

# The William H. Miner Agricultural Research Institute

*Carrying on William Miner's  
vision of science  
in the service of agriculture.*



2020-21  
Annual Report  
[www.whminer.org](http://www.whminer.org)

# MESSAGE FROM THE CHAIR

*“Great things in business are never done by one person, they’re done by a team of people.”*

— Steve Jobs

Often, during the most challenging times comes an unexpected level of clarity. That was one of the benefits of the pandemic for Miner Institute. The challenges brought on by the pandemic and the uncertainty surrounding it, made it abundantly clear that the Miner team is extraordinary.

Even during the early days and months of the pandemic, when businesses, schools, and Miner Institute’s offices and buildings were closed, our dairy, maintenance, and equine teams were still responsible for taking care of the animals and facilities. The cows were milked, the barns were cleaned, the crops were planted and later harvested. The wheels of Miner Institute kept turning and staff did what needed to be done.

The words “thank you” seem insignificant in considering the perseverance and team cohesiveness it required to tackle the past year, but on behalf of the board of trustees, I would like to express our gratitude to the Miner team – *you* are what makes Miner Institute the great organization that it is.

— Rod Giltz  
*Chair, Miner Institute Board of Trustees*





# PRESIDENT'S MESSAGE

This past year, the Covid-19 pandemic affected nearly every aspect of the Institute's programs, directly or indirectly. Still, our dedicated staff did an extraordinary job of fulfilling our education, research, and demonstration mission.

Nearly 50 students enrolled in our education programs – undergraduate, graduate, and interns – and we all learned about virtual and hybrid teaching models! When we suspended in-person outreach events in March of 2020, our staff switched to virtual presentations and the number of attendees exploded to over 3,500 people! Future events may well contain an online component when it makes sense to reach a larger audience.

Our staff secured about \$650,000 in research grants with several large proposals still awaiting funding. The research focus continues on dairy nutrition and management, forage quality, milk analysis, and nutrient management. In April of 2020 we welcomed Allen Wilder to our staff as a forage agronomist.

Despite restrictions on milk production throughout 2020, our dairy herd still retained its spot in the top-5% of herds in the US – a testament to the outstanding farm staff and leadership in our dairy and crops department. The goal is to expand to 500 cows by the end of 2021 to fill our new barn addition completed recently. And in the equine program, initial planning has begun on a multi-purpose riding arena to keep the program vibrant and relevant to regional horse enthusiasts.

Overall, as farming moves forward in a post-Covid world, carrying on William Miner's vision of science in the service of agriculture has never been more important.



— Dr. Rick Grant  
President, Miner Institute



# EDUCATION

In 2020, 48 students participated in our educational programs. This includes nine Advanced Dairy Management students; 5 summer experience students; 23 Applied Environmental Science students; five year-long interns who have finished their undergraduate degrees; five graduate students; and one post-doctoral researcher. To learn more about our education programs visit <https://www.whminer.org/about-education>

## Advanced Dairy Management Program

The enrollment of nine students in the Advanced Dairy Management Program exceeded our strategic plan goal for the first time. There were 7 students from UVM, 1 from SUNY-Cobleskill, and 1 from Michigan State University. This spring semester program is comprised of five courses with classroom and hands-on learning environments. Dairy Management Practicum, Dairy Nutrition, Crop Production, Experience in Agricultural Research, and Ag Seminar are offered annually.

The semester started with in-person learning until mid-March when students returned home and finished the program online. We incorporated online meetings, encouraging the students to submit questions to the speakers and watched webinars hosted by dairy industry companies. The students adapted well and were able to deliver terrific Agricultural Seminars from *Journal of Dairy Science* articles in addition to their Research Project Proposal presentations — we were impressed! The students were well supported by our at-home staff, as there were frequently up to 20 people joining in to learn.



The ADM class of 2020 was able to attend World Ag Expo in California in February before the pandemic hit. Pictured from **L to R**: Emily Hiller, Jessica Nash, Levi Vaughan, Henry Delabruere, Andrew Gilbert, Brandon Mansfield, Olivia Reynolds, Sondra LaRoche, and Keltsey Rushton.

