and 20 technical staff members, the building now houses 25 faculty and 125 technical staff. The VDL is severely overcrowded with minimal room to expand or add new programs, develop or incorporate new technologies, or ensure separation of incompatible activities with the adjoining veterinary hospital.

Beyond issues raised with an outdated facility, the caseload at the VDL has doubled over the past six years, processing 75,000 - 85,000 diagnostic case submissions and conducting

# Meet New IVMA Executive Board Member Dr. Michael Slattery



This September, Dr. Michael Slattery from Maquoketa joined the IVMA Executive Board representing District 13. Let's get to know our newest board member.

Dr. Slattery grew up in Winthrop where his father, Jim was a mixed animal practitioner. He attended Iowa State University obtaining a degree in Animal Science in 2009 and his DVM in 2013. After graduation from veterinary school, Dr. Slattery was hired as an associate for Risius Veterinary Service to start a satellite office for the clinic in Maquoketa.

Dr. Slattery is now a partner in the clinic and works entirely on beef cattle, splitting his time between feedlot and cow/calf operations. He enjoys his work saying, "Every day is a new setting with different people, different cattle, and a different location. Also, the area I work in is very scenic."

When he's not working, Dr. Slattery likes to golf and pheasant hunt. He is on the board of his local cattleman's association and helps his in-laws with their feedlot cattle operation.

Dr. Slattery was just married this past June to his wife, Janell. "I made it to 30 before getting married!" he joked.

Advice for new veterinarians? Dr. Slattery says, "Taking the initiative to do something without being asked resonates remarkably well with anyone."

When deciding to join the IVMA Executive Board, Dr. Slattery said, "I've always appreciated the contributions of the IVMA to the profession, so it seemed like a great way to pay my respects. I also don't feel that veterinarians' network like they once did and this is a built in way to do so."

We're glad you joined the IVMA Executive Board, Dr. Slattery. Welcome!

more than 1.25 million tests each year - many with same-day results. Timely, comprehensive, and high-quality diagnosis of diseases is key to protect animal and human health, and in being able to effectively respond to large scale outbreaks that can be extremely harmful to Iowa's agriculture industry, such as Highly Pathogenic Avian Influenza that affected nearly 32 million birds and resulted in a \$1.2 billion hit to the state in 2015.

It is highly likely that the condition of the current VDL facility will continue to deteriorate, jeopardizing full accreditation. Loss of accreditation would have serious negative implications, not just financially, but also in terms of access to test methods and test certifications under the National Animal Health Laboratory Network.

With no capacity to absorb increased demands, issues will persist creating an unsafe environment and posing a major threat to Iowa's meat, milk, poultry, and egg industries.

As a result, a new stand-alone VDL facility is the university's number one capital project and will be at the forefront heading into the legislative session to begin in January. The request calls for \$100 million in state funding (\$20 million per year over a five year period), with an additional \$24 million to be raised through private donations and other sources.

As the state's only land-grant institution, the university has the responsibility to ensure the world's food supply is plentiful and safe, provide students with a world class learning experience, and offer assistance to Iowa's producers to generate economic prosperity in Iowa.



Tour participants, including Representative and IVMA Member Dr. Chuck Holz (far right), listen to discussion of handling specimens and testing protocol.

## SAVE THE DATE FOR LEGISLATIVE DAY!

Discuss the VDL building project and other issues affecting the veterinary profession with State Senators and Representatives at the annual IVMA Legislative Day.

February 28 • Des Moines

# Why the change in recommended age of sterilization of cats?

**BY: PHILIP A. BUSHBY, DVM, MS, DACVS MARCIA LANE ENDOWED CHAIR OF HUMANE ETHICS AND ANIMAL WELFARE, MISSISSIPPI STATE COLLEGE OF VETERINARY MEDICINE**

In June of 2017, the AVMA formally endorsed the consensus document put forth by the Veterinary Task Force on Feline Sterilization for Age of Spay and Neuter Surgery, which recommends cats not intended for breeding be gonadectomized by five months of age. This joined endorsements from other veterinary medical and cat breeding associations including the American Association of Feline Practitioners, Association of Shelter Veterinarians, American Animal Hospital Association, Winn Foundation, Catalyst Council, Cat Fancier's Association and The International Cat Association. Feline Fix by Five (FFF) is a campaign promoted by the Marian's Dream Foundation to share this recommendation that has garnered such broad support. FFF was born out of awareness that cats can be reproductively active by 4 to 5 months of age, yet most veterinarians recommend spay/neuter of cats at 6 months of age or older. The result of this mismatch between age at which cats can become pregnant and the recommended age of sterilization is demonstrated any time one walks into a local animal shelter.

Animal shelters are generally overrun with kittens, the vast majority of which are the result of unplanned and unexpected pregnancies of young cats. A survey conducted in the State of Massachusetts revealed surprising results. While many people believe that pet-overpopulation is the result of pets that are left intact for their entire life, the opposite is true. Cats that were eventually spayed accounted for 87% of all litters born.<sup>1</sup> Cat owners who are unsure of when to have their cat sterilized or simply wait until 6 months of age or later are faced with the dilemma of what to do with an unexpected litter of kittens. Too often those kittens are relinquished to local shelters and too often those kittens are euthanized. The problem was not that the owners refused to spay or neuter their pet; it was that they didn't have it done in time.

Esther Mechler of the Marian's Dream Foundation, who initiated the FFF campaign, has stated that "the number of births prevented - simply by changing the recommended age for spay/neuter of cats from 6 months to between 4 and 5 months - could reduce the numbers of shelter intakes enough to balance the number of potential adopters with available cats and kittens. We could end the overpopulation of cats by this one simple change."<sup>2</sup>

As a profession, we need to recognize that there is, at present, no scientifically sound basis for waiting until 6 months of age or older to sterilize cats and no contraindications for spay/neuter at 4 to 5 months of age. Anesthetic concerns about juvenile surgery voiced in the 60s and 70s are no longer valid. There are many anesthetic drugs and protocols in use today that are safe in cats as young as 6 weeks of age. Old fears that castration of juvenile male cats would predispose to urinary obstruction were disproven in the 90s.<sup>3</sup> There are numerous known health benefits for spay/neuter in cats, in addition to the population management benefits, and there is "no evidence to suggest that pediatric gonadectomy by 5 months of age is linked to any increased risk of disease."<sup>4</sup> A survey conducted in 2000 of veterinarians who were, at that time, spaying and neutering cats under 5 months of age, confirmed that the surgeries were easier, faster, and had fewer complications than spay/neuter of cats at 6 months of age or older.<sup>5</sup>

So, what should the practicing veterinarian do to make this change? Simply add one more appointment to your standard kitten wellness protocols. Make no changes in current vaccination and parasite control recommendations except add an appointment for spay/neuter two to three weeks after the last kitten vaccination. Owner compliance will be increased, surgeries will be easier, and, in time, local shelters will not be overrun with kittens.



