# SUMMER 2016

IN THIS ISSUE ISVMA Community Outreach

Perioperative Fluid Therapy: What's New? VET DEBT





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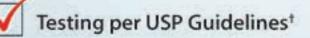
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### In Good Hands

by Herb Whiteley, DVM, DACVP



On April 23, I had the pleasure of hosting the ISVMA scholarship awardees at the College of Veterinary Medicine's annual awards and scholarships

celebration. The ISVMA supports four students, one from each class, to be the student representatives to the association. Our class representatives this year were Jacob Maag, first-year class, from Golden Eagle, Illinois; Andrea Vercelli, second-year, from Elgin, Illinois; Lynsee Melchi, third-year, from Waukegan, Illinois; and Kiley Mettendorf, fourth-year, from Stewardson, Illinois. They all participated in ISVMA activities and are an important voice in our association and on the Board of Directors. Additionally, on May 13, I was honored to represent the ISVMA at the College of Veterinary Medicine's graduation convocation, where 116 new veterinarians were awarded their degrees, and to present the valedictorian award to Dr. Kristen Kuntz from Glen Ellyn, Illinois. Our association and the profession will be in good hands as these new veterinarians enter the profession.

#### Volunteer for a Committee

In order to keep our association strong, we need broad representation and participation in our association committees. Dr. Sandra Faeh, our president-elect, is in the process of identifying members of the association to serve on our numerous committees. Several important committees need additional members to serve. These include the following: Education and Sponsorship, Legislative, Membership, Certified Veterinary Technician Task Force, Public Relations and the Board of Directors. Additionally, there are many opportunities to be involved in regional associations within our state. As I look at the Board of Directors, we have an excellent and diverse group of veterinarians and certified veterinary technicians participating, including a number who are early or midcareer. As new associates and veterinary technicians in practices, please consider participating in our committees, and as practice owners and "bosses," please encourage and support the participation in our association by your associate veterinarians and certified veterinary technicians.

Members can utilize ISVMA's volunteer form online at www.isvma.org or can contact Dr. Faeh directly at s.faehbutler@gmail.com to volunteer for a committee.



# Congratulations, Graduates!

by Charlotte Waack, CVT, RVT



It is hard to believe summer is here! I would like to congratulate all of the recent graduates from our Illinois veterinary technology programs. I also wish you well in your upcoming

board examination and hope we see many more CVTs in Illinois at the end of August.

On February 16, 2016, the Illinois Department of Financial and Professional Regulations (IDFPR) approved the amendments to Section 1505.60 (Certified Veterinary Technician Functions) and Section 1500.48 (Employees of a Licensed Veterinarian Who are not Certified Veterinary Technicians). These amendments have tasks and levels of supervision for CVTs and for those who are not CVTs. Over six years ago, an ISVMA task force was formed to start putting these rules together. This task force first researched extensively, studying various practice acts across the United States, reviewing the AVMA's Committee on Veterinary Technician Education and Activities' skills list and the AVMA Model Practice Act. Members of the task force worked together to assemble a list of tasks and then set levels of supervision for each task. This was a very long process from this task force to the IDFPR approving the amendments, but it was so worth the wait!

If you have not looked at the new ISVMA website, take a look at the new design and new areas. The new design is very sleek and user-friendly!

Have a great summer, and start marking your calendars for the ISVMA Convention, November 4-6, 2016, in Lombard, Illinois. We have a great technician program lined up for our CVT members!

### Does My Voice Matter?

by Deborah Lakamp, CAE, Executive Director

In the first five months of every year, it seems like every conversation revolves around numerous legislative proposals emanating from the State Capitol. Whether you follow politics or not, there is no denying that decisions made at the Capitol have an impact on how you practice veterinary medicine. There were two instances this session that are excellent illustrations

of how much each and every voice can influence decisions made by lawmakers and others.

Illinois has become a target state for the Beagle Freedom Project (BFP) to pass legislation directing public universities, which conduct research that uses animals, to turn their animals over to a rescue agency without regard for the animals' health or needs. These demands do not take into account the already well-established and documented university research protocols and successful adoption policies. As stated on the BFP's social media site, the group's ultimate goal is to end all animal research. ISVMA's position on this matter is simple ... the health and welfare of research animals should always be under the purview of a veterinarian.

ISVMA, thanks to the efforts of our members who both helped shape our position and who served as our conduit with legislators, was a critical player in the coalition that formed to oppose this legislation.

While proponents of the legislation tried to dismiss BFP's announced intention to ultimately end animal research and even their boast of having bankrupted a laboratory, opponents fueled with the information provided by ISVMA and our other coalition members were able to convince the members of the Senate Higher Education Committee that this legislation was unfounded and questionable public policy. It was heartening to hear our objections being voiced by the committee members as they debated and cast their votes in opposition. The result may not have been as satisfying had our members not engaged in contacting their local legislators as well as helping create ISVMA's position on this important issue. Our voices mattered.

A few weeks later, I sat in on a meeting with a young veterinarian and a legislator. The legislator's message during this first time meeting with her constituent was simple and direct. She said, "You need to be the squeaky wheel on animal welfare issues. I need to hear from you regularly and, especially, when I am in the district. I would also like to visit your clinic and see what you do and how you do it. We need to get to the point that we know each other personally." Every ISVMA member should take this advice (and invitation) to heart.

