Innovative approaches in teaching the next generation of veterinarians.

Enhancing the clinical skills of veterinary graduates through hands-on learning

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The Mississippi State University College of Veterinary Medicine (MSU CVM) has a long history of emphasizing the graduation of practice-ready veterinarians who are capable and confident in their clinical skills. Our students acquire foundational information via didactic lectures and associated laboratories in the first 4 semesters and are provided an early exposure to live animal surgery laboratories in year two, with each student completing 3 or 4 surgeries during that time. Students then have tremendous opportunities to acquire clinical competency through 2 full years of clinical rotations in our teaching hospital and affiliate sites during their third and fourth years. The MSU CVM’s curriculum is designed to provide a strong, multispecies foundation, allowing students the opportunity to focus on species or discipline interests while developing skills essential for the success of an entry-level veterinarian.

Expansion of clinical core rotations

The MSU CVM’s program strengths include the faculty-directed clinical teaching in the MSU CVM Animal Health Center and our off-campus emergency and referral center located in the state’s largest metropolitan area. Through these 2 locations, our students complete 18 core rotations while also having the opportunity to complete up to 26 weeks of clinical electives. Following a comprehensive curriculum review of the clinical teaching, clinical core rotations were recently modified and include a large animal ICU rotation, an expanded neurology rotation, and a shelter medicine rotation. The shelter medicine core rotation allows all students the opportunity to individually perform an average of 55 ovariohysterectomies or castrations on dogs and cats from the shelter or belonging to low-income community members. This experience, combined with the surgical experience during second-year surgery labs, the core surgery rotation, the shelter medicine and other MSU CVM electives, as well as externships, allows students to develop surgical skills that make them extremely prepared and highly sought after following graduation.

Clinical rotations utilize threshold experiences allowing students to demonstrate entry-level clinical skills and knowledge needed for day 1 practice. Faculty supervision is provided through active patient management and care to give students opportunities to practice and prepare for these experiences.

Implementation of the enhanced clinical practicum program

In addition to the core rotations at MSU CVM hospitals, students are required to select two 4-week enhanced clinical practicums (ECPs), which are scheduled at affiliate veterinary practices. The goal of the ECP program is to provide additional experiential learning opportunities to assist students in the practical application of veterinary medicine. One ECP must occur in a rural large or mixed animal practice, ensuring that every student experiences the unique opportunities encountered in such practice types. These experiences are also used to encourage students to consider practicing in rural communities with the intent of helping address the nationwide rural veterinary shortage.

Hands-on learning through clinical core rotations and the ECP program at MSU leads to confident, competent graduates who are practice ready.