A message from the Chair

Dear colleagues and friends,

Welcome to another academic year. We are already more than mid-way into the fall semester, in which over 100 new students declared Animal Science as their major (Class of 2017). Let me express a warm welcome to each and every one of our new students, and wish all of our Animal Science majors a very successful semester and academic year ahead.

In September, we had our external Academic Program Review, and while we wait for the final report, the initial feedback was extremely positive. We also welcomed two new graduate students into the Department, MacKenzie "Mac" Campbell (Dr. Rick Grant at the Miner institute) and Filiz Korkmaz (Dr. David Kerr’s lab), and we initiated a search for a new tenure track faculty position in Animal Health.

This winter semester, the Department will also offer its first course in alpaca husbandry. Twelve students will have access to a herd of 500 alpacas in a beautiful setting in Ecuador located between 10,000 and 12,000 feet elevation. The landscape includes alpaca pastures, montane forest, and grassland páramos above the tree line. The instructor, Dr. Stuart White, has lived in Ecuador for 31 years and raised alpacas on the Mazar Wildlife Reserve since 1985.

Before closing, I’d like to extend my congratulations to Dr. Betsy Greene who received the 2013 National Communications Video Award for the National Horse Safety on the Road Public Service Announcement (see page 13), to Dr. Julie Smith who received the Distinguished Service Award from the National Association of County Agriculture Agents during their annual meeting in Pittsburgh, PA (see page 7), and to doctoral candidate Sue Ishaq for being awarded a USDA Pre-Doctoral fellowship.

To all of our readers, thank you for your continued support and I wish you and your families all a safe and Happy Thanksgiving.

Please follow us on Facebook (UVM Animal Science) and Twitter (uvmasci).

Kind regards,
André Wright, Ph.D.
Department Chair

Happy Thanksgiving
Barlow Lab

The Barlow lab welcomes a few new students and scientists this fall. Dr. Janet Sei is a post-doctoral researcher visiting from Plum Island Animal Disease Center. She will be in our lab most of the semester working on bovine dendritic cell isolation and characterization for our Foot and Mouth disease virus (FMDV) collaborative studies.

Three new undergraduates have joined the lab as volunteers. Suzie Stephenison and Adam Bushell are both honors students shadowing in the lab this fall to identify an undergraduate honors thesis project, and Animal Science major Sunshine has joined us as a work study laboratory assistant. Returning undergraduates include Sam D’Amico, Hagen Dooley, Mandy Erdei, Chantal Girard, Ashley McCoy and Amanda Carmellini. Sam Hart has stayed on in the lab as a temporary research assistant for the fall, and Amanda Ochoa continues to provide amazing technical support for us all. Further information on everyone’s work can be found at our updated web site http://asci.uvm.edu/labs/barlow/.

Mital Pandya presented her research to the UVM Immunobiology group this fall and followed this with a committee meeting where she mapped her plans for completion of her PhD on T cell responses and epitope discovery for FMDV. Robert Mugabi has been making excellent progress on typing Staphylococcus isolates for his project on Staphylococcus epidemiology on artisan cheese farms.

Our lab group hosted an investigators meeting for our NSF grant. All the project investigators, post-docs and graduate students traveled from Copenhagen, Nairobi and New York to Vermont in early October when foliage was still at its peak. In addition we invited two other guest scientists and coordinated a mini symposium on T-cell responses held at UVM. Speakers included Drs. Ivan Morrison, Soren Buus, Morten Nielsen, and Wendy Brown. For a summary of our meeting and their presentations check out the news section of our web site at http://asci.uvm.edu/labs/barlow/.

Scientists of the NSF-BREAD project met in Vermont for their annual investigators’ meeting hosted by the Barlow lab. Here they are at Smuggler’s Notch mimicking a 9 amino acid peptide motif, from left to right in positions 1 to 9, Dr. Vish Nene (ILRI), Dr. Nicholas Svitek (ILRI, Nairobi, Kenya), Dr. Soren Buus (University of Copenhagen), Mital Pandya (UVM), Dr. John Barlow (UVM), Dr. Janet Sei (UVM and Plum Island Animal Disease Center), Dr. Morten Nielsen (Technical University of Denmark), Dr. Bill Golde (Plum Island Animal Disease Center), and Dr. Jared Patch (UVM and Plum Island Animal Disease Center).
Kraft Lab

It has been a busy and bustling summer in the Kraft Lab. In May, we welcomed an ASCI department-familiar face, Rachel Smith, who took up the position of laboratory research technician. Rachel transitioned from the universe of microbes to the world of lipids and fatty acids. In addition, a warm welcome to our newest, long-desired, member of the lab, gas chromatograph mass spectrometer (GCMS-QP2010 Plus, also fondly known as “Hans”). Hans moved into the lab about a month ago and has since been engaged with Trevor Gearhart (PhD student at the Department of Biological Sciences) characterizing complex fish fatty acids.

