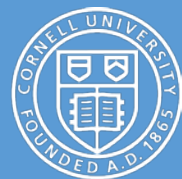


# ANNUAL REPORT

FY16



Cornell Dairy Center of Excellence



## TABLE OF CONTENTS

SUMMARY	2
LEADERSHIP	3
MILESTONES	4
WEBSITE	4
SPRING SEMINAR SERIES	4
SYMPOSIUM	5
CENTER OF EXCELLENCE USDA-NIFA	7
DCOE FELLOWS	8
PROGRAM STAFF	8
LOOKING AHEAD	9
FINANCIAL SUMMARY	10
CONTACT	10

## SUMMARY

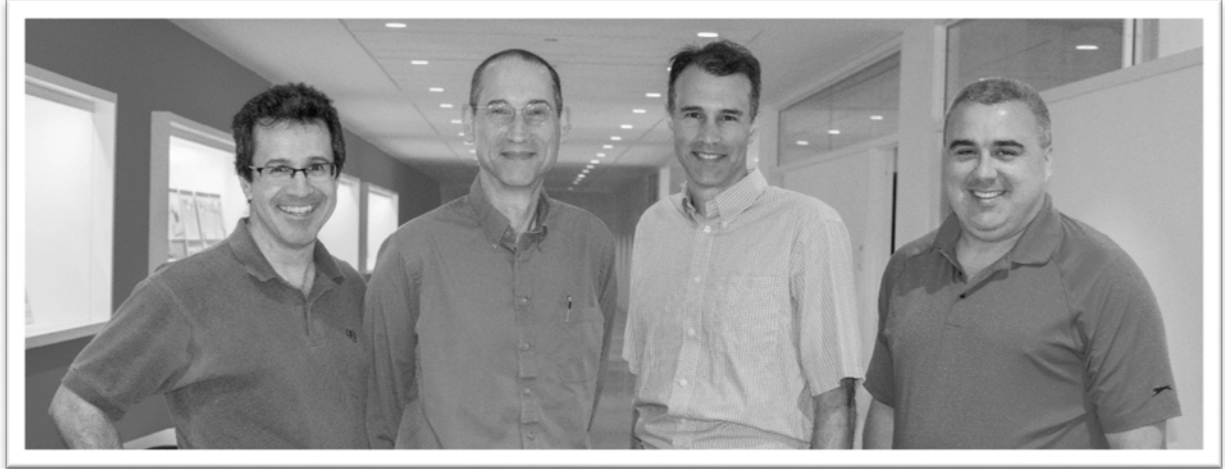
Among peer institutions, Cornell is uniquely situated in a living laboratory of over 100,000 dairy cows within an hours' drive of campus and reaches the almost 5,000 licensed dairies in New York State through a variety of means. The dairy industry accounts for more than half of all agricultural receipts in NYS (>\$2.8 billion in farm gate dairy sales) and the State is a national leading producer of yogurt and cottage cheese

([http://www.agriculture.ny.gov/annual\\_report.pdf](http://www.agriculture.ny.gov/annual_report.pdf) visited 8/3/16.) In 2014 the Cornell Dairy Center of Excellence (DCOE) was created to foster interdisciplinary engagement in research, education, and extension in the field of dairy science at Cornell. United by a Center of Excellence, the individual efforts of the over 100 faculty and staff with expertise in the dairy industry are stronger. These dairy experts are located in departments across the Cornell Ithaca campus and regional facilities and span the Colleges of Agriculture and Life Sciences, Engineering, Human Ecology, and Veterinary Medicine. Areas of expertise include preventative medicine and herd health, dairy production management, food safety, human and animal nutrition, epidemiology, dairy processing, worker training, industry relations, and many others. Goals of the DCOE include facilitating collaboration and funding opportunities, enhancing the visibility of dairy expertise at Cornell and improving teaching and dairy education. Through these activities, the DCOE strives to improve all facets of the dairy system, addressing environmental sustainability issues, animal well-being, the general economic health of producers and processors, and providing quality, nutritious products to consumers.

