

The University of Vermont College of Agriculture and Life Sciences

(CALS) is both personal and decidedly different. We are a small college embedded in a Public Ivy. From our university's highly ranked programs to our stellar teaching and research in the sciences, CALS offers a breadth of programs that create opportunities for the future. Our faculty, staff and students are passionate, engaged and approachable. Through our innovative curriculum, hands on learning opportunities and high quality advising, students help produce a better world, with sustainable goals in mind.

We are proud to be caretakers of the legacy created by our valued alumni and friends. Thank you for your support and engagement.



Animal and Veterinary
Sciences
Biochemistry
Biological Science
Community
Entrepreneurship
Community and
International Development
Dietetics, Nutrition

and Food Sciences

Ecological Agriculture

Environmental Sciences

1,479 students

Environmental Studies
Food Systems*
Microbiology
Molecular Genetics
Nutrition and Food Sciences
Plant Biology
Public Communication
Sustainable Landscape
Horticulture
Self-Designed Major

* coming soon

Animal and Veterinary Sciences



The New Dairy Barn

The UVM Paul R. Miller Research and Educational Center provides excellent energy efficient facilities for agricultural research, education, and plays a key role in the development and promotion of agriculture in Vermont and New England. Activities

include dairy research, equine sciences, mammary biology, milk quality, biosecurity, safety, and animal health.



CREAM



900,000 lbs. of milk produced as part of the CREAM program

15,760 hours is the minimum time worked by CREAM students this year

98% acceptance rate of UVM CREAM students who apply to veterinary schools.



Dr. Julie Smith Presented John Finley Award

Dr. Julie Smith, Extension Associate Professor in the Dept. of Animal and Veterinary Sciences, was awarded the 39th Annual John Finley Award for excellence and dedication to Vermont Agriculture.



ASCI Student Becomes First Woman Certified as a Combat Engineer

Vermont National Guard Spc. Skylar Anderson became the first woman certified as a combat engineer — a battlefield job that, like many others, was once held exclusively by

men. "I knew I was going to be one of the first, but I didn't know I was going to be THE first," said Anderson. Anderson is a student in the Department of Animal and Veterinary Sciences and hopes to become an equine veterinarian.

credits: Wilson Ring, AP News

Alumni Spotlight



Today Show's
Al Roker Learns
a Lesson From
CALS Alum,
Lindsey King



Lindsey King, CALS alum, '04, is currently the Senior Keeper at the San Diego Zoo. Lindsey was featured on the Today Show recently, teaching host Al Roker about Koalas. She is also the Vice President of the American Association of Zoo Keepers. Lindsey majored in Animal Science.

Community Development and Applied Economics



Community Development in St. Lucia

Students in the St. Lucia Community Development class visited the Caribbean's only "drive-in volcano" with numerous hot springs, bubbling mud pools and fumaroles (steam vents). The students worked with the St. Lucia Ministry of Commerce to interview local consumers on their experiences with faulty consumer products.

645 CDAE students have engaged with the community through service-learning partnerships in the classroom this year alone.

20,000 Vermonters have contributed to the Center for Rural Studies Vermonter Poll over the last 25 years.



CDAE Named COTS Partner of the Year

Community Development and Applied Economics Department is named the Committee on Temporary Shelter (COTS) Community Partner of the Year.





Professor Kathleen Liang Earns Vogelmann Award

The Hubert W. Vogelmann Award in CALS recognizes outstanding effort and achievement in research and scholarship.

CDAE students has worked over **10,500** hours in community internships this year.

1 Vermont was ranked first among top Peace Corps-producing states. CDAE is home to the Peace Corp recruiter and the undergraduate Peace Corp Prep program.



Jonathan Leonard Recipient of 1st Annual Thomas Patterson Award

This award recognizes a faculty member who has demonstrated innovative and outstanding teaching that is consistent with the stellar education Tom Patterson provided more than 4,000 CALS students over 40 years. Jonathan has taught core skills in public speaking and technology for decades, and worked as a team with Tom to provide a foundation for first year CALS students.