The legislator did not promise that she would agree with what this veterinarian told her but she promised to listen and consider the information provided. Policy-making success, especially as it relates to the veterinary profession, depends on the free flow of information to those who ultimately will make the decisions. The long-term success of our profession depends on our expending our energies to protect it. Our voices will matter.



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### Big Hearts, Alternate Pathways and Winning the Race

by Peter Constable, Dean



You may recall me as a food-animal clinician-scientist from my faculty days at Illinois, but another of my longtime research interests is cardiovascular physiology, particularly in

the elite canine athlete.

For more than two decades I've been involved in studies of the dogs participating in Alaska's Iditarod, the annual sled dog race covering more than 1,000 miles between Anchorage and Nome. When racing 300 miles in a cold environment, these extraordinary athletes burn calories at more than twice the rate of thoroughbreds in heavy training, three times the rate of Tour de France cyclists, and four times the rate of sedentary Alaskan sled dogs.

As dean, I've continued to make an annual trek to Alaska in early March as part of a longitudinal study of this unique population. With fellow Australian Dr. Kenneth Hinchcliff, current co-editor in chief of the *Journal of Veterinary Internal Medicine* and a former dean, and other co-authors, I've published a number of scholarly articles about these amazing dogs.

Every veterinary practitioner should be made aware of this: clinical findings that would, in the typical canine pet, indicate pathology may be normal for athletes at this level. In our study of 48 highly trained sled dogs compared with 18 lightly trained sled dogs, 19 untrained sled dogs, and 14 mongrels, the elite athletes far more frequently showed systolic cardiac murmurs (in fact, 40 percent of the highly trained dogs had murmurs), cardiac chamber enlargement, and a prolonged QT interval on an electrocardiogram.

These findings match the findings in human endurance athletes. (Unlike human elite athletes, however, the dogs did not exhibit a lower than normal resting heart rate.)

We've shown that endurance training increases QRS duration, which in turn correlates with cardiac size in the dog and may be useful in predicting performance in endurance activities.

What I've experienced working with the dogs of the Iditarod informs my perspective as dean. Performance and endurance are qualities that matter, whether the race is literal, covering miles, or metaphoric, toward organizational goals and aspirations.

As a college, we have adopted a long-range vision that describes what success looks like:

We will be a pre-eminent public college of veterinary medicine, provide a transformative educational experience for our students, create and communicate knowledge that changes the world, deliver outstanding clinical service to our patients and clients and pursue excellence in all our endeavors.

Achieving this vision will be a complex and multifaceted process, so we've identified the actions we'll take over the next five years to move us in the right direction. These actions are documented in our 2016 Strategic Plan. Like the empirical scientists veterinarians are, we will track predefined data to measure our progress toward our goal.

Sometimes, the path to our goal will take us through unexplored territory. As you know, the Illinois budget situation has ratcheted up the financial pressures on higher education. We are forging innovative partnerships with the industry to meet these challenges, just as we reached outside the norm when reimagining delivery of a 21st century veterinary curriculum.

The fact is, to achieve our goals in a changing social and economic environment, we must find new strategies. While we continue to foster scholarship and discovery, we may put a new focus on faculty hires that align with campus research priorities, patent applications, endowed chairs, and graduate student scholarships. Our strength in transformative learning experiences may embrace international partners, dual degree programs and the latest technology in instructional methods.

A fierce determination to achieve fuels our plan and our people. We are glad to have the Illinois veterinary community as part of our winning team.



Dean Peter Constable with some of his study subjects at the 2016 Iditarod.



# It is no secret that loan debt has been a growing problem for graduates of higher education, but the future looks particularly bleak for students of veterinary science.

"Mean full-time starting salary for 2011 graduates — not including graduates pursuing advanced education — was \$66,469, which was down 1.3 percent from the value for 2010 graduates (\$67,359) and up only 2.5 percent from the value for 2009 graduates (\$64,826)," wrote Malinda Larkin of *JAVMAnews*.

Larkin went on to say that the 2011 AVMA annual survey of graduating veterinary students "showed that for the approximately 90 percent of veterinary school graduates with debt, mean student debt increased from 2010 to 2011. Mean debt for 2011 graduates with debt was \$142,613, a 6.5 percent increase from the value for 2010 graduates. Mean debt for 2009 graduates with debt was \$129,216."

The blame for the widening gap between salary and debt to some degree falls at the feet of the government. According to Larkin, "There's been a gradual, steady decline in both state and federal funding for education on a per capita basis, especially at the state level."

However, there is some positive news — recently President Barack Obama issued an executive order that sped up a law altering the Income-Based Repayment plan. Larkin explained, "The law now allows borrowers to limit loan repayment to 10 percent of their discretionary income, with the remaining balance forgiven in 20 years if they meet certain requirements." Countless conferences have been held by various organizations in the recent past in an attempt to further address this issue. Michigan State University is one of these organizations. Sponsored jointly by the AVMA, the Association of American Veterinary Medical Colleges and Michigan State University's College of Veterinary Medicine, on April 20-22, the school brought together some 180 individuals for the "Fix the Debt Summit," with the following goals in mind:

- Provide recommendations to colleges, students and employers that address the debt problem
- Raise awareness among all stakeholders about the severity of the debt problem, its impact on the profession and the facts surrounding it
- Gain a shared understanding of all the issues contributing to the student debt problem, including cost of education, debt management and starting salaries



The summit's webpage also reads, "Student debt and the cost of veterinary medical education issues are of the highest priority for our profession. All facets of the profession — colleges, students and employers — need a shared understanding of the issues contributing to these problems in order to find viable solutions to improve the situation."

