

Keeping in Touch

University of Vermont
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College of Agriculture and Life Sciences
CALs on the Web: www.uvm.edu/cals



Plant sciences at UVM ready to blossom



Lab Manager and Ph.D. student Tom Weicht (at microscope)—with advisor Deborah Neher and Ph.D. student Brian Darby—identifies nematodes as indicators of soil quality and climate change in a project funded by the U.S. Dept. of Energy, Program of Ecosystem Research.

Plant and Soil Science (PSS) Department chair **Deborah Neher** has only been on the job since September, but she's already envisioning advancements that will move UVM to the forefront of plant sciences research and education, not only in the Northeast, but nationally and globally.

She's excited about the opportunities to design new courses, recruit top

researchers, and reshape the curriculum to better meet the needs of students in the 21st century. Dr. Neher especially is committed to developing strong interdisciplinary relationships with the Botany and Agricultural Biochemistry (BOT) Department and the Environmental Sciences Program.

"One goal that the University has set for us is to increase our undergraduate enrollment," Neher says. "We have 40 majors now in PSS and want to increase that to 100, reflecting UVM's overall goal for growth. We also want to grow the graduate program through external grant money."

Neher plans to make courses more attractive to students, including non-majors, by making them more relevant to the changing world. An organic food production course, for example, is being offered for the first time this year. A new course planned for spring 2006 will examine global policies including food security and world hunger. In addition, the two majors in the department—ecological

agriculture and sustainable landscape horticulture—have a strong ecology component, which is in keeping with UVM President Daniel Fogel's vision and direction for UVM as an environmental university.

"Part of the challenge to increase undergraduate enrollment is to offer courses to get students excited," Dr. **Thomas Vogelmann**, chair of Botany and Agricultural Biochemistry (BOT), adds. "In Botany, we currently offer courses on everything from plant cell biology to ecosystems and are expanding our curriculum to build excellence in our undergraduate and graduate programs.

"Our faculty have been successful in obtaining grants from the National Science Foundation and USDA. Our Ph.D. program is gaining strength. We have some excellent facilities to support training in plant biology."

Vogelmann envisions introducing courses that cross the interface between BOT and PSS, thus creating

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Tyzbir receives national teaching award

A nutrition professor long heralded by his students for his innovative and dynamic teaching style has been named one of two Northeast regional recipients of the USDA-National Association of State Universities and Land-Grant Colleges' (NASULGC) Excellence in Teaching Award.

Tyzbir Scholarship Fund launched—see page 5 for details.

Dr. **Robert Tyzbir** received the prestigious award at the NASULGC annual meeting in San Diego in November. CALS also hosted a special reception in his honor in January on campus.

The Excellence in College and University Teaching in the Food and Agricultural Sciences Awards Program recognizes eight regional and two national winners each year. Recipients are selected for their exemplary teaching, scholarship, and service to their university and receive a \$2,000 stipend to use to improve teaching at their institution. Dr. **Lyndon Carew**, who received this award in 1995, is the only other UVM recipient.

"Bob teaches the breadth and depth of courses in the department from introductory courses like sports nutrition, to

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Dr. Robert Tyzbir (second from right) receives his NASULGC national teaching award from Dr. Joseph J. Jen, Undersecretary for Research, Education and Economics, USDA, along with Nutrition and Food Sciences Chair Jean Harvey-Berino (left) and CALS Dean Rachel Johnson.

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Message from Dean Rachel Johnson

New courses, facilities, awards mark steady progress for CALS



Inaugural recipients of awards from the 2004-2005 Undergraduate Student Opportunity (USO) Scholarship Fund take a break from classes to visit with Dean Rachel Johnson. Top left: Michael Taras, Courtney McLaughlin, Nikolas Muenke, Jennifer Balentine, Andrew Stock; lower left: Lena Wasmus, Dean Rachel Johnson, Christa Sherburne-Law, Sarah Greenleaf.

Progress is apparent in so many areas of the College that it is a pleasure to provide regular updates in *Keeping in Touch*.