For more information on Feline Fix by Five go to <http://www.felinefixbyfive.org/endorsements/>

For more information on the AVMA's position on spay neuter go to <http://www.avma.org/spayneuter>

1. Manning MM & Rowan AN, Companion animal demographics and sterilization status: Results from a survey in four Massachusetts towns. *Anthrozoos* 5 (3).
2. Esther Mechler, Personal Communication, October 25, 2017.
3. Stubbs WP Scrugges SL, et al BMS. Prepubertal gonadectomy in the domestic feline: Effects on skeletal, physical and behavioral development. *Vet Surg.* 1993;22.
4. Dale S. When to Spay/Neuter Cats? Vet Consensus Says Fix by Five Months. *Vet Pract News.* 2016.
5. Land TDVM, Wall SDVM. Survey of the Coalition of Spay/Neuter Veterinarians. *J Am Vet Med Assoc.* 2000;216(5).

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## In Remembrance

### Dr. Donald Rubel

IVMA Life member, **Dr. Donald Rubel** passed away January 20, 2017. Dr. Rubel graduated from Leeds High School and then enlisted in the United States Army in 1944. After being honorably discharged as a 2nd Lieutenant in 1946, Dr. Rubel received his undergraduate degree from the University of South Dakota. He received a Doctor of Veterinary Medicine degree from Iowa State University in 1953. Dr. Rubel had a large-animal veterinary practice in the Sioux City and Hinton area for many years and later opened a small-animal clinic in Leeds. He enjoyed golfing and fishing and was a master gardener, known for his gladiolas. Don was an accomplished violinist at a very young age, playing with the Sioux City Symphony while a high school student and later with the ISU orchestra. Dr. Rubel was a member of Wesley United Methodist Church, and was also a member of Triangle Lodge #643 and the Sioux City Consistory. Survivors include his six children, 12 grandchildren; 3 step grandchildren; 27 great grandchildren; and 8 step great grandchildren. His wife Patricia preceded him in death in 1999.

### Dr. Harold Albers

IVMA Life member, **Dr. Harold Albers** passed away on July 16, 2017. Originally from Eagle Grove, Dr. Albers served in the U.S. Navy during World War II. He received his DVM from Colorado State University and honorary Ph.D. in Agricultural Economics from Iowa State University. He moved to St. Petersburg, Florida in 1971, and later established the Northeast Animal Hospital; he practiced veterinary medicine for 50 years. Dr. Albers has authored countless articles about his work with seabirds, pelicans, eagles, and as a veterinary medical consultant on polar bears. His community service is extensive, including establishing the St. Petersburg Audubon Society Teachers Ecology Camp and the Feed the Pelicans Fund; supporting the establishment of the Suncoast Seabird Sanctuary, the Association of Avian Veterinarians, and the National Wildlife Rehabilitators Association. Dr. Albers received numerous awards for his veterinary contributions, volunteerism, and community and environmental achievements. He was an active member of St. Andrew Lutheran Church for several years. Dr. Albers is survived by his children, Bryan L. Albers and Elizabeth Albers Rutmeyer and her husband, William. He was preceded in death by his companion, Mary Brazier.

*Merry Christmas  
and Happy  
New Year*



From the IVMA Staff

Teresa, Tracy, Cyndy, Randy, Lolo, Levi and Lexi



The College of Veterinary Medicine recognized four individuals during Homecoming with its Stange and Switzer Awards. Pictured from the left, Dr. Jack Shere, Stange Award; Dr. Pat Halbur, the Dr. Stephen G. Juelsgaard Interim Dean of Veterinary Medicine; Dr. Richard Ross, Stange Award; Dr. Hank Harris, Stange Award; and Dr. Bill Williams, Switzer Award. Photo: Christopher Gannon, Iowa State University

## Congratulations!

### Dr. Bill Williams

IVMA member, **Dr. Bill Williams** was awarded The William P. Switzer Award in Veterinary Medicine at Iowa State University College of Veterinary Medicine Awards Breakfast on October 27 in Ames. The award is given to recognize individuals who have made outstanding contributions to society and to the Iowa State University College of Veterinary Medicine. Even though Dr. Williams is not a graduate of ISU, he has been a strong supporter of ISU's College of Veterinary Medicine and committed to serving the veterinary profession. Dr. Williams is a graduate of the University of Missouri's College of Veterinary Medicine. He is an IVMA past president and a champion of the IVMA Foundation which provides veterinary student scholarships. Dr. Williams has raised more than \$10,000 pedaling across Iowa during RAGBRAI since 2011 for the Josh Challenge Project which provides hospitalized children with a stuffed dog and book to comfort them. Dr. Williams co-owns and operates two small animal practices in Des Moines and Altoona.

**Congratulations, Dr. Bill Williams!**

### Dr. Richard Ross

IVMA member, **Dr. Richard Ross** was awarded the Stange Award for Meritorious Service in Veterinary Medicine at Iowa State University College of Veterinary Medicine Awards Breakfast on October 27 in Ames. This is the highest award presented to distinguished alumni by Iowa State University College of Veterinary Medicine and is presented annually for outstanding professional achievement in veterinary medicine.

Dr. Ross, professor emeritus at Iowa State University College of Veterinary Medicine is internationally known as an expert in the field of veterinary microbiology. His research on swine respiratory diseases caused by mycoplasmas has had a significant impact on the understanding of mycoplasmas infections in animals and humans. It is estimated that Dr. Ross' research has significantly reduced US swine producer economic losses by millions annually.

