

NEWS BRIEFS

EVENTS

NOTABLES

SEARCH

PRINT THIS ISSUE

PRINT PAST ISSUES

FEEDBACK

UVM HOMEPAGE

[Spike Lee Speaks to Spring Fest](#)



Director Spike Lee mingled with students before and after his April 19 talk, which was a gift of the senior class. He also found time to toss a football on the Green. (Photo: Andy Duback)

In a rollicking, wide-ranging talk, *Do The Right Thing* director Spike Lee touched on subjects including the GRE, the racial follies of popular films, the double-standard of university administrators who allow confederate flags to fly in dormitory windows and the "modern day minstrel acts" of some MTV rappers.

[FULL STORY ►](#)

PREVIOUS ISSUE

[Lecture Spotlights Library of Allen Brothers' Ally](#)

[Conference to Explore End of Life Topics](#)

[Hearts and Minds](#)

[Older Drivers](#)

[Saving the Southern Forests](#)

[Sugar on Snow in Spring](#)

[Symposium: Banks, Business and the Holocaust](#)

[Four Students Receive Governor's Awards](#)

[Animal Care in Outsourced Hands](#)

[Deep in the Bogs](#)

New England bogs nurture carnivorous pitcher plants that could potentially serve as biological indicators of nitrogen pollution, according to research published this month by UVM biologist Nicholas Gotelli.

[Major Cancer Grant](#)

With help from a new award, Dr. Barry Finette may be closer to finding how healthy cells acquire the genetic changes that turn them into cancer cells.

THE WEEK IN VIEW

April 24 6:30-8:30 p.m. Auditions for *Dancing at Lughnasa*, October production. Sign up on callboard at Royall Tyler Theatre. 656-2094

April 24-26 All Day "Clothesline Project Display," Fireside Lounge, Billings. Created by local survivors of violence and friends.

April 25 12:30 p.m. Seminar: "Moving the Climate Change Agenda Forward," Seth Dunn, Worldwatch Institute. 104 Aiken. 656-3269

April 25 7:30 p.m. Jazz Collage Concert (free) with the University Jazz Ensemble, Music Recital Hall.

April 25 8 p.m. "Terrorist Groups Infiltrating the U.S.: Their Radical Muslim Sponsors, and What We Can Do About It," Deborah Schlusell, columnist, townhall.com. North Lounge, Billings.

April 28 Noon Baseball vs. Binghampton, America East game, Centennial Field.

NEWS BRIEFS

EVENTS

NOTABLES

SEARCH

PRINT THIS ISSUE

PRINT PAST ISSUES

FEEDBACK

UVM HOMEPAGE

NEWS BRIEFS

**April 20 Alternative Takes Off**

Students took a break from classes and the sprint to final exams on April 20 for "Spring Fest '02", a student-organized weekend of concerts and other events. About 1,500 attended a concert by the band Vida Blue, which has members from Phish and the Allman Brothers Band. The substance-free event concluded without any major incidents, according to organizers and local press reports. (Photo: Andy Duback)

UVM to Guide California Preservation Project

UVM Historic Preservation Program graduate students and staff soon will begin a collaboration with the National Park Service in a program of research and training. The work will center on the Las Flores Adobe Ranch House, a National Historic Landmark site located on the Camp Pendleton United States Marine Corps base in San Diego County, Calif.

Students will serve as summer interns and researchers with the National Park Service, documenting the history of the building's components, developing appropriate treatment recommendations and restoring its fenestration.

The project, conducted by the NPS Intermountain Support Office of Santa Fe, N.M., will be coordinated by Douglas Porter, adjunct faculty member in historic preservation.

Principal investigator on the project, Thomas Visser, director of the Historic Preservation Program, said: "As we work together to conserve an important national historic landmark, this collaboration will offer our students exciting opportunities to gain direct knowledge of professional preservation practices while providing needed scholarly services to the National Park Service. We are pleased that the University of Vermont is being recognized as a national leader in conservation education and research."

Vermonters Value Wilderness

Vermonters overwhelmingly support public ownership of land, even when creating additional wilderness areas might require modification of traditional land uses, says a statewide UVM poll released on April 22.