## 2020-21 Flanagan Scholarship

A \$1.3 million donation from the late Stephen Flanagan in 2015 established a scholarship fund to help support Miner Institute's education programs. The scholarship is named after Mr. Flanagan and his parents, Stephen S. Flanagan and Frances B. Flanagan.

Graduate student Emily Fread and year-long dairy intern Trina Bigelow are the 2020-21 recipients of the Stephen S. Flanagan, Frances B. Flanagan, and Stephen F. Flanagan Scholarship. Emily is from Cornelius, NC. She has an undergraduate degree in Animal Science from North Carolina State University. Emily participated in the Summer Experience in Agricultural Research program at Miner Institute in 2018 and started a graduate program in 2020. She is pursuing a master's degree at the University of Vermont, supported and directed by Miner Institute, that focuses on the effect of heat stress on dry dairy cows and calves. Trina grew up on a dairy farm in Willsboro, NY. She studied dairy management at SUNY-Morrisville and earned her bachelor's degree after a 15-week internship and stayed on as the year-long dairy intern at Miner Institute. Trina is interested in herd health and genetics.



Graduate student Emily Fread, left, and dairy intern Trina Bigelow are the 2020-21 Flanagan scholarship recipients.



## Summer Experience Programs

Summer Experience programs in Farm Management, Equine Management, and Agricultural Research were cancelled in 2020 due to Covid-19. However, three students decided to travel to the Institute, undergo a 14-day quarantine, and then work over the summer in the equine program. Similarly, one student decided to work as a summer research technician. Students that were accepted for the 2020 program will have the opportunity to take part in the 2021 Summer Experience Programs, assuming we are able to conduct them.

Courtney Brasovan from Stephen S. Austin State University, Lauryn Barnett from Morehead State University, and Samantha Conte from Clemson University participated in the Summer Experience in Equine Management program. Maggie Kirby from Cornell University worked with the research team as a technician for the summer.

## Applied Environmental Science Program

Following SUNY-Plattsburgh guidelines, we taught the AESP courses face-to-face until Thanksgiving, but with masks and social distancing. Following Thanksgiving break, instruction switched to an online format.

Courses offered as part of the 2020 program were Forest Ecology and Management with Dr. Mark Lesser; Agriculture and the Environment with Stephen Kramer; Water Quality and Modeling with Dr. Collin Fuss; Wetland Ecology and Management with Dr. Mary Alldred; and Wildlife Ecology and Management with Dr. Danielle Garneau, which was offered on campus.



Director of Lab Studies Steve Kramer tours his Agriculture and the Environment class through Miner Institute's dairy barn as part of the Applied Environmental Science Program.



— photo by Christopher Crosby Morris

Pictured above (L to R) are Samantha Conte, ShyAnne Koehler, HD Providence "Vinny", Lauryn Barnett, and Courtney Brasovan. Samantha, Lauryn, and Courtney came to Miner as Summer Experience in Equine Management interns in 2020. ShyAnne was the year-long equine intern.



Kai Yun Lai arrived at Miner in mid-summer in an extended summer intern-type role. Kai is from Taiwan and has a bachelor's degree in animal science from National Chiayi University in Taiwan. She is pursuing a certification in equine dentistry and is seen here with HD Burke, "Joey."



Maggie Kirby was accepted into our Summer Experience in Ag Research program which was cancelled due to the pandemic. Maggie spent part of the summer working with us as a research technician and then returned for a few weeks during her winter break from Cornell University.

# RESEARCH

In 1928, William Miner's vision for Heart's Delight Farm was to provide "opportunities ...for experimental and research work in order that it may serve to advance the science of agriculture." The challenges faced in 2020 certainly spotlighted the dedication of Miner Institute's staff to this mission. The startups of some projects were delayed and some sampling events were lost at some of our remote nutrient management sites at the onset of the pandemic. Many staff worked remotely with data management/analysis and proposal/report writing while other staff were available to assist with the daily operational needs of our dairy herd and farm. By late May, research activities began to ramp up and continued at full capacity through the end of the year.

