

SPOTLIGHT ON

Iowa State Veterinary Medicine

Innovative approaches in teaching the next generation of veterinarians.

Iowa State University powering innovative swine instruction

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When COVID-19 prompted the College of Veterinary Medicine to move its courses online in the spring of 2020, faculty moved quickly to make that a reality.

But faculty and staff in Iowa State University's Swine Medicine Education Center (SMEC) were making plans to move online before COVID-19 forced the issue.

SMEC is the only swine medicine education center in the nation, educating students from 31 veterinary colleges and veterinary professionals from 38 countries. Veterinary students take a variety of clinical rotations with SMEC where they gain valuable information about the swine industry, develop and practice clinical and production management skills, experience swine veterinary practice, and further develop communication skills.

"Teaching clinical swine medicine to fourth-year veterinary students is challenging in normal times," said Dr. Locke Karriker, SMEC director. "Livestock producers and their veterinarians are increasingly worried about biosecurity and are more and more reluctant about allowing us to bring students to their farms.

"COVID hit swine students hard," Karriker said. "Traveling to swine facilities was off the table, which was an important component in our instruction."

Today SMEC is a leader in perfecting remote instruction for clinical teaching. The team quickly created an online learning platform and digital library through a Moodle resource shared with Iowa State University's Center for Food Security and Public Health. Dubbed internally as the "Pigipedia," it is offered to students and veterinarians and houses swine-specific resources, training materials, and educational videos on nearly every medical technique that would be required for swine practice.

SMEC veterinarians also conducted farm visits where they connected live visits with students during clinical swine medicine rotations. They brought out the best student and faculty case presentations from previous years' rotations to provide case context as well.

This was all made possible because SMEC was already working with VetNOW, a leader in telemedicine for companion



Iowa State University's Swine Medical Education Center has moved many of its in-person farm visits online.

animals. SMEC began exploring telemedicine to broaden access to food animal veterinarians in underserved areas of the US.

"We reached out to VetNOW and proposed to accelerate the collaboration to meet the immediate need of virtual remote teaching of clinical medicine to veterinary students," Karriker said. "VetNOW needed a partner to help them adopt their telemedicine platform used for small animal hospitals and practices for use in large animal practices and herd investigations."

Working with VetNOW, SMEC piloted utilization of the company's platform in student rotations to provide farm tours, observe clinical signs in animals, and evaluate equipment. The result allowed students to "conduct" herd visits and capture them in a medical record. By moving to this virtual approach, students on swine production medicine rotations are now able to "visit" 4 different swine farms in a single day. For instance, in the swine industry, boar studs are kept under strict biosecurity due to their value. Telehealth will allow for more students to see how such facilities are run without being physically present.

For more information about SMEC, visit www.smec.iastate.edu.