2002

Faculty Excellence

University of New Hampshire

FACULTY EXCELLENCE

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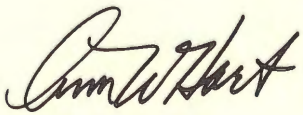
What does excellence mean?

We think you'll find the answers in these pages.

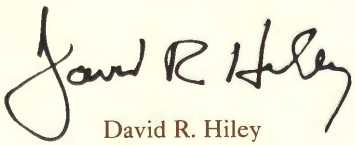
Join us as we recognize and celebrate members of our accomplished faculty who have distinguished themselves in the classroom, the laboratory, their communities, the state, and around the world. Their dedication and exemplary work are among our University's most valuable resources.

And we thank them. Because of them, we are able to offer a genuinely diverse, authentic, and excellent education. As you will read here, it is an education that stretches limits. It extends from a secondary school in Haryana, India, where an inspired young man found plants to be "simply fascinating;" to Portsmouth's Market Square, where an engaged professor assesses the delicate balance of the state's economy; from urgent work to save lives from AIDS in sub-Saharan Africa; to a third-grader looking through a microscope and making a decision "that was a turning point for me."

These are the individuals who create turning points for our students. Each of these 17 stories tells us that the quality of our faculty is second to none. How fortunate we are to be a part of this vibrant community.



Ann Weaver Hart
President
University of New Hampshire



David R. Hiley
Professor of Philosophy
Provost and Vice President for Academic Affairs

Excellence Awards

UNIVERSITY-WIDE

EXCELLENCE IN TEACHING

SUBHASH C. MINOCHA

Professor of Plant Biology

At age 24, Sir Isaac Newton was musing in his mother's English garden. An apple fell from a tree, striking him on the head. He pondered the force that caused the apple to fall, a question—legend has it—that led him to his theory of universal gravitation.

Now suppose Newton had asked a slightly different question, poses Subhash Minocha, professor of plant biology. What if he asked what force kept that apple stuck to the branch? Or why it came off?

"Newton would have been a botanist, instead of a physicist," says Minocha. "Many scientific discoveries depend on the questions you ask. Some may come spontaneously—you're walking through the woods and you discover a new plant—but most come by design with a specific problem in mind. Newton was troubled by the lack of an explanation for the planets' orbits, and the apple inspired him to find the answer."

"You can't tell what the potential of a seed is simply by looking at it. Like human beings, you don't know until something has passed through the test, what the final product will be."

The need to understand nature and how it functions is part of what defines our humanity, says Minocha. It was this innate drive that drew him into science when he was a young man studying at Government Higher Secondary School in Kaithal, a small town in the state of Haryana, India. Originally interested in medicine, his focus shifted to plants because he found them "simply fascinating," and he attended Punjab University in India to pursue his interest.

"Initially, plants may look uninteresting to students because they're passive in their appearance," he says. "But they're as active as animals in their functioning without ever moving from their place."

There are so many questions about plants that need answering. How do they know when to drop their leaves? What genes regulate how they measure time? What is encoded in a seed that tells it when to germinate?

Minocha, who has been teaching and doing research at UNH for 28 years, studies these processes on the cellular level. New tools and methods have replaced older "manipulative" techniques, like cross-breeding, with cutting-edge molecular ones, like cloning and recombinant DNA. In collaboration with his wife, Dr. Rakesh Minocha, a research scientist with the USDA Forest Service, he leads a team of students answering some of the most fundamental questions about stress in plants.

"The way we do science has changed dramatically over the years," he says. "Where we once had to manipulate the whole plant, we can now manipulate the genes themselves."

This has led to complex ethical issues about how far science should go in terms of changing what some say nature intended. But, like the need to understand how things work, humans are also driven to make things better. Genetically engineered foods and stem cell research are but two products of that drive.

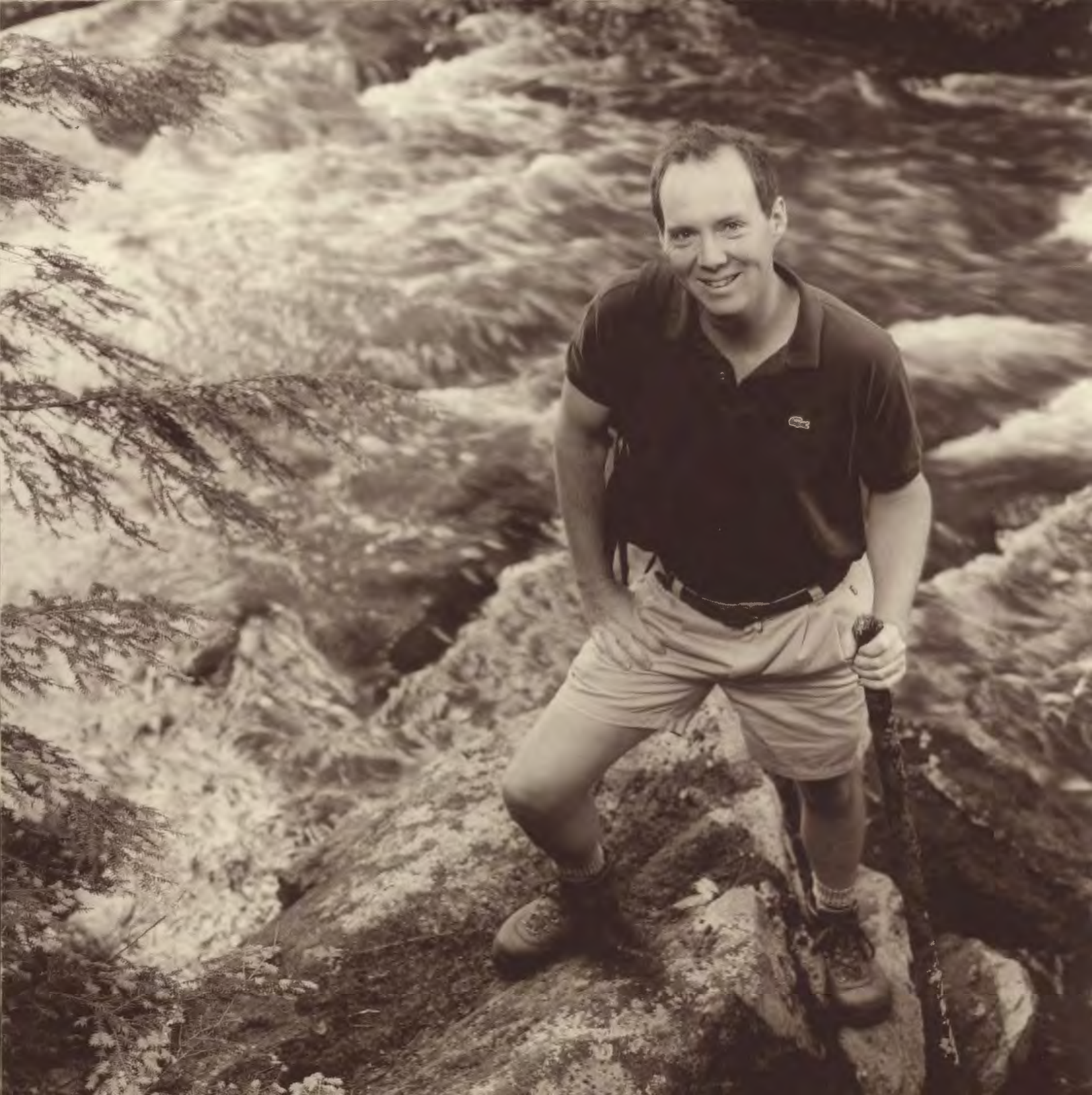
"Biotechnology has become one of the most controversial issues of our time," says Minocha. "We can design prettier flowers, more nutritious foods, maybe even healthier children. That is wonderful and scary at the same time."

