



Barri Morrison (left) and Katie Smith, fourth-year veterinary students, examine Chip while on the Companion Animal Medicine Service. Chip was ultimately diagnosed with encephalitis, but he is doing well.

FROM THE INSIDE OUT: A CHRONICLE OF THE COMPANION ANIMAL MEDICINE SERVICE

“Internal medicine to receiving for a case . . . Internal medicine to receiving for a case.” The overhead paging system at the LSU School of Veterinary Medicine makes this call numerous times each weekday. Five faculty members, five residents, six interns (who rotate between internal medicine and surgery), and 10 or more veterinary students comprise the Companion Animal Medicine service.

Veterinary students are assigned to the service for a “block” consisting of four weeks. These veterinary students are third- and fourth-year LSU SVM veterinary students, as well as fourth-year veterinary students from Ross University in St. Kitts and St. George’s University in Grenada. Students from Ross and St. George’s complete their fourth-year at veterinary schools in the U.S. The LSU SVM admits approximately 10 of these students three times per year.

During the Companion Animal Medicine block, two clinicians are assigned to oversee and instruct the students, including the House Officers, who are interns and residents employed by the Veterinary Teaching Hospital and Clinics (VTH&C) to provide service to patients as they train in a veterinary specialty. Each clinician is assigned certain House Officers and students; one clinician’s group receives appointments and walk-ins, and the other clinician’s group cares for the animals brought in the day before or those transferred from the overnight Emergency service.

On the Companion Animal Medicine service, those students who are receiving cases meet with owners and their pets as they come in for their appointments. The student takes a history from the owner and starts the patient’s paperwork. The student then takes the patient to the Treatment Room, a large

room with diagnostic equipment, scales, and medicines. A thorough examination of patients takes place in this room. At any given time, there can be four to six dogs and cats plus up to 20 people in this room.

The majority of the hospital's patients are referred from other veterinarians in Louisiana, though some are referred from other states, and some clients use the VTH&C for their primary care. Referring veterinarians, or RDVMs, send their patients to LSU to help make a diagnosis or because the VTH&C has expertise in a particular specialty in veterinary medicine or specialized equipment. The VTH&C works in collaboration with RDVMs to give patients the best care possible.

The following snapshots of the Companion Animal Medicine service track activities during a two-day period. The service saw 36 patients during this time, either as scheduled appointments, emergencies, or walk-ins. For practical purposes, not all patients, clinicians, or students could be mentioned here.

Wednesday, 8:00 a.m.

This is day three of a four-week Companion Animal Medicine block.

Veterinary students gather for rounds. Dr. Kirk Ryan, assistant professor of veterinary medicine, discusses diabetes. He uses a recent case as an example, and the group discusses symptoms and the variety of treatments available, including the different types of insulin and their respective uses. Dr. Ryan stresses the importance of being familiar with human insulin brands because clients will ask about them.

9:00 a.m.

Students check on patients that spent the night in the intensive care unit, or ICU. Aliya "Yani" Magee, a fourth-year veterinary student, is working with Claude, a 13-year-old cat that was brought in as an emergency referral case. Claude is jaundiced and has a mass on his pancreas.

9:15 a.m.

Yani goes to the Anesthesia service to check on a sedative for Claude. She then discusses the dosage with Dr. Isabelle Cattin, a resident, who confirms it. Yani goes to the Diagnostic Imaging service to see when Claude can be brought in for an ultrasound and a fine-needle aspirate, or FNA (cells will be removed from the pancreatic mass and the liver so they can be

Companion Animal Medicine Faculty

Frederic P. Gaschen, Dr.habil., DACVIM, DECVIM

- Professor of Companion Animal Medicine
- Service Chief, Companion Animal Medicine
- Dr.habil., University of Bern, 2000
- Joined the LSU SVM faculty on 01/11/2006

Mark J. Acierno, DVM, MBA, DACVIM

- Assistant Professor of Companion Animal Medicine
- BS, Skidmore College, 1986
- MBA, Pace University, 1991
- DVM, Mississippi State University, 2000
- Joined the LSU SVM faculty on 10/18/2004

