

Washington State

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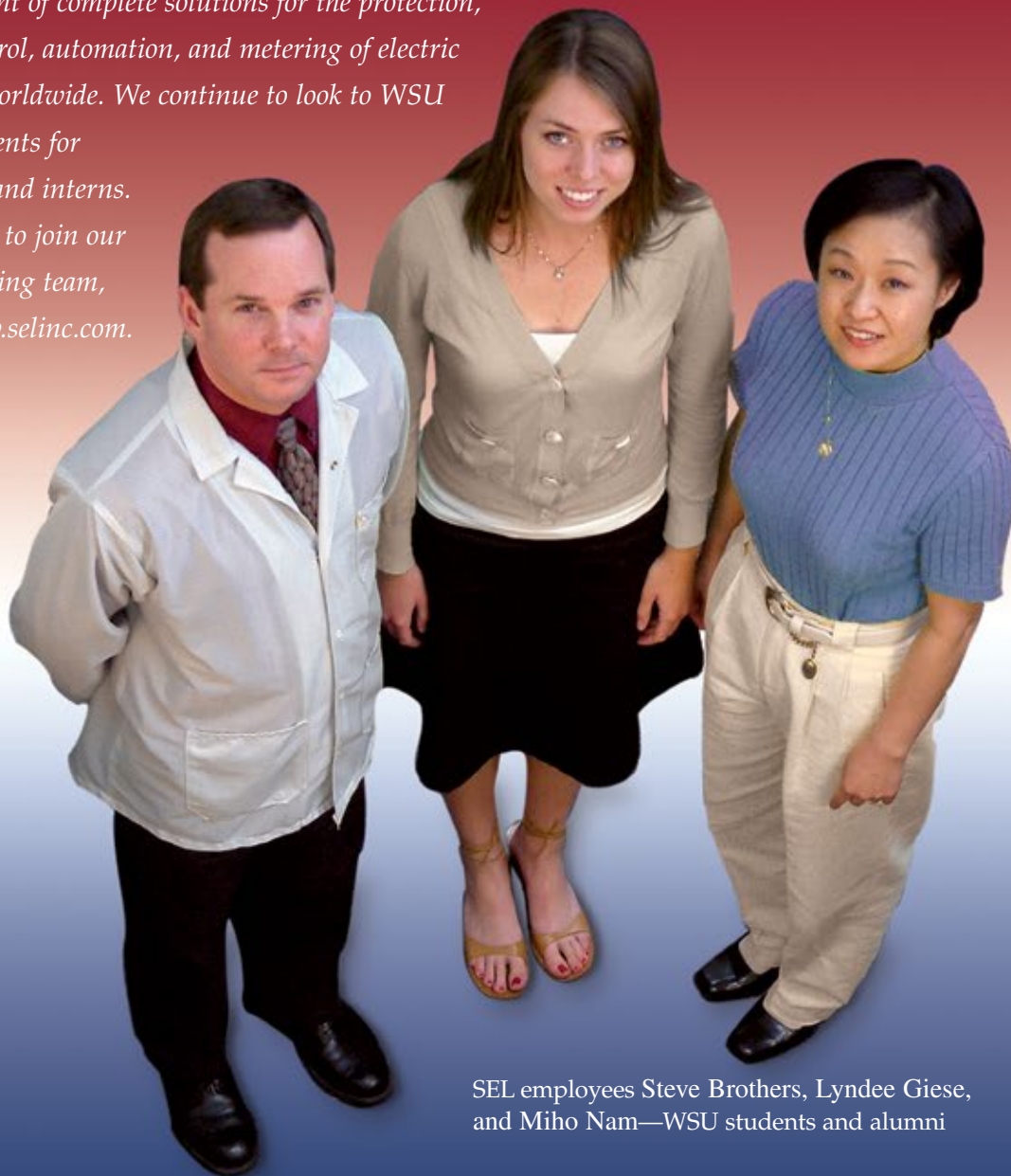
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features

24 Washington's Wine Crush

by Hannelore Sudermann • photos by Chris Anderson

Four years ago, our first issue led with a cover story on Washington's burgeoning wine industry. Since then, the number of Washington wineries has more than doubled, to 360. Rising stars Annette Bergevin '86 and Debbie '79 and David Hansen '77 have joined old hands at turning Washington's climate and soil into some of the best wine in the world.