Dr. Ross served as the CVM dean and also other leadership roles including the Dean of the College of Agriculture at ISU.

**Congratulations, Dr. Ross!**

# AVMA Economic Summit 2017

The 5th annual AVMA Economic Summit was held in Chicago, Oct. 23-24, 2017. This summit provided valuable information regarding practice management, hiring decisions, student debt, and business trends relating to veterinary consumer spending. Participants were from a variety of fields, with a mix of private practitioners, academicians, veterinary industry, economists, and students. This veterinary-focused economic knowledge was provided by a team of economists, lobbyists, veterinarians, and market analysts with special attention to veterinary-specific factors. This year marked the final year for Dr. Michael Dicks, Director of the AVMA Economics Division, who announced his retirement during the meeting.

The review of current economic indicators at this time suggest a trend of moderate economic growth for the next 12-18 months. Advice was given to hold off on major practice expansions or purchases right now in the face of a strong labor market and high demand for housing, as large ticket items are more expensive now than they may be in the future.

There was a slight increase in the applicant to VM1 seat ratio, moving from 1.6 to 1.7. Overall, fewer male students are applying. Regarding the diversity of applicants, colleges must be aware of the challenge to gaining veterinary volunteer experiences presented those students who are first-generation college attendees, students of under-represented populations, and students on Pell grants. These students must be strategic in their time use (balancing between school and full-time work), are less likely to have family or financial support, and may have fewer opportunities to serve in leadership roles of volunteer organizations. Nevertheless, these students demonstrate grit, time-management skills, and resourcefulness that could work well in the veterinary field.

Some take-aways that I personally found valuable as a veterinarian academician (who never practiced, and is married to a practice co-owner) were:

- A goal for veterinarians of bringing in \$250/hour of revenue based on a 40 hour work week. This would generate a target of \$500K production in a year. Whatever the actual dollar amount may be for each practice, it is a helpful tool to break down a year-end production goal into actionable, recognizable goals that can be achieved on an hourly to daily basis. Tangible goals are more easily achieved, particularly for those in new roles.

- “Good business supports good medicine.” This is probably obvious, but could be overlooked in the training stages due to the overwhelming volume of medical knowledge that must be attained. The times have changed; I can safely say that I graduated from vet school with minimal to no economic sense. The culture has changed too. Thus this reminder: your clients expect you to perform high quality medicine, but they also expect you to stay open, and to employ the same staff.
- In a talk by a practice hiring manager (Scott Spaulding, “The Market for Veterinarians: A Hiring Manager’s Outlook”), the top desired traits in an associate veterinarian are listed below. It bears noting that while grades may stratify a class, the traits listed here should be achievable by all: Personable, Good communicator, Understands the practice culture, Positive and enthusiastic, Demonstrates leadership, Creative.
- The AVMA is producing an Economic Model by state, so that trends can be more accurately analyzed based on regional, rather than national market data. This data will be further searchable for large animal vs. small animal practice trends.
- It is predicted that the overall number of new clients is decreasing. This will influence current strategies of client management.

These are just a few highlights of the meeting. There was a wide array of speakers and all contributed to my personal awareness of veterinary economics. This is a relatively new meeting (2017 was the fifth Summit) that continues to evolve over time. I personally found this very valuable and think the IVMA membership and ISU students would benefit from hearing specific information about the health of veterinary practice management.

Respectfully submitted,  
Dr. Amanda Fales-Williams,  
IVMA Vice President.



# CLASSIFIEDS

Advertising rates are \$75 for the first 55 words; each additional word is \$1.50. Voting members of the IVMA receive the first 75 words free. Additional words are 75 cents each for one month.

Classified advertisements appear in the IVMA Update and on the website – one month for non-voting members and non-members of the IVMA and three months for voting IVMA members.

To place an ad, email it to [ivma@iowavma.org](mailto:ivma@iowavma.org).

## VETERINARIANS WANTED

Part Time Veterinary Associate needed for a rapidly growing single doctor practice in Waverly, IA (15 miles North of Cedar Falls). 1-2 days per week, week days only, no on-call. Small animal exclusive. Looking for a positive, team-orientated veterinarian with good communication skills to practice exceptional medicine and a passion for client education. We have an experienced staff and state of the art facility equipped with laser surgery, laser therapy, digital radiography and dental radiography, full in-house lab with Idexx, etc. Ideal candidate must have experience in surgery, dentistry, and diagnostics but mentoring will be provided for new procedures and continued growth. Please send cover letter and resume to [compassionatecarewaverly@gmail.com](mailto:compassionatecarewaverly@gmail.com), view us at [www.compassionatecarewaverly.com](http://www.compassionatecarewaverly.com)

Garver's Animal Health Center clinics are growing! We are seeking a Full-Time Associate Veterinarian to join our multi-doctor practice. Animal Health Center is a mixed animal practice with four locations in Central Iowa with a great support staff. There are many opportunities to expand our cow/calf, equine and small animal services. Our clinics are located in Albia, Knoxville, Oskaloosa and Ottumwa. We offer top of the line facilities and equipment. We offer a competitive salary and excellent benefits including a retirement plan, paid time off, health insurance, paid IVMA and AVMA dues and continuing education. The company provides transportation and business cell phone. Please contact Beth Petty at 641.660.8333 to set up an interview, or you can email your resume to [bpetty@albiavet.com](mailto:bpetty@albiavet.com).

Indianola Veterinary Clinic is a newly-remodeled, mixed animal clinic just south of Des Moines. We want to hire a self-motivated, friendly veterinarian to join our team. With the expansion of our facility and services, we now need more help. We currently have four veterinarians and would like another professional to join us. Indianola Veterinary Clinic has a great staff that cares for the person and the pets. Indianola is a growing family town, and with Des Moines so close there are opportunities for all. Please send resume to [Indianolavetclinic@gmail.com](mailto:Indianolavetclinic@gmail.com)

Small animal associate needed for our modern, long established practice in Fairfield, IA, a community renowned for culture and recently selected by Smithsonian magazine as one of the nation's top 10 Best Small Towns. Will consider either full or part time applicants, with potential for practice ownership. Please email resumes to [info@vetclinicpc.com](mailto:info@vetclinicpc.com) and explore our community at <http://www.travelfairfield.com>.