The poll, which focused on issues related to the Green Mountain Forest, was conducted by the University of Vermont's Center for Rural Studies under contract with the Vermont Wilderness Association, a consortium of environmental groups that support expansion of wilderness areas and public land ownership.

"There's no such thing as a perfect survey," says Fred Schmidt, associate professor of community development and applied economics, who directed the project. "But we worked hard with the group to take the bias out of the questions and get the most useful responses."

The poll was conducted among a representative sample of registered voters statewide, with a five percent margin of error after 472 completed interviews. The poll also contracted a separate sample of registered voters in households in or adjacent to the Green Mountain National Forest. These residents, who presumably would be most directly affected by changes in the size and regulation of the forest, also strongly supported public land ownership.

A complete report on the poll's findings, methodology and questions is online at a [Center for Rural Studies site](#). This is a summary of some of its major findings:

- I approve of the public ownership and management of land. 89.1 percent agreed statewide, 88.1 percent agreed in the GMNF area.
- More wilderness areas should be established on the Green Mountain National Forest. 72.7 percent agreed statewide, 68.8 percent agreed in the GMNF area.
- Some existing wilderness areas on the GMNF should be reopened to logging. 27.3 percent agreed statewide, 25.7 percent agreed near the forest.

Interviewers also asked poll respondents to rank various priorities for the forest on a scale of one through 10. Results in the statewide and local sample also tracked closely. Respondents overwhelmingly agreed that the forest should "protect wildlife habitat, watersheds, and natural processes." The statewide interviewees gave lower mean scores to the statements that the

A Season of Winning Arguments

UVM's Lawrence Debate Union recently ended another winning season, maintaining its top-10 ranking in the National Debate Association Sweepstakes.

The LDU, which finished ninth in the sweepstakes, set new team records for the most wins (438) and most debates (831) this year. Among the squad's honors this season: senior Aaron Fishbone and sophomore Shawn Wilkerson were named to the national Cross Examination Debate Association All American Debate Team; and Coach Alfred "Tuna" Snider, professor of forensics, received the Don Brownlee Award for service to debate.

The LDU will visit Puerto Rico May 6-11 to compete in the second annual International Spanish Language Debate Tournament.

The UVM squad was the only American debate team to attend last year's tournament, which was held in Santiago, Chile. They received several standing ovations during the event. This year in Puerto Rico, Snider will present a workshop on judging and assist with tournament management.

For more on LDU activities, go to <http://debate.uvm.edu/ldu.html>.

forest should provide opportunities for camping, hunting and hiking (5.2 on the 10-point scale), snowmobiling and ATVs (3.9) and logging, grazing and mining (3.5).

While the sample polled is demographically representative of the overall population of Vermont residents accessible by telephone, the age and educational level of participants was slightly higher than average. This is typical of statewide polls.

theview

University Communications
86 South Williams Street
Burlington, Vermont
05401-3404

pho 802.656.2005
fax 802.656.3203

theview@uvm.edu

[The View Homepage](#) | [UVM Homepage](#)

[News Briefs](#) | [Events](#) | [Notables](#)

[Print This Issue](#) | [Print Past Issues](#) | [Feedback](#)

NEWS BRIEFS

EVENTS

NOTABLES

SEARCH

PRINT THIS ISSUE

PRINT PAST ISSUES

FEEDBACK

UVM HOMEPAGE

EVENTS

**Sugar on Snow**

The sugar-on-snow party held April 23 on the Green wasn't exactly fun for the entire family, if this young person's skeptical expression is any guide. But party participants not confined to baby backpacks enjoyed snow and maple syrup trucked in from the Proctor Maple Research Center, visited exhibits of maple science and history, and listened to live music. (Photo: Bill DiLillo)

Taking Stock of Census 2000

Fred Schmidt, co-director of the Center for Rural Studies, will present "Census 2000: Its Challenges to Policy in Vermont," April 25, at 7:30 p.m., in Memorial Lounge, Waterman.

The research-in-progress seminar will examine seven areas of census accounting in the state: organizations and reorganizations of place; increases in population; populations increases due to native births and in/out migration; trends in age and gender; race and ethnicity; household composition; and housing occupancy.