Susan M. Eddlestone, DVM, DACVIM

- Associate Professor of Veterinary Medicine
- DVM, LSU, 1989
- Joined the LSU SVM faculty on 09/16/2002

Amy M. Grooters, DVM, DACVIM

- Professor of Companion Animal Medicine
- BA, Central College, 1984
- DVM, Iowa State University, 1989
- Joined the LSU SVM faculty on 07/12/1995

Kirk A. Ryan, DVM, DACVIM

- Assistant Professor of Veterinary Medicine
- DVM, Colorado State University, 1996
- Joined the LSU SVM faculty on 09/01/2006

sent to pathology for testing and a possible diagnosis). Reid, a 5-year-old cat that presented with seizures the night before, is receiving a neurological exam from Dr. Dena Lodato, an intern, and Amber Acker, a fourth-year veterinary student.

9:40 a.m.

Dr. Joseph Taboada, associate dean for student and academic affairs and professor of veterinary medicine, is called in to consult on Claude's case. He confirms that an FNA of the mass and liver is warranted.

9:50 a.m.

Dr. Cattin and Yani administer the sedative, and Claude is taken to the Diagnostic Imaging service, where Dr. J. Daniel

Companion Animal Medicine Service continued

Rodriguez, assistant professor of diagnostic imaging, performs an ultrasound-guided FNA.

10:15 a.m.

Yani returns Claude to the ICU and monitors him as he wakes up from the sedative. The samples from the FNA are taken to Clinical Pathology. Dr. Lodato and Amber discuss medications and dosages for Reid after his neurological exam. Reid will go home tomorrow with a prescription for phenobarbital and then return in two weeks to be reevaluated.

10:30 a.m.

Each day during the block, one of the veterinary students is assigned the task of information student. This student takes all general calls from the public. Yani is the information student today and takes a call from a dog breeder who wants to know about the VTH&C's vaccine protocol. Yani will confirm the protocol and call her back.

10:45 a.m.

Holly Rice, a fourth-year veterinary student, is on the Surgery service for this block and discusses Claude's case with Yani. If Claude's FNA results indicate that a biopsy of the mass and/or liver is necessary, Claude will be referred to Surgery.

11:00 a.m.

Yani takes Claude's blood sample to Clinical Pathology so it can be centrifuged. She views Claude's FNA slides with the Clinical Pathology residents and discusses the diagnosis with them. Claude has lymphoma. Yani pulls serum from the centrifuged blood and refrigerates it in case it is needed for further testing.

11:20 a.m.

Yani writes down the official vaccine protocol for the hospital, which is posted on a wall in the Treatment Room, and calls the breeder back to discuss it.

11:30 a.m.

Students check e-mail and catch up on patient paperwork.

12:30 p.m.

Dr. Ashley Martin, a resident, and Marc Bordelon, a fourth-year veterinary student, perform upper gastrointestinal endoscopy on Dale, a 10-year-old cat, and take biopsies from Dale's

stomach for further diagnostic testing. Dale is then taken to ICU.

1:00 p.m.

Chip, a 13-month-old Terrier mix, presents with four-day history of fever of unknown origin. He is about to undergo diagnostic testing to determine the source of the fever. Dr. Bettina Mayer-Roenne, a resident, calls Chip's RDVM to discuss the case. She then meets with the owners, along with fourth-year veterinary students Katie Smith and Barri Morrison.

1:25 p.m.

Nugen, a 12-year-old mixed breed dog, presents with difficulty breathing. He is examined by Mike Rossi, a fourth-year veterinary student, and Dr. Jennifer Chang, visiting clinical instructor of veterinary emergency medicine, who suspect Nugen has laryngeal paralysis. Mike centrifuges Nugen's blood samples and checks another blood sample with a glucometer. Marc, who earlier assisted Dr. Martin with Dale's endoscopy, is monitoring Dale while he warms up in a make-shift hot tub to help raise his temperature after the anesthesia (warm water



Dr. Ashley Martin, a resident, instructs veterinary students on how to use the ultrasound on Baby, a Boxer mix brought in with a urinary problem.