As the summit centered around financial struggle, it was only fitting that some financial assistance be available to those participants who had need. Travel grant scholarships were offered to 10 students and 10 recent graduates wanting to attend the summit.

Meanwhile, ISVMA's Board of Directors is doing its part to find a solution. On April 20, its members met and brainstormed the following ideas, among others, to be considered at the Fix the Debt Summit.

- AVMA or other vet organizations help provide loan repayment plans (rather than using a private loan) or provide better consolidation options
- Loan forgiveness with more opportunities not just for those in areas where the environment is not ideal for family living (i.e., fewer school opportunities, spouse employment, etc)
- Students partner with a local bank to apply for loans with better interest rates than student loans
- Tiered type of monetary support students would apply for post graduate financial assistance
- More private and/or foundation scholarships

As the summit centered around financial struggle, it was only fitting that some financial assistance be available to those participants who had need.

• All graduates give back to their colleges to support scholarships – large numbers of grads giving back a small amount (i.e., \$100/year) creates a large source of funds/endowments

And what can veterinary students as individuals do? AVMA's Kim Kishbaugh offered some tips in the article, "What you Need to Know About Paying for Veterinary School":

- Take money management classes
- Research the student loan process and learn about student loans
- Attend a veterinary school where you can qualify for in-state tuition rates
- Take time off between undergraduate school and veterinary school to make and save money
- Make a budget now, and practice living within its constraints
- Apply for scholarships
- Borrow only what you absolutely need

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AVMA has been reaching out to help veterinary students afford school for several years. In March of 2010, the organization began a program called Food Animal Veterinarian Recruitment and Retention Program. According to AVMA's website, the program speaks to the organization's "ongoing commitment to help ease

the financial burden most veterinary graduates face, especially those looking to pursue a career in rural areas in need of food-animal veterinarians." The graduates in the first set of recipients each received up to \$100,000 in the form of veterinary school loan repayments.

#### **Cutting the Cost**

Instead of just helping students afford the incredibly high cost of education, what can be done to actually decrease the expense? That is precisely the question former ISVMA president and veteran veterinarian Dr. Ronald Gill is concerned with answering.

"Fixing the debt will be difficult," Dr. Gill said. "We didn't get into this position over night. The cost of educating a veterinarian is approaching that of educating a physician and debt of veterinary students is nearly two times the starting salary."

Dr. Gill shared what he believes to be the number-one obstacle to overcoming the exorbitant debt many veterinary students face and his answer echoed Larkin. "It's the general lack of government support for higher education," he said. "It's not just veterinary medicine. At one time, 80 percent of support came from the government. Now it's 20 percent."

Despite such staggering odds, Dr. Gill has found students and new vets to be highly optimistic. "We still have very bright energetic students," he said. "I ask, if they had known before they started that they would have this debt, would they have gone through with it, and they always say yes. They would do it all over again."

However, Dr. Gill believes the discrepancy between salary and debt to be unsustainable and is eager to find solutions. "One thing we could do is reduce the number of undergraduate years," he said. "I was admitted to veterinary school after two years. The general average is four years, which means two more years of college expenses, two years' less salary.

"Another thing is the sharing of instructors between schools. I don't think we need an individual in each school in the early stages. One person could be recorded and shared over the internet."

*Epitome* also spoke with another ISVMA member, Dr. Erika Eigenbrod, to get her input on the subject. "To me, one of the biggest issues that new

graduates need to overcome is our lack of business and personal financial sense," she said. "What I mean by that is we are so focused on learning the correct way to practice medicine that we put many other things on the back burner. Almost every veterinary student starts school knowing they are going to owe a lot in student loans after graduating, and it is just kind of accepted. We put it in the back of our mind and spend the next four years really focusing on vet school, becoming the best doctors we can be."

Eigenbrod experienced one effective response to this situation during her time in school. "I feel very fortunate that our state veterinary school started offering business classes to help us think about these things before graduation. There are many repayment options for your student loans, but it can be very tricky and time consuming trying to determine which programs you qualify for, what each program entails and what program fits with your personal situation."

Eiegenbrod continued, "More guidance on the issue of student-loan borrowing and understanding the impact this debt may have on future decisions and endeavors is critical to ensuring a successful path for each new graduating veterinarian. I would recommend more continuing education classes for new graduates with business and financial professionals and a continuing dialogue between all interested parties."

Student AVMA President Matthew Holland concurred. "Now is the time, before it's too late, to unite. Students, recent grads, practicing veterinarians, academia, associations, leaders in organized veterinary medicine, leaders in all walks of veterinary medicine — now is the time for all of us to be open to each other's ideas and act in the interest of the profession and its future," Holland said. "Because if we all agree that we're all accountable, the collective we can and will facilitate meaningful change. The spirit of collaboration at the summit was a step in that direction."

