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Washington State

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COVER
STORY

Bridges to Prosperity • Taking the University to the People

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by Mary Aegerter • photos by Robert Hubner

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by Pat Caraher • photos by Laurence Chen

William Hewitt built his dream on Blake Island. Hewitt is gone, but his dream lives on in Native tradition and the rich aroma of roasting salmon.

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by Pat Caraher • photos by Laurence Chen

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by Teresa Wippel • photos by Zoe Keone

When Ethiopian partisans blew up a bridge to stop the advance of Mussolini, they also split a region. Ken Frantz put it back together.



ZOE KEONE

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LAURENCE CHEN

Cover: Ken Frantz '71, right, founding executive director of Bridges to Prosperity, Inc., participates in a ribbon cutting ceremony with Ethiopian provincial officials and an Ethiopian Orthodox priest. The ceremony marked the reopening of Second Portuguese Bridge, which spans the Blue Nile River in Ethiopia. Virtually impassable since World War II, the bridge had been repaired by Frantz and his crew of volunteers from Bridges to Prosperity, ending years of isolation for communities on both sides of the river. See story, p. 40. Photo by Zoe Keone.



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photograph by Robert Hubner

WashingtonState

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VOLUME 2, NUMBER 1, WINTER 2002-03

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TO SEND THIS MAGAZINE: *Washington State Magazine* is distributed free of charge to graduates, donors, faculty, and staff of Washington State University. With a gift of \$25 or more, you can have WSM sent to someone who is not currently on our mailing list.

For details, go to

<http://washington-state-magazine.wsu.edu/send.html>

or contact Sherri Hemphill at 509-335-1686, hempfill@wsu.edu

LETTERS: *Washington State Magazine* invites letters on its content or on topics related to the University. Letters for publication must be signed and may be edited for style, length, and clarity. Shorter letters are more likely to be published due to space limitations. Writers should include an address and daytime phone number. Send all correspondence to:

Washington State Magazine

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Washington State Magazine is published quarterly by Washington State University, PO Box 641227, Pullman, Washington 99164-1227. Editorial offices are located at Washington State University, Information Technology Building, Room 2013, Pullman, Washington 99164-1227.

Board of Regents, Washington State University ©2002.

Alternate formats will be made available upon request for persons with disabilities.

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LETTERS

Farm workers



Dear Editor:

I ENJOYED THE COVER and cover story in the Fall 2002 issue on the Roozens, "Bulbs and Blooms." First of all, congratulations on an outstanding magazine. Secondly, I was impressed that you put the worker, Carlos Sanches, on the cover. I live in Mexico half the year and have an appreciation for the importance of Mexican and other migrant workers who work here in the U.S. year after year.

I would like to suggest a story

for *Washington State Magazine* on the importance of the migrant worker to the economy of the U.S. I know firsthand of the difficulty of workers coming to the U.S. Our Mexican and other Latino neighbors are not being thought of in high enough regards. The difficulty of coming to the United States and the plight of the farm workers is not a well told story. If it wasn't for the migrant farm workers, we wouldn't have half the food on our tables and in our stores! How important is that!

These workers often times send half of their earnings home to their families back in Mexico and Latin America. What a sacrifice! If it was easier for these workers to receive documentation and come to the U.S., they would most probably work for six to nine months and then get to go home to their families for the other times. However, once they come to the U.S. most of them stay because they are too worried about not being able to make it back in again. In Mexico these workers only receive about five to eight dollars a day. Here in the U.S. they receive 10 times that.

The U.S. is lucky to have a neighbor like Mexico, not only because of the great Mexican culture, but for the huge workforce that is available to the U.S. It's time that the Latino farm worker is given his due respect. I hope you can do a story on this, and again I compliment you on the beautiful cover.

Gordon Rathbun '73
Acapulco, Mexico

Thanks for the excellent suggestion. According to a report prepared in 2000 for the Health Resources and Services Administration, more than 65,000 migrant farm workers and 121,000 seasonal farm workers participate in Washington's agriculture. Their role is certainly a basis for a future WSM article, a large and complex story. We should point out, however, that Mr. Sanches is a permanent resident of the United States.



GMOs and corporate relations

Dear Editor:

THANK YOU for the informative and provocative article on genetically modified food. The questions about the technology are fascinating, but as the author points out, the thornier problem is that of ownership. How this technology will serve us or harm us depends on our politics and economic system.

In a future issue can we hear from your departments of Economics and Political Science? I would like to know how the best minds are tackling these issues.

In mulling this over I have come to think that business/corporations must be excluded from participation in politics. They are artificial "legal" entities, not citizens, and should not have the civic rights of humans. Contributing to political debate—with words, money, or other influence—is a civic responsibility and right and should be carried out by citizens and not by legal creations. If they do, we humans lose control over them. A total ban on business/corporate participation would certainly impact campaign finance reform!

And what should be the relationship between publicly supported institutions such as WSU and these legal entities?

I look forward to discussion of these thorny problems in future issues.

Karen Farnsworth '83, Seattle

Dear Editor:

THE ARTICLE in your Fall 2002 issue, "Genetically Modified Foods: What's in it for You?" may be the most complete, most balanced article on this subject that has come to my attention. I am forwarding it to several interested parties. Thank you very much for a well-written, honest look at this difficult issue.

Nancy Daniel '85, Salem, Oregon

Writer seeks information about Deborah Gardner

Dear Editor:

I WISH TO REMIND READERS of a fallen classmate. Deborah Ann Gardner came from Tacoma and attended Washington State University from 1971 to 1975. She was active in the Associated Women Students and served on the ASWSU Senate. She majored in bacteriology and lived at the Kappa Alpha Theta sorority house. She also worked at the old Ram Pub, now Pete's Bar and Grill.

Deb thrived in Pullman. She was dark-haired, vivacious, poised, and adventurous. She joined the Peace Corps in 1975 and died tragically one year later in Tonga, in the South Pacific, slain by a fellow volunteer.

Deb's case is historic and little known. I am writing a book about it with the cooperation of her father, Wayne. My book should appear in a year and a half.

I seek the help of former classmates in learning more about her.

Thank you.

Phil Weiss, Glenham, N.Y.
E-mail: tongabook@yahoo.com

The Friels

Dear Editor:

THANK YOU for your excellent article on Catherine Mathews Friel [WSM Spring 2002]. Mrs. Friel's senior English class at Pullman High School was rigorous. She encouraged a straightforward writing style with plenty of practice. I remember a statistical breakdown we examined in class one morning that showed students from Pullman High did better in their first year at Washington State University than the competition.

Her teaching was one good reason. Shakespeare? Ask her for some insight into the opening scene of *Macbeth*! And while the women's movement hadn't jelled in 1963, Mrs. Friel brought issues of gender equality into our classroom discussions well before Gloria Steinem and *Ms. Magazine* arrived on the national scene.

I recently met Robert McCall, who played basketball for the Lewis and Clark Normal School against WSC in the early 1940s. In his 80s now, Robert remembers when opposition coach Jack Friel, after every game, would come into the locker room and shake hands with the opposing players.

Quite a pair. Winning in the classroom, on the court, and in life.

Some may equal, but none excel.

Greg Cleveland '68, Yakima



JOHN HOGG

PANORAMAS

FACULTY RESEARCH TOPS \$100 MILLION

WASHINGTON STATE UNIVERSITY researchers conducted research valued at more than \$100 million over the last year on projects that include myriad subjects.

"We are proud of this achievement," says James N. Petersen, interim vice provost for research. "This landmark shows the accomplishment and quality of our researchers and their programs."

Petersen says all of the colleges contributed significantly to achieving this milestone. The College of Agriculture and Home Economics, through the Agricultural Research Center and Cooperative Extension, led the way with nearly \$33 million expended last year to fund research, outreach, and educational programs. Other colleges also contributed significantly to these land-grant missions, with the College of Sciences at nearly \$18 million and the colleges of Veterinary Medicine and Engineering and Architecture at approximately \$13 million each.

Nearly 15 percent of the expenditures are from the National Institutes of Health, while more than 11 percent are funded by the Department of Energy. WSU faculty members also receive major grants from the Department of Agriculture, the National Science Foundation, the Department of Education, and the Department of Defense. ■

White-uniformed fielders manned their positions as the bowler tested his skills on the pitch against 11 batsmen in an early September cricket match at Washington State University. The WSU Cricket Club includes undergraduate and graduate students and faculty from around the world. WSU finished the 2002 season with a 4-8 record.



BRANDON D. COLE / CORBIS



Jon Mallatt used genetic analysis to confirm his suspicions about the hagfish.

A bizarre, slimy animal shows its stuff

"If you want to tell the story of how important things evolved, you must get the relationships right first . . ."

WITHOUT JAWS, most vertebrates—including us—would be stuck hanging around in the ocean or on the ground, unable to bite and scooping up or filtering food. We'd also be smaller. Instead, we're fearsome predators and herbivores, with big brains and an infinite range of food sources. We have evolution to thank for our for-

tune—and Jon Mallatt to thank for helping us appreciate the fact.

"The evolution of jaws a half billion years ago was the single most important factor in the success of vertebrates," says Mallatt, associate professor in the School of Biological Sciences and in basic medical sciences.

Mallatt began his study of the

evolution of jaws as a graduate student, with an analysis of how fish and lampreys feed. In subsequent years, his anatomical comparisons of fish, lampreys, and other animals led him to propose the then novel idea that jaws evolved as a breathing apparatus that became adapted for feeding, rather than just as a feeding apparatus.

In the process he also analyzed the hagfish, a jawless vertebrate that has a mechanism for feeding similar to the lamprey's. Many considered it the most primitive vertebrate, but Mallatt wasn't sure.

"I wondered if hagfish were a good model of the primitive vertebrate that jaws came from or just a bizarre, slimy animal that doesn't tell us much about what early vertebrates were like," says Mallatt. "I always believed the second."

Mallatt found that he couldn't answer his questions about the hagfish and about the evolution of jaws just by studying the anatomical structures. "Anatomical characteristics are complex," says Mallatt. "Many genes control each one." It's much easier to model how evolutionary change happens at the

genetic level, by looking at the DNA.

Mallatt chose the gene sequence of the 28S component of ribosomal RNA as a means to determine phylogeny, or how organisms are related to each other. Ribosomal RNA is fundamental to life, involved in making proteins, so its structure and function can't change much. If there is evolutionary change, it comes slowly, he says. Comparing the DNA sequence of this gene in distantly related animals can reveal how the animals are related to each other.

Mallatt, one of the first to use the 28S DNA sequences to study phylogeny in animals, confirmed what he had always felt about hagfish, that it is not a primitive vertebrate, but rather the second member of a natural group with the lamprey. Now he's using the sequences to address an even bigger question: how all animals are related to each other.

"If you want to tell the story of how important things evolved, you must get the relationships right first," says Mallatt.

—Mary Aegerter



Kim Kidwell



DESIGNED TO COMPETE

ROBERT HUBNER

BY DEVELOPING new spring wheat varieties with exceptional milling and baking characteristics, Kim Kidwell hopes to create a domestic demand for Washington wheat so it is milled and baked in the Northwest instead of being exported into increasingly competitive foreign markets.

Currently, between 80 and 90 percent of Washington's annual wheat crop is exported rather than used domestically, says Kidwell, who is a spring wheat breeder and associate professor of crop and soil sciences at Washington State University.

Bakers look for a number of different characteristics in wheat, including water absorption, gluten strength, and protein content. Different levels of each characteristic can dramatically affect baking quality.

"Consistency is key," says Kidwell. "Manufacturers need products to bake to a similar size and quality each time. A loaf of bread is worthless to a manufacturer if it doesn't fit in its packaging."

One of the new wheat varieties created by Kidwell is called Zak. Released by WSU for public use in October 2000, Zak is a high-yielding variety that also makes excellent bread and cookies. Nabisco's bakery in Portland has expressed an interest in using Zak. ■

—Jeff Wolfe

THE SINK'S NEARLY FULL

SOME climate change researchers have placed high hopes in forest and grassland soils and their ability to act as carbon “sinks.” These sinks store excess atmospheric carbon and thus partially offset the effect of increasing amounts of carbon dioxide in the atmosphere. Because of carbon dioxide’s role in global warming, these soil and forest sinks are important in moderating changes in global climate. Unfortunately, a recent study by Washington State University environmental scientist Richard Gill and his colleagues indicates the sink may be reaching capacity.

Although carbon dioxide has been increasing in the atmosphere for the last 10,000 years, the increase has been especially rapid in the last 150 years because of the industrial revolution and land cultivation. The rate of increase has been slowed somewhat because some of the carbon has been stored in organic matter in the soil, moderating increases in atmospheric carbon dioxide. However, says Gill, the storage capacity is dependent on how both plants and soils respond to the changes caused by the rising carbon dioxide. Increased carbon

dioxide tends to make plants more productive, but this higher productivity begins to change nutrient dynamics in the soil.

Gill’s research shows that there is a limit to how much carbon can be stored in soils and that soil capacity may be at an important threshold. In the Texas tallgrass prairie soil he and his colleagues studied, they found that at high carbon dioxide concentrations, soils were not able to continue to store excess carbon.

“It appears,” says Gill, “that soil carbon storage is very sensitive to nitrogen availability—which

changed dramatically with rising carbon dioxide. If the ability of soils to continue to absorb carbon dioxide is limited, we may soon begin to see rapid increases of greenhouse gasses in the atmosphere, leading to potentially swift changes in global climate.”

Gill and his colleagues reported their results in the May 16, 2002, issue of *Nature*. Gill’s research is funded by a United States Department of Agriculture National Research Initiative Program grant. ■

—Sharon Hatch



A COMPASS, NOT A ROADMAP

by V. Lane Rawlins, President
Washington State University

RECENTLY, I SPENT A DAY in Kongsberg, Norway, at a company that is the world leader in development and production of dynamic stabilizers. These technological wonders are installed on ships and oil platforms in the stormy North Sea to stabilize them so that the oil fields can be worked. I was amazed at a video showing ships sitting still in a rough sea, accomplished, I was told, by precisely measuring all of the turbulence around the ship and correctly predicting, one second in advance, what the ship will experience. That instant is sufficient time for actions that keep the ship stable.

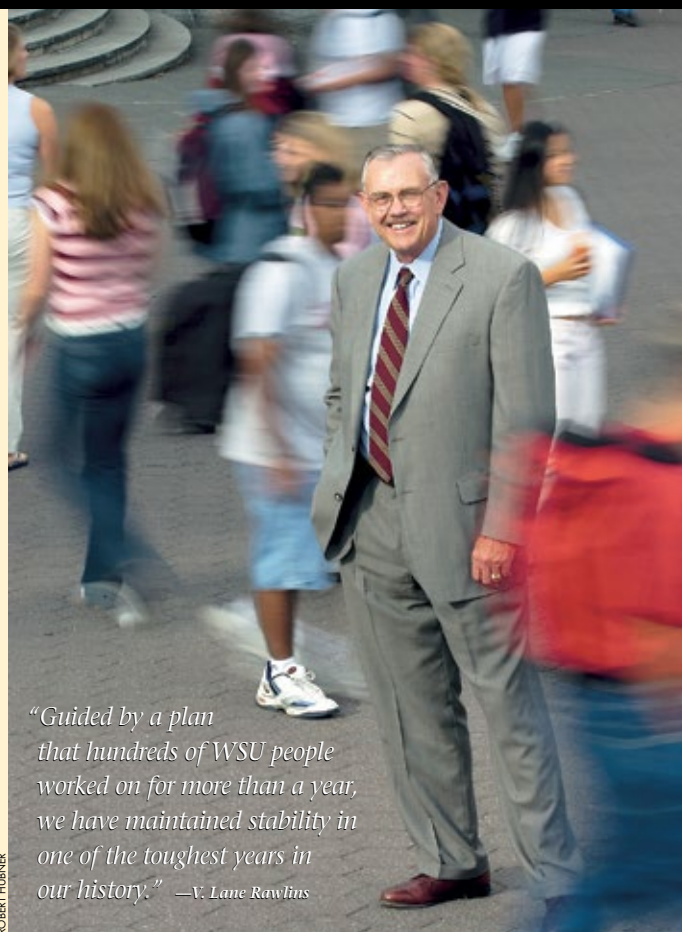
The stabilizer uses two kinds of information: the position the ship is trying to maintain and the turbulence of the sea. In other words, they have to know what they are trying to accomplish and what problems must be overcome to do it.

As we left the tour I thought about how similar this is to our situation today. This past year has seen some rough seas for Washington State University, including major reductions in our state appropriations, increases in tuition, and turmoil and anxiety stirred by the events of September 11. Our dynamic stabilizer is our strategic plan and the processes set out in that plan. The plan does not prescribe all of our actions but is focused on our destination. We have often described it as “a compass, not a roadmap.” We know that we must constantly reassess our current position, look at challenges and weaknesses, and set a course that allows us to make progress even in stormy times.

Our charge at WSU, as we have defined it, is to offer the very highest quality undergraduate education in a research environment. Whether resources are plentiful or short, we can direct them to improve what we believe is already one of the best educational experiences in the nation. This is not a short-run commitment or simply a question of changing our image. We are looking at what we do, including curriculum development, student services, facilities planning, faculty rewards, landscaping, athletics, and everything else, to assure that a quality undergraduate education is a major focus.

Prospective students were quick to understand this message. This year we had a record number of qualified applicants, with phenomenal growth in those classified as “high ability.”

Through our plan we recognize that research is the key to excellence in college education. Regardless of the field or level of study,



“Guided by a plan that hundreds of WSU people worked on for more than a year, we have maintained stability in one of the toughest years in our history.” —V. Lane Rawlins

ROBERT HUBNER

successful students must prepare for the future by learning to think about change. Research looks at the future and prepares students for change. It is our goal to immerse all students in a world-class research environment. To do this, we must support research, reward success, and partner with government, business, agriculture, and others who support and depend on our discoveries and innovations. We are succeeding in reaching new levels of research funding and other measures of success and recognition in our research. This year we experienced an 18-percent increase in externally funded research expenditures, for the first time exceeding \$100 million.

We did not escape damage from state budget cuts and external shocks. Without sufficient faculty, we had to turn away hundreds of qualified students. Many research projects that show promise are on hold for lack of state support, and some have been reduced or eliminated. Some of these opportunities, for students and those who benefit from our research and outreach, are permanently lost.

In the North Sea, it takes a lot of fuel and energy to remain stable in a storm. Similarly, our resources have been taxed, and some have been exhausted, but we have maintained our course through the current storm and are preparing for the next. Guided by a plan that hundreds of WSU people worked on for more than a year, we have maintained stability in one of the toughest years in our history. Ultimately, it is not the plan, but our shared commitment to it that has kept us on course. I am very proud to be a part of this process. ■

DON'T PANIC YET

AN ASTEROID may be heading for a collision with earth, reports a group of researchers including WSU Tri-Cities's Scott Hudson. Fortunately, the probability of a collision is only one-third of one percent, and we have 878 years to prepare.

In an article in the April 5 *Science*, scientists predict that Asteroid 1950 DA, about one kilometer in diameter, could hit earth in March 2880. Typically, it is very difficult to predict asteroid collisions this far into the future. However, by obtaining radar imagery of the asteroid, the researchers were able to model in detail the evolution of its orbit for the next several centuries.

Although Asteroid 1950 DA was discovered in 1950, researchers lost track of it, re-discovering it on New Year's Eve 2000. Its potentially nefarious nature was uncovered in the course of a recent radar experiment.

Hudson, professor of electrical engineering and computer science, has worked to better understand the exact shape and orientation of asteroids and to develop computer models that more accurately predict their orbits. He worked for 15 years to develop the computationally intensive computer software to look at scattering of radio waves, from which he can then deter-

mine the shape and orientation of asteroids. Such work has been made possible by advances in computing power in the past decade.

Hudson is quick to mention that no human being has ever been killed by an asteroid collision and that numerous other natural and man-made hazards are of more concern. Nevertheless, the possibility of a collision remains an intriguing question for scientists because of the potentially catastrophic effects. The work also is of interest because asteroids can provide valuable clues to the origin and evolution of our solar system. ■

—Tina Hilding

Mystery of the Martian Mummies

ONE OF THE LAST PLACES you would expect to find teenage girls in the middle of July is a science classroom. But for Rachel Milhem, Romany Redman, and nine others, the Washington State University Spokane CityLab Young Women's Summer Science Camp laboratory was one of the hottest places to be last summer.

"I wanted to participate in this camp, because I really like science, and I thought it would be fun to analyze stuff, like maybe whether or not aliens exist," says Rachel Milhem, a sixth-grader at All-Saints Catholic School.

Rachel, along with 10 other young girls, decided to spend some of her summer engaging in an "Astrobiology Quest," which sought to explain and understand the origin of the building blocks of life. It was some pretty intense subject matter for these junior high school students.

Romany Redman, an eighth-grader at Sacajawea Middle School, is a two-year veteran of CityLab's science camp. "I decided to come back and do it again this year, because I had so much fun last year, and I made a lot of new

friends," says Romany. "What I like about this summer science camp better than school is the teachers here trust you with a lot of important stuff, and we actually get to participate in real experiments."

Working under the premise that NASA discovered some Martian mummies, campers learned to conduct gel electrophoresis, type blood, check for the presence of starch and protein in mock digestive and fecal samples, and more. They explored DNA and rocketry, working with the research-quality equipment in WSU Spokane's new Health Sciences Building. Campers also spent a day on the Pullman campus with visits to chemistry, physics, and birds of prey—along with Ferdinand's, the CUB game room, and the swimming pool—then stayed overnight in a dorm.

Drawing on the appeal of mysteries for young people, CityLab teaches scientific reasoning and methods as tools to solve problems. Workshops challenge these 21st-century Nancy Drews with themes such as "The Mystery of the Crooked Cell," an exploration of the molecular basis of a genetic disease using gel electrophoresis, and



JEFF T. GREEN

Katie Chamberlain, an 11-year-old sixth grader at Roosevelt Elementary in Spokane, tests "Martian" fecal and digestive samples for starch and protein. In the background, Chelsea Momany and Grace Chapin also practice their analytical skills.

"Raiders of the Lost Arc (haleology)," which uses ELISA (Enzyme Linked Immunosorbent Assay) to look for protein residue on fossils.

Sylvia Adams Oliver of WSU Spokane created CityLab in 1995 to address and counter negative stereotypes and biases that young women and minorities face in the science setting. CityLab is a fully equipped, laboratory-based teaching and learning center providing mentoring and laboratory instruction in biology, chemistry, and biotechnology.

Bonnie Wagner, one of the instructors from this year's science

camp, repeatedly gave the girls encouragement and bolstered their confidence in their work as young woman scientists. "Ladies, right now is an exciting time in science. There are more colleges and careers than ever that are embracing women in many different areas of science," she told her eager students. "Science is not just for men. Women have the brains to conduct these types of experiments too."

—Christine Gerfen

For more information about WSU Spokane CityLab programs visit www.spokanecitylab.wsu.edu.

What's protein got to do with it?

USING TWO NEWFANGLED TOOLS, GENOMICS AND PROTEOMICS, it is now possible to measure the activities of thousands of genes and corresponding proteins—all at once. The methods are reasonably straightforward technically, and all the necessary bits and pieces are available to anyone—for a price. A lot of razzle-dazzle and hype have accompanied this technological breakthrough. Certainly mountains of data will be generated, and many interesting insights will be gained in the next few years.

But *then* what? Ironically, we are blessed with almost too much of a good thing. University labs worldwide and dozens of newly spawned biotech companies are working day and night to devise methods for sorting out all this information. Meanwhile, some of the most interesting outcomes of this technology have focused not on the macro-scale events but rather on smaller, more tractable questions relating to how a few specific gene products facilitate—or prevent—one specific part of one specific cell function. This effort has been aided by computer modeling techniques and other sophisticated technologies that allow us to understand in excruciating detail how biological molecules are shaped and how this shape dictates their function.

Meanwhile, a related, perhaps even more profound, question is being approached using these same methods: how did these exquisitely intricate circuits of gene expression ever evolve in the first place? The truth is dawning that techniques and genes aren't all there is to the story. For example, the goal of the new U.S. Department of Energy's Genomes to Life program is "to venture beyond characterizing such individual life components as genes and other DNA sequences toward a more comprehensive, integrated view of biology at a whole-systems level."

We are still a long, long way from a truly comprehensive understanding of even the simplest cell. With the maturing of our approaches to the relevant issues, maybe we're due for a quantum leap in our understanding of how all we life forms are put together in so many different but basically similar designs.

—Howard Hosick, professor of genetics and cell biology in the School of Molecular Biosciences



ROBERT HUBNER

A little background

Genomics is the study of the genome, which is all the genes, or the complete set of genetic information, within an organism. Its recent culmination was the mapping of the human genome by two separate research groups. As monumental an accomplishment as it is, however, the Human Genome Project's completion was just a little bit of a let-down, because it forced everyone to face the fact that genes don't actually *do* anything by themselves.

Genes code for the production of proteins, which actually do the body's work.

So in order to really understand how the body functions, we must study the proteins. Mapping the genome has enabled us to pursue *proteomics*, the study of all the proteins in an organism and how their *interaction* makes it function.

And you thought genomics was complicated (you *had* heard of genomics, right?)

Whereas the human body is thought to comprise about 40 thousand genes, these genes probably code for over 100 thousand proteins. To make things more complicated, the mix of proteins varies from one cell type to the next. That mix changes as conditions change, for example when you have a cold or have just eaten a meal.

What does this mean for Professor Hosick's work?

Among other things, Hosick studies the mechanisms of breast cancer development. And what's a primary ingredient of tumors? And of the growth factors that stimulate their formation? You guessed it. **PROTEINS.**

A couple of analogies you can insert into the next dinner party conversation about proteomics:

- Genes are the recipes to the proteins' banquet.
- The genome is the musical score to the proteomics symphony.

Beyond the hype, what's the big deal?

TWO WORDS: "diagnosis" and "drugs."

SEASONS|SPORTS



CINDY FREDRICK



CINDY FREDRICK

EUROPEAN TOUR BUILDS LIFETIME MEMORIES by Cindy Fredrick

IN AUGUST Coach Cindy Fredrick and the Washington State University volleyball team spent 12 days in Europe, sightseeing and playing eight matches. While winning all its matches was special, it wasn't everything, Fredrick said of the tour. She agreed to keep a journal. Here's her report.

Saturday, August 10

We arrive in Munich at 9:30 a.m. after departing Pullman Friday at 3 a.m. Our guide, Cory, meets us at the airport. Frank, our bus driver, takes us to the City Square. The first place we see is McDonald's. We have a break, so we walk through the large shopping area. Being with 15 young women, their reaction is, of course, "Great! Shopping!"

We spend two hours in the city center, mainly watching the people, and they watch us. We are in our Cougar warm-ups with t-shirts proclaiming "Cougar Volleyball—European Tour." That night we have our first practice. The

cushiony feel of European volleyballs takes getting used to.

In one hotel there are no televisions and no bathrooms in the rooms. The looks on the young people's faces when they see their rooms are priceless. No television? No bathroom?

Sunday, August 11

Today we drive to the Dachau concentration camp (photo left). Walking through the fence and entering the building, the mood is somber. My players are engrossed with reading every large display explaining the war, the rise of Hitler, and the Third Reich. Their faces and eyes show their disbelief and sadness as they walk in the showers, observe the wall hooks where people were hung and tortured. We read short bios on some of the prisoners and the Nazi soldiers. We walk in silence across the roll call years where over 27,000 prisoners had been. You can't describe your thoughts as you watch the film documenting what truly was man's inhumanity to man.

This is an education you don't

get from a book or a classroom. It is a morning none of us will forget.

Tonight we have our first match against Club Lohof.

Monday, August 12

Today we travel to Fussen en route to Augsburg for a match. We were down 24-21 in one game and fought back to win 27-25. We are beginning to understand how to win, how to come back.

Tuesday, August 13

Fussen is definitely a tourist area. We visit The Royal Castle Neuschwanstein built in the late 1800s, but don't go inside. The ticket line is too long. The Austrian countryside becomes more beautiful with the Alps looming into heavy clouds.

The excitement picks up in Salzburg. The Mozart festival is going on. There is much street music, puppeteers, painters—and many people.

We enter Salzburg Cathedral in the Square. Paintings on the ceilings, the beautiful architecture and reverence of the cathedral are inspiring. Salzburg has to be at the

top of our list for its beauty and cleanliness.

This is a good night for the Cougars. We play tough and learn about going face to face in competition while keeping our composure.

This evening we have choices of Austrian goulash with venison, trout, or macaroni, Austrian-style. Our practice at restaurants is for at least two people to order different dishes and share.

Wednesday, August 14

Chelsie is sure they're giving us sleeping gas through the vents, as it seems the players struggle to stay awake as soon as the bus starts to roll.

Austria is beautiful. As we leave our guesthouse area we are surrounded by the steep hills, and goats are grazing. I break into my Julie Andrews imitation of "High on a hill there's a lonely goatherd." Our German coach driver and his girlfriend laughingly praise my yodeling.

We're now traveling to Hungary. No university volleyball team from the States has played in Hungary,

SPORTS|SEASONS

we're told. The Cougars are proud to be the first and want to be positive representatives. At the gym we are honored to see the American flag hanging beside the Hungarian flag.

Thursday, August 15

Our guide speaks very good English. He is anxious to pack in all of the sights of his beloved Budapest in just four hours. We drive by the Parliament building, which is exquisite, right on the Danube. There is concern that with the rising water buildings will be in peril. Our tour continues to the Opera House and the Fishermen's Bastion.