Dr. Ashley Martin, a resident (third from left), performs a gastrointestinal endoscopy and takes biopsy samples from Dale, a 10-year-old cat. She is assisted by Marc Bordelon, a fourth-year veterinary student (second from left). A technician takes the samples for the Clinical Pathology laboratory, and members of the Anesthesia Service monitor Dale's vital signs throughout the procedure.

was placed in a rectangular tub, which was then covered with a garbage bag; Dale was placed on the bag and covered with a towel).

1:40 p.m.

Chip is brought into the ICU. He is scheduled to have a spinal tap in the morning. Dr. Mayer-Roenne suspects that Chip has a fever because he has encephalitis (if so, this will be the fifth encephalitis case seen by the VTH&C in the last two weeks). Dr. Mayer-Roenne draws blood from Chip so that titers can be run for rickettsial diseases.

2:00 p.m.

Dr. Martin checks on Dale. A CBC/chem panel will be performed for Nugen, who has a mass under each forelimb. Lexi, a 4-year-old Terrier/Yorkie mix, is prepped for ultrasound. The ultrasound will be used to see if she has a shunt. Lexi

has been having seizures and one possibility is that she has a portosystemic shunt, which was indicated by her bloodwork. Lexi is then taken to the ICU. The ultrasound does not detect a shunt.

2:40 p.m.

Claude is discharged. He is going home with his owners with a course of prednisone therapy. Dr. Chang discusses Nugen's diagnosis with Mike Rossi and Sae Miyoshi, a fourth-year veterinary student. Nugen will be referred to surgery. An endoscopy will be performed to determine the degree of the laryngeal paralysis.

3:00 p.m.

Veterinary technician Holly Carey and fourth-year veterinary students April Fitzgerald and Sae Miyoshi check the blood pressure of Tribbles, a 12-year-old Shi Tzu that came in for dental work and to check skin masses. Students and House

The Veterinary Teaching Hospital & Clinics recorded almost 23,000 patient visits from July 1, 2007, through June 30, 2008. Over 17,000 of those were dogs and cats, which were seen by clinicians and students in the Small Animal Clinic.

Companion Animal Medicine Service continued

Officers gather for afternoon rounds led by Dr. Mark Acierno, assistant professor of companion animal medicine, to go over the day's cases.

4:25 p.m.

Students check on their patients, do paperwork, and sign up for the next day's cases. Some students will return at various times throughout the evening to check on patients again.

Thursday, 7:45 a.m.

Students examine their overnight patients and check the board to see the day's schedule.

8:00 a.m.

Students and House Officers gather for rounds. Before they can begin, Katie Smith and Barri Morrison are paged to the ICU to meet with Dr. Mayer-Roenne and check on a patient. Back in rounds, Dr. Martin uses Claude's presentation as a point of discussion to elucidate liver diseases in cats, problem list development, possible diagnoses, diagnostic tests, and courses of treatment. When patients are presented to the VTH&C, students and House Officers start by developing a problem list to track all of the patient's issues.

9:10 a.m.

Students and House Officers start receiving patients and reviewing the charts of those patients that stayed overnight. Yani reviews the records of a new patient named Red, an 8-year-old Labrador Retriever that has a possible esophageal stricture.

9:30 a.m.

Amber Acker and Dr. William Ratteree, an intern, examine Blondie, a 6-year-old Labrador Retriever, who presented for a health maintenance visit and vaccines but also has a pad laceration. Sae Miyoshi and Dr. Lodato examine a 13-year-old Chihuahua who cannot keep food down and retches throughout the day and night.

10:15 a.m.

Katie Smith and Dr. Mayer-Roenne examine Patches, a 9-year-old Beagle, who is here for a recheck for hypothyroidism and diabetes. Patches will also be checked for a urinary tract infection.