Ankeny Animal and Avian Clinic is seeking a full time veterinarian to join our four-doctor, companion animal/bird/exotic practice. We are dedicated to providing direct and honest communication and a caring, compassionate, solution-based approach for our clients. Our full time staff is currently Fear Free certified, and we are seeking someone genuinely interested in an environment that is patient and client focused. Individuals that thrive in a team-based, fun, collaborative atmosphere and who are dedicated to progressive medicine and care will do great here! We offer PTO, paid vacation, AVMA and IVMA membership, a CE stipend, 401(k) match, money toward health insurance, cafeteria plan, and regular feedback with your supervisor. We are conveniently located in central Ankeny, with an enthusiastic, committed clientele [and some of the best pets ever!] Please send resume and cover letter to [ankenyvets1@gmail.com](mailto:ankenyvets1@gmail.com)

Spencer Ag Center is in search of a swine focused veterinarian to be part of a progressive production animal business. SAC provides veterinary and nutrition services and products covering more than a 100 mile radius from Spencer, IA. Position would involve herd health consultation and diagnostics with independent swine producers: sow farms, nursery, and wean-to-finish. Approximately 90% of time devoted to swine with the remainder cattle and small ruminant. Vets work closely with PhD nutritionists and in house salesmen. Applicant should have passion and drive to practice high quality medicine in a friendly, team-oriented environment. Excellent benefits package and NW IA has lots to offer. Contact Dr. David Shirbroun at 515-419-2156 or [dshirbroun@spenceragcenter.com](mailto:dshirbroun@spenceragcenter.com)

Associate/part time veterinarian needed for exclusive small animal practice in town of 8,000 people located approximately 35-40 minutes from Des Moines. We are looking for an individual to work 3 days a week, with the possibility of working some Saturday mornings. The practice has a Idexx blood chemistry machine and a QCB analyzer. Most all surgeries are the routine spay, neuter, declaw, lumps and bumps. No after-hours calls. If interested call or email Dr. Harlyn McGuire at 515-465-5626, [hgmdevm@aol.com](mailto:hgmdevm@aol.com)

Looking for a good schedule and great benefits and earning potential? Do you like thinking on your feet? We have an opening for a ¾ to full-time veterinary position at a busy small animal clinic in Urbandale IA. We are growing and need a 4th DVM to join our awesome staff. Absolute musts include good interpersonal skills and the flexibility to see walk-in patients along with solid medicine and surgical skills. If interested please call 712-899-7417 (Jay) or e-mail [jayl1330@gmail.com](mailto:jayl1330@gmail.com).

Abel Keppy Animal Hospital in Bettendorf, IA is seeking an Associate Veterinarian to join our caring and compassionate team! Abel Keppy Animal Hospital is a well-established animal hospital in the Quad Cities. Our location allows us to provide a high standard of care to the residents of the Quad Cities in both Iowa and Illinois. We value our clients, patients, and team members. Our team focuses on building relationships with each pet parent to offer individualized and exceptional care that best suits the needs of their furry and scaly family members. Because our practice is growing, we are looking to add another valued team member to our work family. An ideal candidate is a veterinarian that not only is passionate about providing a high standard of care to patients but would also bring new services into the hospital to offer clients. We offer CO2 surgery laser, digital radiography, digital dental radiography, tonopen, registered veterinary technicians, and so much more. Excellent compensation and benefits package. Full-time or part-time hours available. More information at [www.abelkeppy.com](http://www.abelkeppy.com). Please submit resumes to [smoss@nvanet.com](mailto:smoss@nvanet.com)

We are looking for a part-time/full time Veterinarian that is able to work independently at Urban Pet Hospital and Resort, located in Urbandale, IA. We have flexible hours and an excellent compensation and benefit package. If you know of anyone that would be interested, please have them email their resume to [dee@urbanpethospital.com](mailto:dee@urbanpethospital.com) or call me at 515-727-0607 during 9-4 or 515-418-8297 cell any time.

FT veterinarian needed to join three person mixed animal practice to replace retiring doctor. Located in northeastern Iowa, our practice is 45% dairy, 35% cow-calf, and 20% SA. Idexx LaserCyte and Catalyst analyzers with Digital X-Ray. EasiScan ultrasound used for bovine reproduction. Spectacular support team. Area has strong agriculture industry with many excellent dairy and beef operations. New graduates encouraged to apply. Supportive mentoring provided.

Buy-In opportunity available to enthusiastic person willing to work hard and have fun while professionally improving their own skills and knowledge along with the team around them. Waukon, Iowa. Dr. Ryan Hammell, cell 563-568-7736, Daytime phone 563-568-2487, [rbh Hammell@mediacombb.net](mailto:rbh Hammell@mediacombb.net)

Are you tired of cookie cutter "Veterinarian Wanted" ads? We are too. We could use words like "progressive" and "compassionate," but we are into an honest portrayal and effectual use of those rather than for key word searches. Our practice is busy. If it wasn't, we wouldn't need this ad. We do offer a compensation and benefits package. How do you feel about bartering for fresh produce? We have great clients. No joke here. Recall that we are "into" honesty. We have digital stuff. No more flip phones for us! Our support staff to doctor ratio is all wrong. Hence, the ad. Possessing the ability to wrestle alligators and Chihuahuas is considered a plus. Those who don't laugh at this ad need not apply. We have found it to be an effective screening tool. If you'd like to learn more about how amazing we are, please send a cover letter and resume via email to Jessica at Iowa Veterinary Wellness Center, [info@apvet.com](mailto:info@apvet.com).

Canton Veterinary Clinic in Canton MO is looking for an associate to join our team of 5 DVM's plus support staff. We are a mixed animal practice with Veterinarians that have emphasis in area of interest of bovine, equine and small animal. Multiple DVM's allow for work-life balance in emergency call and Saturday rotations; along with one weekday off. Ultrasound, digital radiograph, haul in facility with tip table, blood chem and CBC, gas anesthesia, etc. A truck/box will be provided as well as vacation, C.E. and I.R.A. Compensation negotiable based on candidates desire to be on commission, salary or a combination. 573 406 2758 or [drdan@cantonvetclinic.com](mailto:drdan@cantonvetclinic.com). Questions or inquiries welcomed by phone or email.