A Sample of Alumni in Action

Jonathan Bond

Director of Vermont Tenants and Mobile Home Programs at CVOEO

Chelsea Clark

Public Affairs Specialist at Vermont Air National Guard

Chelsea Davidoff

Corporate Social Responsibility Coordinator at Paramount Pictures

Erica Campbell

Farm to Plate Program Director at Vermont Sustainable Jobs Fund

Travis Marcotte

Executive Director, Intervale Center



Microbiology and Molecular Genetics

Rwanda Ministry of Health hosts Undergraduate Intern to Study Health Policy



credits: University Communications

Microbiology major, Gabby Sarriera, is in Rwanda this semester working with the Ministry of Health. After meeting Dr. Agnes Binagwaho at the Global Health and Innovation Conference at Yale last year, Dr. Agnes offered Gabby an internship to help study health policy with the goal of providing better healthcare access to all. Dr. Laura Hill, Senior Lecturer in Plant Biology, has been a wonderful mentor to Gabby while setting up this experience.

Alumni Plans After Graduation

Priyanka Ravichandran

Accepted at Tufts to do a graduate program in Public Health

Liam Kelley

Accepted at Harvard for a PhD program

Lauren Donnelly

Accepted to UVM College of Medicine

Emily Keller

Started a non-profit in Guatemala to feed the hungry, graduated early so that she could spend the next 6 months there before coming stateside to start dental school in the fall of 2016.

81% of undergraduate MMG students go on to pursue a medical or research track.

Lauren Donnelly Named Outstanding Senior



Lauren Donnelly is this year's recipient of the Lawrence K. Forcier Award, which is given to the outstanding CALS senior in recognition of outstanding academic achievement, research, scholarship and character. A microbiology major, Lauren

has a near perfect GPA and she is co-author on two publications, and currently revising a third research article submitted to the Journal of Bacteriology. Lauren is also a pre-health peer mentor and volunteers with several non-profit organizations.

Niles Trigg Earns Alexander Kende Academic Merit Award



Niles is a double major in microbiology and molecular genetics, as well as a member of the Honors College. He conducted research with Dr. Susan Wallace, studying the response of glycosylase to damaged DNA bases. Niles is a member of the Pre-Medical

Enhancement Program, MEDLIFE, and has been a teaching assistant for Microbiology and Infectious Diseases. He has tutored students in both chemistry and biology. Niles is also the Captain of the Intramural Soccer Team.

WE ARE THE FRONTIERS OF SCIENCE AND THE ENVIRONMENT...

CALS is home to four interdisciplinary and cross-college programs: Biochemistry, Biological Sciences, Environmental Sciences, and Environmental Studies.

Environmental Studies Student Visits Family Connection in Cuba

Aidan Wahl, a UVM senior majoring in environmental studies traveled with



Aidan Wahl, '16, (right) visited Sloppy Joe's in Havana, Cuba- the same bar and restaurant her great-grandparents (left) frequented in the 1940's. (photo courtesy Aidan Wahl)

a UVM class this year to visit Cuba. Aidan's grandfather, Julio, grew up in Cuba, working on a farm. In 1947, at age 14, he moved with his family to the United States — and he's never been back. This semester, UVM students studied the famed urban farms and coral reefs of Cuba. They then traveled there to see how conservation is—and isn't—working on this fast-changing island nation.

source: University Communications

Pollutant Movement through Air Land and Water

Environmental Sciences Co-Director, Don Ross, is offering a new course that provides an opportunity for students to work with the community. The course

is taken by students in three colleges (CALS,

RSENR, CAS) and partners with Friends of the Northern Lake and Stone Environmental (Montpelier) to decide which new system design to use to treat outflow from agriculture drainage tile.

Nutrition and Food Sciences

2 Senior undergraduate students, **Dani Hansen** and **Gabby Headrick**, have been accepted into the 2016 class of the exclusive Master of Science in Public Health / Registered Dietitian Program at Johns Hopkins University. Congratulations!