After our second match with Club Vassas, our players and theirs have dinner together in a pub. Most of the Hungarians speak some English, so the conversations are lively. There is laughter and exchanging of e-mail addresses and t-shirts.

Friday, August 16

We begin our trip to the Czech Republic. We choose to go back through Austria, not wanting to pay for another visa to travel through Slovenia. Our match with the Brno Club begins one-half hour after we arrive. The gym is brand-new. We feel like we're at a Pac-10 school. We come away with a five-game win.

Saturday, August 17

This is a day much like our Fourth of July. In downtown Brno (photo right, p. 12) people all dressed in costume celebrate the freedom of the Czech people from the Swedes. We take in the sights and visit the shops where beautiful hand-cut crystal is sold.

Sunday, August 18

We leave for Prague in the morning. Along the way we stop at a charming small town with pink,

blue, and yellow buildings. The streets are cobblestone. After lunch we continue on to a little ski town, where we play Club Praha. We look tired and lose the first game but come to life and win the next three games. We are relieved to have completed our competition 8-0. The team breaks into the Cougar Fight Song.

Monday, August 19

After lunch we depart on a three-hour ride to Prague. The bus has become our second home. Turnover, a small town famous for its garnets, is on the way. We stop. Women and shopping are the same, no matter the country.

Tuesday, August 20

Our day in Prague begins with a tour of St. Vitas Cathedral. We brave the 286 steps that wind to the top. There are guards outside the castle area near the cathedral. The players choose one to try to make smile. They are serious young men, but this one cannot resist the charm of the Cougar women.

Frank and Doreen have taken such special care of us as our coach driver and assistant. To honor them, we all chip in with a card and \$200 tip. It brings them both to tears, as well as many of us.

Wednesday, August 21

We spend one last morning shopping (of course!) before the nine-hour trip back to Munich and our flight for the U.S. August 22.

The opportunity to travel in Eastern Europe and experience the cultures, the people, and food is a real bonus. I am so proud of my women—for their play and for being the most admirable representatives of their families and their university. This is education and sport at their best. It will always be one of the fondest memories of Washington State Volleyball. ■

LONE STAR DIETZ left a football legacy

"That was the game which was to change the face of New Year's Day in the years to come."

—Rose Bowl historian Rube Samuelsen.

IN THE FIRST FOUR DECADES of the 20th century, hardly a week went by during football season when the name of William H. "Lone Star" Dietz's didn't appear in the nation's sports pages. Today it's rarely heard in Pullman, or anywhere else. In spite of that near silence for 60 years now, the one-time Washington State College football coach (1915-1917, 17-2-1 record) left a legacy that could land him in the College Football Hall of Fame next year.

He began his coaching career in 1912 as an assistant to Pop Warner at Carlisle (Pennsylvania) Indian Industrial School after playing there in 1907. He last coached during the 1942 season at Albright College, Reading, Pennsylvania.

His paintings still adorn the walls of Albright, alma mater of former WSC athletic director J. Fred Bohler, who hired him at WSC. Visitors to the Albright field house can

see Dietz's portrait of Dick Riffle. The All-American quarterback starred on the Lions' undefeated team in 1937, Dietz's first year at the helm. Prominently displayed in the Career Development Center across campus is Lone Star's painting, *The Pursuit of Knowledge: A College Fantasy*, a gift from the Class of 1959.

The Washington Redskins still conduct their summer training camp in Carlisle, home to Lone Star when he was playing and coaching at the Carlisle Indian Industrial School (1907-1915). Although Dietz coached the then Boston Redskins for only two years, the pro team remains eternally tied to him.

Lost to posterity are the details of exactly how the Boston Braves football team became the Boston Redskins in 1933, when Lone Star took the coaching reins. (The Redskins moved to Washington, D.C. in 1937.) What is known is that Red-

Coach William "Lone Star" Dietz, with cane, and his Cougar football team that defeated Brown 14-0 in the 1916 Rose Bowl game.



SPORTS|SEASONS

skins owner George Preston Marshall wanted a name change to differentiate the Boston football team from the better-known Boston Braves baseball team. In any event, the Braves became the Redskins in 1933 with Lone Star working the sidelines.

Marshall, a Washington, D.C.-based laundry tycoon and showman, was interested in improving the Redskins' financial position. One way was by capitalizing on its colorful coach's Sioux heritage in promotional materials. Fliers featured photographs of Lone Star in Indian regalia, in a business suit, and in moleskins with his Carlisle letter sweater under his arm, according to Richard Whittingham, author of *The Washington Redskins: An Illustrated History*.

Dietz's legacy, however, doesn't end with the National Football League, or even the East Coast. It extends far beyond.

The nation's New Year's Day football tradition is thought to be a result of his masterful coaching. Prior to 1916, some football games had been played on New Year's Day, even some intersectional games, including one in Pasadena in 1902, which was stopped in the third quarter with Michigan ahead 49-0, and Stanford unable to field 11 players due to injuries. But none successfully captured the fancy of the sports public until Lone Star's Washington State College charges proved themselves to be the equal of Cornell, the best team in the East that year, according to Walter Eckersall, who officiated the game, as quoted by football historian Terry Fitzgerald.

Although oddsmakers considered WSC vastly inferior, Lone Star and his players put West Coast football on the map by blanking Brown 14-0. The WSC defense held star halfback Fritz Pollard to 40 yards

net rushing. And the entire Brown team gained only 96 yards that day. Lone Star's offense operated with precision, gaining 325 yards even though stripped down to its most basic plays by playing conditions on a muddy field.

When celebrating the 40th anniversary of the 1916 historic contest, Rose Bowl historian Rube Samuelsen wrote, "That was the game which was to change the face of New Year's Day in the years to come. That game provided the stimulus which turned the holiday from the day after the night before (of celebrating) into a day of football in many parts of the country—yeah, even the world—as bowl games sprung up without number."

Current Washington State head coach Mike Price has a copy of the 1915 team photograph on his desk in Bohler Gym as a constant reminder that Lone Star is the only coach in school history to lead his team to a Rose Bowl victory.

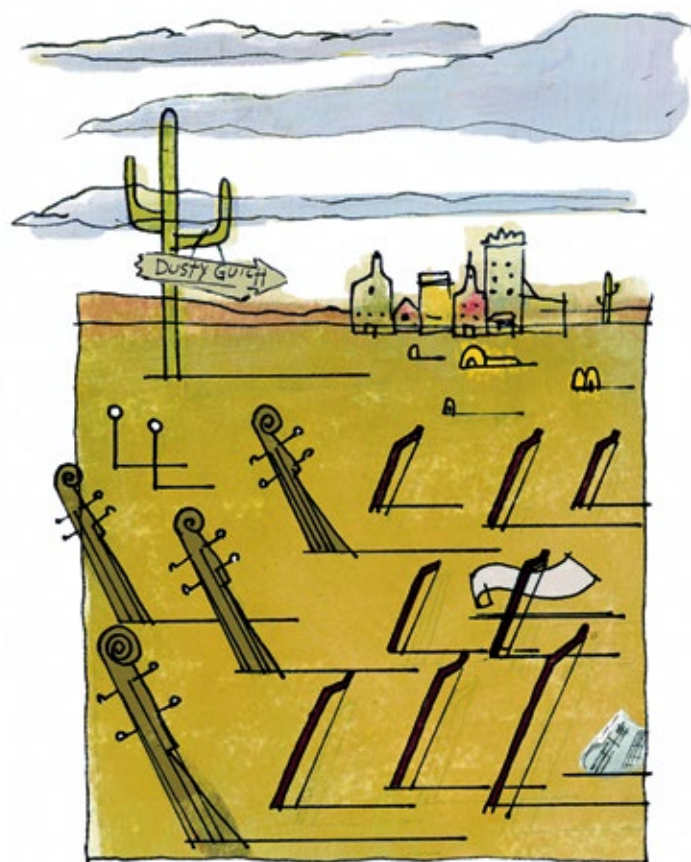
A photograph from the Washington State University Library depicting the original event and several pages devoted to Lone Star are included in Dick Fry's wonderful book about Washington State sports, *The Crimson and the Gray: 100 Years with the WSU Cougars*. Fry notes that Lone Star was not on the train with his team when it returned to Pullman. The coach was in Hollywood making movies, another legacy.

William H. Dietz has been nominated for induction into the College Football Hall of Fame in 2003. Football fans familiar with Lone Star's legacy hope he will be selected and receive the long overdue recognition he merits. ■

—Tom Benjey

Tom Benjey is writing a biography of Dietz. Benjey can be reached at 546 E. Springville Road, Carlisle, Pennsylvania 17013 or benjey@pa.net.

♦ A COMMON READER ♦



TROUBLE in DUSTY GULCH

by Bill Morelock • Illustration by David Wheeler

I really should be more worried about this. It's my living after all. For 20 years I've been presenting

a kind of music so wildly varied in time (seven centuries and more), in style (Morris dances, Joplin rags, Mahlerian stairways to heaven, Copland cowboy ballets), and in instrumentation (shawms and zithers along with the violins and cellos), that the

term “classical” is as inadequate in describing it all as calling the United States of America, Dusty Gulch, Nevada, just to avoid the complexities. But we call the music Dusty Gulch anyway, and there’s trouble in Dusty Gulch. Always has been, to tell you the truth.

Problem is, very few people listen to it. Many classical radio stations are either jumping ship to more vibrant formats—mostly news/talk—or sticking with it out of loyalty, but with reduced expectations. Major orchestras are building up big debts because too few of their plush red seats are showing signs of wear.

Music, and especially serious music, is a transport to the heavens. Great musicians amaze us all with an art that is nearly uncanny. Yet what happens when a critical mass of people simply don’t care anymore? The music, in terms of the numbers of listeners who know it and are devoted to it, has been “dying” for decades. Yet a new wave of well-publicized teeth-gnashing and clothes-rending occurs whenever some new calamity or outrage—National Public Radio’s “gutting” of its classical music program, “Performance Today,” for example—seems to make life in Dusty Gulch, which was already pretty bad, more imperiled than before. Much like passenger train travel in this country, there’s a strong sense that classical music should be there, that it should be a central part of the culture, even though almost no one uses it.

This all brings up an interesting question about change and loss, about the relationship between progress and decadence. If classical music becomes even more of an endangered exotic curiosity than it is now, is it a tragic loss or an evolutionary casualty? Is it any more tragic than the rise of writing and the corresponding withering of oral traditions and well-developed memories? The art of illuminated manuscripts fell victim to Herr Gutenberg. Not many of us mourn the layers of dust accumulating on classics by Milton and Cervantes. If classical music performance were to completely die away, would we be poorer for it? Certainly. But I’m also poorer for not being able to recite 10,000 lines of iambic pentameter on demand, and I don’t actively suffer for it. Does one necessarily need music—serious or silly—to live a rich life of inquiry and poetry and curiosity and art and analytical facility and great love?

Probably not.

The novelist Vladimir Nabokov, for instance, wrote fiction of frightening complexity in two languages, was a serious lepidopterist, translated Pushkin, was a memorable teacher of literature, came from a musical family, enjoyed an unusually happy marriage with his beautiful wife, Vera, regarded music as “an arbitrary series of essentially annoying sounds,” and had no use for it at all.

It’s a tricky thing, preserving a cultural artifact. It requires maintenance that the natural enthusiasms of the culture don’t give it. Classical music resembles a coconut palm in a Pullman greenhouse. Heroic efforts will always keep it alive and as glorious as it would be in a Brazilian jungle—or late 18th-century Vienna. But the world outside the glass is cold and indifferent. In other words, the music is never going to occupy a central place in our culture again, if it ever did. Our culture is too democratized; it offers too many choices. No one voice has the authority to dictate taste and make anybody listen.

We are losing something as this music moves further to the margin. But we’ve suffered 10 thousand other irretrievable and—at the time—tragic cultural losses, from which we tend to recover and over which we cease to grieve. No collective teeth-gnashing over Dante’s disappearance from the best-seller lists. Yet Dante isn’t dead, only wandering the underworld, available for anyone to discover.

In the same way, the music and its performance will never die. And with recordings preserving music as an artifact, the same will be true of Beethoven’s late string quartets and Charles Ives’s symphonies. They won’t—and don’t—occupy a prominent place in our culture, and jobs (like mine) connected with classical music may go the way of the blacksmith. But the music will be there, in some form, and ultimately it’s up to the implacable forces and whimsical tastes of each of us whether to take it or leave it. ■

Bill Morelock '77 is a writer and broadcaster. He hosts “Drivetime Classics” on WCAL-FM, Northfield, Minnesota.

A SUMMER JOB THAT MEANT SOMETHING

An Entomology Undergrad Combats the Worm in the Apple



Ruth Henderson

WHEN THEY HATCH, they're so tiny you can barely see them. Then they eat. They bore their way inside an apple and consume it from within. After two weeks, they're half an inch long, pinkish orange, and engorged, with tiny dark heads. They're also translucent, so if you look closely, you can see their food moving along their digestive tracts.

They're codling moth larvae, the number one adversary of Washington apple orchard growers and the subject of Ruth Henderson's fascinating summer of research at the Washington State University Tri-Cities Food and Environmental Quality Lab. With faculty members Allan Felsot and Vincent Hebert, Henderson, a sophomore and an entomology major, came to know much about the diminutive despoiler—and the best way to kill it. She loved almost every minute of her work.

From mid-May to mid-August, Henderson ran bioassays on the larvae as part of research on sprayer technology for pesticide applica-

tion in orchards. Felsot, Hebert, and the students used two different types of sprayers, the industry standard Airblast and the newer Prop-tec. The researchers also used two different pesticides, the most commonly applied Guthion, slated for phaseout by 2005, and its replacement, Intrepid.

Guthion is being replaced because of its dangers to human health, Henderson says. The neurotoxin binds to a certain neurotransmitter in the synapse so it can't be broken down. Its buildup can cause seizures, and death.

Henderson learned just how effective Guthion is on larvae during the course of the summer. For each bioassay, leaf samples were collected from various sites in the lab's orchard. The sites were treated differently: with the two sprayers, the two pesticides, and two concentrations. Henderson took small leaf samples from each plot, put them in a petri dish, and placed five larvae on the samples. She checked all samples at different time intervals to see how many had died.

"Shortly after application, with the full rate and the half rate, all five larvae would be dead in two hours," she says. "Guthion is used wherever there are apple orchards. It's really the best thing for killing codling moth larvae."

Intrepid is an insect growth regulator that restricts a larva's ability to go through a normal molting cycle.

"With Intrepid, we would get mortality, but it wouldn't be until 24 to 48 hours later, and it wasn't always 100 percent mortality," Henderson says. The problem is that codling moth larvae move very quickly, and it takes them less than 24 hours to chew into an apple. Once a larva gets inside, the fruit isn't marketable anymore.

"It kind of comes down to choosing human safety or effectiveness," she says. "But what they're hoping to do in the lab is reduce worker exposure through the safer sprayer technology, therefore enabling the orchards to continue to use Guthion."

Before last summer, the Kennewick native's only work in a

research laboratory involved washing glassware in Clark Hall during the school year. But John Brown, chair of the WSU entomology department, sent her resume to entomology-related labs near the Tri-Cities, and Felsot called her home during spring break.

Once at the lab, the researchers taught Henderson how to set up bioassays, record data, label and store samples, and take care of codling moth larvae until they were used in the bioassays. She became so familiar with the lab's work that in early July, she presented findings from her part in the bioassays to two visiting groups.

"What most impressed me about the job was I would actually be working with the research, especially since it related to my major," she says. "I didn't really expect to be participating so much. I just figured I'd be washing more glassware. It was very satisfying to go to my summer job and do something that meant something to the world."

—Nella Letizia

Senseless shootings send SNOWY OWLS to Pullman



BEFORE LAST SUMMER, Washington State University's Veterinary Teaching Hospital had not treated a snowy owl in more than six years. But in June and July, its exotic animal care service had to treat two of them. Both suffered gunshot

wounds, and both were from Barrow, Alaska.

The first owl was hunting the Alaskan tundra about 300 miles from the Arctic Circle when he was shot. He was found a few days later and taken to Dr. Gregg Black for treatment.

Black stabilized the owl, named Jacob, then arranged to have him flown to the WSU teaching hospital by Alaska and Horizon Airlines. The carrier provides free air transportation to and from the veterinary college for injured birds of prey.

Jacob's left elbow had been destroyed, and he had a deep puncture wound in his stomach. He would live, but he would never fly again.

Snowy owls commonly live in the open tundra of northernmost Canada and Alaska. They grow to be about two feet high, with a five-foot wingspan. They prefer open country and perch on the ground or rooftops, but now Jacob had to learn to rest on a log perch.

The second owl was found on the tundra by a tourist from Kuwait and was also sent to Black's clinic. But its wounds were more serious than Jacob's. The owl had a gunshot wound through the tip of his right wing and a rifle slug buried against his pelvis on the opposite side.

Kristi Ilyankoff, a WSU junior in wildlife ecology and president of the WSU Raptor Club, was volunteering at the exotic ward when this owl reached the hospital.

"When he first came in, he was really alert and standing up and aggressive," Ilyankoff says. "He didn't have a bandage on . . . because he had torn it off."

Even though surgery was performed, his injuries were too severe for him to ever fly again.

As a result, his fate is the same as Jacob's. Neither will ever return to the wild. ■

—Emmy Sunleaf

◆ MONEY ◆

SAME DANCE, DIFFERENT TUNE

by John R. Nofsinger

Buy low, sell high. Investors understand this basic goal of investing. This idea appeals to the intellectual side of our brain. However, it is the emotional, not the intellectual, side of our brain that usually motivates action. That is why advertisements and sales pitches appeal to our feelings more than our intelligence.

Unfortunately, our emotions and psychological biases make buying low and selling high difficult. Consider the actions of many investors. The great bull market of the late 1990s brought millions of new investors into the stock market. The continual rise of the stock market was a trend that investors projected into the future. Assuming a past trend will continue is a common psychological bias. Since the stock market was rising, people believed it would continue to rise. As a consequence, investors put more and more of their savings into the stock market. Since the stocks of small technology firms were rising the highest, those were the stocks that investors bought. Many investors buy into stocks toward the end of a long bull market. That is, *they buy high*.

After a savage bear market began in 2000, millions of investors began to bail out. The print and broadcast media have been full of stories of investors who have thrown in the towel. These people feel betrayed by the corporate system and the stock

market. Investors view the declining stock market as a trend that will continue into the future. So they sell. *They sell low*.

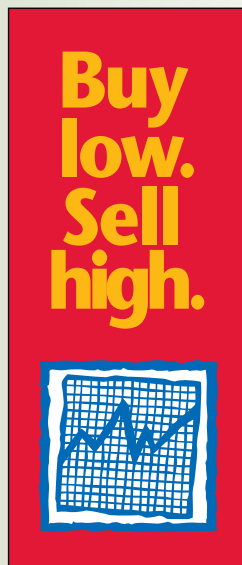
The same psychological bias that causes investors to be too optimistic near the end of a bull market also causes them to be too pessimistic near the end of a bear market. The bias that causes people to project the current trend into the future also causes them to do the exact opposite of what they intellectually know is the goal. They buy high and sell low. When the stock market was at its highest in 1999, investors couldn't buy enough of it. The stock market went on sale in the summer of 2002 and investors didn't want any part of it.

If you make investment decisions based on the emotional side of your brain, you usually end up doing the opposite of what the

intellectual side would do. How do we avoid acting on emotion and psychological bias? One way is to use mechanical trading techniques that remove emotion from the process.

Judge the outcome of the time-tested technique of creating an asset allocation and then rebalancing it once per year. Consider an investor who targets a portfolio of 50 percent stocks and 50 percent bonds. Each year in the late 1990s, the stock portion of the portfolio did quite well and skewed the portfolio to be 60 percent stocks and 40 percent bonds. At year end, the investor sells some stock and uses the money to buy more bonds in order to rebalance back to the 50 percent stocks/50 percent bonds target. As the bear market began in 2000, bonds outperformed stocks. This investor would rebalance annually by selling some bonds and using the money to buy stocks. The technique causes investors to be selling stocks near the end of a bull market and buying them at the end of a bear market. The investor would have been taking profits in stocks in 1998 and 1999, and adding to the bond position just in time for the large 2000 to 2002 increase in bond prices. As the bond prices rose, the investor would then be taking those profits and buying into a depressed stock market.

In other words, the investor would buy low and sell high. ■



John R. Nofsinger '88, '96 is professor of finance at Washington State University and author of Investment Blunders (of the Rich and Famous) and What You Can Learn from Them, Financial Times/Prentice Hall 2002.

A SENSE OF PLACE

Living and Gardening in the Pacific Northwest *by* **Tonie Fitzgerald**



ROBERT HUBNER

Many people have become dismayed or depressed by what is happening to our natural world. Others have become gardeners.

IN WASHINGTON STATE, it has been over 200 years since indigenous peoples described where they lived as “the place where camas blooms” or “the place where wild onions nod.” In other parts of the country, it has been even longer.

Where Native Americans lived—and the plants and animals that lived there—determined *if* they lived. Survival required intimate contact with the natural world. Without guidebooks, maps, or Internet access, they knew weather patterns, ocean tides, hydrology, topography, and the life cycles and habits of plant and animals in the places they lived. They had a very strong “sense of place.”

Now, most Americans are able to get through a day with little outside world contact. We may not prefer it that way, but it’s common for us to spend the greater part of our days in a built environment. Typically, our “sense of place” comes from the locations of our houses, offices, schools, gyms, restaurants, stores, libraries, or other buildings.

Can we even tell if we’re near the ocean, in a desert, on a plateau, or by a grassland prairie by looking out the window? Not always. In America, the natural landscape, with its millions of plants, animals, birds, and insects, is disappearing at an alarming rate—220 acres per hour!—due to urban and suburban sprawl. And what isn’t street, parking lot, or edifice is apt to be an ornamental landscape meant to please the human eye rather than sustain biodiversity.

Ecologically, the plants in these landscapes are not the ones that thrived there before the land was changed by human activity. While North America is home to about 20,000 native plant species, most landscapes since the 1950s have been designed and planted with cultivars of a couple hundred plants and trees that lend themselves to mass production, marketing, and sale. So, a person traveling from Boston to Seattle or Atlanta to Los Angeles sees not only the same chain stores, restaurants, and hous-

ing developments, but also the same northern—or southern—palette of plant materials across the nation.

This “geography of nowhere” was identified by James Kunstler in his 1993 book of the same title. In essence, in today’s built environment, we can’t tell where we are when we look around.

We are losing our sense of place. We may not like it, but we accept it as the inevitable cost of progress.

The acceptance of the geography of nowhere is puzzling when one considers that so many of us, particularly in the Pacific Northwest, claim to be “outdoorsy” and go to great lengths to connect with nature. We hike, we camp, we go to the lake. We breathe, we relax, and we reconnect with ourselves. And then we drive home to jobs, school, housework, and other aspects of our busy lives. We have become a culture that “visits” nature and “lives” more and more in a built environment.

Many people have become dis-

mayed or depressed by what is happening to our natural world. Others have become gardeners. Gardening, which includes landscaping, ranks as America’s number one leisure activity. Research indicates why. Studies have linked people’s proximity to nature—primarily plants—with stress relief, shortened hospital stays, increased mental acuity, lowered blood pressure, reduced domestic violence, and a host of other good things. We may not be highly conscious of it, but we feel and act better when we’re around plants.

Evidently, gardeners know the benefits of being among plants. It’s hard to find one who doesn’t spend much of his or her time tending to plant and soil needs, watching for the first new growth, waiting for bloom time, and so on. Gardeners must be in tune with the natural world, for it’s the sun or shade, the wet or dry, the hot or cold, that determines how their gardens grow. Gardeners have their sense of place in this world.

“Naturalized landscaping” is the fastest growing style of gardening. Naturalized landscaping can be loosely defined as landscaping with plants adapted to the places where we live. Naturalized landscapes use plant types and groupings that welcome the diversity of birds, animals, insects, and soil microbes that make for a healthy ecosystem. Natural landscapes welcome people to walk through them, sit in them, and do less maintenance in them. Think pine needle paths instead of edged walkways; natural plant shapes instead of sculptured hedges; drought-tolerant groundcovers instead of thirsty lawns.

Perhaps more important, landscapes that reflect the local natural surroundings give us that sense of where we really live. ■

Tonie Fitzgerald is a WSU/Spokane County extension agent in horticulture and author of Gardening in the Inland Northwest (Washington State University 2001). See review, page 57.

College of Nursing

This year, the College of Nursing joined the ranks of a select few national colleges as we admitted our first group of United States Army Cadet Command and ROTC students through the Partnership in Nursing Education (PNE) Program. The ROTC units of the four consortium institutions, Eastern Washington University, Gonzaga University, Washington State University, and Whitworth College, are part of this new endeavor. The WSU College of Nursing was selected to be one of the participants in this unique partnership because of the superb quality, the success of our graduates, and the world-class reputation of our nursing program.



Seven highly qualified nurse cadets, each holding full ROTC scholarships, were admitted to the incoming junior class as part of the PNE program. Over the next two years the nurse cadets will participate with their classmates to meet all the requirements of the basic baccalaureate nursing program. At the same time, they will complete a number of required military science courses, including physical fitness training taught by the professors of military science on the consortium member campuses. Upon graduation with a baccalaureate degree in nursing, these nurses will be commissioned as second lieutenants in the U.S. Army Nurse Corps.

In addition to our PNE Army nurse cadets, the College has attracted a number of other students who are serving in various military branches. Students may be assigned to the College to complete their education either at the undergraduate or graduate level. They often have the opportunity to designate what college they wish to attend and have chosen this college based on its excellent national reputation.

Inspiring and transforming health care for generations to come....

World-class enrollment

The number of applicants to the WSU College of Nursing has increased dramatically. This fall there were three qualified applicants—men and women—for every available junior class opening. The opportunities and possibilities a nursing career offers are attracting students in record numbers. The reputation and quality of the education provided by the WSU College of Nursing are well known. Our world-class graduates are heavily recruited to work in traditional and challenging capacities, some choosing to be dispatched around the globe.



The PNE program demonstrates the military services have recognized this as well. Our country will be well served by these nurse officers, and we are honored and proud to be involved in the preparation of our military nurse corps.

Your support of the College of Nursing, particularly in this time of great need for health care professionals and our nation's health, is truly appreciated. Your continued contributions to our scholarship and advancement efforts will measurably impact the College as we work to address the health care needs of our communities, our state, and our country—now and for future generations.



*A multitude of
questions about
reproduction are driven
by a simple point.*

*If a species—
amphibian, avian,
or human—is to
survive, it must
reproduce.*

A Matter of

AT FIRST, IT LOOKS LIKE a fishing expedition. But the Styrofoam cooler graduate student Cynthia Gill carries is not stocked with bait and beer, and she is carrying a long-clawed hammer rather than a fishing pole. Our quarry is long-toed salamanders, and our hunting ground is a small, ice-covered pond about 10 miles northwest of Pullman. The hammer is for breaking the ice.

Our haul that day is 68 male salamanders and six females, and it's not an easy catch. Although the animals are confined by plastic traps, they are slippery beasts to grab and hold onto, especially with ice-cold hands. But they are lovely—shiny and dark in color, some with bright olive green stripes down the center of their backs. Salamanders are amphibians, and there is worldwide concern about an apparent steep drop in their numbers. Amphibian populations, even entire species, have declined, some to extinction. The Costa Rican golden toad hasn't been seen since 1989.

"Amphibians are the canaries in the coal mine for the environment," says Paul Verrell, Gill's advisor and an associate professor in the School of Biological Sciences at Washington State University and the Center for Reproductive Biology, a research unit based at WSU and the University of Idaho.

Most amphibian species spend part of their lives in the water and part on land and are exposed to contaminants in both places. Their soft, permeable skins also make them especially vulnerable to contaminants. Most are predators, and if environmental chemicals accumulate or concentrate as they move

up through the food chain, they will hit predators the hardest.

The problem comes in deciphering just what these amphibian "canaries" may be telling us, for their decline undoubtedly has many causes. The most obvious is habitat loss due to our expanding human population. Non-native predators and competitors, introduced on purpose or arriving by accident, also play an important role. But there are declines in places where neither of these have happened—"mystery declines"—that could be due to one or a combination of toxic chemicals, UV radiation, global climate change, or disease, says Andrew Storfer, assistant professor of biological sciences.

Determining cause-and-effect relationships is difficult at best, controversial for certain—especially when we're looking at chemicals. Even if laboratory studies show that a chemical has negative effects on an animal, it's difficult to correlate that information with exposure in the animal's natural environment—or even to know what a relevant environmental exposure level might be.

Although early research on the effects of chemicals on wildlife and humans concentrated on testing for cancer-causing properties, more and more research now is focused on looking for developmental and reproductive abnormalities. This change comes in part out of concern for the wild species, since in some fish and wildlife species there is strong evidence that chemicals found in the animals' habitats may cause these problems. But we are primarily concerned about the possible effects on humans.

Obviously, humans as a species need not yet worry about reproductive fitness or species survival. However, work aimed at determining if and how environmental chemicals cause abnormalities in our



reproductive systems should lead to a better understanding of those systems and help foster the discovery of safer, more effective, and affordable methods of controlling our own population.