But most of the general population is scientifically illiterate when it comes to dealing with these complex issues. Minocha feels a responsibility to educate people because "they must have an appreciation and understanding of science to be able to engage themselves intelligently in the debate."

While UNH students are his primary audience, he also works with high school teachers, gives public lectures, and teaches the next generation of college students through a summer institute he directs called Project SMART (Science and Mathematics Achievement Through Research Training). These are the people, he says, who are or will be dealing with society's complex scientific issues all the way from the Congressional floor to the local town meeting. He hopes what he imparts will help them guide the way.

Exciting times to be a scientist, Minocha admits. Exciting times to be.

—Sharon Keeler, UNH News Bureau



BRUCE T. ELMSLIE

Associate Professor of Economics

In a McConnell Hall classroom, Adam Smith is going loggerheads with Karl Marx on the subject of competition. Things are just getting out of hand when John Maynard Keynes steps in to offer a moderating opinion. Speaking through the medium of UNH graduate students, these giants of economic theory have been brought together courtesy of Bruce Elmslie, a man whose strategies for making economics fresh and interesting in the classroom inspire emulation on the part of colleagues and rave reviews from students.

"Bruce's classes come alive with policy debates and experiments, which many of us borrow," says colleague Michael Goldberg, associate professor of economics. "He continually brings into his classroom innovations that engage students in the material."

"I never had much use for the expression, 'curiosity killed the cat.' As the foundation of our intellectual lives, curiosity leads to exploration, understanding, and new questions. Inertia is a powerful force; my window is a wondrous antidote."

Searching for the source of Elmslie's motivation to keep his work vital after more than a decade of teaching is pleasantly bewildering; his interests are legion. He is known not only as a dedicated teacher, but also as a research machine, publishing more than 25 articles in 10 years, with six more papers in the pipeline. His academic expertise jumps from the history of economic thought (he is internationally regarded for his study of Adam Smith) to international economics to one of the most contested subjects in the field of economics today—the sources of economic growth. He is a golfer who played college tennis, a writer of short stories whose tastes in reading range from the southwestern mysteries of Tony Hillerman to the existentialist prose of Eastern Europe's Jerzy Kosinski. He plays classical guitar, but loves listening to Lynard Skynard, Jethro Tull, and ZZ Top.

It doesn't take long to find the thread that weaves such contrasting interests together, however; Elmslie is open and curious to the core.

"I love exploration, whether it's of new ideas or mountains," says Elmslie, for whom a backcountry hike with students and colleagues is likely to become a day-long conversation about philosophy, economics, or a research project. "I enjoy having a number of projects going at once. The ideas come from conversations, articles, books, life at home—context does not matter as long as you are interested in exploring and open to possibilities."

One might expect that pursuing most every passing interest would translate into a phenomenal workload—and it does. Alongside teaching four courses a year and conducting research, Elmslie twice has served as coordinator of the graduate studies program in economics and cocreated a bachelor of science degree in quantitative economics. He recently spent a semester as the faculty coordinator with UNH's study abroad program in Budapest, and looks forward to integrating this program into the curriculum for business administration students. His publication record prompts frequent requests to referee for top journals in his field and he is currently chairing a committee for the History of Economics Society on graduate education in the history of economic thought.

Yet for a man who is prolific in the classroom, the research arena, and in his professional community, Elmslie is remarkably unconcerned about the outcomes of his curiosity.

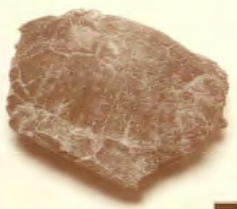
"When I came to UNH, I felt like the luckiest man in the job market; this may have been the only position that allowed me to combine my research interests," he says. "I never expected tenure, I just welcomed the opportunity to work hard at something compelling. I think that's key to staying active—don't do things with a reward in mind, do them because they compel you to or, simply, because you love to do them."

—D. J. Leonard,
University Publications

WILLIAM C. CLYDE

Assistant Professor of Earth Sciences

One day when he was a graduate student scrambling up a steep gully in search of fossils, Will Clyde found a foothold that looked like a rock—but turned out to be a 52-million-year-old turtle. "This fossil is one of my favorites," he says, "not because it's so important from a research point of view, but because it really helps people understand what a fossil is."



On a blustery Saturday in early spring, when the tide is out and the air is heavy with the briny smell of the sea, Will Clyde hunkers down on a rocky outcropping, his back to the wind. He is intent on telling a story. The plot lines, he explains to a group of students clustered around him, are staring you in the face.

A dark bolt of basalt slices through the rough mass of gray rock beneath Clyde's feet. The clue is obvious, but the story is complex. The assistant professor describes how the igneous intrusion, once a molten mass, cut through the older metamorphic rock. He asks a few questions. The students make notes. They are piecing together one small chapter of an ancient story, the history of the Earth.

Why care so much about the rock beneath our feet? "This is something I explain the first day of class," says Clyde, who teaches Earth History, as well as Paleontology, and Sedimentary Rocks and Stratigraphy. "You should be interested in the history of the Earth for the same reason you're interested in any history class: it puts our own existence in perspective."

Back in his lab, the paleontologist holds a tiny cube of red stone between his thumb and forefinger. "This is the closest I get to art," Clyde says, joking. But it's true. Whenever he returns from the field—Wyoming or Alaska or Pakistan—Clyde spends hours bending over his mitre saw, grinding rough chunks of rock into perfect one-inch squares. It takes a certain deft touch not to cause a 50-million-year-old rock to disintegrate into useless crumbs.

Once they're cut to size, each cube is labeled with a date, a site number, an identifying letter, and two arrows—one showing the "strike" or compass direction of the plane from which the rock was taken, the other indicating the "dip" or angle of the plane. Then Clyde gathers a batch of 30 samples and steps into a small metal cage—one of only a handful of paleomagnetism labs in the country. Inside this lab, a space free of Earth's magnetic field, samples are repeatedly heated, cooled, and measured—a process that can take up to 60 hours per batch. The cumulative measurements help Clyde pinpoint a rock's geological age.

Every cube offers another clue to help answer one of geology's hottest questions: Where did modern mammals come from? "The evidence is so clear," says Clyde, describing the striped rock formations of Wyoming's Big Horn Basin, where he does much of his research. "At this one level, all of a sudden—wham!—you see all these modern mammals. Beneath this level, you don't see any of them."

It is this turning point, the boundary between the Paleocene and early Eocene epochs, that most intrigues Clyde.

—Suki Casanave, College of Engineering and Physical Sciences

CLYDE L. DENIS

Professor of Biochemistry

Every morning Clyde Denis enters his laboratory in Rudman Hall with the expectation that, before the day is through, he might learn something that nobody ever knew before. That's why he's a molecular biologist, he says: because we know so little about life, and there is so much more to discover.

For the past 19 years, Denis, a professor of biochemistry and molecular biology, has been investigating how cells function and why cancerous cells grow uncontrollably. Most recently, he has focused on two proteins manufactured by cells that appear to turn off that growth. In the past 19 years, the National Science Foundation and National Institutes of Health have given him more than $5.6 million to continue this promising line of inquiry.

"I have these minimalist mobiles hanging in my office—linear, yet defying reason, simplicity becoming complex. They remind me of banksia seed pods or certain parts of Franck's or Schubert's string quintets."

Denis works with yeast cells, which function like human cells but are quicker and easier to grow in the lab. Further work must now be done with human cells, but his research could lead to novel drugs or gene therapies to suppress cancer.