Preliminary findings suggest that relative changes in community size have, and are currently, making reapportionment difficult in middle-to small-sized places. Statewide growth continues to be fed by in-migration and the northwestern corner of the state is experiencing the most rapid growth. Vermont, although still predominately white, has had dramatic ethnic diversification.

Using the data as a stimulus, the panel and audience will explore their implications for Vermont.

Panelists will be: Sam Hand, emeritus professor of history; Jack Hoffman, former chief of the Vermont Press Bureau; and Kathleen Hoyt, Vermont secretary of administration. Jan Eastman, of the Snelling Center for Government, will moderate.

Town Meeting to Explore Corporate Control of Media

A congressional town meeting to discuss corporate control of the media will be held on April 29, in Campus Center Theatre, Billings, at 7:30 p.m. There will be a question/answer period following the presentations.

Participants in "The Media and Democracy" include:

- Robert McChesney, communications professor at the University of Illinois, Champaign-Urbana and co-editor of the economic journal, *Monthly Review*. In his book, *Rich Media, Poor Democracy: Communication Politics in Dubious Times*, McChesney proposed addressing the contradiction "between a for-profit, highly concentrated, advertising-saturated, corporate media" through massive government subsidies for nonprofit journalism, vigorous antitrust litigation aimed at media conglomerates and robust regulation of corporate broadcasters. See his bio at: [McChesney](#)
- John Nichols, national correspondent for the political journal, *The Nation* and editorial page editor of *The Capital Times* in Madison, Wisc. Nichols, McChesney and Ralph Nader co-authored the book, *It's the Media, Stupid*, which posits a takeover of U.S. media by transnational conglomerates and explains how journalism, electoral politics, entertainment and the arts have suffered.
- U.S. Rep. Bernie Sanders, who will serve as moderator.

The free, public event is sponsored by the UVM Department of Sociology, St. Michael's College Department of Journalism and Congressman Sanders' office.

Information: Andrew Gilbertson, in Rep. Sanders' office, 862-0697 or 800-339-9834.

Teleconference: Improving Education for Disabled Students

UVM will host a national teleconference for faculty, staff and students titled, "Improving the Quality of Education for Students with Disabilities: A Shared Responsibility," April 25, 2-4:30 p.m., in Memorial Lounge, Waterman.

The goal of this live production is to facilitate the expansion of partnerships among university administrators, faculty, disability service providers

Information: 656-4389 or crv@uvm.edu

Fleming Museum Hosts Open House Weekend, Museum Sale

In celebration of spring, the Fleming Museum will hold an open house and store sale April 26-28. Admission during the three-day event is free.

Among the current exhibits is "The Landscape of Loss: Photographs by Jeff Gusky," portraits of the all-encompassing loss that followed the Nazi invasion of 1939.

The Museum Store will offer 15-40 percent discounts on most merchandise. Proceeds will support exhibitions, programs and operations.

Information: Jennifer Karson, 656-0750.

and students with disabilities.

The program will be followed by a 30-minute wrap-up session facilitated by Margaret Ottinger, coordinator, ACCESS, and Kristin Wright, AA/EO compliance specialist, Office of Affirmative Action/Equal Opportunity.

The satellite broadcast will be open-captioned, and the associated Web pages will provide material in an accessible and readily convertible digital format. Accommodations and RSVPs: 656-7853 or access@uvm.edu

theview

University Communications
86 South Williams Street
Burlington, Vermont
05401-3404

pho 802.656.2005
fax 802.656.3203

theview@uvm.edu

[The View Homepage](#) | [UVM Homepage](#)

[News Briefs](#) | [Events](#) | [Notables](#)

[Print This Issue](#) | [Print Past Issues](#) | [Feedback](#)

NEWS BRIEFS

EVENTS

NOTABLES

SEARCH

PRINT THIS ISSUE

PRINT PAST ISSUES

FEEDBACK

UVM HOMEPAGE

NOTABLES

April 24-30

Awards and Honors

Robert Manning, professor of natural resources, received the 2002 Louis Twardzik Distinguished Alumni Award from Michigan State University on April 11. The award is named for a distinguished professor of park, recreation and tourism resources. It is presented to alumni who are "excellent in their professional endeavors, are respected nationally and have consistently moved the profession to new levels of success and recognition."