We are busy recruiting students for our new major, "Public Communication," in the Department of Community Development and Applied Economics (CDAE) (see page 3). We are also launching a new joint Ph.D. program in Animal, Nutrition and Food Sciences.

Construction is underway on the new home for our internationally renowned Department of Nutrition and Food Sciences (NFS). Deconstruction of the Carrigan Dairy Science Building is necessary to make way for the new Dudley H. Davis Student Center. The addition to the Marsh Life Sciences Building to house our NFS

faculty, staff, and students will carry on the proud tradition of excellence in teaching, research, and service for those faculty who have worked in the Carrigan Dairy Science Building over the past 55 years (see page 4).

Progress continues to be made on the Campaign for the College and the University. Over \$180 million has been received in cash and pledges toward the University-wide goal of \$250 million, while our College has received nearly \$6 million to date. We continue to seek support for a number of priorities, especially undergraduate and graduate student scholarships. Scholarship support makes a significant difference in our ability to attract and retain top students. Thanks to the support of many donors, we have been able to make awards from the Undergraduate Student Opportunity (USO) Scholarship Fund to a number of deserving undergraduates (see accompanying photo). We are grateful to our generous donors and invite others who have not made a gift to do so today.

New programs, new buildings, new faculty, new scholarships, prestigious awards ... as the popular t-shirts say, "Life is Good!" As always, I welcome your input and would love to hear from you. I may be reached at calsdean@uvm.edu.

Happy spring, and I look forward to seeing many of you at our upcoming Alumni and Friends Dinner on April 30 (see dinner registration insert).



UVM Freya, with her filly foal, UVM Mercedes, are shown by Dr. Josie Davis, equine lecturer, and UVM Morgan Horse Farm Director Steve Davis.

Everything Equine and Horses 2005

UVM Extension, Champlain Valley Exposition, and Horse Works have joined forces to bring the **Everything Equine and Horses 2005** back to Vermont on April 23 and 24 at the Champlain Valley Fairgrounds in Essex Junction, Vt. Over these two days, live demonstrations and educational seminars on equine biosecurity, training methods, equine business, barn safety, veterinary topics, and more will be available for participants.

Known as a regional equine educational event and trade show, over 150 vendors will market their equine and related wares. Over 5,000 people attended in 2004 and more are expected this year. Mark your calendar! For more information, visit the website at: <http://asci.uvm.edu/equine>, e-mail betsy.greene@uvm.edu, or call (802) 656-2108.

Progress and new programs abound in CDAE

Community Development and Applied Economics (CDAE)

Department's new major in Public Communication was approved by the UVM Board of Trustees late in 2004. Already students are transferring into what we believe will be a very popular offering in CALS and a great complement to CDAE's majors in Agricultural and Resource Entrepreneurship and in Community and International Development.

Majors in Public Communication learn how communication systems work, how to solve complex communication problems and manage information, and how to apply knowledge in an increasingly dynamic, global society. CDAE is currently searching for a tenure track assistant professor of Public Communication to begin Fall 2005.

CDAE's research program has grown twelve fold over the past two years. Faculty successfully competed for over \$1.5 million in sponsored research and outreach grants in FY04. Projects range from risk management outreach programs for farmers, training Honduran sugar producers to use more sustainable methods based on Vermont maple syrup producing techniques, to investigating consumer use of restaurant food labels. The Center for Rural Studies has been a large contributor to the grant funds, especially with the community development earmark funding obtained through the efforts of **Senator Patrick Leahy (D-VT)**.

The CDAE international program continues to grow and has doubled twice in the past two years to 48 students. **Josh Farley** and **Jay Ashman** have recently returned from a successful first trip to St. Lucia, where students worked on projects ranging from helping the Ministry of Commerce, Investment and Consumer Affairs with their "buy local" initiative to developing demonstration projects that highlight alternative sources of energy.

—Jane Kolodinsky



Eustace Vitalis (left), Agricultural Officer for the Sandals chain of hotels, explains to UVM students some of the difficulties associated with purchasing produce from local farmers in St. Lucia. UVM students, from left, are Rachael Kuhnunch, Rob Arabian, Katy VanDis, Keith Shapiro (blocked), and Ivan Ladd-Smith.