Dr. Lizzy Pope Recipient of VT Women in Higher Education Award



Dr. Pope has been chosen for the VT Women in Higher Education's Williams Emerging Professional Award. Dr. Pope joined the Department of Nutrition and Food Sciences in the fall of 2014 as an Assistant Professor and Director of the Didactic Program in Dietetics.

Alumni Spotlight Jessie Curran, MS, RD



Jessie graduated from UVM with a B.S. in Nutrition and Food Sciences in 2009, and then earned her M.S in Dietetics in 2013. Jessie has worked as a Central Texas Food Rescue Coordinator at the Capital Area Food Bank of Texas, a Nutrition Educator at the Pediatric Weight Management

Clinic, and Public Health Specialist at the Vermont Department of Health. In March 2015, Jessie joined Brown University in Providence, RI where she currently works as a Registered Dietitian.

Professor Donnelly Featured in Netflix Documentary

Professor Catherine Donnelly appeared in the Netflix documentary of Michael Pollan's Cooked in February. Featured in Season 1, Episode 4, "Earth", Professor Donnelly was interviewed on cheese safety. Watch the series on Netflix!





Dr. Farryl Bertmann Named 2016 Outstanding Dietetics Educator

Dr. Farryl Bertmann was awarded the Vermont Academy of Nutrition and Dietetics Outstanding Dietetics Educator Award for the year 2016.



She currently serves on the
Academy of Nutrition and Dietetics Foundation Healthy Food for a Healthy Planet group, the Vermont Academy of Nutrition and Dietetics' State Policy Representative and State Regulatory Specialist, and as the Dietetic Educator for Food For Thought, a non-profit supplemental summer lunch program in her hometown.

50% of NFS Dietetics students match higher than the national average for the required 12 month practice program to become an RD!

Accreditation Council for Education in Nutrition and Dietetics the exceeding approx for the Academy of Nutrition right. and Dietetics

Students must be matched with a health-care facility, community agency, food service corporation, or combined with graduate studies for typically a 12 month program. This requirement is part of the standards that must be completed by the Accreditation Council For Education in Nutrition and Dietetics, and is just one step toward becoming a Registered Dietitian (R.D.)

Plant Biology



Dr. Laura Hill Earns Environmental Merit Award

The New England Office of the U.S. Environmental Protection Agency (EPA) has selected Dr. Laura Hill to receive an Environmental Merit Award in recognition of her exceptional work and commitment to the environment. The annual award recognizes outstanding environmental advocates who have made significant contributions toward preserving and protecting our natural resources. Laura was nominated by Dr. Thomas Hudspeth. The award will be presented in Boston in May.

Record Maple Production at Proctor Research Center

2,612 gallons of maple syrup were produced this spring, a record for the UVM center! Despite the mild winter with record low snowfall, the Proctor Maple Research Center produced more maple syrup that any year in its history. The sugarbush is located in Jericho, VT. The Center provided the traditional sugar-on-snow to UVM faculty and students across campus on April 26th.



Beck Powers wins Genetics Student Research Award from the Botanical Society of America

Graduate student Beck Powers, in the Preston lab, has been awarded a Genetics Student Research Award from the Botanical Society of America. Her proposal is titled "Genetic building blocks in the evolution of sympetaly: a candidate gene approach."

Research Featured In Plant Cell



PBIO postdoc, Christine
Ondzighi-Assoume, and Dr.
Jeanne Harris, were featured
by Plant Cell, the American
Society of Plant Biologists, for
their research on the effect of
environmental nitrate on the
plant hormone, abscisic acid.

Alum Went to Great Heights to do Student Research

Ph.D. alum, Monique McHenry, is pictured here among the clouds in the Bolivian Andes, where she collected specimens of the fern genus Polistichum as part of the research she conducted in Dave Barrington's lab. Monique defended her thesis in 2012.



NACTA Connect | develop | achieve

McKeown Earns Teaching Award

Meghan McKeown, PBIO Ph.D. candidate, was

awarded the NACTA Teaching Award Merit of Certificate. Meghan has been a teaching assistant for Genetics for five years where she researches current events to teach the science behind important news stories involving genetics, demonstrating vividly the application of the topic to students' lives. Meghan has pursued the Graduate Teaching Program Certificate offered by UVM's Center for Teaching and Learning.