Holland had the opportunity to speak at the Fix the Debt summit. As part of his closing remarks, he shared, "We know the inclination for this important work to lose momentum once we all go home and return to normal. We ask for each and every one of you to choose this to be part of your normal. Choose to harness our energy, and all the energy in the room. Choose to be grateful for the opportunity, and the privilege, to be the growth you want to see. Choose to acknowledge the difference between change and growth. Choose to use inevitable discomfort to be the catalyst for communion. And please, let's choose each other, starting now."

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# ISVMA Community Outreach

### FFA Agricultural Skills Competitions

ISVMA's member veterinarians and certified veterinary technicians engaged in two recent community outreach opportunities that allowed young people to learn about the veterinary profession.

The first event was helping create and then judging the skills stations for the veterinary technology career development event for a statewide FFA contest. A total of 76 students from 21 FFA chapters gathered at Joliet Junior College's Weitendorf Agricultural Education Center to test their understanding of the veterinary profession. The students exhibited the skills they had learned during the school year at various stations. Some of the challenges included muzzling an animal, equipment recognition, parasite recognition, demonstrating proper handling and restraint techniques, a math skills test and a fecal matter test.



Clifton Central High School won the overall team competition and will advance to the national competition in October at the National FFA Convention in Indianapolis. Tri-Point High School (Cullom, Illinois) student Katie Malone won first place in the individual competition.

"Ag education is about providing students real-world applications to the skills they learn in school. Through ISVMA assistance, we were able to offer as close to a real-world experience as possible," said Luke Allen, agricultural program advisor, FCAE Project, a special project of the State Board of Education. "On behalf of students, we appreciate ISVMA's involvement in making this a good learning opportunity."

### Learning Veterinary Science at Wagner Farm

During the second event, over 200 people braved cold weather and even some sleet to learn about the veterinary profession at historic Wagner Farm in Glenview. Families and their elementary-age and

younger children had an opportunity to learn about livestock and companion animals through a variety of hands-on learning stations. The stations, designed by ISVMA Director of Education Dr. Michelle Gundlach included the following: learning to suture, what household items are poisonous, veterinary instruments and their uses, X-ray, CPR,





grooming, what a parasite looks like under the microscope, and a large-animal veterinarian with his truck. There was even a station where kids used iced sugar cookies and candies to replicate how a cow's intestines look.

"Despite the sleet, I had a blast," said Dr. Scott Keller, director of the certified veterinary technician program at Joliet Junior College. "Parasites may not be all that glamorous, but the kids really liked seeing their parents grossed out by them. I hope to do it again next year."

One attendee stated: "My fifth-grade daughter and I attended today's first Vet for a Day event at Wagner Farm and, despite the awful weather, enjoyed it tremendously. The people manning the booths — veterinary industry professionals — were educational, and some were very entertaining."

Dr. Kelli Kramer, ISVMA Board member, worked the CPR booth. "Many of the elementary-age kids had already learned CPR in school



and were excited to practice on our Resusci Rover. They loved it when we told them that they 'saved the dog!' Many parents inquired how to save their pet specifically and had great questions! I'm looking forward to doing it again next year!"

Helping youth learn about veterinary practices is one of the many ways ISVMA members can share their profession.

### Volunteer Feedback



"The FFA CDE was a fun, well-organized event showcasing Illinois high school students' knowledge and technical skills in animal care. It was a great opportunity to interact with motivated young adults and give advice about future careers in veterinary medicine."

"It's always a pleasure to work with the future of veterinary medicine. The youth I see that become involved in FFA and 4-H show a level of knowledge, as well as an ability to communicate, that impresses upon me that we have a very bright future in animal care, agriculture and veterinary medicine."

"I am so happy I was able to participate in the very first 'Vet for a Day' at Wagner Farms! It was truly amazing to see the kids (and their parents!) light up when they heard the cow's heartbeat."

"It was wonderful working with everyone and seeing the kids tie square knots and learn more about suture patterns. Quite a

few of them were naturals at it! I also hope to help out next year, or at any other event that ISVMA needs vets at in the future."

"I was manning the toxicology station. It was incredible to educate pet owners on common household items that can be lethal to their four-legged family members. The event was extremely wellorganized. I hope next year Mother Nature is a little more cooperative!"



# **Perioperative Fluid Therapy:** What's New?

by Jessica Antonicic, CVT, VTS (Anesthesia/Analgesia), MedVet Chicago

Plan to attend her informative sessions at the ISVMA Convention, November 5, 2016.

There have always been debates regarding whether fluid therapy while under anesthesia is even necessary. There are many different opinions and many different recommendations for rates as well as fluid choices. Most people who work with anesthetized patients, especially in specialty practices, would agree that fluid therapy is essential. Fluid therapy aids in replacing fasting losses prior to surgery; insensible losses that occur during surgery, like evaporative loss; surgical or traumatic loss (hypovolemia); and hypotension (absolute and relative). Some would argue that a patient under anesthesia for a short period of time should not need fluids, but here is something to consider. All anesthetic drugs that are used on veterinary patients alter a patient's hemodynamic state. This can occur by causing vasodilation leading to hypotension (i.e., gas anesthetics and propofol), bradycardia (i.e., opioids), respiratory depression (i.e., ketamine, propofol and opioids), and the list goes on. Now, does fluid therapy help with respiratory depression? Well, not directly, but it will help in treating other negative side effects, like vasodilation, which leads to hypotension. Hypotension in animals is one of the most common complications during general anesthesia in veterinary medicine.