VERRELL'S WORK with salamanders such as those Gill and I collected that cold March day is aimed at understanding their reproductive biology, their sexual behavior in particular. He would like to understand why some individuals are more successful reproducers than others. He also is involved in a wide-ranging project at the Center for Reproductive Biology. One of the center's programs is aimed at investigating how environmental toxins, especially those that disrupt the endocrine system, affect reproduction. (See sidebar.)

The endocrine system helps regulate the body's activities via hormones, extremely sensitive chemical messengers that are secreted by specialized cells and travel throughout the body in the bloodstream. The timing of their secretion and delivery is critical and carefully orchestrated. While adult mammals have feedback mechanisms that can cope with at least some variation in hormone levels, those mechanisms may not be active during embryonic development, a time at which it is thought animals are most susceptible to the effects of endocrine disruptors.

Of particular interest to the Center for Reproductive Biology is the hormonal regulation of the basic processes of reproduction. Estrogen-like hormones primarily regulate the female reproductive system, and androgenic hormones primarily regulate the male system. Both, however, play at least some role at critical times in the development of the reproductive system of the opposite sex.

Left: Cynthia Gill and Paul Verrell with long-toed salamanders. Because their skin is permeable and they are predators, salamanders are particularly vulnerable to environmental chemicals.

Survival

BY MARY AEGERTER • PHOTOGRAPHY BY ROBERT HUBNER

REPRODUCTIVE TOXICOLOGY

The Reproductive Toxicology of Endocrine Disrupters Program at the Center for Reproductive Biology is designed to determine if, and then how, environmental toxins, especially those that disrupt the endocrine system, affect reproduction. The program is comparing what happens in species from four different vertebrate classes—amphibians, fish, birds, and mammals—in order to grasp the similarities and differences in how environmental toxins might affect reproduction. That will help extrapolate to possible effects on humans, says Michael Skinner, director of the center.

The projects in the endocrine disrupter program involve Skinner, Kwan Hee Kim, Hubert Schwabl, Gary Thorgaard, and Paul Verrell at Washington State University, as well as Joseph Cloud, Victor Eroschenko, Rolf Ingermann, and James Nagler at the University of Idaho.

Most of the program's research involves two model compounds: methoxychlor, developed as a replacement for DDT, and vinclozolin, an anti-fungal agent used in vineyards. Methoxychlor can be metabolized, or converted by the body, into an estrogenic compound, an anti-estrogenic compound, and an anti-androgenic compound. Vinclozolin is anti-androgenic. Both are registered for use in Washington.

Why are salmon changing their gender?

Endocrine disrupters interfere with the normal interactions of the hormones and their targets. They may do so by preventing the interaction—anti-estrogenic or anti-androgenic—or by mimicking the interactions, and producing effects at inappropriate, usually earlier, times.

It's clear that some wildlife populations have developmental and reproductive system abnormalities that may be related to endocrine-disrupting chemicals. The most well-known are the alligators of Florida's Lake Apopka. A variety of endocrine-related abnormalities were reported following a large chemical spill into the lake. The majority of male alligators were found to be feminized, and the females, super-feminized. In addition, hatching rates for alligator eggs were substantially lower than normal.

Some of the chemicals that are believed to affect animals in their natural environments have been shown to cause similar effects in laboratory animals. Some chemicals that have been linked to developmental and reproductive system abnormalities in wildlife already have been identified and banned. For other chemicals there are no cause-and-effect data.

In humans, evidence points to a number of problems related to fertility and reproduction. The Environmental Protection Agency (EPA) says that the rates of breast, prostate, and testicular cancer have risen, and that male fertility has been reduced. Although the endocrine system seems a logical place to look for causes, the EPA also says that except in the case of DDT/DDE, DES, and dioxin, it has not been shown that endocrine disrupters are causing problems for humans. The National Academy of Sciences says that even these chemicals have not been shown to affect humans. DDT/DDE, DES, and dioxin have all been banned in the United States or are heavily regulated.

It also is important to note that many if not all of the environmental estrogens, except DES, are much, much less

active in our bodies than the natural estrogens we produce.

VERRELL FIRST BECAME interested in endocrine disrupters as possible tools for helping to dissect various aspects of reproductive behavior. If a disrupter knocked out sperm production, then it might be possible to determine the effects of courtship on reproductive success without the associated complications of an actual mating. But he soon realized that these compounds were interesting in their own right. After Rolf Ingerman, professor of biological sciences at UI, found that methoxychlor appears to partially paralyze salamander larvae, Verrell wondered whether it would make them more vulnerable to predation. While predation does not directly affect reproduction or directly involve the endocrine system, it does have an impact on species survival. A dead salamander larva is unlikely to contribute to its species' survival.

The answer to Verrell's question is "yes," at least if the predators are juvenile dragon flies, voracious natural predators of salamander larvae. When both the salamander larvae and the juvenile dragon flies are exposed to methoxychlor, a widely used pesticide, in a concentration similar to what might be found at certain times of year in streams or wetlands, the salamander larvae show more sensitivity than the dragon flies. That suggests that larvae in areas treated with methoxychlor are more likely to be eaten than larvae in other areas.

However, since estrogen alone does not produce the same results, it seems unlikely that this particular effect of methoxychlor is due to its endocrine disrupter properties, says Verrell.

In reality, there is little known about the effects of methoxychlor or vinclozolin—or any other endocrine disrupter—on amphibians, says Verrell. Given the concern about their declining populations, he finds that a bit puzzling.

But it is known that when male long-toed salamanders like those he studies are exposed to estrogen, there are more dead cells in their testes than in those of unexposed animals. Dead cells make neither sperm nor natural androgens. Since methoxychlor has estrogenic properties, it might have the same effect, but those experiments haven't been done yet—in amphibians. Similar ones have, however, been done in fish, on embryonic rainbow trout.

Joseph Cloud, professor of biological sciences at UI, has found that methoxychlor does not feminize embryonic rainbow trout or cause them to reverse sex. If that also is the case for chinook salmon, then scientists will have to find an alternative explanation for what's happening to some of the Columbia River chinook.

Although some runs of wild salmon appear far from threatened, other runs of wild salmon and steelhead on the Columbia River are teetering on the brink of extinction. Thinking that reproductive problems might be part of the cause, James Nagler, associate professor of zoology at UI, with the help of Gary Thorgaard, professor in WSU's School of Biological Sciences, investigated whether the chinooks' genotypes—the content of their chromosomes—were the same as their phenotypes—how they looked or behaved. The two had the necessary tool, a marker that recognizes a portion of the Y chromosome, and an appropriate location, the Hanford Reach area of the Columbia, home of one of the river's only two healthy runs of chinook. Y chromosomes usually define the male animals of a species. Males have one each of the X and Y chromosomes, while females have two X chromosomes. Thorgaard found that 84 percent of the fish that were functioning as females and laying eggs actually carried the marker, implying that they had a Y chromosome and were in fact genotypically male. Yet all of the female fish from the nearby Priest Rapids hatchery were genotypically normal females with two X



CHRIS MATHER

Does appearance always reflect the genes?
Not in salmon. Gary Thorgaard found that 84 percent of the Hanford Reach chinook that were functioning as females were actually males.



"We make a mistake when we equate hazardous

chromosomes. The Hanford Reach fish and Priest Rapids hatchery fish share essentially the same habitat throughout life once they've hatched and headed down the Columbia River.

Several possible explanations for the anomaly were proposed, some of which were discounted. Since the hatchery fish were derived from Hanford Reach fish and the two runs appear to be otherwise genetically identical, it seems unlikely that the bit of the Y chromosome recognized by the marker has moved to another chromosome only in the Hanford Reach fish. It also seems unlikely that radiation is to blame. The dosages the fish might have received would have been small, and radiation usually sterilizes fish rather than changing their sex.

The main difference between the two populations was the water that they were raised in—the Columbia for the wild fish, well water for the hatchery fish. Since incubation temperature can affect the sex of developing embryos of several species of cold-blooded vertebrates, it's unfortunate that the temperatures of these two water sources during fish egg incubation are not known.

The story becomes more interesting with data from the following two years. The marker continued to be found on functionally female fish from the Hanford Reach, though the incidence decreased. Female Priest Rapids hatchery

fish carrying the marker also have been found, as have female fish from farther down the Columbia.

Sex reversal does appear to occur naturally in trout and salmon, but the frequency is low, says Thorgaard. In some fish species, natural sex reversal is thought to be a means of maximizing offspring. Larger females produce more eggs, but even small males can mate. Conversely, if a dominant male fish dies or there are few males, a female might change into a male and still mate. Sex reversal happens in the laboratory if male chinook or other male salmonids are exposed to estrogenic hormones or estrogenic endocrine disrupters at a critical time near hatching. This type of manipulation has been used as a hatchery management tool for some years.

Several estrogenic compounds can be detected throughout the year in the Columbia. Some undoubtedly come from agricultural chemicals, some from upstream pharmaceuticals, and some from pregnant women who live upstream. The latter secrete estrogen in large amounts. It is not known if the concentration in the river of any one of these compounds is sufficient to cause sex reversal, nor how they may or may not work together to affect the endocrine system of the fish.

"We really have no idea of . . . what might be going on out there," says Thorgaard. But we know that a similar study in California's Sacramento River suggests that the same thing has happened there. And we know that the city of Richland gets its drinking water from the Columbia River.

At this time, there doesn't appear to be a problem with respect to the numbers of functioning male and female fish

in the Hanford Reach. But that could change. Since each parent in a mating gives one of its chromosomes to an offspring, the mating of an XY female and an XY male should produce fertilized eggs that are YY as well as XY and XX. While it's unknown at this time if YY chinook can survive, it is known that YY rainbow trout and coho salmon do and that they are sexually viable. If a YY mates with any kind of female, whether XX or XY, all the offspring would be male, for all would have a Y chromosome. An all-male population will have difficulty finding anyone to mate with.

NAGLER AND THORGAARD currently are looking for YY males in the Hanford Reach as well as considering possible causes for the genotype-phenotype anomaly. Given the close association between endocrines in both the development and functioning of the reproductive system, it certainly seems reasonable to investigate endocrine disrupters as a cause. But it's difficult to determine where any disrupters might come from—pharmaceuticals, chemicals, or natural sources. And it's difficult to connect even a known endocrine disrupter to what we see happening in the environment, says Allan Felsot, professor of entomology and environmental toxicologist at WSU Tri-Cities.

"We make a mistake when we equate hazardous residues in the environment and their risk of adverse effect," says Felsot.

Identifying substances that are hazardous in laboratory experiments is just the first step in assessing their risk in the environment. After that comes dose-response assessment, exposure assessment, and risk characterization. All have to be completed in order to relate what is learned in the laboratory to wildlife and humans.

Establishing a dose-response relationship involves characterizing the relationship between the amount of compound



residues in the environment and their risk of adverse effect.” —Allan Felsot

and how often it causes an adverse effect and how strong that effect is. Exposure assessment involves determining how much of a hazardous compound actually is in the air, water, plants, or other places, and then whether those amounts are relevant for how an animal might be exposed to them. Exposure assessment also involves determining how reactive the compound is, how long it remains in the environment, and what happens to it as it degrades.

The final step in the process is risk assessment. Interestingly, this has a non-scientific element that is determined by what we as a society define as safe, says Felsot. The EPA may take the highest dose of a pesticide that produces no effect in experimental animals and call that the allowable exposure. Then it builds in a safety factor that at present may be so high that the allowable exposure for humans is 1/100 of that animal dose.

WHILE THIS PROCESS cannot guarantee that there won't be unforeseen problems with a chemical in the future, it does offer some protection. Unfortunately, no such process offers protection from pharmaceuticals or naturally produced hormones that pass through wastewater treatment facilities.

Richard Bull, professor of environmental science at WSU Tri-Cities, has spent a large part of his scientific career involved with various aspects of drinking water and water treatment. Among his concerns is a worry that the focus on pesticides may result in our not looking in other places that contribute more important endocrine-active compounds—such as wastewater. “In all probability, if there are environmental impacts, these are the estrogens that are important,” he says. And there are a lot of them. They come from pharmaceuticals such as birth control pills and from hormones secreted by

pregnant women and other animals. The metabolites of natural estrogens are likely to remain in the water column, he says, while chemicals like methoxychlor that are not highly water soluble are more likely to become attached to sediments in the water and be removed during drinking water treatment.

A second concern comes from the increasing dependence upon municipal wastewater as a drinking water source that is being contemplated in many parts of the country, including southern California. A third is related to the effects of intensive agriculture, an issue here in Washington. Intensive agriculture is affecting the environment right now, and there may be human effects down the line, he says. Effluents from feedlots contain biologically active amounts of androgens that are released slowly from androgen pellets attached to the ears of cattle to increase growth. In dairy farms, there are high concentrations of natural estrogens.

On the other hand, Bull is concerned that the focus on endocrine disruption as a cause of reproductive problems will result in our ignoring other explanations. If there has been a decline in human male fertility as some suggest, there will be multiple causes, and the focus on endocrine disruptors may bias research that is needed to identify other causes, he says. He feels that the focus should be on reproductive and developmental effects. “This broader approach will catch the endocrine disruptors if they're responsible,” he says.

MICHAEL SKINNER, director of the Center for Reproductive Biology, and Kwan Hee Kim, professor in WSU's School of Molecular Biosciences, both study the development of the male reproductive system and the production of sperm in rodents. Rodents are excellent model systems for human studies, says Skinner. Rodents protect themselves from toxins in much the same way as

Allan Felsot, an environmental toxicologist at WSU Tri-Cities, questions the role of the common orchard pesticide methoxychlor as an endocrine disruptor. “I’ve got 10 kids,” he jokes. Seriously, toxicological cause and effect are very difficult to determine.



Female birds hatched from treated eggs were smaller and lighter than those from untreated eggs.

we do and have livers that are efficient at getting rid of them. Rats are especially good models, he says, for they eat just about anything.

Kim's work deals with the effects of environmental chemicals on the embryo during its development, but, as is the case for Verrell, the effects she studies are not directly related to endocrine disruption. They are, however, directly related to reproduction, for she focuses on substances critical for sperm production: vitamin A and the molecules it interacts with in specific cells within the testis.

"Why do mammals rely on vitamin A, which they don't make, to produce sperm?" asks Kim. She hypothesizes that if animals have vitamin A, it means that the environment they inhabit is healthy enough to support offspring.

Kim's work has shown that vitamin A binds or attaches to a specific molecule in some types of testis cells. The molecule, a receptor, then moves into the cell's nucleus. Once there, it binds to the DNA and leads to a change in the expression of genes and the making of proteins.

Kim has expanded her work with vita-

min A to include a look at the effects of a class of widely used chemicals called phthalates. Phthalates are used to increase the flexibility of polyvinyl chloride and are components of insect repellents, lubricants, and solvents. They are found in toys, food storage containers, blood bags, and plastic wrappers. Because they readily leach out of these plastics, they are among the most abundant environmental contaminants.

Phthalates are known to be toxic to testicular cells, to be endocrine disrupters, and to cause liver cancer. Kim is interested in how they affect the interaction of vitamin A and its receptor. She has found that phthalates interfere with the movement of the receptor into the nucleus. If pregnant female rats are fed phthalates for just five days during a specific time of embryonic development, then the mature male offspring will have empty or partly empty testes. Their sperm production will be limited, at best.

Skinner's research is focused on understanding how the testes develop in the embryo and how they function in the adult rat. His lab has identified several specific factors that are involved in cell-to-cell communication during testis development. When the communication is interrupted at critical times in embryonic development by endocrine disrupters, the effects are seen in the adult animal. If the pregnant female is exposed to methoxychlor at levels similar to those used in Canada to control black flies and mosquitoes, the development of the fetal male reproductive system is affected. When adults, male rats so affected will have abnormal sperm.

PRELIMINARY RESULTS suggest that the effects of endocrine disrupters also may be passed to the next generation. When both the male and female in a mating have been exposed to methoxychlor as embryos, their offspring may have problems. Over generations, a pop-



Kwan Hee Kim and Michael Skinner study the development of the male reproductive system and the production of sperm in rodents. Rodents protect themselves from toxins in much the same way as humans do.

Many failed to lay eggs when they matured.

ulation living in a small area regularly exposed to methoxychlor would have difficulty remaining viable, says Skinner.

The same might well be the case for some birds. Preliminary work by Hubert Schwabl, associate professor of zoology at WSU, Victor Eroschenko, professor of zoology at UI, and post-doctoral researcher Rosemary Strasser—now at University of Nebraska—suggests that endocrine disrupters reduce the reproductive success of Japanese quail. They do so by interfering with the development of the female reproductive tract and of the part of the brain that deals with reproductive function.

The researchers treated developing quail eggs with methoxychlor and one of its breakdown products at concentrations similar to what can be found in the eggs of wild birds. They found that the treated eggs didn't hatch as well as those that weren't treated, either hatching later or not at all. Interestingly, in the latter case, the embryos were alive and looked normal at the time they should have begun the hatching process, says Strasser. Female birds hatched from the treated eggs were smaller and lighter than those from untreated eggs. Many failed to lay eggs when they matured, and upon examination showed a second oviduct not seen in untreated birds. The eggs of those that did lay were uniformly medium in size. Normal, untreated birds lay eggs in a range of sizes. The eggs of treated birds also had weaker shells, one of the primary reasons that the use of DDT was severely reduced in the United States and that the bald eagle almost became extinct.

Male birds hatched from the treated eggs looked physically normal but didn't act that way. They had a markedly reduced interest in mating with females, whether measured as attempts to mount or actual copulations. When presented with a normal male, they showed none of the normal aggression or "tough guy" routine, says Strasser. Given a choice, the treated birds actually preferred being

alone and having nothing to do with either sex of bird. In another experiment, normal males actually were likely to mount the treated males, suggesting that the latter showed some feminine characteristics.

GILL AND I collected our salamanders from that iced-over pond northwest of Pullman during their breeding season, at which time they leave their usual home, burrow on land, and venture down to local ponds or slow-moving streams. (If you think ice water seems an inauspicious place for a cold-blooded animal to mate, I agree.) That the males arrive first, perhaps staking out their bit of watery turf before the females arrive, was confirmed by Gill's data. She set out her traps on February 2, but didn't catch her first female until the 23rd.

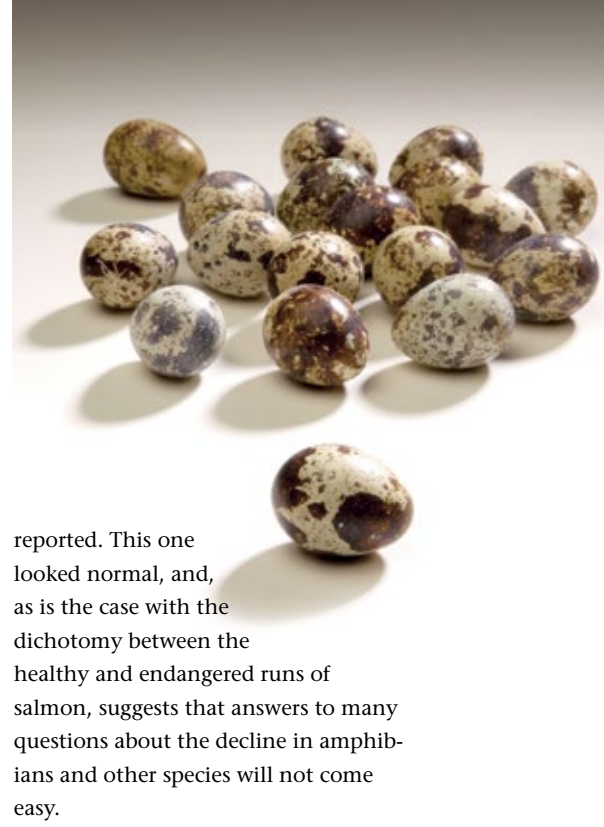
Sexing the salamanders is easy—superficially. During the breeding season—or at least when they're ready to mate—the males swell at the base of their tails, around the orifice common to their reproductive and digestive systems. The females do not. In addition, a female that has mated is liable to be considerably plumper and wider than a male, says Gill. There also may be differences in the shape of their tails.

I thought I had the sexing thing down pat the first day out, was less sure by the end of the second.

Once mating has occurred, the eggs are deposited in the water and the females head back to their burrows. The eggs hatch, and the larvae spend part of the summer in the pond, then change into juveniles and stay on land until they reach breeding age and size.

We also caught a frog the second time we went out, along with 29 male and 11 female salamanders.

I was glad to see the frog, another amphibian whose numbers have declined worldwide and among which all kinds of odd physical abnormalities have been



reported. This one looked normal, and, as is the case with the dichotomy between the healthy and endangered runs of salmon, suggests that answers to many questions about the decline in amphibians and other species will not come easy.

Even if a chemical causes deformities or death in the laboratory, even if it does so at concentrations relevant to those in the environment, what that means is unclear. It's not the amount in the laboratory or the environment that matters, but the amount that gets to the right place within the animal. That animals seem much more susceptible as embryos makes it even more difficult, and I think this embryonic vulnerability is perhaps what concerns us most. The effects of any substance that causes developmental disruption in an embryo are apt to be much greater than the effects of the same substance on adult animals.

It seems reasonable that we should temper our reactions to press reports of this or that laboratory finding with the awareness that much more needs to be done to determine whether the finding has relevance to the "real world."

How scientists will sort out the mix of possible endocrine disrupting substances in the environment is hard to predict. No chemical, pharmaceutical, or natural hormone is out there alone—it truly is a soup of unknown makeup.

Gary Thorgaard's observation bears repeating: We really don't know what's going on out there. ■

*Mary Aegerter writes regularly for WSM. Her book, *Hike Lewis and Clark's Idaho*, was released this fall by University of Idaho Press.*

Friendly People

Bill Hewitt built Tillicum Village



Editor's note: Following interviews for this story, Washington State University alumnus William S. "Bill" Hewitt, 85, died June 24, 2002, in Seattle after a short illness. A celebration of his life was held the evening of July 22 at Tillicum Village.

BLAKE ISLAND seems miles, even decades, removed from metropolitan Seattle. The island was once a popular gathering place for the Duwamish and Suquamish Indians. There's evidence that Seattle's namesake, Chief Sealth, leader of the Suquamish, was born on Blake.

But the island is only eight miles from Seattle's Pier 55. The 45-minute charter trip across Puget Sound affords magnificent views of the Olympic and Cascade mountain ranges, as well as Seattle's skyline. Deer, otter, and other wildlife inhabit the 473-acre island. Carved totem poles, depicting bears, ravens, and eagles, stand like stiff, silent sentries protecting a sacred place. Clam nectar is ladled out of big pots and served to visitors as they reach the terraced lawn in front of Tillicum Village at the water's edge.

"That's the best appetizer I've had in years," says one lady. She crushes the clamshells with her foot before entering the longhouse's heavy wooden double doors. The building is constructed of cedar posts and crossbeams and sided with split cedar planks.

Tillicum Village—"Tillicum" means "friendly people" in Chinook—celebrates its 40th anniversary this year. It has built a reputation on fresh-baked salmon, prepared inside the longhouse on cedar stakes over alderwood fires in the traditional manner of the Northwest Coast Indians. Guests file past circular fire pits where orange-pink slabs of salmon have been baking for an hour. Generous portions are served buffet-style on fish-shaped trays. Following the meal, the lights dim. Patrons sit quietly at long tables at right angles to the stage anticipating "Dance on the Wind." Some 100,000 people a year visit the village with as many as three tours departing the Seattle waterfront daily in July and August.

TILLICUM VILLAGE was the vision of William S. "Bill" Hewitt '42. The Seattle native wanted to build and operate a unique restaurant and cultural center in a longhouse. He grew up in Bremerton, where his father owned a restaurant near the naval shipyards. While completing a degree at Washington



Above: Mark Hewitt, right, with totem carver George David.



on Northwest traditions

State College in home economics and hotel and restaurant administration, he opened The Cougar Den, a small eatery in downtown Pullman to help pay for his education.

Hewitt's training in the food industry would pay dividends during World War II. Drafted into the Army, he was assigned to the general's mess hall in the rear echelon away from the firing lines at the Battle of the Bulge. "That was the best break I ever had," he said.

After the war, he returned to Seattle. He was hired as a relief manager for Clark's Restaurants and later worked for Western Hotels. For two years, he was food department manager at the Newhouse Hotel in Salt Lake City. Later, he opened Hewitt's Café on 4th Avenue in downtown Seattle, then launched Hewitt's Catering Service. Early on, he catered for youth and church groups. He learned to bake salmon Indian-style with the head and backbone removed, and prepared the first "potlatch-style salmon bake" for the Boeing Airplane Co. in 1958. It was a big success, and business grew. He began looking for a place to build a longhouse to showcase his service. Blake Island proved to be the ideal site.

Hewitt's plan was to open Tillicum Village in April 1962 to capitalize on the tourist trade generated by the Seattle World's Fair. He thought the village would turn a profit from the beginning, gain momentum, and become a magnet for local organizations and groups. The venture's continued growth would ensure prosperity for years to come.

But things didn't go quite as smoothly as hoped.

FROM THE LIVING ROOM of his waterfront home near the Fauntleroy ferry landing in West Seattle, Bill Hewitt pointed out Blake Island, flanked by Vashon Island to the south and Bainbridge Island to the north.

"There was nothing out there when we started," Hewitt said of the site that is now Tillicum Village. If allowed to build on Blake Island State Park, he agreed to take care of the pit toilets.

Mark Hewitt, who succeeded his father as president in 1990, was 11 or 12 when the logs being towed across Puget Sound to be used in construction of the original building were scattered to kingdom come in a storm. He remembers playing on the logs after they were rounded up and stacked on the beach.

"It was a gamble," Bill Hewitt explained.

The original building cost about \$400,000. Friends in the plumbing and electrical trades provided him in-kind services for stock. First-year gross sales of \$25,000 came to only five percent of the expected sales volume. The seasonal nature of the business, confusion regarding docking facilities on the island, and the fact that another company controlled virtually all



Salmon is prepared on cedar stakes over alderwood fires.



Drummer Pauline Hillaire



Dancer Alexander Joseph

of Seattle's tourism compounded Hewitt's difficulties. Debts soared. He went to the Chamber of Commerce for advice. Those reviewing the project said his only option was to file for bankruptcy. He would not consider doing that.

"The catering business supported us at the start," he explained. Fortunately, the year after the World's Fair ended, he and two partners landed the catering contract at the Seattle Center. But nine months later, he sold his half interest to focus on Tillicum Village. With hard work, perseverance, and faith he managed to get the operation on a sound financial footing.

"It took nearly 15 years," he said.

"**ONE THING WE FIND CHALLENGING** is the preconceived idea people have of what they will find at Tillicum Village," Mark said. "What we do well is share the Pacific Northwest, with its water, islands, mountains, salmon, clams, native culture, deer, and lowland forests."

"Visitors will tell you what sets our place apart is the people," the senior Hewitt added.

Tillicum Village employs about 10 people year-round in its Seattle office. Another 12 to 15 work on Blake Island. In the peak summer months the island staff swells to nearly 60, most of them Native Americans.

From the start, none were more important than Hyacinth and Winnefred David, Native American elders and longtime village employees. They instilled a great respect for Indian tradition in their large family. The two youngest sons, Joe and George, have provided leadership and inspiration to fellow artisans in expanding the boundaries of their classical art forms, including the village's totems, masks, and other carvings on display. Brothers Benny and Douglas also worked at the village.

THE NATIVE AMERICAN DANCE program, which had remained virtually unchanged since Tillicum Village opened, took on a new presence in 1992. Greg Thompson Productions began working on a stage set and script based on individual dances of the Northwest Coast Indians.

"We wanted something more professional, including the timing of the show," Mark explained of the result, "Dance on the Wind." While individual tribal customs differ, the tribes share many of the same traditions passed on from elders to their children and grandchildren. The Paddle Dance welcomes visitors to the potlatch, the ceremonial Mask Dance comes from the West Coast of Vancouver Island, and the Blanket Dance from the Lummi. The Dance of The Terrible Beast is a favorite. It tells in story and dance of a mythical creature

that could fly like a bird, swim like a fish, walk upright like a human, and disappear at will.

OVER THE YEARS, Tillicum has baked salmon throughout the world: on top of Mount St. Helens, Greece, the United Arab Emirates, Japan, Mozambique, and Namibia—the latter during a celebration marking delivery of a new Boeing 747-400 to Air Namibia. But in 1993, the world came to Tillicum.

In November of that year, at the invitation of President Bill Clinton, the fifth ministerial meeting of the Asia Pacific Economic Cooperation (APEC) conference was held in Seattle. Leaders from 14 member countries convened at Tillicum Village for a day to discuss the future of trade throughout the Pacific Rim.

"We had two things going for us," Mark said, "a remote location that officials thought would be secure, and our ability to work with the White House and U.S. State Department in preparing the site during the week prior to the event."

Preparations for the November 20 meeting began in mid-summer. Nearly everything had to be removed from the village's front lobby and longhouse, stored in vans, and parked a quarter-mile away. New carpeting was installed. Special furniture was brought in. Selected Indian art from Tillicum's collection was displayed. Millions of dollars of electrical communications equipment was installed to provide satellite links throughout the world. Six hundred media representatives were housed under a huge tent erected on the island's northeast point near Tillicum Village. The president and APEC delegates arrived at 9:45 a.m. The meeting concluded mid-afternoon.

"That was a lot of work for one day," Hewitt said.

AFTER RELINQUISHING CONTROL to Mark, Bill Hewitt would visit the village several times on weekdays and nearly every Saturday and Sunday. He enjoyed collecting tickets, passing out plates in the buffet line, and answering questions about the village's history.