Michael Miller finished his Ph. D. program in the spring of 2020, defending his dissertation entitled, *Effects of forage quality and management decisions on feed intake of lactating dairy cows*. The research staff grew with the addition of our new agronomist, Allen Wilder; two new graduate students, Emily Fread and Cari Reynolds; a year-long research intern, Julia Fouts; and a Post-doctoral Associate, Dr. Yu "Patrick" Zang.

The research conducted in 2020 and planned for 2021 continues to focus on nutritional strategies for calves and dairy cattle at all stages of lactation. Forage quality from field, to silo, to cow has also been an emphasis of projects. Additionally, studies are being conducted to evaluate animal well-being, with a focus on heat stress and heat abatement strategies for lactating and dry cows. Nutrient management research following the pathway of nutrients through surface and sub-surface (tile) runoff continues to be conducted to better understand nutrient loss and how to establish best management practices for farmers to retain these valuable nutrients in fields. Results for most of the research conducted by Miner Institute are reported to the public through scientific meetings and journals or through the monthly Farm Report available on our website at [whminer.org](http://whminer.org).



Post-Doctoral Researcher Yu "Patrick" Zang, Ph.D.



Forage Agronomist Allen Wilder

## GRADUATE STUDENT ACHIEVEMENT



Katie Smith earned a second-place prize in the 1st Annual North East Graduate Student Research Contest through the Northeast chapter of The American Registry of Professional Animal Scientists (ARPAS). The research she presented via a video presentation for the contest was related to fiber digestibility and rumen fermentable starch.

Smith is pursuing a master's degree in dairy nutrition through the University of Vermont. Her research looks at the interaction of fermentable starch and indigestible fiber in the cow's rumen and how it affects lactation performance and carbohydrate digestibility. She hopes to return to Missouri to work as a nutritionist after completing her degree in early 2021.

"Katie's work shows us how sensitive cows are to dietary starch and how easy it is to reduce milk fat production which is a critical contributor to dairy farm profitability," said Rick Grant, president of Miner Institute.

## 2020 ABSTRACTS AND PEER-REVIEWED PUBLICATIONS

### Animal Well-being:

- Effect of episodic heat stress on behavior, body temperature, and lameness of lactating dairy cows on farms in northern New York. 2020. Authors: Ballard, C. S., S. Green, S. Baldwin, A. E. Pape, and R. J. Grant. *J. Dairy Sci.* 103:260 (Suppl. 1).
- Effect of stocking density and effective fiber on the ruminal bacterial communities in lactating Holstein cows. 2020. Authors: Clemmons, B. A., M. A. Campbell, L. G. Schneider, R. J. Grant, H. M. Dann, P. D. Krawczel, and P. R. Myer. *PeerJ*, DOI 10.7717/peerj.9070.
- Characterizing drinking behavior from reticular temperature with artificial neural networks. 2020. Authors: Pape, A. E. and C. S. Ballard. *J. Dairy Sci.* 103:T13 (Suppl. 1).