Since this debate has been going on for a long time, none of this is new information. The current guidelines according to the American Animal Hospital Association (AAHA) for fluid rates for an anesthetized patient are as follows:

• Provide maintenance rate (cats, 2 to 3 ml/kg/hr; and dogs, 2 to 6 ml/kg/hr) plus any necessary replacement rate at less than 10 ml/kg/hr

- Adjust the amount and type of fluids based on patient assessment and monitoring
- Adjust rates to species (cat/dog) as well as underlying medical conditions, like cardiovascular disease and renal disease
- Reduce rate if anesthetic procedure runs longer than one hour
- In the perioperative period, start at 3 ml/kg/hr in cats and 5 ml/kg/hr in dogs, then reduce the rate by 25 percent per hour until maintenance levels are reached, provided the patient is stable

These are the current recommended guidelines because AAHA states that IV fluid rates that are delivered at 10 ml/kg/hr, with boluses given during anesthesia due to hypotension, are not evidence-based and should be reassessed. AAHA's reasoning is that high fluid rates may actually lead to worsened outcomes, including increased body weight and lung fluid, decreased pulmonary function, coagulation deficits, reduced gut motility, reduced tissue oxygenation, increased infection rate, decreased PCV/TP (packed cell volume/total protein), and decreased body temperature.

The new school of thought is to treat IV fluid therapy like drug therapy and tailor the fluid rates and type of fluid to the individual patient based on the surgical procedure that the patient is undergoing plus





the patient's current physical status. The objective is to provide fluid therapy that is individualized and goal-directed to minimize the risks of fluid overload and provide the patient with the proper amount of fluids to maintain homeostasis. The current thinking for the normal healthy patient that is stable under anesthesia is to provide its basal water requirements (1 to 2 ml/kg/hr) plus fasting loss (1 to 2 ml/kg/hr) plus insensible loss (1 to 2 ml/kg/hr), which equals about 5 ml/kg/hr. When dealing with a patient that has persistent

hypotension or hypovolemia, the current recommendations are to give a crystalloid bolus of 3 to 10 ml/kg, repeatable once. If unresponsive, then use colloids (hetastarch or VetStarch) at a rate of 5 to 10 ml/kg in dogs and 1 to 5 ml/kg in cats, titrated to effect, to help increase blood volume, leading to an increase in blood pressure. If those treatments are unsuccessful, then resort to vasopressors (dopamine/dobutamine) if no hypovolemia is present. All of these treatments should be in conjunction with a reduction in the general anesthesia that is being provided to the patient.

The fluid choices are many, but here are a few common ones: balanced crystalloid solutions, including LRS, Normasol-R, and Plasma-Lyte A, etc.; synthetic colloids, including hetastarch and tetrastarch (VetStarch); and, lastly, natural colloids, like whole blood, packed red blood cells or plasma. The new school of thought is to treat IV fluid therapy like drug therapy and tailor the fluid rates and type of fluid to the individual patient based on the surgical procedure that the patient is undergoing plus the patient's current physical status.

In the end, the fluids chosen and the rate delivered are only beneficial to our patients if they are being monitored properly to ensure that we are providing them with the proper goal-directed plan that minimizes risk and provides the most reward.



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# Not Your Parents' Pot

by Tina Wismer, DVM, DABVT, DABT, MS, Medical Director, ASPCA Animal Poison Control Center

Plan to attend Dr. Wismer's lectures at the ISVMA Convention, November 5, 2016.

With the legalization of medical marijuana, Illinois will probably follow the trend of other states and see an increase in the number of marijuana-intoxicated pets presented to veterinary clinics.<sup>1</sup> This increase is probably due to several reasons. Number one, people will be less concerned about the potential legal ramifications and, thus, will be more likely to present their intoxicated pets to the veterinarian. It is also possible that the number of cases has not increased, but because of more potent forms of marijuana, the clinical signs are worse, prompting more owners to seek medical attention.

While most marijuana exposures 10-plus years ago were to plant material, edibles (cookies, brownies, etc.) and concentrates (wax, shatter) are becoming more common today. These products have high levels of tetrahydrocannabinol (THC). The concentration of THC in marijuana plant material varies from 1 to 8 percent, while extracts contain as much as 28 percent, and oils/concentrates contain 30 to 50 percent THC.<sup>2,3</sup>

The most common clinical signs of marijuana intoxication are depression, ataxia and urinary incontinence. Other signs include agitation, vocalization, vomiting, diarrhea, hypersalivation, tachycardia, hypothermia, mydriasis, bradycardia, seizures and coma. Clinical signs can be seen as soon as 30 minutes after oral ingestion and may last up to 72 hours.<sup>4</sup>



Urine drug screening tests have not been validated for use in dogs. Most over-the-counter urine drug tests will give a false negative result for marijuana (THC) in dog urine. This is thought to be due to different metabolites produced by dogs when compared to humans.<sup>5</sup> These different metabolites may also explain the urinary incontinence that is seen in dogs and not in other species.