Congratulations to Pamela Bay (ASCI class 2014) and Katie Ritchie (ASCI class of 2014) on each securing a Summer Mini-Grant covering expenses and supplies for their research projects. Katie participated in fieldwork at the Rubenstein Ecosystem Science Laboratory for her research project gill-netting and trawling for White perch and Yellow perch throughout Lake Champlain. Now Katie is bringing the fishy samples to the lab for lipid extraction, methylation, and analysis. Pamela took care of 60 hungry mice at the Colchester Research Facility feeding them plant- and fish-derived bioactive fats to explore their effects on glucose homeostasis and pancreatic β-cell function. First results have been submitted in the form of an abstract to be presented at the Experimental Biology 2014 meeting.

Our PhD student Melissa Bainbridge was busy this summer with farm visits, lab work, and starting a cow trial at the research farm. She is excited to continue as a teaching assistant for Animal Nutrition this semester and to begin her coursework.

For seven weeks the Kraft lab hosted two undergraduate students, Xiaoting Lu (aka “Erin”) and Guokan Ge (aka “Ben”), from the College of Animal Science and Technology at Zhejiang University as part of a summer research program for Chinese students. Erin and Ben were a huge help to our lab, processing close to 500 various forage samples and 100 milk samples. Thank you, Erin and Ben!

Dr. Kraft traveled over 7,000 miles away to present at the BIT Life Sciences 3rd Annual World Congress of Endobolism 2013 in Xian, China and at the Northwest A&F University. Enriching both professionally and personally, it was a big adventure for a short visit thanks to our native travel guide Dr. Feng-Qi Zhao.

Despite all the hard work, we also had fun times during miniature golf and a fare-well party for Erin and Ben.

For more information about our lab, please visit our website at: http://asci.uvm.edu/labs/kraft/
Greenwood Lab

It’s a busy and exciting time in the Greenwood lab. We welcome undergraduate research students Nicole Gruszczynski, Mara Hearst, Taylor Hull, Beth Kennett, Adriana Wilford, and Sarah Zeger to the lab, along with undergraduate volunteer Dana Ortiz. We are in full swing completing a trial out at the farm, as well as busy in the lab working on methodology development and sample analysis.

Zhao Lab

Welcome to visiting scholar Dr. Yingdong Ni who joined the Zhao lab in September. Dr. Ni is currently a Professor in Animal Physiology in the College of Veterinary Medicine, Nanjing Agricultural University of China. She has a strong background in liver metabolism in farm animals. Dr. Ni will stay with us for one year. We hope she will enjoy her stay and believe that her presence will make a great contribution to our program.

This past summer, Dr. Feng-Qi Zhao spent more than two months at the Zhejiang University of China teaching and conducting research. He also gave several plenary lectures at various Chinese universities and research institutions during his trip.

In August, Dr. Zhao was invited to give a keynote speech of his research at the Annual Conference of the European Association of Animal Science in Nantes, France. He also gave another keynote speech at the 11th World Congress of Animal Production in Beijing, China in October.

In addition, graduate student Shun Kitaoka presented his study at the 19th International C. elegans Meeting at the University of California in Los Angles and graduate student Xi Qian presented his thesis research at the 2013 Gordon Conference of the Mammary Gland Biology in Stowe, Vermont this past June.

To learn more about the Zhao Lab: http://www.uvm.edu/~fzhao/

Kerr Lab

The Kerr lab welcomes Filiz Korkmaz, a new Ph.D. student, to continue our research on identifying genetic and/or epigenetic differences between cows in their innate immunity to bacterial infection. Ben Green (current Ph.D student) recently had his second manuscript accepted for publication that indicates a role for DNA methylation (an epigenetic process) in affecting the immune system, and he is well on his way to completing analysis for a third paper examining this process in the age-dependent development of the innate immune system. Meanwhile, Aimee Benjamin (current Ph.D. student) has some very interesting results indicating differences between cells from Angus and Holstein breeds in their response to challenge with bacterial components. Samantha Monck is a new undergraduate researcher and will be developing assays to locate specific epigenetic differences between animals. Dr. David Kerr is currently teaching ASCI 001 to 98 students.

For more information about our lab, please visit our website at: http://asci.uvm.edu/labs/kerr/
Wright Lab

The Wright lab is busy as always. Doctoral candidate Sue Ishaq continues to cultivate novel bacteria from the moose rumen, and is preparing for a probiotic experiment next spring using lambs. Sue was recently awarded a 2013 Agriculture and Food Research Initiative Competitive Grant from the USDA National Institute of Food and Agriculture for her proposal on using bacteria culturing from the rumen of moose to improve production in lambs. Ph.D. student Laura Cersosimo is hard at work getting her first animal trial underway with 24 primiparous cows at the Miller farm. Laura is comparing the rumen methanogen population between different breeds of dairy cattle.