While those visits became less frequent over time, Hewitt was aboard the *Good Time* charter boat operated by Argosy Tours April 28, a beautiful Sunday afternoon—the day before his 85th birthday. The previous evening's attendance had topped 600, and nearly 600 pounds of salmon had been prepared.

Hewitt sat quietly in the sun outside the longhouse taking in the scene and observing the people before entering the dining hall.

"It's a nice feeling to see people have a good time," he said. ■

President Clinton, fifth from left, and leaders from 14 countries meet at Tillicum Village in 1993.



When Cooperative Extension was launched in the early 20th century, its agents spread throughout the state and country with its gospel of scientific farming and better methods of food preservation. Though its vision may have adjusted to the times, its passion for taking the university to the people is as strong as ever.

Taking the University *to the People* BY TIM STEURY

Dale Whaley,
Carolyn Blake,
Robin Spicuzza,
Dan Fagerlie, and
Dianna Sage above
Republic, the seat
of Ferry County.

If you stay overnight in Republic, Washington, everyone you meet is going to ask, "So what brings you to Republic?" You don't just

wander into Republic, because it's not on the way to anywhere. You come to Republic for a reason. Republic is the county seat of Ferry County, which is a little larger than Delaware, but with a population of 7,000. Ferry County is nestled in the rugged Kettle Range just south of the Canadian border, knee-buckling-gorgeous country, breaking down to the dry spare hills above Lake Roosevelt, which bounds it on the east and south.

What brought Dan Fagerlie to Repub-

lic in 1982 was he was fresh off a degree in agricultural economics at Washington State University and looking for a job. He got an offer, a hot-shot corporate position in Chicago. And turned it down. Exasperated, his advisor exploded, "Jiminy criminy, if you don't want a real job, go upstairs and talk to Extension."

Real job? A management sales position comes with a clear-cut job description. Working for Cooperative Extension does not. A management sales position can make you a lot of money. Working for Extension won't. But then, sales isn't for everybody.

Created by the Smith-Lever Act of 1914, Cooperative Extension is the *extension* of the land-grant university, which was created by the Morrill Act, signed by President Lincoln 50 years earlier.

The Morrill Act was a radical notion. In return for grants of land, land-grant universities were commanded to offer education to the middle and lower class, something that hitherto had been unimaginable.

So why not take it a step further? Why not take education *to* the people? The work of Cooperative Extension was "to consist of giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in said colleges. . . ." Its philosophy—"help people help themselves."

Every one of Washington's 39 counties—and nearly every one of the nation's 3,150 counties—has a Cooperative Extension office. The country has changed dramatically since Extension was created, and its mission is no longer so purely rural.

But Extension personnel are as passionate as ever about bringing the university to the people.

"It's a calling," says Fagerlie, who has been making things happen in Republic as Ferry County Extension agent ever since he turned his back on the corporate world.

Volunteers are not automatically accepted. They must go through an interview process and be selected. "We discriminate," says Don Meehan. "Does this individual know what it means to be a volunteer?"

LAURENCE CHEN



The beach indicates the health of the entire watershed, says Don Meehan (second from left), chair of Island County Cooperative Extension and founder of Beach Watchers. With Meehan, Waste Wise coordinator Janet Hall, volunteer Lyla Snover, Beach Watchers coordinator Sarah Schmidt, and volunteer Fred Terrell lead a force of trained volunteers dedicated to keeping their beaches and their island home healthy.



Above: Volunteers Fletcher Davis and Cheryl Bradkin attempt to add a species to the list that Beach Watchers have developed for Island County beaches.

Left: Lyla Snover (white sweatshirt) and Rowena Williamson (with poster) serve as "ship's naturalists" on the Whidbey Island ferries, talking with visitors about non-point-source pollution and other topics.

On the beach

TWO HUNDRED MILES and a ferry ride to the west, Extension agent Don Meehan found his calling on the beaches of Island County.

It's not too much of a stretch to call Island County's Whidbey and Camano islands a temperate paradise. Largely rural, Whidbey is long and slender and lovely, its economy based on the U.S. Naval Air Station and tourism. It is just hard enough to reach to keep out the immigrant hordes from the mainland one would expect in such a place. Still, growth is on every islander's mind. From a population of barely 6,000 in 1940, the county is currently home to over 71,000. Forty thousand new residents are expected over the next two decades.

In spite of the population pressure, the county's beaches are generally very healthy, says Meehan. And that's how he and the Beach Watchers, a group of Extension volunteers organized by Meehan and coordinated by Sarah Schmidt, aim to keep them.

The inspiration for Beach Watchers

was sparked by a program in Clallum County called Bay Watchers. But Bay Watchers' interest focused only on the watersheds. It stopped at the beach, says Meehan.

He started thinking about the beach as an indicator zone. If tankers illicitly dump waste, it ends up on the beach. Pollution from upland watersheds has to cross the beach.

"It's a transitional zone," he says.

So one of the Beach Watchers' major tasks is to keep their eye on the county shoreline through annual scientific surveys of 30 beaches. They maintain species lists and note changes in beach ecology. "We know exactly what's happening on our beaches," says Meehan. "We have great data."

Their goal is to establish a baseline for what is a healthy beach, then make sure their beaches stay that way. Toward that end, Beach Watcher volunteers go through a rigorous training program, experiencing as many as 40 instructors.

Volunteers are not automatically accepted. They must go through an interview process and be selected. "We discriminate," says Meehan. "Does this individual

know what it *means* to be a volunteer?"

A lot of people just love to learn about nature, he says, "but they don't do a dang thing for their community."

Once admitted as a volunteer, the candidate must commit to 100 hours of service over two years. This service comes not only in the form of monitoring the beach, but perhaps more significantly, through education. The student volunteer becomes a teacher.

Driven by the notion that the more you know about something, the more you care about it, Beach Watchers take their knowledge to islanders and tourists. Lyla Snover, a native of Whidbey, and Rowena Williamson lecture on the ferry about marine ecology. Sandy Dubernell, who works as volunteer office manager at the Admiralty Head Lighthouse, the Beach Watchers headquarters, also gives talks at the Coupeville wharf about Rosie, the gray whale whose skeleton hangs from the wharf ceiling, another Beach Watchers project.

In Deception Pass State Park, Beach Watchers help out at Rosario Beach tide-pools, which were almost ruined by the beach's popularity among Seattle schools.



ROBERT HUBNER

Since 1999, Dan Fagerlie, left, WSU entomologist Gary Piper, and others have released tens of thousands of predatory insects in Ferry and surrounding counties in a move to control the invasive diffuse knapweed and other noxious weeds. Dale Whaley, right, who recently received his master's degree in entomology working under Piper, is now the extension bioagent coordinator for Ferry County Extension. The bugs are voracious, and native bunchgrass is starting to return to areas cleared of knapweed.

Time was, fleets of school buses would pull up and disgorge hordes of hyper kids out for a day's fun, spreading across the beach like hungry locusts, loving it and destroying it at the same time.

Beach Watchers teamed up with the state park to organize a less invasive approach. Now schools must make reservations. Every student gets a lecture on beach etiquette from a beach watcher. Beach Watchers oversee the expeditions, identifying tide pool life for the students and making sure they don't disturb it. What was once beach chaos is now, says Meehan, a total learning experience. And Rosario is getting back to normal health.

Meehan and Schmidt stress that beach-watching is more than just watching the beach. It teaches the interconnectedness of an island. Beach watchers educate their fellow islanders about reducing non-point-source pollution, protecting and conserving groundwater, preserving bluffs and shorelines,

protecting eelgrass beds and forage fish spawning beaches, maintaining septic systems, and much more.

Their vigilance paid off recently when two beach watchers found *Spartina anglica*, or English cordgrass, growing on the beach near Coupeville. (See Summer 2002 WSM.) *Spartina* is a persistent and aggressive invasive plant that has taken over large areas around Puget Sound. Being beach watchers, they recognized the threat and alerted Judy Feldman, who combines her role as noxious weed coordinator for Island County and outreach coordinator for Beach Watchers. There will be no invasion of *their* beaches.

Clearing the scenery of weeds

WATER IS VERY MUCH a concern in Ferry County—and therefore to Dan Fagerlie. Steep terrain and shallow soils

have left Ferry County vulnerable to erosion, flooding, and groundwater contamination.

Exacerbating the erosion problem was a massive invasion of diffuse knapweed. Knapweed crowds out the native vegetation that holds the soil in place. Whole mountainsides were covered by the nasty invader and washing away. The only cure seemed to be helicopter spraying, which is very expensive. And didn't work very well, unless it was long-term, with repeated applications.

But Dan Fagerlie had an idea. Fagerlie is full of ideas. In fact, he seems to get a new idea about every minute or so.

Increasingly, Extension is a tenuous dance among the needs of the community, the entrepreneurial skills of the county agent, and available money. Grant money, that is. Every extension agent who's been around a while remembers the day not too long ago when extension agents could not apply for grants. Just talk to the farmers and

keep an eye on those 4-H kids. That's all you've got time for. But as regular funding dwindled, agents were told to "seek and ye shall survive." That survival increasingly depends on the ability of agents to assess the needs of their communities and find grant money to meet those needs.

Historically, Extension has been funded by a unique federal, state, and county collaboration. Increasingly, however, Washington State's contributions have shrunk.

"In 1980, 80 percent of Extension funding was by the state and county," says Extension Dean Mike Tate. "Now it's half that."

"Everything I need to know in Extension I learned in a marketing class," says Fagerlie. "Instead of going out and selling a generic program to everybody, we look at the audience and figure out what

the needs are."

Everywhere he looked, Fagerlie saw a need. He got a five-year youth-at-risk grant from the USDA, with which, in collaboration with the Colville Confederated Tribes, to rebuild an abandoned youth camp on the reservation, which makes up the southern half of Ferry County. He found money to build a 4-H challenge ropes course.

They hired tribal people and expanded into canoes and rock-climbing 4-H programs.

Then he found money to place a faculty extension agent on the Colville reservation, enhancing agricultural, 4-H, and other programs in collaboration with the Tribes.

Rural life and guns are a fact of life. People hunt in Ferry County. Gun safety education is a big need. "But everybody's running scared from it," say Fagerlie. So he embraced it, wrote a grant, started a very successful 4-H shooting sports program.

Same way he took on knapweed. Except there wasn't a whole lot of money available for weed control. So think water quality. Big need, lots of grant money available. Well, Fagerlie thought, why not put the two ideas together?

Fighting knapweed generally means copious amounts of herbicides. Which pose a potential threat to . . . *water quality!* Got it? That's how Fagerlie thinks.

By this time, he'd also realized he couldn't get all these projects done by himself. So he translated this thinking into a USDA Extension Water Quality Grant to conduct water quality educational work in the area. He then hired Carolyn Blake to coordinate the water quality part and Daro Palmer to handle the biocontrol. Since then, they have secured separate bioagent funds from the Forest Service, Tribes, and others.

Working closely with WSU entomologist Gary Piper, Palmer, Fagerlie, and recently hired WSU graduate Dale Whaley have introduced insects that just love to eat knapweed. The results have been phenomenal. Ranchers call Fagerlie up just to tell him how nice that patch above their spring looks where they couldn't spray, what with the bugs

Carolyn Blake checks for caddisfly larvae, indicators of stream quality. Blake coordinates the Cooperative Extension Water Education and Training through 4-H, Ferry County schools, and other children's programs.



ROBERT HUBNER



CAROLYN BLAKE



CAROLYN BLAKE



CAROLYN BLAKE

Top: Ferry County 4-H campers study community habitats and niches.

Middle: At Inchelium Environmental Days, children examine the effects of different soil covers on run-off.

Bottom: Curlew kindergartners spray spring rain on a model of their watershed.

having eaten all the knapweed and the native bunchgrass coming back.

Blake has developed an extraordinarily innovative program in the public schools.

Seventy percent of the water supplies in

"In 1980, 80 percent of Extension funding was by the state and county," says Extension dean Mike Tate.

the county are private. Of course, everybody wondered what the water in those wells and springs was like, what with the mining and all. But the grant backing the idea wouldn't pay for water sampling. Well, why not have the kids do it themselves as an educational project?

So Blake goes into the sixth-grade classrooms throughout the area and gets them thinking about the water they drink—and shows them with a projection microscope what wondrous creatures could be living in it. Including, by the way, *E. coli* and *coliform*. And draws on WSU publications and research to show them how groundwater works and how nitrates can leach into it. And gives them sampling bottles. And they get all

excited. Especially when they publish their results in *The W.E.T.* (Water Education and Training) *Look*, the newsletter that goes to every household in the county. Its most recent issue reports there was *no E. coli* in the last round of testing, a welcome improvement from the year before.

Second-graders learn a few basics about the water cycle, about how much water is in their bodies. Third-graders learn about soils.

Fourth-graders learn about the salmon cycle and build watershed models of where they live. They start with topographic maps, cut out carpet pad layers to build the elevations, cover them with cheesecloth and plaster of Paris, and use felt for vegetation, then start testing with spray bottles to examine the effects of runoff after a fire. Or knapweed.

They use sponges for wetlands, then take them away to see what happens.

Then, says Blake, "We teach kids how to become teachers."

the WSU Research and Extension Center in Puyallup, Butkus and Kathleen Manenica manage a \$4.5 million program, funded in part by the U.S. Department of Agriculture Food and Nutrition Service, aimed at improving the nutrition of disadvantaged and low-income Washingtonians.

Named "Food Sense," the program reached 30,000 people throughout 18 counties in Washington last year, half of them school children. Most of the adults were in groups of five or six.

Washington has a very high rate of immigration, says Manenica. The immigrant population is primarily Hispanic and Asian, but also includes a large number of Ukrainians and Russians. Program materials are printed in seven languages.

Food Sense works through a large number of community agencies and organizations, including school districts, Community Service (formerly food stamp) offices, Even Start/Head Start, food banks, senior centers, homeless shelters, and many more. The USDA Food and Nutrition Service provides funding with match requirements. State, city, and county governments provide much of the matching funds.

As with Beach Watchers, students become the teachers.

Actual hunger is only one of the nutritional problems addressed by Food Sense. According to Manenica, families with the lowest incomes also have the poorest diets, fewest skills to stretch their food resources, most food-related disease, and poorest school performance. Food Sense addresses these needs by teaching young mothers how to shop more wisely and by teaching children basic nutritional requirements, which they can then take home to their families. Children start making food decisions in the fifth or sixth grade, says Manenica. "It's amazing to see how they influence buying habits of families."

Food Sense also tackles food insecurity by teaching good-tasting and nutritious recipes using economical

Kathleen Manenica and Sue Butkus coordinate Food Sense programs throughout the state. Among other things, Food Sense teaches meal-planning and other strategies aimed at improving nutrition within tight budgets.



EARL OTIS

Teaching them to fish

ACCORDING TO A SURVEY just released by Brandeis University, Washington State ranked first in the nation in "food insecurity." Food insecurity is a measure of whether there is enough food in the house to feed everyone.

How can this be? One of the most diverse agricultural producers in the nation, Washington has been a leader in fighting hunger, says Sue Butkus. "So we were stunned" by the survey.

Stunned in spite of the nature of her job. From

"Now it's half that."

ingredients and by teaching people how to better use food that is available. For example, let's say you've never cooked anything more complicated than a TV dinner (you know who you are), and the good people at the food bank give you a hunk of buffalo. What are you going to do with it?

A related program that is growing rapidly is diabetes awareness education. Among Food Sense's target groups, as many as 40 percent of some groups suffer from diabetes.

Yet another major emphasis of Food Sense encourages families to eat together more often. According to research—and the common sense of some—not only does eating together improve the nutritional quality of meals, it strengthens the bonds between family members, enables children to do better in school, and reduces the risk of substance abuse among teenagers.

The best thing about the program is that it works. Food Sense is designed so results can be tracked. "Over half of the people are planning meals more often," says Manenica. If you plan ahead, you spend less money and have less waste. Forty-six percent are comparing prices at the grocery store, over half are using a shopping list, and 46 percent are able to stretch food resources till the end of the month.

High expectations

BUT WHY IS Extension doing this? Why not the Department of Health and Human Services? Or Health and Welfare?

"Because we're an educational institution," says Butkus. "We're not a regulatory or social services organization. We know that with education people are able to make ends meet better. They have better nutrition, they're healthier, the kids stay in school more."

This theme, and the subtle distinction involved, is a mantra of Extension people. Meehan stresses over and over that Beach Watchers is an educational, not an activist venture. "We don't beat



In order to get to Republic and Ferry County, it's said that you have to either take a ferry, cross a mountain pass, or come in through a foreign country. Despite its isolation, it shares with Washington's 38 other counties a tight connection to WSU through Cooperative Extension.

people over the head with an anti-pollution message."

In Ferry County, how do you best improve water quality? By building a curriculum around it.

When George A. Nelson arrived in Wahkiakum County in 1913 as the first Extension agent in Washington, more than 20 percent of the nation's population was rural. His job was to "help farmers help themselves." Today, fewer than 2 percent of Americans live on farms.

Agricultural extension remains a vital, and diverse, part of Cooperative Extension's mission. In Washington, this varies widely in form and focus. In Central and Southeastern Washington, the heart of the state's tree-fruit industry, Extension works closely with industry to coordinate WSU research efforts with the needs of industry growers.

In northern and western counties, the effort is directed more to small-scale farmers and urban gardeners. Extension has helped develop learning centers at locations throughout the state, where

place-bound students can nevertheless achieve a degree from WSU. In Olympia, Extension directs the Energy Program, a multi-million-dollar brain trust and clearinghouse. And a WSU Extension forester has a spot in the College of Forestry at the University of Washington!

"The UW has the horticultural capacity," says Extension dean Mike Tate, "but we have the outreach."

In fact, if you keep your eyes open, you'll see signs of WSU Cooperative Extension everywhere you go in Washington. In spite of its presence and tradition, however, it still faces uncertain funding and endorsement by a legislature that seems interested only in undergraduate numbers. The uncertainty and soul-searching have left a lot of casualties along the way.

But as the preceding examples have shown, many of Extension's leaders have risen to the challenge and displayed an extraordinary level of entrepreneurship.

"The people who are left are the superstars," says Tate. "Expectations are way up."

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And maybe those expectations are realistic. Times have changed, and so have funding realities. Regardless, for

The Puyallup Fair

is "show and

The Fair is their opportunity to tell you what they've learned, "to strut their stuff."

With attendance topping 1.2 million this year, the fair is the fifth largest in the country. If you're a visitor, stop by the livestock pavilion and learn about animal science projects. Catch the horsemanship and barrel racing activities in the covered arena. Slip quietly into the "cat barn" so as not to wake



Story by Pat Caraher
Photography by Laurence Chen

Strutting Their

tell” time for 3,500 young 4-H participants statewide.

“Milo,” “Luigi,” “Mario,” and “Theo.” This popular venue attracts nearly 150 show cats.

Sample Jennifer Chesley’s apple spice cake fresh out of the oven in the demonstration kitchen. “Almost everything I do is a 4-H project,” says the bubbly 17-year-old with hair pulled back into a ponytail. The eldest of seven children raises goats and pigs on the family’s two acres near Kennewick. At the fair, she also modeled a ’70s formal dress she made.

Walk over to the 30-foot-high climbing wall, where 4-Hers test their wits—and wills. “The challenge has a lot of parallels to life for young people. Sometimes things look uphill, insurmountable. But if you take it one step at a time, you can get there,” says Betsy Fradd, Youth Connections coordinator for 4-H Youth Development. 4-H headquarters are at the Puyallup Research & Extension Center.

“We don’t look at what is wrong with young people, but what is right,” says Pat BoyEs, state 4-H director for youth de-

velopment. “We emphasize their strengths and how they can capitalize on those strengths.”

The Washington State 4-H Fair is a showcase for all the life skills 4-H emphasizes—citizenship, teamwork, communication, wise decision-making, and goal setting, among others.

4-H’s philosophy is “learn by doing,” whether the project is cows, computers, or karate. There’s also an expectation that 4-Hers share their knowledge. That was the case in Sunday afternoon presentations that included how to adopt a wild horse, deliver a goat, or build a garden lantern out of chicken wire.

“In all our evaluations the first thing we do is give some positive feedback,” says longtime adult volunteer Marguerite Long of Auburn. Her husband, Bob, adds, “We have 100 ways to say you did a good job.” They were impressed by a dog training demonstration, as well as a young girl’s presentation on famed World War II pilot and hero Jimmy Doolittle.

While animals are still a big part of 4-H, the Know Your Government Conference, science camp, and leadership and technology clubs are attracting increased participation. So has the 4-H Service Dog Project, where 4-Hers help train puppies for later use as guide dogs for the blind or hearing impaired.

Awarding ribbons has long been a 4-H tradition at fairs. “We don’t judge the children against each other; it is the product they bring,” says BoyEs. “How close is it to meeting the standard? As one skill level is attained, participants are expected to seek the next level of excellence.”

Carol Hagan of Clarkston has been a 4-H volunteer for 16 years. She headed up the state’s Centennial Quilt Project, as well as submitting quilt blocks for the national quilt being displayed in Washington, D.C. as part of 4-H’s year-long centennial celebration. Her own children are now 27 and 28, but her interest in 4-H hasn’t waned. “When you get involved in a successful program like this,” she said, “it’s hard to walk away.” ■



Washington State 4-H CENTENNIAL CELEBRATION

Fifty-six Washington State University Cooperative Extension faculty and staff conduct 4-H programs in all 39 counties of the state. They train more than 10,000 adult volunteers who work with some 86,300 K-12 youth. During 4-H’s centennial celebration this year, youth and adult volunteers in the state are contributing 2.6 million hours of service to their communities.

The ratio of 4-H youths to adults is 9 to 1 in Washington. Sixty-seven percent of the young participants live in urban areas, 56 percent are females, and 26 percent are youth of color. The four Hs stand for Head, Heart, Hands, and Health. The goal: to build caring, competent, capable citizens.

Stuff

BRIDGES TO PROSPERITY

by Teresa Wippel • Photography by Zoe Keone

KEN FRANTZ enthusiastically recalls the day in March 2001 that transformed his life forever. Waiting for an oil change at a car dealership in Virginia, he picked up a *National Geographic* magazine, which fell open to a dramatic photograph: a man dangling from a rope strung between two arches of a broken stone bridge spanning the Blue Nile River in Ethiopia.

Built 360 years ago, the Second Portuguese Bridge had been partially destroyed during World War II by Ethiopian patriots desperate to keep Italian dictator Mussolini's troops from entering their territory. But Ethiopia, one of the world's poorest countries, had not been able to repair the

bridge, a lifeline for moving everything from grain to live animals from one side to the other. For 65 years, crossing the river over the broken span required a group of men standing on either side with a rope, pulling the person across inch by inch.

When Frantz saw the photo, the semi-retired construction executive had an immediate thought: "Here's something that I can do. There's a tremendous need, and it wouldn't be that hard." Thinking about the photograph as he drove home from the car dealership, Frantz had another idea: "Not only could I fix this bridge, I could see if there are opportunities to fix other bridges." After talking with his

wife, Cheri, and his two pre-teen sons, and after establishing a non-profit organization, Bridges to Prosperity, Frantz began writing letters and making phone calls to family members and friends, requesting their support.

That the magazine had fallen open to that page "was quite strange," says the 1971 political science graduate of Washington State University. "I had been thinking about what is going to be my legacy, beyond family and beyond succeeding in business. Personally, for me it was a calling."

Another twist of fate was the fact that his brother, Forrest Frantz ('74 Gen-

Three months after Ken Frantz first saw the National Geographic photo, he was on his way to Ethiopia . . . to survey the bridge and determine what it would take to repair the structure.



*"I had been thinking about what is going to be my legacy,
beyond family and beyond succeeding in business."*

—Ken Frantz

eral Studies, '78 M.B.A.), had seen the same photograph and had the identical thought of rebuilding the bridge—a coincidence the pair discovered when they talked a couple of weeks later. Forrest, who lives in Snoqualmie Pass with his wife, Pat King Frantz ('77 Office Administration), and their two daughters, became a founding director of Bridges to Prosperity and played a key role in overseeing the design and engineering of Second Portuguese Bridge.

Ken Frantz is no stranger to construction projects and bridges, or to completing them quickly. Growing up in Burien, he, Forrest, and their three brothers—Jim ('70 Electrical Engineering), Lawrence ('72 Chemical Engineering), and Marty (x'73 Business Administration)—helped their

father, a Boeing engineer, build summer vacation homes. Then the homes were sold to fund the boys' tuition at WSU.

Frantz recalls building a 120-unit apartment complex with Marty in 56 days, setting a national record. And when Frantz relocated his family from California's Silicon Valley to Gloucester County, Virginia, in 1992, he fulfilled a longtime dream of buying an island—Cuba Island on the York River. Of course, while building a home on the 17-acre island, he needed to get to the mainland, which required construction of a bridge.

But repairing a bridge in another country—especially a country with few resources and many needs—was a new challenge. Frantz first contacted the Ethiopian embassy, where he shared his



MELAKU ZEIERE

Top, l. to r.: Randy Stacey, volunteer; Hussein, nurse at free clinic; Burre, camp security chief; Ken Frantz, project leader; Amar, camp aide. Bottom, l. to r.: Dr. Mengistu Mekonnen of the free clinic; Zoe Keone, logistics and photography; and Gary Bunch, volunteer.



Perhaps the most touching story to come out of Ken Frantz's journey to Ethiopia is that of a 12-year-old girl named Banchamlak.

During their initial survey trip, the Bridges to Prosperity delegation made an overnight stay in a nearby village. Banchamlak's father asked if the visitors could help the girl, who was accidentally burned from her forearm to her shoulder years earlier. With no doctors to care for her, the burn formed scar tissue that held her arm permanently locked at a 90-degree angle, severely limiting her most basic activities.

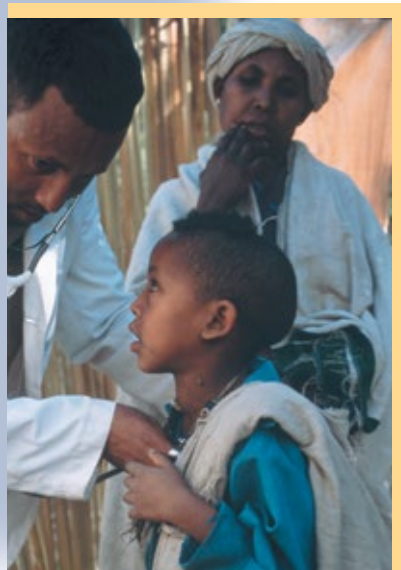
In Ethiopia, Ken noted, "women must do huge amounts of work in and out of the home. With only one good arm, Banchamlak was severely handicapped."

The delegation was moved by Banchamlak's condition, but at that point there was nothing they could do except recommend that the father try to get his daughter to a hospital. The memory of the little girl, however, stayed with Frantz until he returned to oversee the bridge construction eight months later.

Once a free medical clinic was established at the bridge construction site, Frantz had an inspiration: He would send for Banchamlak and have her examined by the clinic doctor, Mengistu Mekonnen. The doctor was positive about the possibility of an operation for her at the nearest hospital in Bahir Dar, so Frantz arranged to take the girl for surgery after bridge construction was complete.

The surgeon, a friend of Dr. Mengistu's, successfully released the scar tissue, known as a contracture, on Banchamlak's arm. After undergoing physical therapy, she returned home with her brother but was scheduled to return for more surgery and skin grafts.

A free medical clinic staffed by Dr. Mengistu Mekonnen and a nurse treated 1,000 people from nearby villages.



BRIDGES TO PROSPERITY

plan for rebuilding the bridge with Brook Hailu. The second ambassador to the U.S. expressed his enthusiastic support for the proposal and offered to provide letters of introduction to local and national Ethiopian officials.

While conducting research on the bridge, Frantz also received some valuable advice from Paul Henze, one of the world's foremost experts on Ethiopian history. "He said, 'When dealing with people in Ethiopia, start with local people and work your way up,'" Frantz recalls. "In the U.S., our tendency is to work from the top down."

Three months after Ken Frantz first saw the *National Geographic* photo, he was on his way to Ethiopia. Forrest, a systems engineer for the Boeing Co., traveled with him to survey the bridge and determine what it would take to repair the structure. "Ken's job was to handle the politics. My job was to handle the engineering," says Forrest.

Other family members and friends rallied around Frantz's idea, offering their support. Brett Hargrave, a nephew and former U.S. Army survival instructor, volunteered to serve as the party's medic. Two other acquaintances with construction backgrounds, Randy Stacey and Gary Bunch, also offered to accompany the group and help. All of the men paid their own expenses, including airfare.

Because the bridge site was a considerable distance from the Addis Ababa airport, Frantz hired an expedition firm to help them reach their destination. The 25-member party traveled in jeeps to the trailhead at Mot'a, then began the toughest part of the journey: a 26-mile trip on foot, packing their gear in by donkey.

Once they arrived at the site, they planned to follow the "bottom up" strategy recommended

earlier: approach the respected elders of villages on both sides of the broken bridge to seek their permission and blessing. However, before they had an opportunity to travel anywhere, a delegation of 16 elders appeared at the river to talk about the bridge. They offered their overwhelming support, a trend that continued during three different meetings with more than 60 leaders at villages on both sides of the Blue Nile.

