

# dairy institute

**T**his summer, 21 of tomorrow's leaders in food-systems veterinary medicine will gain entree into top industry facilities—from a consolidated 12,000-cow dairy farm in Fair Oaks, Indiana, to the Kalamazoo, Michigan, research facilities of Pfizer Inc., a world leader in biologicals and pharmaceuticals for animals and humans.

The Summer Dairy Institute at Cornell provides ambitious fourth-year veterinary students and recent veterinary graduates an education beyond the

## Teaching Best Practices in Production Medicine

scope of what is offered in the curricula of any of North America's 31 veterinary schools. The program focuses on production-medicine techniques, combining behind-the-scenes tours with hands-on wet labs and intensive classroom instruction in advanced quantitative skills, diagnostic techniques, and clinical practices. Students learn how to make data-based decisions in all production practices, including reproductive programs, milk-quality programs, and nutrition programs.

"Many dairy-farm owners have MBAs these days, so they expect their veterinarian to have sophisticated production-medicine tools, firsthand knowledge of food safety, and experience in all the aspects of cow comfort, in addition to more traditional medical and surgical skills," says dairy-produc-

tion veterinarian and epidemiologist Daryl Nydam, co-creator of the institute. “Customers are becoming more sophisticated, too. They demand that milk, cheese, yogurt, and ice cream be not only plentiful and economically priced but also of the highest quality and produced with the least environmental impact.”

In New York State, cash receipts from dairy farms exceed \$1.6 billion annually. Dairy farms are the largest cash generator of tangible goods in the state. “Tomorrow’s veterinarians need to be trained in many different areas to address the needs of large, consolidated farms where the profit margin is small. They must keep animals in optimal health—that offers the most efficient production with the least environmental impact,” says Nydam.

To give students the skills they need to excel in an increasingly complex industry, Nydam—along with Chuck Guard, an associate professor in the Department of

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Population Medicine and Diagnostic Sciences, and Associate Dean Robert Gilbert—have assembled a world-class faculty from across North America. They’ve chosen 52 academics, practitioners, and professionals from all segments of the industry to share the latest research, technology, and best practices during an eight-week intensive institute. Underwriting from the American Association of Bovine Practitioners provides scholarship assistance to participants. Students come from as far away as Spain and Austria, each of Canada’s veterinary schools, and 15 other schools in the United States. This diverse group of participants lives together for the duration of the course so they may form friendships and networks with each other and program faculty that will serve them and the industry well into the future. First offered last summer, the institute received so many applications that the enrollment limit was increased this year.

Feedback from the first group of



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students was very positive. One faculty member—foremost production-medicine veterinarian Gordie Jones—commented, “What a dream team of instructors. I wish the institute had been available early in my career.”

Working one-on-one with recognized experts was a highly valued opportunity. Topics in the course modules include: financial decision making, nutrition, biosecurity, labor training and management, public health and regulatory considerations, reproduction, farm facilities and cow comfort, hoof care, and data management, and performance monitoring. Among the facilities toured are packing plants, artificial-insemination centers, feed-analysis laboratories, milk-processing and cheese factories, and a dedicated heifer facility.

On-farm practice sessions allow students to work in small groups gaining additional hands-on experience in milking management in large dairies, calving pen management, feeding management, foot care, and reproductive exams.

Because increasing numbers of the staff members on progressive dairies are Spanish speakers, language instruction

is fundamental for communicating effectively in Spanish in a dairy-farm setting.

“We recognize how important it is for well-trained veterinarians to consult with not only owners and managers but also with the staff who work directly with the animals,” explains Nydam, who is a senior extension associate in the Department of Population Medicine and Diagnostic Services.

Alumni of last year’s institute are now employed across the spectrum of jobs represented in the dairy industry. One took a position with the Food Safety Inspection Service of the U.S. Department of Agriculture, another is managing a multi-thousand-cow dairy, and others are employed in progressive private clinical practices with herd-health orientations.

“The advanced training they receive at the institute gives our alumni access to careers across the whole spectrum, from field to table,” Nydam says. “Our aim is to make participants more confident in modern practice roles. In this way, they will provide value to themselves, their prospective employers, the dairy industry, and society as a whole.”

by Metta Winter