Our undergraduate researchers, Sam Rosenbaum (ASCI, Class 2016), Emma Hurley (ASCI, Class 2016), Ken Wesley (ASCI, Class 2016), Doug Reis (Microbiology and Molecular Genetics, Class 2015) and Michael Chilton (Microbiology and Molecular Genetics, Class 2015) have made excellent progress. Sam and Emma are learning how to analyze bacterial DNA sequence data using bioinformatics programs, Doug and Michael are assisting Sue with culturing and testing of different bacteria isolated from the rumen of moose, and Ken is assisting Post-Doctoral Associate Dr. Benoit St-Pierre to measure the effect of different input materials on anaerobic digester production. Doug and Sue are also currently writing a manuscript on their data of lactic acid bacteria, and Benoit recently published a new paper on the bacterial populations in three dairy farm manure digesters.

The lab also hosted several visitors over the past two months. Natasha Bell, a Ph.D. student from Texas A&M was here for a week of lab training, and Alejandro Salgado, a Ph.D. student from the University of Tromso, Norway, who is studying under Drs. Monica Sundset, Philip Pope and André Wright, also came to learn some new techniques. We were fortunate to have Dr. Mark Morrison from the University of Queensland in Brisbane, Australia, and Dr. Todd Callaway from the USDA-ARS in College Station, Texas visit the lab.

To learn more about the Wright Lab, please visit our webpage: http://asci.uvm.edu/labs/wright/people.html

Webinars featuring Dr. Julie Smith are popping up online!

- Making a connection between agricultural issues and all hazards planning Slide link: http://blog.uvm.edu/jmsmith/files/2013/06/webinar060413.mp4
- Taking a closer look at agricultural farms and facilities in the community through a process called “asset scoring” Webinar link: http://youtu.be/1GJ7egcUqcg
- Identifying capabilities to address potential consequences of agricultural emergencies: http://youtu.be/DnVTetm-MpI
- Identifying and accessing resources to address potential consequences of agricultural emergencies Webinar link: http://youtu.be/HnoM7irAGk4
- Modern Livestock Production Trends and Vulnerabilities Webinar link: https://learn.extension.org/events/search?utf8=%E2%9C%93&q=production+centers&commit=Search

VDIA and Vermont Feed Dealers Fall Conference

The Fall Conference and Annual Meetings of VDIA and the Vermont Feed Dealers went off without a hitch in a new location, the Stoweflake in Stowe, in September. The program and banquet were well-attended. Dr. Wright and CALS Dean, Dr. Tom Vogelmann spoke to attendees on the second day of the conference. Dr. Julie Smith arranged for both keynote speakers, Michele Payn-Knoper of Cause Matters Corp. and Trent Loos of LoosTales.com, to visit with Judy Simpson of WCAX on Across the Fence. Michele and Trent both shared important messages that you can view and share at https://www.youtube.com/watch?v=yMAo1JQczB4 (Part 1) and https://www.youtube.com/watch?v=3w5B2ly56Q8 (Part 2).

This semester Animal Science major Liz Remick is assisting VDIA with its social media presence. Check it out and like the VDIA page at https://www.facebook.com/VermontDairyIndustryAssociation?ref=hl

McKay Lab

The McKay lab is happy to welcome two new additions to the lab, Sydney Friedman and Fernando Betancourt. Both Sydney and Fernando are pre-vet sophomore animal science majors who joined the McKay lab in the beginning of the Fall 2013 semester. Currently, Sydney and Fernando are learning fundamental genetic and epigenetic laboratory techniques through work with the PRKA gene family. Additional Information about Sydney, Fernando and the rest of the McKay lab can be found on our website: http://asci.uvm.edu/labs/mckay/

In other news, Dr. Stephanie McKay was invited to attend the 5th International Symposium on Animal Functional Genomics in Garauja, Brazil and was an invited speaker at the Sao Paulo School of Advanced Sciences in Animal Functional Genomics in Aracutuba, Brazil. In addition to lecturing on RNA-Seq, she had the opportunity to visit the Nelore do Golias cattle operation. (http://www.neloredogolias.com.br/)

VDIA Board Members (front row L to R): Paul Kindstedt (UVM), Anne Doe (Boston Post Dairy), Brian Trudell (Jasper Hill Farm), Julie Smith (UVM); (back row L to R): Bebe Zabilansky (Bruns Bros.), Gene Archambault (St. Albans Cooperative Creamery), Brady Metcalf (Agri-Mark), Chris Pearl (Agri-Mark), Alan Curler (VEDA), and George Wilcox (retired, Agri-Mark).

Futuro, at the Nelore do Golias Ranch in Brazil, whose genome is being sequenced for use as the Bos indicus reference genome.
Brendan Rowley Receives VDIA Scholarship

Currently a junior at UVM, 2 + 2 FARMS (Farm and Agricultural Resource Management Stewards) student Brendan Rowley of Milton, Vermont is the 2013 recipient of a Vermont Dairy Industry Association (VDIA) Memorial Scholarship. Scholarships are available to Vermont residents studying dairying, dairy foods, or dairy industry-related subjects at 2- or 4-year institutions of higher education. New this year: students meeting these criteria but enrolling in out-of-state institutions are also eligible. The scholarship program is administered through the Vermont Student Assistance Corporation (VSAC). Deadlines for next year’s application process will be posted in November at www.vsac.org.