The results were nothing short of amazing in an area where the only means of "fast" communication are telegraph wires and human messengers who serve as runners from one village to the next. Village elders flooded the state capital with messages urging the government to approve the bridge repair project. "We had the permit in hand within two weeks after returning to the U.S.," Frantz says.

Through the Internet, Ken and Forrest discovered Sahale, a Seattle company that specializes in the design, engineering, construction, and repair of remote pedestrian bridges like those found on mountain hiking trails. Sahale did the design at cost, to meet two main requirements. The bridge would have to be strong, as Bridges to Prosperity would have no control over how many people and animals used the span at once. "At the same time, it would have to be transportable—something that could be broken down and be thrown on the back of donkeys," Forrest explains.

After the design was complete, the bridge's lightweight steel trusses were fabricated in Turin, Italy. Then, early last February, they were shipped via boat to the nearest seaport, located in the country of Djibouti, from there by train to Addis Ababa, and finally by truck and jeep to the trailhead.

Ken Frantz, his nephew, Brett, and friends Randy and Gary returned to the site to supervise the bridge construction. The movement of 25,000 pounds of concrete, steel, and gear required that 25 donkeys and 50 porters make several trips between the trailhead and the bridge site.

Bridges to Prosperity hired local villagers to work on various aspects of the con-

Against the backdrop of a banner made by local villagers, reading “Long Live to [sic] Bridges to Prosperity,” Ethiopian Orthodox priests celebrate during the bridge inauguration with drums and centuries-old biblical songs of joy.



struction project, distributing the work equally between villages. All of this was coordinated by another key volunteer, Zoe Keone. She served as photographer, videographer, payroll master, menu coordinator, and dispute resolution manager, along with many other tasks.

Keone also oversaw the start-up and operation of a free medical clinic staffed by an Ethiopian doctor and a nurse originally hired to handle construction injuries. During construction, the clinic treated 1,000 people from nearby villages, with the waiting line at times growing to more than 500. (See related story, left.)

The bulk of the bridge repair involved masonry work, followed by assembly of the bridge, which was pulled manually by ropes into place over the broken section. The entire project, scheduled to take two weeks, was completed in 10 days.

Once the bridge was finished, Frantz held an inauguration ceremony that drew 1,000 people who celebrated the moment with dances, singing, and speeches. In a touching display of affection, villagers brought him gifts of eggs—a precious commodity in a land where many suffer from malnutrition.

Frantz originally estimated that reopening the bridge would increase trade in the region from \$300,000 per year to \$3 million annually. He now believes that total is likely to be much greater. Such economic benefit is at the heart of the Bridges to Prosperity mission statement, which reads, in part: “We believe improved access to markets brings about more trade, and more trade improves economic prosperity.”

As the construction party hiked out of the area, Frantz noted some interesting traffic moving in the opposite direction:

In the early morning of inauguration day, villagers prepare the bridge, decorated in American and Ethiopian flags, for the ceremonial opening.



porters carrying sheet metal headed for villages across the bridge to modernize old grass huts, and a large caravan of mules loaded with goods to be sold on the other side.

This is the true story of the bridge, Frantz says—the resulting increase in trade between villages and the economic benefit for people who so desperately needed to transport their goods easily from one place to another.

Many people want to aid poor countries and are often moved by images of starving children, Frantz adds. But Bridges to Prosperity is “doing something that has long-lasting benefit for those starving children, that allows them to help themselves inside their own country.”

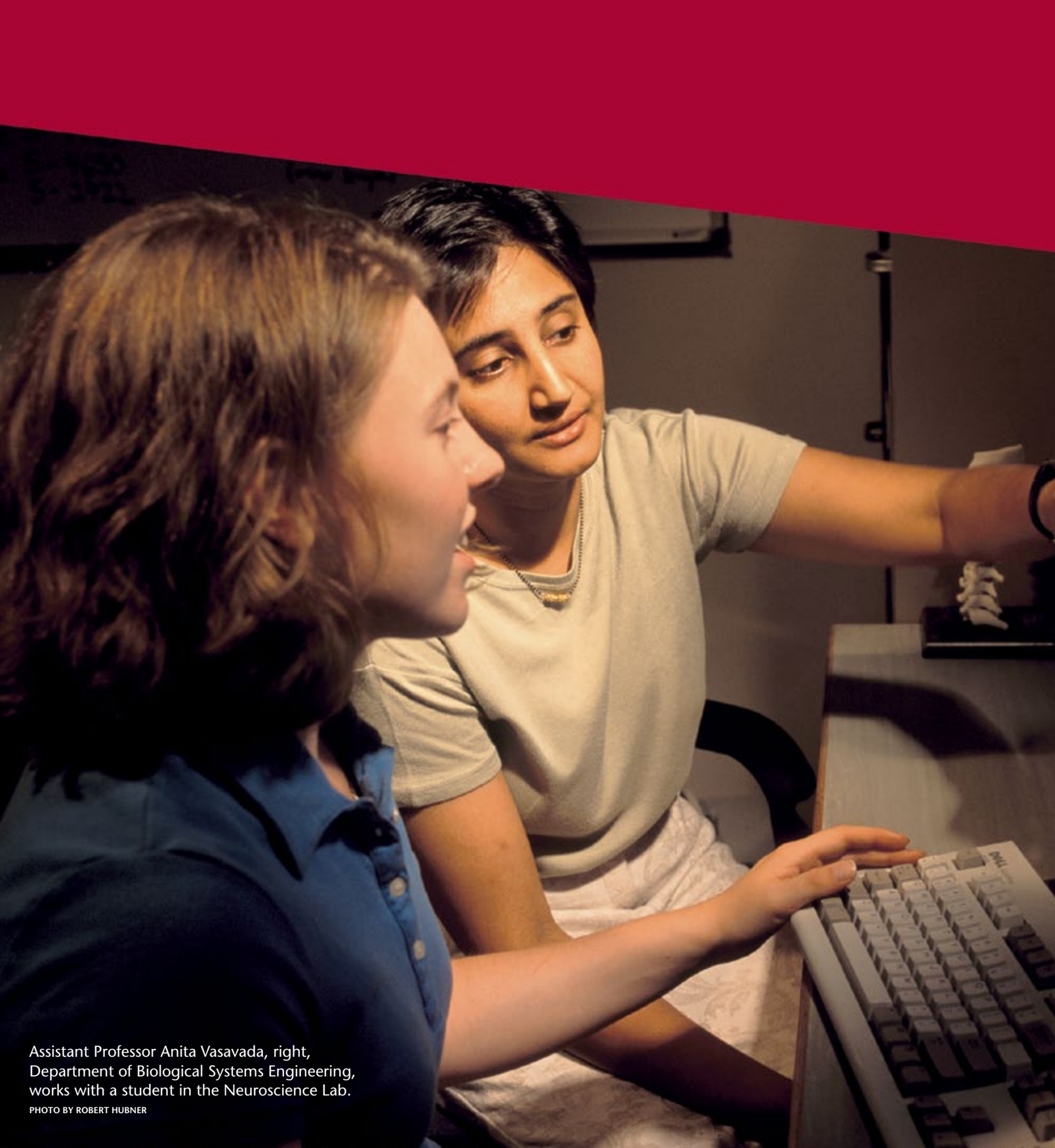
Bridges to Prosperity has completed three other small pedestrian bridge projects, including two in Nepal and one in Indonesia. A second Ethiopian bridge, across another portion of the Blue Nile River, is in the design stage.

And to come full circle on the magazine photo that started it all, *National Geographic* featured Frantz’s work to repair the Second Portuguese Bridge in its October 2002 issue. ■

Teresa Wippel is a freelance writer from Edmonds. Zoe Keone is a professional photographer based in Gig Harbor.

For more information on Bridges to Prosperity, see www.bridgestoprosperty.org

For more photos of the Second Portuguese Bridge project, see washington-state-magazine.wsu.edu



Assistant Professor Anita Vasavada, right,
Department of Biological Systems Engineering,
works with a student in the Neuroscience Lab.

PHOTO BY ROBERT HUBNER



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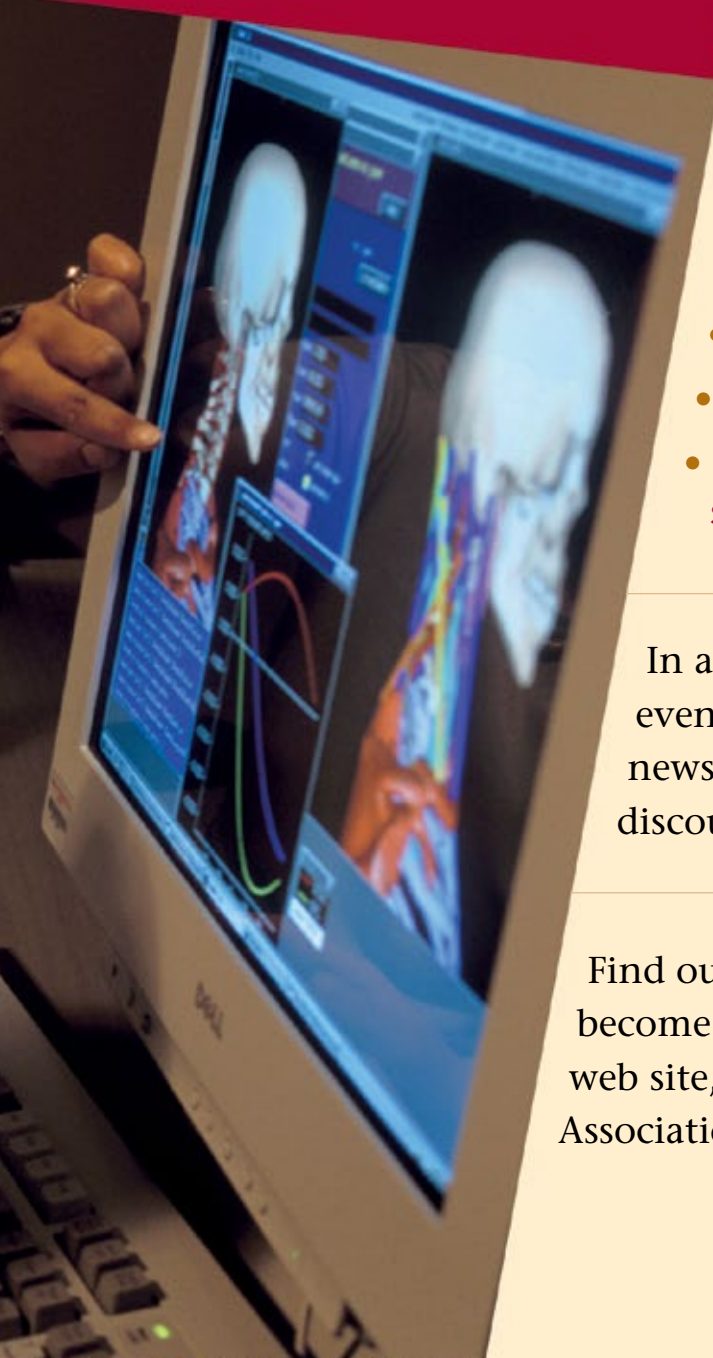
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TRACKING THE COUGARS

CLASS NOTES

1940s

Everlyn Marie Bafus ('40 Home Ec.) reports hearing from two grandchildren at WSU. Another granddaughter graduated in 2001 Phi Beta Kappa and is studying at George Washington University Medical School. All four of her children are WSU grads.

Margaret "Gretchen" von Marbod Simmons ('40 Speech), Seattle, spent August 2001 visiting friends and familiar places in Europe.

Last spring **Betty McGee** ('43 Soc., '43 M.A. Soc.), Las Cruces, New Mexico, wrote, "My 12-year-old grandson has been selected as a member of a soccer team that will participate in a tournament in Sweden in July. He agreed that if we are good, we may go along."

1950s

Betty Erdmann ('50 Psych.) lives in Port Orchard. She completed a doctorate at Columbia University and is now a clinical nutritionist giving metabolic advice to correct food imbalances. She and her husband, Robert, travel twice a year to England, where they lived for eight years.

Willis ('50 Bus. Adm.) and **Nadene Pehl** ('50 Bus. Adm.) of Sun Lakes, Arizona, write, "What a great way to close out year 2001 with a Cougar win in the Sun Bowl and a 10th-ranked football team. Our two 17-year-old granddaughters—Mary Lynne and Allison—were with us in El Paso, Texas

for the game. Hopefully they will be on campus at WSU in 2003!"

Bob Schuster ('50 Geol.) retired from the U.S. Geological Survey in 1996 and lives in Golden, Colorado with his wife, Pat. He studied landslides worldwide during his many years with the USGS. In the past year, he was a consultant on landslide problems in Tajikistan and at the Panama Canal. After earning a master's degree and his doctorate in civil engineering at Purdue, he was employed on the faculties of the University of Colorado and the University of Idaho.

Theo Klein ('50 Agri.) and his wife, Kathleen, have traveled all over North America and to China, Russia, Vietnam, and Europe. "My favorite country is probably Vietnam," he writes.

Dolores Graham Doyle ('51 Gen. St.), Fresno, is the president of the Episcopal Church Women of the Diocese of San Joaquin, California.

In 2001, **Vance Morse** ('51 Geol.) moved from California to a new home in Sun City, Texas "to be near most of our children, and [we] love it."

Thomas Russell Kutz ('52 D.V.M.) has done volunteer work at the University of Washington for the past 10 years, and for the past three with the Seattle Parks on trail maintenance and native plant restoration projects. His travels have taken him to Ecuador, Galapagos, Brazil, Argentina, Antarctica, Kenya, China, and Costa Rica.

Richard E. Johnson ('52 Civil Engr.), Lake Havasu City, Arizona, retired as senior vice president of Wright Schuchart Harbor Construction Co. He reports, "Enjoying golf, good weather, family, and following the Cougars."

Debra Kwong ('55 Pharm.), Seattle, is a pharmaceutical sales representative for Eli Lilly & Co.

Joe Meagher ('57 Speech/Radio-TV) and son **Brad Meagher** ('81 Environ. Sci.) are partners in the Everett law practice of Meagher & Meagher.

In May **Carolyn Manus Meagher** ('57 Speech/Radio-TV) published her new cookbook, *Seasoned with Love: Recipes & Reflections—Heart-Healthy Recipes and Reflections about Food, Family, Friends and Faith* (SpringBoard Publishing, Everett). She writes: "After retiring from the Everett School District as supervisor of public relations, I resumed my freelance writing career."

Patricia Chisholm Tiede ('59 Soc.) retired in December 2001 after a 35-year career in office administration at the headquarters of Club Managers Association of America and at the Industrial Research Institute, both in the Washington, D.C. area. Having "been there, done that," she is now enjoying no stress and total relaxation, which includes tending to her 15th-floor balcony garden in Bethesda, Maryland, and traveling far and wide, visiting people who have been in her life for the last 50 years.

1960s

Sandy Mansfield ('66 Phys. Ed.) was named January 2002 Teacher of the Month by Eastern Washington University. She is a preschool and kindergarten teacher at First Presbyterian Preschool in Spokane. She previously taught for 12 years at the Pacific Science Center in Seattle and one year on the "Bill Nye: the Science Guy" television program.

Allen G. Wesselius ('67 D.V.M.), a retired veterinarian who practiced for more than 30 years in Centralia, received the John McClelland Award.

Since 1989 **Leigh Hess** ('67 Comm., Radio/TV), Long Beach, California, has been an instructor of communications at California State University, Dominguez Hills, Cal State University, Long Beach, Cerritos College, Saddleback College, and Mission Viejo. From 1967 to 1989, he was employed by KHQ-TV in Spokane as an announcer, reporter, news anchor, and host of "High School Bowl."

1970s

Brad R. Bennett ('71 Police Sci. & Adm.) retired October 5, 2002. He was a police officer for 31 years—28 with the City of South Lake Tahoe, Nevada, including the last four as chief of police and fire. His career brought a wide variety of assignments—patrol, traffic, detective, narcotics, SWAT, and administration.

Phil Anderson ('70 Phys. Ed.) was presented certificates for meritorious service as a member of the Pullman Fire Department reserve program since 1972. He continues to teach driver's education at Pullman High School, where he has been a longtime athletic trainer.

Peggy Ludwick ('70 Bact.), Yakima, has done gender equity work for area school districts, specializing in women's history curriculum, Title IX compliance, and math and science success for minority middle-school-aged girls. She is a faculty member at the Smithsonian and Natural Science Resource Center.

Last December **John L. Briehl** ('72 Comm., '73 Soc.) was appointed executive director of the City of Tacoma's Human Rights and Human Services Department, and Human Rights Commission. He writes, "It sounds weird, but in my job I'm the executive director of both the department and the commission."

Since graduating from Harvard Law School in 1978, **Greg Bader** ('72 M.A. Polit. Sci.) has enjoyed a varied legal career with Fortune 500 companies, large law firms, and, currently, the State of Texas, where he is assistant general counsel for the Railroad Commission. "It actually spends 90 percent of its

Columbia Valley wineries double

ARTHUR LINTON, center, assistant dean and director of Washington State University's Irrigated Agriculture Research and Extension Center (IAREC) in Prosser, and Julie Tarara, a USDA research horticulturist, explain the effects of temperature on grape yields to Washington secretary of state Sam Reed during his visit in July. The IAREC is home to WSU's Viticulture and Enology Program. During the past decade, the number of Columbia Valley wineries has doubled, making Washington the second largest wine-growing region in the nation behind California. Reed, who holds two WSU degrees ('63 Social Studies, '68 M.A. Political Science), traveled to China on a trade mission in September 2001 to discuss Washington's wine and fruit industry. He has been secretary of state since January 2001.



PATRICK McDONALD

time regulating Texas's huge oil and gas production," he writes.

Marsha Bliggenstorfer ('73 Wildland Rec., '75 Bact.), Wenatchee, received her teaching certificate from Central Washington University in June 2001 and now is pursuing a master's degree in education.

After completing his M.B.A. at the University of Phoenix (Arizona) in June 2001, **Jack Morby** ('74 Math.) spent August and September in Eastern Europe. He is an information technology project manager for Oregon Health Sciences University in Portland.

Patricia Nissen Ricard ('75 Elem. Educ.), Bremerton, is a learning specialist for a K-6 elementary school in the Central Kitsap School District. Two of her children attend WSU.

Paula Royalty ('75 Psych.), Bellevue, is a first-year law student at the University of Washington. She hopes to practice as a defense attorney in Seattle when she graduates in 2005. For the past 13 years she has had her own business productivity consulting practice, WorkSmart. She received a bachelor's degree in civil engineering at the UW in 1978 and her M.B.A. at UCLA in 1986.

Joseph Daniels ('77 Gen. St.), Long Grove, Illinois, has sold two businesses and has started a third—International Importing Co. Imports come mainly from China and Mexico. He writes, "China has really opened up in the last year and a half."

Melinda K. Lande Sechrist ('78 Int. Design) has been inducted as a fellow of the American Society of Interior Designers. She is president of Sechrist Design Associates, Inc. in Seattle. She was cited for helping enhance her profession by providing guest lectures nationally. She has been published in *Washington Post*, *Investor's Business Daily*, *Los Angeles Times*, and *Seattle Times* and has made guest appearances on several Seattle television programs and ABC TV's "Good Morning America."

Jack Kriesel ('78 Chem. Engr.) was promoted to vice president and general manager of the Jesup (Georgia) Mill of Rayonier, Inc. He joined Rayonier in 1978 as a process engineer in Port Angeles. Rayonier, a supplier of high-performance and specialty cellulose fibers, has 2.3 million acres of timberland.

Kevin Laughlin ('78 Agri. Ed., '79 Teach. Cert.) accepted the position of Ada County extension educator in Boise, after completing his Doctor of Education degree at the University of Idaho.

Angela Seeds ('78 Bact.), Daphne, Alaska, works for the sales department

LIVING THE AMERICAN DREAM



THERE ARE TIMES when Radmila Sarac would give anything for a bite of a *burek* or the chance to watch Nenad Lecic perform again. Nearly six years after coming to Washington from her Republic of Serbia homeland, the 24-year-old Washington State University grad admits she has even had dreams of the flaky Yugoslavian pastry, and she often bends an ear to the subtle sounds of the classical pianist from Belgrade, where she grew up.

"Of course I miss the food and many things from back home," Radmila says. "But if I went home, then I'd miss the things here."

"Here" is the Seattle suburb of Redmond, where Radmila ('00 Computer Science) lives and works as a software test engineer for Microsoft. "Here" is also America, where she chose to move for the betterment of her future after graduating from high school in 1996.

She grew up in a residential neighborhood 10 miles from downtown Belgrade, her backyard an orchard of cherries, grapes, and apples. To the Saracs, America was movies, where Radmila culled much of her early comprehension of the English language, and pop music: her parents' collection of Frank Sinatra, Nat King Cole, and Elvis Presley, whom she calls "my first and only true love."

Radmila and friends avoided much of the pop sounds of Eastern Europe for classical music, often gathering to listen to Lecic and to cook their favorite traditional Serbian dishes, such as stuffed peppers and *sarma*—cabbage leaves filled with rice, beef, and bacon chunks.

"We ate meat, potatoes, and bread—and always dessert—so I don't know how I stayed relatively skinny," says Radmila, whose arrow-straight five-foot, nine-inch frame might help. "On our lunch breaks in high school we would always go to bakeries for pastries."

High school provided Radmila's awakening in terms of what she wanted to do with her future—and where she wanted to do it.

"In one programming class, we would get 90 minutes to do three technical problems," she says, "and the time went by so fast I would get an adrenaline rush. It was almost like a game where I could use my brain. I decided I wanted to work with technology."

"But at the time, Belgrade was down socially, economically, and politically, and everything suffered. I knew the education system would not give me what I wanted and needed in technology, so I guess I followed the American dream."

The dream began in Pullman, where Radmila arrived in the fall of 1996. She began tentatively, living her first year with a family friend in Moscow, Idaho, and ended in a flurry—garnering a 1999 Microsoft Hopper Scholarship in her junior year. Named for the late computer science pioneer Grace Hopper, the award honors women pursuing a career in technology.

That same year, in April, NATO aircraft attacked a government-run media center in Belgrade, part of an air campaign to force Yugoslav forces out of Kosovo. The bombings were just 11 miles from her childhood home where Radmila's parents still lived, and she made her first visit home in nearly three years.

Radmila has not been back since, but communicates regularly with her parents and brother by e-mail. Her older sister, Marija, attends college in Portland, Oregon, and several of her old high school running mates are scattered throughout the country: New York, Connecticut, and San Francisco.

"At some point I would like to go back to Belgrade every year, and of course I think my parents would like to have me back for good," Radmila admits. "I have strong bonds with my country, but I love this country, too. It's where I grew from teenager to adult."

—Scott Holter

CLASS NOTES *continued*

of Lion Chemicals. Recently divorced, she has gone back to school, hoping to enter the Physicians Assistant Program at the University of South Alabama.

Diane Hough ('79 Home Ec., '79 Educ.), Mercer Island, is an educator and psychotherapist for LMHC. She became a licensed mental health counselor in 1989 and has a full-time private practice. She retired from teaching in 1995 but is a frequent trainer and presenter for schools and businesses.

1980s

Gary McFarland ('80 Phys. Educ./Pre-Phys. Therapy), **Janice Druzianich McFarland** ('80 Rec. and Park Adm.), and their two teenagers are on a 12-month, self-contained bicycling trip throughout the world. They left SeaTac July 1, 2002 and will return June 30, 2003. Gary had been practicing phys-

ical therapy in Silverdale since 1982. Janice owns her own Pilates Studio. Their Website for this venture is www.cycling-farlands.com

Eric R. Spangenberg ('82 Bus. Adm.) was named to the new position of associate dean for faculty affairs and research in WSU's College of Business and Economics, effective July 1, 2002. He is responsible for annual appraisals of faculty, promotion, and tenure review, and improvements to the college's performance appraisal system, among other duties. He joined the WSU marketing faculty in 1990.

James Couch ('83 Rec. & Leisure St.), Puyallup, received the 2001 "Sports Volunteer of the Year" award from the Puyallup Recreation Department. He started coaching his son in 1992 and has coached two or three sports a year since then. He is an inspector for Boeing's customer service.

William Bohrnson ('84 Ed.D.) retired as superintendent of Woodland (Washington) Public Schools in July 2000. He continues to be involved in staff development and educational consulting for HOSTS Learning (Help One Student To Succeed), in Washington, Oregon, Idaho, and Colorado. He is finishing his second year as president of the WSU College of Education Alumni Association.

Dan Gustafson ('84 Hotel & Rest. Adm.) is vice president of the St. Louis Area Hotel Association. He has worked for Marriott for 18 years, most recently as the general manager at the Marriott Hickory Ridge Conference Center in the Lisle/Oakbrook, Illinois area.

Joe Esparza ('84 Rec. & Leisure St.) is president of Leadership Outfitters, a 10-year-old international leadership development company in Bozeman, Montana. The company offers unique

products—from outdoor "development retreats" on the ranch where the movie *The Horse Whisperer* was filmed to leadership "communities" for entire companies.

Brent Banister ('85 Math., '89 Ph.D. Math.) has been named a fellow of the Society of Actuaries, the highest professional recognition an actuary can receive. An actuary designs financial programs by using statistical and economic techniques to analyze risks and probabilities to evaluate implications of future events.

Donna Leone Ehrhard ('85 Soc. Sci.), Sedro-Wooley, is a case manager for Pioneer Human Services. Previously she was a certified counselor at Sundown M Ranch in Selah for eight years.

Phillip Kenoyer ('85 Hist.) has been promoted to the rank of lieutenant colonel while serving with the U.S.

Hyslop, Damon earn WSU Alumni Achievement Award

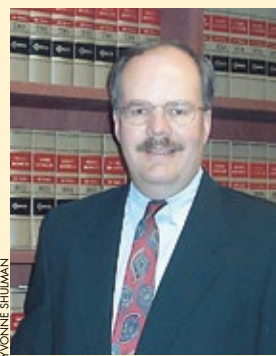
LONGTIME SPOKANE RESIDENTS William D. Hyslop and Dwight Damon received Washington State University's Alumni Achievement Award at a July 16 WSU wine tasting event at Wyvern Cellars in Spokane.

Hyslop, an attorney with the law firm of Lukins & Annis, served as president of the alumni association in 1991-92. Damon, a former two-sport athlete at WSU, maintains a practice in orthodontics.

During Hyslop's tenure as alumni president, the association drafted and then adopted a "role and mission" statement and a list of 10 goals and objectives. Previously, Hyslop served as a volunteer alumni director in Spokane for eight years and co-chaired WSU's Legislative Network, which supports state legislation benefiting higher education and WSU. In 1998 Hyslop was co-chair of a committee that planned the alumni association's centennial celebration.

The 1973 WSU graduate completed his law degree at Gonzaga University's School of Law and joined the Spokane office of Lukins & Annis in 1980. He became a principal in the firm in 1984. From 1991 to 1993, he was U.S. attorney for the Eastern District of Washington, then returned to Lukins & Annis. His practice emphasizes construction law and general business and civil litigation. A past president of the Spokane Bar Association, he currently serves on the Washington State Bar Association Board of Governors.

"I really attribute any success I've had to



William D. Hyslop



Dwight Damon

the foundation I received at WSU, both working with people and getting my degree in political science," Hyslop says. "I enjoyed taking classes from professors like Charles Sheldon [political science] and others who encouraged us to 'do more than just your job—contribute to your community, and share your knowledge and expertise with others.'

"I always look at my days at WSU as the best time of my life. I want others to have a similar experience."

Hyslop is a third-generation Cougar. His grandfather, Victor R. Hyslop '12 and his parents, Tom and Catherine Cornehl Hyslop, both '38, are graduates. His father is a former WSU regent (1983-85). His mother was national president of her sorority, Alpha Gamma Delta.

Damon completed his degree in zoology in 1962 at WSU, where he was captain of the

Cougar basketball team as a senior and played varsity baseball. His father, Howard '31, and dentist brother, Floyd '59, were Cougar baseball players.

Damon received the Washington State Dental Association Award as the outstanding graduate of the University of Washington School of Dentistry in 1964. Following two years in the U.S. Navy, including a tour in Vietnam, he completed his M.S.D. in orthodontics at UW in 1970.

During his WSU undergraduate days, Damon came under the tutelage of the late Herbert Eastlick. He remembers his zoology professor and advisor as a "brilliant, tough, no nonsense person, but very caring and helpful. He prepared me well for dental school."

Basketball coach Marv Harshman recruited Damon to WSU, where his afternoon science labs frequently made him late for practice. His coach never criticized or singled him out for being tardy, he said. "He told me that my preparation for a professional medical career should be my highest priority."

Damon has practiced orthodontics in Spokane for nearly 30 years. For more than a decade, he has worked to develop the new Damon System II bracket system of braces (see WSM, November 2001). The system has increased patient comfort, shortened treatment times, and decreased the number of overall appointments, not only in his practice, but also in orthodontics as a whole.

—Pat Caraher

Marines' Marine Air Control Squadron Seven in Yuma, Arizona.

Eric Straub ('85 Comp. Sci.) splits his time between Redmond and Chehalis, working for Microsoft. He is a WSU Foundation trustee.

In May **Kathryn Simon** ('86 Polit. Sci.) completed her M.B.A. at Saint Martin's College in Lacey. She owns Common Folk Co., a gift and home decor shop in Centralia.

Sally Bryant DeChenne ('89 English) left her position as chief advancement officer at Marymount College in Palos Verdes, California to start her own consulting business. DeChenne Company/Philanthropy Consulting provides counsel to colleges, universities, and other educational institutions regarding fund-raising. She lives and works in Playa del Rey.