In 2016 the DCOE created a brand identity, sponsored a seminar series, a successful symposium featuring Cornell speakers and industry partners, redesigned the web presence for [dairy.cornell.edu](http://dairy.cornell.edu) and represented the Center at Dairy Day at the capitol building in Albany, NY. The inaugural class of 30 DCOE Fellows represent a broad spectrum of expertise and bring a commitment to be actively engaged in the DCOE by giving seminars, mentoring junior faculty, and reviewing proposals within their area of expertise.

## LEADERSHIP

With both financial and in-kind support from their College deans, the DCOE is led by four faculty and a program manager who call on a team of four other staff and the DCOE Fellows to sustain the Center.



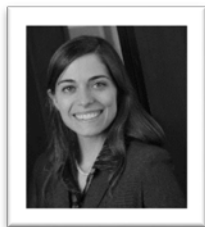
**Martin Wiedmann**, Gellert Family Professor of Food Safety and Co-Director of an Integrated Food Safety Center of Excellence

**Craig Altier**, Professor and Chair of the Department of Population Medicine and Diagnostic Sciences

**Daryl Nydam**, Associate Professor of Dairy Health and Production and the Director of Quality Milk Production Services

**Thomas Overton**, Professor of Animal Science and Director of PRO-DAIRY

---

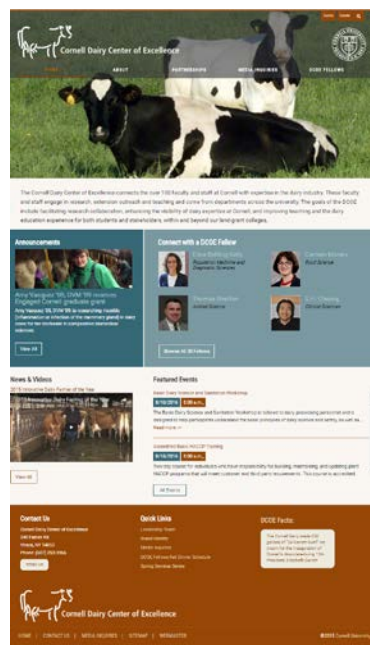


**Elizabeth Goldberg**, Senior Program Manager for the Department of Population Medicine and Diagnostic Sciences, the Animal Health Diagnostic Center, and the Dairy Center of Excellence

## MILESTONES

### WEBSITE - DAIRY.CORNELL.EDU

Working with CIT Custom Web Design, dairy.cornell.edu was redesigned to serve a variety audiences. The goal is for dairy.cornell.edu to be the entry point for all things dairy at Cornell including links to our educational programs, DCOE fellow profiles, seminar series schedule, dairy events, media inquiries and industry partnerships.



### SPRING SEMINAR SERIES

The inaugural DCOE spring seminar series covered a broad range of topics presented by Cornell faculty and invited guests. All seminars were held on alternating Mondays from 4-5PM in Stocking Hall 146. The series was also offered for credit as VTPMD 7081.

Date	Speaker	Department	Topic
Feb 8	Quirine Ketterings	Animal Science	Whole farm nutrient mass balances for dairies in New York; dairy sustainability and progress
Feb 22	Nicole Martin	Food Science	Systems approaches to dairy product quality
Mar 7	Tom Maloney	Dyson	Agricultural workforce mega trends and their implications for dairy managers
Mar 21	Larry Chase	Animal Science	Cows, methane and global warming
April 4	Heather Huson	Animal Science	Dairy cattle genetics and genetic evaluations
April 18	Jenne De Koster	Ghent University	Insulin resistance in transition dairy cows
May 2	Jeff Tester and Roy Posmanik	Chemical and Biomolecular Engineering	Energy recovery from dairy wastes

## SYMPOSIUM

A full-day symposium on Integrated Approaches to Sustainable Dairy Production was held in Stocking Hall 148 on April 27, 2016. Email outreach and same-day registration yielded a full house of nearly 100 faculty, staff, students, agricultural service professionals, dairy producers, and government and media representatives. Presenters were paired to speak briefly on a given topic followed by a joint Q&A. Dr. Mike McCloskey of Fair Oaks Farms and Select Milk Producers gave the keynote.