Denis became intrigued by the possibility of discovery in a high school biology class, but it wasn't until he took organic chemistry and microbiology at the University of Illinois in the early 1970s that he abandoned his plan to become a physicist. As an undergraduate he was strongly influenced by Carl Woese, one of his professors. Woese studied bacteria living in extreme environments—at the bottom of the deep ocean, for example—and found what many scientists now agree is a whole new kingdom of living things.

"He was always thinking, creating questions, formulating hypotheses," Denis says. "That's what I liked about the scientific process."

Denis has spent his own career figuring out how cells know what proteins to produce, when to produce them, and when to stop. That's critical because most cell functions are carried out by proteins.

The proteins that a cell produces are determined by the genetic coding stored in the double helix of DNA in the cell's nucleus. DNA provides the original template for the production of messenger RNA which, in turn, serves as a template for the production of proteins. Ordinarily, the cell keeps producing a particular protein as long as it needs it and then stops. Denis has been looking for the mechanism that turns off the protein production. Working with a colleague at the University of Arizona, he has recently shown that two proteins, CCR4 and CAF1, act together to trigger the breakdown of RNA and stop production. Both proteins occur in human cells, so this discovery could ultimately lead to a new method of tumor suppression in humans.

Research is painstakingly slow and often takes decades to lead to a breakthrough. Denis first isolated CCR4 in 1981 and is still investigating exactly how it is regulated. Yet he remains as excited about the opportunities for generating new knowledge today as he was when he started studying biology as a teenager. "Science is all about making those connections," he says. "All we're limited by in science is our imagination."

—Maggie Paine,
UNH Alumni Publications


MARKET ST

ROSS J. GITTELL

Associate Professor of Management
James R. Carter Professor of Management

"This historic map helps me appreciate the differences across the state, reminds me of how the past is linked to the present, and helps me think about what we need to do to preserve what we value and to make the future better than the past."

At 7:30 a.m. in July it's already hot and hopping in Portsmouth's Market Square. The young man with the green hair and laptop carrying case slung over his shoulder might be headed for work in a software or marketing company occupying valuable office space near the harbor. He might be a tourist or a student. A cook in a local restaurant.

To observer Ross Gittell, savoring a decaf cappuccino at Café Brioche, he's a part of the energy and excitement of a unique community that is "a joy to be a part of"—and worth working hard to preserve.

From Portsmouth to Pittsburg, New Hampshire, it would be difficult to find a single issue of importance to the future prosperity of the state's economy—a delicate balance of tradition and change, of environmental beauty and electronic commerce—that hasn't been shaped and energized in the public mind by the teachings, research, and partnership-building skills of Gittell.

"Ross epitomizes the engaged professor," says University System of New Hampshire Chancellor Stephen Reno. "His considerable expertise makes important issues more intelligible not only to his students, but also to a much broader public."

Reno ought to know. In a breathtaking span of publications and policy recommendations to business and industry groups and the governor's office during the 1990s, Gittell identified the state's quality of life, highly skilled workforce, and growing knowledge-based economy as distinctive assets that should be nurtured and promoted.

The research also warned of a potential "brain drain"—an exodus of the state's most talented students and loss of economic competitiveness—if steps weren't taken to align educational programs with marketplace demands. "The $100 million Knowledge Economy Education Plan for New Hampshire (KEEP-NH), the largest capital request ever embraced by legislators and the governor, was built on Ross' argument that investing in education, K-12 to college, was critical to economic growth," recalls Reno.

Gittell's efforts on behalf of the New Hampshire Charitable Foundation, Children's Alliance, New England Board of Higher Education, and other nonprofits, also reflect his strong belief "that economic strength requires a stronger, accessible, and relevant educational system."

Gittell is equally at ease in the academic and business communities—a trait he affectionately attributes to his parents, one a political science professor, the other a certified public accountant. "I've always enjoyed the back and forth between the academic and applied," says Gittell. "As long as it serves a purpose." Gittell himself has served as vice president of the New England Economic Project, project director of the state's Economic Development Action Plan, and member of a governor's advisory team charged with presenting the state's economic picture to Wall Street bond rating agencies.

"The University and the state's business community have a lot to gain from working more closely with each other," says College of Engineering and Physical Sciences Dean Arthur Greenberg, who serves on the Portsmouth Chamber of Commerce Technology Roundtable. "Ross helps bridge this gap with his energy and knowledge."

And joy. "Ross loves everything," enthuses Jennifer Quinlan, the chamber's business development manager. "Picking out fruit at the farmer's market on Saturday morning. Running through the streets of Portsmouth. Having lunch with his family downtown. Even when he's providing analysis, he's not removed from it all. He's part of the community."

Successful partnering takes patience. What role will the University play in public policy decisions affecting the state's business community? How can educators, business leaders, and legislators create education and training programs that keep the best and brightest students in the state? The questions are difficult. The answers are harder.

One thing is sure: the man in Market Square is already working on them.

—David Moore,
University Publications

RAYMOND J. GOODMAN, JR.

Professor of Hospitality Management

"My other passion is the performing arts. I belonged to a community singing group. I also love dance, theater, and opera. The UNH community might recognize my name because I served on the Cultural Events Committee that brings world-class performances to campus each year. This is one of my most enjoyable areas of service."

Every day about 8,000 baby boomers turn 55, and according to Raymond Goodman, Jr., winner of this year's Alumni Association Award for Excellence in Public Service, "a lot of them will not accept the way our society has taken care of elders in the past."

People nearing retirement today are healthy, active, and not looking for a "rest," notes Goodman, chair of the hospitality management department at the Whittemore School of Business and Economics. "They want to continue learning and contributing to their communities. Above all they do not want to be a burden to their children." A new kind of active, well-rounded retirement experience is needed.

Of such visionary stuff was RiverWoods born—the New Hampshire Seacoast's only Lifecare Community offering a continuum of independent living, supported residential, assisted living, and skilled nursing care. Fifteen years ago, MaryAnna Hatch and Rosemary Coffin of Durham, artists and partners of UNH faculty, dreamed of creating a retirement community they would actually look forward to retiring in. They wanted an intellectually stimulating, intergenerational place, able to accommodate life partners with different physical needs.

RiverWoods of Exeter is all this and more, thanks in part to Goodman's skill at practical matters and dedication to the original idea. On the board since 1990 and chair since 1998, he won this year's public service award for "encouraging leadership" that allows managers "the latitude to accomplish a variety of outreach activities." Many enrich ties with younger generations—there is a playground, a new teen center, a program matching RiverWoods residents with first-time college students, and another to support troubled youth.

The community offers 201 independent living apartments plus a 60-bed resident health care center. In an industry where failure is common, RiverWoods is financially healthy and active in philanthropy. "Too often, boards and directors have the best of intentions but not the basic business skills to keep their facilities financially viable," says Goodman. "It's heartbreaking to residents and families when they fail. Worse, it's unnecessary."

The author of numerous articles and a book on retirement facilities planning, Goodman, by insisting that RiverWoods run according to sound hospitality management and business principles, has helped put it on a granite-solid foundation. He and RiverWoods CEO Frank Crane recently were invited to give "best practices" advice to policy makers on behalf of the American Association for Homes and Services for the Aging in Washington, D.C.

RiverWoods has proved to be one of the most gratifying projects of Goodman's career. "We're doing a lot more than taking care of older people," he says with satisfaction. A Laredo, Texas, native who credits his civic-minded father with modeling public service, Goodman is delighted that "at the end of the day, we can feel good that we have been part of providing an environment that enlightened someone's life." He is a nationally recognized expert on continuing care retirement communities and enhancing older adults' quality of life.

The RiverWoods approach has roots in some religious groups' focus on helping elders stay active in their communities. People gave their estates to the church in exchange for care. It's similar at RiverWoods—couples may sell their home to pay an endowment fee, 90 percent of which is refundable to their estate. Then, for a monthly cost, they are guaranteed care for life.