Risk communication and biosecurity

Biosecurity has to do with managing the risk of introducing or spreading disease. Communicating about risk management—in other words, risk communication—is essential for making a biosecurity risk management plan come to be and be effective.

Dr. Julie Smith recently presented a workshop on Message Mapping: Before, During and After Disaster at the Joint Council of Extension Professionals Galaxy IV conference in Pittsburgh, Pennsylvania. One participant relayed an experience where the Extension organization was ill prepared for the crisis communication needs after a food-related disease disaster. Dr. Julie would like to see risk management planning and risk communication be implemented to avert such disasters in the future.

Continuing on that theme, Dr. Smith teamed up with Dr. Katherine Waters of University of Minnesota for a workshop session on Communication Before, During and After Disaster: How Key Message Development and Audience Identification Strengthen Extension Capabilities at the Extension Disaster Education Network Annual Meeting in October. She will also co-facilitate an interactive workshop on biosecurity called Grime Scene Investigation developed by Dr. Susan Kerr of Washington State University Extension.

Louis Bedor III, former Outreach Professional assisting Dr. Julie Smith with her emergency biosecurity project, took a position with Vermont’s Division of Emergency Management and Homeland Security within the Department of Public Safety. Lou reported that the emergency management training he received while working on the biosecurity project prepared him well for his new position. Congratulations to Lou!

Dr. Smith receives Distinguished Service Award

Dr. Julia M. Smith received the Distinguished Service Award from the National Association of County Agriculture Agents during the 2013 Annual Meeting and Professional Improvement Conference held in Pittsburgh, Pennsylvania. Dr. Smith was one of several honorees who represent the top two percent of the membership selected by their peers and the Director of Extension. The following represents the awardee’s recognition citation:

An Extension Dairy Specialist with statewide responsibilities since 2002, she is recognized as an expert in dairy biosecurity and animal disease emergency management issues. Julie joined the Extension Disaster Education Network’s agrosecurity team at its inception in 2005 and is currently its chair. She has facilitated many agrosecurity trainings in Vermont and helped establish Vermont’s Animal Agriculture Alert Network. Julie manages websites on biosecurity, Johne’s disease, and disaster issues, and also contributes to eXtension.
Long Island Aquarium Internship

Have you ever been kissed by a sea lion? Have you ever gone swimming with seals? Hand fed a monkey? Shaken a sea lion’s flipper? Would you like the opportunity at these unique experiences AND get credit for it? Consider an internship at the Long Island Aquarium and Exhibition Center! This rewarding internship allows you to gain firsthand experience and knowledge with a variety of animals including harbor seals, a grey seal, sea lions, otters, Japanese snow monkeys, long-tongued bats, porcupines, and a sloth!

I interned at the Long Island Aquarium this summer as a mammal department assistant. What does a mammal department assistant do you ask? Great question! Interns have an incredible amount of responsibilities that help the trainers to get all of the daily tasks done on time! Upon first beginning the internship, I was allowed to prepare the diets of the animals, set up enrichment, participate in the sea lion shows, and watch training sessions. With hard work and dedication, I was rewarded by being allowed to do some more specific, really cool tasks. I got to free feed seals, get kissed by a sea lion, practice behaviors with seals, call the monkeys inside for closing, shake a sea lion’s flipper, shift monkeys to different holding cells and hand feed them, and wave to the crowd with a sea lion! During the summer internship, there is even a chance to bring out your competitive side by participating in the intern Olympics and winning prizes. Finally, as a special treat for finishing the internship, you get a chance to swim with the seals!

From completing this internship I have learned, developed and strengthened so many skills that I will absolutely apply to any job in the future. My time management, communication, and public speaking abilities were definitely challenged on a regular basis which helped to improve each one. Aside from learning skills, I have gained general, medical and behavioral knowledge about all of these amazing animals that I did not know prior to the internship. Did you know that a male sea lion can weigh up to 880 pounds? Did you know that a gray seal can live up to 50 years in captivity? Just from being around the aquarium every day you gain so much fascinating knowledge about all of the marine wildlife.

So, what are some tips for landing this internship? For starters, apply online and submit everything before the date that it is due. The interview is your opportunity to impress the trainers. If possible, do the interview in person. Answer all of the questions honestly, ask questions of your own and don’t be afraid to be yourself! Once you land the internship, work hard, be open to try anything and enjoy every second of it. You never know where a new experience will bring you!