Mark Stoler, professor of history, has received the Distinguished Book Award of the Society for Military History for *Allies And Adversaries: The Joint Chiefs Of Staff, The Grand Alliance, And Us Strategies In World War II*, (University of North Carolina Press, 2000). The award was presented on April 5 at the society's annual meeting in Madison, Wisc.

Paula Fives-Taylor, professor of microbiology and molecular genetics, received the International 2002 Research in Oral Biology Award, the highest honor given by the International Association for Dental Research.

Dr. **Barry Finette**, associate professor of pediatrics, received one of seven Clinical Scientist Awards in Translational Research for 2002 from the Burroughs Wellcome Fund. The award, which provides \$750,000 over a period of five years, will assist Finette's research in the area of "Mechanisms of malignant transformation in humans." See full story at [Barry Finette](#)

Dr. **Diane Magrane**, associate dean for medical education, received a \$15,000 grant from the Josiah Macy, Jr. Foundation to support a project titled "Building Collaborative Bridges across Clinical Clerkships." The project is focused on the reconstruction of clinical clerkship education at the College of Medicine. This past February, the college rolled out the first component of its new Vermont Integrated Curriculum, a clinical hands-on orientation for medical students. Three years ago, Magrane received a \$300,000 Macy grant to help with the building of the new curriculum.

Senior **Dana Stromberg**, recent recipient of a Governor's Award for community service, also has won the Samuel Fishman Memorial Fund Scholarship, 2001, for outstanding community involvement and leadership and is a nominee for the Neighborhood Leadership Award, for those who make Burlington a great place to live work and play.

Publications and Presentations

Garrison Nelson professor of political science, contributed a chapter titled "Sideshowes and Strategic Separations: The Impact of Presidential Year Politics on Congressional Elections," to *Politics In an Era of Divided Government: Elections and Governance in the Second Clinton Administration*, edited by Harvey Schantz. (New York: Routledge, 2001), pp. 105-128. He also published, with Richard Hogarty, an article titled "Redistricting on Beacon Hill and Political Power on Capitol Hill: Ancient Legacies and Present-Day Perils," in the *New England Journal of Public Policy XVII* (Fall/Winter, 2001-2002), pp.91-104.

Several UVM geology faculty and students presented papers at the 37th Annual Meeting of the Northeastern Section of the Geographical Society of America, March 25-27, in Springfield, Mass. **Keith Kleipeis**, assistant professor; **Alexander Claypool**, graduate student; and junior **Nathan Toke**, presented "Dynamic Topography in Transpressional Regimes: An Example from the New Zealand Plate Boundary Zone." **Andrea Lini**, assistant professor, co-presented "Post-Glacial Lacustrine Organic Matter Records: Climatic or Biotic Proxies?"

Charlotte Mehrtens, professor,; **Meg Modley**, graduate student; and senior **Alysa Snyder** presented "Sedimentation and Runoff onto the Reef Surrounding Roatan, Bay Islands, Honduras." Lini, Toke and **Paul Bierman**, associate professor, presented "Contrasting Evolution of Northern New England Post-Glacial Lakes." Senior **Megan McGee** co-presented "Hydrogeologic Controls of Wetlands in the Potsdam Sandstone: Adirondacks and Lake Champlain Basin, New York State," documenting a National Science Foundation-funded project. **Angelo Antignano IV**, graduate student, and **Tracey Rushmer**, assistant professor, presented, "Geochemical Effects of Hydrous Phase Stability on Metadiorite Partial Melts: Applications to Tonalite Production in Convergent Regimes." **Stephen Wright**, lecturer, McGee and seniors **Andrew Bosley** and **Matthew Guerino** presented, "Surficial Geology of the Jeffersonville 7.5-Minute Quadrangle, Northern Vermont."

Paul Kindstedt, professor of nutrition and food sciences, alerted us to a new, book. Although not by a UVM author, *The Cheeses of Vermont*, by Vermonter Henry Tewksbury, "includes a brief but nice section on the critical role of UVM in supporting the stunning growth of farmstead cheesemaking in Vermont (see pp 3-4)," Kindstedt said. He added, "The fingerprints of UVM's contributions can be found throughout the book."