"With the knowledge I gain from being involved in RiverWoods, I teach," says Goodman. "I want to convert some of our young people at the Whittemore School to finding a career in retirement living and management. The industry is facing some challenges, and with a surge of 76 million baby boomers coming, the need is apparent."

—Janet Lathrop, UNH News Bureau

RICHARD W. ENGLAND

Professor of Economics

The utility of happiness has long been an economist's conundrum. Student Jessica Nagle recalls how Richard England explained it by sharing a personal anecdote in an economics course.

"He told us about when he was just out of high school and worked at a book warehouse moving stock," says Nagle. "All day long, he'd work very hard while the other guys took it easy. But, they all got paid the same. If utility is happiness, the slackers maximized their utility by minimizing their labor. Professor England maximized his utility and theirs by working very hard. So, the conundrum is why do some people work more for money and others work less for time off?" Nagle laughs, adding that "He says he got the shaft because he also got flat feet."

At UNH, England teaches a wide range of undergraduate and graduate courses: introductory economics, macroeconomic theory, economic history, and a course in ecological economics. He also helped to develop a minor in War and Peace Studies and is on the faculty of the new doctoral program in Natural Resources and Environmental Studies.

England has taught for 25 years mostly at UNH but also as a visiting professor internationally in Casa Blanca, Morocco, and Budapest, Hungary. "His commitment to teaching has continued to grow over the years," says Professor Marc Herold, his colleague and office neighbor of many years. "Ecological Economics is one of our most highly sought-after courses. In it he uses innovative tools such as the Fish Banks Ltd. game that teaches players to manage a natural resource."

England's teaching style is pleasantly conversational and Socratic. Facing the small seminar in his course, Economic History of the United States, he asks, "So what happened to all of those state-owned industries after World War II?"

"They were sold off so the government wouldn't be socialist?" offers one student.

"Yes," nods England. "For how much and to whom?"

Or as Nagle recounts, "The divestiture of public goods to private wealth after the war isn't highly publicized, but it was a huge transfer of taxpayer wealth to established industrialists. Economically, it's very interesting. He always finds stuff like that."

David Howland, a doctoral student in natural resources, recently took Ecological Economics with England. "He started with the fundamentals of supply and demand and slowly moved on to the writings of ecological economists," says Howland. "One of the nicest gifts that Richard gave me was to show how critically connected economics and the decisions that our government makes are. And, consequently, how that affects our environment. Our consumer habits are often separated in our minds. But he's not afraid to make those connections."

When England's students go to the library to read assigned articles, the journals are not conveniently on reserve. By design, the students have to search for them in the stacks. There, in the dreamy quiet world of the library, they might find *Ecological Economics*, one of the newer international journals in which England has recently published. Much of England's work is obviously pragmatic—he's worked on position papers regarding a two-tiered tax structure to help encourage downtown development in New Hampshire's cities and a proposal for a state transportation policy. But he is also a macroeconomic theorist, at home with large-scale calculus, searching for rigorous alternatives to the gross domestic product (GDP), measures that take into account finite resources, quality of life, and sustainability.

What makes England a great teacher? Knowledge, range, courage, compassion, and—most definitely—flat feet. ⊠

—Carrie Sherman, University Publications

"This doorknob is from my maternal grandparents' house in Michigan. My grandfather was an iron miner and the father of several daughters who were high school valedictorians. My grandparents and parents bequeathed to me, not financial wealth, but a love of education, wildlife, the land, and democracy."

JOE L. P. LUGALLA

Associate Professor of Anthropology

"I use books published by different authors from different countries when I teach. I also share my views on issues by publishing them. I strongly believe that through this exchange of knowledge we can enhance not only our global understanding, but also the understanding among different people of the world."

There is a sense of purpose and urgency to everything Joe Lugalla says and does; a sense that time is precious and cannot be wasted.

But make no mistake. There is not an ounce of vanity or ego about this man. He is merely a realist, and his work demands it. Since the AIDS epidemic was first discovered in the early 1980s, 83 percent of all AIDS deaths have been in sub-Saharan Africa. Tanzania is one of the countries that has been severely affected by the epidemic, and about 10 percent of AIDS orphans live there.

Lugalla is an internationally known sociologist and anthropologist, but the research he does is not in a foreign place or on lofty issues. It is in the country where he was born, on topics that directly affect his family and friends.

The creases on his forehead deepen as he talks about the country he left just a few years ago. Lugalla's family still lives in the village where he grew up. There are no flush toilets, no electricity, and no piped water.

"I understand poverty," he says. "Every month I lose someone I know to AIDS. People are dying every day. In some places in Africa there are no cemeteries. People are buried right outside the house or in the farm surrounding the house. So every morning when people walk out the door and every day when they come back, they see the graves. This a powerful message that is contributing to behavioral changes."

Lugalla knows firsthand. Every summer he returns to Tanzania to see his family and to continue his research on AIDS and the children living on the streets as a result of the disease.

"It is very hard to be away from my family," he admits, "but knowing I can help gives me comfort. I feel like I'm making a difference. I'm not simply doing research. I look for ways my research can be used and turned into policies."

Lugalla says he came to the United States in 1993 because working in an international setting is very enriching. "Information is power, and in the U.S. I have easy access to information that helps me in understanding the problems that face not only Africa or the U.S., but other countries in the world."

His first position was as a research fellow in the department of social medicine at Harvard. The interdisciplinary program had social scientists and medical doctors working together on a shared belief that health problems are not caused by medical problems alone, but social factors, too. Lugalla joined the faculty at UNH in 1995. He is a founding member of the Centre for Social Policy, Health Promotion, Social Justice, and Sustainable Development in Tanzania, and, since 1987, has been part of a collaborative project between Swedish and Tanzanian universities on HIV/AIDS.

"I want to be in a public setting because I know that we can change the world by sharing ideas," Lugalla says. "If 20 students believe in what I'm saying, and can internalize it and share it, in a year I've reached 1,000 people."

Lugalla wants to expose American students to the wider world. "It helps them see there are other people with their own ways of life, their own cultures and beliefs and values. The U.S. is not the whole world, I tell them. You have to understand what is happening around you and why."

—Erika L. Mantz, UNH News Bureau

JOSEPH D. GEISER

Assistant Professor of Chemistry

"To learn, you must do, and despite all precautions, you will make mistakes. I tend to keep remains of my more memorable mistakes, like this ruined brass thermal insulator. I needed to heat a sample line red hot. Unfortunately, this evaporated the zinc in the brass. We can laugh about mistakes in the lab and share them with new people."

"When students come to Professor Geiser's office, he won't quit," says Carsten Neilsen, a graduate student who works with Geiser. "When they're done asking their questions, he's still asking them questions. He wants to take them somewhere else."

Where he wants to take them is into a deeper knowledge of the world around them through the physics of chemistry. They discover, for example, that the simple act of pulling a ring off the surface of a liquid can give you enough information to calculate the diameter of a molecule in the liquid. But Geiser says he also wants to take students to a place where they can "be the ones doing the thinking" and ultimately "think like a scientist instead of a student."

"Instead of doing it all for you, he'd ask you the right question," recalls student Steve Pieroni, who took physical chemistry with Geiser. When Pieroni asked for help with a difficult calculation, Geiser said, "Remember those two little rules about how you can multiply by one or add zero? Think about it!"

It's in Geiser's labs where students really get a chance to start thinking like scientists. Three years ago one of his students received an "A" on a 20-page lab report—and then failed the portion of a test on that procedure. "I realized that the way the labs were set up, the students had very specific instructions telling them how to do every step of the manipulation and every step of the calculations. 'You plug in this number here and there.' And that's how certain students could write 15 pages on the topic and learn ZERO!"

