The WSU Clinical Simulation Center
Exceptional Training, Exceptional Veterinarians

Amy Berry ('15 DVM) and Dr. Julie Cary, clinical associate professor

A newsletter from the Washington State University College of Veterinary Medicine
Spring 2014

Improving the health of animals and people at home and around the world.

College of Veterinary Medicine

Advance
Healthy Animals | Healthy People | Healthy Planet
Seeing the rolling green hills of spring on the Palouse is a striking metaphor for positive change. It has me thinking about similar changes in the college—changes underway, and future changes as we continue to meet our new challenges and opportunities.

Over the coming year, for instance, you will see many changes to patient services at the Veterinary Teaching Hospital. We seek to perform more efficiently and effectively, which will improve our service to clients and referring veterinarians. The first phase of these improvements is starting to roll out now and will continue to do so for some months to come. We will continue to monitor our progress with ongoing surveys of client and referring veterinarian satisfaction and be prepared to continue to adjust as we receive feedback. I think you will like what you see.

As you will read in our cover story, our DVM education program continues to improve as our faculty, with the leadership of Dr. Julie Cary, builds a stronger clinical skills curriculum and a clinical simulation facility to support it. The first phase of the WSU Clinical Simulation Center is complete. We will now work to increase the technical support staff and the number and sophistication of simulators and models in the center. This will allow our students virtually 24/7 access to practice their basic hand skills and other procedures. Very cool stuff. Next time you visit we hope you will come take a tour.

Finally, in the not-too-distant future we will complete the upgrade of our core imaging systems by installing a new Magnetic Resonance Imager (MRI). This new equipment is needed to replace our current MRI that is well past its end of life. The new MRI has enhanced capabilities that will keep us on the forefront of veterinary imaging. To accomplish this goal, we will again call on the generosity of many friends and supporters as we seek to raise $2.5 million to purchase and install this much needed machine that helps us save lives.

These and so many more exciting changes (that my limited space here does not permit me to tell you about) are happening every day at the college. Positive change and renewal are indeed in the air.

Go Cougs!

Dr. Bryan Slinker, Dean
WSU College of Veterinary Medicine
Meet Mr. Bear

Mr. Bear is one of thousands of patients who has been helped because of an MRI scan at the WSU Veterinary Teaching Hospital.

After noticing an odd lump on his dog’s head in the spring of 2013, Joel Greenhalgh of British Columbia, Canada, took Mr. Bear, a then 11-year-old Australian Sheppard-Rottweiler mix, to his local veterinarian. At first the advice was to watch and see, but when it didn’t go away, his veterinarian took a biopsy. Mr. Bear had cancer.

The Canadian oncologist referred Mr. Bear to WSU. Neurologist Dr. Annie Chen and fourth-year veterinary student Beryl Swanson at the WSU Veterinary Teaching Hospital examined Mr. Bear and got him in right away for an MRI.

“MRI is the best way for us to evaluate the brain,” said Dr. Chen.

Originally, Mr. Bear’s local veterinarians had believed he just had a lump on the outside of the skull, but the MRI results showed that the cancerous skull tumor was also growing into the skull and pressing on the brain. Dr. Chen and her team took MRI scans from different angles and used different techniques to see the exact location of the tumor and where the blood vessels were.

“We needed to know how far the tumor had extended,” said Dr. Chen. “To know up to the millimeter is very important.” By knowing where the edges of the tumor were, Dr. Chen could better explain the benefits and risks of the surgery. She also saw the tumor was growing very close to a major blood vessel, which added to the risk. But the MRI made all the difference.

“By having the images, we felt confident we could approach that area and do the surgery,” said Dr. Chen.

After long and very delicate surgery, they removed more than 90% of the tumor. Because Dr. Chen knew where the vessel was from the MRI scan, she was able to tease the tumor away from the vessel and not tear it. WSU oncologists followed up with radiation to kill the remaining cancer cells.

“WSU saved my dog’s life,” said Joel Greenhalgh.

For more information about our MRI campaign visit www.vetmed.wsu.edu/Giving/MRI
As a teaching assistant for the lab, I can say first hand that I have watched students at WSU grow in their surgery skills in ways that students don’t have opportunities to until the third year in other programs.

—Amy Berry (‘15 DVM) from Wyoming, who is a teaching assistant in the lab. She wants to practice agricultural animal and equine medicine in rural America.