### Dairy Nutrition:

- Effects of physically effective undigested neutral detergent fiber and rumen fermentable starch on lactation performance and total tract digestibility of lactating cows. 2020. Authors: Smith, K. M., A. Obata, K. Hirano, H. Uchihiro, S. Y. Morrison, J. W. Darrah, H. M. Dann, C. S. Ballard, M. D. Miller and R. J. Grant. *J. Dairy Sci.* 103:M18 (Suppl. 1).
- Evaluation of branched-chain amino acid inclusion in milk replacers on growth and health of Holstein calves. 2020. Authors: Morrison, S. Y., H. Gauthier, A. Obata, K. Hirano, and H. Uchihiro. *J. Dairy Sci.* 103:W115 (Suppl. 1).
- Evaluation of source of corn silage and trace minerals on lactational performance and total-tract nutrient digestibility in Holstein cows. 2020. Authors: Miller, M. D., J. S. Lanier, S. K. Kvidera, H. M. Dann, C. S. Ballard, and R. J. Grant. *J. Dairy Sci.* 103: 3147-3160. <https://doi.org/10.3168/jds.2019-17716>.
- Evaluation of source of corn silage and trace minerals on rumen characteristics and passage rate of Holstein cows. 2020. Authors: Miller, M. D., J. S. Lanier, S. K. Kvidera, H. M. Dann, C. S. Ballard, and R. J. Grant. *J. Dairy Sci.* 103:8864–8879. <https://doi.org/10.3168/jds.2020-18490>.
- Influence of fiber degradability of corn silage in diets with lower and higher fiber content on lactational performance, nutrient digestibility, and ruminal characteristics in lactating Holstein cows. 2020. Authors: Miller, M., C. Kokko, C. S. Ballard, H. M. Dann, M. Fustini, A. Pamonari, A. Formigoni, K. Cotanch, and R. Grant. *J. Dairy Sci.* 103:doi.org/10.3168/jds.2020-19088.
- Letter to the Editor: Silage manuscripts in the Journal of Dairy Science. 2020. Authors: Adesogan, A. T., H. Auerbach, T. F. Bernardes, K. K. Bolsen, G. Borreani, Y. Cai, W. K. Coblenz, J. L. P. Daniel, D. R. Davies, F. Driehuis, L. F. Ferraretto, R. J. Grant et al.. *J. Dairy Sci.* 103:6737–6738. <https://doi.org/10.3168/jds.2020-18359>.
- Relationship of undigested and physically effective neutral detergent fiber with dry matter intake and energy-corrected milk yield of Holstein cows. 2020. Authors: Miller, M. D., W. A. Smith, and R. J. Grant. *J. Dairy Sci.* 103:W47 (Suppl. 1).
- Digestibility and intake. Forages: The Science of Grassland Agriculture. 2020. Authors: Mertens, D. R., and R. J. Grant. 7th ed. Vol. II., K. J. Moore et al., eds. Wiley-Blackwell, Hoboken, NJ.

### Milk Fatty Acid Metrics:

- Milk fatty acid metrics and their relationship to milk fat and true protein concentrations in tanks from US Jersey herds. 2020. Authors: Dann, H. M., A. Pape, and D. M. Barbano. *J. Dairy Sci.* 103:W55 (Suppl. 1).

### Nutrient Management:

- Drainage Water Management Effects on Phosphorus Losses from Paired Northern New York Corn Fields. 2020. Authors: Klaiber, L.B., S.R. Kramer, M.K. Haney, and E.O. Young. *ASA, CSSA and SSSA International Annual Meetings*. ASA, CSSA, and SSSA.
- Edge-of-Field Nutrient Losses in Two Corn Fields with and without Tile Drainage in Northern New York. 2020. Authors: Thalmann, L.E., S.R. Kramer, M.K. Haney, E.O. Young, and L.B. Klaiber. *ASA, CSSA and SSSA International Annual Meetings*. ASA, CSSA, and SSSA.
- Impacts of Drainage Water Management on Nitrogen Losses from Paired Northern New York Corn Fields. 2020. Authors: Klaiber, L.B., S.R. Kramer, M.K. Haney, and E.O. Young. *ASA, CSSA and SSSA International Annual Meetings*. ASA, CSSA, and SSSA.
- Impacts of Tile Drainage on Phosphorus Losses from Edge-of-Field Plots in the Lake Champlain Basin of New York. 2020. Authors: Klaiber, L. B., Kramer, S. R., & Young, E. O. *Water*, 12(2), 328.
- Surface Runoff and Tile Drainage Water Quality in Paired Corn Fields on a Northern New York Dairy Farm. 2020. Authors: Klaiber, L.B., S.R. Kramer, M.K. Haney, and E.O. Young. *ASA, CSSA and SSSA International Annual Meetings*. ASA, CSSA, and SSSA.
- The New York Phosphorus Runoff Index: Version 2.0. User's Manual and Documentation. 2020. Authors: Czymmek, K. J., Q. M. Ketterings, M. B. H. Ros, S. Cela, S. Crittenden, D. Gates, T. Walter, S. Latessa, L. Klaiber, and G. L. Albrecht. Cornell University, Ithaca NY. Accessible at: [http://nmsp.cals.cornell.edu/publications/extension/NYPI\\_2\\_User\\_Manual.pdf](http://nmsp.cals.cornell.edu/publications/extension/NYPI_2_User_Manual.pdf)
- Winter Rye Cover Crop Impacts on Runoff Water Quality in a Northern New York (USA) Tile-Drained Maize Agroecosystem. 2020. Authors: Griffith, K. E., Young, E. O., Klaiber, L. B., & Kramer, S. R. *Water, Air, & Soil Pollution*, 231, 1-16.