For more information about participating in a Long Island Aquarium internship, check out their web site at: http://www.longislandaquarium.com/about-getinvolved-internship-apply.html

Students interested in internship opportunities should check out the department’s Internships & Careers web site:
http://asci.uvm.edu/intern/

If you would like help or additional information, you are encouraged to make an appointment with Fran Kinghorn, ASCI Internship Coordinator. Room 107C Terrill Building or email her at Fran.Kinghorn@uvm.edu

Kristen ten Napel shakes hands with a sea lion’s flipper at the Long Island Aquarium.

Kristen ten Napel is kissed by a sea lion during her internship at Long Island Aquarium.
UVM Dressage Team

The UVM Dressage Team hosted its annual Intercollegiate Dressage Association Show at the Champlain Valley Exposition October 13 and 14.

The team had a superb weekend! On Saturday, Natasha Sprengers-Levine earned 1st place at First Level, Adriana Wilford was 1st and Jessie Gehlmeyer was 4th at Upper Training Level, Sydney Foster was 3rd at Lower Training Level and Abby Szatrowski was 2nd at Introductory Level. UVM Team A came in 1st overall!

On Sunday, Adriana Wilford was 3rd at First Level and Natasha Sprengers-Levine was 4th, Katie Barton was 5th at Upper Training Level, Jordan Gechtman was 2nd at Lower Training Level, Ilana Cramer was 3rd and Meghan Egan was 4th at Introductory Level. UVM Team A placed 4th overall and UVM Team B placed 5th.

All in all, it was a beautiful weekend. The teams we hosted enjoyed themselves, and we all enjoyed the weather and the beautiful foliage!

To learn more about the dressage team, visit their website:
http://www.uvm.edu/~dressage/

Submitted by Natasha Sprengers-Levine
Class of 2014

Dressage Team Upcoming Shows
for Spring 2014:

Feb 22: Mount Holyoke College
March 15: University of Connecticut
March 29: University of Massachusetts

April 2014: IDA Nationals

Natasha Sprengers-Levine competing on Teagan at First Level, placed first.

2013 UVM Dressage Team
UVM CREAMers show at Addison County Fair

Submitted by Sarah Zeger
Class of 2016

This summer a group of CREAMers from both CREAM 2013 and Summer CREAM 2013 took five Holstein and eight Jersey heifers to the open dairy show at Addison County Fair and Field Days. In the Holstein show UVM CREAM G.W. Atwood Sarsaparilla was entered into the spring calf class, UVM CREAM G.W. Atwood Meek and UVM CREAM Detroit Maisy were entered in the winter calf class, UVM CREAM Sid Luna was entered in the fall calf class, and UVM CREAM Braxton Infinity was entered in the fall yearling class. We did very well with Maisy placing 3rd, Luna placing 2nd, and Infinity placing 4th.

Later in the week our eight Jerseys went to the fair. We took spring calves UVM CREAM Celebrity Nellie and UVM CREAM Applejack Khaleesi, winter calf UVM CREAM Headline Fiona, fall calves UVM CREAM Grandious Lady and UVM CREAM Hired Gun Stardust, spring yearling UVM CREAM Renegade Sarabi, winter yearling UVM CREAM Eclipse Aurora, and fall yearling UVM CREAM Connection Saffron. Fiona took 2nd place, Lady took 1st place, Stardust took 5th place, Sarabi took 2nd place, Aurora took 1st place, and Saffron took 4th place. Our best three Jersey heifers were entered into the best three class where we took 3rd place. We also entered the produce of a dam class with two daughters of UVM Illusion Sierra, Saffron and Lady, and we took 3rd place.

UVM CREAM also took three of our best Jersey heifers, Fiona, Lady, and Sarabi to the Champlain Valley Fair open dairy show. At the fair Fiona took 5th place, Lady took 4th place, and Sarabi took 5th place. We also entered these heifers into the best three class where we took 3rd place. After a long summer of preparation and hard work we are very proud of how well these heifers, who were born and raised at the UVM CREAM barn, placed at both shows. This is an experience that my fellow CREAMers and I will surely carry with us for years to come.
CREAM Celebrates 25 Years

Homecoming weekend saw a BBQ celebration of 25 years of CREAM. About a hundred past and present CREAMers, industry representatives and the majority of current faculty members turned out, in of all things, a horse arena.

Speeches delivered by Doctors Purdie, Gilmore and Vogelmann highlighted the past, present and future of the CREAM program. From all reports a good time was had by all who attended. CREAM 13 would like to thank all the staff and faculty who participated in making the event a success.

Summer CREAM 13 dealt with difficult weather conditions but still managed to maintain production. With a limit of 10 students placed on the class, the workload was high and they always seemed to have a smile on their faces as they spent summer getting in touch with their bovine side. They also had success in the show ring (see Addison show report, Page 10).

CREAM 13 students are hard at work to improve the success of the program and are now in the midst of their semester projects which will be presented at our annual dinner.
Dr. Betsy Greene invited Dr. Bridgett McIntosh (University of Tennessee) to present at the annual Fall Equine Pasture Workshop. This year the workshop was held in two locations, Log Cabin Stables (Alburgh, VT) and Rough Terrain Farm (Randolph, VT). The topics, times, and locations were identified by “asking the industry” using social media resources. Thank you to Phil Pearo at Log Cabin Stables and UVM Alum Jessie Stewart Riley (UVM ’08), Assistant Professor at Vermont Technical College, for hosting these workshops.