Associate Professor of Physical Therapy **Nancy Zimny** and fourth-year physical therapy student **Abha Shah** traveled to the small, rural community of El Rosario, Honduras, in March through a volunteer organization called ACTS – Americans Caring, Teaching and Sharing. Working out of a small room in a medical clinic and in the mud brick and adobe homes of the villagers, Zimny and Shah taught people with disabilities exercises to relieve pain and improve function. In addition to providing direct physical therapy care, the two assisted with running the dental hygiene clinic for children, developed educational materials for giving massages and doing exercises and distributed school supplies.

Warren Bickel, professor of psychiatry and co-director of the UVM Substance Abuse Treatment Center, testified before the U.S. House of Representatives Appropriations Committee's Subcommittee on Labor, Health and Human Services and Education on April 23. Bickel, who testified as policy officer of the college on problems of drug dependence, spoke in support of a 19.8 percent increase in funding to the National Institute on Drug Abuse of the National Institutes of Health for Fiscal Year 2003.

Members of the UVM Area Health Education Center (AHEC) program presented this month at the National AHEC Organization's annual meeting in Little Rock, Ark. Among their presentations were: a poster on the UVM AHEC Diabetes Care Improvement Project by **Elizabeth Hallock**, clinical program coordinator at the UVM AHEC program office; and a workshop titled "Mapping a Vision: Using Geographic Information Systems (GIS), the AHEC Database, and Other Information to Understand Health Care Needs," co-presented by **Laurie Hurowitz**, director of loan repayment and special programs at the UVM AHEC Program Office.

April 17-23

Awards and Honors

The University of Vermont Libraries is proud to announce that **Birdie MacLennan**, library associate professor, has been awarded the New England Technical Services Award for Excellence in Library Technical Services "for her dedication to the profession and her contributions to technical services librarianship in New England."

Vaughn Collins, graduate alumnus in community development and applied economics, has been appointed chief of the Federal Duck Stamp Program in the Fish and Wildlife Service. The Department of Interior program has, since its inception in 1934, raised more than \$500 million to conserve more than five million acres of prime waterfowl habitat. He previously worked for the National Partnership Office of the National Rural Development Program (NRDP) at USDA.

NEWS BRIEFS

EVENTS

NOTABLES

SEARCH

PRINT THIS ISSUE

PRINT PAST ISSUES

FEEDBACK

UVM HOMEPAGE

Spike Lee Speaks to Spring Fest

By Kevin Foley



Director Spike Lee mingled with students before and after his April 19 talk, which was a gift of the senior class. He also found time to toss a football on the Green. (Photo: Andy Duback)

In a rollicking, wide-ranging talk, *Do The Right Thing* director Spike Lee touched on subjects including the GRE, the racial follies of popular films, the double-standard of university administrators who allow confederate flags to fly in dormitory windows and the "modern day minstrel acts" of some MTV rappers.

Lee's discussion also included standard commencement address fare: He advised graduating seniors to

find "what it is you like – no, love." But being Spike Lee, even this more shopworn sentiment came with an edge. "Congratulations to the graduating seniors" he said, pausing as knowing chuckles cascaded through Ira Allen Chapel. "Now get ready for the unemployment line."

Senior citizens

Lee's first appearance at UVM since 1990 was a gift of the Class of 2002, and was one of the headline events of Spring Fest 2002, a substance-free, student-organized celebration including recognition of academic achievement and student volunteerism, amid live music and other entertainment. Tickets for Lee's free talk disappeared as soon as they became available, and the hall was filled with students eager to ask questions about film and racial politics.

But the director began in an autobiographical mode, describing how he became passionate about film as a student at Morehouse College in Atlanta. His remarks about needing an "astronomical GRE" to apply for graduate school seemed to resonate with the graduating seniors in the audience, as did his musing on the common conflict between a new college graduate's desire to create a career in the arts, and his or her parents' desire for their offspring to work in a higher-paying field.