# DAIRY

Every farm has to contend with unpredictable events – most often it is weather-related, but farmers also routinely deal with price swings for supplies and for the goods they produce, illness in their livestock or damage to their crops, and in 2020, a global pandemic. The pandemic caused stress for our staff on a personal level, but also created a steep decline in demand for milk which challenged our farm on the business level. In April 2020, our dairy cooperative, AgriMark, sent a newsletter to members stating: “We are in danger of losing a critical part of our food supply when we need it most.” The pandemic caused a 20% decrease in milk demand in the first four months of 2020. In response to the decline in demand, AgriMark initiated mandatory production limits on its members reducing our milk production by 4% each month from the same month in 2019. Additionally, the milk price was down in 2020 as well.

Plans to expand the dairy herd and construction of an addition to the 2008 dairy barn to facilitate the increased herd size were well underway prior to the pandemic. In late August, the addition was completed and animals moved into the new barn. The new barn adds 144 sand-bedded stalls, 4 rows, with a 10-foot transfer lane around the whole barn. A new manure lagoon was also completed in late 2020. It has a 1.7 million-gallon capacity with a concrete bottom to allow access to enter and clean out sand that settles on the bottom.

A used Kinze 3600 12-row corn planter was purchased in time for the 2020 crop season. This planter replaced the 8-row we had been using and increases efficiency for our crops team. We planted 282 acres of conventional corn and 140 acres of BMR corn in 2020. We also were able to purchase an additional 242 acres of land to support our dairy program.

The Summer Experience in Farm Management program was cancelled in 2020 due to the pandemic, but we are looking forward to welcoming four interns for summer 2021.

| Performance measure                  | 2020 Avg  |
|--------------------------------------|-----------|
| Daily milk, lb/d                     | 95.1      |
| 150-day milk, lb/d                   | 99.5      |
| Days in milk                         | 161       |
| Test-day fat, %/lb/d                 | 4.3/1,257 |
| Test-day true protein, %/lb/d        | 3.1/944   |
| Rolling herd average milk, lb/cow/yr | 30,909    |
| Age at 1st calving, months           | 23        |
| Total cows in herd (milking and dry) | 500       |





# EQUINE

Many challenges were faced in 2020. The gratitude for working on a historic farm that has withstood the test of time, a supportive and hard-working staff, and beautiful horses kept us going through tough times and provide hope for better, easier times ahead.

EquiDay, our traditional spring seminar for horse owners, fell right as the gravity of the situation with Covid-19 became evident in places like New York City. A last-minute decision to host the event since our speakers were still available brought some hardy folks to Miner. Using the guidelines at the time, the audience was spaced out through the room, hand-washing and sanitizing was vigorous, but the attendees still managed to learn and enjoy.

The essential work of breeding, training, and caring for horses does not stop for much, virus included. The herd at Miner continued to change with the addition of one colt and three filly foals, all born healthy and full of promise including another perfect outdoor birth on a gorgeous summer afternoon. We continue to collaborate on the long-term study with Michigan State University researchers investigating the early markers of Equine Metabolic Syndrome which can be an issue in Morgan Horses. Each of the mares and foals were blood sampled shortly after giving birth and the foals are enrolled for periodic sampling until their second birthday. We are glad to help contribute to the growing understanding of this issue. The gelding, HD Springfield (UVM Springfield x Stonecroft Duece's Wild) was found to be the perfect match for his new owner in Massachusetts. Born in 2016, "Monty" was the result of the use of frozen semen which was used 2 years after his sire's death; an example of the hope that life will go on.

