

CONNECTING WASHINGTON STATE UNIVERSITY, THE STATE, AND THE WORLD • WINTER 2003-04

Washington State

m a g a z i n e



COVER
STORY

Washington's Marine Highway—Sailing into the 21st Century

Friendlier Bugs, Fewer Chemicals • Boeing's Dreamliner • Putting on the Ritz

ALSO: WASHINGTON STATE UNIVERSITY FOUNDATION ANNUAL REPORT 2002-2003

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If you can put other insects to work eating the insects that are bothering you, everybody wins. Except the pests.

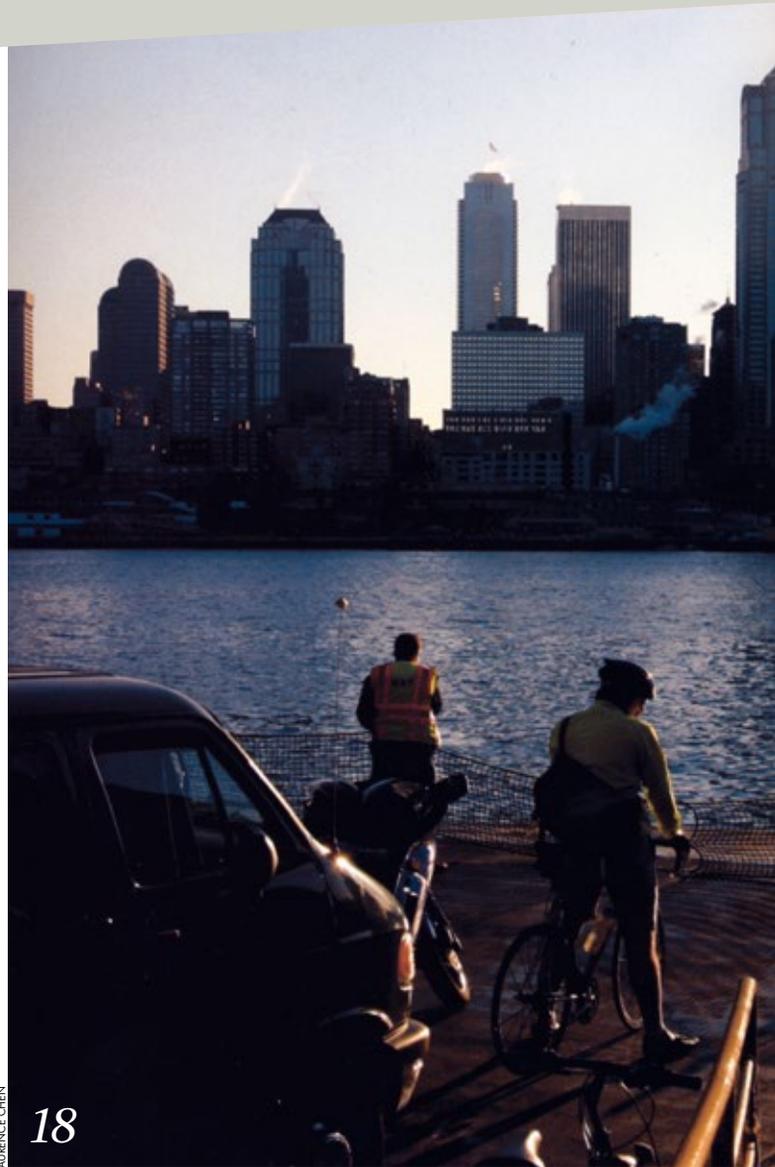
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LAURENCE CHEN



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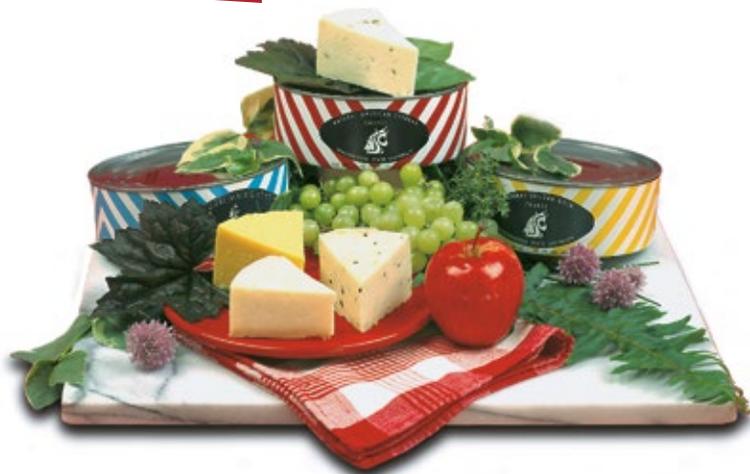
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LETTERS



Cheese Power

As Cougars living on the East Coast, my wife, Lori, and I sometimes forget the fervor for WSU that is a part of our heritage and which our fellow Virginians don't quite comprehend. We are very grateful to have recently survived hurricane Isabel unscathed—just a few leaves and branches in the yard to pick up. The good news is that we brought back three cans of Cougar Gold from our vacation last week that included a stop in Pullman, and even though we were without electricity for three and a half days, our primary concern throughout the ordeal was keeping the cheese cool. We managed to do so but had to sacrifice a frozen turkey in the process—we let the turkey thaw in the freezer but kept it sitting on the cheese! First time a bird nested to keep the contents cool instead of warm. This, after hauling the precious cans all around eastern Washington during vacation and making room in people's fridges to protect it. Now THAT is the power of cheese!

Glenn Williams '89
Williamsburg, Virginia

Pacifist Rantings

We found Tom Tiede's article on journalists' coverage of wars both informative and provocative. However, several of Tom's additional editorial references were puzzling at best and lacking in support. (Surely, he must know that these expressions of his personal opinion would elicit quick responses from his readers.)

(1) He labels recent U.S. actions "wars of revenge" without including any factual basis to back up this statement. This certainly does not fairly characterize America's actions against tyrants around the world.

(2) He states that the "sanitizing of warfare contributes to . . . forces that perpetuate warfare, one of which is public delusion." This assertion rests upon the unwarranted assumption that wars can be reduced, or perhaps evaded, if U.S. (and other countries') citizens receive the full stark pictures of war.

War is absolute hell and has always been among the worst examples of man's inhumanity to man. No one but the totally unin-

formed or very young can possibly not know that. Moreover, there is no evidence that merely showing more of the dark side—the blood and guts—of wars will deter man's evil instincts.

(3) Tom refers to our country's combat experiences as "incessant enterprise," as if he believes these conflicts were avoidable—or even unnecessary—or worse yet, implies that the United States somehow revels in them.

These biased opinions are presented without any proof whatever, thus seeming to violate Tiede's own goal to "get the story, the whole story, and nothing but the story."

Of course, Tom Tiede has a perfect right to state any comments or opinions he wants to, but in so doing here, he seems to be laying much of the blame for the evils of current wars on the United States—definitely a huge stretch. Thankfully, the vast majority of our citizens do not share this view.

*Gordon Pilcher '49 General Studies,
'51 M.A. Econ.
Mountain View, California*

A faculty member I met at WSU 20 years ago made this wise observation: "The truth shall make you free, but first it shall make you miserable." Thank you for publishing Tom Tiede's comments in your latest issue concerning warfare in general and our own country's involvement in warfare in particular. Tiede's hard-hitting comments offer a respite from the narrow and unreflective reporting offered by most modern media. Looking misery in the face hurts, but otherwise how can we hope to overcome its causes?

*Phillip N. Venditti, Ph.D.
American Culture & Language Institute
Wenatchee, Washington*

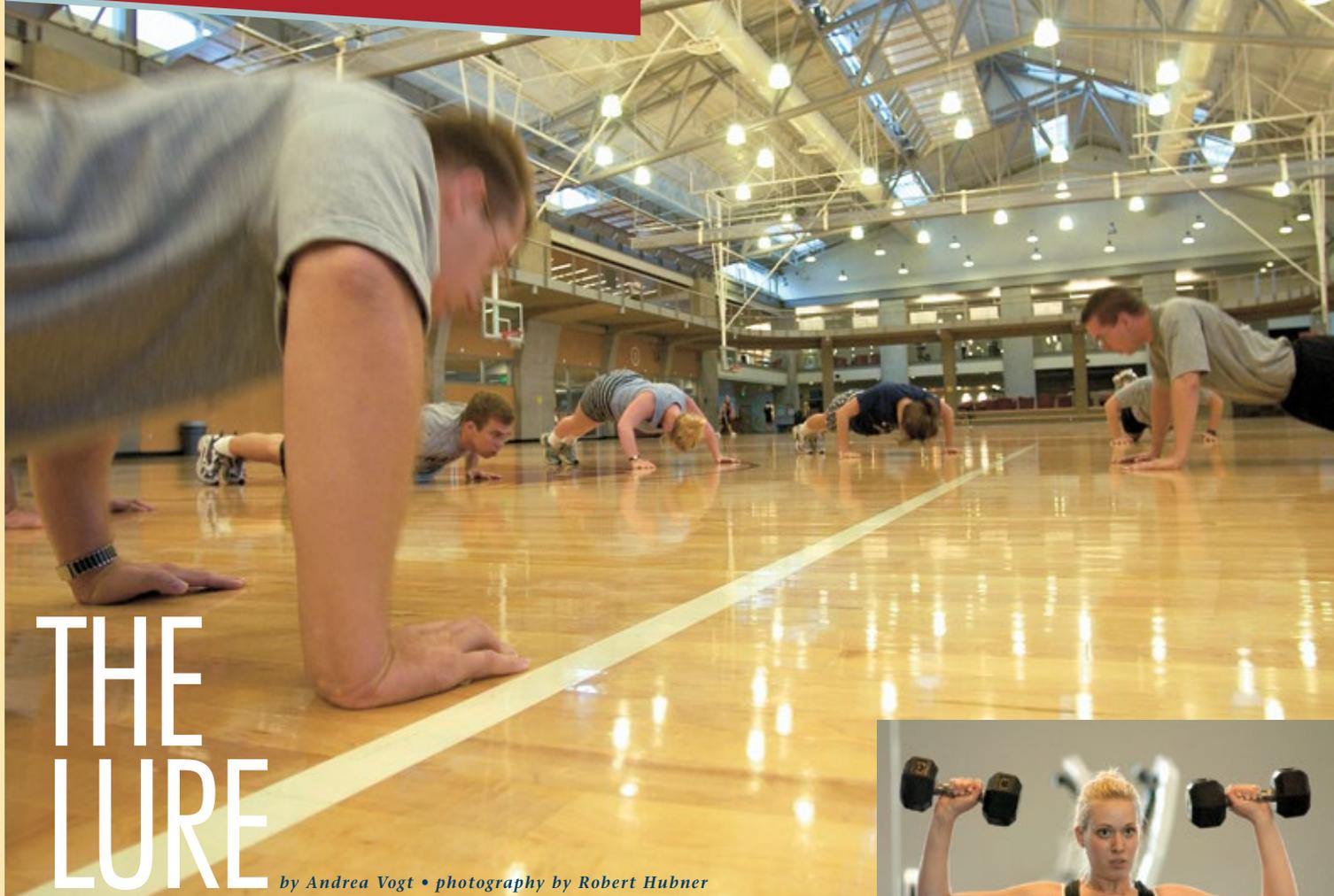
I found it very disappointing that you would choose to publish Tom Tiede's anti-military diatribe in the Fall 2003 *Washington State Magazine*. That type of insult to the many of us who have served with great sacrifice and conviction in the defense of our country is reprehensible. Emotional, poorly justified pacifist rantings certainly deserve to be printed in *Salon* or the *New York Times*, but not in a fine university publication that receives support from alums like me.

Please dispense with the inflammatory radical political discourse that this article represents and stick with the many unique-to-WSU articles that alumni truly enjoy reading.

*Henry B. Lampe '71 Bus. Adm.
Southlake, Texas*



PANORAMAS



THE LURE

by Andrea Vogt • photography by Robert Hubner

The stakes are high for universities across the country in competition for students. Washington State University improved its odds with its recreational gem.



AT THE END of each workday, Kathleen Hatch takes a lap.

She steps out of her office and walks through a weight-training area that, at 17,000 square feet, is the largest of its kind in the nation. She peers down into the naturally lit lap pool and accompanying 53-person hot tub, pokes her head in on a pilates class, and strolls past billiards and Ping Pong tables before rounding the four-lane elevated track that circles the gymnasium.

It counts as a light workout, but

Hatch's true motive is to take the pulse of one of WSU's most expensive pieces of real estate—the \$39 million Student Recreation Center she directs.

The old facilities left much to be desired, students say. There were always long waits to get into a stuffy, windowless, 5,000-square-foot weight room with outdated equipment. This facility offers not just more space: There are nutrition clinics, Internet portals, espresso and juice bars, personal trainers, massage therapists, and seminars

on everything from weight loss to grizzly bear awareness.

Though some wince at the idea of these elaborate recreation centers taking precedence over libraries' long wish lists, recruitment-minded colleges and universities are sparing little to build centers that emulate some of the nation's most deluxe health clubs.

"Colleges and universities are having to compete for students more," says Barry Brown, marketing director of the National Intramural-Recreational Sports Association,



“and when they come to campuses, the rec center can be a determining factor for them to choose that university.”

That’s exactly what happened when Noreen Kariuki came to WSU to visit with her parents from Federal Way, Washington, last spring.

“I saw this and said, ‘I have to come to this school,’” says Kariuki, as she cycles on a machine with a bird’s-eye view of a basketball court packed with young men playing hoops. More than 25,000 prospective students tour the facility annually, and it’s one of the first stops for coaches trying to lure athletic recruits to WSU. University of Washington and Gonzaga University officials have also stopped by to check out the hype. As more universities pour money into fancy recreation centers, there’s more pressure

THE REC CENTER INDEX

\$4,380,000,000

Estimated construction and renovation cost of planned recreation facilities between 2003 and 2008 among 725 colleges and universities that are members of the National Intramural-Recreational Sports Association (NIRSA).

\$3,953,367,000

Estimated mean amount spent per academic year on athletic apparel and clothes by users of college recreation sports, according to a 2002 NIRSA study of the economic impact of recreation sports programs.

\$2,862,783,000

Estimated mean amount spent per academic year on athletic shoes by users of college recreation sports. Same study.

\$1,590,435,000

Estimated mean amount spent per academic year on bottled water by users of college recreational sports. Same study.

\$39,000,000

Amount spent on WSU’s Student Recreation Center.

\$3,000,000

Amount spent annually to maintain the center.

\$700,000

Amount spent on payroll for students employed at the center.

160,000

Number of square feet of recreational and fitness equipment at WSU’s rec center.

17,000

Number of square feet for free-weight and cardio fitness training in WSU’s student rec center, which WSU boasts is the largest such training area at a student rec center in the nation.

4,000

Average number of people who enter WSU’s rec center Monday through Friday during the first three to four weeks of school.

400

Approximate number of students employed at WSU’s rec center.

25

Number of years it will take WSU students to pay off the construction bond for their rec center.

0

Amount of slack WSU student employees at the rec center gave to WSU president V. Lane Rawlins when he tried to enter once without identification. Even the prez needs to carry his Cougar Card!

on everyone else to keep up, especially in the health-conscious Northwest, whose residents lead the nation in active living.

Such attractions are a draw not only for students, but also for their parents, eager to know their incoming freshmen will have a healthy alternative to the college bar circuit or campus parties. Rec center officials try to keep up on the latest fitness trends, offering new courses each year, such as this fall's invitingly titled "boot camp," as well as flatwater kayaking and belly dancing.

The center **stays on top** of trends in part because it's largely run by students. Four hundred students are employed on a \$700,000 pay-

roll, making the center one of Pullman's largest student employers.

And it was students who originally requested, lobbied in favor of, voted on, and now pay for the center, the result of a 1998 student referendum calling for a self-imposed fee of \$100 per semester to pay for construction, maintenance, and operation of the center. The 25-year bond requires WSU to pay a \$3 million debt annually. Operation and maintenance take another \$3 million.

There has been some grumbling each year as fees have edged up without students' consent, adding to the already difficult burden of tuition hikes. Students have watched the original \$100 fee climb

to \$120 per semester over the course of three years. The fee increase translates into salary increases and annual improvements, such as the 50 new cardio machines on the floor this fall.

There is a sense of responsibility to justify the expense, admits Hatch, the center's director. "The \$40 million question is, is this a luxury or a necessity? You don't spend \$40 million to win a couple of awards. The physical building has to inspire activity, reach students who are sitting on the fence. But since the day we've opened, we've seen evidence of that happening." ■

What is this drug, and what does it do?

ON A TYPICAL DAY, a dozen pharmacists, physicians, and other health care practitioners will call the Drug Information Center (DIC) in Spokane for some help.

"The questions run from easy ones we can answer right away to ones where three days from now we still don't have an answer," says Danial E. Baker, DIC director and a pharmacy professor at WSU Spokane.

The center, which was started in 1973 and is primarily funded by grants and contracts, also serves as a teaching laboratory for up to four pharmacy students at a time. Students in their final year of pharmacy school spend six weeks in the center becoming familiar with sources of drug information and helping answer questions.

Terri Levien and Danial Baker (standing) work with pharmacy students Tyson Henderson ('02 Ph.D.) and Anh Tran ('02 Ph.D.) to help pharmacists identify drugs and their effects.



Demand for the center's services continues to grow.

"There are some days when the phone doesn't stop ringing," says Baker.

Most of those who call the center are pharmacists working in Washington, Baker says. The center charges a fee to insurance companies and receives donations from some of its users and the pharmaceutical industry. It is not involved with any requests related to medical malpractice.

Callers want help identifying a drug a customer has brought to them, Baker says, or they want validation of something they heard on the news, or they want to know if a patient's symptoms could be drug related.

They also may want to know what the Food and Drug Administration is doing with particular drugs, Baker says. The job requires him to be aware of the latest information about prescription drugs, and he starts his day monitoring various news outlets for drug reports.

Baker and the center's assistant director, Terri Levien, actually produce some of the information used nationally about various medications or drug interactions.

Both write a minimum of five new-drug evaluations each month for Facts & Comparisons, a drug information publishing company based in St. Louis, Missouri.

Baker and Levien are the editor and assistant editor, respectively, of a new pharmacy professional journal, *Advances in Pharmacy*. ■

—Lorraine Nelson

◆ PERSPECTIVE ◆
by Anjan Bose



BLACKOUTS

How often do we want them?

LIVING IN A SUBDIVISION where the power lines are strung on poles in our back alleys, we have had more than our usual share of power outages this summer. This has been blamed on the rapid expansion of the neighborhood squirrel population because of the loud pop of the short circuit that preceded every incident. On August 14, my wife wondered aloud how big the squirrel must have been to have popped everything from Detroit to New York City.

The blame game for the massive outage is just starting. We'll hear about the operators who didn't open circuit breakers in time, the engineers who didn't design the separation schemes just right, the manufacturers whose equipment didn't work exactly, the (de)regulators who didn't provide the right incentives. With a few months of hindsight analysis, there will be lots of blame to go around. The difficult part will be to find the actual solutions that will prevent such cascading blackouts.

Let's get one thing straight. Power outages will happen; there are "squirrels" everywhere. But the probability of large, cascading blackouts can be reduced—through reliability engineering. Reliability engineering for the power grid was worked out after the 1965 blackout. Given that nothing as extensive as that blackout reoccurred until 2003, some may even think that once in 40 years is an acceptable level of reliability. Whenever such an incident occurs, however, we

need to ask whether the reliability is going down. Unfortunately, most engineers believe that corners have been cut in grid reliability in recent years, and the probability of blackouts is going up rather than down.

One obvious and immediate action is to beef up the reserve capacity in transmission. This has been falling due to increases in both generation capacity and electricity demand but no new transmission lines. The engineering necessary for determining new transmission needs is well understood; all the barriers are disagreements on how to get it done economically and politically. This blackout may break the logjam.

Incidentally, the reserves of generation capacity, although barely adequate for now, can easily fall short, as it is mostly affected by market forces and not reliability concerns. Many economists predict boom-bust cycles in generation capacity. The fact is that somebody needs to be in charge, with both the responsibility and authority for adequate grid reliability. For 30 years after the 1965 blackout, the regulated utilities developed reliability standards and voluntarily designed and operated the grid according to these. Since the breakup of these companies during the 1990s, organizational responsibility for grid reliability has fallen through the cracks, to the despair of the generation of post-1965 engineers.

In the long run, it is not enough to just ensure transmission and generation capacity. This will ensure

reliability but is expensive not only in cash, but also in environmental impact. New technologies must be developed, which means research and development. The electric power industry, one of the largest, is one of the smallest spenders on R&D. This distinction is not only limited to the utilities and manufacturers, who usually do the applied research, but also the federal government, which relegated basic research in this area to a very low priority.

The result of this neglect is the lack of any dramatic breakthroughs in generation and transmission technologies in several decades. Even where technology breakthroughs have appeared—new power electronics that can better control grid equipment, new communications that can provide split-second coordination of such controls, microprocessor technologies that can better track everything happening on the grid, to name just a few—their application and adoption have been sporadic at best.

As a society, we need to figure out how this R&D will get done. The complete deregulation of electric generation and the ensuing competition may spur R&D spending on generation technologies. A glimmer of this is already visible with the heightened interest in wind generation, fuel cells, and micro-turbines. Distribution and transmission, however, will continue to be the problem of the commons, and R&D will have to be funded either by

government or with the proper incentives to private industry. The health of the grid and its technological improvement will have to be dealt with as a public good.

Finally, we must consider the oncoming crisis in the workforce needed to design, build, and operate the infrastructure that keeps our lives humming. There has been a major downsizing of the utility industry in North America, not to mention the offshore outsourcing of most of the equipment needed for this industry. Of the remaining workforce, from skilled linesmen and technicians to power engineers, a majority are closing in on retirement age. The training and education pipeline needed to produce the replacements has slowly dwindled in keeping with the downsizing of the industry. If we decide to start reinvesting in this critical electricity infrastructure, we will also have to start cranking up the needed training and education.

The reliability of the power grid is not a mystery; it can be maintained at the highest level that we expect. It costs money, of course, but more than that, it requires attention and will. We can't stop lightning strikes, storms, random equipment failures, human errors—and squirrels—but we certainly can decide how often we want cascading blackouts. ■

Anjan Bose is dean of the College of Engineering and Architecture, and director of the Power System Engineering Research Center at Washington State University.

◆ FROM THE PRESIDENT ◆

ALL FOR ONE, ONE FOR ALL

by V. Lane Rawlins, President
Washington State University

IN THE PRESIDENT'S CONFERENCE room, I have placed a Smithsonian Institution poster showing a group of about a dozen meerkats. For many years I have been fascinated by these small mammals, about the size of prairie dogs, that survive in the harsh conditions of the Kalahari Desert. I first learned of them in an article in the *Smithsonian* magazine in the early 1980s. They have been the subjects of extensive study, not just because they are small, cute, and generally friendly to humans, although these factors probably play some part. Observers are fascinated by their propensity to work together, sacrifice for each other, and practice the division and specialization of behavior for the good of the group. In an article relating some findings from a lengthy study in the September 2002 *National Geographic*, Tim Clutton-Brock writes, "This long-term study, from 1993 to 1998, grew out of my belief that meerkats might offer vital insights into the evolution of mammalian cooperation."

As a reminder of the importance of teamwork within Washington State University, I sometimes ask my colleagues to identify with one of the meerkats in the poster. We are not in the Kalahari Desert contending with eagles, wild dogs, and other predators, but we do face problems in shrinking budgets, new demands on our resources, increasing regulations and restrictions, and the challenge of keeping current in a dynamic research and teaching environment. Success depends on working together to use our shrinking state appropriation effectively, find new sources of support, and employ all of our resources in pursuit of University priorities.

By now most of you know that our "core four" goals include providing the best undergraduate education, attaining new heights in research and scholarship, promoting trust and respect within our community, and maintaining a commitment to excellence in all that we do. Each of these goals demands collective commitment, but I believe that the one that most effectively pulls us together is our commitment to students and their education. And working together is not always easy, because, by its very nature, a university brings together people whose interests and skills are extremely diverse. To start with, faculty expertise ranges from poetry to animal science. WSU is a place with scientists in genomic studies and



President V. Lane Rawlins joined hundreds of other members of the WSU community last fall to welcome arriving freshmen.

RAAH BOSE, COURTESY OF MOSCOW/PULMAN DAIRY NEWS

scholars focused on global politics or world history. In addition, we have policemen, coaches, electricians, as well as professionals in information technology, student affairs, libraries, and a list too long for this space. This diverse organization is a working community because of our common purpose.

Recently I attended a reception for students who have been offered the prestigious Regents Scholarship. About 25 staff and faculty attended with me and worked as a team in addressing the concerns of these prospective students and their parents. As thousands of new students arrived this fall, I saw hundreds of staff, faculty, and senior students helping the new freshmen move into their dorms and apartments and making them feel welcome in our community. Last spring, when there was deep concern about the consequences of war with Iraq, the faculty and staff were available to direct discussions, help with questions, and keep an open environment for dialog among our students. These are examples of community values reflected in individual effort and commitment.

When I ask students and alumni about their experiences at the University, I frequently hear about help they received from an individual faculty or staff member at a time when they were making critical choices or dealing with a personal issue. These stories are often very touching and personal. I know we miss some who pass through WSU without those positive experiences, but I am proud to be a part of an institution that has centered its values and goals on student needs. We become a community, which is more than just a place where we work and attend school, when we focus our efforts on that common purpose. For meerkats, the consensus is that their incredible cooperation stems from a group commitment to the next generation. The tribe cares for and teaches the young in a collective way with the responsibilities of parenthood shared across the group. Someone gave me a "meerkat motto" shirt that reads, "All for one and one for all." That is not all that different in spirit from "World Class, Face to Face." ■

A new method for measuring **HEART RISK**

ALMOST 500,000 PEOPLE in the United States die each year from coronary artery disease, the most common type of heart disease. Half of those people didn't even know they were at risk or had any symptoms of the condition, according to the American Heart Association.

This could change, however, with the adoption of more accurate ways to identify who has the dis-

ease, instead of relying on less consistent risk factors like cholesterol levels.

During the past 10 years, more than 1,000 Washington state residents have participated in the Spokane Heart Study, which might do just that—change the way coronary artery disease is identified. Every two years, study participants have given blood and urine samples, been psychologically profiled, and

answered questions about diet, exercise, job stress, and family medical history. They've also had 10-minute electron beam computerized tomography (EBCT) scans of their hearts to see if calcium has accumulated in their arteries.

This last step measures coronary artery calcification (CAC), which Dr. Harry Mielke, study leader and former director of the Health Research and Education Center at

Washington State University Spokane, predicts “will be a really important factor” in determining who is at risk for coronary artery disease, since traditional risk factors don't necessarily correlate with actual risk.

Coronary artery disease begins when lesions form on the inside of blood vessels leading to the heart. Vessels become inflamed, and then fat, cholesterol, and calcium in the blood collect to form a plaque, a condition called atherosclerosis. This buildup narrows the vessels, preventing blood and oxygen from getting to the heart. Sometimes the plaque ruptures and causes a harmful blood clot elsewhere in the body.

When the study was started in 1994, high blood pressure, high cholesterol, smoking, obesity, and diabetes were well known as risks to heart health. “We were going against mainstream medicine [by looking at CAC],” Mielke says. Today, the Center for Disease Control and Prevention has joined the study, conducting some difficult analyses of blood and urine, and researchers in Switzerland are duplicating the study there.

“Traditional risk factors are pretty weak,” Mielke says, pointing out that many people know someone who died unexpectedly from a heart attack despite apparent good health. EBCT scans, which show calcium found in arterial plaques, can potentially provide quick, quantifiable measurements of heart disease risk.

According to Mielke, one unique aspect of the Spokane Heart Study is the focus on people who aren't sick. He says preventive measures like bypass surgery and angioplasty work pretty well when people know they're sick—the problem is identi-

Writer Alison Emblidge gets her heart health checked through a procedure developed by Harry Mielke (standing). *Washington State Magazine* is pleased to report that her heart is healthy.



fying the people who are at risk but asymptomatic.

The study results show that almost half the subjects whose EBCT scans showed calcium deposits had no traditional risk factors but could still be at risk for developing additional heart problems.