Stewart Karstens ('89 Bus. Adm.), Seattle, is a territory manager for Specialty Retail Venture Retail, a seasonal retail company. On his off-time, which is five months, he plays on a local mini-golf tour. He played pro golf full-time for several years.

Carl Lemon ('89 Comm./Broadcast Prod.) and his wife, Kris Pickel, Tucson, won the Regional RTNDA Edward R. Murrow Award in Documentary News. His news story, "Tucson Riots: Use of Force," dealt with the riots in Tucson following last year's loss in the NCAA Basketball Championship. The story profiles how the Tucson police reacted to rioters. Kris is the 6 p.m. and 10 p.m. anchor at KOLD 13 CBS in Tucson. Carl is one of the station's videographers.

Kevin L. Olson ('89 Sports Mgmt.), marketing director for 24 Hour Fitness in San Diego, has begun a sports business Website at <http://www.athleticdirectory.com>. He lives in Solana Beach.

1990s

Sandra Franklin Van Valkenburg ('90 For. Lang. & Lit.) of Poulsbo teaches German and history at Bremerton High.

Roberta Sangster ('90 M.A. Soc.) is a research psychologist for the Bureau of Labor Statistics in Washington, D.C. In August 2001 she presented a paper on Internet survey design to the International Conference on Improving Survey Quality in Copenhagen.

Troy Hull ('92 Civ. Engr.) and **Joanna Magee Hull** ('88-'89) live in Camas with their three young children. Troy manages the Geotechnical Services Department and is a senior geotechnical engineer for PSI, Inc. in Portland. He has worked for PSI since graduation with stays in Portland, Honolulu, and Eugene.

Nicole Mirante ('92 Comm.) is a screen writer in Los Angeles. She writes,

Ershlers complete Seven Summits with Everest climb

PHIL AND SUSAN ELLERMAN ERSHLER can scratch one more thing off their "to do" list. On May 16 they conquered 29,035-foot Mount Everest and became the first husband-wife team to top the Seven Summits together. (See box.)

The Ershlers' quest to successfully scale the tallest peaks on each continent began in 1992 on Mount Kilimanjaro. Having scaled six other peaks since then, Mount Everest was their final and most formidable obstacle. In fact, the Kirkland, Washington, couple had been thwarted during a 2001 expedition just 1,500 feet from Everest's apex. When Phil's corneas began to freeze, he and his wife had no choice but to turn back. A second opportunity to subdue the world's tallest mountain together came last spring. Weather conditions were favorable. They made their final ascent from the 26,000-foot level and reached the top at 10:20 a.m. Nepal time.

Sue vividly remembers the failed attempt two years earlier. The wind was blowing. Light snow was falling. Lightning flashed off in the distance. The elements and bitter cold temperature impaired Phil's vision.

"We need to go down, can you live with that?" the veteran mountain climber and professional guide asked his wife.

"I was happy that we were alive, safe, and together, but disappointed that we were not successful," she recalled recently.

During a 20-year career in telecommunications, first with GTE—now Verizon—and later with Quest, she had risen to sales leadership positions. Ascending the hierarchy of corporate affairs, she learned lessons that have served her in pursuit of mountaintops. Never quit. Try to figure out what you can learn from disappointment and rejections. Move on. Failure is just a requirement to attain loftier goals.

"I wrote down my climbing goals and looked at them every day until they became do-able," Sue explained. Completing the Everest ascent became a high priority. She even left her job to focus single-mindedly on a second assault.

Phil, an owner of International Mountain Guides based in Ashford, Washington, has been guiding climbers up mountains around the world

"I wrote down my climbing goals and looked at them every day until they became do-able." —Sue Ershler



Phil and Sue Ershler conquered Mount Everest on May 16.

for a quarter century. His credentials include 400 climbs on Mount Rainier. He was the first American to conquer Mount Everest's North Face in 1984, and he completed the Seven Summits in 1989. He met Sue in 1992 and introduced her to a new vocabulary—"ascenders," "carabiners," and "crampons." She didn't know how the climbing devices were used but was eager to find out. That summer, she accepted his invitation to climb Rainier with him. She remembers struggling through the snow and ice and over crevasses, and finding it difficult to breathe the thin air. Nothing, however, matched her sense of accomplishment and exhilaration at standing atop the 14,410-foot Rainier.

"Nowhere in my life have I duplicated that feeling," she says.

Since then the 1979 Washington State University business administration graduate has accomplished more than 31 successful climbs of peaks over 14,000 feet, including 17 on Mount Rainier.

She credits Phil, who graduated from Whitman College ('74 Science), with never letting her give up on herself.

"We had proven to be such a good team that we were married in 1996," she says.

By the end of 1999, they had climbed six of the Seven Summits together, four of them while married, leaving only Everest. During their 60 days on the mountain this year, Sue celebrated her 46th birthday, and Phil his 51st. The final climb via the South Col to the summit from Camp IV at 26,000 feet and return took nearly 16 hours. It began at 11 p.m., May 15 and ended at 3 p.m. May 16.

The Everest conquest complete, Sue says she was flooded with emotions—"happiness that we made it together, excitement that I could actually achieve such a difficult climb, amazement that I was actually stepping onto the top of the world, and concern about getting back down to base camp safely."

—Pat Caraher

THE ERSHLERS' SEVEN SUMMITS

- 1992 Mt. Kilimanjaro (19,340 feet), Africa
- 1993 Mt. Elbrus (18,481), Russia
- 1995 Mt. McKinley (20,320), North America
- 1996 Mt. Aconcagua (22,840), South America
- 1998 Mt. Vinson, Antarctica (16,023)
- 1999 Mt. Kosciuszko (7,310), Australia
- 2002 Mt. Everest (29,035), Asia



Ike Deeter turned 100 July 18.

season and nationally in 1961.

Isaac "Ike" Deeter established the college boxing program at Washington State College in 1932 and coached for 24 years. He also taught men's physical education courses until retiring in 1967.

As Deeter approached his 100th birthday July 18, he was asked to comment on the sport that has been a big part of his life.

"I hated to see boxing go, but I realize the circumstances," he says. Competition in the Pacific Northwest was too hard to find. Idaho State, Sacramento State, and San Jose State were the nearest opponents. For other matches, WSU had to travel to the Midwest and Big Ten Conference. The cost of transportation became prohibitive.

NCAA-sanctioned collegiate boxing suffered a severe setback in 1960. In a match to decide the NCAA title at 165 pounds, San Jose State's Stu Bartell landed a second-round punch to Charlie Mohr's left temple. The University of Wisconsin fighter dropped to the canvas in the Wisconsin Fieldhouse. The fight ended 1:49 minutes into the round. Later Mohr fell unconscious in the dressing room. Eight days later he died.

Both SJS and Wisconsin dropped the sport; so did other schools after the season. The following January, the NCAA did likewise, citing the lack of boxing programs rather than the inherent dangers of the sport.

Recalling the circumstances, Deeter said, "That was a sad day." He lives at Bishop Place, a Pullman retirement community. His handshake is firm. Moments earlier, he'd clicked off the television so he could hear better and picked up the conversation about the sport close to his heart.

Those who know boxing say that to be successful, one has to understand the sport and be interested in it. Deeter did and was. The Hartline native fought as a 160-pounder during his days at North Central High in Spo-

kane. He was Golden Gloves champion in 1927 and 1928.

His coaching record speaks for itself. In 1932, he directed the Cougars to the first of eight Pacific Coast Conference titles. The one-time dean of college boxing coaches produced 53 PCC champions. His fighters won 15 individual NCAA titles.

Boxing enjoyed its heyday under Deeter. The 1938 WSC-University of Wisconsin match in Madison drew 14,300 fans, the largest crowd for an intercollegiate match. The next year, the Cougars claimed the U.S. National Intercollegiate Tournament at Sacramento.

"Boxing is the greatest socializer we have," Deeter once said. "When a man beats you, you respect him regardless of his race, creed, or nationality. You respect him because you know he had to make sacrifices to get into top physical shape."

Deeter always had his fighters prepared. "Pooch" Petragallo (1937), Ed McKinnon (1937), Ev Conley (1950-51), Gordy Gladson (1956-58), Dick Rall (1956-58), Jesse Klinkenberg (1958), and Bobby Cornwall (1959) were among the best.

He considers McKinnon, a 160-pound middleweight and member of his 1937 National Championship team, as "probably my best fighter."

Pete Rademacher, one of the top boxers to graduate from Washington State, was ineligible to compete in college but would spar with the Cougar heavyweights. He lost in the 1952 Olympic Trials but came back four years later to win the Gold Medal in Melbourne. In his first professional bout in 1957, Rademacher floored world heavyweight cham-

pion Floyd Patterson in the second round but lost on a sixth-round TKO at Sick's Stadium in Seattle.

Legendary Washington State College football coach Babe Hollingbery recruited Deeter to play end. Had it not been for a knee injury that ended Ike's promising gridiron career as a freshman, the Cougars may never have had a boxing program. After completing a degree at WSC ('29 Phys. Educ.), he was hired as coach by his alma mater in 1931.

Deeter joined a coaching fraternity that included Hollingbery, Jack Friel (basketball), Buck Bailey (baseball), and Karl Schlademan and Jack Mooberry (track and field). Asked the best advice he'd received from his coaching peers, Deeter says Hollingbery once told him, "Make the kids go to class."

During World War II, Deeter supervised the physical training program for the U.S. Navy at St. Mary's College in Moraga, California, and later at the University of Georgia.

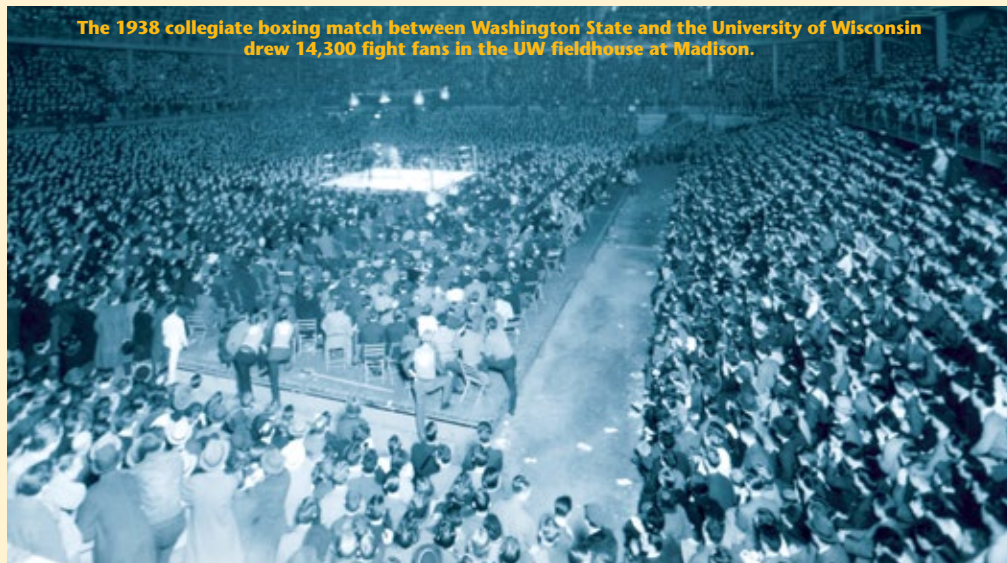
He and his late wife, Claire Rose Deeter, are parents of a daughter, Karlene "Muff" Edwards ('57 Home Ec.) of Yakima. She and her husband, Ron, frequently drive to Pullman to visit and watch Cougar athletic events.

WSU dedicated the Ike Deeter Gray W Room in Bohler Gym in 1970. When the WSU Athletic Hall of Fame was opened in 1978, Deeter was one of the inaugural inductees.

More than 150 friends, including former colleagues and Cougar boxers, attended Deeter's 100th birthday celebration July 20. He said, "If someone told me when I was 75 that I'd live to be 100, I would have told them they were crazy."

—Pat Caraher

The 1938 collegiate boxing match between Washington State and the University of Wisconsin drew 14,300 fight fans in the UW fieldhouse at Madison.



WSU SPORTS ARCHIVES

CLASS NOTES continued

"My last produced project was the Lifetime TV series, 'Any Day Now,' starring Annie Potts. I have also completed two feature-length screenplays. My second feature, a romantic comedy entitled 'Worthy,' is currently being considered by Sandra Bullock's company, Fortis Films, and Francis Ford Coppola's American Zoetrope Studios. I am at work on my third feature-length screenplay—a thriller tentatively called 'Night.' "

Brian Cable ('93 Polit. Sci.) has joined the Portland law firm of Tonkon Torp, where he practices business law with an emphasis on corporate securities.

Todd B. Edmiston ('94 Biol.) graduated from the University of South Alabama College of Medicine in May. He began his residency training in orthopedic surgery in July, also at the University of South Alabama in Mobile.

Jim Valley ('94 Comm.) has been employed at KEX radio in Portland for three years. He writes, "It's been a good experience." He is a reporter and news anchor and has done a few talk shows. He has won a pair of regional Murrow awards for reporting in the past two years.

IN MEMORIAM

1920s

Heather Bowen Allen ('25 Educ.), 98, March 8, 2002, Fresno, California. Moved to Portland in 1941, where she was a substitute teacher.

Ernest A. Cowell '26, 97, July 5, 2002, Prescott. In 1934 moved from Seattle to a wheat farm in Eureka with his wife. Instrumental in establishing a grange and the Grange Supply Cooperative, of which he was president. Ran for state representative in 1954.

Natalie Dodge ('26 Spanish Lit.), 97, April 19, 2002, Portland. Born in Western Siberia and lived in China before immigrating to Seattle in 1922. Moved to Portland in 1940 and taught Russian at Reed College.

Frieda Carstens Schulz ('26 Educ.), 97, May 26, 2002, Reardan. Taught in Goleendale and Sprague.

1930s

Juanita Ankorn ('30 Music), 94, April 5, 2002, Spokane. Taught art and music in Amarillo, Texas. After a divorce and remarriage in 1959, she moved to Palouse, where she and her husband owned Ankorn Hardware.

Robert Hyslop ('33 Arch. Engr.), 93, April 16, 2002, Spokane. Did the structural design of many buildings in Spokane during WWII. After 1964, worked

for consulting engineers Hahn and Campbell, L.C. Campbell, and Tollif R. Hance. Retired in 1976. Involved in the construction of the WSU veterinary laboratory building and Spokane Coliseum. Author of *Spokane's Building Block*, a historical sketch of all downtown Spokane buildings.

Hilda Patterson Kroll ('33 Educ.), 91, May 12, 2002, Federal Way, pneumonia. After graduation, sold textbooks at the WSU Students Book Corp.

Helen Burr Tilford ('34 Bact.), 88, March 13, 2002, Spokane. Medical technologist at St. Luke's Hospital in Spokane. Kappa Alpha Theta sorority.

Thomas Edward Black ('35 Elect. Engr.), 91, April 30, 2002, Kennewick. Served in U.S. Army Corps of Engineers during WWII and Korean War. Assistant to the vice president at Puget Sound Power & Light Co., area manager of the Bonneville Power Administration, and manager of the Benton County Public Utility District. Retired in 1972.

Lela Miller Jacklin ('35 Bact.), 88, April 17, 2002, Spokane. Homemaker.

Helen Broom Leyda ('35 Office Adm.), 89, April 2, 2002, Spokane. After her husband died in 1950, she worked in a variety of fields before retiring in real estate in 1975. Alpha Chi Omega sorority.

Tom W. Moore ('35 Bus. Adm.), 88, April 18, 2002, Portland. Salesman and manager for Van Waters & Rogers for more than 35 years in Portland.

Lawrence Giles ('36 Bus. Adm.), 87, May 11, 2002, Columbus, South Carolina. Served in the Navy during WWII, retiring in 1974 as a commander in the Naval Reserve. Professor of education for 30 years at the University of South Carolina. Phi Delta Theta fraternity.

Robert Birkes ('37 Elect. Engr.), 86, May 11, 2002, Portland. Worked for Pacific Power & Light Co. from 1942 to 1980 in Portland, retiring as manager of electrical engineering.

Wallace Hunt ('37 Bus. Adm.), 88, March 17, 2002, Richland. Navy paymaster and supply officer during WWII. Began as buyer for General Electric at Hanford in 1947. Retired in 1975 from Rockwell Hanford as manager of purchasing and stores. Pi Kappa Alpha fraternity.

Claire Winter ('37 Home Ec.), 87, April 4, 2002, Fountain Hills, Arizona. Homemaker.

Harold Egbert ('39 Zool.), 84, March 4, 2002, Spokane. Worked for the USDA, Washington State Game Department, and U.S. Postal Service for 27 years. Retired in 1972.

1940s

Harris Tremayne Rea ('41 Agri.), 86, March 31, 2002, Walla Walla. Owned

H.T. Rea Farming Corp. in Milton-Freewater, Oregon, and continued to farm until 2001.

Bill Hewitt ('42 Hotel & Rest. Mgmt.), 85, June 24, 2002, Seattle. Founded the Tillicum Village in 1962, a long-house-style performance area for Native American dances, restaurant, and gift shop on Blake Island in Puget Sound.

Mearle "Swede" Miller ('42 Chem. Engr.), 84, April 8, 2002, Sequim. Worked for the U.S. Geological Survey. Navy officer in the South Pacific during WWII. Returned to work with the USGS and traveled extensively as a hydrologist.

William T. Farrish ('43 Elect. Engr.), 81, August 1, 2002, Murphys, California. Navy lieutenant in the Pacific, 1944-46. Engineer and manager for Pan American Airlines in San Francisco, 1946-59. From 1959 to 1984, employed by United Airlines as director of maintenance planning and director of Space Shuttle Program Development. Consultant for Air Force and Airbus. Sigma Nu fraternity.

Roger Olson ('43 Polit. Sci.), 80, February 20, 2002, Pasco. Army officer in Europe during WWII. Received the purple heart and two bronze stars. Obtained a law degree from the University of Washington in 1950. Partner at Olson & Olson and prosecuting attorney for Franklin County for 12 years.

Leonard Spencer ('46 Mech. Engr.), 80, May 21, 2002, Everett. Served in the Army during WWII in Europe, where he was wounded. Employed for over 35 years by Soundview Pulp/Scott Paper Co.

Betty Jane Brown Cook ('47 Chem.), 77, April 24, 2002, Portland. After graduating, became a chemical analyst for Alcoa in Vancouver and in 1956 a

researcher for Tektronix. Taught mathematics and chemistry at Portland State University for more than 20 years.

Warren Coberly ('49 Elect. Engr.), 79, February 16, 2002, Des Moines. Electrical and reliability engineer for Boeing for 35 years. Retired in 1985.

Wynne Johnson ('49 Educ., '55 M.Ed., '59 Ed.D.), 80, May 8, 2002, Sacramento, bone cancer. Enlisted in the Navy the day after the attack on Pearl Harbor, December 7, 1941. Sonar operator of the *USS Colhoun*, a ship sunk by Japanese bombers. Recalled to active duty in 1950 for the Korean War. Taught in Everett, Olympia, and Napavine. Later, taught counseling and educational courses at Sacramento State College for 21 years.

Darrell Parks ('49 Speech/Comm., '55 M.Ed.), 78, April 8, 2002, Palouse. Technical sergeant in the Air Force during WWII. Military honors included the Distinguished Flying Cross and the Air Medal. In Palouse, taught eighth grade, 1951-56; high school English, speech, and social studies, 1956-67; and fifth grade, 1972-82. Served as high school principal, 1967-72.

1950s

Carl A. Blomberg ('50 Bus. Adm.), 73, February 18, 2002, Pullman, surgery complications. Army officer in Japan during Korean War. Ford dealer in North Bend for 10 years. Real estate agent for 15 years. Retired in 2002.

Ted H. Allen ('51 Bus. Adm.), February 16, 2002, Anderson Island, Washington. Owned a motel in Newport, Oregon. Retired in 1983.

Roselle Collins Chase ('51 Educ.), 72, July 13, 2002, Sunnyside. Taught English at Sunnyside High School, 1951-52. Married Chevy Chase in 1953 and raised six children. Delta Delta Delta sorority.

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Overseeing the Davenport Hotel with an appreciation for history

"It's wonderful to be a part of an environment where all you have to do is make people happy and make them comfortable."

—Lynnelle Hull Caudill

BEING PART OF something as elegant and historical as the Davenport Hotel in downtown Spokane adds extra excitement to Lynnelle Hull Caudill's workplace. She joined the Davenport in October 2001 during the landmark hotel's \$30 million, two-year renovation. In April she became director of operations.

While overseeing the daily workings of the hotel, she enjoys the stories she hears from so many people with strong attachments to the building. For decades the Davenport served as a favorite Northwest site for special events, holidays, wedding receptions, grand parties, or an overnight stay, and hundreds of former visitors have called or written with fond memories.

"It's touching. It reminds you this is not just an ordinary hotel," she says. "There are people who remember the Davenport as the most elegant hotel in its time anywhere."

When rooms in the refurbished hotel first opened in July, early guests came from as far as Hawaii and Georgia.

Designed by noted architect Kirtland Cutter and completed in 1914 by entrepreneur Louis Davenport at a cost of \$2.5 mil-

lion, the Davenport enjoyed success as a first-class, world-renowned hotel through much of the 1900s. Presidents Theodore Roosevelt and John F. Kennedy have been guests. So have movie stars Mary Pickford, Clark Gable, Bob Hope, Bing Crosby, and Rock Hudson. Other visitors included Nat King Cole, Babe Ruth, and aviators Amelia Earhart and Charles Lindbergh.

Although the hotel started to slide after Louis Davenport sold it in 1945, it withstood various changes in ownership before closing in 1985. Two years ago, Spokane businessman Walt Worthy and his wife, Karen, bought the 14-story building with plans for historical renovation.

Following a gala opening September 13 and 14, people remain eager to see grand old touches renewed, including the Spanish-Renaissance-style lobby with its glass skylight, elaborate furnishings, and beautiful fireplace.

The front desk features some original carved panels and the original "rack," an antique bank of key slots. Near the grand entry is an Italian hand-carved fountain. Elegant ballrooms were restored in detail, including the Marie Antoinette Room with its surrounding balcony and original chandeliers.

Additionally, the 284 guest rooms were gutted and redesigned to match the Davenport's classic appeal. At one time, some 200 workers were involved in the restoration.

Caudill is responsible for the day-to-day operation of the hotel, including the front desk, guest services, banquets, and housekeep-

ing. While the hotel's finishing touches were being completed, guest rooms were booked solid into the fall, she said in mid-summer.

"I like the energy of a large, full-service hotel. It's wonderful to be a part of an environment where all you have to do is make people happy and make them comfortable."

After attending Washington State University (x'89 Hotel and Restaurant Administration), Caudill worked with Westin Hotels, then with Windsor Capital Group, and later R.C. Hedreen Company, owners of three Seattle properties.

Before joining the Davenport, she served as corporate human resources director simultaneously for the Madison Renaissance Hotel, The Seattle Hilton, and The Elliot in Seattle. In Spokane, she co-owned and managed an executive search and human resources consultant company, Caudill-Groves.

Initially, Caudill came to the Davenport to offer hotel consulting services, after moving from Seattle to Spokane with her husband, John, and two children. Soon she was hired on as director of human resources and was at that time the only staff member with hotel experience, so she played an integral role in hiring the hotel's staff, now numbering 265 people. She helped review over 3,000 job applications.

During the renovation, Caudill's days often included walks around the site with Walt Worthy to discuss plans for hotel operations. For the hotel's guest rooms, the Worthys selected carved mahogany furniture, marble bathrooms, and such high-tech features as an electronic "Do not disturb" signal.

"The technology system in the hotel is state-of-the-art" and has the latest options for high-speed Internet use, Caudill says. She credits Worthy for his vision.

"He's the most optimistic person I've ever met. He just has a can-do attitude which . . . keeps everyone feeling good."

She adds that the Worthys remained committed to renovating where it made sense and making changes that "tastefully fit in" with the hotel's historical architecture.

"As they renovated this traditional and historic hotel, we had to make sure it matched well with not only modern conveniences but also with how we operate hotels today," she says.

Caudill expects the 88-year-old Davenport to have steady occupancy from business groups visiting Spokane for regional meetings. But she anticipates tourists will also seek out the hotel as a unique place to stay.

"It's going to be a mix of business and corporate groups—and a lot of individual visitors," she says. "There's lots of excitement."

—Trevia Lind



Lynnelle Hull Caudill

JEFF T. GREEN

IN MEMORIAM *continued*

James Metcalf Dorr ('51 Educ.), 78, May 22, 2002, Seattle. Served in the Army during WWII, participating in the invasion of France. Began teaching career in Riverside and St. John, relocating to Burien in 1955, where he finished his teaching and coaching career of 31 years in the Highline School District.

Kenneth Edward Hinton ('53 Fine Arts), 75, May 3, 2002, Spokane. Taught art at Spokane Falls Community College for 27 years.

Grover Schiffman ('53 Econ.), 74, June 21, 2002, Seattle. Army cryptologist during the Korean War. Production manager for Continental Group. Retired in 1990.

Wills Kinnaman ('54 D.V.M.), 77, April 8, 2002, Riverside, California. Served in the Navy, 1943-46. Veterinarian with Lake Elsinore, California, Animal Hospital for 45 years.

Carl Baden ('56 Ag. Educ.), 66, May 2, 2002, Federal Way. Crop and cattle farmer in Pomeroy and Walla Walla, 1956-90.

Dawn Springer Larson ('56 Pharm.), June 5, 2002, Dallas, Oregon. Practiced pharmacy in Spokane; Pullman; Iowa City, Iowa; Corvallis; and Philomath, Oregon. Lived for a time in Sweden,

Germany, and China. Taught English medical terminology to Chinese physicians and nurses. Retired to Hood River, Oregon in 1992.

1960s

Jane Ayer Blegen ('66 Elem. Educ.), 58, May 18, 2002, Spokane. Taught string and vocal music classes at public schools in Walla Walla for five years. Began playing the violin with the Spokane Symphony in 1972 and performed her last concert in February. Member of the Spokane String Quartet for 21 years and gave private lessons.

Nancy E. Falk ('68 Engl.), 55, April 1, 2002, Auburn. Taught middle school English and language arts for many years in the Evergreen School District in Vancouver. Owned Morgan horses and published several articles in the *Morgan Horse* magazine.

Robert W. Park ('69 Psych.), 54, May 23, 2002, Yakima. Joined the Air Force as medic in 1969 and flew air rescue missions in Vietnam. Received a master's degree in education from Central Washington University in 1975. Taught at Wilson Middle School in Yakima, 1975-92. Coached basketball, volleyball, and track.

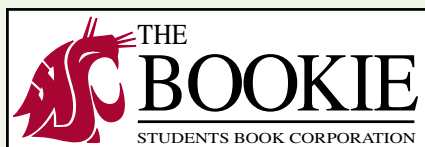
1970s

Norman Gray ('70 Hotel & Rest. Adm.), January 22, 2002, Telluride,

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IN MEMORIAM *continued*

Colorado, glider accident in New Zealand. Twenty-seven-year veteran of the ski patrol.

Deborah Treneer Pitman ('73 Journ.), 51, July 4, 2002, Richland, cancer.

Edgar 'Al' Vickery ('73 Physics, '75 Elect. Engr.), 63, May 2, 2002, Gaithersburg, Maryland. Started working at Hanford for ARCO in 1975. Moved to Saudi Arabia in 1978 with ARCO. Returned to the U.S. in 1983, working in industrial security in Virginia. Returned to Hanford in 1986, working for many contractors until 2002, when he took a position with Battelle.

David Stiers ('74 Ph.D. Plant Path.), 59, March 12, 2002, Oklahoma City. Performed medical research at the Oklahoma Health Sciences Center in Oklahoma City for the Department of Surgery Research.

Gary Schrag ('75 Bus. Adm.), 49, April 26, 2002, Walla Walla. Joined Reese & Baffney law firm in 1978, now Reese, Baffney, Schrag & Frol. Specialized in estate planning and agricultural law. Deputy city attorney, 1978-82.

Betty F. Shepard ('76 Polit. Sci.), 47, May 11, 2002, Washington, D.C. Graduated from Georgetown Law Center in 1979. Worked as a management analyst in the Office of Civil Rights, Department of Education.

Margaret Emerick Doumit ('79 Comm.), 46, May 3, 2002, Puget Island, non-Hodgkin's lymphoma. Employed by KING-TV in Seattle for a year, then moved to Ireland to work for Dairy World Marketing. Known for introducing Irish cheese to the Canadian market. Began working with the Seattle Opera in 1985 and performed in many shows. Moved to Cathlamet in 1996 to work in software sales.

Donna Boisen Ganders ('79 Finance), 45, June 30, 2002, Olympia, endometrial cancer. Helped lead the first organized labor effort of bank employees in the state while at Ben Franklin National Bank in Pasco. Moved to Olympia in 1988 and later became director of finance and reimbursement for the Washington Health Care Association. Married to Larry Ganders, assistant to the president at WSU.

1980s

Greggory Brower ('82 Const. Mgmt.), 44, December 28, 2002, West Richland. Contract administrator for Bechtel Hanford.

L. Roger Sheffels ('87 Ag. Mech.), 37, May 22, 2001, Wilbur, aircraft accident near family farm. Fourth generation to manage 8,000-acre family farm.