Animal Science kudos



Animal Science Lecturer Patricia Erickson, DVM (lower right), listens to community members in the Dominican Republic.

In January, Dr. **Pat Erickson**, lecturer, and Dr. **Jon Erickson**, associate professor in The Rubenstein School of Environment and Natural Resources, served as co-leaders of ENVS 295/CDAE 295—*Community Empowerment through Grassroots Organization: A Travel Study in AIDS Education and Batey Life in the Dominican Republic*. This course gave students an

opportunity to participate in an HIV/AIDS education and community development pilot project in Central America.

Assistant Professor and UVM Extension dairy specialist **Julie Smith** presented an invited paper on biosecurity in January at the Dairy Calves and Heifers: Integrating Biology and Management Conference organized by the Natural Resource, Agriculture, and Engineering Service (NRAES) in Syracuse, NY.

Members of UVM's **Dairy and Pre-Vet Clubs** traveled to Rutgers University in February to compete in a Northeast Student Association (NESAs) all-day contest among hundreds of students from ten universities. In teams of four, these NESAs students competed in three sections: livestock judging, animal science knowledge, and a paper presentation. UVM had three extremely strong teams at this year's contest. The result? The University of Vermont emerged as the 2005 Overall University Champion!

Matrajt active in MMG

Dr. **Mariana Matrajt** joined the faculty of the Department of Microbiology and Molecular Genetics (MMG) last year as an assistant professor. In her research, Matrajt uses genetic approaches to define the pathways that might be useful drug targets for the protozoan parasite, *Toxoplasma gondii*. *Toxoplasma* is transmitted through cat feces and is dangerous to pregnant women and immuno-compromised individuals. It is similar to the malarial parasite; thus, it is hoped that strategies developed to combat *Toxoplasma* might be effective against malaria.

Matrajt was recruited from the University of Pennsylvania where she pursued postdoctoral studies in Dr. David Roos' lab, one of the foremost laboratories in the country, studying *Toxoplasma* biology. Her work with Dr. Roos, supported by a fellowship from the National Research Council of Argentina, resulted in a series of publications in high-profile journals. She developed genetic screens for isolating *Toxoplasma gondii* differentiation mutants which form the basis for her current research focus.

Although she has been at the University less than a year, Matrajt has her laboratory up and running, has applied for extramural research funding, and has been invited to a number of national and international meetings on molecular parasitology.

—Susan Wallace



Dairy foods research continues tradition of excellence

Since opening in 1949, Carrigan Dairy Science building has been home to talented teams of faculty members whose teaching, research, and service have had a profound effect on the dairy foods industry in Vermont and beyond. CALS faculty with expertise in dairy foods have maintained a commitment to excellence and have produced impressive results for nearly six decades.

The deconstruction of the Carrigan Dairy Science Building, planned for summer 2005 to make room for the new Davis Student Center, marks the end of the line for this highly productive facility, but it does not diminish the College's commitment to continuing the tradition of excellence in dairy foods research. New research laboratories, classrooms, and facilities for food product development including a cheese lab and pilot plant are now under construction for use by the students and faculty of the Nutrition and Food Sciences (NFS) Department (see Fall 2004 issue of *Keeping in Touch* for more details).

"The Carrigan Dairy Science Building has been a fixture for several generations of our students and faculty and, of course, for the many people who used to frequent the dairy bar," observes Professor Emeritus **Henry Atherton '48**,

G'50. "It came on line at a critical time when the dairy industry was adjusting to the use of refrigerated bulk tanks and our research team responded by doing studies on cold-tolerant bacteria, milk flavor, and shelf life," recalls Atherton. "There was a world of possibilities in dairy foods that needed to be studied then, just as there is a whole new world of dairy foods options to be examined today," he concludes.

Just as Dr. Atherton and his colleagues capably met the dairy foods teaching, research, and service demands of their day, so too is the current team of experienced faculty members. Professors **Donnelly, Guo, Kindstedt, Pritchard, and Almena-Aliste** excel in their respective fields, which span the dairy food spectrum from basic biochemical and microbiological principles to applied science affecting food processing, food technology, food safety, and sensory evaluation practices.