Topics included;
- Getting the most out of your pasture
- Preserving good ground with high traffic areas
- War against weeds
- Pasture associated nutritional issues

Dr. Betsy Greene discusses high traffic areas, composting, and responsible environmental stewardship at Log Cabin Stable in Alburgh, VT.

Dr. Bridgett McIntosh demonstrates pasture height measurement as one of many tips for improving pasture quality and getting the most out of your pasture at Rough Terrain Farm in Randolph, VT.

Equine Science Program

Dr. Betsy Greene and Dr. Josie Davis help Horse Barn Cooperative students bring in horses at the Ellen A. Hardacre Equine Facility in preparation for the CREAM 25th Anniversary celebration in the Equine Indoor Arena. Dr. Greene is a Professor and is in her 14th year as the State Equine Specialist. Dr. Davis originally started the UVM equine program in 1991 and is currently the Associate Dean of Academic Programs. She is reliving years gone by as she fills in this semester for Dr. Jenny Wilkinson who is out on maternity leave.
The Ellen A. Hardacre Barn was the center of attention during 2013 UVM Homecoming. Horse Barn Cooperative and Equus students took part in several equine demonstrations ranging from a jumping exhibition, dressage, judging, driving, and equine gaming to educate and entertain the crowd of alumni and friends.

2013 UVM Horse Barn Cooperative members and equine faculty.

Sugar Makers award grant

Dr. Betsy Greene and Wendy Sorrell successfully submitted a grant submission to the Chittenden County Sugar Makers Association this summer. The Sugar Makers awarded maple products and maple shirts (approximately $2,000 value) to promote and represent Vermont Agriculture at the national extension meetings which were hosted by the Northeast Region.

Vermont Agricultural Agents Association members receive help from Maine and Washington colleagues distributing Vermont maple sugar leaf candy (using real sap buckets) at the national Galaxy IV Conference in Pittsburgh, PA. Texas Ag Agent and Auctioneer, Tom Benson, poses with the northeast agents.

(September, 2013) Dr. Betsy Greene collects the 2013 National Communications-Video Award for the “Mutual Respect May Save a Life” Public Service Announcement at the Galaxy IV meetings in Pittsburg, PA. UVM Extension, Vermont Horse Council and Vermont Farm Bureau partnered to create this nationally distributed PSA.

Photos courtesy of Scott Hawbaker
Pre-Veterinary Club Activities

UVM’s Pre-Veterinary Club hosted a talk by Dr. Gladys Kalema-Zikusoka, a leading conservationist and scientist working to save critically endangered mountain gorillas in East Africa. Trained as a wildlife veterinarian, Dr. Gladys and her husband Lawrence Zikusoka founded Conservation Through Public Health (CTPH) in 2003. This award-winning non-profit organization promotes biodiversity and conservation by improving the primary health care and livelihoods of the people in and around Africa’s protected areas. The efforts of CTPH around Uganda’s Bwindi Impenetrable National Park have improved attitudes toward conservation among local villagers, reduced disease transmission between humans and gorillas and eliminated poaching. Not only was this event well attended by members of the pre-vet club and animal science department, but it also drew people from the greater Burlington community. Students came away with a better understanding of what Conservation Through Public Health is all about, and many were able to spend some time talking with Dr. Gladys individually about her program and their own career goals.

Last week Pre-Vet Club had Burlington-area veterinary surgeon Dr. Kurt Kenny speak to the group about his work in two different practices. Another highlight for the club was to have members of the Burlington Police Department K9 unit speak to them about what they do.

Pre-Vet Club has been working on practice veterinary school interview questions, understanding case studies, and each week they go over an article that has to do with a current topic in veterinary medicine. They are currently in the process of planning other activities, speakers, and a trip to a veterinary school for next semester.
We were blessed with a beautiful day and crowd for our annual Vermont Day Open House held in August.

UVM Triumph (2011 stallion) is driven by Steve Davis on August 14th at the annual VT Day.

UVM Van Doren, (UVM Tennyson x UVM Halcyon), 2013 colt, appreciates a brisk fall morning at the Weybridge Farm.

Apprentice Intern, Kaitlin MacIntyre of Aurora, OH, demonstrates the attributes of 2009 gelding, UVM Ready Made for Morgan Horse Farm guests.

CALS Dean, Thomas C. Vogelmann thanks Mrs. Marilyn Childs, Vice President of the Morgan Horse Heritage Foundation.

The bones of Black Hawk #20 now rest in a little more style at the UVM Morgan Horse Farm.

The University of Vermont Morgan Horse Farm 2013 Raffle Foal, **UVM Vitality**, was won by Molly Selvidio of New Hampshire. On Sunday, November 3rd, Molly had the chance to come and meet UVM Vitality for the first time. Seen here, they are a handsome pair.