So Geiser abandoned the conventional "cookbook" approach to lab work. Instead, he adopted the more open-ended approach in use at a growing number of schools, including Brown, where Geiser taught as a graduate student. Pieroni describes it this way: "He gives you the theory, all the equations you need, and what piece of equipment to use. Then you have to think about what values you want to measure and what correlations you want to make—and you design your own experiment." The students have two weeks in which to perform their experiment; more than once, if necessary. A 20-page report at the end gives them practice writing in the format used by professional scientists.

Geiser's questions extend the students' learning further and reveal the level of their thinking. After they perform a classic combustion calorimetry experiment measuring the heat for fuels inside a stainless steel vessel, he might ask, "Why do we charge the vessel with 30 atmospheres of oxygen when the reaction only requires six atmospheres?"

"Because you told me to!" is the likely reply from a student who's used to following recipes. But students who are beginning to think like scientists will try to answer the question on a molecular level. Even a wrong answer can provide a good starting point for a discussion on why extra molecules of oxygen are needed to ensure that "molecules will collide and chemistry will happen."

Now the students sometimes surprise Geiser with their ability to find new implications in the lab work, and they're better prepared to perform the original research required for their senior project. But there's another compelling reason for teaching this way. "It's more fun to talk about science with somebody," Geiser notes with a smile, "than it is to talk about recipes."

—Virginia Stuart, College of Engineering and Physical Sciences


Psychoneuroimmunology
W HAMPSHIRE UCS

ROBERT C. DRUGAN

Associate Professor of Psychology

"I may never see you again," associate professor of psychology Robert Drugan tells his students. "And I want you to remember something you heard here—to show you a little of my personal scrapbook. No professor ever did that for me."

It is the last day and last five minutes of Drugan's psychobiology class. Drugan has taught for an hour with projector slides and blackboard notes and flourishes, moving back and forth across the front of the room as he spoke, an athletic bundle of energy and enthusiasm for his topic. Now, in spite of the bright spring day outside, the class is attentive and quiet, and students lean forward to listen. After a semester together, the level of this man's engagement is no surprise to them.

"Whatever you want to do, follow it. Pursue your passion."

Drugan was bitten by the research bug in 1976 in Dr. James R. Misanin's research methods class at Susquehanna University. "I became fascinated by learned helplessness, an animal model of depression," he says. "I was convinced that it could be explained by a change in pain perception as a result of stress." With Misanin, he launched a three-year project that included building a special apparatus for the research. "Rob was one of the most highly motivated students I have had the pleasure of teaching," Misanin recalls fully 26 years later. "He has a passion and an enthusiasm for learning."

Drugan's passion for teaching and the classroom—and for training the next generation of behavioral neuroscientists—blossomed during his seven and one-half years at Brown University.

He had considered becoming a clinical psychologist or a researcher, but, he says, "Every day I walk into the classroom is an opportunity to change lives."

Now at UNH for seven years, Drugan teaches three advanced seminars: Behavioral Medicine, the Neurobiology of Mood Disorders, and psychoneuroimmunology. He also teaches two introductory courses: research methods and psychobiology.

"Exploit your strengths."

When did Robert Drugan become a people person? He has been one all his life. In a story his mother likes to tell, Drugan—a frail child—is two years old and in the hospital intensive care unit, standing up in his crib to wave through the glass at passers-by. His middle name, Charles, is the name of the doctor who saved his life. In high school and college, Drugan worked in a supermarket and knew virtually every person in town by name. In the 1960s he belonged to a band called Peace that played at weddings and parties, church and school dances. In college, he ran marathons to raise money for multiple sclerosis.

"Make a difference."

Now, Drugan is a member of the Friends of Oyster River Track, working with other volunteers to raise funds for a new fitness track. (His daughter, Kylee, and son, Tim, attend Oyster River schools.) And he gives public talks for the Active Retirement Association in Durham. "I hand them my course syllabi and ask them to pick any topic they're interested in: disease, anxiety, stress, aggression...."

Today, Drugan tells his students, "This is an awesome opportunity and a privilege—to be able to affect your lives." And, in fact, over the years many of his students stop smoking, begin to exercise, seek medical assistance for psychological disorders.

"I wish you will have what I have."

As in the Zen saying, Drugan gets what he has by giving it away. When the students leave his class, what will they remember?

"Witnessing Rob's passion for understanding the physiological basis of psychology has pushed me far beyond interest. He has inspired me," says student John Christianson.

"One of the most important things I've learned from Professor Drugan," says psychology student Lisa Wieldholz, "is that even though getting what you want takes hard work, and there are disappointments along the way, you can get there. And once you do, it's possible to love your work."

—Mary Peterson, University Publications

"Through 35 years of running, I've learned discipline, achievement through hard work, and perseverance that has spilled into other areas of my life. The sport of running defines me. I love the quote from Shakespeare's Julius Caesar, 'Bid me run, and I will strive with things impossible.'"

LORI J. HOPKINS

Assistant Professor of Spanish

"The mate ('ma-tay') gourd and the bombilla (straw with a sieve on one end) is used to drink yerba mate, an herbal tea shared with friends and family. For me, it's a way of connecting with people socially and culturally through a tradition that predates the Spanish conquest."

Teaching students to speak Spanish "correctly" is only a small part of the foreign language classroom experience for Spanish Professor Lori Hopkins.

Even more, she challenges students to think analytically and critically about Latin American culture, in part so they can learn about their own culture.

"What does it mean to be an American within the Americas? I try to realign my students' conception of the first world/Third World paradigm, to instead think of the United States as a nation among many within the Americas, a vibrant, diverse, and eclectic geographical region," Hopkins says.

And it's a culture that she dearly loves. Hopkins considers Argentina her second home, a home she first visited during a year-long adventure before starting her master's in Spanish 15 years ago.

At the time, Argentina was transitioning to a democracy. "It was a fascinating time to look at the ways that a people deal with having had such a patriarchal, oppressive regime followed by a democracy, and all of the trials and tribulations of a society opening up."

This fascination led to her doctoral dissertation in 1993 about how literature helps a country understand its own history and come to terms with its difficult past in order to reconstruct its identity.

Hopkins teaches Spanish by exploring with students the rich Latin American cultures via literature, art, and film, and debating social and political issues.

"What is important is to learn about the culture and literature of the Spanish language, to appreciate that the culture and literature of Mexico are unique entities, different from the culture and literature of Cuba or Argentina. This is one of the exciting aspects about my field, that students become more aware of the numerous similarities and the startling diversity among the many different American countries," she says.

Instead of having students write about or discuss a familiar topic, Hopkins asks them to use writing and discussions to explore topics they don't understand. "I always want my students to challenge themselves and feel that maybe it was tough, but that they learned a lot and they were made to think," she explains.

While learning to speak Spanish can be daunting, Hopkins stresses that students don't have to master the language in order to communicate. "We all have different ways of learning languages and sometimes it's just finding out what those ways are," she says.

"I teach them to go on hunches, even if they're wrong. There are many ways to say things. Maybe you don't know the word for it, but you know how to talk around it," she says. "I tell students that they really know more than they think they do."

Juliette Rogers, associate professor of French, was so impressed by Hopkins' teaching methods when she enrolled in her Advanced Spanish Conversation and Composition course that she incorporated Hopkins' teaching methods into her French courses.

"From the very first day of class... Lori made the classroom environment a non-intimidating one. Her pedagogical practices involved a mix of conversation activities that allowed for a variety of learning styles, and although I never became a fluent speaker of Spanish, my ability to produce full sentences improved immensely over the semester," Rogers says.

There is a genuine respect between Hopkins and her students, which student Andrea Szirbik explained this way: "Many teachers are only there to relay information to their students, but Lori helps students to understand the material. She is fun and creative in class, which makes it a joy to be there rather than a requirement."