Beginning this fall, campus visitors will notice the absence of the Carrigan Dairy Science Building and the presence of the new quarters for NFS connected to the nearby Marsh Life Sciences Building.

—Howard Lincoln

In Memoriam

Emily K. Fletcher, a UVM senior, double majoring in Nutrition and Food Sciences and Dietetics, died on December 18, 2004 in a car accident while on her way home to Auburn, Me., for the semester break. She was a member of the Food and Nutrition Club, UVM Crew Team, and a participant in numerous volunteer activities. A memorial service for Emily was held in Ira Allen Chapel on January 28. Memorial gifts are being accepted in Emily's name for a permanent planting on the UVM campus to honor her memory.

W. Howard Martin '31, died in Morrisville, Vt., on December 20, 2004, at the age of 94. Dr. Martin taught at the University of Vermont in the late 1930's and early 1940's followed by a distinguished teaching career at the University of Connecticut. He was a recognized leader in rural and vocational technical education and served on the State Extension Advisory Council and numerous county and state agricultural committees. At the family's request, memorial gifts in Martin's honor are being accepted by the CALS Dean's Office.

Memorial donations can be sent to Howard Lincoln, CALS Dean's Office, UVM, 146 University Place, Burlington, VT 05405-0106.



Here's the scoop!

A set of four counter stools from the original UVM Dairy Bar will be auctioned in the afternoon of Saturday, June 4, during UVM's Reunion Weekend.

Auction time: 1:00 p.m.

Location: Catamount Cookout (behind the Fleming Museum)

Why: Proceeds benefit the CREAM Program's Brett Klein Memorial Scholarship Fund



Meyer family wins Highest Quality Dairy Award

The Meyer family proudly poses with the sign proclaiming them as the winner of the 2004 Highest Quality Dairy Award in Vermont. Presented at the annual January Vermont Farm Show, this award recognizes North Hardwick Dairy as having the highest quality milk among 1,300 Vermont dairy farms in 2004, and it's the first time an organic dairy has won top honors! Pictured left to right (bottom) **Andrew Meyer '92** with daughter **Lila**, **Taylor Meyer '97**, **Nick Meyer '99**; (top) **Mary Parke Meyer**, **Patricia Meyer**, and **Stephen Meyer G'71**.

Plant sciences kudos



Extension Professor **Leonard Perry** received the Perennial Plant Association's 2004 Academic Award in July at its annual meeting in New York City. This coveted award is presented annually to a member who has provided exceptional leadership in education to students and the industry. Perry also was honored by the Vermont Association of Professional Horticulturists (VAPH) on February 9 with

the prestigious Horticulture Achievement Award, which recognizes individuals whose accomplishments have advanced the Vermont horticultural industry.

The New England Nursery Association recently named Associate Professor **Mark Starrett** as its Young Nursery Professional of the Year. The annual award is given to an individual under the age of 40 to honor and encourage continued achievement and success in the horticultural industry.

The **Common Ground Student-Run Educational Farm** received the 2004 VAPH Environmental Awareness Award, which recognizes an individual or organization that has implemented an environmentally sound practice that contributes to the protection of the environment.

Plant sciences education, from page 1

new opportunities for students to explore plant biology. Given the complementary research strengths of faculty in both departments, new synergisms will develop that will benefit both instruction and research.

"We believe that offering hands-on or experiential learning will set our program apart and above others in the nation," Neher says of her goal to expand student internship opportunities. "Gaining practical work skills will help make our graduates more competitive in the job market."

The chairs' joint vision hinges, in part, on the completion of a new state-of-the-art plant sciences building that will house the BOT and PSS departments, including the Entomology Research Lab currently located at the Bioresearch Complex on Spear Street. The 82,000 square-foot building will be situated southeast of, and connected to, the campus greenhouses.

Ellenzweig Associates, a Boston architectural firm, recently was chosen for the project. Like the addition to Marsh Life Sciences, this facility will be designed as a "green building" with the intent to qualify for LEED (Leadership in Energy and Environmental Design) accreditation. Construction is slated to start in fall 2006 with expected occupancy by fall semester 2008.