Testo a Leader in Student Research and Publication



It was a banner year for West Testo, PBIO Ph.D. candidate, who published five papers on the systematics and evolution of ferns and lycophytes that are changing our understand-

ing of how these plants evolved. Three of these papers appeared in journals with broad appeal in the field, Evolution, Molecular Phylogenetics and Evolution, and New Phytologist, and mark an important step in his career. Wes just returned from working with international collaborators collecting ferns and lycophytes in Colombia, Panama, Guatemala, and Mexico.



Department Chair, David Barrington, takes spring 2016 Sabbatical at Harvard University

Plant and Soil Science



Alumni Updates

Eoin Kenny Ecological Agriculture Class of 2014

Eoin is a Research Laboratory Technician assisting in plant pathology and crop epidemiology at the Rowland Institute at Harvard University.

Sarah Kresock Sustainable Landscape Horticulture Class of 2013

Sarah is pursuing a Masters in Landscape Architecture at the Boston Architectural College beginning in 2015.





75,000 lbs. of apples are produced at the Horticulture Farm each year.

50 varieties of apples are grown at the Horticulture Farm.

80 Catamount Educational Farm were shareholders in 2015

COFFEE SEEDS

Students sow coffee seeds for UVM Opening Weekend (Fall 2016) where UVM Horticulture Club will hand out about 1000 coffee plants to First Year Students at the Class of 2021 picnic.



Namesake Award Established for Professor Deborah Neher

Congratulations to Plant and Soil Science Chair Deb Neher! The Soil Ecology Section of the Ecology Society of America



has created a namesake award in her honor, The Deborah Neher Career Award. She was the inaugural recipient for 2015. This award will be presented to deserving scientists

by the Society at future annual meetings.

Terence L. Bradshaw Earns New Achiever Alumni Award



What started out as an undergraduate internship with the UVM Apple Research and Extension team, Terence (Terry) has made remarkable contributions to UVM horticulture programs in his career. He has served as the director of the UVM Horticulture Farm and the Catamount Educational Farm, and is a key

leader in the development of hands-on summer programs. Terry earned his PhD in 2015. He is known as a leader in the hard cider industry, both in Vermont and nationally, and is often sought after to present at national conferences. Terry served as President of the Vermont Tree Fruit Growers Association from 2009-2014. He is also the Proprietor of Lost Meadow Orchard and Cider Mill in Calais, Vermont.



credit: sevendaysvt.com

Food Systems

Announcing the NEW UNDERGRADUATE MAJOR in the College of Agriculture and Life Sciences!









is the number of land grant universities nationally that offer a minor, B.S., M.S, and Ph.D. in Food Systems...and it's at UVM!

5,300 new jobs and an increase of \$10 billion in annual sales in the Vermont food system since 2009. Vermont is a Working Laboratory and Hub for Food Systems work, offering great opportunities for CALS students.