In a large room filled with a half dozen tables, groups of students are following what might appear to be sewing instructions with stitch names such as “cruciate” and “simple interrupted.” At the top of the sheet it reads: Practice Made Perfect. For the WSU veterinary students who are actually learning basic surgical suturing skills, this kind of practice gives them the confidence they need to perform surgeries later in the program.

“Because I already knew the basic skills, I was able to focus on advanced techniques,” says Hillary Carroll, a fourth year DVM student who plans to become an equine emergency surgeon. “And because I had more advanced skills, clinicians were able to give me a more primary role instead of being purely an assistant.”

Three years ago, Dr. Julie Cary and her colleagues began offering open labs to hone surgical skills in a simulated environment to better prepare WSU veterinary students for the job market. What they found was that students felt more comfortable experimenting with different surgical techniques when they worked with other students.

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“Student were more likely to try new techniques with their peers, rather than with professors,” says Cary, a clinical associate professor. So using a peer teaching model, she started training second and third year veterinary students to work as teaching assistants in the labs.

The labs were so popular that after a few years they realized that they needed their own space.

“It was important to be able to offer the labs at regular times so students could have consistent opportunities to practice,” says Cary. “The students really pushed for it.”
In September 2013, with the support of students, the college, and some generous donations, they were able to renovate several rooms in McCoy Hall, the site of the college’s original teaching hospital. The students have been instrumental in creating an environment that feels comfortable to them, says Cary. Students can ask the teaching assistants questions, and Dr. Cary is nearby if students need additional assistance.

“It is a great opportunity for students to become teachers and really master the skills,” says Micall Godderidge (’15 DVM) from Utah, who plans to work in a large animal private practice.

The peer-teaching model has helped to create a student culture where it is the norm to help one another. The peer-based format also has a low-stress, non-intimidating environment, says Godderidge.

Now officially named the Clinical Simulation Center, the goal over the next three years is to expand the center to offer more high fidelity simulation models. High fidelity models provide the physical, or haptic, feedback that a veterinarian would feel during an actual exam or surgical procedure. The center plans to add a Calgary Horse, haptic cow, and haptic horse.

“With haptic technology students can feel the different stages of pregnancy in a cow,” says Cary. “They can also see on the video screen what they are feeling. It is a much more effective way to learn.”

Renovations in phase two will also include a simulated operating room (to be completed in August 2014). The remodeled space will provide students with the opportunity to practice their skills in a more realistic setting. During critical care simulation, students will work through a problem as a team. They will practice the technical aspects of a medical issue, such as cardiac arrest, but they will also get to experience team dynamics, which can affect patient outcomes. While these types of simulations have frequently been done in human medicine, they have been less common in veterinary medicine.

“Often people turn to the senior person in the surgical room,” says Cary. “If that person is having an off day or misses something, the others in the room won’t always speak up. So we have to train them how to do that in the appropriate way.”

One of the most important benefits of this kind of training is that it helps to prevent medical errors.

“People tend to become frantic in an emergency,” says Cary. “So students need to learn how to slow down to avoid making a mistake. They learn to manage their emotions and not get tunnel vision.”

In the final phase of development, Dr. Cary hopes to construct a debriefing room for small group teaching and to discuss what may have gone wrong in the simulation and what they could do better next time.

“We are integrating clinical communication with technical procedures,” says Cary. “Students will have the opportunity to practice an entire case before they even graduate.”

The labs are currently open to WSU veterinary students, interns, and residents. In the next five years, the goal is to expand educational opportunities to veterinary staff and practitioners.

“The surgery skills lab has provided me hours of hands-on practice that I would not have gotten anywhere else,” says Amy Berry (’15 DVM), a teaching assistant in the lab. “It will be invaluable for me as I proceed in my career.”

To learn more about the WSU Clinical Simulation Center and how you can help our veterinary students visit www.vetmed.wsu.edu/SimLab

Training in the lab gave me a better sense of confidence. Being able to remain confident in the face of pressure is invaluable.

—Hillary Carroll (’14 DVM) from Montana. This summer she will start an equine internship at North Carolina State University.

Practice helps give students more confidence to do their first surgeries and to do the work they need to do when they graduate.
More than a Machine
To our patients, MRI is a life saver.

Earlier in this issue you read about Mr. Bear, an Australian Sheppard-Rottweiler that received life-saving brain surgery. Mr. Bear is one of thousands of patients who have been helped because of MRI. But after 18 years of dedicated service to our patients, the lifespan of our MRI machine is quickly approaching its end.