Some participants had high cholesterol levels but showed zero artery calcification, suggesting that they aren't at risk at all.

Besides being able to detect heart disease in "low-risk" patients, heart scans using computerized tomography have significant advantages over other methods of detection. "There's nothing to it," says Mielke, noting that the procedure is noninvasive and fast. All patients have to do is hold their breath for about 20 seconds, while the table they're lying on is shuttled through a donut-shaped machine. Electrodes on the surface of the skin monitor heart rate and trigger the machine to take pictures at specific, standardized points during the heart beat. The result is a series of cross sections showing the patient's chest. Calcium in bones, and any that might be present in arteries, shows up white on a dark back-

ground, similar to an X-ray, and can be measured.

Compared with coronary angiography, considered the definitive test for heart disease according to the Mayo Clinic, EBCT scans are remarkably simple. In angiography, a catheter is routed through an artery from the arm or groin to the heart, and a dye is injected in the vessel, which shows narrow points on an X-ray.

Despite the ease of EBCT scans, Mielke emphasizes that it's still too early to change recommendations related to heart disease detection. The research team is putting together data to determine who should get the \$300 scan and whether people with high cholesterol and no CAC should stop taking drugs to lower cholesterol. They also plan to continue the study for another decade.

In the meantime, the program has set up a good research base and provided an important way to involve the community in research, Mielke says. "Spokane has always been on the cutting edge of heart research." ■

—Alison Emblidge

A MAGNET FOR ENTERTAINMENT

Beasley celebrates 30th anniversary

AS BEASLEY Performing Arts Coliseum marks its 30th anniversary this year, there's been much to appreciate about the multipurpose building. It has a great sound system and sight lines. The entertainment is big-time and varied—Broadway shows like *Jesus Christ Superstar* (1988) to Cougar basketball games and crafts fairs. One wonders how the University managed before the \$8 million facility opened for Commencement in 1973.

Capacity is 12,000, or 4,700 in a mini-arena configuration, and 2,500 in the theatre at the coliseum's west end. Basketball made its debut in Beasley in 1973, and George Raveling's 1982-83 Cougars (23-7) went undefeated in the coliseum.

Comedians, including Bob Hope, Bob Newhart, and George Burns, have always been popular on WSU Mom's and Dad's Weekends. Bill Cosby drew 10,000 in 2002. This fall Jay Leno returned for the third time.

Campus security was never tighter than for Walter F. Mondale's January 1978 visit. Secret Service agents arrived days earlier with a bomb-sniffing dog to check out the coliseum.

When a portable stage failed to arrive for Earth, Wind & Fire's 1979 performance, one was quickly fashioned from footlockers on loan from Army ROTC. The show went on. Garth Brooks sold out back-to-back performances in late August 1993.

The annual Edward R. Murrow Symposium has been a fixture



Garth Brooks

For four days and three nights in early September, the Whitman County Fairgrounds on Highway 26 west of Colfax, Washington, come alive with the Palouse Empire Fair—and Jerry McCollum's evocative photograph cradles the fair squarely within the agricultural landscape it springs from.



Bob Hope



in the coliseum theater, an opportunity for WSU to honor some of the top print and broadcast journalists. Elaborate decorations have also transformed part of the coliseum into a ballroom for the WSU Foundation Gala Recognition Dinner.

"We're booked 150 days a year," says coliseum director Leo Udy, who succeeded 25-year director Jim Crow. "People in the industry know we can do the big shows."

Past performers include Anne Murray, Stevie Wonder, Olivia Newton-John, Kenny Rogers, Loretta Lynn, Dionne Warwick, Gordon Lightfoot, Tina Turner, Wynonna, Huey Lewis and the News, and the Steve Miller Band also have left their mark, along with illusionist David Copperfield and speakers Cesar



Tina Turner

Chavez, Helen Caldecott, and Ralph Nader.

Udy and an ASWSU entertainment subcommittee work together to identify acts. In a 2002 survey, 250 students responded with 160 different possibilities. In overseeing a 2003-04 budget of around \$500,000, Udy takes into account three factors: What are people interested in? Can the coliseum afford it? Is the act/performer available?

"We're kind of a hidden commodity—a town of 26,000, with 100,000 people living within 30 miles," Udy says. "A lot of entertainers don't know where Pullman is, but when they come, they are pleasantly surprised by the town, campus, and coliseum." ■

—Pat Caraher

To view more of McCollum's work, see www.artofthepalouse.com/artists.htm#mccollum



TIM PAVISH new head of WSU Alumni Relations



ROBERT HUBNER

Tim Pavish

TIM PAVISH has been named executive director of Washington State University Alumni Relations and the Alumni Association. The 1980 graduate of WSU's Edward R. Murrow School of Communication was selected from 50 applicants in a national search. He began his new job September 8, succeeding Keith Lincoln, who is retiring.

"Tim has been a tremendous friend of our university over the years. We have greatly appreciated his loyalty, his hard work, and his wise counsel. He is an ideal choice to continue the job of building the association and meeting the needs of our alumni," says WSU president V. Lane Rawlins.

Before accepting the WSU post, Pavish was a managing partner of DDB Worldwide, Inc. in Seattle. He joined the firm in 1983 and helped it grow from \$10 million to more than \$220 million in client billings, making it the largest communications agency in the state. As managing partner, he was responsible for directing the advertising division, the largest and most profitable of the agency's four operating units.

Pavish saluted Lincoln and the vibrant alumni association he and his staff have built over the past 26 years. "It's clear WSU alumni care deeply about this university," he said. "I am thrilled with this opportunity. I love Washington State University and am proud of all it has achieved. There is more to be done. We'll do our best to ensure that alumni get the most out of their involvement with WSU and that alumni have meaningful ways to give back to their alma mater."

The Walla Walla native has remained involved with WSU since graduating. He is a trustee ambassador on the WSU Foundation Board of Trustees and a current member of the WSU Athletic Foundation Advisory Committee, the University's Advancement Communications Committee, and the Professional Advisory Board of the Murrow school. He is a past winner of the WSU Foundation's Alumni Service Award and has served as a communications advisor to WSU administration.

He has also directed the development and execution of award-winning advertising campaigns in support of the WSU Foundation and WSU Athletics.

Pavish also led DDB Worldwide, Inc. in becoming a benefactor of WSU, and he established the DDB Minority Student Scholarship in support of the Murrow School of Communication and WSU Athletics.

He is married to Carin Hull Pavish ('80 Clothing and Textiles). The couple has two children, McKenzie, 12, and Ben, 9. ■

—James Tinney

NEW DEAL AT THE LIBRARY

THE WORKS PROGRESS Administration (WPA), established by President Franklin D. Roosevelt in 1935 as part of his New Deal reforms, was designed to put Americans back to work at a time when the country was suffering massive unemployment from the Great Depression. Now the results of one WPA program can be found on Washington State University's Web site, <http://content.wsulibs.wsu.edu/pncc/pncc.htm>.

Historians working for the WPA in the 1930s and 1940s clipped and archived more than 300,000 newspaper articles dealing with issues and events in the Pacific Northwest from the 1890s to 1940. But it was the inspiration of Ingrid Mifflin, system librarian with the WSU Libraries, that led to the creation of the Pacific Northwest Newspaper Clippings Collection, an electronic archival gem.

The digitized collection contains sources that describe a period of rapid growth and development in the Pacific Northwest. Clippings from newspapers such as the *Spokesman Review*, the

Seattle Post Intelligencer, and the *Oregonian* chronicle the struggle to organize labor unions, such as the Industrial Workers of the World from around 1915, to the increased acceptance of organized labor and the use of strikes as a means to obtain better pay and working conditions in the 1930s.

Thanks to a generous financial contribution by Wallis and Marilyn Kimble in 2002, Mifflin's project to digitize the massive collection began in earnest. The collection of newspaper clippings is housed in dozens of boxes at

WSU's Manuscripts, Archives, and Special Collections offices.

So far Mifflin, along with WSU students working on the project, have digitized and made searchable more than 15,000 articles, pictures, maps, and related items.

The Web site is organized by people and subjects, such as the Coeur d'Alene and Colville Indian tribes, land use issues, inventions, timber and mining industries, and prominent local politicians of the time. But most of the

the construction of the Bonneville and Grand Coulee dams had on state and federal politics, jobs, farming and irrigation, growth, and the Native American population.

At the time of their construction, the dams were heralded as a means of bringing the country out of its economic depression. They were also considered major feats of engineering that could harness the power of the Columbia River and produce an economical and abundant source of energy for the Pacific Northwest.

The dams, however, were not without their critics. They had a tremendous impact on the Native American populations, whose way of life and spiritual and economic ties to the salmon were forever changed by the dams. The site vividly documents the Native American perspective as well.

Mifflin says this one-of-a-kind site has drawn thousands of users since April 2002. Besides providing an accessible historical perspective on Pacific Northwest life in the early 1900s, the site is a source for genealogical research, since names of prominent people are referenced and searchable.

"Students say it's better than reading it in the history books," Mifflin says. "They get a sense of what it was like to live at that time."

The project has been such a success that Wallis and Marilyn Kimble have donated an additional \$76,000 to expand the collection over the next three years.

Mifflin and her students will be busy at least for the next year. They have more than 5,000 articles related to the Grand Coulee Dam yet to scan.

—Megan Guido

ONE HOT LINK

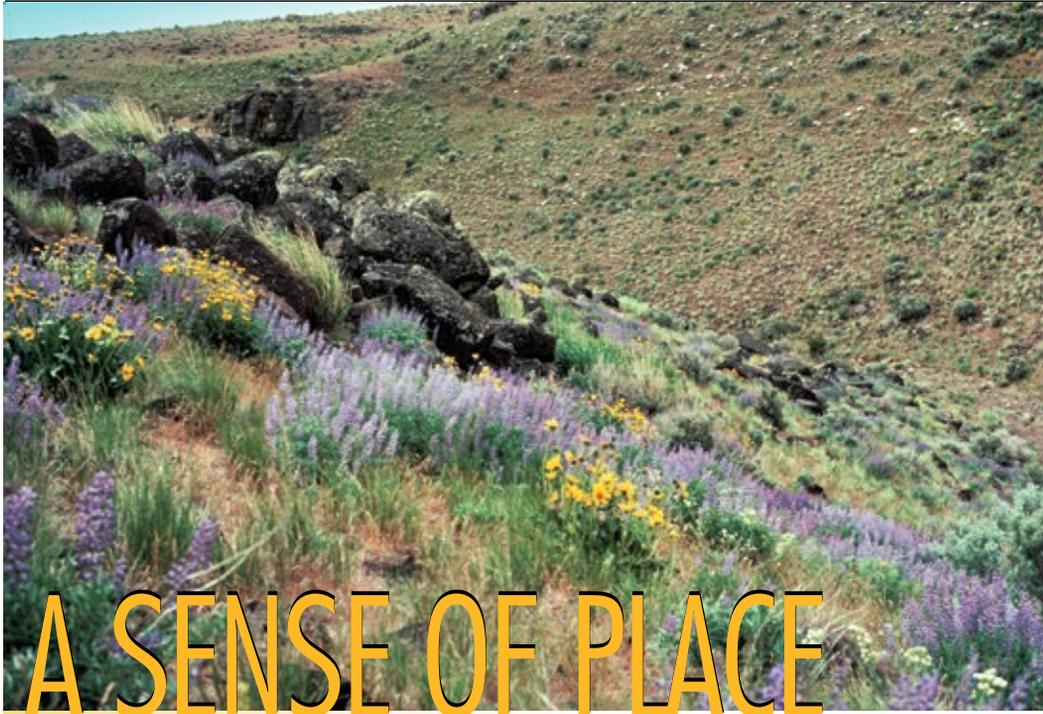
CHECK IT OUT: Pacific Northwest
Newspaper Clippings Collection

<http://content.wsulibs.wsu.edu/pncc/pncc.htm>



—All COULEE COULLEEN BRIDGE BUILT BY ART LACEY, SPokane EVENING PHOTOGRAPHER.

Pictured here are the four outstanding leaders of the Columbia basin project on the observation platform of the Northern Pacific-Spokane Press Grand Coulee flyer just before it pulled out of Cheney, Wash., Sunday on its way to the Coulee dam celebration. Shown (left to right): R. F. Walters, chief engineer U. S. bureau of reclamation; Senator C. C. Dill, Governor Clarence D. Martin and James O'Sullivan, secretary Columbia Basin commission.



Your big (sagebrush-steppe) backyard—near Wenatchee.

tough enough for these conditions include a variety of shrubs, bunch grasses, and forbs. Only near streams or seeps is there enough year-round moisture to sustain clumps of willow, alder, and cottonwood trees.

Artemisia tridentata, big sagebrush, is by far the most common shrub, but other *Artemisias* include stiff sage, three-tip sage, and prairie sage. Other shrubs include bitterbrush, rabbitbrush, and saltbush. These desert shrubs in their soft hues of gray, green, yellow, and rust hold up in the harshest of conditions and provide refuge for elk, deer, coyote, lizards, and dozens of species of birds and small mammals.

The wide spacing between desert shrubs is a survival technique that allows them to stretch their roots and garner the very small but necessary amount of water needed to survive the summer. Those spaces are not empty, though. Interspersed among the shrubs grow the equally water- and nutrient-thrifty bunchgrasses and forbs, most of which go dormant during the summer and do not threaten the larger shrubs' survival.

Unlike sod-forming grasses that spread evenly across the ground to create lawns, bunchgrasses grow in individual clumps. Their extensive root systems absorb and conserve moisture efficiently, and their tufts of stems and narrow leaf blades resist the drying effects of steady wind in the region. As an extra water-conserving measure, bunchgrasses go dormant during the summer months, coming to life only in the wetter seasons of spring and late fall.

Forbs, or wildflowers, are most apparent in the spring, when

A SENSE OF PLACE

Living and gardening in the Pacific Northwest Sagebrush-Steppe by *Tonie Fitzgerald*

THOUGH IT IS the most widespread of plant ecosystems in eastern Washington, covering 24,000 square miles, the sagebrush-steppe is probably the least understood, and therefore the least appreciated, especially among gardeners. By nature, gardeners like to make things grow, and by the looks of things, not much grows in that

desert-like region, except sagebrush. But the sagebrush-steppe region is home to some of the most adaptive and intriguing plants on earth, and gardeners can learn much here to apply to eco-friendly rock gardens and xeriscapes.

The region is most strongly defined by its dryness. Lying entirely east of the Cascade Moun-

tains, it receives only 8-12 inches of precipitation each year. Little to none of that comes during the summer, which accounts for the region's lack of appeal to many gardeners.

Plants in the sagebrush-steppe area survive on a minimum of moisture and make do with some very shallow, rocky soils. Plants

A sampling of rock garden plants

- Achillea tomentosa*, Woolly yarrow
- Aethiomena grandiflorum*, Persian candytuft
- Antennaria rosea*, Pussytoes
- Arenaria montana*, Sandwort
- Armeria maritima*, Dwarf thrift
- Artemisia* spp. (low forms), Wormwood
- Aster alpinus*, Rock aster
- Draba* spp., Draba
- Dryas octopetala*, Dryas
- Erigeron* spp., Fleabanes
- Eriogonum* spp., Buckwheats
- Helianthemum nummularium*, Sun rose
- Lavandula*, Dwarf lavender
- Lewisia* spp., Bitterroots
- Oenothera missouriensis*, Missouri primrose
- Opuntia polyacantha*, Prickly pear
- Penstemon* spp., Penstemons
- Phlox* spp., Creeping and longleaf phlox
- Sedum* spp. Sedums and stonecrops
- Sempervivums* spp., Hens and chicks
- Thymus lanquinosa.*, Woolly thyme
- Viola trinervata*, Sagebrush violet

FURTHER READING

To fully appreciate the magnificence of the sagebrush-steppe system:

Sagebrush Country: A Wildflower Sanctuary

By Ronald Taylor
Mountain Press Publishing, 1990

Singing Grass, Burning Sage: Discovering Washington's Shrub-Steppe

By Jack Nisbet
Graphic Arts Center Publishing, 2000

Watchable Wildflowers: A Columbia Basin Guide

A Bureau of Land Management Publication

ground moisture is ample. This is when the land appears brushed with the subtle purples, pinks, and yellows of the native lupines, phlox, sego lilies, cacti, desert parsley, and balsamroot. The blooms of these desert wildflowers last but a few weeks before the plants tuck themselves into their low-lying and water-conserving cushion or mat forms for summer and underground water-absorbing root forms for winter.

Subtler yet are the many ground-hugging mosses, lichens, and invisible fungi and bacteria that form the region's "cryptogamic crust." This ancient crust layer, all but disappearing now because of livestock grazing and human disturbance, is what holds the land's precious moisture, prohibits invading weeds, and stabilizes its fragile soil.

What can gardeners learn from this land of harsh conditions?

If areas of your property are "like a desert," create a rock garden to showcase the rich array of extraordinary xeric, or drought-loving, plants.

To conserve water, the smaller of the desert plants grow close to the ground in tight cushion or mat forms, with small and heavily textured or hairy leaves. To fully appreciate these fascinating adaptive features, create rock gardens in raised beds, terraced slopes, or mounded areas to invite close inspection.

Xeric plants require fast draining soil. If the ground is not already dry and gritty, mix a three-inch layer of pea gravel or coarse sand into the top foot of soil. To establish plants, mimic spring conditions of ample moisture, but once they're established, water only after the top few inches of soil are dry. ■

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

SEASONS|SPORTS

SPORTS|SEASONS photography by Shelly Hanks

MATT POTTER Puts Positive Spin on Cougar Soccer



MATT POTTER is a disciple of the school of positive thinking. His life's philosophy and his approach to coaching are interwoven. Teaching and soccer are his passion. "In combining the two, we can learn a lot about life," says the Mere, England, native. "Really, it's about becoming the best we can be individually and as a team."

That is what he seeks for himself and for the women who compose the Washington State University soccer team. He was promoted from assistant to head coach in June, succeeding Dan Tobias, who moved on to the University of Arizona. Two days before WSU was to make its debut, Potter was asked if he had any early concerns about the 2003 season.

"We really don't," he said. "We're excited about it."

Still, he must have had mixed emotions about the team's opener? North Carolina had won 17 of the last 24 NCAA women's soccer titles. Rather than bemoan the difficult schedule, Potter chose to look at the bright side. He was thrilled to have his team play on the same field with the perennial national power.

Potter likes to focus on what he and the Cougars can control. From day one, he's worked on building confidence, in "piecing things

together" so WSU can play with anyone. He doesn't want to get caught up in just one game, one opponent.

The teacher/coach/sports psychologist is intent on instilling core values that apply to soccer, academics, and life: Always be prepared to learn, be positive-minded, passionate, hard-working, accountable, stay in tune with yourself, and build relationships.

"If you give your best effort, only good things can happen," he says. "The more confident we play, the more positive we are, the better we'll do." Toward that goal, he's defined roles or "job descriptions" for his players so as to reduce the unknowns. Being sharp mentally, understanding assignments, and communicating can mean the difference between a victory and a loss. It is not necessarily the team that is the most opportunistic that will win, he says, it's the team that makes the fewest mistakes.

In the Cougars' game plan,



“If you give your best effort, only good things can happen.”

—Matt Potter

everyone defends, everyone attacks. It’s not a goalkeeper and four defenders on defense but a team mentality based on organization, discipline, and the ability to recognize situations. On offense, the Cougars will be creative, free-flowing. The first 10 to 15 minutes of each game will be important. “You want to imprint your style on the other team,” he says. “It is critical for us to get into our rhythm.”

He wants his team to press on through two 45-minute halves and finish strong. The Cougars did that in their lone exhibition game against

the Ghana national women’s team that visited Pullman on its tour of the United States in preparation for the World Cup. The two teams played to a scoreless tie in the first half, with WSU eventually winning 2-1. “Maybe some of our players got caught up in the moment,” Potter says of the first-half deadlock. After the break, WSU made some changes and used all its players. “We have great depth plus experience. That allows us to mix and match and find out who can do what.”

In late August, Potter scheduled half-hour time slots to meet individually with all 26 of his players. They talked about the preseason, where he and his staff thought the players fit into the program and team, and allowed the players to do the same.

“We want them to be part of the

process, not just the staff having all the answers,” says Potter. It was important that everyone left the meeting knowing where they stood, how they can get better, and that the coach has confidence in them.

“Coach Potter laid out the expectations he has for us individually and the expectations and vision he has for the program as a whole. I think it was an effective way to get everyone on the same page and working toward the same goals,” says Kim Morgan, senior midfielder and team captain from Seattle.

Potter is a 1992 honors graduate in physical education and religious, social, and moral education from West London College. He competed as a center midfielder for the Watford Football Club, a semi-professional team, and began

coaching when he was 18 in England. In 1992, he moved to Long Island, New York, and joined Noga Soccer, where he coached, developed a curriculum, and coordinated clinics and camps for girls and boys. Before coming to WSU, he was head coach for the Scottsdale (Arizona) Community College women’s soccer team in 2002. Earlier, he spent eight years as head coach of the Sereno Soccer Club in Arizona.

Potter’s goals for the Cougars: to be competitive in the Pac-10 Conference and to earn a berth in the NCAA tournament.

“We want to have quality people leave our program at WSU—people who others want to employ or be around. That can be in soccer or any career these young women want to take.” ■

—Pat Caraher



LOW PRICES BOG DOWN CRANBERRY GROWERS

BILL WAGNER

A worker at Cranguyma Farms in Long Beach, Washington, uses a wooden paddle to keep floating cranberries moving to a submerged pump head, which sucks the berries to a pipe and loads them into a waiting truck for shipping to the processing plant.

IN THE NOT-SO-OLD days, circa the mid-1990s, a small farmer along Washington's southern coastline could rake enough cranberries—and money—from just 10 acres of bogs to send the kids to college and maybe have enough cash left to spend Christmas in Hawaii.

Since the late 1990s, however, some cranberry farmers have been bogged down in another shade of red: debt.

"Now," says Kim Patten, Washington State University Cooperative Extension's cranberry specialist based on the Long Beach Peninsula, "both husband and wife better be working outside jobs and having the kids go to college on their own—and never have a day off."

An expanding supply of cranberries outran the demand for them, and Washington's member-growers in the Ocean Spray Co-op saw the price paid for their tart berries go sour.

"We used to say we could raise a family and pay our debts and live decently on what we made 10 years ago, five years ago," says Cranberry Alliance president Merri Erickson, whose family farms 20 acres near Grayland, Washington. "We can't do that anymore."

The Ericksons own one of 120 small cranberry farms in rural Grays Harbor and Pacific counties, where farmers have planted the fruit since the late 1800s.

Much of the state's crop comes from these family-owned plots, which total 1,500 lowland acres. The annual crop brings \$3 to \$6 million to a regional economy wounded by limping timber and fishing industries.

Into the 1990s, U.S. and Canadian growers rode Ocean Spray's wave of prosperity, as juice drinks splashed grocery shelves in crimson. By 1995, prices climbed to \$60 per 100-pound barrel, double the price most farmers need to make a living.

Success bred competition. Newcomers and old-timers scoured new bogs from soggy land. Cranberry supplies soared. Prices plunged. By 1999, the barrel price bottomed out at \$11. The next two years, the U.S. Department of Agriculture ordered farmers to dump part of their crop to diminish the surplus.

As Washington cranberry farmers lost money, a handful quit. Most stuck it out, waiting for the tide to turn. Slowly, it has. The price for this year's crop is expected to creep up to between \$25 and \$30 a barrel, back to where some farmers can survive, says Patten. Malcolm McPhail, a former WSU Extension agent, this year expects a bumper crop from 90 acres of cranberries he grows near Black Lake in Ilwaco, Washington, making him the state's second-largest cranberry farmer.

McPhail also is the state director for the industry's Cranberry Institute, which promotes research showing that eating cranberries—long known to fight urinary tract infections—also helps prevent cancer and heart disease, among an array of other health benefits. McPhail, Patten, and others say good

health news could boost cranberry sales, already rising since the introduction of a milder "white" cranberry drink pressed from immature berries.

But even as the market rebounds, a new threat looms. Environmental groups last summer won a ruling to restrict the use of dozens of pesticides along salmon streams in much of the Pacific Northwest. Growers preparing for the October harvest still didn't know whether new regulations would harm southwest Washington's cranberry farms, located in one of the state's few areas without federally protected salmon runs.

Patten says the region's cranberry farmers already guard waterways from contamination, but he knows no profitable way around timely chemical applications to ward off insects, weeds, and fungi that obliterate untreated bogs.

He is testing new "environmentally benign" pesticides for farmers. One solution for weeds may be as simple and harmless as spraying vinegar at just the right time. Other problems are tougher to fix, and even a salad dressing ingredient must win approval to be applied as an herbicide.

"It's not something you just do overnight" to win pesticide approval, Patten says. "If they don't have a label, we can't use them."

—Eric Apalategui

LONG BEACH CRANBERRY CHUTNEY

- 1 cup fresh cranberries
- 1 medium onion, quartered
- 1 medium green pepper, quartered
- 1 medium tart apple, cored and quartered
- 1/2 cup granulated sugar
- 1/2 cup apple cider vinegar
- 3/4 teaspoon salt

Put cranberries, onion, green pepper, and apple in food processor and chop coarsely. If some large pieces remain, chop them by hand so as not to grind the mixture too finely.

In a large sauce pan, combine cranberry mixture with sugar, vinegar, and salt. Bring to boil, reduce heat, and simmer covered for 10 minutes. Cool and refrigerate.

From *Wandering and Feasting, A Washington Cookbook*, by Mary Houser Caditz, Washington State University Press, Pullman.

For more cranberry recipes:
<http://agsyst.wsu.edu/cranberries.htm>

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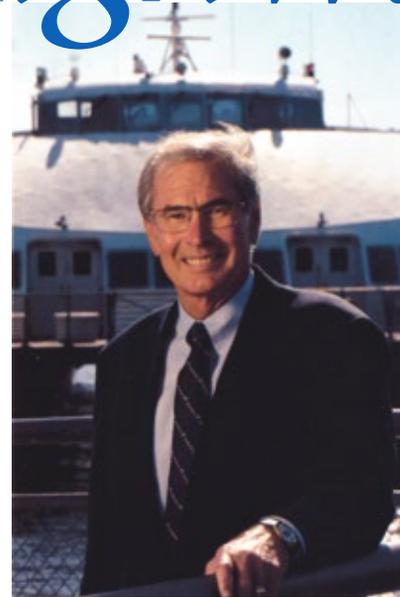
Washington ferries transport more than 11 million vehicles and 26 million people a year.

Washington's Marine Highway

"The ferry system has allowed the state to grow and prosper. It will become more important in the future, providing access to where people choose to live and work, and where housing is available."

—Mike Thorne, Washington State Ferries director and CEO

by Pat Caraher • photography by Laurence Chen



Washington State Ferries director Mike Thorne '62

WASHINGTON STATE didn't offer a ferry service until 1951, although a handful of private companies known as "The Mosquito Fleet" transported passengers and goods across Puget Sound in the early 1900s on small steamers. By the late 1920s, the industry consolidated into two companies. In 1935, the Kitsap County Transportation Company was forced out of business by a strike, leaving the Puget Sound Navigation Company, which became the Black Ball Line, to provide the bulk of the service.

In the late 1940s, labor unions representing the ferry workers successfully struck Black Ball for higher wages. The ferry line petitioned the state highway department to allow a 30 percent tariff increase. The request was denied. Black Ball tied up its boats, bringing much of the cross-sound ferry service to a halt.

Black Ball eventually sold its ferries and terminals in 1951 for \$5 million to a newly created Washington Toll Bridge Authority—now Washington State Ferries. WSF intended to provide temporary service until a network of bridges could be built connecting Puget Sound's east and west sides. By 1959 the legislature rejected the plan for bridges. WSF continued to ferry people and vehicles across the sound as part of the Washington State Department of Transportation.

Sailing into the 21st century

Today Washington operates the largest ferry system in the country. Twenty-nine ferries ply the inland waterways of Puget Sound. The boats deliver nearly 27 million passengers annually to 20 different terminals in eight Washington counties plus the province of British Columbia.