The new building will enable the departments to maximize resources and integrate like functions to create a working environment that will foster a greater sense of community by encouraging increased interaction among faculty, staff, and students. Enhanced laboratory facilities will advance research, positioning UVM to be a leader not only in plant science education but in the international scientific community in the future.

—Lisa Halvorsen

Tyzbir, from page 1

nutritional biochemistry, an advanced-level senior course," says CALS Dean **Rachel Johnson**. "He has an infectious enthusiasm for what he teaches and a tremendous capacity for mentoring students."

"He has always been a star for us," adds Dr. Jean Harvey-Berino, Chair of the Nutrition and Food Sciences Department. "This award gives external validity to someone who we always knew deserved it."

Tyzbir was one of the first on campus to use the Internet as a teaching tool, developing an on-line course in sports nutrition. During his 13-year tenure as department chair, he more than doubled the number of majors, and while he has earned international recognition for his research in nutrition and metabolism, it is his commitment to teaching that makes him stand out.

A former student, Dr. **Casey Smith**, who earned her bachelor's, master's, and Ph.D. in the department, agrees. "I loved attending his classes and special lectures as they were always entertaining and equally as informative. He always challenged me to think outside the box and said that a good education is one that teaches you how to think, and to think for yourself."

Tyzbir has received many accolades for his teaching in his 32 years at UVM, among them the Joseph E. Carrigan Award for excellence in undergraduate teaching in 1988. He received the George V. Kidder Outstanding Faculty Award in 1990.

—Lisa Halvorsen

Tyzbir Scholarship Fund launched

A new scholarship fund has been established to honor Dr. **Robert S. Tyzbir** for his outstanding teaching, his devotion to the fields of nutrition and dietetics, and his dedication to the welfare of his students. The Robert S. Tyzbir Scholarship Fund will provide scholarship support to undergraduate students in the Department of Nutrition and Food Sciences on the basis of academic merit and financial need. Donations at all levels are now being accepted in order to reach the \$100,000 goal.

For information on how to contribute to this scholarship fund, please contact CALS Alumni and Development Officer Howard Lincoln at 802-656-2509 or by e-mail at howard.lincoln@uvm.edu. For more information about the Robert S. Tyzbir Scholarship Fund, visit the following website: www.uvm.edu/cals/alumni.

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12th Alumni & Friends Dinner—*Saturday, April 30, 2005—Registration inside*

Alumni invited for Alpha Zeta Centennial



The Green Mountain Chapter of Alpha Zeta (AZ) invites its affiliated alumni to help celebrate the chapter's 100th anniversary with a series of special events held in conjunction with UVM's 2005 Homecoming and Family Weekend on October 7-9. Preliminary plans envision an array of entertaining and informative events put on by student organizations and programs associated with CALS, including the Horticulture Club, CREAM Program, Equine Drill Team, and Alpha Gamma Rho. Additionally, a special centennial banquet is being planned.

According to AZ faculty advisor, Professor **Mark Starrett**, the centennial celebration is a significant opportunity to showcase the College's outstanding students and organizations and reconnect with many of its esteemed alumni. "Not only do we want the UVM community to become more aware of AZ and its top-notch students, we also want to salute the accomplishments of our alumni over the past century" he says.

As one of the ten oldest active chapters in the country, the Green Mountain Chapter has a distinguished history and a bright future. The chapter routinely consists of about 25 active student members at UVM who are selected on the basis of scholarship, leadership, integrity, and service. They are actively involved with community service projects and the promotion of agriculture throughout the academic year.

AZ alumni will receive more details in the weeks ahead. For those out-of-town alumni planning to return for Homecoming and Family Weekend, it's not too early to reserve a hotel room during peak foliage season weekends. For more information, visit the Green Mountain Chapter website at www.uvm.edu/~womaz.

—Howard Lincoln



Dr. Mark Starrett, AZ faculty advisor (lower left), and members of the Green Mountain Chapter of Alpha Zeta pose for a photo at their spring semi-formal initiation on April 3, 2004.