Eventually, Lee's remarks turned back to the film industry – and the role of people of color within it. He described some of the storytelling and aesthetic challenges that he and other black directors face working within a film canon shaped by racial misrepresentation. Lee argued that the first modern film, D.W. Griffith's *Birth of a Nation* was essentially a "Klan recruiting video." This questionable history, along with its continuing legacy in that no people of color control film studio budgets, puts unique pressures on non-white filmmakers, he said.

On the one hand, responding to Hollywood's legacy of racial misrepresentation creates a temptation to "overcompensate and have Christ-like characters" – decisions inimical to art – but conversely, creating flawed, realistic minority characters risks criticism from within the director's community for "airing dirty laundry," Lee said.

Lee's solution to the dilemma, as he explained at Ira Allen and as evinced in his

Deep in the Bogs

New England bogs nurture carnivorous pitcher plants that could potentially serve as biological indicators of nitrogen pollution, according to research published this month by UVM biologist Nicholas Gotelli.

Major Cancer Grant

With help from a new award, Dr. Barry Finette may be closer to finding how healthy cells acquire the genetic changes that turn them into cancer cells.

15 feature films, is to focus on strong characterization and storytelling. He also said that he has confidence in his audience, even within an industry that is largely contemptuous of its consumers.

"I have been in many meetings with studio heads who refer to you – the American movie-going audience – as idiots," he said. "And every summer, they're being proven right. It's sequels, sequels, sequels," he said.

"Magical, mystical" mistakes

Lee had other criticism of the film industry. Though he endorsed the recent Oscar awards to Halle Berry and Denzel Washington as best actors, and director Sidney Poitier for lifetime achievement, he said he hoped that the awards were not a form of appeasement, to be followed by another 40-year lapse. He also knocked the recent popular films *The Patriot*, *The Legend of Bagger Vance* and *The Green Mile* for indulging in a subtle (and not-so-subtle) racial stereotyping.

"The most disturbing trend of the last few years is the super-duper magical mystical Negro," he said, continuing a theme he developed in *Bamboozled*, his documentary about representation in popular culture. "In these films you have this super Negro who has these powers, but these powers are used only for the white star of the film, but he can't use them on himself or his family to improve his situation."

Even more galling to Lee, some of these historical films climax with black characters being offered freedom by their white counterparts – which they seem to decline.

"It's this myth that we were happy being slaves. Happy that our families were being torn apart and sold on the blocks," he said.

While Lee reserved his harshest criticism for Hollywood's power structure, he also knocked many of the rap artists who perform on MTV and BET for their stereotyped performances. "Something has got to change. And it's up to the audience to demand it," he said.

Barring the 'stars and bars'

The loudest and longest sustained applause of the evening came within the question-and-answer session after Lee's remarks, when a student asked the director about his thoughts about the confederate flags sometimes displayed on student dorm windows at UVM and other institutions.

"There's a thing called freedom of speech, I understand that, but let's just look at a different scenario, what would be the reaction of a student body, administration, faculty if a student had a swastika hanging from the windows? I think the reaction would be a little different," Lee said. "Some of you might not see the analogy, but for people of color, when they see the confederate flag, the stars and bars, it's the same reaction that Jewish people have when they see the swastika... I know for sure that there's not a university in the USA where you can put a swastika in your window. That's not going to happen."

As it turned out, these remarks were about as controversial as Spring Fest '02 weekend got. An April 20 rock concert with the band Vida Blue attracted about 1,500 students. Security officers and police smoothly enforced the event's ground rules, ending several years of student and community pro-marijuana demonstrations.

theview

University Communications
86 South Williams Street
Burlington, Vermont
05401-3404

pho 802.656.2005
fax 802.656.3203

theview@uvm.edu

[The View Homepage](#) | [UVM Homepage](#)
[News Briefs](#) | [Events](#) | [Notables](#) | [Feedback](#)

NEWS BRIEFS

EVENTS

NOTABLES

SEARCH

PRINT THIS ISSUE

PRINT PAST ISSUES

FEEDBACK

UVM HOMEPAGE

Bog Log

Biology professor finds a cheap, accurate barometer of burgeoning nitrogen pollution in an unlikely place — carnivorous pitcher plants growing in Vermont wetlands

By Kevin Foley



Nick Gotelli, professor of biology, recently published work that shows carnivorous pitcher plants are biological indicators of levels of the pollutant nitrogen. (Photo: Bill DiLillo)

Bogs are poor in nutrients, but rich in life, nurturing complex communities of organisms — communities with members that could potentially serve as finely tuned biological indicators of increasing nitrogen pollution, according to research published this month by UVM biologist Nicholas Gotelli.