8:00 AM		<b>Registration</b>
8:45 AM	9:00 AM	<b>Welcome</b> <i>Kathryn Boor, Dean of CALS</i> <i>Lorin Warnick, Interim Dean of CVM</i>
9:00 AM	10:15 AM	<b>The Bovine Metabolic Athlete</b> <i>Jessica McArt,</i> <i>Population Medicine and Diagnostic Sciences</i> <i>Kelley Jensen, Lawnhurst Farm</i>
10:15 AM	10:30 AM	<b>Break</b>
10:30 AM	11:45 AM	<b>Milk for Muscle Health in an Aging Population</b> <i>Anna Thalacker-Mercer,</i> <i>Division of Nutritional Sciences</i> <i>Bill Graves, National Dairy Council</i>
11:45 AM	12:45 PM	<b>Lunch and Poster Session</b>
12:45 PM	2:00 PM	<b>Consumer Food Concerns: Retailer Reactions and Dairy Industry Implications</b> <i>Rod Hawkes, Dyson</i> <i>Bill Strassburg, Wegmans</i>
2:00 PM	2:35 PM	<b>New Technologies to Improve Dairy Cattle Performance</b> <i>Dave Barbano, Food Science</i>
2:40 PM	3:15 PM	<b>Dairy's Sustainable Future</b> <i>Peter Wright, Animal Science</i>
3:15 PM	3:20 PM	<b>Quick Break</b>
3:20 PM	4:30 PM	<b>Keynote Address</b> <i>Mike McCloskey, DVM</i> <i>Select Milk Producers and Fair Oaks Farm</i>
4:30 PM	6:00 PM	<b>Reception</b> Drink ticket provided to registrants, cash bar

---

*"...thank you for putting together such a great symposium... It was one of the best I've attended... I've heard many others comment how much they liked it as well."*

*—Heather Huson, Assistant Professor, Animal Science*

---

Feedback from the event was overwhelmingly positive. We know of at least one collaboration (Jess McArt and Dave Barbano\*) that is a direct result of interacting on this day.

Approximately 1/3 of attendees responded to a survey requesting feedback on the symposium and 93% rated the event as very good or excellent. Attendees appreciated the diversity of speakers and topics, the showcase of Cornell expertise, presentation format, and the keynote.

\*The McArt Lab is looking at the relationship of milk and blood BHB with milk somatic cell count and mastitis incidence. After meeting Dave Barbano at the DCOE Symposium, his lab will process the milk samples for milk BHB determination and many other parameters. He will use data to help develop some prediction equations looking at cow health parameters, and the McArt Lab will be able to use his data to better describe the role of hyperketonemia on udder health.

SYMPOSIUM CONT.



## CENTER OF EXCELLENCE USDA-NIFA

The USDA has placed increasing emphasis on multidisciplinary proposals that include education and extension efforts and will favor proposals coming from Centers of Excellence. Projects sponsored by industry and other government agencies will likely benefit from a similar multidisciplinary structure. In anticipation of dairy-related proposals, the dairy center provided the following paragraph for inclusion in USDA-NIFA proposals. Approximately 7 proposals were submitted in 2016 by DCOE fellows, mostly junior faculty.

*The PI of this proposal is a Fellow of the Cornell Dairy Center of Excellence ([dairy.cornell.edu](http://dairy.cornell.edu)). The Center exists to connect the over 100 faculty and staff at Cornell with expertise in the dairy industry. Its goal is to coordinate in a cost-effective way efforts regarding research, teaching, and extension on the Cornell campus and throughout our state. The Center receives financial and in-kind support for the colleges of Agriculture and Life Sciences, and Veterinary Medicine. In addition, the Center leverages university resources by seeking public-private partnerships with dairy producers, processors and retailers. Members are engaged in numerous teaching activities that target undergraduate, graduate, and professional students, in addition to members of the public through extension efforts. The Center functions to identify and attract funding to support issues important to New York agriculture, including rural areas of the state. The Center has additionally been successful in improving teaching capacity and efficiency in the field of dairy health and production, thus reducing unnecessarily duplicative efforts within our teaching mission. Through these combined efforts, we leverage the intellectual and administrative resources of the university in combination with those of our stakeholders, both dairy producers and processors.*