The ticket was drawn by Dr. Ronda Moore who is the Chairperson of the UVM Morgan Horse Farm's Advisory Committee. UVM Vitality and her classmates have been weaned and will begin their first winter in our 'colt shed.'

With more broodmares due to foal next spring, we are looking forward to announcing our 2014 Raffle Foal by June of next year and continuing our raffle tradition.

Thank you to all who entered this year's raffle. Please come and visit us at the UVM Morgan Horse Farm in Weybridge, Vermont, the "Home of the Morgan."

Winner of 2013 Raffle Foal announced

Winner of 2013 Raffle Foal announced

Winner of 2013 Raffle Foal announced

Restored centerpiece adorns MHF main barn lobby

The Morgan Horse Farm’s Main Barn lobby has a beautiful restored centerpiece. On October 2nd, CALS Dean Vogelmann accepted a check from the Morgan Horse Heritage Foundation culminating the Black Hawk skeleton encasement project.

Restored centerpiece adorns MHF main barn lobby

Restored centerpiece adorns MHF main barn lobby

Restored centerpiece adorns MHF main barn lobby

Restored centerpiece adorns MHF main barn lobby

UVM Vitality (UVM Abington x UVM Havana) with the 2013 Raffle Foal winner, Molly Selvidio.
**Professor’s extension research engages students**

Dr. Betsy Greene encourages students by involving them in her research in the equine industry. Greene is a professor and extension equine specialist at the University of Vermont. She researches management, production and safety of equine.

Over the years, Greene has become a role model in the equine industry. She has secured extramural funding for her research in equine pasture management. She has also collaborated with several state agencies to develop educational materials for equine producers.

In honor of her achievements, Greene received the Equine Science Award at the American Society of Animal Science National Awards Program last week.

Greene has published many journal articles. She has studied the environmental effects of equine grazing and the feed standards for miniature horses.

Greene has served in many organizations including the United States Equestrian Federation, the Equestrian Medical Safety Association and the National Association of Agricultural Agents. She is the co-chair of eXtension’s HorseQuest Community of Practice, a website devoted to spreading information about the equine industry.

Greene’s previous honors have included the 2010 USDA National Institute of Food & Agriculture Partnership Award. She has also received the Joseph E. Carrigan Award for Excellence in Teaching in 2010.

Greene received her BS degree from Morehead State University in Kentucky. She earned her MS from the University of Arizona and her PhD from Kansas State University.

The ASAS-ESS Equine Science Award is given to recognize outstanding achievement in the areas of extension, research, teaching or agribusiness in the equine industry. The American Society of Animal Science is a professional organization that serves more than 5,000 animal scientists and producers around the world.

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**Congratulations to Dr. Wilkinson and her family**

Congratulations to ASCI equine lecturer Dr. Jenny Wilkinson and her husband Dr. Joel English on the birth of their daughter Mabel Thomas English. Mabel was born on July 12th at 8:54 a.m. weighing in at 8 lb 13 oz and measuring 22 inches long. She is pictured to the right being held by her big brother, Townsend Ogden English while their proud father looks on.
Welcome to Animal Science

Mackenzie “Mac” Campbell, originally from Reisterstown, Maryland, received his B.S. in Animal Science from the University of Maryland, College Park in 2012. Following graduation, he worked at both the Maryland University Dairy and a livestock biomedical research facility before coming to graduate school. He will be working towards his M.S. under Dr. Rick Grant at the William H Miner Institute in Chazy, New York, as well as taking classes at UVM. His research will focus on the effects of overcrowding lactating dairy cattle and variance in physically effective neutral detergent fiber rations on cattle behavior, health, and production.

Mackenzie Campbell

Filiz Korkmaz is originally from Wrentham, Massachusetts. She studied at the University of Massachusetts where she earned a Bachelor of Science in Microbiology. She joined the Cellular, Molecular and Biomedical Sciences PhD program in August 2012 and is working on her dissertation research in the laboratory of Dr. David Kerr. Her research is focused on the innate immune response to bovine mastitis and, in particular, how the immune response may be regulated epigenetically. Outside the lab, she enjoys running, skiing, cooking and traveling.

Filiz Korkmaz

Dr. Janet Sei, is originally from Nairobi, Kenya. She received her B.S in Biology and Biochemistry in 2006 from Shippensburg University of Pennsylvania. In 2012, she received her doctorate in Immunology and Infectious Diseases from Penn State University. Janet is a Post-doctoral research associate in Dr. John Barlow’s lab, and works on bovine immune responses to foot-and-mouth disease virus (FMDV). Since FMDV is a biosafety level 3 pathogen, Janet is currently working at the Plum Island Animal Disease Center in New York. Her research investigates the role of bovine dendritic cells during FMDV infection. Janet enjoys traveling, watching movies, and dancing.