For daily commuters, commercial users, and tourists, Washington's marine highway provides a critical link between the greater Seattle area and expanding communities west of Puget Sound on the Kitsap Peninsula, as well as to Vashon, Kitsap County, Whidbey Island, and the San Juan Islands.

During fiscal 2001, WSF transported 11.5 million vehicles and 26.6 million riders. This compares with 28.4 million passengers at Seattle-Tacoma International Airport and 23.5 million patrons nationwide served by Amtrak during the same period.

Sailing into the 21st century, Washington State Ferries appeared to be in good financial shape. Reserves exceeded \$110 million. Referendum 49, approved by state taxpayers in 1998, designated funds for needed passenger-only ferry service to Seattle from Kingston and Southworth. In fiscal 2001, 19,700 walk-on passengers, or 27 percent of ferry riders, benefited from the service.

Referendum 49 allowed for the transfer of monies from the motor vehicle excise tax (MVET) to the state highway system, and the legislature appropriated a record \$289 million of that to WSF.

Things were to change dramatically. In November 1999 voters approved Initiative 695. The backwash rippled through state transportation, reducing funds for roads, highways, bridges, and the ferries. In effect, I-695 abolished the bulk of the MVET, including an expected \$111 million designated for the 1999-2001 biennium to help finance the expansion of the passenger-only ferry service. The plan to enhance that service had to be scrubbed. The timetable for replacing aging ferries and terminals also was pushed back.

Thorne takes the helm

The task of righting the ship has fallen to Mike Thorne. He was hired nearly two years ago as WSF director and CEO. His credentials include more than a decade as director of the Port of Portland and 18 years as an Oregon state legisla-



Thorne estimates that fares should cover approximately three-quarters of operating costs by the end of 2003 and near 90 percent by 2008.

tor. He grew up on a large wheat ranch in Pendleton, Oregon, and still keeps a hand in the operation that his son now runs. Thorne earned a degree in agricultural mechanization from Washington State University in 1962.

Before he came aboard, WSF was instructed to take a close look at its way of doing business, specifically the relationship between the cost of providing service and the income generated from riders. In 2000, the legislature created the Joint Task Force on Ferries comprising legislators, citizens, ferry management, and workers. The group was charged with examining the WSF operation and recommending its future direction. One recommendation was that WSF increase fares throughout the system to 80 percent of operating cost, and maintain the existing level of service. Historically, fares had provided about 62 percent of operating costs.

"We can't capitalize the ferry system from fare-box recovery alone," says Thorne. He wants WSF to be "customer-minded and business-oriented."

In September 2002, nine months after he was hired, WSF introduced a new business and capital-funding plan,

dubbed the "5+5+5" plan. It calls for the ferry system to cut costs by 5 percent, increase general fares by 5 percent, and generate 5 percent in new revenues via a comprehensive retail, marketing, and advertising program. After designing and implementing the plan, Thorne estimates that fares should cover approximately three-quarters of operating costs by the end of 2003 and near 90 percent by 2008.

Had Referendum 51 not failed in November 2002, it would have provided approximately \$750 million for new ferry construction over 10 years. But with the 5+5+5 plan in place, Thorne thinks the ferry system is headed in a positive direction.

"We can do better."

WSF is looking at introducing small retail businesses, like gifts and books, and expanding concessions to include food and beverage items not currently available from galley service or vending machines on the ferry. "What best fits the needs of our customers," Thorne said in late July from his office near the Seattle Center.

He's confident savvy marketing will provide better visibility for WSF and

attract more riders, both in-state and beyond.

"When you are pushing hard to make financial goals, it makes good sense to advertise on the ferry itself and in the terminal, if done discreetly," he says. Travel packages could be developed as an incentive for people to ride the ferry during non-peak-hour service to the San Juan Islands, or elsewhere. Ferries on some routes run one-fourth full. Passengers could be added without increasing costs to WSF.

Thorne says two core principles figured in decisions to reduce service: WSF wanted to impact the fewest number of riders and make changes only where riders have other transportation. Three vessels were idled in June 2000, before his watch. Ridership declined slightly in 2001 and likely will continue—without additional promotion—due to sustained cuts in service and ongoing fare hikes.

Immediately after I-695 passed, WSF conducted a thorough review of administrative and staff positions. Management and support staff were reduced by 29 percent, including 43 positions from the management side, representing 2.4 percent of WSF's 1,800 employees.

"We are at a level we would not want to go much [below]," Thorne says. "I think we can find efficiency in other areas of support." He believes basic services are being met, and most riders agree; but, he says, "We can do better."

Statistics show that ferries completed 99.6 percent of 178,500 scheduled runs in fiscal 2001, the best record dating back to 1966, when WSF started tracking the reliability of its service.

Ferry schedules will continue to be reviewed. For example, management concluded that more than an acceptable rate of overtime was being logged on one of the Seattle-Bainbridge runs. The situation was remedied by adjusting the schedule for that route. Keeping WSF running on time, with safety and security, is all-important, Thorne says. "People use the ferry system as a way of supporting their livelihood."

While safe and serviceable, some fer-

ries need to be replaced. The average age of the fleet is 30 years old. Four ferries were built in 1927. Their commercial application is “far outdated.” They were designed to haul cars built in the 1920s and ’30s, not wide-bodied trucks and long trailer rigs loaded with chips and logs.

Ferry terminals, too, are getting to the point where their pilings and underpinning will soon be beyond usefulness. Long-term plans call for replacing several terminals on Puget Sound. Terminals at Edmonds and Mukilteo are planned as connection points for rail service extending into Seattle.

Despite the serious financial challenges facing WSF, Thorne remains positive. He’s confident goals will be met, that riders will continue to find the service they need and expect. “If I hadn’t believed that,” he says, “I probably wouldn’t have come here in January 2002.”



Thorne’s office is close to Puget Sound. He rides the ferry. He intentionally schedules meetings that take him to communities served by the WSF. “I go there so people don’t have to come to me.” During his marine travels, he observes WSF employees carrying out their duties and sometimes visits with patrons.

What commuters say

Even in mid-afternoon, one senses the pace picking up at Colman Dock. Foot passengers begin to arrive, first in a

trickle, then in a stream. Some grab the *Seattle Times* from a bank of newspaper vending machines in the elevated terminal. They flash their tickets while passing through the gate or pay their fare at one of three ticket booths leading to the large, bench-filled waiting room.

Below, on the landing north of the terminal, vehicles feed into lanes 43 through 58, nine-deep, in parallel rows. The arrival of the *Wenatchee* from Bainbridge is still 15 minutes away. A Mack truck with an image of the Statue of



Liberty painted on the side of its black hood stands out. It is burdened with bales of green hay. Ahead of the waiting vehicles, nine bicyclists pinch in near the steel ramp that will be lowered to meet the ferry.

If he had been in the terminal, Thorne might have met commuters like Mike Crotty, dressed in gray shorts and a matching T-shirt with "O'Dea Football" printed on the chest in purple letters. A teacher and coach at the high school on top of Seattle's First Hill, he makes the nine-block hike to and from the ferry each day. He commutes from Bremerton like some of his students, others of whom come from Bainbridge.

Crotty used to live in Des Moines. Now he prefers "the slower pace of life" on the Kitsap Peninsula. "The cost of living is less, even with the commute," he says.

Tracy Hagbo is a WSF information agent at Colman Dock. Her work finished, she takes in the foot traffic on the concourse outside her office through dark sunglasses. She lives in West Seattle. "When housing got high over here, people sought cheaper housing on the Kitsap Peninsula," she says. "They've still got to get across the water. That's the bottom line."

Another woman on the Seattle-Bainbridge run commutes three days a week—"a little over an hour door-to-door." It beats fighting freeway gridlock on I-5. One-third of her commuting neighbors feel the same way. She came to Seattle from Chicago, but moved to Bainbridge Island three years ago. The major appeals—a smaller community, more house and a little more property for the money, and quality schools. Even with two fare hikes in 18 months, the cost of riding the ferry is comparable to taking Seattle's Metro buses, she says.

Being tied to the ferry schedule, particularly missing a ferry or finding it full, can be frustrating, she admits. "But there's always another one." She and most of her friends give the ferry system

good marks, although she'd like to see more retail businesses on the ferry or in the terminal—"shoe repair, dry cleaning, and a bookstore."

At the end of each run, the boat is cleared of all passengers for a cabin sweep. "We want to make sure the ferry is secure for the next trip," says blue-uniformed deckhand LeRoy Augustine. He steps aside to let passengers board at Bainbridge. "It's a Mariner crowd going to the game tonight."

Safety ranks at the top of the list of priorities for passengers and crew,



followed by on-time performance and cleanliness.

"Every deckhand, galley personnel, and engineer has special duties during fire, abandon ship, and rescue drills," says chief mate Victor M. Lotorto. One drill is conducted weekly.

In a first-aid storage area near one of the cabins, Lotorto picks up a defibrillator and gently taps it with one hand. "We used this to save a 45-year-old woman December 7, 2001." Each Christmas, he receives a card from her and her mother.

Here to stay

Those who work with Thorne describe him as a man of "tremendous integrity," driven to be as good a public servant as he can be.

He's sometimes frustrated that things take so long to accomplish. Since early in his WSF tenure, he's wanted to transform Pier 52—Colman Dock—into a more retail-friendly establishment. The remodeling began this fall. For many, it is "a very outward sign" that things

are changing with the ferry system. WSF will also build two new ferries over the next three to five years. A management team is charged with finding \$120 million for that effort. The legislature will help fund a third ferry.

"If there's truly an interesting side of Mike Thorne, it is his willingness to stand up and be held accountable," says a colleague. "At a time when new taxes and revenues are not available, he's willing to do business a different way. He's moving the ferry system towards being as self-sufficient as possible. I think the

ferry system can get it done, knowing what I know about Mike Thorne's leadership and commitment."

Public opinion regarding the ferry system is highly favorable in general. That is not to say there aren't opportunities for improvement, Thorne says. "We've identified where we want to make the system run more efficiently—and the general baseline support needed.

The people who use the ferries know we don't just have an eye on raising fares."

In June 2002, Washington State Ferries celebrated its 50th anniversary. The occasion clearly signified its service and commitment and that the ferries are here to stay. "The ferry system has allowed the state to grow and prosper," Thorne says. "It will become more important in the future—providing access to where people choose to live and work, and where housing is available."

Does he have a wish list for WSF?

"Yes. We have to think in terms of being as efficient and cost effective as we can. We have to look outside the traditional processes that you find in state government and more in terms of being entrepreneurial in delivering this essential service."

If the WSF is realistic and successful in reaching its goals, he says, "We will have a system that will be worth talking about at the 100-year anniversary." ■

ON CALL

Student firefighters protect their campus



Training and drills are a big part of being a student firefighter.

Thick, gray smoke billows from the roof of the vacant two-story house. Outside, 20 firemen, most of them student firefighters at Washington State University, check their breathing apparatus and air packs.

Given the order, four quickly enter the back door single-file. Visibility is near zero. Once inside, they drop to their knees. The leader crawls to his right, careful to keep his right hand on the wall as a point of reference. Each man holds on to the boot heel of a colleague ahead. A sweep of both floors takes less than 10 minutes. The “victims”—two dummies—are found and evacuated.

“There’s no substitute for a live-fire exercise—the heat and the smoke, navigating furniture and stairs,” says Bob Jarosch, training officer with the WSU and Pullman fire departments.

Firemen from both departments, along with volunteers from Whitman County Rural Fire District 12, participated in the drills over three nights in January. The fires were controlled—straw torched in barrels throughout the University-owned house near Beasley Coliseum. A week earlier, firefighters had completed a walk-through, with attention to procedures and safety.

“You used to just come off the street to fight a fire,” rural fire chief Lester Erwin says. “Now things have changed so much . . . the hours of training required.” Student firefighters complete



✱ *“They are here as dedicated students, but*

150 hours to become emergency medical technicians (EMTs), if not already certified.

WSU and Pullman departments share responsibility for any fire on or off campus or a mass casualty incident—for example, at the Pullman-Moscow Airport. A contract inked by the city and University in 2001 provides expanded, more cost-efficient service to the campus and community. Under the pact, veteran Pullman fire chief Pat Wilkins added the WSU Fire Department to his responsibilities.

He describes the 15 student firefighters as “the backbone” of the WSU department. They support five full-time

firemen. At least two men are needed on an ambulance run, three on a fire call. A cardiac arrest case typically requires a five-man team—two permanent staff plus three student firefighters/EMTs.

“The students are a valuable asset,” Wilkins says. “They are here as dedicated students, but also provide service 24/7 on a shift basis for the WSU Fire Department.”

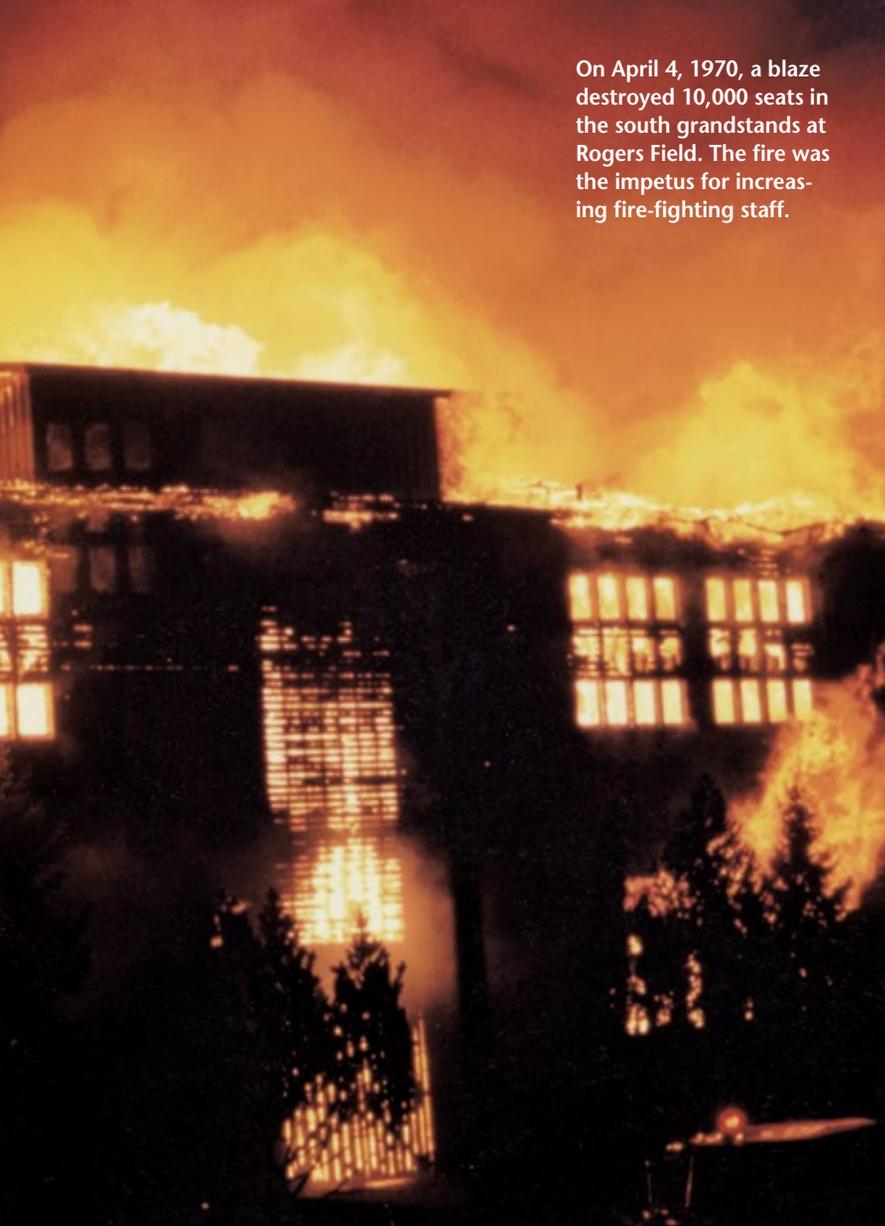
WSU is one of a handful of four-year colleges and universities nationwide that rely heavily on full-time student firemen and EMTs. The University of Alaska, Fairbanks, and the University of California, Davis, are the

only others Wilkins knows of in the western United States.

Student firefighters live two to a room in the campus fire station. Each semester they elect a resident captain from their ranks. During the week, five three-man teams fill 14-hour shifts, 6 p.m. to 8 a.m. When not attending WSU classes, they return to the station and are on call. A minimum of one permanent staff member, a student engine driver, and two firefighters/EMTs respond to all alarms around the clock.

In 2002, the WSU fire station handled 387 fire calls and 282 requests for EMTs. The EMTs work all major WSU athletic events on campus, plus some events in

On April 4, 1970, a blaze destroyed 10,000 seats in the south grandstands at Rogers Field. The fire was the impetus for increasing fire-fighting staff.



also provide service 24/7. . . .” —Fire Chief Pat Wilkins

at Rogers Field—now Martin Stadium—causing nearly \$300,000 damage. The arson fire occurred during spring vacation, when only four firemen were on duty. The wood grandstands burned for three hours. That blaze was the impetus for increased staffing levels, particularly for the overnight shift.

More than 400 students have supported their education as WSU firefighters. Competition and qualifications are stiff. In spring 2002, 48 applicants sought three positions. On average, five firefighters graduate each May. Because of the extensive training, students must commit to a minimum of two years. Two to three women typically apply each year. Rigorous physical requirements eliminate many candidates, male and female alike. A woman passed the physical fitness test in 1997, but was hired by the Vancouver Fire Department before she could go to work at WSU.

Resident student captain Brent Olson was a WSU firefighter for three years, while pursuing dual degrees in criminal justice and sociology.

“This [fire fighting] is always what I wanted to do,” he said last May between shifts. Two uncles and a cousin are firemen. He’s tested with Tualatin Valley [Oregon] Fire and Rescue, the first step in “almost a yearlong” hiring process. Four years ago, during a summer clinical rotation as an emergency room EMT at St. Vincent Hospital in Portland, he participated in the delivery of a baby in the hospital’s doorway.

Olson helped fight the October 2001 fire that claimed Pullman’s historic, two-story Corner Drug Store. Firefighters fought the blaze for nearly five hours. During the ordeal, the importance of the training he received, attention to safety, and service was driven home.

“Sometimes you aren’t at the top of your game. On those days, I say ‘I’m not here for myself. I’m here for everyone.’ That brings me back into focus,” he says.

“You get to know the people you work with well. You rely on them. If I were to go down, they’d pull me out. We take that seriously, although it goes unsaid a lot of the time.” ■

the coliseum, like concerts and Commencement. They deal with broken arms and legs, twisted ankles, sprains, and concussions. Some of the injuries result from varsity athletic games and practices or intramural sports. Calls for assistance also involve detoxification, heart attacks, strokes, seizures, and falls.

According to a *Pullman Herald* account, student firemen at Washington State College date back to 1922-23, “when nine students manned the pumps.” In the early 1920s, they lived in a metal shed attached to the rear of College Hall. In response to calls, they pulled a rickshaw-like fire cart across campus lawns and fields.

The college purchased its first fire truck, a Mitchell, in 1925, about the time the fire station was being established in a mechanical building on the present site of Daggy Hall—at the top of Engineering Hill. The current five-bay station across from the Compton Union Building was built in 1962.

The campus has experienced a number of significant fires. In the spring of 1949, a major portion of a wing of North House, one of the two-story, World War II-vintage student residence halls known on campus as “Cardboard Castle,” burned down.

On April 4, 1970, a blaze destroyed 10,000 seats in the south grandstands

Boeing's Mike Bair & the



MICHAEL O'LEARY

by Bryan Corliss

SOMETIME BEFORE THE END OF THE YEAR, a team of executives from Boeing's commercial airplanes division in Seattle will fly to Chicago to present to the corporation's board of directors their final plans for a new airplane that will change the way we fly, the way Boeing builds airplanes, and the way airlines operate in the 21st century. On that day, the board is expected to endorse that plan and formally authorize the program. If it does, no one will have played a bigger role in making that happen than Mike Bair, a 1978 graduate of Washington State University and senior vice

Dreamliner or paper

7E7

president in charge of the development of the new 7E7 Dreamliner at Boeing Commercial Airplanes.

Boeing calls the plane the “Dreamliner,” because the name was the top choice of voters in a worldwide contest. But it could very well call it the Aviation Transformer.

Boeing plans to use new materials and processes to build the 7E7, which will carry aloft an array of new systems. It will fly farther than any other jet its size and carry passengers more comfortably. And it will be assembled in an entirely new way, perhaps in a new factory far from the Red Barn, the boat shed on Lake Washington where Bill Boeing’s team put together the first wooden seaplanes more than 85 years ago.

Boeing says the 7E7 represents the future of aviation. Aerospace analysts say the 7E7 is key to Boeing’s future. Washington governor Gary Locke says the 7E7 is key to Puget Sound’s economic future. Critics say the 7E7 is nothing more than “a paper airplane” that will never get built.

As for Bair, he says he’s got “a great assignment.” Overseeing development of the 7E7 “has got to be one of the best jobs in the company.”

THE 7E7

The 7E7 is the hardworking, plain-Jane sister of Boeing’s now-mothballed, delta-winged Sonic Cruiser. When the airline industry went into its tailspin after September 11, the market for premium-paying business passengers to fill the sexy, super-fast Sonic Cruiser evaporated. In December 2002, Boeing Commercial Airplanes chief executive Alan Mulally announced that the Sonic Cruiser was out and the 7E7 in.

The new plane fits into Boeing’s concept of the future for airlines, which is greatly different from that of its only competitor—Airbus, the European aerospace consortium.

Airbus planners look at the crowded world airline hubs, such as London’s Heathrow or Charles de Gaulle in Paris, and see there’s no more room to add additional flights. Therefore, if airlines are to grow, they’ll need larger planes to connect to other world hubs. This reasoning led to the development of Airbus’s 555-seat A380 super jumbo, which will eclipse Boeing’s 747 as the largest commercial airliner when it enters service in 2006.

Boeing executives counter with an aphorism: “People want to go where they want to go.” Instead of flying from Atlanta to New York on a domestic jet, then boarding a jumbo jet for a transoceanic flight to London, where another change of planes puts a passenger on a smaller plane for Frankfurt, Boeing believes people would rather fly from Atlanta to Frankfurt directly—or point-to-point.

Boeing pioneered the concept in the 1980s with the 767, a mid-sized jet with the range to link secondary cities across the Atlantic. The 7E7 is intended to replace the aging “Six-Seven” and its sister jet, the single-aisle 757.

The 7E7 will be a very different plane, from the ground up. To start with, it will be the first commercial jet made primarily from composites, rather than aluminum.

COMPOSITES

Composites are sheets of woven industrial-strength fibers covered in resin. When baked dry, they form a solid. Fi-

MIKE BAIR

TITLE —

Senior Vice President for
7E7 Development,
Boeing Commercial Airplanes,
Everett, Washington.

HOMETOWN —

Richland, Washington.

EDUCATION —

Bachelor of Science in Physics,
Washington State University, 1978.

M.B.A., University of Puget Sound, 1982.

Master’s degree from the
Alfred P. Sloan School of Management,
Massachusetts Institute of Technology, 1993.
Named a Sloan Fellow.

FAMILY —

Lives with wife Elaine and sons
Braden, 14, and Thomas, 12, in
Woodinville, Washington.

ABOUT WSU —

Current advisor to WSU College of
Engineering and Architecture.

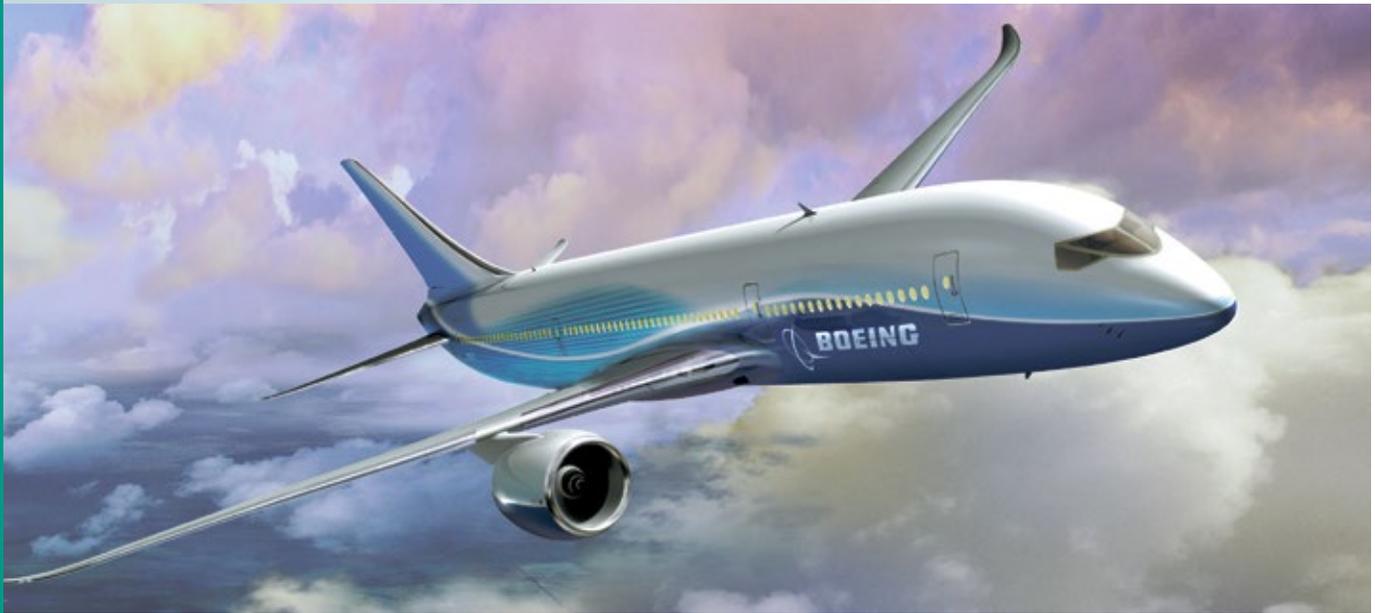
Calls WSU the best school he attended.

“That was a wonderful experience. . . .
I had professors teaching classes, not TAs.”

berglass is a common type. Boeing now uses more-advanced composites—bullet-proof Kevlar and ultra-strong graphites soaked in advanced polymers—for jet interiors and some exterior parts, like the tails of the long-range 777.

There are many advantages to composites, Bair says. They’re lighter. They don’t corrode or suffer metal fatigue. When manufacturing, it is easier to build up layers of composites rather than to mill down blocks of metal. The problem has always been their high price—up to four times as much as aluminum. However, recent advances in composites manufacturing are bringing

airplane?



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those costs down dramatically. Given all the pluses, “It was real obvious to us that it was the right direction to be moving,” Bair says.

Using composites, he adds, will make flying more comfortable.

Consider also the air quality inside passenger jet cabins. The air is Hepa-filter scrubbed, yet people still leave jets after a long flight feeling sick. There are two main problems, Boeing engineers say. The air inside a jet cabin is very dry, and while the cabins are pressurized—humans couldn’t live at 39,000 feet without it—they’re not pressurized to ground level. The result is an environment similar to the top of an 8,000-foot-high mountain in the desert—livable, but not comfortable.

Bair says that until now, Boeing could design systems that increase humidity, but that also would increase the condensation inside the plane, and thus corrosion. Boeing also could design planes with higher cabin air pressure, but that would mean adding heavy reinforcement. Using composites eliminates both restrictions, Bair says.

Using composites also will greatly change the way Boeing builds the 7E7. Boeing jets today are largely assembled by hand. At Boeing’s massive factory in Everett, Washington, workers use 30-ton cranes to lift airplane sections into four-

story steel “jigs,” which hold the pieces in place. Mechanics hand-drill holes in the aluminum sheets to bolt together millions of panels, stringers, subassemblies, and fasteners. Other mechanics string, by hand, miles of wires and cables. When Boeing’s at full production, assembly takes about three weeks.

Using composites changes that. Boeing and its partners will fabricate “monolithic” 7E7 parts delivered to the factory largely intact. Instead of putting together up to three million parts, Dreamliner mechanics will deal with fewer than 10,000. Instead of the 5,000 people or more who build the 747, Boeing will need as few as 800. Bair created a buzz last summer when he announced at a business group luncheon that the goal will be to assemble the new plane in three days.