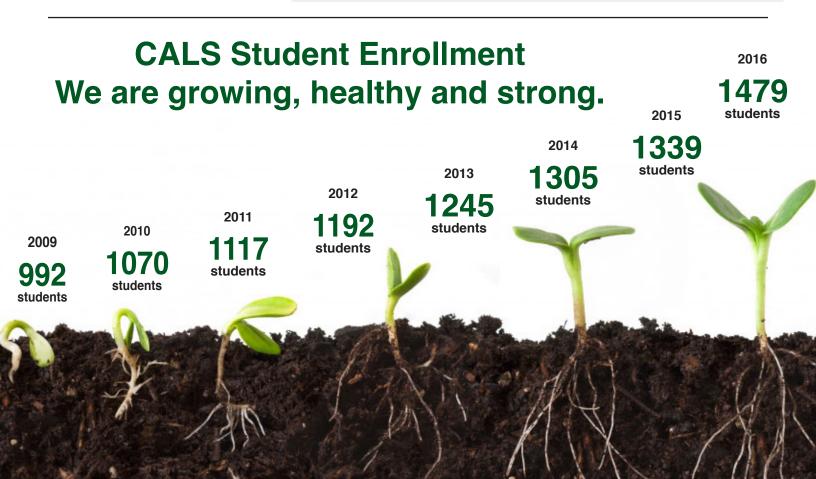
A Sample of CALS Alumni in Food Systems

Natural Science Focus: Kate Elderkin, Nutrition and Food Sciences, '08

Kate graduated from UVM with a degree in Nutrition and Food Sciences and then continued her education at the Culinary Institute of America where she focused on Culinary arts and wine and beverages. Graduating in 2010, Kate then worked as a cook and private chef until joining The Imagine Food Innovation Group's culinary research team in Seattle, WA in 2015.

Social Science Focus: Karen Fries, Public Communication, '10

Karen is an alum of the Community Development and Applied Economics department majoring in Public Communication. She completed an internship with Ben and Jerry's marketing department, and then joined them after graduation as a marketing specialist. Karen then went to NYC to join Chobani Yogurt as a Brand Manager, before moving to the west coast to become the Social Media Manager at Annie's, Inc. in San Francisco, CA.



College Honors: Distinguished Undergraduate Research

Animal and Veterinary Sciences

Abigail K. Earle, Animal and Veterinary Sciences – "Cryptosporidium Diversity of Species Infections and Temporal Infection Patterns on a Teaching and Research Herd" Mentor: John Barlow

Sydney R. Friedman, Animal and Veterinary Sciences – "Global DNA Methylation in the Liver of Vermont Bobcat (Lynx rufus)" Mentor: Stephanie McKay

Audria C. Greenwald, Animal and Veterinary Sciences - "Analysis of Extreme Microbiome Samples and Microbial Reference Standard Using Oxford Nanopore MinION and Sanger Sequencing Technologies" Mentor: Scott Tighe

Laurel K. Saldinger, Animal and Veterinary Sciences – "Delineating the Change in Rumen Microbial Communities as Cows Move from Indoor Feeding to a Pasture-Based Diet" Mentor: Jana Kraft

Sarah L. Zeger, Animal and Veterinary Sciences - "The Effects of Feeding Coffee Grounds to Dairy Cattle on the Bovine Milk Protein Profile" Mentor: Sabrina Greenwood



Michael S. Barnum, Microbiology and Molecular Genetics – "Thyroid Hormone Receptor β (TRβ) Regulation of Runt-Related Transcription Factor 2 (Runx2) in TumoRigenesis" Mentor: Frances E. Carr

Kathleen R. Bashant, Microbiology and Molecular Genetics - "A Role for Glycolysis in the Induction of Dendritic Cell Necroptosis" Mentor: Ralph C. Budd

Lauren N. Bellfy, Microbiology and Molecular Genetics – "Creating a Synthetic Lymph Node for HIV-1 Investigations Using 3D Hydrogels" Mentor: Markus Thali

M. Lauren Donnelly, Microbiology and Molecular Genetics – "Characterization of Clostridium difficile Spores Lacking Either SpoVAC or Dipicolinic Acid Synthetase" Mentor: Aimee Shen

Liam P. Kelly, Microbiology and Molecular Genetics – "Investigation of Effects of Post-Translational Modifications to SMIM1 on Its Role As the Vel Blood Group System Antigen" Mentor: Bryan Ballif

Connor L. Klopfer, Microbiology and Molecular Genetics – "Interactions of the EhMSP-1 cytoplasmic tail with cytoskeleton filamentous actin in Entamoeba histolytica" Mentor: Christopher Huston

Priyanka Ravichandran, Microbiology and Molecular Genetics – "Determining if the Interaction Between the Clostridium difficile Spore Morphogenetic Proteins SipL And SpolIVA for Proper Spore Formation and Coat Localization" Mentor: Aimee Shen

Tamar R. Wheeler, Microbiology and Molecular Genetics - "Molecular Basis of Acta2 Gene Repression by Purine-Rich Element Binding Protein B" Mentor: Robert Kelm