1990s

Matthew Herzog ('96 Crim. Justice), 28, September 13, 2002, Bellingham,

car accident. Deputy sheriff of Whatcom County. While Herzog was training another officer, the trainee pursued a car traveling in excess of 100 m.p.h., lost control of his vehicle, and struck a tree.

Tavia Thomas ('98 Hotel & Rest. Adm.), 26, July 11, 2002, Hillsboro, Oregon, traffic accident. Worked for Marriott Hotels in Santa Clara, California and Portland. Most recently she was program manager for Intel in Hillsboro.

Faculty & Staff

Gus W. Hokanson ('61 M.A. Extension), 88, May 5, 2002, Pasco. County extension agent until 1943. Served in the Navy aboard the *USS Maryland* and *USS West Virginia*. After the war, superintendent of Klock Produce in Seattle. Returned to cooperative extension in 1955 in Ephrata. Promoted to chair of the Franklin County Extension Office in Pasco in 1959. Sent to Turkey in 1967 to educate Turkish farmers on new wheat varieties and management practices. Retired in 1976.

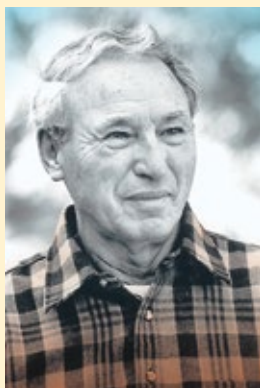
Marjorie McMillen, 88, July 1, 2002, Bainbridge Island. Head resident of Duncan Dunn Hall at WSU for three years prior to her appointment as director of the Graduate Residence Center, where she served for 17 years. Retired in 1982.

Charles H. Drake, 86, May 20, 2002, Pullman. Retired as professor emeritus of bacteriology in 1980 after 38 years on the WSU faculty. Earned bachelor's and master's degrees at University of Minnesota. Later taught at University of Kansas until joining WSU in 1944.

Jon Christopher, 68, April 1, 2002, Mesa, Arizona. WSU assistant professor of kinesiology, 1968-99. Consulted for the National Golf Association and helped start the Fellowship of Christian Athletes at WSU.

Joe Cvacara, 68, June 18, 2002, Vacaville, California, esophageal cancer. Professor of agricultural education at WSU from 1972, until he retired in 1999. Taught at the University of Idaho, 1968-72. Received outstanding teaching awards at both WSU and UI. Served as a consultant for rural development in Malawi, Africa and Ukraine. Lived in Genesee, Idaho.

Jeremy Darcy-Evans, 44, August 9, 2002, Moscow, Idaho. Postdoctoral research assistant in the Department of Chemistry at Massachusetts Institute of Technology. Lecturer in bioorganic chemistry at Oxford University in England. Joined the WSU biochemistry, biophysics, and chemistry faculties in 1989. Received the Edward R. Meyer Distinguished Professorship in 1998. Director of the Nuclear Magnetic Resonance Center and the School of Molecular Biosciences at WSU.



Herbert L. Eastlick

Herbert Eastlick mentored thousands

WASHINGTON STATE UNIVERSITY zoology professor Herbert L. Eastlick was devoted to preparing students for professional careers in medicine, dentistry, and veterinary medicine. He once described himself as a “taskmaster and autocrat in the classroom,” motivated by his overriding concern for his students and the rigid demands they would

face in professional schools. He mentored thousands and gained a reputation among medical schools for honest, accurate evaluations of the students he taught and advised. Often, deserving WSU applicants were admitted to leading schools on the basis of his word.

During his 33 years at WSU Eastlick gained wide respect for his research on the origin of pigment cells in vertebrates, development of muscle tendon, and host-graft reaction. In 1939, he made the first successful transplant between two different species of warm-blooded vertebrates—the growth of a duck leg on a chicken.

Eastlick grew up on a ranch in Montana, miles from any town, and received a bachelor's degree in biology at the University of Montana in 1930. He completed his master's and doc-

toral degrees in zoology at Washington University in St. Louis, where he met and married fellow graduate student Margaret “Peg” Gardiner, who survives him at Pullman.

In 1939 he received a National Research Council Fellowship from the Rockefeller Foundation and went to the University of Chicago to work under the well known embryologist Paul Weiss. It was there that he made the acquaintance of Washington State College President E.O. Holland, who hired him in 1940. He was chairman of the Department of Zoology from 1947 to 1964 and chaired the Faculty Executive Committee in 1955-56. He also helped create WSU's nationally ranked Honors Program and presented the University's eighth Faculty Invited Address on his research in 1961.

In 1979 the new Eastlick Biological Sciences Building was dedicated in honor of the Eastlicks. His wife taught bacteriology and pathology and supervised the pathology laboratories in the College of Veterinary Medicine at WSU for 23 years.

A number of years ago, the Eastlicks pledged their estate to Washington State University to create undergraduate scholarships for students based on their ability and need.

Eastlick died June 20 in Pullman, from complications of Alzheimer's disease. He was 94.

Memorial contributions may be made to the Herbert L. Eastlick Scholarship in care of the WSU Foundation, PO Box 644102, Pullman, Washington 99164-4102.

—Pat Caraher and Sharon Hatch

Paul Castleberry sharpened minds

DURING 40 YEARS in teaching, including 34 at Washington State University, H. Paul Castleberry touched the lives of many students. He taught courses in American government, international law and organizations, and U.S. foreign policy.

“He was never easy as he pulled and pushed, bullied and begged better work out of his students,” said Patrick Morgan, a former WSU faculty colleague in political science. “He sharpened minds and shook up views, and not just here [WSU]. He taught in London and has held Fulbright Awards for lecturing in Egypt.”

Castleberry retired from WSU in 1983. The longtime Pullman resident died February 1, 2002 in Moscow, Idaho. He was 80.

He was acting chair of WSU's political science department in 1957 and 1961-62, and chair from 1964 to 1968. He was active in the University Senate and held leadership positions in the Faculty Council and on several committees. He also was co-founder of the Northwest Inter-Institutional Study Abroad Program.

A frequent speaker for campus and civic groups, Castleberry often stressed the need for changes in U.S. foreign policy to secure a lasting peace in the Middle East. In 1962, he was selected to deliver the University's 10th address in the Invited

Address series that recognizes scholarly achievement. In that address he said, “History reveals no president or secretary of state putting the interests of another country ahead of our own. Mistakes are often clear only after calculated risks produce the wrong result.”

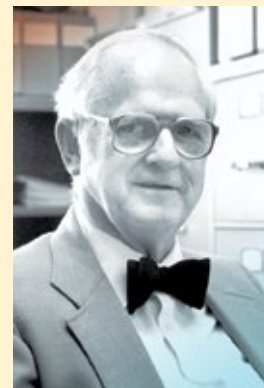
Castleberry received two Fulbright awards to lecture in the Middle East—one at American University in Cairo, Egypt, 1953-55, and the other at Ankara University in Turkey, 1962-63. He taught two summers in study-abroad programs in Paris and London.

One floor in WSU's Regent's Hill residence hall is named the Castleberry House in his honor.

A native of Duncan, Oklahoma, Castleberry earned bachelor's and master's degrees in government at Texas Tech University. He completed his doctorate at the University of Chicago in 1949, before joining the WSU faculty.

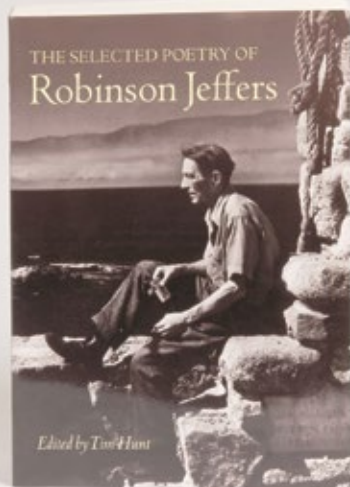
Memorials may be made to the H. Paul Castleberry Scholarship, c/o WSU Foundation, PO Box 644102, Pullman Washington 99164-4102.

—Pat Caraher



H. Paul Castleberry

BOOKS, etc.



The Selected Poetry of Robinson Jeffers

Edited by Tim Hunt
Stanford University Press, Palo Alto, California

How to describe Robinson Jeffers, now 40 years deceased? Visionary or reactionary? Hard-eyed realist or Romantic throwback? The West's answer to the East's Robert Frost? California's anti-type in poetry and politics to John Steinbeck in fiction and politics?

Jeffers's raw "inhumanism," along with his defiance of government meddling, seems the essence of fabled American independence and individualism. In one of his anti-Modernist screeds, "Poetry, Gongorism, and a Thousand Years" (1948), which Tim Hunt, professor of English at Washington State University at Vancouver, includes among other prose in the *Selected Poetry*, Jeffers advises young poets that a "post-humous reputation" is "the only kind worth considering." Professor Hunt's editions of both the collected poems (five volumes, Stanford, 1988-2001) and the selected poems (2001) constitute an invaluable contribution toward that end.

Perhaps Jeffers's anti-establishment rhetoric, familiar from the opening lines of "Shine, Perishing Republic," will always find an audience, whether from the left or the right politically, is hard to say: "While this America settles in the mould of its vulgarity, heavily thickening to empire," and protest becomes a mere "bubble," the speaker smiles sadly in his distant way and

satisfies himself with the reflection that all eventually turns to mulch. But in this oft-anthologized poem, which boasts such aphoristic passages as "corruption / Never has been compulsory," we also encounter Jeffers at his most sententious: "And boys, be in nothing so moderate as in love of man, a clever servant, insufferable master." When Jeffers gets sententious, he gets prosy.

One stumbling block for those who would promote the resuscitation of Jeffers's reputation is his love of the dogmatic and didactic mode, the two being interrelated. For example, writing of modern cities in his preface to *Tamar* (1923), he finds them "barren of poetry." In "Point Joe" he wrote, "Permanent things are what is needful in a poem," and "Fashionable and momentary things we need not see nor speak of." Consciously anti-Modernist, Jeffers comes off as even more stridently anti-Postmodernist in his values. While he concedes in his preface that an airplane is "as poetic" as a plow or a ship, Jeffers aims at the endurance of mountains, the permanence of granite, the sea, and the stars. His best hope for attracting contemporary readers may be in such environmental views as that which undergirds his most frequently cited line: "I'd sooner, except the penalties, kill a man than a hawk" ("Hurt Hawks").

But perhaps, to reflect finally on Professor Hunt's major achievement with this volume, Jeffers will appeal to the presumably growing audience for "Expansionist" poetry, for long narrative poems like "Give Your Heart to the Hawks" that have not held center stage since the days of Byron and Longfellow. Hunt improves considerably on such anthologies as the 1976 Vintage and the 1987 Carcanet, which offer an ample supply of shorter poems, but few of the long poems that Jeffers aficionados would argue should be the basis of his reputation.

Stanford University Press has treated this book kindly, offering the poems in a nearly seven-by-nine-inch format running just 32 lines per page. In light of Jeffers's proclivity for long lines, often in excess of 25 syllables—a considerable ramble, given the Anglo-American tradition of 10 syllables in the iambic pentameter line—the reader will appreciate the generous layout. The price tag of about \$25 for this substantial volume of 758 pages makes it something of a bargain.

For more information, see <http://www.sup.org/>

—Ron McFarland, Professor of English
University of Idaho



Sojourner
Julie Silvera
Produced by
Paul Ely Smith

Style, phrasing,
and rhythmic

acuity are hallmarks of a great jazz singer. Julie Silvera displays all of these and more on her debut CD, *Sojourner*. A graduate of Washington State University with an M.A. in music, Julie cut her "jazz teeth" singing in Pullman with the Charlie Argersinger trio at Rico's Smokehouse.

How refreshing to hear a singer dig into the literature of the American Songbook and pick out rarely recorded jewels! *Sojourner* boasts three such gems: "Sweet Georgie Fame," "Lost and Lookin'," and "All Alone."

On *Sojourner*, Julie covers the gamut of emotional expression, flashing the extremes of her range and dynamics throughout. Listen to the honey—no, the molasses—of her tone on the opening cut, "You'd Be So Nice to Come Home To." Just when you cozy into her velvet sound, she growls out a line that is motivated purely by swing. Phrasing around the rhythm and landing in the pocket, she swings, and swings hard.

The stand-out tunes on this CD are the two duo pieces between Charlie Argersinger and Julie, "Alone in the World" and "Sweet Georgie Fame." Transparent and intimate, in "Alone in the World," Julie favors the purity of her head voice and wispy phrases that invoke the longing in the lyrics. Charlie is at his best in duo exchange with Julie, gliding in compliment to her every turn of the phrase. In "Sweet Georgie Fame," the elegance and clear musical chemistry between Charlie and Julie are captivating.

Sojourner is a jazz CD. Although Julie has grit in her voice, with hints of gospel and R&B, she uses these elements sparingly. She flirts with other styles, spicing up the tunes while remaining true to the jazz idiom.

There are marvelous players on *Sojourner*: Charlie Argersinger (piano), Richard Dozier (bass), and Dave Jarvis (drums). They enhance Julie's singing, whether they're locking in a swing tune or laying out the warm open timbres of a ballad.

Julie has intonation problems throughout the CD. But her connection to the lyrics, warm sound, and ability to swing outshine that difficulty.

Other cuts on *Sojourner* are "Good Morning Heartache," "I'm Traveling Light," "Estate," "When the Sun Comes Out," "I'm Hip," and "A Sleepin' Bee."

Contact jazzdiva1@hotmail.com for more information.

—Sunny Wilkinson, recording artist and
jazz faculty at Michigan State University
and Western Michigan University

Gardening in the Inland Northwest

By Tonie Jean Fitzgerald
Washington State University

If you are a gardener just embarking upon the horticultural journey of growing vegetables or fruit in the Inland Northwest, this book is quite simply the best reference you can find. Tonie Jean Fitzgerald starts out with the basics that every gardener should know about the unique soils and climate of the region. Next she gets down to the specifics of planning and planting a vegetable garden, including how to raise transplants from seed and what varieties perform best in area gardens.

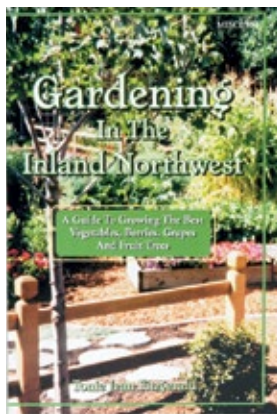
She follows up with a chapter on pest control from pesky insects to damaging diseases, providing sound advice on how to limit the use of pesticides in the garden. After vegetables comes backyard fruit production from berries to grapes, apples, pears, cherries, peaches, plums, and apricots. She reveals the mystery of successfully growing these bearers of luscious treasure.

Fitzgerald should know quite a bit about gardening in the inland region. She has been a WSU Spokane County Cooperative Extension faculty member since 1985, providing educational programs to local gardeners and farmers. She credits her wealth of gardening knowledge to working with Master Gardener volunteers since 1979. That must be why the information is so down-to-earth and easy to understand.

This handy reference is not filled with glossy pictures, as are many gardening books; instead, it's illustrated with delightfully artistic line drawings. It's also packed with straightforward advice and handy tips. One useful tip, for example, helps gardeners ward off aching backs. When digging or hoeing, Fitzgerald recommends taking frequent "back breaks" by lying flat on the ground and bringing both knees up to your chest, stretching your lower back muscles. The easy-to-read charts and lists interspersed throughout the book are also very helpful. The book is a virtual step-by-step road map for both beginning and experienced gardeners of the region.

For more information, contact WSU's Bulletin Office at 1-800-723-1763 or 509-335-2857.

—Marianne Ophardt
WSU Area Extension Faculty



Seasoned with Love: Favorite Heart-Healthy Recipes with Reflections about Food, Family, Friends, and Faith

By Carolyn Frances Meagher
SpringBoard Publishing, Everett, Washington

Carolyn Frances Meagher ('56 Speech) conceived a passion for cooking and baking while learning to make cinnamon rolls in a high school cooking class in Pullman, Washington. In time, rich desserts and "anything with cheese" became her trademark among family and friends.

However, the high-fat dinners came to an abrupt end several years ago during a health crisis that triggered an evaluation of her family's dietary patterns. Meagher began experimenting with her favorite recipes—and looking for new ones—to lower the cholesterol and fat content without losing flavor. In *Seasoned with Love*, she presents an eclectic selection of her favorite home-style recipes, all reduced in cholesterol and fat. These include such delectables as chocolate cinnamon buns, orange chicken breasts with coconut rice, banana muffins, and piña colada carrot cake.

The book is divided by seasons of the year instead of food groupings. A series of short reflections about food, family, friends, and faith is interspersed among the recipes. Drawings by artist Dode Eastman add the finishing touch.

"Even people who don't cook much say they enjoy reading the book, especially the stories," Meagher says. "It's a unique addition for cookbook collectors, too."

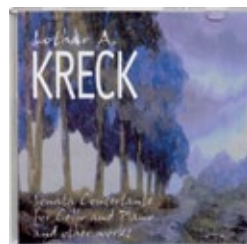
For information, call 425-252-3423, or e-mail cmeagher1@mindspring.com



Sonata Concertante for Cello and Piano and other works

Lothar Kreck

In the course of his 26 years at Washington State University, Lothar Kreck, who retired in 1997, served as director of Hotel and Restaurant Administration (1971-79) and was the program's first Ivar B. Haglund Distinguished Professor. He also pursued an avocation as a composer and performer, playing viola in orchestras in the U.S. and Europe. *Sonata Concertante for Cello and Piano and other works* presents seven of his compositions.



Although he began writing music in 1953, the earliest piece on this CD dates from 1985. The disc includes performances by WSU piano faculty Susan Chan, organist and pianist David Hatt, and the Maui Symphony. Three of the compositions, including the title piece, are performed on a MIDI computer.

A self-taught composer, Kreck employs a distinctly contemporary musical language that shifts freely between tonality and atonality. Often meditative, and sometimes brooding, this music spans an emotional range from the tenderness of the selection from *China Suite* to the controlled tension of "Soggetto," the mystery of "Si Vis Me Flere," and the assertiveness of "Adagio."

Of the opening piece, *Nimbus Moments*, pianist David Hatt has written, "[It] uses marvelous and sometimes quite complicated keyboard figurations in a pastiche format. It is very much a performer's piece..."

For information, contact Lothar Kreck at 509-335-5766 or 334-2638.

Down Along the Sunset

By Benner Cummings
Blue Wave Press,
San Clemente, California

In this slender volume of 29 poems Benner Cummings ('51 Speech & Hearing Sci.) pays homage to the romance of surfing. Based upon Cummings's years as surfing and swimming coach at San Clemente High School, the poems celebrate the beauty, grace, daring, and freedom inherent in the pursuit of surfing—often in terms that equate surfers with mythological figures:

Like the playful sea god Triton,
He arose from out of the sea.

While these verses might lack the polish of a Robinson Jeffers, they nevertheless ring with the authority of Cummings's deeply felt response to the magic of riding the waves. Perhaps no other lines exemplify that response so well as these from "On a Blue October's Ocean":

To have surfed forever
Down the golden trails of the sun.
Seeking out royal adventures,
To ever follow the sun.

To surf beyond the sunset,
Surfing a wild Sulu sea.
Surfing the seas of all the world,
Forever a part of me.

For more information, contact Blue Wave Press, 250 Ave. Montaldo, Suite C, San Clemente, California 92672.



Happy Holidays



Forks, Chinook Pharmacy
Stan ('76) & Linda Peterson ('78)

Langley, Lind's Drug
Ron ('66) & Pam Lind

Freeland, Lind's Drug
Ron ('66) & Pam Lind

Snohomish, Kusler's Pharmacy, Inc.
Janet Kusler ('80) & Mary Pat Connors

Edmonds, Five Corners Pharmacy, Inc.
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Mill Creek, Mill Creek Pharmacies
John Oftebro ('65)

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Greg Grun ('78)

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Seattle, Northaven Pharmacy
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Owl Pharmacy
Fritz McGinnis, ('71)
Cheney Medical Lake

Fairfield, Owl Pharmacy

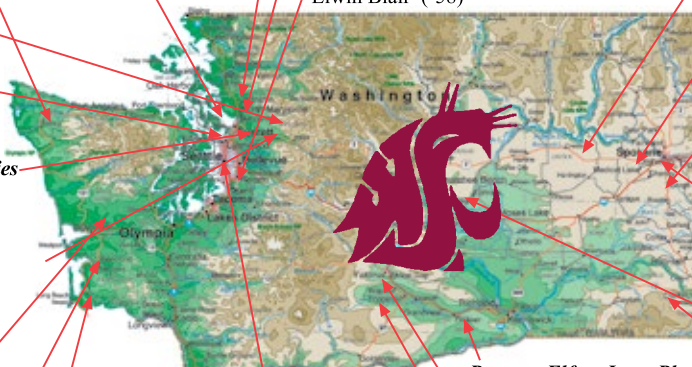
Spokane, Lidgerwood Owl Pharmacy
Fritz McGinnis, ('71)

Spokane, Valley Mission Homecare Pharmacy
Bob ('65) & Mary Lou Redmond

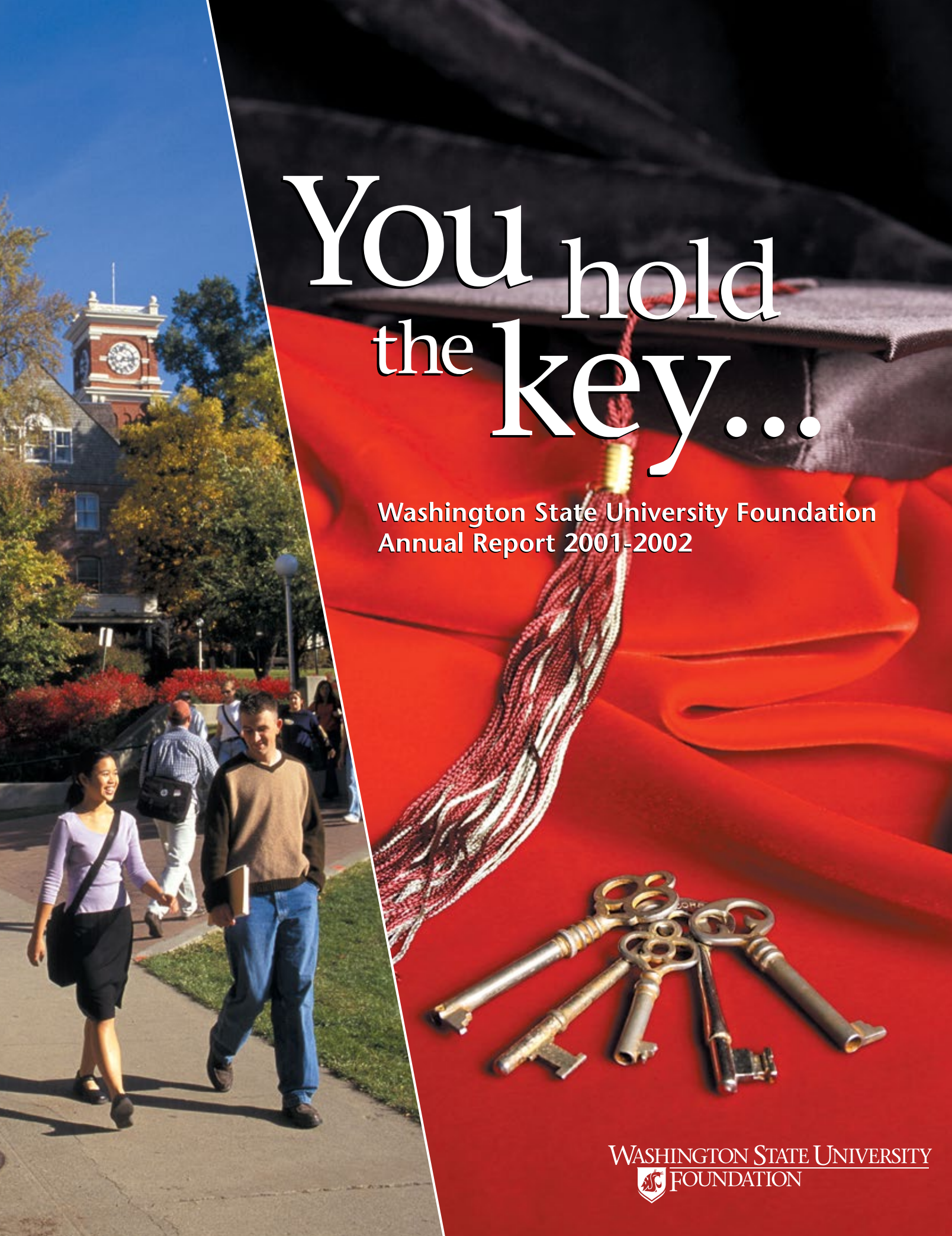
Spokane, Jones Pharmacy
Doug Crafton ('78) & WD Evans

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Clarkston, Wasem's Drug
Clifford ('51) & Rick Wasem ('80)



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You hold the key...

Washington State University Foundation
Annual Report 2001-2002



Opening Doors To Excellence



As I complete my term as Chair of the Board of Trustees for the WSU Foundation, I am excited and optimistic about the future of Washington State University. The institutional leadership demonstrated by President Rawlins and his team underscores their overwhelming commitment to quality. This commitment to excellence will open doors for students, for faculty, for research and for innovation at Washington State.

Participation in the strategic planning process has renewed my belief in the solid foundation upon which this quality institution is based. This extensive planning process has positioned Washington State University to become a world-class leader in higher education. The vision that has been created for the University provides the keys that will open doors to future excellence.

It also has been my privilege and honor to serve on the search team that selected Rick Frisch as Vice President, University Development, and President, WSU Foundation. Rick's track record as a leader, development professional, and advocate of higher education will be a tremendous asset to WSU. It is extremely satisfying to end my term as Chair of the WSU Foundation with solid leadership at the helm.

This institution has a tremendous resource in its donors, alumni, friends, and volunteers. I have had the good fortune to work with an outstanding team of volunteer leaders whose commitment to WSU is unparalleled. The leadership team that follows me has a great deal of expertise and enthusiasm, and I know they will take the base we have established and build upon it to support this outstanding University. On behalf of the WSU Foundation, thank you to all of our Foundation Trustees for their generous gifts of time and talent.

Every time I meet a member of the Cougar family, I am gratified by the enthusiasm that our supporters have for advancing excellence at Washington State. We are grateful to every one of you, our donors, for your tremendous generosity throughout the past year that has opened so many doors at Washington State University.

Jacquelyne A. Doane
Chair, WSU Foundation

Opening Doors With Your Support

The theme of this year's annual report, "Opening Doors," reflects all of the ways in which private support makes a difference at Washington State University. You truly provided the keys—your support totaled \$43.2 million last year for the University's highest priorities. The tremendous generosity of the Cougar family is truly remarkable and unmistakably demonstrates that Washington State is poised to move to the next level.

The stories included in this report demonstrate how the generosity of donors and friends of Washington State University is truly the key to excellence. Gifts fund scholarships—both to recruit high-ability students and to ensure that students with financial need can complete their education. Private support funds professorships and chairs that help the University retain and recruit the world-class faculty whose face-to-face work with students in the classroom makes WSU an excellent place to receive an education. Programs to build diversity, support the arts, and offer leadership opportunities for students are made possible through the generous support of donors. In addition, gifts to WSU helped to build an Indoor Practice Facility that will give WSU student-athletes a competitive edge, as well as funding the library collections, laboratory equipment, and computer facilities that give all WSU students an academic head start.

Now, Washington State University must move to the next level. This University is opening doors to new relationships with donors, friends, and volunteers. Since I joined the WSU Foundation in June, I have seen a genuine enthusiasm to advance the research and educational capacity of this institution. WSU appreciates and values your advocacy. Thank you for your support—it is a crucial and valuable resource.

As WSU moves forward in building success, the WSU Foundation needs to find ways to capitalize on the great store of time, talent, and support that exists among donors, alumni, and friends. The Foundation will look for ways to organize operations so that volunteers can help WSU more effectively and consistently. WSU will strive to better engage with citizens in communities where the University has a presence—either through a regional campus or through a critical mass of alumni and supporters.

I look forward to working with you to achieve these objectives and find the keys to Washington State University's future success.



Richard L. Frisch
Vice President, University Development
President, WSU Foundation





Opening Doors...

To Academic Achievement

Jim and Dianna Huber, their sons Jason and Ryan, and their close friends Jerry and Kristi Schei died on November 21, 1992 enroute to the Apple Cup in Pullman. The Scheis and the Hubers were alumni, donors, WSU Foundation trustees, and recipients of the WSU Foundation's Outstanding Service Award. As the tenth anniversary of this day approaches, the Cougar family gratefully acknowledges the impact on WSU of the bequest from the Huber family and pauses to remember how much Jerry, Kristi, Jim, Dianna and the boys are missed. The Scheis' two children, Kjell and Carrie, live in the Seattle area.

Cougars far and wide remember November 21, 1992 as the "Snow Bowl" when Drew Bledsoe led the Cougars to an upset of the 5th-ranked Huskies in a relentless snowstorm. Football fans across the country tuned in to watch the Cougars demolish the Dawgs during a devastating blizzard that blanketed the Martin Stadium turf.