Where those three days of work will take place is a topic of much interest.

“E” FOR EVERETT?

Boeing says the “E” in “7E7” stands for a number of the new plane’s attributes: efficient, environmentally friendly, even “e-enabled,” because it will be outfitted with Boeing’s new Connexion service—a type of Wi-Fi aerial broadband.

Boeing’s Puget Sound workers, on the other hand, hope that the “E” stands for “Everett.” Cynical wags, though,

have determined the “E” is for “extortion.”

Boeing announced in May that it would hold a nationwide search for a final assembly site for the 7E7 project. That set off a mad scramble among development officials from California to New Jersey. More than 20 states are believed to have submitted proposals.

The news that Boeing would consider a new site jolted a region already rattled by the company’s move of its corporate headquarters to Chicago in 2001. Some Boeing watchers—even employees—say it’s a sign the company is fed up with Washington.

The state’s elected officials were shocked into action. Their fear, Gov. Locke says, was not that Boeing would disappear overnight. The company will continue to build 737s and 777s in Renton and Everett for years. But if the 7E7 goes, the next new Boeing plane is likely to follow it, and the state’s aerospace industry would slowly wither, the governor says.

To forestall that, the state legislature, meeting in what some called the “Boeing session,” adopted a five-cent-a-gallon gas tax for highways. Following years of deadlock, they overhauled the unemployment and workers compensation systems. And Locke in the final hours pushed through a bundle of busi-

BOEING'S 7E7 DREAMLINER

ness tax incentives that would be worth \$3.2 billion over the next 20 years to Boeing and other aerospace companies—if the 7E7 is built in Everett or, alternatively, in Moses Lake, Washington.

For a jet-builder like Bair, getting involved in these political processes was “different,” he says wryly. “I’ve never done that before.”

Bair says he came away “impressed . . . I don’t think any of us would have guessed they’d have done what they were able to do.”

Bair says the site search has its roots in the problems Boeing had getting permits to expand the Everett factory in the early 1990s, as it prepared to add the 777 assembly line. Under the terms of the then-new Growth Management Act, Boeing ended up paying the city of Everett \$47 million in impact fees. At the same time, Bair says, Indiana was dangling \$300 million to get United Airlines to build a maintenance base in Indianapolis. (United closed that facility last year in a cost-cutting move.)

In Everett, leaders say that the permit problems of the past are ancient history. The city and Port of Everett are working closely with state and federal officials to get approval for a \$15.5 million pier for Boeing.

Bair says today’s site-selection process doesn’t mean Boeing is “looking for someone to give us a bunch of money.” In most industries, a nationwide search like this is standard operating procedure, he notes.

But Boeing’s corporate leaders have set some “aggressive” cost targets for the 7E7, he says. “We have to present a viable business plan to the board.”

So before Bair and Mulally fire up that Powerpoint in Chicago, “One of our responsibilities is to make sure we’ve looked at every possibility.”

DREAMLINER—OR PAPER AIRPLANE?

The fact that Bair’s bosses have yet to commit to the 7E7 has some questioning whether it will ever fly. Skeptics note

that the now-shelved Sonic Cruiser itself was a replacement for the proposed 747X, which also never got off the ground.

The *Wall Street Journal* last spring reported that key members of the Boeing board of directors would rather not invest in the new plane and would instead prefer to emphasize more profitable defense-industry projects. Richard Aboulafia, a widely quoted industry analyst, describes the new jet as something of a do-or-die effort for Boeing’s commercial jet business. “With the 7E7, the market is there, and the technology is there,” he told his clients. “If Boeing doesn’t launch it, they are putting the world on notice that they will probably never again develop a new jetliner.”

Bair says he’s “very confident” that his team will get the go-ahead to build the 7E7. The company has pulled many of its most talented people off other assignments to work on it. “That’s a good indication of how serious the company is.”

Calling the Dreamliner a make-or-break airplane for Boeing is an overstatement, he says. But there’s no question that it’s important.

Is it keeping him up at night? No, Bair says. But “it is humbling, very humbling. It’s very important to our company’s future.” ■

Bryan Corliss ('82 Comm.) writes about business and aerospace for The Herald in Everett.

What is it?

A proposed 210-passenger jet capable of flying about 8,000 miles—some 1,200 miles farther than comparable planes. Boeing also will design a 250-passenger model with a shorter range.

What’s different about it?

If built, it will be the first commercial jet built primarily of composites instead of aluminum. New engines and systems will make it 20 percent more fuel-efficient. New processes will mean final assembly in as few as three days. Boeing plans to make its suppliers full “risk-sharing partners,” who will spend their own money to design and build portions of the plane—and share in the profits accordingly. Boeing will offer a service package with the jet, akin to an auto dealer’s maintenance agreement.

Where will it be built?

Boeing is conducting a nationwide search. Officials in Everett, Washington, say they’re confident the new plane will be built locally, but about 50 other sites around the country have been proposed, including Moses Lake, Washington. Sites in Texas are rumored to be among the front-runners. Georgia, South Carolina, and California also appear strong.

What are the key dates?

Boeing’s board of directors will make a final decision by year’s end on whether to offer the 7E7 to customers. At that time, the company will announce where it wants to build the jet. After that, Boeing will try to line up customers, with the goal of launching the program in mid-2004. If all goes according to plan, the first flight will be in 2007 and first delivery in 2008.

A BUG-EAT-BUG WORLD

by Mary Aegerter
photography by Robert Hubner



*Encouraging natural predation
lessens chemical dependence.*

NEXT TIME YOU ENJOY A good beer, pause a moment and thank your neighbors. Chances are, the hops that give your beer most of its bitterness and some of its flavor and aroma were grown in Washington state. But what you can't see or taste in your brew is the change that's coming to the growing of hops.

David James, associate professor of entomology and extension specialist, calls himself a "pest manager with a focus on biocontrol." Biocontrol means using living organisms to control pests, whether plant or animal. Biocontrol also means establishing a lasting relationship between the control organisms and the pests, rather than eradicating the latter.

Classical biocontrol stems from the fact that many pests, especially plant pests, are introduced species that arrived here without the predators and pathogens that control them in their native habitat. Classical biocontrol entails a carefully regulated release of natural control agents into the pest's new

Above: Jumping spider (*Phidippus sp.*).
PHOTO BY DAVID JAMES

habitat. It has been used safely and successfully, even spectacularly, on a variety of weed species, including tansy ragwort, purple loosestrife, and diffuse knapweed (sidebar, page 33).

Conservation biocontrol is based on controlling what usually are native pests with the natural enemies or predators that should already be out there doing the work. The reason they're not out there working is that when we spray with broad-spectrum pesticides, we kill them. Fortunately, the use of broad-spectrum pesticides is on the decline. That means the natural control agents may soon be back in the fields doing their appointed tasks.

Biocontrol often is part of an integrated pest management (IPM) program that takes into account the economic, environmental, and sociological effects of any proposed pest management strategy. Washington has been the worldwide leader in IPM for apples since the 1960s (see sidebar, page 34), but the concept has been slow to take hold in some of the state's other crops. James came to Washington State University four years ago to help change the latter condition.

James started with hops, converting a conventionally treated hop yard outside his Prosser office to biocontrol. Since the state's growers collectively pay about \$2.6 million for a single industry-wide spray for spider mites, the major pest of hops, they were interested in how biocontrol and IPM would work in his yard.

James's hop yard has not been sprayed for the past three years, and it produces a commercial crop. Thanks to the presence of three times as many predators of spider mites, the number of mites is the same as in conventionally sprayed yards. Which hops would you rather have in your favorite brew?

Intensive monitoring of pests and predators in his hop yard has shown James that the key to controlling spider mites is the early season. If predators come early, they can control hot spots of mites and limit their spread for the rest of the season. Those predators that come—not just one, but a complex army of them—seem tuned in to the smell of the mites, says James, and he's exploring the possibility of artificially enhancing the numbers of predators with chemical attractants. This year James will run a second test of

methyl salicylate as an attractant. Last year, it worked well.

James also has been working on biocontrol systems for the state's grape growers. Deirdre Prischmann, a doctoral student studying in James's lab, compared spider mite populations in unsprayed vineyards to those in vineyards that had received traditional chemical sprays. She found significantly more mites in the latter. "If you use chemicals, you're going to have more mites," says James. The benefits of such work will be monetary as well as environmental—monetary not just in savings on the cost of pesticide application, but in the opening of new markets for Washington state wines.

At this point, little Washington wine is exported. It hasn't been necessary—which was not the case in Australia, where James first worked. Wine is that country's second-leading export, behind sheep and wool products. While developing its export market, Australia learned that European countries are strict about residues in wine. Australia took most of the chemicals out of its grape growing and keeps the remaining levels low. The country's "clean and green" image serves its wine-making industry well.

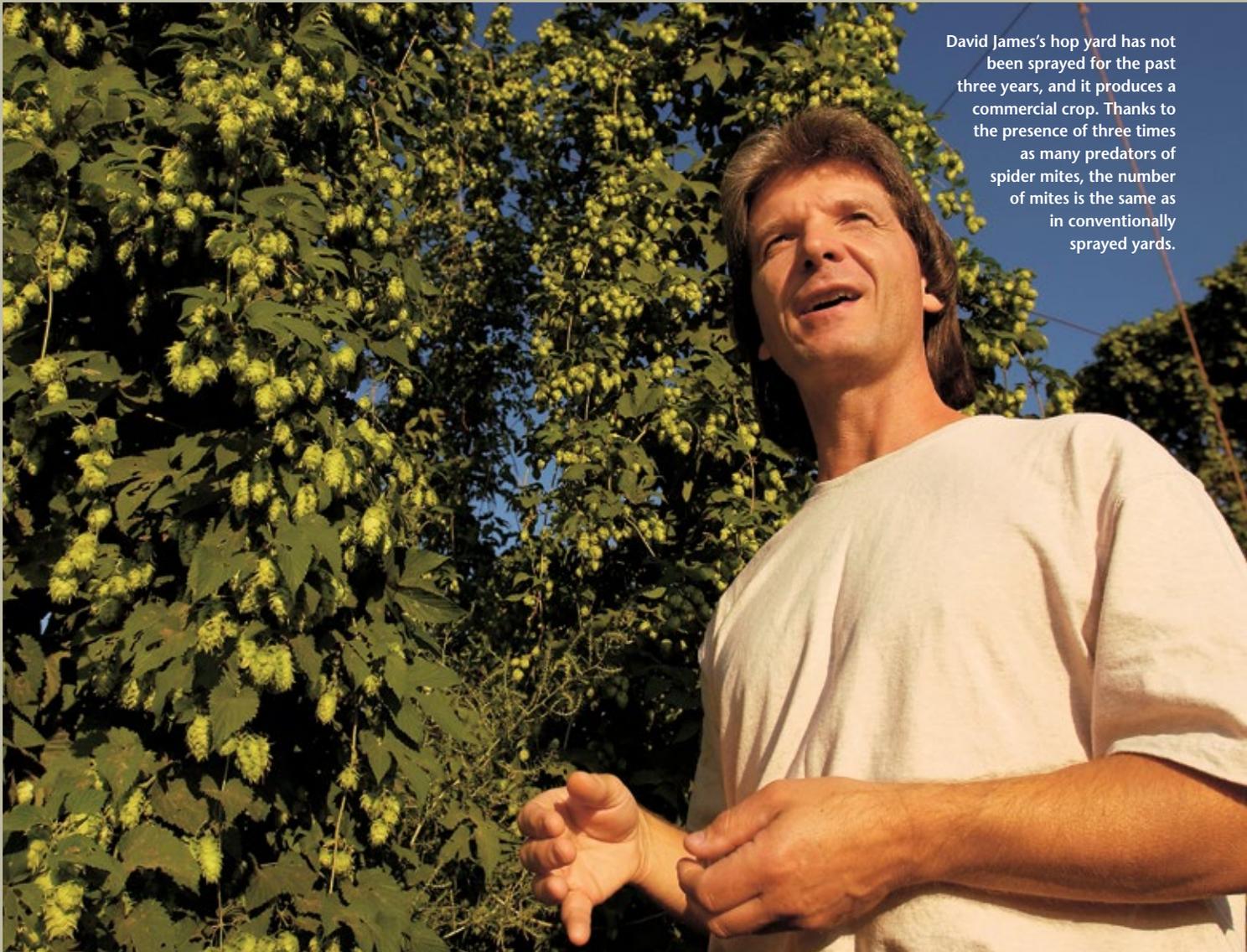
As Washington produces more wine and looks to export, residue restrictions will be a powerful motive to drive change even without increasing domestic demand for clean and green.

PROTECTING THE GENERALISTS

Obviously, the key to success for these biocontrol efforts is to not kill off all the good guys, whether or not they kill just one pest or many—as do the generalist predators such as those Bill Snyder, assistant professor of entomology, studies.

"Generalists often eat anything they bump into and can subdue," says Snyder. That can include good guys like pollinators or even each other. Spiders are generalists, as are praying mantises and ladybugs.

Generalists have special problems when you use broad-spectrum pesticides, for they tend to live longer than other insects and sometimes produce only one generation in a year. A fatal spraying may wipe out the



David James's hop yard has not been sprayed for the past three years, and it produces a commercial crop. Thanks to the presence of three times as many predators of spider mites, the number of mites is the same as in conventionally sprayed yards.



Top to bottom:

- Minute pirate bug (*Orius tristicolor*), predator of mites and aphids.
- Anagrus wasp, parasite of grape leafhopper eggs.
- Hover fly larva feeding on an aphid.
- Multicolored Asian lady beetle (*Harmonia axyridis*).
- Mite-eating lady beetle (*Stethorus punctum picipes*), predator of mites.

PHOTOS BY DAVID JAMES

entire year’s predation possibilities. The multigenerational pests, however, will still haunt you later in the season.

With a switch from broad-spectrum to softer pesticides that target and kill specific pests, the generalists should survive. And softer pesticides are where we’re going, whether you look at upcoming government regulations, a desire or need to export to countries that demand clean and green, the increased demand in this country for organics, or concern about what pesticides are doing to people and to the environment.

In addition to using softer pesticides, we also can enhance the environment so as to

Conservation biocontrol is based on controlling what usually are native pests with the natural enemies or predators that should already be out there doing the work.

encourage the predators to stay, prosper, and reproduce, says Snyder. That may involve breaking up the monoculture and providing places for the beneficial predators to overwinter, such as James is suggesting for the parasitic wasp, or providing places for other stages in their life cycles to feed.

Several of Snyder’s graduate students have worked on projects involving generalist predators. Renee Prasad is looking at the effectiveness of beetle refuges, or “beetle banks,” for organic growers of cabbage crops. Cory Straub is experimenting with flowering plants that may be added to beetle banks to provide nectar for parasitic wasps. Amanda Koss, who has since received her master’s degree, worked on potatoes, one of our most heavily sprayed crops. Aphids cause a disease in potatoes that results in poor storing qualities. In the past, growers have sprayed regularly with broad-spectrum pesticides. Koss looked at whether aphid predator densities increase when the new softer pesticides specific for sucking insects like aphids are used.

It makes wonderful sense to do all this, says Snyder—identifying predators and planting refugia or flowers. But as yet, there has been little follow-up on whether any of this helps. It’s not known whether you get

more beneficials with refugia or beetle banks, or whether the beneficials you do get ever actually move out into the field and feed on the pests.

“You could actually be attracting all the good bugs out of the field and into the refuge or providing a refuge for the pest, not the beneficial,” says Snyder.

The tools he and others need to determine what does and doesn’t happen may well come from another WSU researcher, Vince Jones, associate professor of entomology, Tree Fruit Research and Extension Center, Wenatchee. Jones works on developing sampling programs to determine pest and natural-enemy densities, models that will determine the best time to sample for a given insect, and techniques that permit the study of how both pests and predators move through the landscape. Though he specializes

in tree fruit, his work is applicable to a wide variety of crops.

“Movement and dispersal [are] intimately entwined with biocontrol and the newer management strategies,” says Jones. And they aren’t activities that have been easy or even possible to document before.

One technique Jones uses to study insect movement is to spray areas with marker substances that are not normally found outdoors—like soy milk or egg substitute. The low-tech spray then can be identified on insects found in traps by means of higher-tech laboratory procedures.

The markers can tell Jones where orchard pests are overwintering, where beneficial insects are coming from, or which insects are moving into or out of refugia and beetle banks such as those Snyder and James are looking at. He also can determine how far into an orchard the beneficials from refugia actually move.

Understanding the generalists, however, requires more. In addition to not yet knowing how they move around the landscape, we don’t know what, how often, or how much they eat—things we need to know in order to understand their role in the system. It’s not practical or probably even possible

NO GREEN CARDS REQUIRED

Most of our Western weeds are the result of more than a century of overgrazing, says Gary Piper, associate professor of entomology and biological weed control specialist. As the native grasses disappeared, they were replaced by exotic weeds such as cheatgrass. Weeds are opportunists and usually good colonizers.

"The secret to managing weeds is preventing colonization," says Piper.

Most plants we know as weeds aren't natives, and essentially all of the plants on the state's noxious-weed list are exotics. When the West opened for settlement, homesteaders brought a little bit of "back home" with them. Sometimes it was by accident, as happened via the railroads. Seeds came on the trains themselves, sprouted on the rail beds, and of course the trains brought more people. But sometimes, as was probably the case with St. Johnswort, the

weeds were brought here on purpose. St. Johnswort was considered an antidepressant. It also was the first weed to motivate active biocontrol in the United States.

When the weeds-to-be arrive here, usually from Europe or Asia via the eastern United States, they don't bring their natural control agents with them, the predators that eat them and the pathogens that make them sick. As a result, their populations explode.

It often takes five or more years to get permission to use a biocontrol agent on a weed. Those years start with a survey for predators in the weed's native homeland. When one with a limited host range is found, it's brought to the United States for testing. The final steps are approval by the United States Department of Agriculture and, usually, the states in which it's to be used.

It usually takes three to five years before released insects establish a large enough population to really do the job. As long as enough weeds persist to support the control insect, you've got a long-term, cost-effective fix, says Piper. Success means a weed population that's small enough to live with.

A good example is Dalmatian toadflax, an aggressive little weed from Europe. It's a perennial that competes well with forage plants. Animals don't like to eat it, and its leaves are thick and waxy, so control with herbicides is difficult.

The Canadian government introduced a promising biocontrol weevil into British Columbia. Within a couple years, it was obvious the insect was a good choice, and it now is approved for release in the United States. Some crossed the border on their own, however, and their offspring are now out controlling toadflax here. "Insects don't need green cards," says Piper.

Piper collects the weevil in May and June, then moves them around the state. One place he collected a couple years ago looked particularly fine. There were maybe 500 plants, and he collected a few thousand weevils. When he returned the next year, he found only 30 plants or so. "The weevils had been so successful that I thought I was in the wrong place," he says.

Classical biocontrol for weeds has an excellent track record. There is no recorded instance of an introduced insect that's run amuck and harmed crop plants or endangered other species. However, concern about specificity is usually what causes delays in the approval and release of a biocontrol agent.

Admittedly, it is difficult to find an insect that is completely specific to just one plant. For example, species such as cheatgrass are closely related

to cereal crops, and the Canada thistle is closely related to artichokes as well as our native thistles. This kind of relatedness is one reason why it's unlikely that biocontrol will solve all our weed problems. ■



Gary Piper



Top to bottom:

—Flowers of Dalmatian toadflax.

—Damage to terminal foliage.

—*Mecinus janthinus* adult inside a toadflax stem.

PHOTOS BY GARY L. PIPER

Stan Hoyt led the way to friendlier management

Stanley Hoyt, retired entomologist and superintendent at the WSU Tree Fruit Research and Extension Center in Wenatchee, is generally credited with starting what has become a world-renowned integrated pest management (IPM) system for apples. Spider mites were the driving force, for they had become such severe pests that they threatened the entire apple industry.

In 1961, while testing several new experimental materials for controlling codling moths, Hoyt noted that there were big differences in spider mite populations among orchards. The differences depended on what materials had been used. Follow-up work included looking at the effects of the total array of chemicals applied in orchards on the entire insect complex found there. That work showed that one predator appeared to be responsible for spider mite control in the orchards with fewer pests. In general, he found that while the miticides in use were highly toxic to predators, the spider mites themselves rapidly developed resistance to them. "We were setting ourselves up for problems by using those miticides," says Hoyt. And some of them had to be applied up to eight times a year to achieve any level of control.

In 1963 and 1964, Hoyt set up about 30 observation sites between the Canadian border and the Yakima Valley, places where orchards using conventional pesticides sat side by side with those using what we now call IPM. He invited growers to watch and see what would happen.

"It worked better than I expected," says Hoyt.

The big break came in 1965, when a large part of the Yakima area frosted out. Because growers expected small crops, saving money was even more important to them than usual. Hoyt, with the help of local extension agent Bill Hudson, set up what became the first large commercial use of IPM. The growers avoided using miticides and other materials that would disrupt the predators. They eliminated some entirely and changed how others were used by reducing dosages or, with thinning agents, taking care as to how and where they were applied to the tree. It worked well. IPM took off

and gradually became the way to manage pests, and biocontrol finally became a real possibility for controlling orchard pests.

"The predators did the job, and we took the credit," says Hoyt.

Hoyt went on to study the biology, distribution, and feeding behavior of predators. He found that orchards can tolerate a fair number of pests that don't actually damage the fruit. The bottom line is that although we might be able to control or kill almost every last pest, we don't need to, and doing so usually backfires.

The work was fun and satisfying, says Hoyt. It was making a real change, not just substituting one

pesticide for another. Plus, the growers were excited about it and would head out into their orchards with hand lenses to watch the predators at work.

The basics of Hoyt's IPM program are used throughout the world on apples and applied to other deciduous fruits. In Washington, the estimated savings to apple growers is \$3 million per year, says Vince Jones. Hoyt would say that figure is way too low if current practices are compared with those of the early '60s. Not only are there environmental benefits and pesticide and application cost savings, says Hoyt, but the growers are making more money because the fruit quality is better. ■



"The predators did the job, and we took the credit," says Hoyt.

The basics of the integrated pest management program developed by Stan Hoyt (left) are used throughout the world. A number of WSU scientists, including Jay Brunner (right), promote IPM's virtues and effectiveness.

to get this kind of information with lab studies or by having students or technicians sit out in the field and watch the bugs. It is practical, however, to use DNA and sophisticated molecular techniques.

INSECT GASTRONOMY

Tom Unruh, research entomologist, United States Department of Agriculture-ARS, and adjunct professor of entomology, WSU, is fine-tuning a method that will provide quantitative information on predator diets. He can look at specific DNA sequences to determine what pests or other beneficials are being eaten, even when during the season a predator might switch from one prey species to another. He also can determine how many prey a predator eats in one day by looking at how long the predator has gone without a meal. Large pieces of DNA digest more rapidly than small ones, and Unruh uses the abundance of different-sized DNA pieces in a predator's guts to determine how long it's been since the predator last ate.

The biology of the insect may dictate the ultimate usefulness of this. A lacewing will eat many insects at one time, stuffing itself as if at an all-you-can-eat buffet. Another predator may be more of a gourmet, eating just one, then going off to savor and digest it. The DNA pieces won't tell Unruh how many pests either predator ate at that one sitting. But he'll know about when it had its last meal. That, coupled with behavioral studies of how many prey a given predator eats in one sitting, can be used to estimate how many it eats in a day.

Unruh's technique is a far cry from the old "count the predators and prey" system. When you count, you only get numbers, he says. You get no information on whether the predator is eating that prey or whether it's feeding on something else. Given that there might be 10 or 20 species of predator out there, growers need to know which are the

most important for controlling particular pests. They are the species he needs to monitor in order to determine whether to spray.

But knowing which predator is the most important doesn't come easy and may not yet be possible. The techniques that will provide this and much more information are under development and being tested. When they are ready—something both Jones and

Snyder suggest might be the case in five years or so—growers may have the information they need to truly implement biocontrol.

Biocontrol is knowledge-based. It often means not doing what your first impulse says is right, says Jones. It's knowing that, because you haven't sprayed and killed all the predators, you can afford to wait a bit. It's knowing that the insects that can control



"If you use chemicals, you're going to have more mites."

—David James

Above: Deirdre Prischmann, a doctoral student studying in James's lab, compared spider mite populations in vineyards with no chemical pesticide inputs to those in vineyards that used traditional chemical sprays. She found significantly more mites in the latter. Bottom left: Two-spotted spider mites (*Tetranychus urticae*). PHOTO BY DAVID JAMES

Putting

the problem probably are out there, and it's knowing what to look for in order to determine whether they really are.

In some places, the process is well underway and showing promising results. That's the case for pear psylla, the major pest of pear orchards. Because one or two nymphs per leaf can cause economic problems, pear orchards have a low threshold for damage. Until recently, this meant many sprays with broad-spectrum pesticides. Things have changed, thanks to a substance more often found in cosmetics than in an orchard. Kaolin, a clay, originally moved into agriculture as part of a technique developed to prevent fungal infections, says John Dunley, associate entomologist at the Tree Fruit Research and Extension Center in Wenatchee. But kaolin also works to prevent pear psylla. When pre-bloom pear trees are sprayed with it, pear psylla don't come into the orchards early, don't feed, and don't build up populations. How it works isn't known.

A couple of years ago, Dunley recommended that Wenatchee River Valley growers use kaolin, and last year 95 percent of them did. If this continues and accomplishes what he hopes—essentially, chasing the bug out of the area—it will open the way for controlling other pests with softer, even organic, pesticides and for biocontrol.

A group of growers in the Pashastin Creek area, south of the Wenatchee River between Leavenworth and Wenatchee, went that step further last season and used kaolin and organics. Their results were promising. The region is relatively isolated, so that the area-wide tactics weren't confounded by what happened in surrounding orchards. The costs to growers were about the same as they had been before. The growers who already were organic spent an average of \$270 an acre for pest control, while those in transition from conventional to organic spent \$360. Nearby conventional growers spent \$490.

Dunley says the area is well on its way to creating an environment where natural enemies can live, work, and prosper. In time—all biocontrol is long-term—it will take less work and less money to manage pests this way. ■

Mary Aegerter is the author, with Steve Russell, of Hike Lewis and Clark's Idaho (University of Idaho Press, 2003).



on the

Ritz

by Andrea Vogt

AMERICAN MANAGEMENT METHODS MEET EUROPEAN HOTELLERIE

THE HOSPITALITY STUDENT stutters nervously as she reads from the menu and trembles a bit as she pours our Cabernet.

She asks us repeatedly if we want more bread.

This is finals night in the service class at the International College of Hospitality Administration in Brig, Switzerland. Our server's grades are on the line, and I can see her professor in the corner of the room, watching over our table like a hawk, grimacing and scribbling occasionally on his notepad.

His standards are high: Switzerland is known as the birthplace of hotel management, and many of the world's most famous hotels are run by Swiss managers. A Swiss cook serves up the fare set before the Queen of England.

It was here in this small, picturesque alpine valley near Brig, where famed hotel magnate César Ritz was born and began his career in hotel-restaurant management, eventually working in some of Europe's most prestigious hotels.

Just as rural Pullman, Washington, may be the last place one would imagine to find a world-class hospitality school, Ritz, the 13th child of a Swiss peasant couple, was an unlikely candidate to become "the king of hoteliers and the hotelier of kings." But in this obscure village where Ritz took his first job as an assistant waiter, Washington State University students are learning the fine art of European hotellerie, and students from around the world are learning American business management methods from WSU, whose on-site faculty offer a bachelor's degree in hospitality business management.

"We think it's a very good mix," said Michael Vieregge, director and assistant professor at the WSU School of Hospitality Business Management's Swiss Center. "It's the best of two worlds coming together."

Lothar Kreck, a WSU hospitality business management professor who retired in 1997, helped negotiate WSU's cooperation when the unique hospitality administration school in Brig was launched in 1985



“The American students benefit from the Swiss skill levels, and the international

by Swiss businessman W.D. Petri. Petri was looking for a way to modernize the Swiss hospitality system’s service-oriented education with American business methods. Kreck helped make it possible by convincing WSU to allow students from the Swiss school to finish their degrees in Pullman. Later, WSU began offering credits on-site through the extended degree program that was expanding rapidly under then-WSU president Sam Smith. In 1989, the Institut Hotelier César Ritz became the first Swiss hotel school with an American accreditation.