10:30 a.m.

Kevin Abbott, a fourth-year veterinary student, and Dr. Martin examine Baby, a Boxer mix and regular dermatology patient who presented with urinary issues and possible bladder stones. An ultrasound will be done to look for the stones. Urinalysis and a urine culture will also be performed.

10:40 a.m.

Kevin and Dr. Martin review doses for antibiotics. A low-dose therapy is recommended for Baby's urinary infection. Katie Smith and Dr. Mayer-Roenne examine Maggie, a 12-year-old Bichon Frise with Cushing's disease. Maggie is a regular patient who is here for a recheck for the Cushing's. ZZ, a 2-year-old Toy Poodle with lethargy, anorexia, and elevated liver enzymes, is examined by Marc Bordelon. After the exam, ZZ is taken to ultrasound.

11:20 a.m.

Toni, a 12-year-old Poodle mix, comes in for a recheck for polyarthritis. She was put on new medicine two weeks ago, and the recheck is to determine the effectiveness of the medication. Greta, a German Shepherd, presents with chronic urinary tract infections and a possible involved vulva. She is examined by Amber Acker and Dr. Acierno. ZZ is given a neurological examination by Marc Bordelon. Toni is discharged, and blood is drawn from Maggie.

11:45 a.m.

Students have lunch and catch up on e-mails and paperwork.

1:00 p.m.

Following emergency admission, a 3-week-old puppy with a bloated abdomen is examined by Dr. Cattin, Dr. Ratteree, and April Fitzgerald.

1:30 p.m.

Students and House Officers gather for afternoon rounds, where Dr. Martin continues the discussion from that morning. Dr. Kirk Ryan interrupts to give Bradley Self, a fourth-year veterinary student, a gift that has been dropped off for him by a grateful client. Some students must leave rounds in response to pages or to check on patients.



Marc Bordelon, a fourth-year veterinary student (left), and Alexis Lecoindre, a visiting student from the University of Liege (Belgium), perform a neurological exam on ZZ, a Toy Poodle.

2:20 p.m.

All students and House Officers check on patients in the ICU and the Treatment Room. A 17-year-old Dachshund presents with persistent coughing. A urine sample is being taken from Maggie, the dog with Cushing's disease. Francis, an 8-year-old Labrador Retriever presents with anorexia, weight loss, and masses in her neck.

3:00 p.m.

Simba, a 1-year-old Cavalier King Charles Spaniel, is given a health maintenance exam and vaccines. Chloe, an 11-month-old cat with chronic seizures, comes in for a recheck.

4:20 p.m.

Students check on patients, catch up on paperwork, and check the board for the next day's schedule. As with the day before, students will return in the evening as needed to check on patients.

The Companion Animal Medicine service provides the faculty, House Officers, staff, and students the opportunity to see an array of different diseases and injuries, which is vital to their veterinary education. "I love the variety of seeing so many different diseases and how internal medicine brings many different aspects of medicine together in one place," said

Dr. Bettina Mayer-Roenne. "There's the added complexity of being a detective when trying to find the correct diagnosis. Owners often have low expectations when they arrive, so it's great when you can help them and show them that many diseases are manageable."

Adds Dr. Frederic Gaschen, professor of companion animal medicine, "I chose to be an internist because I am fascinated by the pathomechanisms of diseases in various organ systems. While it is important to recognize typical clinical signs of a specific disease, it is essential for an internist to understand what mechanisms eventually lead to the problem. This knowledge helps us design the best possible treatment plan to help that particular patient. I enjoy being an internist in academia because of the various aspects of my job. Teaching students and House Officers keeps me on my toes: intellectual laziness is not an option in this line of work. Being involved in designing clinical studies in an attempt to fill gaps in our knowledge of canine and feline diseases is another facet I couldn't live without. Clinical work—attempting to provide the best possible care to sick cats and dogs from our community—has been a main motivation since I started vet school."

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