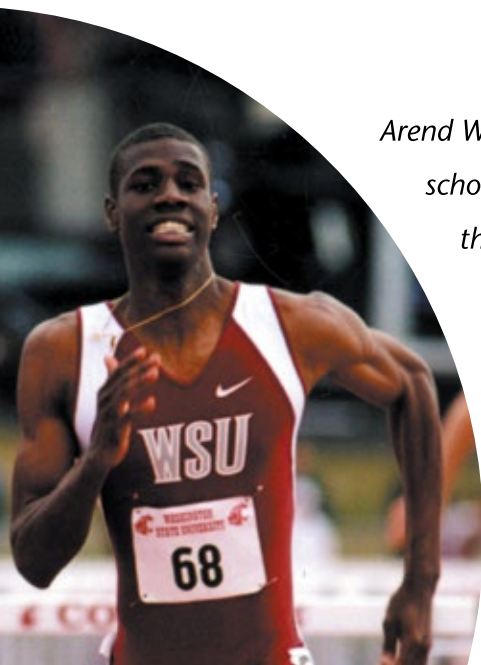
Euphoria was tempered when word spread that a small plane carrying four committed WSU alumni and their children had disappeared in the Cascade Mountains. Concern turned to tragedy when confirmation hit the Palouse that Cougars had lost friends and classmates.



Professor Jerman Rose says that the Hubers' generous bequest was a catalyst for WSU's program in Entrepreneurship.

Over the past ten years, dozens of WSU students have received WSU's unique educational experience thanks to the philanthropy of the Huber family, whose bequest to Washington State University funds scholarships for business students and student-athletes, as well as an endowed chair in the College of Business and Economics. Nearly \$300,000 has been awarded to students as scholarships, and more than \$500,000 in endowment income has benefited the James D. Huber Chair in Entrepreneurship. An additional \$500,000 from the Huber Family Endowment has been used to benefit WSU for alumni events and recognition, publications for students, and beautification of the campus.

Arend Watkins received a scholarship endowed by the Huber family that helped him complete his degree in Social Sciences. He graduated in May, 2002.



Athletic scholarships endowed by the Hubers support current student athletes and provide financial aid to student-athletes who have exhausted their eligibility, but are working to finish their degrees. "Because of the tremendous generosity of Jim and Dianna Huber, over 50 WSU student-athletes have received endowment support since 1993," said Jim Sterk, Director of Athletics. "Through their foresight and leadership, the Huber family has ensured that student-athletes will always have access to remarkable learning experiences that will benefit them for the rest of their lives."

According to Professor Jerman Rose, holder of the James D. Huber Chair in Entrepreneurship, the Hubers' generous bequest has been a fundamental catalyst for the program in Entrepreneurial Studies. "I can't overstate the impact that it has had. Without it, we would not have more than a few scattered courses. We now have an academic program that provides our students with a hands-on understanding of business creation and small business management."

"Jim and Dianna understood how powerful a bequest of this magnitude could be to a charitable organization," said George Holzapfel, the Hubers' estate planning attorney. "They believed that if something happened to all of them, their estate should

be put to use in a positive way for the causes they believed in—and WSU was high on that list. It is good to see their accomplishments fund important programs and carry on in such a positive way."

According to Mary Lou LaPierre, who knew them well before her retirement as Director at WSU West in Seattle, the Hubers would have been pleased to see their gift opening doors for WSU students to gain valuable experience as part of their education, while also giving back to the community. "The Hubers and the Scheis were entrepreneurs who lived life to the fullest and followed their passions. They loved that Cougar Spirit—it was part of their lives—they wanted WSU to be the best it could be." Their lasting legacy will never be forgotten.

Katrina Stroh is a senior majoring in Communications and Advertising. Her scholarship from the Huber endowment helps her compete for WSU on the soccer field.



You hold
the key...



Opening Doors...

To Hands-On Experience



Jonathan McPherson of Richland is a self-proclaimed “computer guy.” He started with an internship as a programmer at pharmaceutical giant GlaxoWellcome. By the time McPherson was 19, he’d added a second professional programming internship to his resume, this one with Lockheed Martin Information Technology in Richland, WA—beginning employment there two weeks before he started junior college.

Yet even working part time, McPherson, who transferred to WSU Tri-Cities in 1999, majoring in—what else?—computer science, found that covering the cost of his education was difficult. That’s where Peggy and Kenneth Young came in.

Young was a 1956 chemical engineering graduate from WSU. After graduating, he moved to the Tri-Cities to work for General Electric on the Hanford project, completing 40 years of service at Hanford. He died in 1994 at age 61.

“The scholarship enabled me to focus on school rather than finances, which was a major reason I was able to excel in my classes.”

Jonathan McPherson

For two consecutive years McPherson was awarded the Kenneth L. Young Memorial Scholarship in Engineering, given to undergraduate majors in an engineering discipline at WSU Tri-Cities with a 3.3 GPA or greater who are in financial need.

McPherson has earned other merit-based scholarships, including a WSU Foundation Scholarship and the Lockheed Martin IT Bridge Builder Scholarship. With the financial pressure eased McPherson shone academically, being listed five semesters on the president's honor roll and graduating summa cum laude in December 2001. His high academic standing was a factor in his being hired at Lockheed as a full-time web systems developer/analyst last January.

"The scholarships enabled me to focus on school rather than finances, which was a major reason I was able to excel in my classes," he said. "I earned little and would have been under financial stress were it not for the generosity of others."

"I cannot emphasize the importance of this enough," he added. "It heavily enriched my educational experience and made me a much more attractive candidate for postgraduate positions."

McPherson came to the branch campus to explore computer science in depth, the theory behind it, and where the field is going in the future. WSU Tri-Cities proved to be an excellent place to do this; he sampled a wide variety of related fields, including artificial intelligence, security, graphics, and databases.

McPherson learned how to help others, as he became a resource for students' programming questions. He also led a prayer group on campus, taught Bible studies at his church, and mentored new employees at his job.

"Perhaps one of the most important things I learned from those activities was that teachers and leaders aren't those who have somehow finished learning and now can present their wisdom to others. They are fellow students who are themselves learning," he said. "I learned just as much teaching others as I did from others' teaching. This concept changed both the way I looked at leaders and the way I lead."

McPherson will start work on his master's degree in computer science at the University of California at Davis this fall. More than anything, he said, his decision to continue his education is a testament to the quality of the computer science education he received at WSU Tri-Cities—and the donors who made that education possible.

Kenneth L. Young was a 1956 graduate from WSU in Pullman. He completed 40 years of service at Hanford.



You hold
the key...



Opening Doors...

To Diversity

Washington State University senior Tasha M. Madison is one of the few researchers today to see how cultures, peoples, and genders look through the eyes of a child. She crammed 30 years of reading children's bestsellers into her summer to study how minority groups were represented through the 1970s, '80s and '90s. And even at this early stage in her review, Madison is concerned.

"Even in the most modern books, there's still a huge gap in the way minorities are being represented," she said. "To not have multicultural representation in this time...it says we have a long way to go."

Madison, a communication major, is carrying out her research as part of her participation in the McNair Postbaccalaureate Achievement Program, funded by the U.S. Department of Education, which prepares eligible low-income, first-generation undergraduates and underrepresented minority students for doctoral education. Without financial aid Madison wouldn't have been able to attend WSU.

"It's been a blessing to me," she said. "McNair has been a huge chunk

of my financial aid. It's funding my research, which is very significant."

The McNair program is one way in which WSU supports multicultural students in their education and their success. But much of WSU's ability to strengthen its commitment to diversity also comes from the generosity of the University's donors who have established scholarships and scholarship endowments. Some examples include the:

- William W. and Ruth E. Anderson Business Scholarship.
- Creighton Endowment for Native American Students.
- Elgin DDB Minority Student Scholarship in Advertising and Public Relations.
- Jay and Retha Inghram Rockey Scholarship Endowment in Communication.
- Seattle Times/Blethen Family Minority Scholarship.
- Ronald McDonald House Charities Scholarships for African Americans, Asian Americans, and Hispanic Americans.

"Such private giving greatly enhances WSU's ability to recruit and retain multicultural students through scholarship support," said Steve Nakata, Director of WSU Multicultural Student Services. "The competition between four-year universities in the state of Washington can be fierce for top-notch students of color."

"As we would expect, these students will often decide to go to the college or university that provides the most financial incentives," he said. "I believe WSU is becoming more competitive for high-achieving students because of the increased scholarship support we are able to offer them."

In the year 2000, the total average debt for WSU graduating seniors receiving financial aid was more than \$15,000. This kind of debt burden can hinder

You hold
the key...



*Tasha M. Madison, a
communication major,
is carrying out her
research as part of
her participation
in the McNair
Postbaccalaureate
Achievement
Program.*

student decisions to pursue advanced degrees or to pursue careers in traditionally lower-paying arenas such as public service, education, and social services.

"These kinds of financial challenges facing most of our students are particularly acute within our minority student population, many of whom come from urban centers where jobs and low pay levels make accumulation of savings for college even more difficult," notes Vice President for Student Affairs, Charlene Jaeger.

Scholarship support is crucial in bringing students of color to WSU—and those same scholarships are equally vital to retaining them, according to Milton Lang, Special Assistant to the President.

Lang cites the case of WSU senior Pagia Keys as an example of how private giving can change a student's life dramatically. The working, single mother of two young sons is enrolled in the College of Education's Future Teachers of Color Program (FTOC), majoring in elementary education, and will graduate in May 2003. But she came very close to leaving the University except for the intervention of Lang, Johnny Jones of the College of Education, and WSU Regent and FTOC Program Founder Ken Alhadeff.

Last spring, Keys had reached the point of exhaustion, working 25 hours a week, being a full-time student and trying to care for sons Kassell, 7, and Kaleb, 3. By the end of the semester, she had a 3.3 GPA but became ill and was having trouble keeping up. She talked to Lang and Jones in desperation. A few days later, a phone call came.

"Ken calls me at home—I was home with the kids—and he told me, 'I'm going to do something for you. It's because I believe in you. I know you'll make a difference in the academic world,'" Keys said.

Alhadeff gave Keys the funds she needed to finish her education without working at the same time. Keys can't talk about the gift without breaking down a little. "It's more than helping me get my education. This is helping me raise my kids," Keys said. "I see this as holding my hand through this journey as I set an example for my kids in everything that I do....Every time I tell this story, I'm saying thanks. It's testimony for me."

*"Every time I tell
my story, I'm
saying thanks. It's
testimony for me."
Pagia Keys*





Opening Doors...

To Achieving Their Dreams

WSU's doors are open to Wenatchee siblings Zach and Inga Zornes, thanks to the generosity of donors supporting student scholarships. A freshman, Inga has been named a Regents' Scholar, an award worth \$14,000 per year for four years. Zach enrolled this fall as a junior transfer from Wenatchee Valley College (WVC) with help from the President's Award, intended to bring promising students from community colleges to WSU. He was also awarded a \$2,000 Dean's Merit Scholarship through the College of Engineering and Architecture. According to WSU President V. Lane Rawlins, Zach and Inga are just the kind of students that WSU wants to attract through these awards. "These students will make a real contribution to the University and to their fellow students, both in the classroom and as members of the campus community."

Both Zach and Inga graduated from Wenatchee High School with outstanding academic records

and well-deserved reputations as accomplished violinists. Zach volunteered to do yard work for an elderly couple, gave his time to nature organizations, and demonstrated his leadership and musical ability at church and in the community. All of this was on top of working as a math and science tutor, a groundskeeper at the Woods House Music Conservatory, and spending summers working as a cherry swamper. Graduating as her class valedictorian, Inga volunteered her musical talents and organizational abilities for a wide variety of church and community functions. Somehow she also found time to earn a varsity letter in golf and work part-time as a violin teacher, an ensemble violinist, and as a group leader for a summer program at the Woods House Music Conservatory, in addition to other odd jobs.

Doug Merrill, technology teacher at Wenatchee High School, says Zach and Inga will be outstanding additions to the WSU student body. "Both are well-rounded individuals who set good examples for themselves and others. They are genuinely interested in those around them and are comfortable working side-by-side in the classroom with instructors and peers."

Wenatchee High School Principal Mike Franza says WSU made a "wise move" when establishing the Regents Scholarship Program because it attracts top-caliber students, such as Inga, from across the state. But Inga has shown she can also compete with the best, both nationally and internationally. While visiting WSU with her brother and mother for the "Alive!" orientation program, her father called with news that Inga's essay, one of 2,300 entries from around the world, was chosen as one of 15 finalists in the Holocaust Remembrance Project essay contest.

You hold
the key...

Zach's interest in electrical engineering will be nurtured at WSU, where engineering courses are experiment-based and focus on practical applications, notes Dr. Bruce Unger, a physics engineering instructor at WVC who recommended Zach for his scholarship. While Zach almost chose to go to the University of Washington, his scholarship and his sister's decision to enroll at WSU made the decision easy for him. Dr. Unger thinks that Zach, whom he describes as "a hands-on kind of guy, very good in the laboratory," will thrive at Washington State.

These siblings are good friends as well as brother and sister; in Zach's senior year, they wrote a humorous dual editorial for the Wenatchee High School paper that outlined the pros and cons of parting ways as Zach graduated and headed for Wenatchee Valley College. Now they are together again—both will be Honors College students living in Honors Hall and even hope to share a few classes. Honors Dean Mary Wack observes, "Scholarships are strengthening the Honors College by creating opportunities for the best students in the state to attend WSU and to share their gifts with Honors students and faculty."

These scholarship programs, supported by the generosity of WSU's valuable donors, proved to be the key to educational opportunity for this dynamic pair of students. They, in turn, will open doors for others with their commitment to community and in their careers. "My greatest achievement has been finding pleasure in working hard and setting good examples," says Inga. It runs in the family.

"Scholarships are strengthening the Honors College by creating opportunities for the best students in the state to attend WSU...."

Honors Dean Mary Wack

Zach and Inga Zornes laugh outside of Honors Hall—their new home at WSU.





Opening Doors...

With Cougar Pride

Washington State University's "Cougar Pride" is what makes WSU a unique place to receive an education—it is a theme that alumni and friends echo over and over. Cougar Pride has led 57,097 of our alumni and friends to make an investment in the future of Washington State University.

As a result of their generosity, the WSU Foundation raised \$43,240,586 in gifts and private grants for fiscal year 2001-2002, which ended June 30. An additional \$4,358,291 was pledged by WSU's generous donors. This was the fourth best year in the 23-year history of the Foundation.

Despite market fluctuations, the WSU Foundation's endowment finished the year at \$176.6 million. At the same time, WSU added 64 endowed scholarships, seven endowed graduate fellowships, and five endowed professorships and chairs.

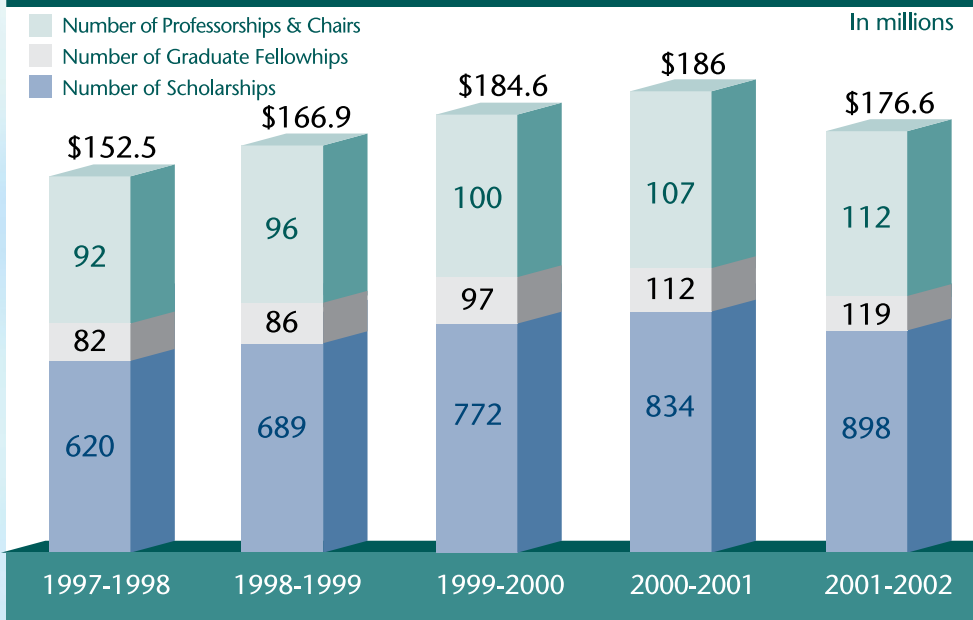
For the first time, the President's Associates—made up of individuals and organizations contributing \$1,000 or more annually—has exceeded 4,200 members, an increase of more than ten percent.

Last year donors generously made 137 gifts of more than \$25,000—38 more than the previous year. Highlights included:

- A gift of software databases made possible by Leigh and Marilyn Stowell of Leigh Stowell & Company, Inc. valued at \$4.2 million. These databases, the first of their type of this scope in the nation, will be the foundation of the Division of Governmental Studies and Services' sociological, political, and consumer behavior research activities. They will enable students and faculty to conduct hands-on analysis of consumer markets and support graduate student and faculty research in demographics and sociology.
- An Allen Foundation for Music award of \$625,000 to the School of Music and Theatre Arts to equip a newly designed recording studio in the Kimbrough Music Building, giving WSU students opportunities for hands-on experience with state-of-the-art recording technology.
- WSU's Center to Bridge the Digital Divide's receipt of a \$456,000 grant from the Bill & Melinda Gates Foundation, which supports the overall mission of the Center as well as a 4-H technology outreach initiative for youth in low-income and rural communities to develop technology skills.
- Phillip and June Lighty, whose leadership and support have graced Washington State University for many years, gave several gifts totaling more than \$430,000. Last year, their generous gifts supported numerous University priorities including multiple leadership awards and programs, the Lighty Opportunity/Presidential Scholarship, the Lighty Alumni Centre Fund, Washington State Magazine Fund, the Indoor Practice Facility, the Yoder Graduate Fellowship Endowment in Sociology, and WSU Athletics.
- A gift of nearly \$350,000 from George and Marianne Grant to establish the George and Marianne Grant Engineering Excellence Endowment to support the highest priorities of the College of Engineering and Architecture, as well as the George and Marianne Grant Tri-Cities Engineering Excellence Endowment to support academic programs related to engineering at WSU Tri-Cities. This gift also supports athletic scholarships and the Indoor Practice Facility.

Thanks to WSU's generous donors, alumni, and friends, Cougar Pride is alive and well—opening doors for learning, for research, and for achievement at Washington State University.

Growth in Graduate Fellowships, Professorships & Chairs, and Scholarships



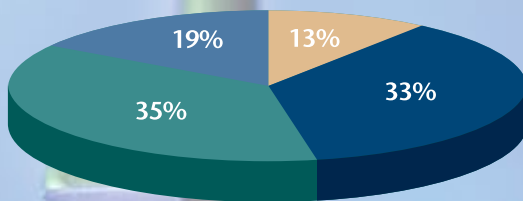
New Dollars Added to Endowment

\$21,724,883	\$12,364,285	\$17,381,097	\$14,961,561	\$11,255,089
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Endowment Investment Return*

+11.4%	+7%	+4.4%	-2.9%	-4%
1997-1998	1998-1999	1999-2000	2000-2001	2001-2002

* As of fiscal year ending June 30.

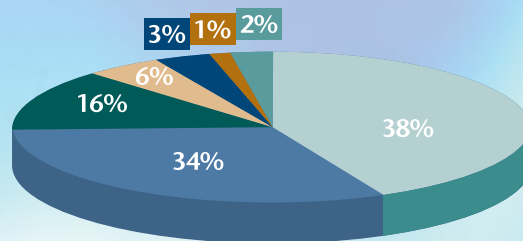


Gifts and Grants—Sources

- Foundations, Corporations, and Organizations
- Private Grants
- Alumni
- Friends, Parents, Faculty, and Staff

Gifts and Grants—Designation

- Operational Support
- Research
- Scholarships
- Facilities
- Distinguished Professorships & Chairs
- Other
- Graduate Fellowships



You hold
the key...



Opening Doors...

With Private Support

Here at Washington State University, we take the “World Class. Face to Face.” motto very seriously. While short and simple, this phrase captures the essence of what we strive to deliver: the best undergraduate experience in a research university and a world-class environment for research, scholarship, graduate education, and the arts. This year we began implementation of WSU’s strategic plan, which lays out the steps necessary to achieve these goals—goals that open doors to excellence in teaching undergraduates; in training a future generation of teachers, scientists, and leaders; and in producing research and scholarship that improve people’s lives.

I’m gratified that Washington State is building on an excellent foundation of success that includes many of the factors necessary to achieve key strategic goals. This year, freshman applications rose more than 14 percent, applications from multicultural students were up 24 percent, and the number of incoming freshmen with a 3.6 or higher grade point average has increased by more than one third. Eighteen of the 25 very talented high school students offered our prestigious Regents Scholarships—a program targeted at keeping top students in the state—joined us at WSU this fall.

We have tremendously dedicated and talented faculty, epitomized by Don A. Dillman, winner of the WSU Eminent Faculty Award this year. The nation’s outstanding expert on survey methodology and author of the

leading textbook in the field, Dillman was tapped to help improve the U.S. Census. This is just one way that WSU contributes to the state of Washington and our society through nationally recognized programs, including broadcasting, sociology, hospitality and business management, writing across the curriculum, plant biotechnology, wheat genetics and breeding, and veterinary medicine. Private support is crucial to help us build on the success of these and other vital programs.

WSU President V. Lane Rawlins, WSU Foundation President Rick Frisch, and WSU Foundation Chair Jacque Doane.



"Every gift, no matter the size, opens doors at Washington State."

V. Lane Rawlins

To build on this foundation of achievement, we need the support of our alumni and friends. Every gift, no matter the size, opens doors at Washington State. Our scholarship endowment—built by donors large and small—makes the Regents Scholars program possible. Bringing excellent students to WSU helps everyone receive a better education. Yet, there are still students who cannot afford to attend college. We need your help to build a future for WSU where all deserving students can afford to complete their degrees. We need your help to retain and recruit the best faculty and give our hard-working researchers and teachers the resources that they need to continue their top-notch programs. Private support in these areas moves us closer to achieving the vision created by students, faculty, and staff detailed in the new strategic plan.

This University has an obligation to create the citizens of the 21st century—graduates, students, and faculty who think globally, are comfortable in an international context, and understand how to keep the United States and the state of Washington competitive in the global economy.

The role of the Washington State University Foundation is to find sources of private support and help our donors and friends determine where their interests and investments will have the most impact at WSU. Last year, despite a challenging economic environment, the Foundation raised more than \$42 million for WSU's highest priorities. I am deeply grateful to this organization for all of the work that it does for the University.

Under the new leadership of Rick Frisch, Vice President, University Development, and President of the WSU Foundation, we are looking forward to continuing this successful partnership that will take Washington State University to a higher level of achievement and excellence. You are part of this partnership—you hold the key. I look forward to working with you toward this vision.



V. Lane Rawlins, President
Washington State University

You hold
the key...

Washington State University Foundation Board of Trustees 2001-2002

Volunteers are the key to Washington State University's efforts in securing private philanthropy. We are pleased to acknowledge the efforts of our trustees and thank them for their generous gifts of time and resources to open doors for others at Washington State. They serve as an example for all private donors and provide exemplary leadership in the Foundation's prudent stewardship of all gifts.

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For Opening Doors at Washington State University

Your support helps make Washington State University "World Class. Face to Face."

The Washington State University Foundation is a non-profit, tax-exempt charity that develops support and manages assets to the benefit of Washington State University. The Foundation is governed by a board of trustees that includes professional, business, and philanthropic leaders, as well as the University President, faculty, and students, who are dedicated to excellence at WSU. Pursuant to RCW 10.09, the Washington State University Foundation is registered as a charitable organization with the Secretary of State of the state of Washington.

No administrative fees were levied against gifts, and all funds received went directly to the designated purposes specified by the donors. For more information about how you can support Washington State University, please call or write Washington State University Foundation, French Administration Building, Room 442, PO Box 641042, Pullman, Washington 99164-1042, telephone 509-335-6686, or 800-GIV-2-WSU; or visit the Washington State University Foundation website at www.wsufoundation.edu.

As a supplement to this report, the WSU Foundation publishes The Honor Roll of Donors, which lists the names of our loyal supporters, to whom we are extremely grateful. All donors of gifts of \$100 or more will receive a copy at their preferred address. If you do not receive a copy and would like to obtain one, please call the WSU Foundation or go to the WSU Foundation website, where a copy is available for viewing and downloading.



Washington State University Foundation Annual Report is published annually by Washington State University, PO Box 645910, Pullman, Washington 99164-5910. Washington State University Foundation Annual Report 2001-2002

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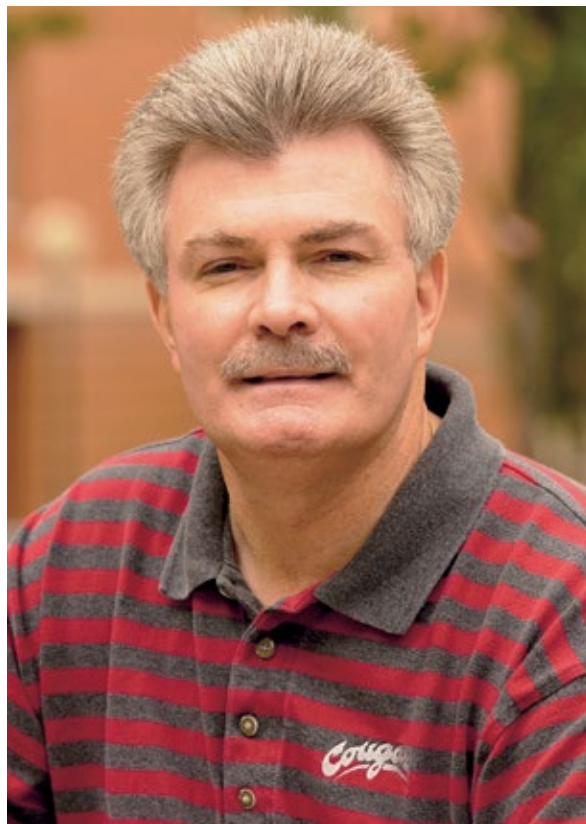
WSU VETERANS MEMORIAL

A Legacy of Hope

Ten years ago, most doctors could only give persons with cancer treatment options and survival statistics. Conversations rarely focused on a person's quality of life as part of decision-making about cancer treatment. Today, armed with the results of research by Washington State University professor Mel Haberman ('69 B.S. Zoology, '71 B.N. Nursing) and colleagues across the nation, oncologists approach cancer treatment from a holistic viewpoint, including quality-of-life considerations in decisions about the course, timing, and outcomes of treatment.

According to Haberman, "Quality of life is a very personal thing—each survivor decides what it means to them, weighing how treatment will affect them mentally, physically, socially, spiritually, and in terms of their freedom from pain, feeling in control of life, and the anticipated impact of the illness on their family."

Haberman is associate dean for research at the WSU College of Nursing and an affiliate investigator with the Quality of Life Assessment Group at the Fred Hutchinson Cancer Research Center in Seattle. He and noted University of Washington cancer researcher Dr. Frances Marcus Lewis are collaborating with the Spokane medical and nursing community on a study of quality of life among couples experiencing a metastatic recurrence of advanced breast



Mel Haberman: "When I listen to [cancer] survivors, I discover the richness and resilience of the human spirit..."

cancer. "Our goal is to develop strategies that will augment the couple's ability to manage family stress, children's concerns, the side effects of treatment, and the many ways cancer changes daily life and routines," Haberman states. Recently, he worked with Dr. Lewis and a group of private donors and Spokane hospitals to honor the memory of WSU nursing educator Denny Murphy. Funding was obtained to offer an intensive training program to local cancer support staff who, in turn, are now available to assist couples with newly diagnosed breast cancer.

Haberman has explored the psychosocial aspects of cancer with colleagues from across the nation for about 17 years, utilizing funds from private organizations and government agencies,

including the National Cancer Institute. Results from this collaborative work earned national recognition and are featured in numerous publications.

"Our research chronicles how cancer survivors learn to create an optimal quality of life for themselves and their families. By giving over 1,500 survivors a forum for telling their stories, our research findings provide a heritage and legacy of hope for future generations of survivors," he says. "When I listen to survivors, I discover the richness and resilience of the human spirit and people's capacity to find strength and meaning in adversity. Cancer survival is about living life to the fullest, in spite of the disease."



Berger Keatts ('50 D.V.M.), left, sought to honor the memory of Dr. John McCoy, former dean of the College of Veterinary Medicine. Berger, a retired veterinarian and farmer, says Dr. McCoy had a tremendous influence on his career choice. Berger lauds Dr. McCoy as an articulate and thorough instructor whose diagnostic skills were unparalleled. He recalls how Dr. McCoy often astonished students with an acute ability to "practically see right into his patients."

What's Your Legacy?

In 2001 retired Pomeroy farmer and veterinarian Berger Keatts, ('50 D.V.M.), included a bequest in his will as part of his overall plan to establish the "Berger Keatts Distinguished Professorship" in the College of Veterinary Medicine. The bequest, coupled with a charitable remainder trust and an IRA designated to the WSU Foundation, will advance research efforts and continue the legacy of instructional quality that places Washington State University's veterinary science program among the top in the nation.



A bequest to fund scholarships, endow professorships, or support other University priorities will allow you to leave a lasting legacy at Washington State University.

For more information on bequests, contact the Gift Planning Office, Washington State University Foundation, PO Box 641042, Pullman, Washington 99164-1042, 800-448-2978, gift-planning@wsu.edu, <http://wsufoundation.wsu.edu>