—Lori Gula,
UNH News Bureau

MARA R. WITZLING

Professor of Art History and Coordinator of Women's Studies

"This quilt was made in a class I taught called 'Women's Fiber Arts Traditions.' I was impressed with the high quality of each square, even those made by students who, like myself, defined themselves as 'needle idiots.' Their 'graphic wit'—a phrase used by Marge Piercy in her poem 'Looking at Quilts'—demonstrated how well the students understood the course material."

In the world of art, memories come in the form of pictures. I vividly remember back 10 years ago when I was in college to a dark room somewhere in the Paul Creative Arts Center, with an image of a Renaissance painting projected onto the screen. The scene in the painting is burned into my memory. But, even stronger than this recollection is my memory of Professor Mara Witzling. Her ebullient smile, her passion for art, and her ability for transferring that passion to her students almost swayed me to a career in art history.

Our last class assignment was to bring in a representative object and describe it. So, it only seems appropriate 10 years later that I pick an object for Professor Witzling. Her object is a lamp, one that brightly shines upon anyone sitting in her space.

Witzling says that she is "captivated with the world's luminescence." Sit down with this professor for five minutes, and you will feel the glow of luminescence as she discusses "the sparkle of the visual world" and laughs about her excitement for teaching, saying "I can't help myself, I just explode!"

"There is a feeling one gets when observing Professor Witzling—that between teacher and student there is mutual admiration and a shared enthusiasm for the subject," says colleague Professor Eleanor Hight of the Art History Department. "The students clog the hall as they follow her like the Pied Piper to her office after class."

In fact, Witzling isn't interested in being a pied piper with spellbound followers. Worshipful relationships make her uncomfortable, but relationships of shared connection are key to her teaching.

She explains, "'Education' comes from the Latin word *educere*—to lead forth—and that is the part I like about it. Education is engaged, active interaction between teacher and students. This is created with an atmosphere of openness."

A feeling of openness is what a visitor to Witzling's office in the Women's Studies Program immediately feels; she has combined her dual interests in art and women's studies by teaching in both programs. Quilts line the walls of the outer office, and comfortable, coffee shop-style couches invite the visitor to prop up her feet and stay a while.

Witzling's teaching style is very open. "I teach with discussions, small groups, and response papers. The teaching that I find less interesting is simply lecturing. I would rather work with the connections that people are making than give my narrative," she explains.

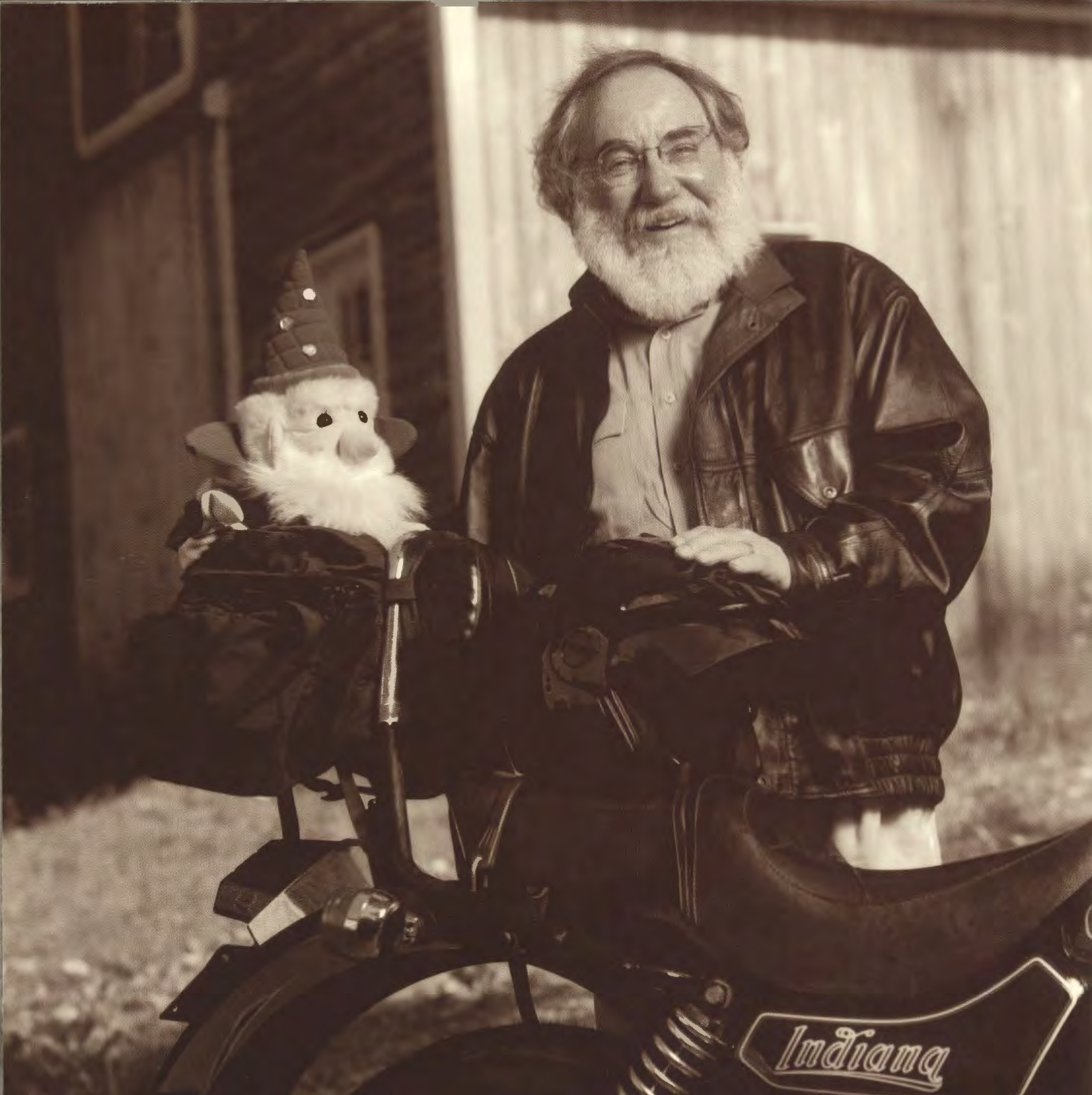
Sometimes, students making their own connections do not always agree with her interpretation of art, but she takes this in stride as the "stimulating" aspect of teaching. Witzling says that she loves to discuss art with people. Aptly put by a student in a class evaluation, "She lives and breathes this stuff."

Says the professor, "To me, works of art have a kind of magical power."

Perhaps Witzling is more like Dorothy from the Wizard of Oz, with her magical ruby slippers and engaging enthusiasm, than the Pied Piper. Her students accompany her down the yellow brick road, learning, along the way, to look at the world from a different perspective.

"She was the first teacher to ever challenge my fears by asking me to define my identity as a young woman," writes recent alumna Kimberly Bossi. "She told me that anything is possible."

—Amy Seif,
Institute for the Study of Earth, Oceans and Space


Indiana

JEFFREY COLMAN SALLOWAY

Professor of Health Management and Policy
Director, Center for Health Promotion and Research

Early in his career, Jeff Salloway was asked to teach a course in epidemiology.

"I got turned on to epidemiology in 1964 or so," the sociologist remembers. "They needed a summer course for medical students and I said 'Sure, I can teach it. Let me read the book.' Well, I read the book, and I just loved it. It's been almost 40 years now and I'm still working to make sense of it all."

At about the same time Salloway, who had been raised in a non-observant Jewish household, also realized that he had no real commitment to his faith. Again, he did "what any academic does." He read a book.

Two paths became one. "I pursued both [Judaism and epidemiology] as scientific enterprises," he says. "Eventually, you get to the point where you ask the same question, 'what is the nature of reality?'"