Gotelli and collaborator Aaron Ellison (then of Mt. Holyoke College) focused on the

carnivorous northern pitcher plant. By measuring nitrogen levels and leaf size and composition of randomly selected pitcher plants at 26 New England bogs, they found that a plant's shape was an accurate predictor of local nitrogen levels. In two field experiments, they corroborated and extended these observations, finding that artificially increasing the amount of nitrogen available to the pitcher plants had rapid and predictable effects on the size and shape of the plant's leaves.

Cost-benefit carnivores

The pitcher plants Ellison and Gotelli fed with nitrogen began producing more and larger phyllodia, fan-shaped leaves that are more efficient at gathering energy through photosynthesis than the water- and insect-gathering pitcher leaves. The feedings changed the biological cost-benefit calculus that had caused the plants to evolve carnivory in the first place; when nitrogen was plentiful, the cost in lost photosynthesis capability of maintaining the pitchers was no longer worthwhile.

The findings support a substantial body of work that models the evolution of botanical carnivores in cost-benefit terms and demonstrates that the resource expenditures necessary for a plant to become carnivorous are not favored by evolution when an environment is rich in nutrients. But the Ellison-Gotelli paper has applied as well as theoretical interest.

"The increased nitrogen levels caused the pitcher plants to stop producing pitchers, or to not make them as big or robust. The plants stopped investing as much in a suddenly less productive activity," says Gotelli, who published the study in the April 2 issue of *Proceedings of the National Academy of Sciences*. "We started to see changes on a fairly short time scale, eight to 12 weeks. That was a real surprise. We suspected the plants would respond, but perhaps over the course of several seasons rather than during a single growing season."

Pitcher plants as indicators

The plants' fast and calibrated response to a range of manipulated nitrogen

Spike Speaks

In a rollicking, wide-ranging talk, *Do The Right Thing* director Spike Lee touched on subjects including the GRE, the racial follies of popular films, the double-standard of university administrators who allow confederate flags to fly in dormitory windows and the "modern day minstrel acts" of some MTV rappers.

Major Cancer Grant

With help from a new award, Dr. Barry Finette may be closer to finding how healthy cells acquire the genetic changes that turn them into cancer cells.

levels suggests that the plants could become a biological indicator – a canary in the coal mine of sorts – of airborne nitrogen deposition. (The metaphor, despite being clichéd, is apt here for several reasons. Ellison and Gotelli will publish research later this year that argues that increased nitrogen levels eventually will put the long-lived pitcher plants at risk of extinction.) Though nitrogen pollution is an increasing problem, thanks to decades of increased use of fossil fuels and nitrogen-based fertilizers, the monitoring stations necessary to fully trace its effects are expensive and widely scattered.

The Ellison-Gotelli findings suggest that simple field tests of easy-to-find pitcher plants in bogs may be able to provide much-needed data on deposition of nitrogen at the level of local ecosystems.

"This suggests that you could potentially go out with some calipers and a notebook and come back with indicators of nitrogen levels," Gotelli says.

Naturalists have used biological indicators to formally assess the health of rivers, streams and oceans for more than 100 years. But using plant growth patterns to assess pollutants, especially atmospheric rather than point-source pollutants, is an emerging approach that has considerable potential to cheaply and safely assess the health of wide range of ecosystems. Other carnivorous plants, Gotelli hypothesizes, may serve as indicators of levels of other pollutants.

At home in the bogs

But that's only a byproduct of Gotelli's long-time interest in fundamental questions about how communities of animals and plants form, organize, thrive, compete and fail. "I didn't go into this to become an environmental savior," he says.

But he's pleased to find a rich new arena to study communities and population, especially one so easily accessible from home.