Since the heaviest workload for the equine program falls in the summer, we needed to hire some labor to help us get it all done. The normal Summer Experience programs were canceled, but we were able to bring on three of the students that had been accepted to the SEEM (prior to Covid-19) as employees for what we internally called a "modified" experience. There were no shows, demonstrations, tours or other public activities, but the opportunity to work on a horse farm and learn the aspects of managing a breeding farm were highly valued by them nonetheless; they came from all over the country and quarantined knowing that a good summer could be salvaged. Finally, the tangled process of securing her visa ended and our new yearlong intern, Kai Yun Lai, arrived from Taiwan in early August. We were grateful that everyone was willing to take the chance, and in return they earned and learned towards their education and future careers.

The local horse-owning public must have been feeling the need to bring a little brightness to the world through the creation of foals! Our mare and stallion station services were in high demand in 2020. Four outside stallions and five outside mares came to Miner and resulted in many successful pregnancies; 2021 should see the arrival of ten new foals including Morgans, Arabians, Quarter Horses, Appaloosas and some cross-breds. We continue to be happy to offer these opportunities to owners as well as providing a well-rounded experience to our interns.



— photos by Christopher Crosby Morris

**Top Image:** HD Knox with Spring's National Velvet

**Middle Image:** HD Springfield "Monty"

**Bottom Image:** Roy Mauritsen brought his cameras and image-taking technology to Miner this summer and created some amazing photographs for us (see front cover).

# OUTREACH

2020 started off quite similarly to other years. There was much anticipation about the coming programs and plans for the year. In addition to our annual education and outreach programs, an open house was planned for the summer; a new exhibit in the Heart's Delight Farm Heritage Exhibit was being organized; and a day-long Ag in the Classroom program for teachers was being developed. Sadly, like the rest of the world, we only had about 10 weeks of "normal" in 2020 and those exciting programs were cancelled in hopes we could re-schedule them in 2021.

We were able to host a group of SUNY Plattsburgh education students for informative workshops in our barn and labs and were also able to host our second annual Beat the Boredom program for school-age kids during February break prior to the pandemic.



Point Au Roche State Park Naturalist Kristin Collins helps participants at the February Beat the Boredom program to build bird feeders with pine cones.



Graduate Student Cari Reynolds, back left, explains to a group of SUNY Plattsburgh students how the rumen functions during a visit in February.

## INDUSTRY COMMUNICATION

The Miner Institute *Farm Report* is a monthly dairy newsletter sent to more than 2000 subscribers worldwide. It is written primarily for farmers and other agricultural professionals in the Northeastern U.S. and Eastern Canada. Most articles deal with dairy and crops topics, but also included are articles dealing with environmental issues and global agriculture as well as editorial commentary. Articles are frequently re-printed in other industry publications.

The *Stable Sheet* is a newsletter for both equine owners and industry professionals that is published several times per year. It provides practical information on all aspects of horse care, from breeding to training to health and safety. We also share challenges we've faced and offer insight on how to prevent the same from happening to others. The *Stable Sheet* also promotes equine events sponsored by Miner Institute and the University of Vermont.

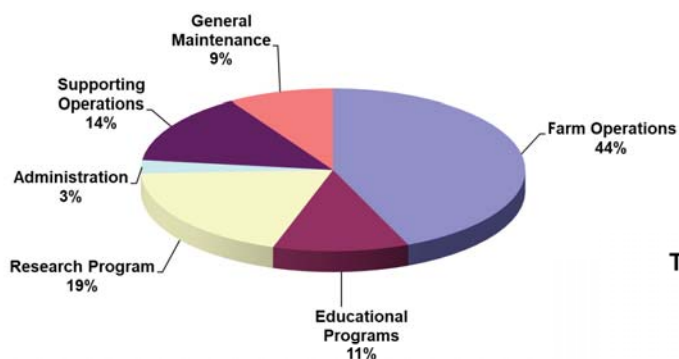
The *Farm Report* and *Stable Sheet* can be found online at [www.whminer.org](http://www.whminer.org)