FT SA or MA associate needed for 5 doctor mixed animal practice in Evansville, WI. Located conveniently 20 minutes from both Madison and Janesville. Evansville has a wonderful small town atmosphere. Companion animal rapidly expanding with recently remodeled clinic and includes IDEXX in-house lab, ImProMed software, high speed dental unit, great support staff. After hours SA emergencies are referred. For interested candidates, LA work is predominantly dairy with some beef, small ruminant, swine. Equine optional. Competitive salary, liability insurance, dues and license, 401K and funded retirement plan, paid vacation. Partnership potential. Contact Lynae at [admin@lynaeevansvillevetsservice.com](mailto:admin@lynaeevansvillevetsservice.com)

IVRC is seeking a Full-Time Veterinarian to join our rapidly growing Emergency and Critical Care Department. We are seeking an individual who is interested in providing exemplary patient care, while maintaining outstanding communication with both clients and referring veterinarians. Responsibilities will include overseeing the care of all hospitalized patients as well as assuming care of transfer patients from the specialty services; and/or seeing new emergency cases. The ideal candidate will be self-motivated, team focused, and possess strong interpersonal skills. We offer our emergency veterinarians an excellent benefits package and provide exceptional support through access to our specialists and our large staff of RVT's. We also hold monthly in-house CE provided by our boarded specialists. For inquiries regarding this position, please send resumes to [careers@iowavrc.com](mailto:careers@iowavrc.com) or fax (515) 278-2056.

Our hospital is proud to provide advanced veterinary specialty services to clients throughout Iowa and surrounding areas. Located in the heart of Iowa; we

are operational 24 hours a day/7 days a week, with 2 Board Certified Emergency/Critical Care specialists, 4 Veterinary Surgeons, a Cardiologist, 10 Emergency/Critical Care Veterinarians, and over 60 support staff. Along with our specialty services, our hospital provides advanced imaging services to include: GE LightSpeed computerized tomography (CT), LogiqS8 w/XDclear Ultrasonography, and Digital radiology, as well as Stryker Endoscopy, Arthroscopy, and Laparoscopy. We also provide advanced anesthesia and pain management techniques; as well as the capability for long term ventilator support. Antech Diagnostic Laboratory is onsite to provide us with the capability to provide our clients with highly accurate and timely results.

Experienced, full time veterinarian wanted for a small animal practice near the mighty Mississippi river in Muscatine Iowa. Riverside Animal Hospital is progressive with a loyal and growing client base. Riverside is staffed with certified technicians, client care specialists, and a practice manager. Riverside grew >20% in the last 2 years. Riverside needs an enthusiastic veterinarian to embrace the growth and business philosophies as well as become a great advocate for its patients and clients. Riverside has digital radiography, ultrasound, surgical and therapy lasers, and uses AVIMARK software. After hours emergencies supported by the area Emergency Center which is directed by Riverside's owner. Compensation includes a base salary with production bonus as well as traditional benefits. This year's full time vet is on pace to earn >\$90k. If you enjoy the comfort and intimacy of Iowa living in a River City town, then this is your practice! \*Future partnership/ownership is a definite consideration.\* Contact: Dan Drahos, DVM, P: 563 299-6009 , Email: laptopdoc@machlink.com

Summit Veterinary Services in Winterset, Iowa is currently seeking a full-time mixed animal associate veterinarian. We are currently a 3.5 doctor mixed animal practice. We have a large and expanding cow-calf client base and are also experiencing growth on the small animal side. Our large animal working facility was recently updated and includes a Flying W tilt chute and Daniel's hydraulic alleyway. SVS is also progressive with small animal practice and is well-equipped with in-house hematology/chemistry/thyroid analyzers, digital radiology, dental radiology, gas anesthesia, electrocautery, and cold laser. Applicants should be proficient in pregnancy evaluation and preconditioning. Competitive salary and opportunity for early buy in available. New grads or experienced veterinarians are welcome to apply. Interested applicants please call at 515-462-3711 or email at summitvetservices@gmail.com.

Pet Health Center of Tiffin is looking for a compassionate and enthusiastic small animal Veterinarian to join our team. We are dedicated to providing excellent customer service and the highest quality care. We are looking for self-motivated team members. We currently have a position for a full or part time individual and would be happy to interview new graduates as well as experienced practitioners. We have an ideal environment in which to mentor a new graduate, but if you are experienced, we do not interfere and will learn from you. We believe in hiring the best and giving them the tools to flourish. Applicants must have excellent communication skills, command of internal medicine, complete diagnostic workups, proficient surgical skills and demonstrate a commitment to continuing education. We offer a challenging, flexible, unique work environment, an exceptional benefits package and the opportunity for a long-term career. Submit resume and cover letter to phctiffin@gmail.com attention Katie. Additional Salary Information: Based on experience.

Hubbell Animal Hospital and Altoona Veterinary Hospital are seeking an experienced Associate Veterinarian to join our team. We are full service veterinary hospitals in the Des Moines metro area with nearly 60 years combined AAHA accreditation. Both hospitals are fully staffed with experienced and registered veterinary technicians and support staff who strive to provide quality and compassionate care to our clients and patients. The ideal candidate should have strong communication skills and a desire to practice high quality medicine and ability to perform a variety of general soft tissue and dental surgical procedures. About our Hospitals: Our Hubbell Animal Hospital location just moved into a brand new 4000 sf facility that houses 3 exam rooms, dedicated surgical suite that is climate controlled, consult/grieving room, isolation exam/hospital room, dental suite with digital dental radiography, ultrasound, and Idexx in house chemistry/hematology and digital radiography. Our Altoona Hospital is similarly sized and equipped.

Interested candidates should submit their resume and references to [altoonaveterinaryhospital@mchsi.com](mailto:altoonaveterinaryhospital@mchsi.com).

FT veterinarian wanted for mixed animal clinic at the Monticello Veterinary Clinic in scenic Eastern Iowa. Our well established practice is looking to replace a retiring partner. The clinic offers fully upgraded technologies including ultrasound, digital rad, Idexx blood machines, Cornerstone software, and many more. A competitive salary and benefits including health insurance, phone, truck stipend, and more are included. Please contact us at [montivets@gmail.com](mailto:montivets@gmail.com) or 319-465-5402 to apply.