---

## DCOE FELLOWS

The inaugural class of DCOE Fellows include 30 faculty and staff representing the College of Veterinary Medicine, the College of Agriculture and Life Sciences, Engineering and Human Ecology – Division of Nutritional Sciences. They include the DCOE leadership team, seminar and symposium speakers, self-nominated and leadership team-nominated individuals. DCOE Fellows are expected to be actively engaged with the center which includes presenting seminars for the spring seminar series, symposia or other events; mentoring junior faculty in the dairy field; reading and critiquing grant proposals related to their field.

- |                        |                        |                           |
|------------------------|------------------------|---------------------------|
| 1. Sam Alcaine         | 12. Curt Gooch         | 23. Roy Posmanik          |
| 2. Craig Altier        | 13. Yrjo Grohn         | 24. Syed Rizvi            |
| 3. Dave Barbano        | 14. Rod Hawkes         | 25. Jeff Tester           |
| 4. Erica Behling-Kelly | 15. Heather Huson      | 26. Anna Thalacker-Mercer |
| 5. Rodrigo Bicalho     | 16. Quirine Ketterings | 27. Michael Van Amburgh   |
| 6. Kathryn Boor        | 17. Tom Maloney        | 28. Larry Van De Valk     |
| 7. Yung-Fu Chang       | 18. Nicole Martin      | 29. Lorin Warnick         |
| 8. Larry Chase         | 19. Jessica McArt      | 30. Martin Wiedmann       |
| 9. S.H. Cheong         | 20. Carmen Moraru      |                           |
| 10. Julia Finkelstein  | 21. Daryl Nydam        |                           |
| 11. Julio Giordano     | 22. Thomas Overton     |                           |

## PROGRAM STAFF

**Heather Darrow**, Conference Coordinator for Dairy Management Group and PRO-DAIRY Program provides conference registration and event support

**Corey Merrell**, Research Aide IV for the Animal Health Diagnostic Center is the webmaster for [dairy.cornell.edu](http://dairy.cornell.edu)

**Julie Stafford**, Industry Liaison Officer in the Department of Food Science and Cornell Institute for Food Systems supports industry inquiries and partnerships

**Claudia Wheatley**, Senior Public Affairs Officer in the College of Veterinary Medicine fields media inquiries



## LOOKING AHEAD

Dairy Lunches and Half-Day Events – Inviting DCOE members to propose dairy-related topics of interest to the academic community for a lunch or half-day discussion. For example: GMO/Non-GMO Dairy – What role should Cornell play in the GMO Dairy discussion? A number of dairy companies are discussing moving to GMO-free products, including some discussion about sourcing raw milk from dairy farms that do not use GMO feeds. Other topics might include Antimicrobial resistance and prudent use; further reducing the carbon footprint of dairy production; enhancing nutritional benefits of dairy based foods for health and function; making use of alternative feed sources for cows from co-products of other industries; educating the food consuming public about food production practices.

Facilitating Connections – Happy hour events for junior faculty and informal interdisciplinary dinners hosted by DCOE Fellows in their homes.

