

Training Center Provides On-Farm Experience to Veterinary Students

When fourth-year veterinarian student Nora Wachter arrived at Green Meadow Farms for her clinical rotation, it was the first time she had been on a working dairy farm. Her exposure to the day-to-day functions on the farm will be valuable as she pursues her interest in public health and food safety. Without the rotation at Green Meadow Farms, she could have completed her education with only laboratory exposure to a dairy farm.

"My experience at Green Meadows has definitely been beneficial, especially in my interests in public health," Wachter says. "It will be important for me to know how farm management practices impact food safety."

Nora and all fourth-year veterinarian students, now have the opportunity to be involved in the day-to-day operations on a dairy farm thanks to a partnership between Green Meadow Farms and the College of Veterinary Medicine. The partnership has created the MSU Training Center for Dairy Professionals that opened in July. Major donations from Land O'Lakes Purina Mills and GreenStone Farm Credit Services also made the center possible.

"The training center formalizes a long-term relationship the college has had with Green Meadows," says Dr. Tom Herdt, chairperson of the MSU Department of Large Animal Clinical Sciences.



Dr. Will Raphael goes over daily cases with students and Dr. Lou Neuder. (l-r) Dr. Jill Brester, Dr. Raphael, Nora Wachter, Dr. Neuder and Karen Schneider.

"We have been bringing students out there for several years. Having the center provides us more opportunity for teaching students."

While completing their rotations at Green Meadows, the students work alongside veterinarians completing herd health checks, examining sick cows and investigating areas on the farm with opportunity for improvement. They also learn how to incorporate the extensive record keeping system into the diagnosis and treatment.

In addition to their rotation at the center, students also complete a three-week internship traveling with a private practice large-animal veterinarian.

"Green Meadow Farms has a very sophisticated approach to farm management and they participate in cutting-edge technology," Herdt says. "Through the on-farm intranet system students will be able to monitor records and other information important to animal health."

The center is also available to other faculty members for teaching purposes. Students and faculty in the Department of Animal Science will also be using the training center.

The activities and training at the center will occur across the entire farm. The focal point of the center is a 1,300 square foot building housing a classroom

and computer laboratory, as well as offices for faculty. A break room and kitchen area and housing for students needing to stay overnight is also available.

In addition to the facility there is currently a clinical laboratory, a surgery room and large classroom/meeting area on the farm.

Heading up the training center is Dr. Lou Neuder, Green Meadows on-site veterinarian. Dr. Neuder is also an associate professor in the college and manages the activities at the center.

"The concern at Green Meadows is the same as others in the industry: where are the dairy veterinarians going to come from if they haven't had a chance in to interact in a large-herd environment?" Neuder comments. "We have to provide them exposure to the industry."

Along with exposure to the industry, future veterinarians need to understand the changing technology in farm management and the changing role of the vet-

erinarian. Providing students with exposure to a large commercial operation is increasingly difficult as farms move farther away from the university.

“When the Land Grant Colleges were established they were put in rural areas and students had ready access to lots of farms,” Herdt says. “Now the cities have moved closer to the colleges and the farms have been pushed out. It is happening all over the country.”

The proximity to MSU and the vast number of animals at Green Meadows gives students the opportunity to see a variety of situations.

“In the past, the animals were brought to the university, but as the farms move out it is increasingly more inconvenient to haul animals in,” says Dr. Will Raphael, training curriculum coordinator. “Instead of bringing the animals to the students we are bringing the students to the animals.”

“We are also fortunate that Green Meadows is willing to go the extra mile in diagnosing and treating the animals” Raphael says. “Students get the chance to see and treat a number of cases.”

Dr. Jill Brester, is a full-time intern at the center. She recently completed her education at Kansas State University but felt she needed more training before starting in a practice. While at Green

Meadows she has had the chance to see a number of cases.

“It is hard to get a lot of hands-on training at school,” Brester says. “Being here has taught me so much.”

Brester and other students had the chance to perform

a caesarean operation on a cow that was delivering a genetically deformed calf. The calf suffered from a rare disease that affects the physical development.

“I had seen pictures of the disease in books, but it is nothing like seeing it first-hand. And being able to do a caesarean was an awesome opportunity,” Brester says.

With 3,500 milking animals along with young stock at the farm, the students see the entire production cycle on the farm. They may help with calving, a DA, pregnancy checks, lameness, etc. They also learn how the role of animal health interacts with all aspects of the farm.

“Veterinarians today are at the management table when decisions are being made,” Neuder says.



Dr. Sprecher, MSU professor, brings students out to GMF to teach palpation techniques.

Neuder believes that it is just as important to educate the students not pursuing a large animal practice as those that are. While the drive behind the center was to train future food animal veterinarians, offering all students exposure to the farm environment is crucial.

“Veterinarians are perceived as experts in animal health. Someone bringing a cat in for a check-up may ask the veterinarian about public health issues like BSE or chronic wasting disease,” Neuder says. “They need to be educated in preharvest food safety practices to understand these public health issues.”

The training center helps move the MSU College of Veterinarian Medicine to the forefront of teaching colleges in the nation. The center will be made available to other colleges around the nation and in Canada. This winter a group of students from Guelph, Ontario will be at the center completing coursework.

“As the industry changes and the roles of the veterinarian changes we need to be looking for new ways to train students,” Herdt says. “There is a strong need to train in traditional things but we must also offer training in new technologies and expectations of the industry. This training center will offer a lot of opportunity for us to do that.”



Dr. Brester prepares to draw blood from a group of cows.

“We need to educate the students on how the animal health role interacts with nutrition, production and other areas like environmental issues and facility design.”