Janet Sei
UVM Halloween Horse Barn enjoyed by many

Members of the UVM Horse Barn Cooperative hosted an evening of trick-or-treating and a bake sale on Monday, October 28th between 5:30 and 7:30 pm at the Ellen A. Hardacre Equine Center located at 500 Spear Street in South Burlington. This event was well attended by local children in the community and their families who were amazed by the costume clad horses and students. Of course, they also enjoyed receiving candy at each stall. This is a popular event held annually on the Monday before Halloween and is fun for the entire family. [http://asci.uvm.edu/horsebarn](http://asci.uvm.edu/horsebarn)

Dr. Greene and Dr. Smith appear on Across the Fence

*Across the Fence* is the longest running daily farm and home television program in the country, airing Monday-Friday, 12:10-12:30 p.m. on WCAX TV Channel 3. UVM Extension Equine Specialist, Dr. Betsy Greene, and UVM Extension Dairy Specialist, Dr. Julie Smith, appeared on the following episodes:

- Vermont Equine Extension Workshops and Equine Activities: Greene/Pearo – (11/06/13)
- Advocating for Agriculture: The Vermont Dairy Industry Association and the Vermont Feed Dealers & Manufacturer's Association (Part Two): Smith/Payne-Knoper – (10/01/13)
- Advocating for Agriculture: The Vermont Dairy Industry Association and the Vermont Feed Dealers & Manufacturer's Association (Part One): Smith/Loos – (9/30/13)
- Getting the Most Out of Your Pasture: Greene/McIntosh – (9/4/13)
- The Role of Chittenden County Farm Bureau: Greene/Sogoloff – (7/8/13)
I envision a bright future for the Paul R. Miller Agricultural Research Farm and invite you to be a partner in its renovation. Since its construction nearly 50 years ago, the Miller Farm on Spear Street has been a vital part of the College’s teaching, research and outreach activities. It is time to build upon that success.

Our plans for an array of exciting and essential facility improvements will replace worn, out-moded buildings with state-of-the-art farm facilities designed to serve the College’s teaching, research and public education needs far into the 21st century. New classroom and laboratory facilities will enhance our outstanding CREAM and EQUUS programs as well as other Animal Science and Plant & Soil Science courses. We will expand our dairy research capabilities through new lab and animal care facilities and will increase the involvement of Vermont farms as research partners through the UVM Dairy Center of Excellence.

The $300,000 investment made by the State of Vermont in UVM’s farm complex in the mid 1960’s has paid substantial dividends. Just as Dean Paul Miller and Professor Robert Fitzsimmons worked tirelessly over 50 years ago to bring modern agricultural teaching and research facilities to fruition, my colleagues and I intend to fulfill our vision for these necessary improvements.

Our formula for success requires a blending of college funds with private donations. Your help is needed to accomplish our Phase I fundraising goals. Together, we can ensure that our college continues to deliver excellent educational programs and conduct cutting-edge research to serve our students, Vermont’s dairy industry and our many other important stakeholders for generations to come. Please contact me at calsdean@uvm.edu to learn how you can be of assistance.
Support UVM Animal Science

The Department of Animal Science is home to some of the best and brightest students, high quality research, and outstanding outreach activities at the University of Vermont. Your donation will help the Department continue to deliver first-rate service in these areas. Annual gifts from alumni and friends at all levels do make a difference. Please consider supporting the Department with a donation of any size.

Gifts may be made online at the Development Office’s secure website:

http://alumni.uvm.edu/giving

Please specify Animal Science Department in the “Other” category.

ASCI 298: Primer in Alpaca Husbandry

Twelve students will be studying alpaca husbandry in Ecuador during the winter session. Don’t miss the next issue of our newsletter to hear all about their exciting educational travel experience.

Calendar of Events

2013

November

December
Dec. 4, 2013. Last Day of Classes
Dec. 6, 9, 10, 12, 13, 2013. Exam Days
Dec. 14, 2013. December Commencement

2014

January
Jan. 1, 2014. New Year’s Holiday
Jan. 10, 2014. AgEncode Meeting; San Diego, CA.
Jan. 11-14, 2014. Plant and Animal Genome Meeting; San Diego, CA.
Jan. 20, 2014. Martin Luther King, Jr. Holiday

February
Feb. 17, 2014. Presidents’ Day

March
Mar. 3-7, 2014. Spring Recess

April
Apr. 18, 2014. Honors Day
Apr. 30, 2014. Last Day of Classes

May
May 2, 5, 6, 8, 9, 2014. Exam Days
May 18, 2014. Commencement
May 18-21, 2014. Digestive Disease Week (DDW) Annual Meeting; Orlando, FL
May 18-21, 2014. 113th General Meeting of the American Society of Microbiology; Denver, CO.

June

July
Jul. 20-24, 2014. The 2014 Joint Annual Meetings of the American Dairy Science Association (ADSA), American Society of Animal Science (ASAS), and the Canadian Society of Animal Science (CSAS) will be held together in Kansas City, MO.