Signing bonus available!!! Elkader Veterinary Clinic, Elkader, IA is seeking a full time mixed animal associate veterinarian. The practice is located in scenic Northeast Iowa. We are a well-established mixed animal practice with a large animal haul in facility and a full scale small animal hospital. Large animal work consists predominantly of dairy and cow/calf. On call is split between 4 doctors. Truck and box are provided as well as a competitive salary and benefits package. Future buy-in potential is also available. We are looking for an enthusiastic, hard-working and team-oriented individual who is engaged in advancing the practice and themselves. We are a youthful, innovative, and energetic group of veterinarians with an excellent support staff and friendly work environment. Please submit cover letter and resume to [elkadervetclinic@gmail.com](mailto:elkadervetclinic@gmail.com)

Coralville Animal Hospital in Coralville, IA is seeking a Part-Time veterinarian. We have recently remodeled our facility and upgraded our equipment to include in house IDEXX lab equipment, DR digital radiography, digital dental radiography, ultrasound, advanced anesthetic monitors and more. We are dedicated to providing quality patient care, superior client service in a warm-friendly environment with family friendly office hours for staff. Please submit your resume to Dr. Crystal Frank at [cfrankdvm@gmail.com](mailto:cfrankdvm@gmail.com)

We are a busy, four-doctor, AAHA-accredited hospital looking to add a new associate veterinarian to our team. Our clinic offers ultrasound, digital radiographs, laser, and digital dental radiographs. We encourage CE so our staff can have the knowledge to provide the most up-to-date care for our patients. We have a well-trained technical support staff that works closely with our doctors, building up the relationships we have with our valued clients. We are a well-established clinic and our goal is to not only provide care for our patients, but to care for their owners and to give back to our community. Dubuque is centrally located halfway between Des Moines and Chicago, and less than two hours from Madison, the Quad Cities, and Iowa City. It offers an excellent school system, affordable housing, vibrant community events, and scenic river bluffs. We are looking for someone who is passionate about veterinary medicine and enjoys surgery. We believe that by using the team based approach we are able to provide the highest level of care. We offer a three day work week, weekends and on-call rotation are shared by all the doctors. Salary is commensurate with experience, and new grads are welcome to apply. Please e-mail resumes with cover letters to [dvmctah@aol.com](mailto:dvmctah@aol.com).

Veterinarian Wanted - Full time relief veterinarian December 2017 through April 2018, with potential for permanent position for the right candidate. We are a four-doctor small animal hospital in Burlington, Iowa. Busy, long-established practice with emphasis on preventative medicine and surgery. Schedule and salary are negotiable. Personalized client and patient care is the center of our practice. Interested candidates contact Cheryl @ (319) 752-5983 and email resume to [aganho1957@aol.com](mailto:aganho1957@aol.com).

Small animal veterinarian wanted for mixed animal practice in Windom, MN. Either full or part time. Very busy growing practice, well equipped with all essential amenities, excellent support staff and three other veterinarians. Please contact at [mikedvm@yahoo.com](mailto:mikedvm@yahoo.com) or 507-831-1473.

Osceola Veterinary Clinic is seeking an additional veterinarian interested in being part of a growing mixed animal practice. New grads as well as experienced veterinarians are encouraged to apply. We are a well-equipped clinic with a new facility that was completed in 2014. In return for hard work, great communication skills & client care, we offer a competitive salary & an outstanding benefits package as well as providing a truck & mobile unit. Doctors alternate between a 4 1/2 & 5 day work week. On-call time is shared. Want to be part of a rural but modern mixed animal practice yet choose to concentrate on your favorite aspect of veterinary medicine? Send your resume to [osceolavetclinic1@yahoo.com](mailto:osceolavetclinic1@yahoo.com).

Blue Grass Veterinary Hospital is seeking a full or part time associate veterinarian possessing excellent communication skills for a growing companion animal practice. We are open to all levels of experience. Our clean, modern facility is located in a suburb of the Quad Cities. Our support staff is amazing and supports a family atmosphere with excellent client relationships. Our hospital offers computer records, digital radiography, digital dental radiography, advanced surgical monitoring, blood chemistry/hematology analyzers, and more. Benefits of the job include no on call hours, retirement benefits, competitive salary, paid CE and AVMA/IVMA dues, paid vacation and sick leave, and opportunity for future ownership. Contact Dr. Joyce Werning at [bluegrassvet@bluegrassvet.com](mailto:bluegrassvet@bluegrassvet.com).

Part time, small animal veterinarian wanted at busy 4 doctor, AAHA accredited hospital in Ames. Position will be 8:30 am - 6:00 pm on Mondays and occasional Saturdays 8:30 am - 1:00 pm. Possibility to cover open shifts while others are on vacation. We provide quality medicine and surgery to a wonderful clientele. Full service hospital includes digital radiology (also dental), laser surgery, laser therapy and in house diagnostics. Tremendous, professional staff and a great work environment. Looking for a friendly, positive, team-orientated veterinarian with good communication skills to practice high quality medicine. Compensation based on experience. Prefer experience, but will consider new graduate. Please send resume to [amespethosp@outlook.com](mailto:amespethosp@outlook.com).

FT or will consider PT veterinarian for a busy/fast pace small animal practice in Des Moines. Experience in exotics (non-avian) or an interest to learn is a plus. We are located in a residential area and the practice has been here since the 20's. In house lab, digital radiography, etc. and willing to add other equipment for the right person's interest. No emergencies. Salary based on experience. Contact [oaksvetclinic@gmail.com](mailto:oaksvetclinic@gmail.com). Thank you for your consideration.

Marcus-Remsen Veterinary Clinic, PC in Marcus, IA (NW Iowa) is a 4 Doctor Mixed animal predominantly beef cattle and swine practice. We are seeking an associate veterinarian to join our practice. Swine experience or interest is preferred. Small animal portion of practice has more than doubled the last few years and still has areas to expand. Shared on call and emergency duties, paid IVMA/AVMA/PLIT dues, CE stipend, clothing allowance, and generous vacation time. Truck and Ambulatory unit provided. Salary negotiable. Newly built large animal building with indoor working facilities and equine stocks. New surgery suite with new Idexx CBC/Chem/Urinalysis, portable X-ray and Ultrasound, gas anesthesia, dental scaler. Two office locations. Small community living with a great atmosphere and friendly clients. Not far from a few larger towns. Experienced or new grads welcome. 712-261-3033 or email [tmartindvm@gmail.com](mailto:tmartindvm@gmail.com).