Decontamination of an orally exposed patient is possible, but the antiemetic properties of marijuana may limit the effectiveness of emetic drugs. Emesis should only be tried prior to the onset of clinical signs. Activated charcoal is generally not needed.

Treatment is symptomatic and supportive. In many cases, mildly ataxic and ambulatory animals can be managed at home. For the more severely affected, place on IV fluids and monitor respiratory function, heart rate, blood pressure and body temperature. Keep the patient warm and quiet, and minimize sensory stimuli. Rotate body position if the animal is recumbent or comatose. Agitated patients can be calmed with diazepam or acepromazine (if normotensive). No specific CBC or chemistry profile abnormalities are expected. Intralipids (20 percent solution) may be helpful in animals that are comatose because THC is lipid soluble.<sup>1</sup> The dosing regime is an initial bolus at 1.5 ml/kg given over 20 to 30 minutes, then followed with a constant rate infusion (CRI) of 0.25 ml/kg/min for 30 to 60 minutes. If the animal is no longer lipemic in four hours, repeat the CRI. Do not give any more than three doses if there has been no significant response.

A lethal dose has not been established in dogs or cats, but it only takes a small amount to cause clinical signs. Fortunately, death is rare. If appropriate treatment is implemented, the prognosis is good, and no permanent effects should be anticipated.<sup>2,6</sup>

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### Tina Wismer, DVM, DABVT, DABT, Medical Director, American Society for the Prevention of Cruelty to Animals' Animal Poison Control Center

Dr. Tina Wismer is responsible for overseeing medical recommendations made by the veterinary staff. She is also highly involved in lecturing, making media appearances and writing, and she coordinates the Animal Poison Control Center's (APCC) extern program. Dr. Wismer earned her undergraduate degree from Ohio's University of Findlay in 1990 and received her doctor of veterinary medicine degree from Purdue University in 1994. Her first job was in a small animal practice in Michigan. She then worked for an emergency practice in South Bend, Indiana, before joining the APCC in 1998. In July 2003, Dr. Wismer became a Diplomate of the American Board of Toxicology and the American Board of Veterinary Toxicology. Dr. Wismer has written several peerreviewed toxicology articles and book chapters. She is an adjunct instructor at the University of Illinois, previously a visiting professor at St. Matthews University (Cayman), a consultant for VIN (Veterinary Information Network) and a Master Gardener.

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# IDFPR Launches Paperless Renewals, Licensing for Professionals

Beginning in February of this year, the Illinois Department of Financial and Professional Regulation (IDFPR) implemented paperless licensing and renewals for the professions licensed and regulated by the divisions of Real Estate and Professional Regulation. The transition away from paper-based renewals and licenses means regulated professionals can now renew their license quickly and easily online, and be provided proof of licensure through email and IDFPR's License Lookup application. An added feature - licensees may now access digital, printable copies of their license by visiting IDFPR's electronic license website at www.idfpr.com/Applications/GetMyLicense/login.asp. IDFPR's website and electronic license functionality are mobile-device-friendly.

"By shifting to 21st century digital technology, we increase efficiency, reduce costs, and provide an overall better experience for our licensed professionals," said Bryan A. Schneider, IDFPR secretary. "Since making the transition to paperless, IDFPR has processed over 230,000 renewals and new license applications through our streamlined licensure process. We believe by providing the latest in innovation for our



licensees, we can create a regulatory environment conducive to strong economic growth and opportunity."

State licenses for veterinarians and veterinarian technicians expire on January 31, 2017, with the renewal period opening early to mid-November 2016. IDFPR strongly encourages all licensees to visit IDFPR's online address change webpage at www.idfpr. com/applications/LicenseReprint to provide a current email address and ensure contact information is up to date and accurate. Official IDFPR correspondence, including renewal reminders, will be sent via email only. Paper postcards will no longer be sent.

For individuals with questions or concerns regarding licensure status or the renewal process, please contact IDFPR, toll-free, at (800) 560-6420.

## **IVMF** Donations

The Illinois Veterinary Medical Foundation (IVMF) welcomes contributions to celebrate or honor the life of a pet as well as to memorialize a loss. Download a donor form from the ISVMA website at www.isvma.org/illinois-veterinary-medical-foundation to submit your memorial. Please indicate whom you are honoring on the form, and give an address where the memorial notification can be sent.

#### In Memory

The IVMF thanks the following veterinary clinics for their contributions in memory of the following pets:

#### Mon-Clair Animal Hospital

Abby, Ali, Allie, Andy, Ange, Anna, April, Armani, Aspen, Bailey, Bailey Mae, Barkly, Belle, Bertie, Bijou, Blue, Bo, Boomer, Buck, Buddy, Buster, Buttercup, Chance, Chief, Chloe, Chuck, Chyna, Chyng, Clayton, Copper, Dante, Dixie, Ellie, Fractal, Gizmo, Gritz, Guinness, Gullane, Haley, Harley, Hawk, Honey, Jack Rabbit, Jessie, Jimmie, Katie, Kayla, Kipper, Kirby, Lefty, Lexi, Libby, Lucy, Mac, MacDuff, Maggie Mae, Mickey Mouse, Miss Daisy, Miss Julie, Mitzi, Molly, Ms. Abby, Myley, Mylo, Nala, Nalah, Nuggie, Oakley, Odie, Ozzy, Paul, Peppar, Pepper, Phoebe, Pumpkin, Reggie, Rosco, Roxie, Sadie, Sam, Sammy, Sara, Sasha, Shadow, Simon, Skittles, Socks, Stella, Sunny, Susie, Tinkerbell, Tucker, Tuffy, Ty, Vincent, Willow, Zoe Mt. Sterling Veterinary Clinic Layla