Today, this holistic blending of insights is commonplace for Salloway, and much more than a pedagogy. It's a marriage of passions, a genuine gift, he says, and not of his own making. "In my work there is this wonderful merger of mysticism and science. The insight that somehow everything fits together."

So, how does a professor of health management and policy impart this gift of mysticism and science to an audience of skeptical undergraduates? By example, of course.

A child once nicknamed Salloway "Wizard." It's a persona he's grown into over the years, and it goes well beyond the twinkle in his eye and the unruly white beard. Local schoolchildren may only recognize him as Albus Dumbledore, Harry Potter's beloved mentor. Undergrads who've taken Epidemiology and Community Medicine no doubt remember him as Moses analyzing the epidemiology of the 10 plagues of Egypt. And this example, a lecture that's fallen on the Passover seder, best charts the convergence of Salloway's lifelong pursuits of science and spirituality.

As the Bible relates, after the Pharaoh ignores Moses' plea to "let my people go," God unleashes the plagues upon Egypt. Through the eyes of an epidemiologist, the plagues might be explained in this way: red algae created the illusion that the Nile had turned to blood; frogs overran the land fleeing contaminated river water; without frogs as natural predators, an insect infestation resulted.

"Now, this is not a course in religion," Salloway explains. "It's a course in scientific method. If you read the story of the Exodus as an epidemiologist, and if the sequence of events does not make sense in terms of the science, you have to throw the story out as mythology. Alternatively, if you can't disprove the story on the basis of science, you don't prove that it's true, disqualify it as truth, or fail to debunk it."

"So, we go through this analysis in class and suddenly a sense of awe and wonder emerges. Maybe we don't have to separate faith and science entirely and say they are irreconcilable. Maybe there is a unity to both perceptions of the universe. Maybe we can use our scientific method to find that unity."

Salloway reflects on the typical response of his students. "Some walk out and say 'that was stupid, what a waste of time.' But the other response is just wonderful. They'll say, 'I never understood all that. You put everything into perspective in a way I just didn't anticipate.'

"The world is filled with wonder," says Salloway. "To be able to step back from your deductive science and to see that wonder is the most phenomenal gift you can inspire."

—Michael J. Jones, University Publications

As an observant Jew, Salloway wears a prayer shawl or Tallit. The Old Testament specifies the Tallit's color. "It's difficult to translate the Hebrew into English," says Salloway. "The color could be purple, could be blue, could be sky blue... In dim light, it appears colorless. But, in sunlight those white stripes glow iridescent blue. Like magic."

R. DAN REID

Associate Professor of Decision Sciences

"I caught this fish on a trip with Bob Puth, retired professor of economics, the only other faculty member in WSBE who had a fish in his office. The day before, Bob asked me how big a fish I needed to consider it a trophy. My response was six and a half pounds. That next day, it was the only fish we caught, and it weighed in at six and three-quarter pounds. I had my trophy fish."

There is never a time when you stop learning.

Dan Reid would know. He and his wife, Bev, are avid ballroom dancers. They started with group lessons four years ago after a New Year's Eve party left them sitting out while everyone waltzed. And really, it's quite fitting that the couple should be tearing up the dance floor. They first met at a USO dance in California, six weeks before they decided to get married.

"It's no different than a gymnast sticking a landing or a diver making the perfect water entry," Reid says as he tries to describe the joy of dancing with his wife. "When you hit all the beats, you know it and there is no feeling in the world quite like it. I try to share that with my students; that it doesn't matter if everyone says you danced great or if I give you an A or a B or a C. You have to judge yourself against your own standards. I tell them you never stop learning, you never stop having opportunities. If you don't try, you can't succeed."

After 11 years in the Air Force as a Polish linguist, including a stint teaching at a cryptology school, Reid went to work on his Ph.D. at the Ohio State University. He wanted to be a teacher, a good teacher, and he knew that meant having experience.

"I took a break from my Ph.D. to work in the industry," he says. "It was not a popular choice with my advisers, but I knew I wasn't ready to go into the classroom and be what I wanted to be. I wanted to be someone with real-world experience."

That work break also led Reid to realize the long hours and high pay of the corporate world were not an acceptable trade-off to spending time with his family. He has been a professor of operations management at UNH for 15 years.

"As a professor, I think I have an obligation to try to instill some values in students. We deal with questions like 'If your boss tells you to do something wrong, would you do it?' There's more to life than just learning the book. The book stuff is the easy stuff. I like to think that I stretch students. I'm more concerned that I make a difference in some kid's life than whether they go into business or not."

Reid's former student, Kjersten (Odman) Darcy, says he did make a difference.

"I particularly appreciated that he always sees his students as individuals," she says. "He never seemed to view us as simply a group of people he was going to instruct for a block of time each Tuesday and Thursday."

Reid's impact is not only being felt by students at UNH, but undergraduates studying operations management around the world. After years of complaining about the lack of good textbooks on the subject, he joined forces with a colleague to give writing one a try. The result is *Operations Management*, published in 2001.

"The number one difference in our book is that students can read it," he says. "Especially undergraduates. Some of our colleagues look down at it for that reason, but we thought undergraduates were the most important group to reach." ❋

—Erika L. Mantz,
UNH News Bureau

ROBERTA P. KIERONSKI

Assistant Professor of Mathematics

"The graphing calculator is an excellent tool for discovering and learning about mathematics. It allows students to see and understand concepts they may have only memorized in the past. Use of the calculator does not mean that students relinquish rational thought; in fact, it enhances students' interest and understanding."

The trick to teaching mathematics is knowing how not to do it.

Roberta Kieronski learned that during her junior year in high school when the teacher consistently left a student standing at the blackboard, unable to solve the problem.

"I was always getting caught trying to help that last one left standing," she remembers with a laugh. Although she tutored other students on the side and was the first student in her high school to break 700 on the mathematics part of the SAT tests, the chance to try teaching in her senior year cinched it. "That was it. I was going to be a math teacher."

Almost 40 years later, Kieronski is sharing her expertise as an assistant professor of mathematics and working hard to dispel negative attitudes about the subject she says is as important as knowing how to read.

"I always think about the person who is trying to learn. On the first day of every class, I tell my students they don't have to raise their hands, and that I'll only call on them if they do raise their hands."

Being able to do mathematics is not enough to be a mathematics teacher, she says. You have to be able to explain why. "I had a professor who used to say things were 'intuitively obvious,' which I finally determined meant he could not explain it."

This year is not the first time Kieronski has been recognized for excellence in the classroom. She won the award in 1987, the first year it was presented, and didn't think she was eligible to win a second time. What made it even more of an honor this time, she adds, was that a faculty group of past winners nominated her, "people who know what it's like to be in the classroom.

"I really love to be in the classroom," she continues. "I do think my strength is more in working with students. I can't do the work for them, but I can assist a student who is stuck. We sit down and I have them explain what they're thinking and see if I can find the one little thing holding them back."

She also teaches a basic arithmetic class at the University's Manchester campus, and never labels a problem easy because every student has areas of weakness and strength. And when she teaches finite mathematics for liberal arts students, she looks for ways to show her students how the subject is relevant to their lives. All in the name of eliminating math anxiety.

Kieronski believes everyone can learn mathematics, but that they have to be taught the way that works for them. She sees it as her job to constantly discover different ways to present the same material.

She actually requires students in her classes to have a graphing calculator. "Isn't this great?" she asks, eager to open her bottom desk drawer and whip one out for a demonstration.