Progressive, fast-paced small animal and exotic practice in North Iowa is looking for an associate. We have a fabulous support staff waiting for you! Minimal on-call time and small-town life with short drive to bigger cities. We would love to mentor a new grad or embrace an experienced, like-minded veterinarian. We practice low-stress handling. All the amenities here-in-house bloodwork, surgical and therapy lasers, extensive anesthetic monitoring, digital full body and dental rads and an updated facility. Please submit resume to [drlacoste@amhiowa.com](mailto:drlacoste@amhiowa.com).

Full-time associate veterinarian to join 3 doctor practice in Melbourne and Baxter, Iowa (30 minutes from Des Moines and Ames). Seeking qualified individual with an appreciation and understanding of the challenges and opportunities of rural practice. Approximately 50% large animal and 50% small animal. No equine work. No exotics. Vet truck provided. Emergency on call duty divided evenly among doctors. Send resume to [dvm@partnercom.net](mailto:dvm@partnercom.net). Call 641/482-3265 for more information.

Seeking veterinarian for a 3 doctor small animal practice, located in eastern Iowa. Candidate should have good surgical skills. We have surgical and therapy lasers, Idexx lab equipment, digital radiography and ultrasound. No after hour emergencies. Salary plus bonus, paid vacation, CE allowance. New graduate considered. Please contact Dr. Sue Hartmann, Klein Animal Clinic, 2332 Cumberland Sq Dr., Bettendorf Iowa, 52722. Phone 563-441-7560

Full-time associate veterinarian wanted in northeastern Iowa. We have an in-house lab (Idexx), ultrasound, cryo therapy, Tonopen, sevoflurane anesthesia and a digital

x-ray system. On call duty is one night/week with 1 weekend every 3-4 weeks. Our specialties: preventive and diagnostic medicine, surgery (soft tissue, orthopedics), exotics, ultrasound, and chemotherapy. Package includes: 401K, cafeteria plan, growth opportunities, paid dues, CE stipend, uniforms, and coffee. If you want to start work early, learn something new every day, and practice great medicine (and a lot of it), please apply. Contact: Dr. Tom Taylor (taylortomtt@hotmail.com or 319-232-5292).

Blank Park Zoo in Des Moines, IA is seeking a part-time Associate/Relief veterinarian to work 1 to 2 days per week and share after-hours on-call responsibilities with zoo veterinarians. Required working hours will include at least 2 Saturdays per month. Submit an online Blank Park Zoo application with cover letter and resume attached. Application & complete job description can be found online at: [www.blankparkzoo.com/contact-us/jobs](http://www.blankparkzoo.com/contact-us/jobs).

Due to tremendous growth our NVA hospitals in the Quad-Cities is looking for an experienced Associate Veterinarian to join our team! We are located in the Quad-Cities, a group of five cities straddling the Mississippi River on the lowa-Illinois boundary. We provide primary, referral services and limited emergency services to a population of approximately 100,000. Our amenities include 4 exam rooms, treatment/recovery area, surgery suite, dental/prep area, radiology, isolation room, in-house lab, digital x-ray, ultrasound, iso/sevo anesthesia, ultrasonic and high speed dental equipment, digital dental x-ray, complete pharmacy, and Avimark software. Excellent compensation and benefits package. Please submit resumes to [ssmoss@nvanet.com](mailto:ssmoss@nvanet.com).

Trans Ova Genetics in Sioux Center, Iowa is looking for a Herd Health Veterinarian to join our team! Provide high quality veterinary care and up to date management practices for elite genetic animals owned by clients and Trans Ova. Serve as a member of the Veterinary Services team, working in a team environment for continuous improvement of herd health. You will perform surgeries as necessary at calving center and in joint research projects, including Caesarian section, umbilical resection, hernia repair, etc. You will also perform procedures such as health checks, treatments, neonatal intensive calf care and monitor, update and train on the preventative medicine protocols, nutritional aspects, and overall herd health of calf program. This position provides on call emergency support during the work week (Monday thru Friday afternoon) in rotation with other team members. For a full job description and to apply visit our website at [www.transova.com/careers](http://www.transova.com/careers).

## VETERINARY TECHNICIAN WANTED

The College of Veterinary Medicine at Iowa State University is accepting applications for certified Veterinary Technicians. Basic veterinary technician skills are expected. Familiarity with common veterinary equipment including blood pressure monitors, EKG machines, and gas anesthesia machines. Exposure to more advanced skills such as urinary catheter placement, triage skills, patient restraint ability, and multiple site capability for IVC placement. Ability to multi-task as well as excellent communication skills a must. Great pay and a full benefit package like no other! Please apply at: <http://www.iastatejobs.com/postings/27610>.

We are growing!!! WANTED: Certified Veterinary Technician for busy small animal practice in Rochester, MN area. Outgoing, self-starters with confidence in skills and communication are encouraged to apply. Certification is a MUST. Experience preferred. Send resume to Jennifer at [manager@meadowviewetmn.com](mailto:manager@meadowviewetmn.com)

Heart of Ankeny is looking for a Full or PT Technician to join their team! We are a full service small animal hospital offering medical, surgical, and dental services. We offer high quality care with in-house laboratory, digital x-ray, dental x-ray, high-speed dental unit, and ultrasound. Position offers PTO, retirement plan, discounted services/product for your pets, and paid CE. Pay will be based on experience. Interested applicants please email [heartofankeny@gmail.com](mailto:heartofankeny@gmail.com)

Walk-in veterinary clinic in Urbandale is looking to hire a technician or assistant. Experience is preferred but not necessary if you are eager to learn and enjoy multi-tasking. Responsibilities will include: Holding animals and assisting veterinarians, drawing blood

and processing laboratory samples, answering phones and working at the front desk, and cleaning. We offer an exciting work environment, competitive pay and great benefits! These include health insurance, IRA with company match, profit sharing and vacation time. Please e-mail your resume and/or cover letter to [jayl1330@gmail.com](mailto:jayl1330@gmail.com) if interested.