#### East Side Animal Hospital

Allie, Bailey, Bruno, Champ, Furby, Hazel, Lightning, Mattey, Mookie, Oliver, Peanut, Riley, Shadow, Squeekers, Tater, Toby 🏶

# **ISVMA Annual Convention**



### When: November 4-6, 2016 Where: The Westin Lombard Yorktown Center, Lombard, Illinois

### What's happening:

- Up to 20 hours of CE
- High-quality speakers
- Hands-on learning in wet labs
- Small animal, large animal, practice management and CVT seminar tracks

Registration opens late summer. Watch for registration in the mail, or register online at www.isvma.org.

### One Health: **Upcoming Events**

### Join OCSA for the VOP Launch of Integrative Pet Care Chicago

Integrative Pet Care Chicago is a veterinary facility dedicated entirely to physical rehabilitation, fitness and holistic wellness. Its doctors come from a variety of disciplines, bringing their collective experience and expertise to the field of rehabilitation. Come join us!

August 27, 2016 2-3:30 p.m.

2520 West Armitage Avenue Chicago, IL 60647

.....

Dr. Megan Ridley, Medical Director, IPC, Chicago



### Join OCSA in September for the 5K Dog Walk and Fun Run

Friendly dogs are welcome but not required! Registered dogs MUST be accompanied by a registered walker.

Sunday, September 11, 2016

Leroy Oakes Forest Preserve 37W700 Dean Street St. Charles, IL 60175

Registration: 8:30 a.m. Opening Ceremonies: 9:30 a.m. 5K Walk and Fun Run: 10 a.m.

#### **Ticket Prices**

Includes lunch, OCSA T-shirt for the walker and teal bandana for the participating pooch!

- Adults \$35
- Students \$25
- Children \$20
- Scouts \$10
- Dogs \$10

**Register Today!** 

# Classifieds



### IN-STATE OPPORTUNITIES VETERINARIANS

- Huntley Veterinary Hospital, located in the northwest suburbs of Chicago, is seeking a competent, caring and enthusiastic fulltime associate to complement our four-doctor team. Pleasant work environment in an attractive, well-equipped hospital enjoying trained long-term staff. Competitive salary with full benefits. Please send résumé to Hvh10289@sbcglobal.net.
- Small-animal practice in northern Illinois seeking associate veterinarian; position is added on as we grow from three to four doctors. Professional growth and development, and customer service are our emphasis. We have in-house lab, digital dental and digital radiography, ultrasonography, rigid and flexible endoscopy, and an array of orthopedic instruments. Our practice caseload consists of pet wellness, exotic animal medicine, as well as advanced internal medicine and surgical caseloads. The ideal candidate would have interest in surgery and future practice ownership. Contact forestcityvet@gmail.com.
- Part-time veterinarian wanted to join multidoctor practice in Rockford, Illinois. Must have excellent people skills and a friendly, out-going personality. We emphasize service, education and empathy for our clients and patients. For further detail, please email iggy580@aol.com.
- The Champaign County Humane Society (CCHS) seeks an ex-• perienced veterinarian with a passion for shelter medicine to join our staff. The ideal candidate will be someone who enjoys a collaborative work environment and being a teacher/mentor to staff and veterinary students. This is a part- or full-time position. The veterinarian will work closely with the medical care manager and shelter. Manager to maintain the health of the shelter's population through effective protocols of animal husbandry and the diagnosis and treatment of medical conditions. The veterinarian will perform or supervise all the surgeries at CCHS. Other duties include instructing/supervising University of Illinois veterinary students on their shelter medicine rotation, training medical staff, and working at CCHS low-cost vaccine and spay/neuter clinics, as well as attending staff and Board meetings. We treat a variety of medical conditions and have a robust foster care program for recovering animals and neonates. In addition to dogs and cats, we take in a variety of exotic species. To apply, please send résumé and letter of interest to Mary Tiefenbrunn, executive director, via email at director@cuhumane.org.

- Animal emergency clinic in Bloomington, Illinois, is seeking a full-time DVM. (Part-time position may be considered.) Salary plus production bonuses. Comprehensive benefits package. Three shifts per week nights, weekends and holidays. We love our patients, and our practice enjoys a high level of community involvement. Bloomington/Normal offers big city activities with a hometown feel. To join our team, please contact Dr. Patti Niehm via email at niehm.hph@gmail.com, or fax résumé to (309) 828-5836.
- Associate veterinarian for busy central Illinois small animal practice. New graduates welcome. Family-type practice, six veterinarians, no after-hours emergencies, digital radiology, excellent in-house lab. Email stjosephvet@icloud.com, or fax (217) 469-2248.
- Dundee Animal Hospital is a three-location, 24-hour hospital including emergency and internal medicine specialty. We are seeking a part-time or full-time veterinarian. We offer an excellent benefits package for someone looking to join a large, organized team with a family feel. Our AAHA-accredited practices are located in the northwest suburbs of Chicago. Founded in 1958, we have established an excellent reputation within the community and have a substantial client base. Please email résumé to Dena Chiddister, practice manager at dchiddister@dundeeanimalhospital.com.