In fact, when WSU began offering its credits for a bachelor’s degree in Switzerland, it was the first U.S. hospitality school to do so in Europe, according to Vieregge. Other schools soon followed suit, including University of Massachusetts, University of Central Florida, and Virginia Tech. Today, Cornell University’s hospitality school offers a master’s degree in Paris.

But at the time, Petri was rocking the boat. In fact, he was kicked out of the Swiss Hotel Association for introducing English-language programs.

“At the time, it was seen as very non-traditional,” explains director of WSU’s School of Hospitality Business Management Terry Umbreit. “But looking back now, it was actually pioneering and cutting edge.”

That, despite an ancient alpine culture that at first seems anything but modern. Brig is the German-speaking capital of the State of Valais, gateway to the Matterhorn Mountain as well as elite resorts such as St. Moritz. A railroad town with about half the population of Pullman, it’s situated in a wide valley of achingly beautiful Swiss villages flanked by 12,000-foot peaks.

Housewives hang featherbeds to air out the shuttered bedroom windows of

their half-timbered chalets. Enormous woodpiles stacked outside would last for five winters on the Palouse. The cows wear bells. And when spring break rolls around and Pullman students are heading off to Mexico or the warm dunes along the Snake River, these students are still knee deep in snow. (Although, they like to point out, it’s just a few hours drive down into Italy, so they can hit a Mediterranean beach in less time than



the Matterhorn napkin fold

it takes Pullman students to drive to Seattle.)

But don’t let the alpine location and old-world charm fool you. The current school facility was built in 1991, expanded in 2000, and is fully wired for Internet access and videoconferencing. Students are given wireless connections when they arrive, allowing them to carry their laptops to class and check their e-mail by satellite wherever they are, even though “where they are” appears cut off from the rest of the world by the surrounding mountains.

In 1997, the Swiss Center program was restructured to allow WSU’s School of Hospitality Business Management to offer its bachelor of arts degree on an accelerated basis to graduates of the al-

ready-established hospitality program at the International College of Hospitality Administration, which offers two-year and master’s degrees in collaboration with other institutions.

Once students have completed the two-year degree, WSU offers the remaining two years, with students taking the same courses WSU students at the home campus in Pullman take—

mostly advanced hospitality management and business administration classes. But other courses are unique to the Brig program, such as specialty classes in casino operations and ecotourism.

“The American students benefit from the Swiss skill levels, and the international students benefit from the American business management courses,” says Vieregge. “The classes are small, there’s individual projects. It’s very challenging, and the European students give them a run for their money.”

The restructuring also synchronized the year into a U.S.-style system of two semesters and two summer sessions. Classes are taught by three permanent faculty and rotating summer faculty, many of whom come to Brig from Pullman.

“I’ve been impressed,” says David Sprott, an associate professor at WSU who came to Brig with his wife and children to teach consumer behavior for a semester. “The combination of a Swiss hotel school and an American system holds together very well.”

Germans make up the largest portion of the total 200 students, though about 40 different nations are represented at the school. Of the 200, approximately 50 are enrolled in WSU’s extended degree program in pursuit of their bachelor’s degree.

So far from home, faculty often

students benefit from the American business management courses.”

—Michael Vieregge, Swiss Center director

double as surrogate parents for homesick students suffering various kinds of culture shock. One faculty member had to help a student from Israel inch her way down the mountain during a sledding party after she panicked—her first time on snow. When a blizzard canceled a planned glacier hike, another professor hurriedly threw together a fondue dinner at her home for two dozen visiting South African students.

“I feel like the faculty here really take students under their wing,” says Heather Tornow, 22, a junior from Seattle. The family atmosphere is summed up by the way students affectionately greet Vieregge, their director, in the halls: “Hey, Dr. V!”

But the casual, friendly atmosphere does not mirror a lack of rigor or professionalism. Students abide by a strict formal dress code. (Male students are prohibited from wearing earrings and must wear ties during the day.) And classes, say the American students, are more rigorous than back home.

“It seems people are more serious and motivated here,” says WSU junior Paige McDonald of Laurel, Montana. “They have strong opinions, and you feel like you have to really be on top of it. Especially since everybody actually comes to class every day.

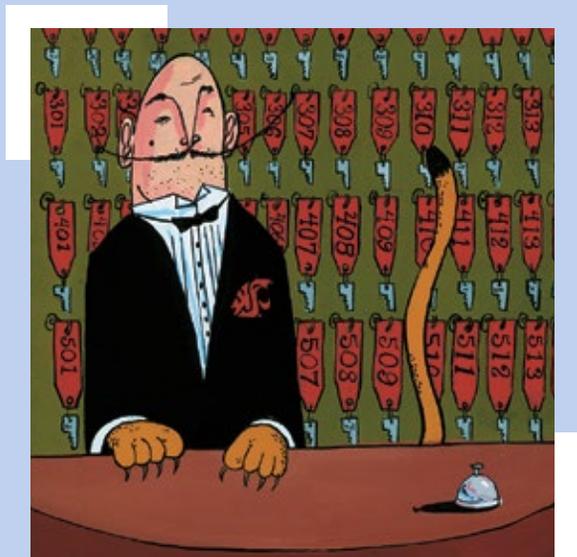
“In Pullman there’s diversity, but it’s not as concentrated,” adds McDonald. “Here you learn a lot in class, but also just hanging out with people from all different nations and learning about their cultures.”

“We believe students who have studied here are changed for the better after this program,” says Umbreit. “They are more wide open, they interview better, they have a more global perspective.”

Take graduate student Stephanie

Kroh, for example. Kroh, 24, first came to study at WSU from La Paz, Bolivia, where her mother was the chef at the American embassy. Since she began her studies several years ago, she’s started a family tradition. Brothers, sisters, and cousins have all come to Pullman to study, following in her footsteps. This semester, she’s working as a graduate assistant in the Swiss hospitality program.

“The advantage of being here is you



a Cougar at the desk

are exposed to many different cultures in a small family atmosphere,” says Kroh. “Hospitality is a world industry, and you need to be able to adapt and understand other cultures.”

That’s never been more true than today. In 1999, there were 663 million international tourists, according to the World Tourism Organization (up 4 percent from 1998).

“Globally, the industry had a tremendous year in 2000. It was a benchmark year for tourism internationally,” says WSU professor Nancy Scanlon, who teaches at the Swiss Center. But September 11 and terrorism concerns have wreaked havoc on tourism and triggered cutbacks in business and pleasure travel. Scanlon and others have responded by

stressing the need to drive operating costs down while still maintaining value for customers.

When he’s home in Thailand, Ni Ti Pat Chimnam runs a small hotel. But this semester, he’s working full time on soaking up all he can from his WSU professors in Switzerland, including Scanlon, who this semester is teaching a class on hospitality and the environment.

“In this class, I have learned things

I just never thought of before,” says Chimnam, leafing through his text before class. And not just how to flambé, serve fondue, or set a French-style table, but practical tools he plans to put into practice in Thailand—ways to save energy, recycle waste, and save water—like faucet aerators, shower water-reduction devices, and low-flush toilets.

Chimnam and Ben Gies, a 23-year-old WSU senior from Richland, Washington, strain to understand each other’s accents as they work on their joint assignment in Scanlon’s class. Now that he’s seen some of Europe and studied alongside

other foreign students at the Swiss Center, Gies says he’s more confident about starting his job hunt later this year. He’s already setting his sights on Waldorf-Astoria in New York City.

“Studying here helped me understand how different cultures manage to come together with all our diverse beliefs,” says Gies. “I think I have a broader understanding of things now. It has taken my small-town American values and put them in a global perspective.” ■

Andrea Vogt lives in Bologna, Italy, and Palouse, Washington.

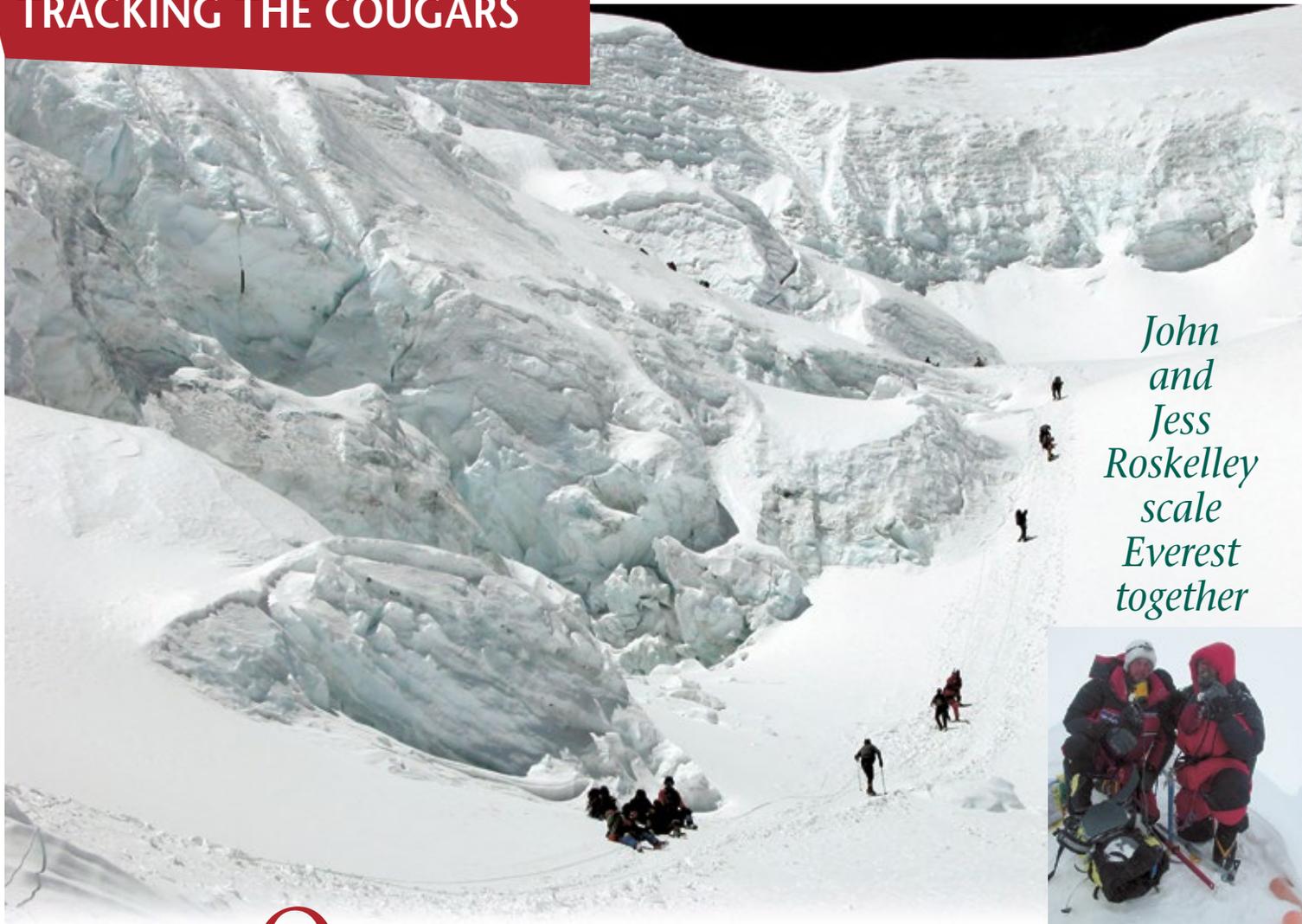


ACHIEVEMENT:

n. a thing achieved, especially by skill, work, courage, etc.; feat

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*John
and
Jess
Roskelley
scale
Everest
together*



ON TOP AT LAST by Pat Caraher

AFTER four failed attempts, the last one 10 years ago, John Roskelley must have wondered if he'd ever get another chance to conquer 29,035-foot Mount Everest. Or even if he wanted to.

Never underestimate Roskelley's resolve.

The Spokane County commissioner has been climbing since 1965. For years he was among the world's most accomplished mountaineers. In 1981 he made his first assault on Everest's east side, via the unclimbed Kangchung face. He was 33.

"We didn't get very far," he said in mid-June from his downtown office.

That was the beginning of the Everest saga. In 1983, Roskelley reached 26,000 feet on the West Ridge before being forced down with pulmonary edema. A year later, while climbing with a strong group of guides from Mount Rainier, it was the potential for severe frostbite at 28,000 feet on the North Face route that ended the attempt. Roskelley doesn't regret the decision to turn back. He still has all his fingers and toes. Phil Ershler, a team member who was using bottled oxygen, reached the summit.

Roskelley continued to climb, but not Everest, not until 1993 with Seattle's Jim Wickwire. High

winds on the North Col covered their ropes with snow.

"We never caught a break in the weather," Roskelley said.

Maybe it would be his final climb on the world's highest mountain?

"I could have said that in 1993. I always believe that there's something left, if you have a strong desire to go after it."

He demonstrated that last spring, when he summited Everest's North Ridge May 21.

ROSKELLEY has experienced tougher, more technical challenges on smaller peaks over 26,000 feet. He's stood atop Gaurishankar and Makalu in Nepal and Uli Biaho and Trango Tower in Pakistan. For 15 years, Everest hopefuls have considered the northeast route on the North Col—Roskelley's May route—the best alternative to the preferred South Col route from Nepal.

"There's a lot of luck with these expeditions"—and variables, the 1971 Washington State University graduate in geology said. The route. Whether sherpas accompany climbers above advanced camp. And whether climbers rely on bottled

oxygen, which Roskelley hadn't on Everest until this time.

The climb was billed as "Generations on Everest." Dick Bass, 73, of Snowbird, Utah, was attempting to become the oldest man to summit. Wickwire was 62, Roskelley 54, and his son, Jess, 20. They climbed with five Sherpas.

Ed Homer of Minneapolis, who had the original permit, never got the chance. He was struck and killed by a falling rock on Mount Rainier in September 2002. Shortly after learning of the unfortunate accident, Roskelley called Wickwire. "I've given this a lot of thought. I'd like to keep the [climbing] permit and take Jess along."

Jess Roskelley has followed in his father's pions. Despite his youth, the University of Montana student and Mount Rainier guide had reached the 14,410-foot summit of Rainier 35 times.

"I always treated [Jess] as a teammate," Roskelley said, referring to climbs they've made together. That was the case on Everest as well. "When he had comments to make about the route or team, Jim, Dick, and I took his comments seriously."

He'd watched his son wrestle and compete in cross-country at Mount Spokane High School. The pair also raced mountain bikes together. "I knew Jess would be a solid partner and stick with it."

In January, Jess had three wisdom teeth extracted. By the time he reached base camp in early April, his jaw had become infected. He left the team, was taken by jeep through Tibet and into Nepal, found medical help, and was back within five days.

"It was discouraging to leave the team . . . leave the mountain, and go back to ground zero," he would say. Earlier the Roskelleys spent almost seven weeks above 17,000 feet becoming acclimatized before moving on to advanced base camp at 21,000 feet. They were encouraged by the forecast for decent weather for the May 16-18 window. About May 13, the Roskelleys moved to the North Col at 23,000 feet. After one good day of weather, they were forced by fierce winds to hunker down in their tent for days. On May 17, they tried to reach the next camp at 25,700 feet, but were beaten back by more wind.

Conditions on May 18 were perfect, but the Roskelleys, exhausted, decided to rest for the day. Three Sherpas went ahead to set up the camp. The Roskelleys followed the next day,

"The goal you set for yourself is to stay the course . . . to stay focused. At any time you get tired of the glare off the snow, the dust, the miles of glacial terrain, the travel, the lack of sleep, the altitude. The altitude just takes a huge toll on you."

—John Roskelley

which was windy and cold, but climbable. The Roskelleys had been on the North Col five days and six nights—longer than any other climbing parties.

Roskelley had vowed to himself not to leave Everest until he got a shot at the summit. When winds gusted up to 80 mph at 25,500 feet, Jess asked his dad if they should put on their down suits and climbing boots in the tent.

"Yes," he responded. "If the tent takes off with us in it, we'll have to bail out and be able to survive."

Roskelley thought it best to stay put the next morning, considering the high winds, but their Sherpas thought it was best to move to the next camp, so they pushed on, reaching the 27,200-foot level at 2 p.m. They limited themselves to a single bottle of oxygen to reach the camp. The elusive summit was within reach—1,800 vertical feet above them and a half a mile to the south.

"It doesn't sound like much," Roskelley said, "but the distance you have to travel diagonally along the ridge is quite a ways."

THE FINAL ASSAULT began at 11 p.m., May 20, after tea, Snickers bars, and oatmeal. It was snowing. The wind had picked up a little, but wasn't bad. The sky was cloudy. The temperature was surprisingly warm, 20 degrees below zero. On a clear night, it could have been 40 degrees below.

Bottled oxygen "really gives you a boost, when you are used to not having it," Roskelley explained. The climbers would take two or three breaths for each step as they moved diagonally up the first gully. Ahead of them was the highest ridge on earth, with an 8,000-foot vertical drop on the east side and the same on the north.

En route to the ridge, they encountered two bodies—grim reminders of the perils climbers face. "Cave Man" was directly under a rock overhang, "laying there like he was asleep." Believed to be from India, he perished in 1998. They stepped around him. The other body was located below the ridge, just above the "Second Step," a treacherous area along the northeast route.

The final 1,800 feet, from camp to summit, took a little over seven hours. A series of small rock ramps that switchbacked to the ridge slowed them down.

With the summit about two hours away, the main concern was not knowing what was coming next in the dark. They felt they were moving "too slowly." This wasn't the time to make a mistake.

"I knew we would get a good summit shot, or at least one of us would—either Jess or myself. We talked about how great it would be to summit together. But at my age, I didn't know what my chances were," the senior Roskelley said.

He was rewarded on his fifth

try; Jess on his first.

"Dad, we did it," Jess said, as the two hugged. Both had tears in their eyes and found it difficult to breathe and talk through their face masks. The emotions had been building up for about half an hour.

"There we were on our knees, trying to keep from getting blown off. When you're exhausted and weakened by all the work, standing on a table-sized platform makes you feel a bit uneasy," Roskelley said.

The noted photographer, author of three books, speaker, and environmentalist took photos to document their conquest and congratulated the two Sherpas with them on top. The view was limited. Clouds obscured everything but the summit cornices.

They remained on the summit only 10 minutes—more than enough time to enjoy what they had achieved. Then their thoughts quickly turned to another challenge—getting off the mountain safely. ■

Visit [John Roskelley's home page at www.johnroskelley.com/index.html](http://JohnRoskelley.com/home_page_at_www.johnroskelley.com/index.html)

CLASS NOTES

1930s

Joe Caraher ('35 Journalism) is author of *East Side, West Side, All Around the Town* (Pajokirk, 2003), a collection of newspaper columns he's written over a half-century. He is retired editor and publisher of the *Herald & News* in Klamath Falls, Oregon.

Sylvia Haapala ('38 Home Ec., '38 Educ.), Winlock, celebrated her 90th birthday January 15, 2003. She taught at Toledo and Winlock high schools for 30 years.

1940s

The Ed K. Erickson Theatre Off Broadway at Seattle Central Community College has been dedicated in honor of **Ed Erickson** ('40 Educ., '46 B.Ed., '48 M.A. Educ., '65 Ed.D.), founding president of the Seattle Community College system.

Richard Sagle ('42 Pharm.), was one of only 27 of the National Weather Service's 11,000 volunteer weather observers to receive the John Campanius Holm Award in 2003. He has recorded temperatures and precipitation daily for almost 46 years in the northern Ferry County community of Republic.

Wendell Oliver ('48 Wildlife Biol.), Toppenish, retired wildlife biologist for the Washington State Game Department, has been a consulting biologist for 10 years for such clients as the Yakama Indian Nation and various public utility districts.

Ed Soper ('49 Agri.), Lake Forest Park, reports 74 former residents of the Pine Manor men's cooperative living group at WSC attended an April 25-27 reunion in Pullman. The gathering included 52 spouses. **Cliff Gillies** ('51 Phys. Ed., '59 M.S. Phys. Ed.), South Bend, was master of ceremonies, and **Carl Ronning** ('42 Polit. Sci.), Whidbey Island, was one of the earliest residents.

1950s

Florence Wager ('50 Speech Comm., '54 Educ.), a retired arts administrator for the San Francisco Symphony Association, was among the 2002 Women of Achievement selected by Clark College in Vancouver. She also received the Women Sustaining the American Spirit Award from the Clark County YWCA.

Dave Allen ('52 Engl.) is an Episcopal monk of the Society of Saint John the Evangelist in Cambridge, Massachusetts.

Stanley M. Miller ('52 Dairy Sci.) and **Barbara A. Kitlar Miller** ('53 Home Ec. Educ.), Bellevue, celebrated their 50th wedding anniversary June 29, 2003.

Elaine Zakarison ('54 Sociology), Pullman, was awarded the Women's Studies Alumni Award for 2002 from WSU. She was the executive director of the YWCA at WSU, 1961-62 and 1966-75. Later she became an assistant to the dean of students, 1979, and director of Supportive Service Programs, 1987. She served as

CLASS NOTES *continued*

director of Student Services for the YWCA of the U.S., 1987-95.

1960s

Martin Favero ('61 M.S. Bact. & Pub. Health, '64 Ph.D. Bact.) was the inaugural recipient of a lectureship award in his name presented by the Association for Professionals in Infection Control and Epidemiology in San Antonio last June. Favero is director of scientific and clinical affairs at Advanced Sterilization Products (ASP). Prior to joining ASP in 1996, he worked 32 years with the Centers for Disease Control and Prevention in various positions, including director of the CDC's Hospital Infections Program.

Bob Boehm ('62 Mech. Engr., '64 M.S. Mech. Engr.) is director of the University of Nevada-Las Vegas Center for Energy Research. In 1990, he became chair of UNLV's newly formed engineering department. He spent more than 20 years teaching at the University of Utah, where he was department chairman.

S.M. "Ghazi" Ghazanfar ('62 Bus. Adm., '64 M.A. Econ., and '69 Ph.D. Econ.), Moscow, Idaho, is editor of and a contributor to *Medieval Islamic Economic Thought*, published by Routledge Curzon in 2003. Earlier this year, he received the Lifetime Alumni Award for Excellence for his long-term commit-

ment to students and the University of Idaho. He taught economics, 1968-2002, and was department chair, 1979-81, 1993-2001.

Michael Keller ('64 Phys. Ed.) retired after 25 years as track-and-field coach at the University of Idaho. He now is a realty professional with Windermere Real Estate-Manito LLC in Spokane.

David A. Bryant ('66 Forest & Range Mgmt.) is the new president of Oklahoma Panhandle State University at Goodwell. Earlier he was vice provost and director of agriculture extension services and professor of animal and range sciences at Montana State University.

Norm Howard ('67 Hotel & Rest. Adm.) is the new general manager at the Grand Union Hotel in Fort Benton, Montana. He has more than 30 years of hotel industry experience at the Davenport Hotel in Spokane and in California, Tennessee, Illinois, Kentucky, and Arizona.

1970s

Thomas Roche ('70 Ph.D. Chem.) was honored as a University Distinguished Professor at Kansas State in May. He is a leading researcher studying mammalian pyruvate dehydrogenase complex (PDC), a central decision-making factor in how a body uses sugar.

Kevin Heimbigner ('71 Acct., '73 Teach. Cert.) retired after 30 years as a business education teacher and coach at Toutle Lake, Odessa, and Naselle high schools. Three times he was Washington State Baseball Coach of the Year, amassing a 411-102 record. He also coached basketball and football, winning 26 league championships. Now he is a staff writer for the *Chinook Observer* in Long Beach.

Mike Hinz ('73 Animal Sci., '78 Bus. Adm.) retired in 2002 after working at WSU for 28 years, including 24 as chemistry department storeroom manager. Since 1993, he has been head track-and-field coach of Pullman High School and the Pullman Comets summer club. Under Hinz, PHS has claimed three state championships—boys in 1998 and 2003 and girls in 2001.

Since 1973, **David Leary** ('74 M.A. Police Sci. & Adm.) has held numerous positions at the Lawrence Livermore National Laboratory in California. Last summer he was again appointed security chief, a position he held in the mid-1980s, when he introduced the lab's first special response team and K9 dog patrols.

Matthew Wanchena ('74 Arch St.) of Woodinville has been accepted into a special doctoral program in the business school at Kennedy-Western in Cheyenne, Wyoming. He is being awarded 50 percent of the credits required for his doctorate as a result of his prior work experience, military service, and education. He expects to complete the degree in 18 months. He was a building plans examiner/building inspector for the SeaTac Airport Building Department.

Barbara Huprich Deckert ('75 Engl.), Elkridge, Maryland, tells us that her first book, *Sewing for Plus Sizes: Design, Fit, and Construction for Ample Apparel* (Taunton Press), now is in paperback. It sold more than 14,000 copies in hardback. Her second book, *Sewing 911: Practical and Creative Rescues for Sewing Emergencies* (Taunton Press), was reviewed in *WSM* fall 2002. She also writes articles for several national sewing magazines, has appeared on PBS and HGTV, and runs a custom clothing business.

Rob Wayne Hansen ('75 Hist.) received the 2002 Teacher of the Year Award presented by Moses Lake Wal-Mart. The 28-year educator teaches fifth grade at Knolls Vista Elementary in Moses Lake.

American food writer **Robert Carmack** ('76 Comm.), Sydney, Australia, is author of a new book devoted to cheese fondues, meat, and fish cooked in wine and stock fondues. He previously was a food researcher for *Time-Life* books.

Master Sgt. **Michael Olsen** ('76 Forest & Range Mgmt.) is a program facilitator

of the Junior Reserve Officer Training Corps at Old Town High School, Old Town, Maine. He has served in the Army for 25 years.

William C. Barr ('77 M.A. Child & Family Studies) is senior vice president of health care operations for The Regency Group, a four-state affiliation of Blue Cross and/or Blue Shield companies in the Northwest. The appointment was announced in July at company headquarters in Portland. He has more than 25 years experience in the health care industry.

Suzanne Carr Pease ('77 M.A. Child Development) took office as president of the National Association of Women Business Owners in June. She owns Ampersand Graphics, a New Jersey graphic design firm.

Gary Versteeg ('77 Comm.) and Gary Anderson opened the 12,000-square-foot Seattle Auction House in Seattle's Georgetown neighborhood in December 2002.

Stephen Fodor ('78 Biol., '82 M.S. Biochem.), San Diego, was appointed to the Scientific Advisory Board of Phenomix. He is the scientific founder, chairman, and CEO of Affymetrix. His development and use of DNA chip technology has led to broad commercial applications in many areas of basic and clinical research.

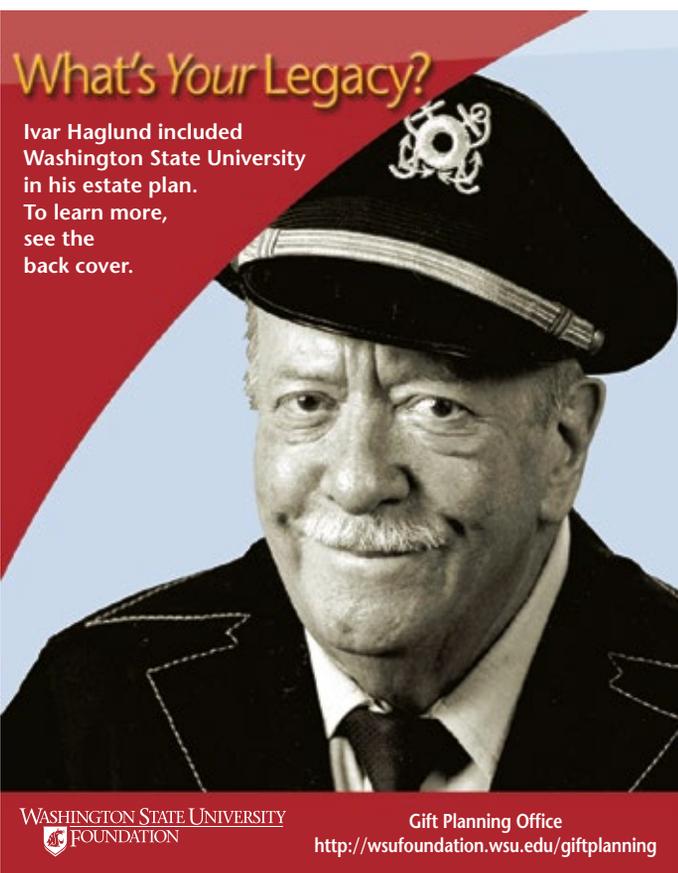
Abdullah Al Musa ('79 Plant Path.) was appointed president of the University of Jordan in February 2002. At UJ he has served as academic vice president, scientific and medical faculty, dean of the faculty of agriculture, deputy dean of the agriculture faculty, and head of the department of plant protection.