As we look to the future of patient care, a new MRI cannot wait. Your gift will bring exceptional care to patients and offer hope to the clients who love them. To Mr. Bear and the thousands of other patients this machine really is more than a machine. It is a life saver.

Why WSU and Why Now?

The WSU Veterinary Teaching Hospital is the only place in the Pacific Northwest and western Canada that offers high-field MRI that can accurately diagnose patients large and small. The nearest comparable MRI machine is more than 800 miles away from Pullman.

In the last five years, more than 2,000 animals have received MRI scans. Dogs, cats, horses, bald eagles, grizzly bears, sheep, and even a ferret have received enhanced diagnosis—often lifesaving—with this sophisticated machine.

WSU is also the only veterinary hospital in the Pacific Northwest with a high-field MRI that can easily be used on horses. With its larger hole (70 cm diameter bore) clinicians using the new MRI will be able to scan further up a leg or down a neck, improving diagnostics.
Congratulations to the 2013 Jerry Newbrey Teaching Scholars!

The Newbrey Teaching Scholar is awarded for excellence in teaching during the first three years of the veterinary core curriculum. This award is given in memory of Jerry Newbrey, who joined the VCAPP faculty in 1975, and who died too young in a climbing accident in 1990. Jerry was an exceptional teacher and student advocate. Those who receive this award richly deserve our appreciation for their commitment to our students and to excellence in the classroom.

2013 Jerry Newbrey Teaching Scholars

Teresa Alessio  
Bonnie Campbell  
Krzysztof Czaja  
Tamara Grubb  
Joe Harding  

Steve Hines  
Don Knowles  
Steve Lampa  
Charles Leathers  
Katrina Mealey  

Robert Mealey  
Pete Meighan  
Steven Parish  
Debra Sellen  
Rance Sellen  

Leslie Sprunger  
Patricia Talcott  
Michael Varnum  
Patrick Wilson

Your Gifts in Action

A WSU Small Animal Intern Gets Specialized Critical Care Training Thanks to a Gift from the Dean H. Smith Excellence Fund

After earning a DVM from the University of Montreal, Marie-Lou Gauthier was thrilled to be accepted as an intern at the WSU Veterinary Teaching Hospital to further her education and gain more hands-on experience. So she felt very fortunate when she and other WSU interns were given the opportunity to spend two weeks at Animal Critical Care and Emergency Services (ACCES) in Seattle.

“Getting a chance to be in a private practice and speak with a criticalist and learn as much as I could was a great experience,” said Gauthier. “It really increased our confidence.”

While at ACCES, the interns were able to work on a wide range of cases with the critical care medical team and the other veterinarians. They were also encouraged to be involved in the patient cases and go on rounds with the critical care veterinarian.

The opportunity was possible thanks to the Dean H. Smith Excellence Fund. The fund was established by Dr. Dean Smith (’49 DVM) to support his alma mater.

Marie-Lou is now completing a specialized neurology internship in Texas and after that she will apply for a neurology residency. Her hope is to become board certified and work as a neurologist at a university.

She is grateful for the experience she’s had at WSU and believes her time at ACCES will help her succeed in her career.

“It was really important see how emergency care worked in a private practice,” said Gauthier. “It gave me a new perspective about what emergency medicine is.”

To learn more about how your gift can make a difference please visit www.vetmed.wsu.edu/GiftsInAction
Look for Gatherings of WSU Alumni, Friends, and Students at these Upcoming Events!

Mark your calendars

Peter A. Zornes Memorial Golf Tournament

The seventh annual Peter A. Zornes Memorial Golf Tournament will be held on Saturday, June 28, 2014, at the Colfax Golf Club to benefit the Peter A. Zornes Memorial Neuroscience Scholarship at WSU. Register to play or volunteer at www.vetmed.wsu.edu/Zornes or contact Lynne Haley at lhaley@vetmed.wsu.edu or 509-335-5021.

Other important dates to remember

June 27–28  DVM Class reunions (’74, ’84, ’94) in Pullman  
June 28  Peter Zornes Memorial Golf Tournament in Colfax, Washington  
July 28  Alumni reception at the Appaloosa Grill in Denver, Colorado  
August 27  CVM Dean’s Reception at McCormick & Schmick’s in Seattle  
September 10–12  Golden and Diamond Graduate Reunion (’54, ’64) in Pullman  
September 27  College hosts reception at the WSVMA in Yakima, Washington

CE courses at WSU and online are offered year round; visit www.vetmed.wsu.edu/CE for more information.

For more information about upcoming events visit www.vetmed.wsu.edu/Events.