"Most ecologists are enamored by the tropics. But there's too many species there for me," Gotelli says. "I prefer simpler systems, ones I can manipulate and then sit back and watch what happens. My research tends to move in five-year cycles, but I think this bog work could continue 10 or 20 years. The ecology of these bogs is wide open, and it's fascinating."

theview

University Communications
86 South Williams Street
Burlington, Vermont
05401-3404

pho 802.656.2005
fax 802.656.3203

theview@uvm.edu

[The View Homepage](#) | [UVM Homepage](#)
[News Briefs](#) | [Events](#) | [Notables](#) | [Feedback](#)

NEWS BRIEFS

EVENTS

NOTABLES

SEARCH

PRINT THIS ISSUE

PRINT PAST ISSUES

FEEDBACK

UVM HOMEPAGE

Finette Receives Burroughs Wellcome Fund Award

By Jennifer Nachbur

For the past several years, Dr. Barry Finette has focused part of his research on trying to answer a key question: "How do healthy cells acquire the genetic changes that turn them into cancer cells?" With help from a new grant, Finette may be a little closer to finding the answer.

This March, the Burroughs Wellcome Fund honored Finette, associate professor of pediatrics, with a prestigious 2002 Clinical Scientist in Translational Research Award. The five-year, \$750,000 award will help support Finette's research – conducted at the UVM Vermont Cancer Center – in the development of genome stability and the extensive proliferation and mutagenic mechanisms associated with pediatric and adult malignancies.

"This award acknowledges the importance of the work we've done to date in studying the evolutionary process we believe leads to cancer," Finette said. "Uncovering previously unknown information – like our discovery of the first evidence of genetic instability occurring in non-malignant cells – helps to create better treatments for patients and in the long run, may help in preventing some cancers from even occurring."

To date, two well-supported mechanisms have been associated with causing a normal cell to mutate into a cancer cell. The first involves the production of hyper-mutable or genetically unstable cells. The second causes cell proliferation, in which cells replicate at a faster rate and, in the process, acquire mutations. Through an examination of blood samples, Finette looks for this activity in the non-cancerous T-cells of children with leukemia who have at one time been treated with chemotherapy for their cancer. T-cells, along with B-cells, are one of the two main immunologic cells responsible for fighting infection. Within these T-cells is a "marker gene" called hypoxanthine-guanine phosphoribosyltransferase (HPRT). HPRT mirrors genetic changes that occur in a cell.

Finette and his team will use the Burroughs Wellcome grant to continue their research on childhood leukemia patients, as well as children and young adults with Hodgkin's disease. The latter have a high susceptibility to develop a second cancer. Their research also will focus on ulcerative colitis patients, who are at a greater risk of developing colon cancer.

Finette, who also received a 1998 National Cancer Institute Howard Tenin Award and was twice named a Translational Research Scholar by the Leukemia and Lymphoma Society, has published several papers related to the mechanisms and clinical relevance of somatic mutations in the development of diseases in children.

"Throughout his career, Dr. Finette's contribution to translational research -- the critical link between basic laboratory work and improved care for patients -- has been outstanding," said David Yandell, director of the Vermont Cancer Center. "It comes as no surprise to all of us that his research contributions, as well as his proven ability to mentor future translational researchers, are being recognized by the Burroughs Wellcome Fund on a national stage."

The Burroughs Wellcome Fund is an independent, private foundation dedicated to advancing the medical sciences by supporting research and other scientific and educational activities.

Spike Speaks

In a rollicking, wide-ranging talk, *Do The Right Thing* director Spike Lee touched on subjects including the GRE, the racial follies of popular films, the double-standard of university administrators who allow confederate flags to fly in dormitory windows and the "modern day minstrel acts" of some MTV rappers.

Deep in the Bogs

New England bogs nurture carnivorous pitcher plants that could potentially serve as biological indicators of nitrogen pollution, according to research published this month by UVM biologist Nicholas Gotelli.

theview

University Communications
86 South Williams Street
Burlington, Vermont
05401-3404

pho 802.656.2005
fax 802.656.3203

theview@uvm.edu

[The View Homepage](#) | [UVM Homepage](#)
[News Briefs](#) | [Events](#) | [Notables](#) | [Feedback](#)