Mickey Urdea ('79 Ph.D. Biochem.) has been elected to the board of directors for Quantum Dot Corp. in Hayward, California. He has published more than 185 scientific papers and has 89 issued patents and patent applications, having developed numerous patented compounds, processes, and devices.

1980s

Phil Hinrichs ('80 Agri.) was inducted into the Northwest Athletic Association of Community Colleges' Hall of Fame in June. He compiled a 19-1 pitching record at Yakima Valley College in 1976 and 1977. He later pitched at WSU for two years and played professionally for six years in the San Francisco Giants organization. He is a wheat and grain broker in Pullman.

Martin L. Heimbigner ('81 Bus. Adm.) is a partner in the Seattle accounting firm of Tatum Partners. He serves on the City Bank board of directors.



What's Your Legacy?

Ivar Haglund included Washington State University in his estate plan. To learn more, see the back cover.

WASHINGTON STATE UNIVERSITY FOUNDATION

Gift Planning Office
<http://wsufoundation.wsu.edu/giftplanning>

Janine Anderson ('83 Comm.) has joined the Tri-Cities Visitor and Convention Bureau as membership director.

Mary McLeod Wadsworth ('83 Interior Design) has been named a principal at Civic Design in Great Falls, Montana. She is lead computer-aided drafting manager and interior designer for the company. She has a dozen years of experience in project management with Eddie Bauer, SeaFirst Bank, the Chil-

dren's Museum of Montana, and the state of Montana.

Donald E. Tilton ('85 Mech. Engr.) is co-founder of Isothermal Systems Research, Inc., a company that has developed cooling technology expected to save the military about \$300 million in weapons costs. In June ISR received a Value Engineering Achievement Award from U.S. Department of Defense officials during ceremonies in Washington,

D.C. Tilton developed the initial spray-cool technology that the military will use aboard airplanes and in ground vehicles. He is chairman for business strategy of the company based at Liberty Lake near Spokane.

Physics professor **Paul E. Adams** ('86 M.S. Physics) was selected for the Marian Pfister Anschutz Endowed Professorship in Education at Fort Hays State University in Hays, Kansas. He is

looking for ways to use the collective talents of FHSU faculty to develop quality teachers for western Kansas.

John Mercer ('86 Comm.), anchor at KTVN-TV in Reno, Nevada, for the past eight years, has been named news anchor at WDEF-TV in Chatanooga, Tennessee. He started his broadcasting career in Yakima, and later was a news anchor at KOBI-TV in Medford, Oregon.

WORKING TO PREVENT ANOTHER CHORNOBYL

"While it is devastating to see the impact of the Chernobyl accident—both economically and socially—international nuclear safety has advanced significantly because of this incident."

— Susan Senner

TEAMS OF communications professionals at the Hanford Site in Richland, Washington, juggled shifts to respond to hoards of news media calls in April 1986 about a catastrophic accident at the Chernobyl nuclear power plant in Ukraine. Susan McKenna Senner ('80 Communications) worked with this group, responding to questions about Hanford's N-Reactor, which had some design similarities to the ill-fated Chernobyl plant. The Hanford crew manned phones and provided reassurance that multiple safety systems in place at N-Reactor would prevent such an accident from occurring at Hanford.

Just over a decade later, Senner's career became more closely aligned with the Chernobyl plant and other Soviet-designed reactors. Senner is a project manager at the U.S. Department of Energy's Pacific Northwest National Laboratory, which is managed by Battelle and supports efforts to improve safety at Soviet-designed nuclear power plants. In 1997, Senner joined the site's International Nuclear Safety Program, which has implemented safety projects at 67 commercial nuclear power plants in Armenia, Bulgaria, the Czech Republic, Hungary, Kazakhstan, Lithuania, Russia, Slovakia, and Ukraine.

Senner manages technical and communications projects for this international nuclear safety effort. She travels two to three times a year to the former Soviet Union to meet with foreign colleagues or to accompany U.S. officials during nuclear power plant visits. She has visited the Chernobyl site

three times. "While it is devastating to see the impact of the Chernobyl accident—both economically and socially—international nuclear safety has advanced significantly because of this incident," she says.

In what is known as the worst nuclear accident in history, an out-of-control nuclear reaction at the plant 80 miles north of Kiev blew off the roof of the steel building. It sent tons of radioactive material into the air, contaminating widespread areas, killing 30 workers immediately, and forcing evacuation. Chernobyl alerted the world to the urgent need for safety work at reactor plants in the former Soviet Union. A partnership of seven countries, including the United States, called the G-7, identified ways to provide assistance. The International Nuclear Safety Program evolved from that effort.

"The International Nuclear Safety Program is based on transferring technology from the U.S. commercial nuclear industry to countries not quite as advanced in their safety practices," says Senner. "Its goal is to assist countries in establishing nuclear safety infrastructures that will be self-sustaining. Ultimately, we want to ensure that there will never be another Chernobyl-like accident anywhere in the world."

From its inception in 1992, the international program has helped to upgrade safety equipment, provide operator training, and instill a sense of safety consciousness within the operating environment at these plants, according to Senner. As part of this work, she and others at Battelle have built strong rela-



Susan Senner, '80

tionships with overseas colleagues in operational, regulatory, and academic fields. In fact, Senner's relationship with one Ukrainian woman whose life has been cruelly impacted by the Chernobyl accident has flourished into a strong friendship. The woman's teenage son spent a summer with the Senner family as part of a program designed to help the young people of Chernobyl.

Although the international program's original scope is winding down, some work will continue through next year, Senner says. Her job is starting to shift toward other nuclear safety projects. She has worked in the nuclear industry since graduating from Washington State University, first for Westinghouse Hanford Company (1980-87), then for Energy Northwest—operator of Washington state's only commercial nuclear power plant—for 10 years, before joining Battelle six years ago.

—Treva Lind

CLASS NOTES *continued*

Edmund Viesturs ('87 D.V.M.), Seattle, reached the summit of 26,658-foot Nanga Parbat in Pakistan June 22. His goal is to climb the world's 14 highest peaks without using bottled oxygen. Nanga Parbat was his 13th. The avalanche-prone peak, known as the "Killer Mountain," has been the site of a number of mountaineering disasters. Nepal's 26,545-foot Annapurna still remains on his list.

1990s

Diana L. Dreisbach ('92 Bus. Adm./Marketing) and Jack Danridge were

married in September 2002. They make their home in Lacey. She is an accounts specialist at an Olympia bank.

After the 2003 Washington legislative session, **Jane Yung Dennie** ('93 English) accepted a position as an assistant attorney general assigned to the University of Washington Medical Center. She previously worked on WSU government relations causes for more than six years.

Julie Everton Elliott ('93 English) has joined the staff of Schurz Library at the Indiana University-South Bend campus.

Scott O. Patterson ('93 Polit. Sci.) has been hired as chief information officer and director of public affairs for C-T in Vancouver, Clark County's public transportation. Earlier he was public affairs director with the Greater Vancouver Chamber of Commerce for three years.

Tim W. Busse ('94 Comm., '97 Educ. Teaching Certificate) has been recognized for his teaching at Spokane's East Valley Middle School. He teaches a class for seventh- and eighth-grade students who haven't fared well in mainstream classes. He was one of 18 teachers chosen to travel to China with the

University of Washington's East Asian Resource Center to learn about Chinese culture.

Andrew Perkins ('95 Environmental Sci., '98 M.B.A.) is an assistant professor of marketing at the Jones Graduate School of Business, Rice University, Houston. His current research focuses on the influence of implicit strength of identification on attitude formation.

Debra Kim Kwong White ('95 Pharm.) and **Gilbert Lee White** ('90 Polit. Sci.) were married May 3, 2003, in Kauai, Hawaii. She is a neuroscience sales representative with Eli Lilly and

Benzel helped set state education reform in motion

BRIAN BENZEL embraces the challenge of helping every child master key educational skills. As superintendent of Spokane Area Schools, the second largest school district in Washington, he oversees a \$264 million annual budget, more than 30,000 students, 3,500 employees, and 50 schools.

"I'm excited about what we're trying to do with education in Spokane, in the state, and in America," he said earlier this year from his downtown office.

He says Spokane schools are reversing the trend that generally shows poverty being connected to low academic achievement.

"Clearly society has moved to a place where high school [education] alone is not sufficient today. It's stated as a goal for the country that all children should be able to master those core skills—math, reading, listening and communication, and writing.

"I think our state was fundamental in that during the 1990s."

In reaching these goals, however, school districts face shrinking state funding for K-12 education. When an anticipated \$5 million Spokane Public Schools budget cut for 2002-03 was announced, Benzel sought public input. He wanted to know what people valued most. For 2003-04, the district faced a \$4 million proposed cut, and there was little time to take proposals back to the public.

While the state's depressed economy raises challenges for educators and school funding, the Spokane district has received positive community support for levies and bonds. In March, voters approved two important measures that operate schools and will begin a 25-year facility improvement program. Despite local successes, unfunded mandates from the state and federal governments cause

concern for educators like Benzel.

After graduating from Washington State University ('70 Bus. Adm.), he became an education policy analyst for the state legislature and later a supervisor for Frank Brouillet, then state superintendent of public instruction.

The Ritzville native became business manager of the Mead School District, Spokane, in 1977 and served four years as its superintendent through 1988. His long tenure in education includes a teaching stint, seventh-grade math at Mead Middle School, in 1983. He demonstrated his administrative talents as Edmonds School District superintendent, 1988-97, and then as chief operating officer for the Seattle School District, 1998-2001, before returning to Spokane.

In 1987 he was asked to chair Gov. Booth Gardner's Task Force on Schools for the 21st Century. This work led to a governor's blue-ribbon panel to develop the plan for the state's 1993 Education Reform Act that created the Commission on Student Learning. He served on the commission from 1992 to 1999. The commission helped implement a state school-reform plan that established learning goals for all students, developed the aligned student-testing system—now the Washington Assessment for Student Learning—and initiated professional development strategies for teachers and staff.

Prior to 1993, Washington did not have common education goals.

"We created a process that allowed a shared understanding of what these student



Superintendent of Spokane Area Schools Brian Benzel '70 obviously enjoys reading to schoolchildren.

learning targets should be," Benzel says. "We can be way more clear in what we are trying to accomplish. For example, we want our students to be able to write with clarity. Old standards and tests attempted to accomplish this goal through multiple-choice tests. We have created a framework for successful writing, and we assess the students by having them write."

Benzel also holds a master's degree in public administration from the University of Washington and a doctorate in educational leadership from Gonzaga University.

In conversation, Benzel comes across as open and relaxed. Away from work, he enjoys golf, reading, fly-fishing, and stamp collecting. He met his wife, Cindy Scott Benzel ('70 Bact.), at WSU. She is a retired school principal.

Benzel sets high expectations for himself and encourages the same in others. He also seeks to manage tensions between opposing interests—toward the goal of improvement.

"Finding a way to create that balance is the magic of leadership," he says.

—Treva Lind

Co. in Seattle. He is a senior development officer at Seattle University.

Robert J. Harrington ('96 Bus. Adm., '01 Ph.D. Bus. Adm.), a former chef with a doctorate in strategic management, is dean of the Chef John Folse Culinary Institute in Thibodaux, Louisiana.

Heidi Pierce ('96 Arch, '96 Arch. St.) has joined Zeck Butler Architects P.S. in Spokane.

Bryan Chiu ('97 Gen. St./Social Sci.) was voted Canadian Football League outstanding lineman in 2003. His team, the Montreal Alouettes, won the Grey Cup last season for the first time in 25 years.

Renee Tarabochia ('97 Hotel & Rest. Adm./Bus. Adm.) and **Joe Robertson** ('99 Crim. Just.) were married August 10, 2002, in Seattle. They have purchased a home in Maple Valley.

Randall & Hurley, Inc., a nine-year-old Spokane company owned and operated by Clay Randall and **Lynn Hurley** ('98 Math), boosted its revenues by 40 percent in 2000 and increased its customer base by 150 companies. The company handles retirement plans on behalf of clients, most of them small- to medium-sized businesses in the Spokane-Coeur d'Alene, Idaho, area.

Jed P. Sparks ('98 Ph.D. Botany), an assistant professor of ecology and evolutionary biology at Cornell University since 2002, received the Faculty Early Career Development Program grant from the National Science Foundation. He will receive \$500,000 in research support over five years. His research focuses on how plant communities physiologically respond and contribute to environmental conditions in the atmosphere and soil around them.

Michael S. Wilson ('98 Arch., '98 Arch. St.) has joined the Spokane architecture firm of Madsen Mitchell Everson and Conrad as an intern.

IN MEMORIAM

1920s

Catherine Mathews Friel ('23 English, '58 M.A.T. English), 101, July 27, 2003, Pullman. English teacher at Pullman High School. Married to **John Bryan "Jack" Friel** ('23 Econ., '23 Hist.), WSC head basketball coach for 30 years, 1929-58. Kappa Alpha Theta sorority and longtime chapter advisor.

Lorin Markham ('23 Agri.), 101, May 23, 2003, Spokane. President of National Water Resources and president of Spokane Chamber of Commerce for 20 years.

Edna Sommers ('28 Educ.), 96, Portland. Lived in Spokane and Salt Lake City before moving to Portland in 1942, where she was a book department manager for Olds & King department store.

Is there life after basketball?

Donaldson finds it in business and community

JAMES DONALDSON would like you to know that he's fine not playing basketball. Sure, the former Washington State center spent 20 seasons in the National Basketball Association and on the European circuit. And yes, it brought him some nice paychecks and an opportunity to compete at the highest levels of professional basketball. But it's never been a case of "basketball is life."

Now don't get the wrong picture. Donaldson still misses the competition. Still misses the practices—really—and the nightly face-off in games.

But here's the ugly side of pro sports—it's cut-throat. Younger players are always brought in to supplant veterans. If you should suffer a severe injury, there's no guarantee you'll ever make it back.

Donaldson knows that. He went down with a career-threatening knee injury in 1988 while playing for the Dallas Mavericks. Ever the optimist, he saw inspiration, and the course his post-basketball days would take was shaped then.

"The lightbulb came on," he says. "I became interested in physical therapy . . . in really wanting to help people."

His WSU degree is in sociology (1979).

"I love to learn," he says. Even when he was playing professionally, teammates would tease him when they found him reading books in the locker room. Later, he began taking physical therapy courses and hopes to be licensed soon.

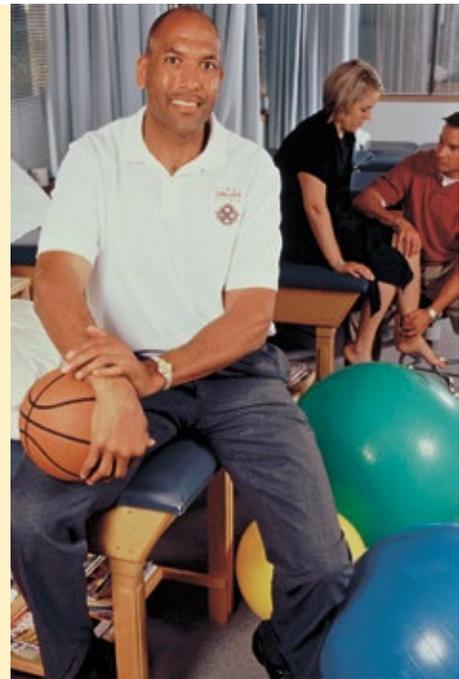
Meanwhile, he has directed his entrepreneurial talents toward the establishment of three physical therapy clinics in the Puget Sound area.

He opened the first Donaldson Clinic in 1990 at Mill Creek, a trendy suburb just off the busy I-5 corridor between Seattle and Everett. He hand-picked a group of top-notch specialists to address clients' PT and rehabilitation needs.

As business increased, the Donaldson Clinic grew. He acquired a clinic in Cashmere. It has since been relocated to the Central Area in Seattle and is scheduled to re-open later this year or early 2004. A third clinic opened two years ago in Tacoma's Hilltop area. Each clinic was the product of meticulous planning.

Both the Hilltop and Central areas are in poor, low-income districts.

"We were one of the first businesses to open in the Hilltop Area," Donaldson says. "It was deemed this dangerous, gang-infested place, but it's been cleaned up, and we saw a chance to offer opportunities to those living there." The clinic has become one of the cornerstones in the area's recent revitalization.



James Donaldson '79

Donaldson's people-first, humanistic approach was molded while he was growing up in Sacramento, California.

A shy youth uncomfortable with his height, he was nervous about going out for basketball, uncertain about the glare and spotlight a 7-foot-2 teenager was bound to attract.

"He came in tall, awkward, and overweight," says his high school coach, Chuck Calhoun, who covered the gym's windows so kids couldn't peek in and practiced with Donaldson one-on-one. Slowly and with patience, Calhoun worked with Donaldson, helping him become comfortable with his body and his game.

Amazingly, the center drew little interest from college recruiters, until Calhoun bumped into then-WSU basketball coach George Raveling at a coaching clinic in Nevada. Calhoun mentioned a seven-footer he had. Two weeks later, Donaldson visited Pullman. He stayed.

Following a distinguished career in a Cougar uniform, he took his talents to the NBA. There he played for several teams, including the Seattle Sonics. Before retiring in 2000, he spent his last four seasons playing in Europe.

Now Donaldson is involved with more organizations than a political candidate. He donates time to the NAACP; the Urban League; the Breakfast Group, an African American organization; the Gray W Club, varsity letter winners; and as a community relations representative for the Seattle Sonics.

"I always knew that when my playing career was over, I wanted to help people," Donaldson says. "There were people in my life who taught me the value of responsibility. I want to blaze a trail for young people to give back to their communities."

—Jon Naito '03

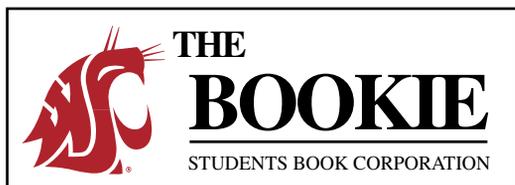
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STUDENT OWNED SINCE 1914

IN MEMORIAM *continued*

1930s

Alice M. Colman ('30 Pharm.), 92, June 19, 2003, Portland. Pharmacist. Vice president of the Washington State Business and Professional Women's Club in the late 1940s and served on the Kirkland City Council.

Harold Cullen Davis ('30 Phys. Ed., '37 M.A. Phys. Ed.), 94, May 14, 2003, Salem, Oregon. High school coach and teacher, then a director for the YMCA in Salem, Portland, and Seattle.

Mildred J. Kelsey Malm ('30 English), 97, May 15, 2003, Spokane. Taught English at Newport High School for three years. Worked for Spokane Bank for Cooperatives. Retired in 1973.

Dorothy Vaughan Peters ('30 For. Langs.), 95, May 12, 2003, Chelan. Taught in Sunnyslope for one year, then became a homemaker.

Erling J. Logan ('33 Educ.), 90, December 6, 2002, Ashland, Oregon. Intelligence officer with the U.S. Marine Corps in WWII. Retired as a major in 1959. Taught school in Skagway, Alaska; Worland, Wyoming; Daly City, California; and Sandpoint, Idaho, where he owned the Elliot Hotel. Worked with the United Nations Relief and Rehabilitation Administration and in Shanghai, China, with the UN's displaced persons division.

Alice Aaring Senn (x'33), November 2002, Kirkland, cancer. Worked for the Sunnyside School District. She and her husband, **Clem Senn** ('33 Phys. Ed.), had four children, all WSU graduates.

Richard D. "Dick" Shannon ('33 Phys. Ed.), 93, September 16, 2002, Yakima. Farm equipment businessman for 33 years starting with Yakima Equipment, which was later purchased by Food Machinery Corp., where he served as manager. Beta Theta Pi fraternity.

Hugh Crawford ('35 Geol.), 92, April 6, 2003, Ephrata. Employed by the U.S. Geological Survey, U.S. Bureau of Reclamation, U.S. Army Corps of Engineers, Washington State Department of Natural Resources, and was later self-employed as a licensed professional engineer and land surveyor.

Dorothy "Dot" Watson Greening Fishburne ('35 Home Ec.), 91, September 10, 2003, Tacoma. Co-owned a dude ranch in Montana and traveled with her husband, Ross Greening. He was a WWII pilot and POW. She was co-author of his war accounts published by the WSU Press in 2001, *Not as Briefed*. After his death in 1957, she married Superior Court Judge John W. Fishburne. Widowed eight months later and raised five children while working for the American Red Cross.

Kenneth Green Rowlen ('35 Agri.), 90, March 7, 2003, Newport, Washing-

ton. After graduation worked in clerical position with the Union Pacific Railroad. Became a pilot in 1936, then a link trainer and a navigator with the U.S. Air Force. After his military service, he returned to the Union Pacific in Portland and worked for the railroad until retiring.

Andrew McMeekin ('36 Mech. Engr.), 88, May 30, 2003, Steptoe, Washington. Worked for the Coulee Dam Bureau of Reclamation and the Civilian Conservation Corps, serving in Utah and Arizona. Later, became engineer for the Grand Coulee Dam, John Day Dam, and Garfield County. Returned to the family homestead in Steptoe to farm in 1978.

Sylvia Antilla Johnson ('38 Home Ec.), 87, March 8, 2003, Anacortes. Cooperative Extension Agent in Skagit County, 1938-42, and Island County, 1959-81. Tenured as WSU faculty in 1962. One of the first female county chairs of Cooperative Extension in Washington.

1940s

John C. Sonnichsen ('40 Civ. Engr.), 85, May 23, 2003, Prosser. Employed by Bechtel Corp., 1941-47, and by the Army Corps of Engineers in Seattle, 1951-76, except for 1960-61, when he was with the Mediterranean District at Livorno, Italy. Worked for Benton County Engineers, 1979-83.

Orvel Eskelson ('41 Forestry), 87, January 22, 2003, Spokane. Served in the Air Corps during WWII in North Africa, Corsica, and Italy. Farmed in Colfax until 1968, when he became a research assistant at the WSU Dryland Research Unit in Lind, retiring in 1978.

Helen Randall ('41 Nursing), 84, April 29, 2003, Portland, Oregon. Married Edward Paul, Jr. in 1943. Homemaker.

Robert P. Brimble ('42 Vet. Sci., '50 D.V.M.), August 23, 2003, Portland, Oregon. Co-owner of Town and Country Animal Clinic for 35 years in Portland. (See *Washington State Magazine*, Fall 2003, page 49.)

Wilton Heinemann ('42 Animal Sci.), 83, July 26, 2003, Yakima. Following employment as a county extension agent, moved to Prosser in 1945, where he spent a 40-year career in education and scientific research devoted to the advancement of the livestock feeding industry.

James Kraft ('42 D.V.M.), 84, April 25, 2003, Bellevue. Major in the Veterinary Corps during WWII. Owned the Seattle Veterinary Hospital. Served as the state and King County chapter president of the American Veterinary Medical Association.

Joseph A. Werner ('42 Bus. Adm.), 82, September 2, 2003, Tacoma. After serving in the Air Force during WWII,

worked five years for a national retail chain, then owned an independent variety store for 15 years. Taught accounting and business law and served as division chairman and associate dean of instruction at Green River Community College in Auburn. Retired in 1983.

Betty Anne Quackenbush Kittel ('43 Personnel Mgmt.), 83, March 2, 2003, Bellingham. Medical secretary for Fisher Body in Cleveland, Ohio, and real estate listing secretary for several years in Naperville, Illinois.

Raymond C. "Doc" Storey ('43 D.V.M.), 85, July 13, 2003, Molalla, Oregon. Veterinarian, city councilman, and school board member in Molalla.

Dean Darnell ('44 D.V.M.), 90, June 19, 2003, Auburn. Veterinarian and pharmacist, 1994-2001, in such locations as Cathlamet, Winlock, Mossyrock, Ephrata, and Mary's Corner (near Chehalis).

Kenneth Gowan ('44 Pharm.), January 25, 2003.

John Mansfield ('44 Gen. St.), 81, June 20, 2003, Sequim, aortic stenosis. Sales accounting supervisor for Chevron for 33 years.

Willa "Billie" Berry ('47 Spanish), 77, May 22, 2003, Spokane. Ran a flower shop with her husband, Clive Berry, in Issaquah, 1948-62. Phi Beta Kappa sorority.

Robert "Bob" Strausz ('47 Gen. St.), 80, July 25, 2003, Bellingham. Served in WWII in the Marine Corps. Orchardist in the Yakima Valley until moving

to Friday Harbor in 1994. WSU regent, 1973-77.

Don Hollingbery ('48 Arch. Engr.), 78, June 29, 2003, Yakima. Son of former WSU football coach **O.E. "Babe" Hollingbery**. Partner in Paddock & Hollingbery architectural firm for 25 years, ending in the late 1980s.

Carl Johansen ('48 Entom., '49 M.A. Entom.), 80, May 28, 2003, Coeur d'Alene, Idaho. WSU professor of entomology. Moved to Coeur d'Alene in 1984.

Philip Phibbs's legacy

"No decisions are easy, particularly when you are a university president and you are changing an institution."

—Philip Phibbs

MORE THAN A DECADE removed from the presidency of the University of Puget Sound, Philip M. Phibbs remembers the job as tough and demanding. But he loved it.

Many decisions he made, he acknowledges now, were difficult. They affected academic programs and people's lives. Through it all, he's confident the UPS is better today for his efforts.

Phibbs shared thoughts about his presidency during a late-April visit to Washington State University. He and Gwen, his wife of 49 years, had come to Pullman to celebrate the 50th anniversary of their graduation with other members of the Class of '53.

When he assumed the UPS presidency in 1973, the university's endowment was "very small—\$6 million," and the budget was "barely balanced." Facing those challenges, he and the trustees set the school on a course to become one of the top liberal-arts colleges in the country. Toward this goal, human and financial resources were focused on undergraduate education. Off-campus programs were phased out, except for the new law school. Athletics was restructured to provide equal opportunities for women. Recreation courses were expanded to benefit the general campus population. And all graduate programs were eliminated, save those in the School of Education. By design, student enrollment was limited to 2,800, approximately what it is today.

"No decisions are easy, particularly when you are a university president and you are

changing an institution," Phibbs says. Yet he held out a vision he thought would make for a stronger university. "A lot of the wonderful faculty had doubts, but they had faith in me. They went along. They just had to be convinced this would work." Applications for admission soared. So did the quality of students and programs, graduation rates, and donations. UPS's endowment was \$68 million when Phibbs retired in 1992. "The university had something to sell, a quality education in the liberal arts," he says. "Donors are interested in supporting quality and in hiring our graduates."

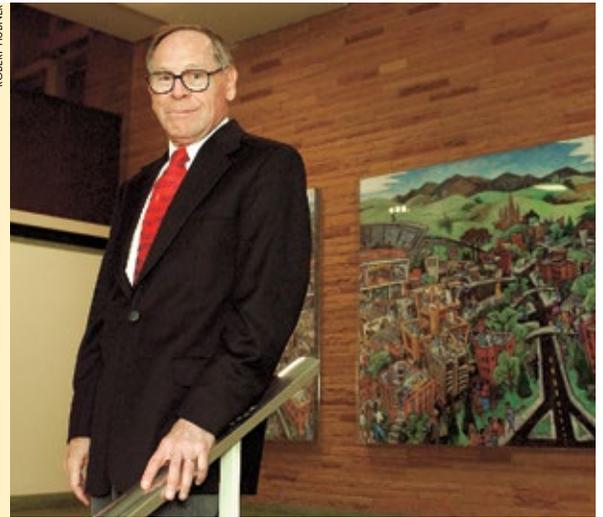
He attributes much of his success as UPS president to Gwen. "I have a great spouse. She believed in what we were doing—and was a partner in it."