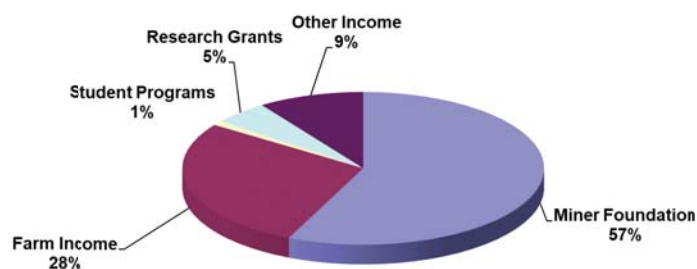


# FINANCIAL SUMMARY

## The William H. Miner Agricultural Research Institute 2020 Expenditures



## The William H. Miner Agricultural Research Institute 2020 Revenue



## COMMUNITY CONTRIBUTIONS



United Way of the Adirondack Region President and CEO John Bernardi, left, Administrative Assistant Makayla Provost, center, and Business Manager Holly Lafountain are seen here accepting bikes that were assembled by the Miner team and donated to children in foster care. Although we didn't get the same team-building component that we typically do at our in-person December staff meeting, which of course did not happen in 2020, we were able to assemble the bikes in small groups and our staff was pleased to be able to carry on this tradition.



Amy Bedard, Rachel Dutil, and Maggie Carter helped to organize the annual charity auction that raises money for the local JCEO. The auction is typically held at the staff Christmas party, but was done virtually this year due to the pandemic. We are humbled by the generosity of our staff as we were able to donate \$1,078 for those in need in our region!

# CONGRATULATIONS TO ...

**ShyAnne Koehler**



— photo by Christopher Crosby Morris

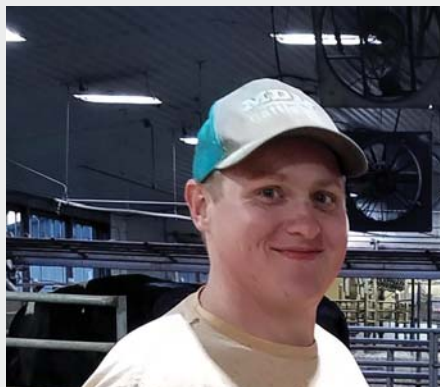
ShyAnne was a Summer Experience in Equine Management student in 2016 and returned as a yearlong intern in late summer 2019. She now lives in Missouri and works as the lead riding instructor at the Hope Center — a therapeutic riding barn. She teaches lessons to children and adults with special needs and kids with troubled pasts. She has earned a certificate for special needs and inclusion.

**Kristen Gallagher**



Kristen was a yearlong research intern from July 2019 to July 2020. She is currently working toward her Master's degree in animal science at Michigan State University looking into the relationship between amino acid metabolism and liver health in early lactation dairy cattle. She hopes to work as a dairy nutritionist and technical consultant after she graduates.

**Michael Miller, Ph.D.**



Michael arrived at Miner in summer 2016 as a research technician and later decided to enroll in a Ph.D. program at the University of Vermont. He completed his Ph.D. in May 2020. He now works as a Dairy Nutrition Consultant for Ruminant Solutions by Trouw Nutrition. He also provides technical support to the nutrition team. He lives in Western NY and covers from St. Lawrence County, NY to Northern PA.



# #Minergratitude

The Miner team gave us countless reasons to be grateful in 2020 as we navigated through the uncertainty that the year brought. We wanted to highlight our staff to recognize their hard work and so we started a #Minergratitude campaign which was shared with staff through email and on social media. All the gratitude posts have been added to a gallery at <https://www.minermatters.com/miner-gratitude.html>



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Tony LaPierre  
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Co-owner, Leerkes Dairy Farm

Brendan P. Owens, Esq.  
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Stafford, Piller, Murnane, Kelleher &  
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Collegiate Administrator  
Vice Chair, Miner Institute

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Chief Strategy Officer  
Yankee Farm Credit

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Holtz-Nelson Dairy Consultants

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Environmental, Health, and  
Safety Engineer