Adel Veterinary Clinic is seeking a dedicated, enthusiastic self-motivated individual to join our team as a full time veterinary technician. Occasional evening and weekend hours required. We provide a drug-free workplace, paid CE, quarterly bonus program, 401k with employer matching, uniform allowance and paid time off. \$500 signing bonus for certified/credentialed technician after completion of 90 probationary period. If interested please email resumes to [sarasorensen@mediacombb.net](mailto:sarasorensen@mediacombb.net).

Taylor Veterinary Hospital in Cedar Falls is hiring a full-time Registered Veterinary Technician. We are a very busy 2 doctor small animal hospital and are looking for someone who is self-motivated, have excellent customer service skills, be able to work well in a team setting and have a positive attitude. This position provides health, disability, life insurance, pet care discounts, uniform allowances, paid holidays and PTO. Compensation will be based on experience. Please send cover letter and resume to [jsmith@taylorvet.com](mailto:jsmith@taylorvet.com)

Coralville Animal Hospital in Coralville, IA is seeking a registered veterinary technician. We have recently remodeled our facility and upgraded our equipment to include in house IDEXX lab equipment, DR digital radiography, digital dental radiography, ultrasound, advanced anesthetic monitors and more. We are dedicated to providing quality patient care, superior client service in a warm-friendly environment with family friendly office hours for staff. Qualified applicants will be reliable, friendly, and a self-motivated worker. Please submit your resume to Dr. Crystal Frank at [cfrankdvm@gmail.com](mailto:cfrankdvm@gmail.com)

Progressive, fast-paced small animal and exotic practice in North Iowa is looking for a technician to expand our fabulous support staff! Minimal on-call time and small-town life with short drive to bigger cities. We practice low-stress handling. All the amenities here-in-house bloodwork, surgical and therapy lasers, extensive anesthetic monitoring, digital full body and dental rads and an updated facility. Please submit resume to [drlacoste@amhiowa.com](mailto:drlacoste@amhiowa.com).

Seeking a Registered Veterinary Technician for a 3 clinic practice in the Iowa City Corridor. Fun team of professionals wanting to add another RVT to a growing team of professional staff. We are looking for a technician who can bring excellent customer service and patient care. Schedule would be 4 work days per week plus every other Saturday 8 to noon. Benefits include competitive wages, pet care discount, scrub allowance, paid CE, retirement plan, paid vacation and sick days and more. Apply today to join our team. Please email resume to [bms@iowacityvet.com](mailto:bms@iowacityvet.com).

## VETERINARY CLINIC STAFF WANTED

The Mediapolis Veterinary Clinic in Mediapolis is seeking a full-time receptionist/veterinary assistant. We are a two-doctor mixed animal practice with two RVTs. Duties include answering phones, scheduling appointments and farm calls, prepping and de-prepping patient charts, sending reminders and billing statements, filling prescriptions and refills, general custodial duties, and assisting the veterinarians and technicians when needed. Our close-knit staff will help transition you into our family. Benefit package available. Please send resume to [mepovet@gmail.com](mailto:mepovet@gmail.com).

## EQUIPMENT AVAILABLE

Automatic x-ray film processor, AGFA CP1000. Only 6 years old. In very good shape. Includes 1 case of fixer, 5 rare-earth cassettes, and film. Make an offer. Call 641-743-2138.

For Sale: 2008 Toyota Tacoma, well-maintained, and equipped with a Bowie Capri 6 that was recently restored. For more information, please email [doddoug@goldfieldaccess.net](mailto:doddoug@goldfieldaccess.net) or call 515-851-1331.

Agfa CP1000 automatic film processor for sale. Plates, cassettes, films, developer fluid, and fixer included. Selling due to recent upgrade to digital radiography.

\$500 OBO. Call 319-837-6511 or email [leecovet@gmail.com](mailto:leecovet@gmail.com).

Bowie 5.5 Legacy Mobile Veterinary Unit. Fits short bed trucks. Purchased new in 2009 for \$13,000. Everything on unit is working great. Shell well taken care of. Looks new. Asking \$6,000 OBO. Please call/text 712-261-3033.

For sale: COMPANION THERAPY LASER. LiteCure LTX 15, top end model with all accessories included. Still has remaining three-year warranty (same as new models for sale now). Barely used due to change in clinic priority after purchase. Buy before end of the year for Section 179 tax savings. For more info, please email [owatnnavetservices@gmail.com](mailto:owatnnavetservices@gmail.com) or call (507) 451-0960.

## PRACTICE FOR SALE

For Sale: Small animal solo practice of 38 years in Des Moines with loyal client base originating from all area of the metro. Leased space (1500 sq. ft.) makes ownership of well-equipped clinic affordable. Photos available upon request. Please respond to: [dsmvet5049@gmail.com](mailto:dsmvet5049@gmail.com)

Well-established and equipped practice for sale in N. Central Iowa, currently 80% small animal. Clinic is 3000 SF facility with boarding kennels and large lot on a busy highway. This area is growing; wonderful potential for a good lifestyle and a comfortable living. For more information, please email [doddoug@goldfieldaccess.net](mailto:doddoug@goldfieldaccess.net) or call 515-851-1331.

## CASES NEEDED

Complimentary dental consultations in your office: Now through Dec 31, Dr. Mathis is looking for the last few cases to complete her dental credentials. Some can be telemedicine. Most equipment is mobile: I'll come to your practice. To finish, the following cases have greatly reduced prices or free: Erupting teeth alignment, Oral mass diagnostics without full excision, Endodontics, Crowns, Orthodontics (correct painful bite), Tooth avulsion replacement, <48hr tooth fracture for vital pulp therapy. Email [drjen@tooth.vet](mailto:drjen@tooth.vet).



Iowa Veterinary Medical Association  
 1605 N. Ankeny Blvd., Suite 110  
 Ankeny, IA 50023

• **QUOTABLE** •

"Christmas is not a time nor a season, but a state of mind. To cherish peace and goodwill, to be plenteous in mercy, is to have the real spirit of Christmas."

- Calvin Coolidge

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