Gwen Willis ('53 Home Ec.) came from Walla Walla to WSU, where she and Phibbs met. She worked in the library while pursuing her degree and later taught kindergarten at Anne Wright Seminary in Tacoma.

Phibbs found his own undergraduate experience at WSU "invaluable." Political science professors Dan Ogden, Paul Castleberry, and Howard Payne were, he says, superb teachers, convincing him of "the singular importance of teaching at the undergraduate level."

Always the scholar, he spent a year at Cambridge as a Rotary Foundation fellow. His master's degree and a doctorate in poli-

ROBERT HUBNER



Philip Phibbs '53

tics are from the University of Chicago. He spent 1957-58 as a Congressional fellow in Washington, D.C., where he worked in turn for Washington senator Warren G. Magnuson and North Carolina congressman L.H. Fountain. However, he dismissed thoughts of a political career, and he joined the faculty at Wellesley College, progressing through the ranks to executive vice president, then serving three months as acting president.

Now the Phibbses spend part of the year in Tacoma in a modest home overlooking Commencement Bay.

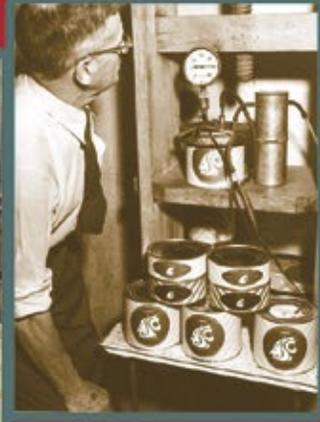
What legacy did Phibbs leave at UPS?

He is most proud of helping to transform the university from an institution that left some students unchallenged into one that emphasizes academic excellence.

"It's easy to criticize a decision you aren't involved in making," he says. "It's much harder when you've shared in the decision-making and have seen the advantages and disadvantages of it."

—Pat Caraher

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IN MEMORIAM *continued*

Philip A. Chapman ('49 Geology), 78, February 13, 2003, Shelton.

James Coe ('49 Bus. & Econ.), 76, June 27, 2003, Wenatchee, prostate cancer. Started orchard-industry career with Beebe Orchard Co. in Chelan. Sales manager for Wenoka Sales for 20 years. Later worked at Northwest Fresh until retirement in 1997. Sigma Nu fraternity.

Chester Lindsey ('49 Arch.), 76, August 2003, Seattle. Owner of Chester Lindsey & Associates, an architectural firm. Designed the 76-story Bank of America Tower and the Fourth and Blanchard Building in Seattle.

Nadine Ziemann Oman ('49 Home Ec.), 78, August 27, 2003, Spokane. Married **Glenn Oman**, a former WSU associate athletic director, in 1947. Worked the WSU switchboard. Lived in Pullman until 1982, then moved to Spokane.

1950s

William W. Gamble ('50 Comm.), 79, August 2, 2003, Sacramento. Announcer for KFBK radio in Sacramento for 35 years. Transferred to public relations for the *Sacramento Bee*; later became head of the department.

Charles Lund ('50 Ag. Engr.), 79, April 30, 2003, Spokane. Technician in the Army during WWII. Received a Bronze Star and a WWII Victory Medal. Worked

in the sales industry for 42 years. Retired in 1992.

Edward L. Gurney ('51 M.A. Agri.), 84, May 19, 2003, Chattanooga, Tennessee. Army Ranger during WWII. Research chemist for the Tennessee Valley Authority.

George E. Pheasant ('51 Agron.), 73, of Ephrata, April 5, 2003, Jackpot, Nevada. Began working as a soil scientist for the American Soil Conservation Service in Ephrata in 1951. Started his own farm in 1954. Served on the Washington Apple Commission for 20 years. Member of the Washington Research Association and president of the Washington Horticultural Society and the International Apple Institute.

Sam Langmas ('52 Agri.), 73, January 29, 2003, Bend, Oregon, bone marrow disorder. Taught science at Cascade Junior High, Pilot Butte Middle School, and Bend Senior High in Bend, Oregon, 1956-81. Opened Sam Langmas Grounds Maintenance after retiring from teaching in 1981. Served on the Bend Planning Commission, 1970-78; Bend City Commission, 1973-84; and as mayor of Bend, 1983. Founding member of the Mid-Oregon Federal Credit Union. Sigma Nu fraternity.

Darrel R. "Doc" Robertson ('52 Chem., '52 D.V.M.), 88, August 10, 2003, Excelsior Springs, Missouri. Veter-

inarian in Kansas City until 1953, when he started Clay-Ray Animal Hospital in Excelsior Springs.

Kenneth Edward Hinton ('53 Fine Arts), 75, May 3, 2002, Spokane, cancer. Taught art at Spokane Falls Community College for 27 years. Traveled to New York City, San Francisco, Rome, Paris, and Greece.

Phillip M. Davenport ('54 Gen. St., Pre-Med.), March 6, 2003, Wenatchee. Before retiring, he worked for the Wenatchee Valley Clinic.

E.D. "Bud" Van Dissel ('55 Mining Engr.), 89, May 7, 2003, Spokane. Owned Silver Beach Resort at Waitts Lake, near Chewelah, for about 20 years.

Victor R. Cullens ('56 Ed.D.), 81, Portland. Retired superintendent of the Parkrose School District in the Portland area.

Marshal "Marsh" Fischer ('56), 68, July 18, 2003, Sunnyvale, California, cancer. Worked for Lockheed Corp. for more than 30 years, holding financial and administrative positions.

John F. Eisenberg ('57 Zool.), 68, July 6, 2003, Bellingham, cancer. First resident scientist at the National Zoo in Washington, D.C., 1965-82. Helped make science and conservation biology a component of animal management at zoos internationally. He left the zoo as

assistant director to teach and research at the University of Florida until 2000. Wrote more than 150 major scientific publications on ecology, behavior, and evolution, including the influential *The Mammalian Radiations: An Analysis of Trends in Evolution, Adaptation, and Behavior*. His three-volume *Mammals of the Neotropics* series, a comprehensive survey of South American terrestrial and marine animals, was completed in 2000 with co-author Kent Redford.

Richard "Dick" Lawrence Simpson ('58 Civil Engr.), 68, August 27, 2003, Spokane. Worked for the Washington State Department of Transportation in Seattle, designing the I-5 freeway. Moved to Spokane Valley in 1967 to work for his father at Clarence E. Simpson Engineers. City engineer of Cheney for more than 20 years.

1960s

Terry Ladd Proctor ('64 Educ.), 60, May 14, 2003, Appleton, Wisconsin. Employed by the Kimberly-Clark Corp. in Neenah, Wisconsin, for the last 18 years. Kappa Delta sorority.

Shirley Weigle Cross ('65 M.F.A.), 76, May 26, 2003, Whidbey Island. Educator in Spokane public schools for 26 years, retiring as director of art in 1981. After her retirement, she designed and built homes in Rockford Bay on Lake Coeur d'Alene, Idaho, and on Whidbey Island.

Niva, Cox named WSU regents

CONNIE MILLARD NIVA and **ANGELA S. COX** were named by Governor Gary Locke last summer to Washington State University's 10-member Board of Regents. Cox serves as the student member, a position created in 1998.

Niva ('62 Bact. and Public Health) makes her home in Everett. She served on the Everett City Council, 1986-89, and on the Washington State Transportation Commission for 10 years, including three as chair.

As a regent, she says, she'd like to see WSU continue making progress in creating the best undergraduate experience and in nurturing a world-class environment for research, scholarship, and graduate education. She also wants WSU to become a leader in academic excellence among its group of peer universities.

The major challenge for WSU's leadership at the moment, she says, is to manage with a reduced state budget appropriation, while

continuing to plan for long-term growth and the needs of the communities where WSU has campuses.

During her six-year term, Niva says she will work to gain recognition by the state legislature and citizens that funding for higher education is "a critical element in the future economic development and quality of life of the people of the state."

Niva holds a master's degree in public administration from Seattle University, where she has been a visiting professor. She also has been a lecturer and laboratory administrator at the University of Washington Medical School. Her husband is Jud Marquardt.

Cox, a WSU senior from Anchorage, Alaska, is a dual major in advertising and English. In addition to attending classes during the summer, she was an editorial assistant for the *Western Journal of Black Studies*, a leading interdisciplinary journal



Connie Niva '62



Angela Cox '04

that publishes scholarly articles focusing primarily on the African American experience in the United States.

As a regent, Cox says she will concentrate her efforts on building relationships and diversity, as well as attending to the budget.

"This position is not about what it can do for me, but what I can do for the students," she says. "I want to . . . be proactive with student issues . . . to be there with a plan to resolve any issue."

IN MEMORIAM *continued*

Thomas F. Kingen ('68 Bus. Adm.), 56, July 16, 2003, Spokane, heart attack. Employed by Preston, Gates, & Ellis in 1980 and served as counsel to the Spokane Transit Authority. Became partner and head of the municipal law department at Perkins Coie in 1990. Since 1997, he has been the attorney for the City of Pullman.

Judith Millard Freeman ('69 Home Ec.), July 9, 2002, Tacoma. Taught elementary science and was active in community affairs for many years. Delta Delta Delta sorority.

Dennis Bruce Stewart ('69 Hist., '74 Hotel & Rest. Adm.), 57, August 25, 2003, Bellevue, car accident. U.S. Army second lieutenant in Vietnam, 1970-71. Worked at the Los Angeles Country Club and as commissary manager for Amtrak. In 1990, started and was sole proprietor of Stewart Northwest Industrials, an industrial supply business.

1970s

Robert "Bob" Kipe ('70 Elect. Engr.), 54, May 30, 2002, Portland, Oregon. President and owner of Kipe and Associates, a computer consulting business.

Jeremy Lyons ('70 Music), 54, April 30, 2003, Kirkland, cancer. Music teacher specializing in piano, woodwinds, and reed instruments. Played saxophone and keyboard for various bands, including Crown. Passionate about writing and playing in the '70s and '80s. Wrote a "Bach/Rock" symphony that was performed by the Seattle Symphony Orchestra. Born James Ackerman.

Daryl Kraft ('75 Ph.D. Ag. Econ.), 57, July 27, 2003, Manitoba, cancer. Professor of agricultural economics at the University of Manitoba since 1974. Published more than 300 research papers on such subjects as transportation, income stabilization, international trade, wheat marketing, farm policy, and ethanol.

Jeanne B. Feldner ('76 Gen. St.), 82, June 19, 2003, Albion. Worked at Pullman Memorial Hospital as head cook of the kitchen until her retirement.

1980s

David Gunstone ('85 Elect. Engr.), 41, May 31, 2003, Seattle, rock-climbing accident in Vancouver, B.C. Wrote and published *Traveler's Guide to Washington Rock Climbing*. Former research and development engineer.

Tracey C. Oswald ('85 Bus. Adm.), 40, August 17, 2003, Burlington. Black & Decker Northwest Territory manager for 14 years, selling DeWalt tools. Pi Kappa Alpha fraternity.

1990s

Ingrid Giden ('96 English), 35, June 20, 2003, Pullman, diabetes complications.

Faculty and Staff

Glenda Kent Boone, 82, August 10, 2003, Palouse. Secretary for Palouse Soil and Conservation office, 1940-47. Bookkeeper for R.A. Hanson Co. for two years. Secretary for the WSU Department of Economics, 1969-87.

Aldrich "Oz" Bross, 55, April 22, 2003, Deary, Idaho. Employed by WSU for 22 years, most recently as information systems manager for Business Affairs.

Gary G. Galbraith, 69, May 21, 2003, Pasco. WSU professor of psychology, 1972-98. Diplomat of the American Board of Professional Psychology. Director of the WSU Clinical Psychology Program 1972-79 and 1985-90.

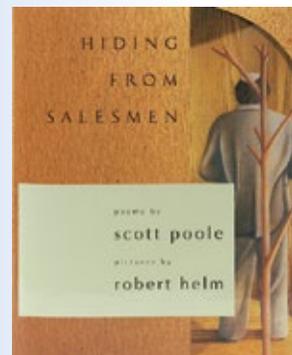
James McGinnis, 85, May 30, 2003, Berkeley, California. Moved to Pullman in 1944 as an assistant professor of poultry husbandry. Spent a year at Pfizer on leave from WSU in 1952 and was later a consultant to the Rockefeller Foundation in Mexico City and Santiago, Chile. Contributed significantly to the improved source of nutrition in the developing world and the discovery of vitamin B-12 before retiring from WSU in 1983.

Courtland Miller, 79, August 25, 2003, Pullman. WSU budget analyst, 1968-86.

John Munn, 71, August 8, 2003, Everett, stroke. Member of the 1956 U.S. Olympic wrestling team and wrestling coach at the University of Washington. Extension agent for the WSU Cooperative Extension of Snohomish County office in Everett. Taught the value of nature stewardship through the many programs he developed.

Roger Veseth, 51, September 9, 2003, Moscow, Idaho. Conservation tillage specialist for WSU and University of Idaho. Developed the *PNW Conservation Tillage Handbook*, co-authored *Wheat Health Management* in 1991, and received numerous WSU awards, including the Kenneth J. Morrison Extension Award and the WSU College of Agriculture and Home Economics Extension Faculty Excellence Award. Still employed by WSU at the time of his death, while recovering from an accident.

BOOKS, etc.



Hiding from Salesmen

By Scott Poole '92, '95
Lost Horse Press, Sandpoint, Idaho, 2003

"Talk happiness," wrote the prolific poet Ella Wheeler Wilcox about 125 years ago. "The world is sad enough / Without your woe." The former U.S. poet laureate Billy Collins has largely gone in that direction, and so has Scott Poole ('92 B.S. Psych.; '95 B.A. English), who lives in Spokane and reads his poems Monday mornings on public radio station KPBX (91.1 FM).

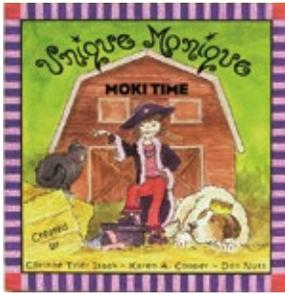
In short, if one has a sense of humor—preferably of the absurd as well—it's hard *not* to like most of the 43 poems that comprise Poole's second book. "I'm sleeping on the coffee table tonight. / I think someone stole my bed." So begins one of Poole's poems. Driving home with one headlight burned out, "eating free restaurant mints, / listening to my wife snore, / I wonder how many people / have been married at McDonald's," Poole writes in "Location." Remembering a McDonald's located near a mountain, he thinks, "who put this mountain / next to this McDonald's?" When he thinks of "Smoked White Turkey" lunchmeat, Poole—or his speaker in the poems—thinks of Andy Warhol, and he falls in love with the caller from the Multiple Sclerosis Society, because she has "a gorgeous southern whiskey / drawl of long porches drenched / in bougainvillea and lemonade."

Okay, fine, cautions the inner critic, but levity can only go so far; serious poets, the great ones, offer other, darker pleasures. Were Milton or Keats, Yeats, Sylvia Plath, Robinson Jeffers, or Rilke humorous? But perhaps the readership for poems would be much broader and more enthusiastic if it were otherwise. Isn't it possible to enjoy the pleasures of even the darkest poets while reserving a place in our hearts and minds for those who would make us think through humor? The citations above are not to say that Poole is never "serious." His wit is compassionate, not scathing or sharply satirical, and the last poem in the collection, "Sincerity," is an admirable tribute to the victims of September 11.

One chord struck throughout the poems is the surreal. The opening poem, "The Way Water Wears on Us," begins: "A man walks with a waterfall / cascading down his back. He wears / a plastic suit and a hat with a pump. / Moss has grown over his coat." Surrealism, like the poor, will always be with us, and its most comfortable home is in the playfully serious poems of writers like Poole. But is there a limit? How playful is too playful? Is there a line between the whimsical and the silly or the downright inane? This is the risk poets such as Collins and Poole take. Whether they succeed is for their readers to decide.

Lost Horse Press (www.losthorsepress.org/hfs.html) has done an admirable job with this book, and former Washington State University fine arts professor Robert Helm's illustrations are a welcome complement to the poems.

—Ron McFarland, Professor of English,
University of Idaho



Unique Monique: Moki Time

By Corinne Tyler Isaak '92, Karen A. Cooper, and Don Nutt
Moki Time, L.L.C., Hartline, Washington, 2002

Alley the Cat

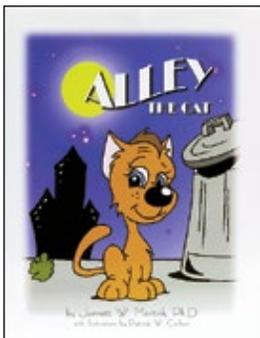
By Jarrett W. Mentink '98, '01
Kids in the Clouds, Federal Way, Washington, 2002

Although these two books for children differ from one another in almost every respect, they're nevertheless equally delightful.

Young readers of *Unique Monique: Moki Time*, by Corinne Tyler Isaak '92, Karen A. Cooper, and illustrator Don Nutt will scarcely notice that they're learning to tell time and acquire new words, as they follow five-year-old Monique—or Moki—through her day on the family farm.

From the moment she rises at 7 a.m. until bedtime 12 hours later, Moki revels in the simplest and most immediate of pleasures. A mock talent show. A picnic on the lawn. Flying "Mama's" kite. Daydreaming in the hayloft. Playing dress-up. The role of imagination is important here—and it's handled so deftly that adults will scarcely notice how deeply rooted this book is in the traditional values of family, place, and the unfettered imagination of childhood.

The illustrations reinforce the book's homespun appeal. Rendered in watercolors and edged



with decorative borders that bleed off all sides of the square-format pages, they could well serve as patches in a country quilt.

The text of *Alley the Cat*, by Jarrett W. Mentink '98, '01, is written in the same galloping

meter as *Unique Monique's*, but there the similarity ends.

In a graphic style reminiscent of Walt Disney cartoons, the book tells the story of Miss Alley, who not only breaks the "old rule" that "cats don't like mice," but actually finds mice "quite cool." In contrast, gangster felines Skinny, Harry, and Crazy Pete "loved to chase mice / and when they caught them—They'd eat!" Frustrated by their inability to catch Wheels, "the fastest mouse in the land," they lay a trap for the intrepid rodent. But just as they're about to finish off their intended victim, in rushes Alley,

who has been watching all along, and rescues him.

If there's a moral here about the tyranny of inherited notions that perpetuate discord at the expense of harmony, kids will probably pick up on it—in less highfalutin terms, of course. Mainly, though, its simple story line, vivid characters, fresh design, and lively illustrations by Patrick W. Carlson will make *Alley the Cat* lots of fun for any child.

For more information, see www.mokitime.com and www.kidsinthecLOUDS.com.
—George Bedirian

I Only Smoke on Thursdays

By Georgie Nickell '94
iUniverse, Lincoln, Nebraska, 2002

What would Audrey Hepburn do? Look no further than the timeless class, spirit, and wit of the late actress for tips on dating and living as a modern woman. That's part of the advice of Seattle author Georgie Nickell ('94 Communication) in her debut novel, *I Only Smoke on Thursdays*.

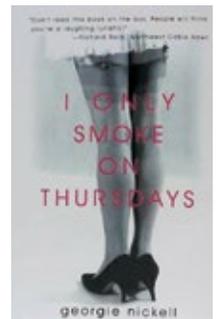
Nickell chronicles the Valentine's Day dumping of her heroine by The One—she annoyingly capitalizes His every reference—and the three years that follow of dating, smoking, going to bars with names like the "Fruit Fly" and "Cha-Cha Hut," and drinking vodka tonics with extra lime. *Smoke on Thursdays* is the how-to manual of a single Seattle twenty-something learning to

overcome grief and find someone meaningful amid a sea of duds, patterned along the same acerbic lines as *Bridget Jones's Diary*.

Some of Nickell's observations are as clever, funny, and dead-on as Jones's. She claims "all your boy-friends become fables who live in a shoe." She riotously describes dates with Dustin the Duck, so dubbed because his jewelry-wearing reminds her of Ducky from *Pretty in Pink*, and Dan the Labrador, whose idea of kissing includes licking her face. She likens men who won't go away to alligators depicted on the Discovery Channel that attack the sweet little gazelle at a riverbank.

Ultimately, there aren't any models to follow to find good love; just be yourself, Nickell asserts. Hepburn wasn't perfect either. As any American movie classics aficionado may recall, she was prone to fits of screaming and/or wailing. You might find yourself doing the same after reading Nickell's book. Either that, or upping your one-day-a-week smoking habit.

For more information, see <http://www.iuniverse.com/bookstore/>
—Nella Letizia



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a THOUSAND WORDS Photograph by Robert Hubner



REBUILDING THE PAST: The historical Memorial Arch, a three-quarter-size replica of the 1905 arch (inset), marks the entrance to the west side of the Washington State University campus. The original was a gift of the Class of 1905. The reproduction, near the same site, was presented to the University by the classes of 1947 and 1997.



focus

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focus ON ENGAGEMENT

A MESSAGE FROM THE WSU FOUNDATION CO-CHAIRS

This annual report focuses on the ways in which individuals and organizations contribute to the excellence that is Washington State University. Our first year as co-chairs of the WSU Foundation Board of Trustees has been extremely rewarding. When we undertook this commitment, we did it with the knowledge that WSU is a special place, with tremendously committed friends and alumni who truly make up a “Cougar family.”

Our expectations were high, and we are pleased to say that the Cougar family—alumni, friends, faculty, staff, students, academic leadership, and organizations such as Boeing, Microsoft, and the Murdock Foundation—has stepped up over the past year to move Washington State closer to its goals.

The stories in this annual report illustrate how focused engagement and private support at *all* levels have transformational potential. The ARCS Foundation is helping WSU’s future scientists pursue their dreams. Regional Leadership Councils—whether in the Bay Area, Portland, or Los Angeles—are getting the word out that WSU provides the best undergraduate education at a research university and spreads the excitement of world-class research to those outside of our immediate area. President’s Associates’ gifts make a difference—year in and year out—providing the margin of excellence for programs across the University. Individuals like Floyd and Judy Rogers share their vision for international leadership in computer science and their belief in the importance of higher education through their investment in and engagement with WSU. But these stories are just the beginning. When you talk to WSU faculty and students, administration and staff, alumni and friends, it is clear that transformation is not a lofty ambition—it is a process that is underway. WSU is moving to the next level at an accelerating rate.

In an economic environment when many institutions are seeing a leveling off or decrease in private support, the tremendous commitment of Cougars everywhere has resulted in a double-digit increase in private support to Washington State for the 2002-2003 fiscal year. We know that as the strategic plan continues to move forward, as new research breakthroughs happen in WSU’s labs and classrooms, as outstanding students receive a world-class education, graduate, and join the workforce—the transformational power of an investment in WSU will be realized over and over again.

Please join us in celebrating the achievements of the past year and in looking forward to a bright future.



Mark and Patt Suwyn
Co-Chairs,

Washington State University Foundation

bruce forster photography, inc.



focus ON SCIENTISTS OF THE FUTURE

ARCS FOUNDATION AND COUGAR COMMUNITY LEADERS PARTNER TO HELP WSU RECRUIT TOP GRADUATE STUDENTS



Working in partnership with the ARCS (Achievement Rewards for College Scientists) Foundation, Washington State University is establishing a solid foundation for graduate education in the sciences. Through graduate fellowships funded by ARCS, Washington State is attracting the nation's best students in the sciences—and raising the standards of excellence in

classrooms and laboratories across the University.

ARCS is a national women's volunteer organization dedicated to helping the best U.S. graduate and undergraduate students by providing scholarships in natural sciences, medicine, and engineering. ARCS was established in 1958 in the aftermath of the Soviet launching of Sputnik. A group of 53 women philanthropic leaders committed to reestablishing U.S. technological superiority began giving financial

awards to college students majoring in science and engineering.

The ARCS Foundation Seattle chapter provides fellowships totaling \$15,000 to graduate students in WSU's College of Veterinary Medicine and Center for Reproductive Biology. Because the fellowships are in addition to other awards, including teaching and research assistantships, they substantially enhance WSU's ability to recruit outstanding graduate students.

An ARCS fellowship is helping Abbey Davis to earn a Ph.D. in reproductive biology. She is applying her passion for the environment to research the reproductive behavior of the Columbia spotted frog. "The number of amphibians is declining worldwide due to environmental impacts, so monitoring amphibian populations is encouraged," she says.

Homer Adams III weighed several options in deciding the next step in his pursuit of an advanced degree. After talking to several WSU faculty members, he set his sights on WSU and was awarded an ARCS fellowship. Now in his second year at WSU's Center for Reproductive Biology, Adams' research is focused on reproductive physiology. His studies encompass the starting point of life and examine such issues as the impact of age on fertility. Adams' work utilizes cutting-edge technology in gene therapy and touches transgenic animals, endangered species, and genetic and hereditary diseases in humans.



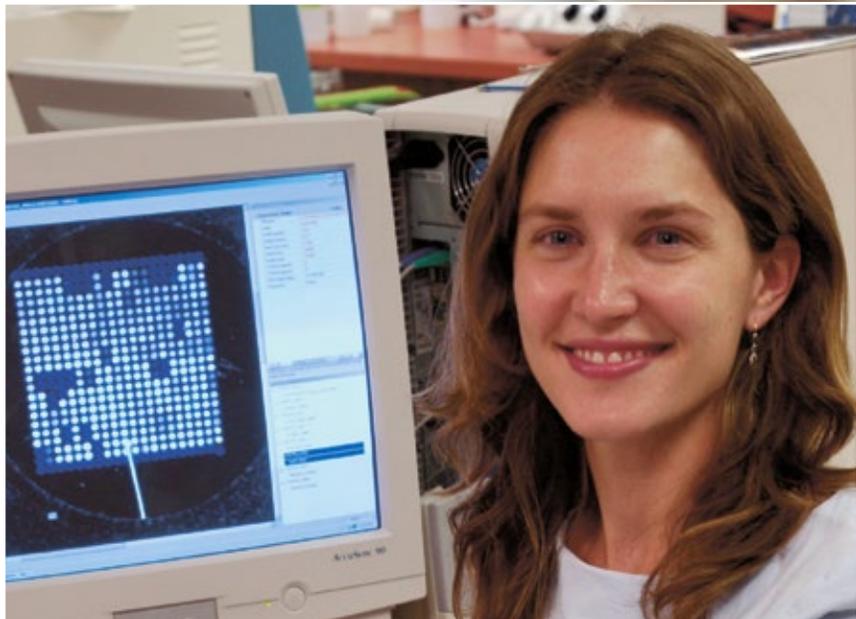
*Abbey Davis,
Reproductive Biology*



*Homer Adams III,
Reproductive Physiology*

Sunshine Lahmers was awarded an ARCS fellowship in the Department of Veterinary and Comparative Anatomy, Pharmacology, and Physiology (VCAPP). She is pursuing a Ph.D., specializing in cardiovascular research. The fellowship gives her the opportunity to receive clinical training and pursue her research in dilated cardiomyopathy. Working with VCAPP professor Henk Granzier and Siegfried Labeit, M.D., of Germany, her work has contributed to new collaborative relationships for WSU. Professor Granzier's lab is involved in collaborative research with scientists at WSU and several other U.S. locations. "A lot of opportunity comes from collaboration. It makes the research better, and you can answer a lot more questions as a group," says Lahmers.