**Front Row (L-R):** Roderic Giltz, Dr. Frederick Woodward, Rocklyn Giroux, Geoffrey Yates, and Richard Eakins.

**Back Row (L-R):** Dr. Rick Grant, Kirk Beattie, Janet Duprey, Tony LaPierre, and Bernard Leerkes.

**Absent:** Brendan Owens and Steven Frederick



# EMPLOYEES & YEARS OF SERVICE

## FACULTY/RESEARCH

|                          |    |
|--------------------------|----|
| Katie Ballard, M.S.      | 33 |
| Amy Bedard, M.L.S.       | 14 |
| Maggie Carter            | 24 |
| Shaun Castine            | 11 |
| Heather Dann, Ph.D.      | 16 |
| Jeffrey Darrah           | 18 |
| Wanda Emerich, M.Ext.Ed. | 33 |
| Heather Gauthier         | 20 |
| Jered Green              | 4  |
| Stephanie Green          | 2  |
| Mark Haney               | 2  |
| Laura Klaiber, M.S.      | 12 |
| Lisa Klaiber             | 12 |
| Stephen Kramer, M.S.     | 26 |
| Sarah Morrison, Ph.D.    | 2  |
| Sheila Mousseau          | 8  |
| Robert Navaroli          | 1  |
| Ashton Nelson            | 1  |
| Alexander Pape, M.S.     | 3  |
| Allen Wilder, M.S.       | <1 |
| Yu Patrick Zang, Ph.D.   | <1 |

## AGRICULTURE

|                   |    |
|-------------------|----|
| Shawn Bechard     | 15 |
| Makenna Bell      | 1  |
| Bethann Buskey    | 17 |
| William Cole      | 1  |
| Steve Couture     | 15 |
| Carl Duprey       | 4  |
| Joshua Duprey     | 1  |
| Patrick Duprey    | <1 |
| Andrew Guerin     | <1 |
| Kristup Kalvaitis | 13 |
| Leonard King      | 2  |
| Ralph LaBombard   | 16 |
| Conner LaPierre   | 1  |
| Darren McDonald   | <1 |
| Joshua Mc.Sweeney | <1 |
| Henry Meseck      | 36 |
| Lee Provost, Jr.  | 1  |
| Alexis Seymour    | 1  |
| Dave Sweeney      | 1  |
| Kevin Tobey, DVM  | 1  |
| Jimmy Van Weort   | <1 |

## FOOD SERVICE / HOUSEKEEPING

|                 |    |
|-----------------|----|
| Tammy Allen     | 12 |
| Hope LaForest   | 22 |
| Michelle Wright | 8  |

## GRADUATE STUDENTS

|                 |
|-----------------|
| Emily Fread     |
| Cari Reynolds   |
| Katherine Smith |
| Leanna Thalmann |

## INTERNS

|                       |
|-----------------------|
| Trina Bigelow, Dairy  |
| Julia Fouts, Research |
| Kai Yun Lai, Equine   |

## ADMINISTRATION

|                   |    |
|-------------------|----|
| Kirk Beattie      | 20 |
| Rachel Dutil      | 11 |
| Rick Grant, Ph.D. | 17 |
| Laurie Miller     | 37 |

## EQUINE

|               |    |
|---------------|----|
| Karen Lassell | 25 |
|---------------|----|

## PHYSICAL PLANT

|                   |    |
|-------------------|----|
| Jared Ashline     | 13 |
| Daniel Belrose    | 18 |
| David Boulerville | 32 |
| Mark Gonyo        | 20 |
| Adam LaCount      | 11 |
| Michael Lemza     | 1  |
| Gary Morrison     | 2  |

## REMEMBRANCE

In 2020, two Miner Institute retirees passed away.

Francis Bushey worked as a custodian at Miner Institute's education building from 1976 until his retirement in 1989. He died in May. He was 96 years old.

Jerome Favreau was a member of the maintenance team at Miner for 23 years from 1974 to 1997. He died in September. He was 80 years old.



Francis Bushey



Jerome Favreau

# The William H. Miner Agricultural Research Institute



*Research • Education • Demonstration*

**Miner Institute uses its farm, facilities, and staff to conduct fully integrated education, research, and demonstration programs rather than treating them as separate and unequal functions.**



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