### **TECHNICIANS & PRACTICE PERSONNEL**

- Huntley Veterinary Hospital located in the northwest suburbs of Chicago has a full-time certified veterinary technician position available to join our four-doctor small-animal practice. Looking for an energetic self-starter and team player. Pleasant work environment in an attractive, well-equipped hospital enjoying trained long-term staff. Competitive salary with full benefits. Please send résumé to Hvh10289@sbcglobal.net.
- Capitol Illini Veterinary Services is a six-doctor, two-clinic, AAHA-accredited practice serving the Greater Springfield, Illinois, area for over 35 years. We practice with state-ofthe-art, cutting-edge technology, such as endoscopy, digital X-ray, ultrasound, laser therapy, arthroscopy and more. We offer competitive salary, benefits, paid time off, holidays and vacation time. Capitol Illini Veterinary Services is seeking TWO full-time certified veterinary technicians, one for each location in Springfield, Illinois, and Chatham, Illinois. Must be flexible, organized and client-focused. Please no calls. Submit your résumé to jolene@capitolillinivet.com.

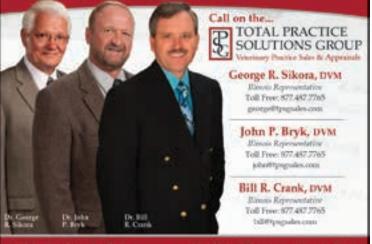
### **PRACTICES FOR SALE**

- Need help selling, buying or appraising your veterinary practice? For a free consultation, call G.R. Sikora, DVM; J.P. Bryk, DVM; or B.R. Crank, DVM, toll-free at (877) 487-7765, or go to www. TotalPracticeSolutionsGroup.com.
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### OUT-OF-STATE OPPORTUNITIES VETERINARIANS

- Part-time veterinarian needed for well-equipped general practice in southeast Wisconsin near Lake Geneva. Nice community and fun place to work. Stable, well-trained staff. Extra pay for emergency call, but not required for position. Contact Brenda Long by phone, (262) 763-6055; email, burlingtonlongview@yahoo.com; or fax, (262) 763-8203.
- Exceptional people. Extraordinary care. 24/7. Join an amazing team of hardworking, humorous and caring individuals in the emergency department at the Wisconsin Veterinary Referral Center (WVRC), one of the largest and most diverse emergency and referral practices in Wisconsin. Our three facilities, located in Waukesha, Grafton and Racine, allow for flexible schedules and work locations to fit your strengths and personal goals. The hospitals are equipped with modern diagnostic capabilities combined with beautiful and spacious work environments. Enhancing the facilities are a team of dynamic co-workers, including a broad range of specialists in critical care, cardiology, internal medicine, neurology, oncology, surgery, ophthalmology, dentistry, anesthesiology and medical imaging; 18 emergency veterinarians; four emergency interns; dedicated technicians; and client-focused support staff. Marshfield Laboratories, a full diagnostic veterinary laboratory with on-site clinical pathology, complements the practice in the Waukesha location's lower level. Each of WVRC's three locations provides easy access to the attractions of the city of Milwaukee: theater and concert performances, fine dining, and upscale shopping, as well as an active sports scene that includes the Milwaukee Brewers, Bucks and Admirals. The cities of Madison, Green Bay and Chicago are easily accessible, and the surrounding suburbs and countryside provide multiple options for top-rated schools and various leisure opportunities for the outdoor enthusiast. Our Racine hospital is also a convenient commute from northern Illinois for both staff and clientele and is enjoying steady growth in both the emergency and specialty caseload. Be exceptional with us by applying online at www.wvrc.com or by contacting Dr. Kari Severson at kari.severson@wvrc.com.

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# ISVMA Education Update

by Michelle Gundlach, Director of Education

If you haven't already, mark your calendars for November 4-6, 2016. The ISVMA Annual Convention will be returning to the Westin Lombard Yorktown Center, and we have a great program in store for you. Each of the three days will feature small animal, large animal, practice management and technician tracks, and several wet lab opportunities will be available as well. We will feature another lunch and learn on Sunday, as well as an evening CE reception and a lunchtime CE event in the Exhibit Hall. It will be possible for you to obtain your entire 20 hours at one in-state event! Our presenters

will include Dr. Michael Dryden, Ms. Katherine Dobbs, Dr. David Williams and Dr. Michelle Rosenbaum.

Two of our convention speakers, Dr. Tina Wismer and Ms. Jessica Antonicic, have penned feature articles for this edition of *Epitome*. Future issues will highlight more of our great lineup of speakers. We're looking forward to seeing all of you at Convention — to enjoy networking opportunities, hear first-class CE offerings and visit with our vendors in the Exhibit Hall. Don't miss it!



### Register now and book your cabin for the first ISVMA Education Vacation!

We will be sailing to the western Caribbean on Royal Caribbean's *Independence of the Seas*, with behavior CE for DVMs, CVTs, and staff provided by Dr. Debra Horwitz. Contact Fran Babicz at OK Travel, (773) 581-0100, for cruise details.