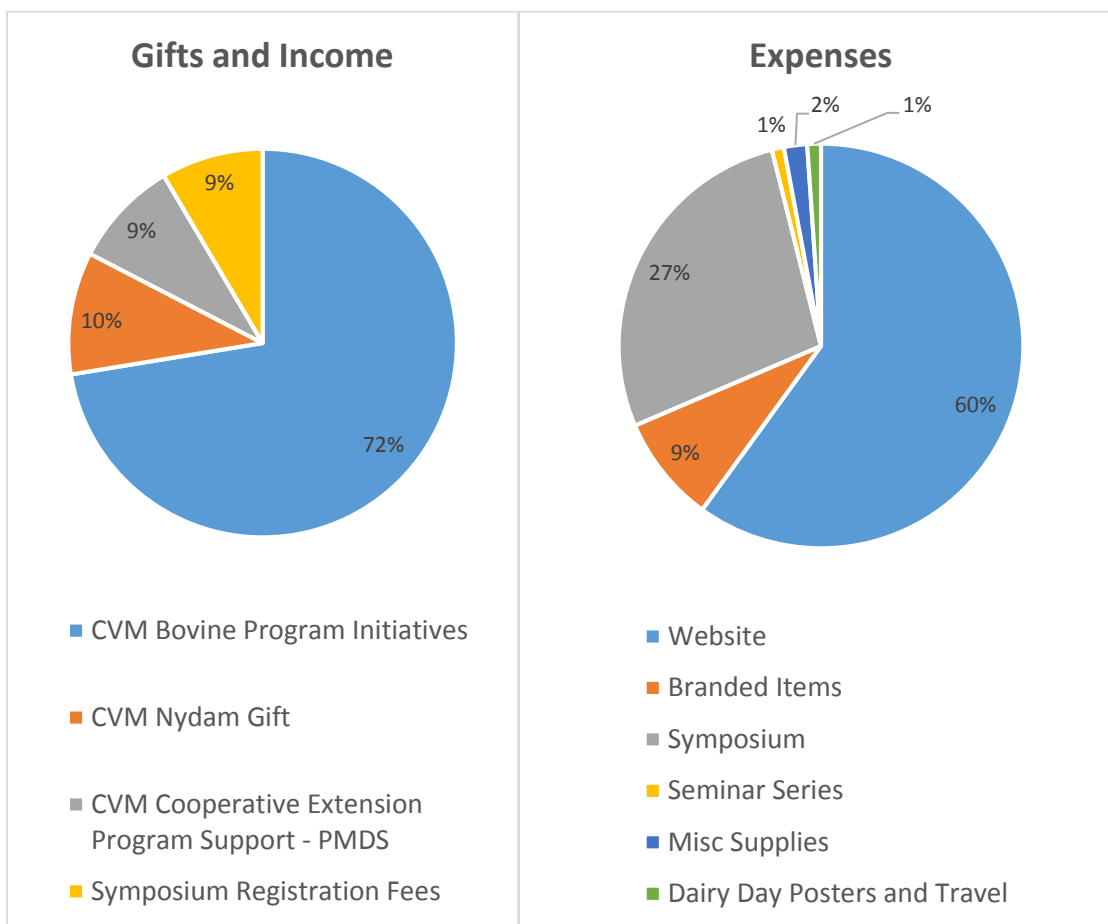
Dairy Symposium 2017 – Considering the role of dairy and other animal-source protein in the challenge of feeding an increasingly populous world and holding the event in NYC.

Spring Seminar Series 2017 – Similar format to last year, alternating Mondays from 4-5PM. Speakers will represent the breadth of dairy expertise on campus and, among others, are likely to include faculty from Food Science, Freie Universitat Berlin, Population Medicine and Diagnostic Sciences, and the field of Nutrition.

Website [dairy.cornell.edu](http://dairy.cornell.edu) – adding and enhancing content

## FINANCIAL SUMMARY

The DCOE Activities Account started with an initial gift from the College of Veterinary Medicine and captures all the operating expenses and income for the Center. These funds were primarily used for a new website and to support the inaugural symposium in April 2016. Registration fees covered about half of the expenses for the symposium and could be increased to cover more of the costs in the future. The Department of Population Medicine and Diagnostic Sciences gave the funds received from Cornell Cooperative Extension for dairy extension work to subsidize part of the website. Daryl Nydam gave a gift to the center of \$3,000. The new website includes a “donate” function that will route future gifts into this account.



## CONTACT

Elizabeth Goldberg, Senior Program Manager

Cornell Dairy Center of Excellence  
240 Farrier Rd.  
Ithaca, NY 14853

dairy.cornell.edu  
607-253-3966 / [elizabeth.goldberg@cornell.edu](mailto:elizabeth.goldberg@cornell.edu)