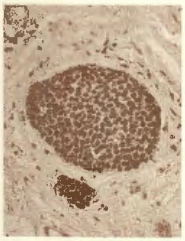
"We allow ourselves to think that it's okay not to be good in mathematics, but we're the only nation that thinks that way. No one says 'I can't read,' but it's perfectly okay to say 'I've never been good in math.' People have to be more aware of mathematics and what it does in their lives. Even if you're an English major, you still want to understand a profit, how to pay bills, and how to read a workperson's estimate."

Or—on the personal side of the ledger—to figure out how long it will take she and her husband, Joseph, to see a game in every major league baseball stadium in the United States and Canada. Ten down, how many to go?

—Erika L. Mantz,
UNH News Bureau

ANDREW P. LAUDANO

Associate Professor of Biochemistry



"Students in our laboratory work very independently. These breast tumor cells were stained by UNH students to detect active estrogen receptors. Our test may someday help predict which tumors will respond to drugs such as Tamoxifen."

A few years ago, Andy Laudano conducted a short seminar for high school students participating in Project SMART (Science and Mathematics Achievement Through Research Training), the University's summer science program. So compelling was the biochemist's talk about cancer research that two students skipped lunch and worked late into the night for the next two weeks in Laudano's lab in Rudman Hall. The students, with the help of Laudano and graduate students, performed the first test that showed a particular antibody actually worked in recognizing a kind of protein that is activated in some breast cancers, the active Src (pronounced *sark*) protein.

"I'll never forget it," Laudano says. "It was one of those run-out-into-the-hall-and-yell-to-everyone moments."

The discovery meant that these "manufactured" antibodies could bind to the active Src proteins that contribute to uncontrolled growth of some breast cancer cells and other forms of cancer.

Recently, a grant from the Susan G. Komen Breast Cancer Foundation allowed Laudano's laboratory to prepare antibodies that can determine when the estrogen receptor is turned on. Incubating human breast tumor samples with these antibodies may some day allow doctors and their patients to predict which tumors will respond to anti-estrogen drugs such as Tamoxifen.

He claims his role in the discovery was modest, but others would disagree. Laudano says: "I provided the stage for students, that's really all I did."

His colleague, UNH microbiologist Tom Pistole, says: "What sets Andy apart is his absolute dedication to creating the ideal learning experience for students as well as his dedication to both the undergraduate and graduate learning experience."

Laudano's teaching focus has been in both upper-level and graduate-level courses. He recently said he wanted to teach an introductory course because he wanted to broaden his teaching experience to include first-year students.

"Andy took the biology course on an overload basis," says Pistole. "He offered an honors section of Biology 411 and is working with other faculty and graduate students to create a new set of laboratory experiences for these students. It is a monumental undertaking."

Laudano's interest in science began when Mr. Amarante, his third-grade teacher, brought a microscope to school. "I looked through the eyepiece before he even put a slide on, and it looked like the moon," Laudano recalls. "That was the turning point for me."

Laudano's teaching style doesn't change from one level to the next, he says. "I take something that is very complicated, and break it down to small logical steps," he explains. "I tell students that science gives them the confidence to understand anything they want; as big as anything is, we can break it down into components that we all can understand. My most shining moment when I'm teaching is when I see that they get it.

"I was trained as a chemist, so I am very conscious of trying to teach concepts in a way that is understood," he says. In discussing the Src protein, Laudano likely will include a bit of history about it. In 1911, a farmer brought a chicken into a lab at Rockefeller University. Turns out that chicken is known to have the first cancer-causing virus, and that the virus caused cancer by making Src. "Now what was a farmer doing with a chicken in downtown Manhattan?" Laudano asks excitedly.

And many times, he says, "getting it" doesn't happen in the classroom. Laudano is known for his evening and weekend help sessions, which include food. He is so well known for this that when the staff at a local restaurant sees him coming, they give him free food for his students.

"We scientists tend to think it's our great lectures," he says, winking. "But I'm convinced some of the best teaching and learning is done informally."

—Kim Billings, UNH News Bureau

CHARLES A. CARAMIHALIS

Associate Professor of Food Services Management

Charles Caramihalis has a smile as big as the state of New Hampshire. And Maine. And he's got a heart to match. He's thrilled to have received his award, and doubly so because, at the Thompson School, it's the students who nominate the faculty.

"He's there to help," says Amy King, a recent graduate who is off to manage a restaurant in the Lakes Region. "He's always raising the bar on what we can achieve." Others agree: "He's glad to be with us; optimistic, approachable, fun." "He's fabulous," says Erika Richards, a former student who now manages the UNH Dairy Bar. Technically, Caramihalis is her supervisor—a boss—but to her, he remains a trusted adviser.

"This block and tackle signifies my tie to the ocean. It is painted with 1984, a year that was a turning point in my life. I got married, opened a restaurant, and began my teaching career at UNH. It's been crazy busy ever since."

Whether it's menu selection, food prep, personnel, or presentation, Caramihalis is everywhere, teaching his students everything they'll need to know about managing a business, themselves, and each other. "These students come from all walks of life," he says. "Some of them are from the biggest restaurant families in the area, and others are new to this experience. I want to help each one of them do their best."

On a Tuesday morning, he's with his students as they prepare the Thompson School's Balcony Bistro for the afternoon lunch crowd. Today they're expecting a party of 20 from a local bridge club. Students downstairs in Cole Hall are preparing the food, but upstairs at the Bistro, at what Caramihalis calls "the front of the house," they're managing everything that goes on. The students are serious and focused. Professional.

The Dining Room Practicum is a challenging course that offers a lot to learn. "If you are going to teach it, you'd better live and breathe it," he says. "I like to show students by example what they can do with their careers."

And what an example he sets. He's a teacher who has logged more than 25 years in the restaurant business, all of it along the Seacoast. He's the founding owner of York's Maine Course Restaurant. "It's still in operation," he says quietly, with a glint of pride in his eyes. But working seven days a week, 15 hours a day, took too much time away from his growing family, so he sold the business. Now, as the seasonal manager of the Cape Neddick Lobster Pound, "He's the hub of the restaurant," says colleague David O'Brien, "and that's what keeps his course material at the cutting edge."

An alumnus himself, Caramihalis first came to UNH in 1977 to study hospitality management. He was working in the Memorial Union as a food service manager when he saw an advertisement for an assistant professor of culinary arts. He jumped on the opportunity to advance, but reality struck on the first day of classes. "If I had known that I'd have to speak in front of a group, I never would have applied," he jokes.

Caramihalis says the close-knit atmosphere at the Thompson School bolsters his confidence and keeps him steady. He treasures his ties with his students, friends, and family. He's the oldest of five brothers, all lobstermen working out of York Harbor. Sadly, in January 1994, the family lost Christopher, the second eldest, to the sea.

Overlooking York Harbor, there is a stone memorial honoring the community's missing sailors. Caramihalis helped to plan and build it. Engraved on its three sides are images of Boon Island, the Nubble Light, and Mount Agamenticus. These are the fixed points, the landmarks that fishermen use to guide them safely to shore.

Caramihalis is that kind of navigational compass for his students. "They get their bearings by watching him," says Department Chair Nancy Johnson. "He teaches them about accepting responsibility with grace. He has to be there—for his family and his students." And he is.

—Sarah Aldag, University Publications

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Mara R. Witzling
Photographed June 14, 2002, outside her home, Durham, N.H.

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Jeffrey Colman Salloway
Photographed June 24, 2002, at his home, Lee, N.H.

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R. Dan Reid
Photographed June 28, 2002, with his wife, Bev, at the Rockingham Ballroom, Newmarket, N.H.

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Roberta P. Kieronski
Photographed May 20, 2002, on a walkway at the University of New Hampshire at Manchester.

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Andrew P. Laudano
Photographed June 28, 2002, in his Rudman Hall laboratory.

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Charles A. Caramihalis
Photographed June 3, 2002, on the *Kylie Michelle* in York Harbor, Maine.

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