Nutrition and Food Sciences

Danielle L. Hansen, Nutrition and Food Sciences – "Fatter After Four Years: Examining the weight trajectory of college students" Mentor: Elizabeth Pope

Claudia E. Hleap, Nutrition and Food Sciences – "Reducing Food Waste through Peer-Competition and Positive Messaging around Nutrition and Sustainability in Elementary Schools" Mentor: Elizabeth Pope

Student Research Conference Undergraduate Presenters

Animal and Veterinary Sciences

Marisa Beanland (Heather Daszkiewicz), Animal Science, Use of home range by resident female and male bottlenose dolphins of Bocas del Toro Mentor: Laura May Collado

Sydney Friedman, Animal and Veterinary Sciences, Global DNA Methylation in the Liver of Vermont Bobcat (Lynx rufus) Mentor: Stephanie McKay

Audria Greenwald, Animal and Veterinary Sciences, and Microbiology, Implementing Nanopore Sequencing Technology at The University of Vermont- Evaluating Performance of the Oxford Nanopore MinION with Novel Organisms: Analysis of Haloferax volcanii Mentors: Scott Tighe, Douglas Johnson

Laurel Saldinger, Animal Science, Delineating the change in rumen microbial communities as cows move from indoor feeding to a pasture-based diet Mentor: Jana Kraft

Sarah Zeger, Animal and Veterinary Sciences, The Effects of Feeding Coffee Grounds to Dairy Cattle on the Bovine Milk Protein Profile Mentor: Sabrina Greenwood

Community Development and Applied Economics

Rachel Heath, Community and International Development, Inclusion of Mobile Home Parks in Vermont Emergency Planning, Mentors: Daniel Baker, Kelly Hamshaw



Microbiology and Molecular Genetics

Tom Addison, Molecular Genetics, Characterizing Localization Patterns of SNARE VTI13 in Nicotiana tobacum based on known Endosome Markers RABA1g and SYP61 Mentor: Mary Tierney

Michael Barnum, Microbiology, Thyroid Hormone Receptor β (TR β) Regulation of Runt-Related Transcription Factor 2 (Runx2) in Thyroid Tumorigenesis Mentor: Frances Carr

Katie Bashant, Microbiology and Molecular Genetics, A Role for Glycolysis in the Induction of Dendritic Cell Necroptosis Mentor: Ralph Budd

Faculty Research in Numbers

- \$6.6 million research dollars awarded to CALS faculty (FY2015)
- \$1.9 million federal Hatch dollars awarded (FY2015)

M. Lauren Donnelly, Microbiology and Molecular Genetics, Factors controlling the heat resistance of Clostridium difficile spores Mentor: Aimee Shen

Connor Klopfer, Microbiology and Molecular Genetics, Interactions of the EhMSP-1 cytoplasmic tail with cytoskeleton filamentous actin in Entamoeba histolytica Mentor: Christopher Huston

Priyanka Ravichandran, Microbiology, Determining if the Interaction Between the Clostridium difficile Spore Morphogenetic Proteins SipL And SpoIVA is Necessary for Proper Spore Coat Formation and Localization Mentor: Aimee Shen

John Ribis, Microbiology, Role of peptidoglycan remodeling machinery components in regulating engulfment and coat localization during Clostridium difficile spore formation Mentor: Aimee Shen

Ryan Scherrer (Tianxin Miao, Spencer L. Fenn), Molecular Genetics, Vimentin Targeted Cancer Therapeutic Mentor: Rachael Oldinski

Hannah Shulman, Microbiology and Molecular Genetics, Interactions Between Threonyl-tRNA Synthetase and the Extracellular Matrix as a Mechanism of Angiogenesis Mentor: Karen Lounsbury

Nutrition and Food Sciences

Dani Hansen, Dietetics, Nutrition, and Food Sciences, Fatter After Four Years: Examining the weight trajectory of college students Mentor: Elizabeth Pope

Plant Biology

Lauren Kerwien, Plant Biology, The Effects of MNM on Root Nodulation in Medicago truncatula, Mentor: Jeanne Harris