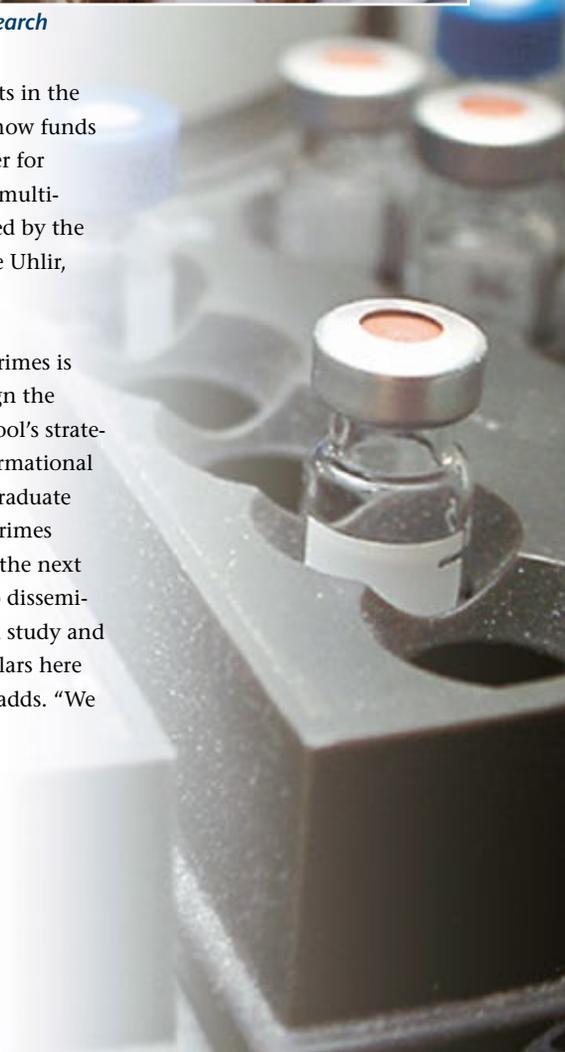
ARCS fellowships offer collaboration of yet another type: a broad network of support from ARCS members in the Seattle chapter. Lahmers adds, "These are wonderful and genuinely nice people who express an interest in what you do. To have people outside your field who find your research exciting—that's really rewarding."



Sunshine Lahmers, Cardiovascular Research

"Beginning with support of five students in the College of Veterinary Medicine, ARCS now funds 16 fellows in that school and the Center for Reproductive Biology at WSU, the first multi-disciplinary 'department' to be approved by the national board of ARCS," notes Camille Uhlir, chapter president.

WSU Graduate School Dean Howard Grimes is working with the Seattle chapter to align the ARCS fellowship program with the school's strategic plan. "ARCS fellowships are transformational and carry enormous potential to lead graduate education at WSU to the next level," Grimes declares. Graduate education produces the next generation of scholars who continue to disseminate the knowledge that is gained from study and research. "We need to get the best scholars here and give them the best education," he adds. "We are building on our excellence."



focus ON CONNECTIONS

NORTHERN CALIFORNIA LEADERSHIP COUNCIL KEEPS COUGAR TIES STRONG

Kevin Ng Photography



Loretta and Doug Allred

In California, alumni, parents, and friends with an interest in Washington State University are getting together to connect with one another, to reconnect with the University, and to raise private support for the students, faculty, and programs that make Washington State world class. The Northern California Leadership Council wants to share the Cougar spirit and spread the word that WSU is a great place both to receive an education and make an investment.

“When you don’t live in Washington, you don’t get a great perspective of the accomplishments of

the students and faculty, or a sense of the passion and drive on campus every day,” says Doug Allred, who with his wife, Loretta, is a member of the northern California group. “WSU is alive and energetic, with very capable and engaged faculty and students doing amazing things. We want to be a part of what is going on in Pullman.”

Residents of Atherton, California, the Allreds have maintained ties to WSU through professional and family connections since their university days. Doug earned a degree in computer science at WSU in 1973 and went on to a career in the high-technology industry. He now serves as senior vice president of Cisco Systems. A member of the College of Engineering and Architecture Advisory Board and the WSU Foundation Board of Trustees, he has been a strong advocate for WSU with Cisco Systems, facilitating several important gifts. Loretta received a degree in home economics at WSU in 1972 and taught school before the Allreds started their family of four daughters.

The couple jumped at the opportunity to help generate awareness of WSU’s world-class programs, to reconnect with alumni and friends, and to build regional connections with individuals and organizations for future support of the University.

“Each of Washington State University’s regional councils is focused on creating opportunities to tell the WSU story and on drawing the support of alumni, parents, and organizations who’ve not been as closely connected with the University because of distance,” says Richard Frisch, president of the WSU Foundation. “These groups will help shape activities and programs that will provide an opportunity for larger groups of Cougs to connect. They also assist in identifying alumni, parents, companies, and foundations who might provide support for new and ongoing WSU initiatives.”

“WSU is alive and energetic, with very capable and engaged faculty and students doing amazing things. We want to be a part of what is going on in Pullman.”

—Doug Allred



“A connection with WSU cannot be accomplished with the same impact using mailings alone. Personal, face-to-face interaction, which the leadership council offers, is important when building these supportive relationships.”

—Jane Logan

“WSU and the Foundation have a new regional focus now,” says Ellen Jampol, regional development director for California and Arizona. “Our alumni and friends know their own communities better than the rest of us. These leadership councils are better equipped to plan regional communications strategies, to identify key leaders within their communities who would benefit from a WSU connection, and to plan WSU events that will reflect a local flair.”

Longtime WSU friend and supporter Jane Logan first got involved with the University through her late husband, Roscoe Harry, or “Rock,” Logan, who earned an architectural engineering degree at WSU in 1933. A resident of Piedmont, California, she finds that the Northern California Leadership Council offers the personal touch to keep those outside the Northwest involved in WSU.

“This group brings local alumni and friends together to reminisce about their Washington State experiences and to learn about the direction the University has since taken,” says Logan. “This cannot be accomplished with the same impact using mailings alone. Personal, face-to-face interaction, which the leadership council offers, is important when building these supportive relationships.”

Leadership councils have been organized in the Portland, Oregon, area with additional groups planned for Los Angeles, Seattle, and Spokane. Leadership groups are also envisioned in the Midwest and on the East Coast.

“We see it as this. . . Anyone who has gone to WSU is invested in the institution and has the responsibility to see that it continues to offer a world-class education,” says Doug.

focus ON THE PRESIDENT'S ASSOCIATES

PROVIDING THE MARGIN OF EXCELLENCE

The membership of Washington State University's President's Associates program is made up of individuals and organizations who support WSU with annual gifts of \$1,000 or more. With four campuses, hundreds of departments, and thousands of students, it might be easy to believe that a gift of \$1,000 annually wouldn't make much of a difference at Washington State—but this assumption is dead wrong, says Rueben Mayes, executive director of the President's Associates program. "With President's Associates membership topping 4,500 in

the 2002-2003 fiscal year and thousands of individuals and organizations renewing their membership yearly—some for as many as 20 years running—the President's Associates program has a reach and impact that truly creates the margin of excellence across the University," says Mayes.



Students Casey Wood and Kristen Johnson with Holly Whitcomb Henry

Last year, President's Associates gifts were directed to almost 700 different areas across WSU, providing more than \$6 million in private support for undergraduate scholarships and graduate fellowships, program operations, facilities, research, professorships, and resources such as equipment, instructional materials, and library books.

In the College of Agriculture and Home Economics, President's Associates gifts fund the Dean's Merit Award, which for the past 10 years has been used to attract high-achieving students to WSU. Jim Cook, interim dean, notes, "Last year the Dean's Merit Award recipients had an average GPA of 3.90. It is clear that these awards are helping the college attract truly outstanding students to our programs."

Barbara Couture, dean of the College of Liberal Arts, says President's Associates gifts fund achievement. "WSU's student sextet [in the School of Music and Theatre Arts] took first place in state and regional competitions and third place in a national competition—trips that wouldn't have been possible without annual private support," she asserts, "not to mention multiple examples of faculty support, graduate student funding, equipment for studios and laboratories, and scholarships."

Ginny Steel, director of WSU Libraries, agrees. "President's Associates' annual support to the Libraries is equal to the funding necessary to purchase 730 books—resources that serve the entire University community, making scholarship and research possible," she says.

WSU alumni giving consistently places the University in the top tier of public research institutions in terms of alumni participation. While this statistic is impressive, it does not capture the tremendous commitment of alumni such as Holly Whitcomb Henry, a Seattle President's Associates Council member who has made annual gifts to WSU for more than 20 years.

A graduate of WSU's College of Pharmacy and the Honors College, Henry expresses her excitement at being able to fund things that are important to her. "Scholarships are really important to Pharmacy right now," she says. As the recipient of academic achievement scholarships during her years at WSU, she stresses the need to give back. "WSU is a great school for high-achieving students. People helped me get through Pharmacy, and we owe so much to the excellent place that gave us our education," she says.

Henry also gives back to WSU through the pharmacy residents she mentors at Medicine Ladies Inc., the pharmacy practice that she co-owns. "Holly is a great mentor, really supportive," says Casey Wood (Pharm.D. '02). "She encourages me to discover new things in pharmacy, and she has great business skills." Adds Kristen Johnson (Pharm.D. '03), "Not only does she encourage the students she mentors to focus on patient care, but she also provides an example of loyalty and leadership within the community of WSU alumni and friends."

Bill Gaskins says it's easy to see that his President's Associates membership and his involvement make a difference at Washington State. A graduate of the College of Pharmacy and a member of the WSU Athletics Hall of Fame for varsity football and track, Gaskins and his wife Felicia have made annual gifts to WSU for more than 18 years. Gaskins also serves as a Gray W board member. He notes, "Gray W seeks to develop a network so former student athletes can stay in touch with the University. We want to reacquaint those people with each other and get them involved at WSU.



Bill Gaskins

Ultimately we want them to become contributors and active participants at WSU." He sees the impact of annual contributions to scholarships as he mentors student-athletes in their academic programs, many of whom would not be able to attend WSU without their scholarships.

Holly Henry and the Gaskins are just two examples of the thousands of individuals who demonstrate their gratitude toward, commitment to, and belief in Washington State University through their President's Associates membership. Their contributions, combined with those of more than 4,500 other loyal Cougar alumni and friends, provide a consistent, annual base of private support—support that creates the margin of excellence that makes WSU "World Class. Face to Face."

*"WSU is a great school for high-achieving students...
we owe so much to the excellent place that
gave us our education."*

—Holly Whitcomb Henry

focus ON HIGH-QUALITY RESEARCH

FLOYD AND JUDY HUIE-ROGERS PUT THEIR WORK, WISDOM, AND WEALTH BEHIND HIGHER EDUCATION AT WASHINGTON STATE UNIVERSITY

Floyd and Judy Huie-Rogers are aware of the direct influence Washington State University's world-class programs have on the quality of industry and living in the state of Washington. In fact, they believe so strongly in the correlation of WSU's top-notch research to the state's well-being, that they endowed not one, but two faculty chairs at WSU.

The Rogers established the first Huie-Rogers Endowed Chair in Computer Science at WSU's School of Electrical Engineering and Computer Science (EECS) in 2000. With their gift of \$1.5 million in 2003 to fund a second Huie-Rogers Endowed Professorship, Floyd and Judy became the first individual donors to contribute two endowed chair positions to WSU.

"We began building our software engineering program into an area of research excellence with the first endowed chair two years ago," says Tom Fischer, director of the School of EECS. "The second endowed professorship will enable us to build additional areas of excellence in our computer science graduate degree program."

"The need for computer scientists is pervasive in the private and public sectors," says Floyd. "Highly educated computer scientists and engineers are needed for problem solving and to strengthen high-tech capabilities in areas ranging from systems security and citizen protection to consumer electronics and online education."

Floyd and Judy know that excellence is contagious. They recognized that state salaries alone are often not enough to attract and retain the world's best teaching and research faculty. Their investment in the quality of the computer engineering program at WSU makes the school more attractive to top faculty and high-achieving students worldwide. This in turn raises the level of excellence for other programs throughout the WSU system and turns out highly educated graduates for the state's workforce.

"We are pleased to have the opportunity to help maintain the distinction of WSU and its College of Engineering and Architecture as one of the top 50 research institutions in the nation," adds Floyd.

According to James Petersen, vice provost for research at WSU, "Interactions between the Huie-Rogers endowed professorships and other campus faculty will enhance the level of science campus-wide. This will allow us to conduct larger scale research projects and increase the potential for this science to positively impact society."



Floyd and Judy Huie-Rogers

Dr. Anneliese Katharina Amschler Andrews, recognized the world over as a leading expert on quantitative analysis of software and software development practices, accepted the Huie-Rogers Endowed Chair in Computer Science in 2001. Andrews' current projects include developing new testing methods, designs, and web applications to create more reliable software programs. "The endowed chair allows me to bring collaborators to campus, which in turn increases the international visibility of our computer science program and of Washington State University," she notes.

After receiving her degree in computer science from WSU in 1974, Judy worked on software systems for eight years at Boeing before leaving to be at home with their two sons. She returned to the software industry in 1985 to work for Proprietary Software Systems and Spacelabs Medical. Judy then chose a new career path and returned to school, earning a master's degree in teaching from Seattle University, and becoming a math teacher in 1995. Judy was elected a member of the WSU Foundation Board of Trustees in 2001.

Floyd worked for Boeing in the 1970s and Software AG in the early 1980s. He joined Microsoft in 1982, retiring as a software design engineer in 1996. Floyd now volunteers in schools, stays at home with their teenage sons, and teaches skiing. He also serves on the EECS Advisory Board. The Rogers are major supporters of forestlands preservation in the Cascades through the Cascades Conservation Partnership and the Loomis Forest Fund.

"The fulfillment of our pledge comes at a critical time for public universities in the state," says Judy. "It is time for the legislature and people of Washington to do their part to adequately fund our universities. Although economic times are difficult, this is the time to redouble efforts and invest in our future and in the students who will be creating and managing it."

It is clear the commitment to quality the Rogers have made to WSU is the same commitment they have for everyone in the state. As the 21st century unfolds, there is no guarantee where computer science research will take the world. But thanks to the vision and foresight of Floyd and Judy Huie-Rogers, Washington State University will be in the driver's seat.

*"We are pleased to
have the
opportunity to help
maintain the
distinction of WSU
and its College of
Engineering and
Architecture as one
of the top 50
research institutions
in the nation."*

—Floyd Rogers

focus ON INNOVATION



A MESSAGE FROM PRESIDENT V. LANE RAWLINS

Washington State University's strategic plan conveys a collective vision for leadership in higher education and in service to individuals, organizations, and communities across the state of Washington. WSU provides the best undergraduate education at a public research university and conducts world-class research and scholarship to empower students and improve people's lives.

For the second year, WSU has seen double-digit increases in applications from high-performing students. The freshman class of 2003 is the most academically qualified in the University's history. In fiscal year 2003, research grants surged to more than \$124 million from sources as diverse as Health and Human Services, Department of Agriculture, Department of Energy, and the National Science Foundation. Four hundred sixty-eight high-achieving juniors from across the state, with an average GPA of 3.94, have been nominated for the Regents Scholars Program.

A distinctive characteristic of WSU's vision is its spirit of entrepreneurship and innovation. To accomplish WSU's mission, innovation must exist in the classroom and laboratory, and also must be translated into applications, products, and services that will change people's lives. That, in part, is what we mean when we describe WSU as "World Class. Face to Face."

As strategic plan implementation progresses, each campus, college, department, and area of WSU is evaluating its strengths and aspirations with an eye toward innovation that will transform the educational experience for students, create opportunities for faculty and staff to build on their outstanding research and scholarship, and stimulate

new approaches for public service. These aspirations are leading to cross-unit collaboration that is bearing fruit in areas such as teaching entrepreneurship and initiating innovative curriculum projects to enhance teaching based on measurable learning outcomes. An entrepreneurial spirit is evident in areas from communications—where the Murrow School addition will soon provide world-class facilities to educate tomorrow's communicators—to sociology and criminal justice—where WSU researchers are changing the way that police departments do business.

Our strategic emphasis on basic and applied biotechnology has stimulated creation of an interdisciplinary Center for Integrated Biotechnology with some 100 of our leading faculty participating. To provide facilities for growth, construction has just begun on the first building of a biotechnology complex that will put WSU on the map in this influential area that is transforming our health care, food supply, and, in fact, our state's economic future.

There are many other examples that I could cite to illustrate the spread of a culture of innovation across WSU. Ideas come from students, deans, friends, staff, faculty, and alumni. As I visit Cougars everywhere, the message that WSU is a place where people can experiment, take intelligent risks, pursue change, and reap the rewards comes through loud and clear. Washington State University is focused on being an educational leader—and leadership comes from the spirit of innovation and transformational possibilities that engage everyone at WSU.

FOCUS ON TRANSFORMATION

A MESSAGE FROM WSU FOUNDATION PRESIDENT RICK FRISCH

One of the pleasures of working at Washington State University is being able to observe transformation as it occurs. Students come to Washington State, often unsure of their goals and ambitions, but graduate and leave with a sense of confidence in their accomplishments and abilities. Outstanding faculty begin with a hypothesis or a new approach to a problem, to the presentation of material to students, or to the improvement of a process, and end up with new knowledge, new breakthroughs, and new applications for their work.

To paraphrase Ralph Waldo Emerson, "Every person believes that he or she has a greater possibility." This year saw the realization of possibility in a number of ways. Thanks to WSU's generous donors, private support increased 14.2 percent in 2002-2003. This total includes seven commitments of \$1 million or more, compared to just one in the previous fiscal year.

The President's Associates program achieved a membership increase of more than 5 percent. The WSU Foundation hired Rueben Mayes as executive director of the President's Associates Program and Jennifer Harris as director of annual giving. Together they will continue to grow and recognize WSU's tremendous community of annual donors.

The WSU Foundation moved downtown, creating links between WSU and the Pullman community. Other important links have been formed, including the regional volunteer leadership councils, a deans' development committee, and a faculty development advisory committee. The WSU Board of Regents and WSU Foundation Board of Trustees have formed strong ties, endorsing principles of operation that form the basis for enhanced communication and a productive working relationship.



These efforts will continue over the next year, with a focus on continuing WSU's tradition of strong alumni giving, building the Foundation's volunteer infrastructure, and creating opportunities for volunteers to increase their engagement. The WSU Foundation turns 25 next year, and plans are in the works for a special 25th anniversary celebration.

Transformation cannot take place without the work of many people. In order to raise the plateau of giving to WSU, changing fund-raising capacity in a permanent way, there must be transformational ideas and people who believe in "a greater possibility." As WSU's campuses, colleges, departments, and programs evaluate their strengths and aspirations, they will work to identify and develop the transformational concepts that create the potential to permanently move this great institution to the next level.

Thank you for your belief in the greater possibility of Washington State University. I look forward to working with you in the next year to realize these aspirations.



focus ON RESULTS

2002-2003 YEAR IN REVIEW

In 2002-2003, 55,664 individuals and organizations made gifts to Washington State University. Their support provides the margin of excellence and reinforces the commitment to an outstanding educational experience that is summed up by WSU's motto, "World Class. Face to Face."

Investments in WSU's future provide the support necessary to continue well into the 21st century as one of the nation's top research universities. As a result of the generosity of WSU's donors, alumni, and friends, the WSU Foundation raised \$48,839,329 in gifts and private grants for fiscal year 2002-2003, which ended June 30—a 14.2 percent increase over the prior fiscal year. An additional \$4,386,510 was pledged by WSU's generous donors. This was the second best year in the 24-year history of the WSU Foundation!

The WSU Foundation's endowment finished the year at \$177,126,709, with more than \$8.5 million in new gifts added to the endowment. At the same time, WSU added fifteen endowed scholarships, six endowed graduate fellowships, and four endowed professorships and chairs.

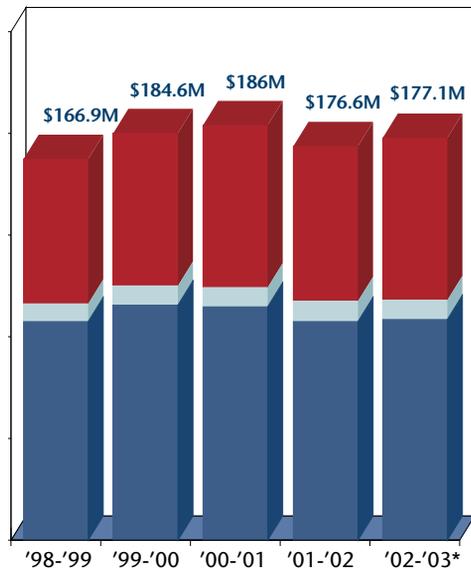
For the first time, the President's Associates—made up of individuals and organizations contributing \$1,000 or more annually—exceeded 4,500 members, an increase of more than 7 percent over the previous year. 2002-2003 also saw seven commitments of \$1 million or more to WSU (one anonymous), compared to one such gift in the previous fiscal year.

2002-2003 HIGHLIGHTS INCLUDE:

- A commitment of more than \$2.2 million by the Bill & Melinda Gates Foundation to support The Center to Bridge the Digital Divide's "Connecting Schools and Communities" initiative, which utilizes youth-community-school projects to provide technology training and education in six rural Washington communities.
- A gift of more than \$1.5 million by Floyd and Judy Rogers to endow a second professorship in the School of Electrical Engineering and Computer Science, further building WSU's software engineering program into an area of research excellence. With the establishment of the second Huie-Rogers Endowed Professorship, the couple became the first individual donors to contribute two endowed chair positions at WSU.
- A gift from Boeing of microwave technology patents to the Department of Biological Systems Engineering, valued at slightly more than \$1.5 million. Originally designed to dry out spacecraft after ocean landings and cure composite materials for fighter aircraft, the Microwave Vacuum Dehydration Technology (MIVAC) may be used to produce new, flavorful, dried fruits and vegetables that are free of additives. The technology could revolutionize the commercial process for preserving fresh foods worldwide.
- Cumulative software gifts by WSU alumni at Microsoft and the Microsoft Corporation totaling more than \$1 million to support computer laboratories, applications, programs, and facilities across the WSU campus.
- A gift by the G. Thomas Hargrove Foundation to create the G. Thomas and Anita Hargrove Center for Plant Genomic Research, supporting the work of professor Norman G. Lewis and his colleagues directed toward discovering genetic aspects of plants that have the potential for applications in pharmacology, industry, and renewable resources.

Every gift, no matter the size, makes a difference for the students, faculty, and staff of Washington State University. Thank you for your commitment to excellence and your investment in higher education at WSU.

ENDOWMENT RETURNS, 1998–2003



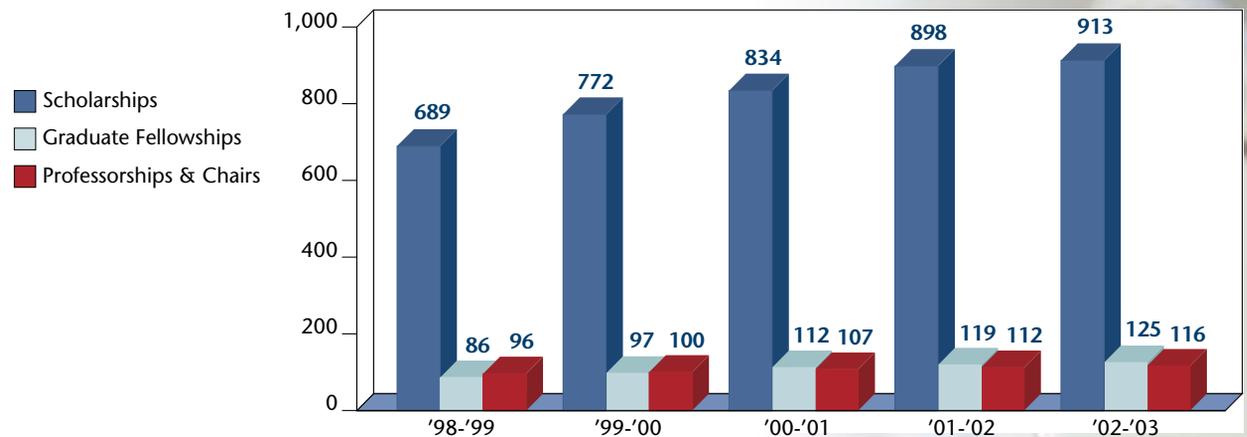
	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003
\$ Added to Endowment	\$12,364,285	\$17,381,097	\$14,961,561	\$11,225,089	\$8,509,045*
Endowment Investment Return	+7%	+4.4%	-2.9%	-4%	+2.9%*

*As of June 30, 2003

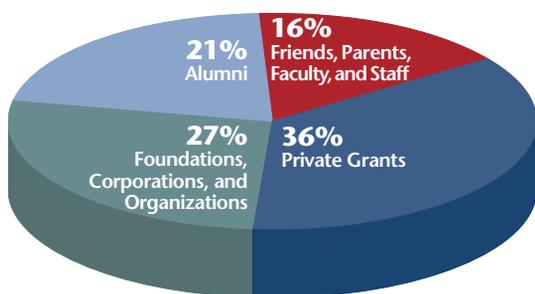
- Scholarships
- Graduate Fellowships
- Professorships & Chairs

*As of June 30, 2003

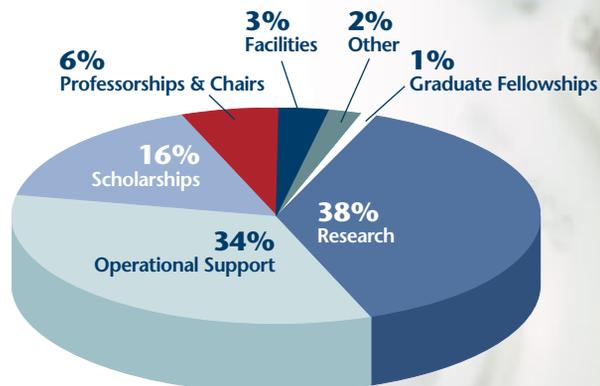
GROWTH IN NUMBER OF ENDOWED SCHOLARSHIPS, FELLOWSHIPS, AND PROFESSORSHIPS, 1998–2003



GIFTS AND GRANTS — SOURCES, 2002–2003



GIFTS AND GRANTS — DESIGNATION, 2002–2003



THE WASHINGTON STATE UNIVERSITY FOUNDATION is a nonprofit, 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.

For more information about how you can support
Washington State University, please contact:
Washington State University Foundation
PO Box 641925
Pullman, WA 99164-1925
Telephone: 509-335-6686 or 800-GIV-2-WSU (448-2978)
Fax: 509-335-8419
foundation@wsu.edu
<http://wsufoundation.wsu.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. Printed copies include profiles of new Benefactors, Laureates, and members of WSU's Lifetime and Legacy giving societies. The complete honor roll of donors, which includes all annual giving clubs, is available for viewing and downloading on the WSU Foundation Web site at <http://wsufoundation.wsu.edu>.



CONGRATULATIONS TO THE 2002-2003 LAUREATES OF WASHINGTON STATE UNIVERSITY

In recognition of their profound impact on Washington State University, the WSU Foundation is proud to recognize the 2002-2003 Laureates of Washington State University. Contributors of \$1 million or more to WSU, these extraordinary individuals and organizations are ensuring a future for the University that is full of promise, innovation, and excellence. Their legacy is expressed in the accomplishments, innovation, and incomparable spirit that make Washington State University “World Class. Face to Face.” It is with deep gratitude that we congratulate Washington State University’s newest Laureates.

Battelle

+Edward and +Florence Handy Forst

Bill & Melinda Gates Foundation

Tom and Anita Hargrove

Hills Pet Nutrition, Incorporated

+Elmer C. and Nacia Bennett Huntley

Weyerhaeuser Company Foundation

+Deceased

focus

CONGRATULATIONS TO THE 2002-2003 BENEFACTORS OF WASHINGTON STATE UNIVERSITY

The Benefactors of Washington State University are alumni and friends whose extraordinary commitment has led them to make one-time or cumulative gifts of \$100,000 or more to WSU. Their vision provides a wealth of opportunities for excellence in research, scholarship, and the arts at Washington State. We are grateful for the profound generosity of Washington State University's newest Benefactors.

- | | | |
|---|---|--|
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| Anonymous | Honeywell International,
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| Achievement Rewards for
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(ARCS) Foundation –
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+Irene Peter |
| +Delbert "Tex" and
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| Jennifer Carloye and
George Huntington | Kiewit Companies
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Denney Rutherford is the Ivar B. Haglund Distinguished Professor in the School of Hospitality Business Management at Washington State University. Ivar B. Haglund, founder of Ivar's restaurants, established the professorship, along with other endowments at WSU, through his Will. Haglund's generosity inspired a legacy of excellence for the School of Hospitality Business Management, and his endowments offer critical support to nationally recognized scholars like Professor Rutherford.

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