Plant and Soil Science

Courtney Dyche-Balling, Ecological Agriculture, Clonal Propagation of Maple Species: Variability in Rooting Success of Acer saccharum and Acer rubrum Mentor: Abby van den Berg

Interdisciplinary and Cross-College Programs

Amelia Fontein, Environmental Studies, Vacationing for a Cause: Volunteer Ecotourism on Alternative Spring Break Mentors: Katharine Anderson, Todd Comen

Laurel Haines, Biological Science, The Effects of Extracellular Histones on the Permeability of Mouse Mesenteric Arteries Mentor: Kalev Freeman

Liam Kelley (Allison Bauza, Mike McLane, Helaina Stergas), Biochemistry, Quantifying Visual Acuity in Zebrafish Embryos, Mentors: Andrew Mead, Alicia Ebert

Devon Lindsey, Biological Science, Modeling Spread and Control of FMDV in New England Mentor: Julie Smith

Michael McLane, Biological Science, Bioactive plant lipids affect pancreatic beta cell physiology Mentor: Jana Kraft, Thomas L. Jetton

Kevin Schiavone, Environmental Sciences, Soil Incubation Study to Assess the Impacts of Manure Application and Climate Change on Greenhouse Gas Emissions from Agricultural Soil Mentor: Elizabeth Adair

Delaney Smith, Biological Sciences, How does biomolecular storage change in the temperate forest ant, Aphaenogaster rudis, as a response to experimental warming? Mentors: Sara Cahan, Katie A. Miller

Jacob Suissa, Self-Designed, Aquatic Hyphomycetes of Northeastern Vermont Mentor: David Barrington

Emily Vayda, Biochemistry, Accounting for viral maturation status in the evaluation of dengue vaccine immunogenicity. Mentor: Sean Diehl

Tamar Wheeler, Biochemistry, Molecular Basis of Acta2 Gene Repression by Purine-Rich Element Binding Protein B Mentor: Robert Kelm

Pascal Wilkins, Biological Science, The effects of predator fish kairomones on feeding rates of Mysis diluviana Mentor: Jason Stockwell

Vermont EPSCoR Wins \$20 Million NSF Award to Promote Resiliency in Lake Champlain Basin

The study will examine the effects of extreme weather events made more regular by climate change. A research team lead by UVM Professor Judith Van Houten will spend five years collecting data to help state and federal officials craft policy to protect the Lake Champlain watershed. Several College of Agriculture and Life Sciences faculty will participate in the research made possible by this grant including: Brian Beckage, Stephanie Hurley, Christopher Koliba, Scott Merrill, and Don Ross.

In memory



Dr. Henry V. Atherton, '48, G '50, **Professor Emeritus of Animal Sciences**

Dr. Atherton was known as a giant in the dairy industry and recognized as one of the field's pioneers by the American Dairy Science Association. Henry retired in 1989, and during his 38-year tenure at the University of Vermont, he influenced the lives of his students, dairy farmers, and the dairy and animal science industries. Henry

was born on November 12,1923 in Eden, Vermont, He graduated from Barton Academy as Class Valedictorian in 1941; received a B.S.Degree, Cum Laude in Dairy Manufacturing in 1948, and an M.S. degree in 1950, both from the University of Vermont; and a PhD in Dairy Technology from Penn State in 1953.





Edward Lane "Budge" Bouton, Extension Professor Emeritus of Plant and Soil Science

Professor Bouton moved to Vermont at age 14, and graduated from Burr and Burton Academy in 1943. Ed promptly entered the Army Air Corps training as a pilot. Following service to his country, Ed attended the University of Vermont. Ed graduated with a degree from the School of Agriculture in 1950. He and his wife, Betsy, raised three children and hosted

many international students who became extended family members. A lifelong learner, Ed returned to UVM to receive his MS focusing on soil fertility in 1975. Ed's career included managing a dairy farm, working for the Eastern States Farmers Exchange (later Agway) and coordinating Vermont's Natural Resource Conservation Districts. Professor Bouton worked as a University of Vermont Extension Agent until his retirement in 1989.

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