TIPS ON WINE TASTING

by Hannelore Sudermann

TEACHING—AND LEARNING—WINE

by Hannelore Sudermann

32 Living with Art

by Tim Steury • photos by Robert Hubner

Jim Kolva '68 bought his first piece of art from a fraternity brother. Now he and his wife Pat Sullivan live amidst their passion, in a loft filled with art, primarily ceramic, by Rudy Autio '52, Harold Balazs '51, Robin Dare '86, and many other WSU alumni, faculty, and other artists.

38 Not Your Normal Truffle

by Tim Steury • photos by Robert Hubner

Head Cowgirl Marilyn Lysohir '79 headed West, earned her M.F.A., and became a successful sculptor. And then she rediscovered Chocolate.

40 It's Only a Model

by Cherie Winner • photos by Robert Hubner

Modelers don't always expect their models to be "right." But they do expect them to help explain our world. At WSU, they use their models to maintain diversity in seeds, to explain our desire to exercise, and to predict the dispersal of gasses over the I-5 corridor.



32



24



38



CHRIS ANDERSON



ROBERT HUBNER

6 letters

10 panoramas

- 10 Hanging on by a whisker
- 11 Pop art in Pullman
Brewing up business
- 12 Maybe tomorrow
- 14 FOOD AND FORAGE: Honey
- 15 Ann Christenson's time piece
- 16 Medieval missive:
An ancient document rediscovered
- 17 Rewriting the book on photosynthesis
- 18 When buoy meets barge
- 19 Magpie Forest
- 20 Adorning the world
A tiny shrimp threatens to topple an industry
- 22 SEASONS/SPORTS: Going with the Floe

49 tracking the cougars

- 49 What I've learned since college:
Theodore Baseler '76
- 50 Class notes
- 51 Honduras: What patients we saw!
Peru: In the middle of the jungle
with no Walgreens
- 53 Being Sacagawea
- 54 Craig Schafer '76: The fixer
- 55 Carolyn Schactler '49: Inspired by many sources
- 56 In memoriam

57 books, etc.

61 WSU Foundation Annual Report

40



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LETTERS

A decent, courtly gentleman

I retired from *The Oregonian* eight years ago and read with intense interest the stories about Edward R. Murrow (fall 2005 issue). I agree entirely with Bob Edwards, the former host of

National Public Radio's *Morning Edition* and author of a book about Edward R. Murrow: Murrow would not be nearly as successful in this age of political balance and correctness. And that includes both broadcast and print journalism. In my last years as a reporter (I had a total of 40) I was dismayed to find straight news reporting in newspapers across the country and later on the airwaves—no matter how personalized—being scrapped in favor of political correctness and alleged balance. And many seasoned, good reporters were pushed aside to accommodate this "correctness."

I also must say that the news gathering and reporting world—in this age of instant communication—is infinitely more varied and crowded than it was in Murrow's day.

Murrow was fortunate to step out boldly when he did. Today he might have gotten lost in a very bold shuffle.

However, I would be the first to praise him for what he did in his time. He gave birth to broadcast journalism, and in so doing set an extremely high standard. He will and should be forever remembered and revered.

Web Ruble '69

I was very pleased to read Val Limburg's article and Bob Edwards's interview on Edward R. Murrow. It brought back a flood of memories for me. I met Murrow when he was nearing the end of his career and, as it turned out, the end of his life. Murrow was the commencement speaker for WSU in 1962, and I was one of a small number of students privileged to be part of a private meeting with him. He was then the director of the U.S. Information Agency, and had in fact by virtue of his own clout with John F. Kennedy separated the agency from the Department of State and had breathed new life into the organization. He reported directly to the president and was one of his key advisors on the conduct of the Cold War, at that time in its zenith. At the meeting he urged all of us about to graduate to devote at least a period of our life to working for the good of the country, not just ourselves. Murrow was mesmerizing and persuasive.

Fifteen months later, August 12, 1963, I reported to U.S.I.A. as a



WSU MANUSCRIPTS, ARCHIVES, & SPECIAL COLLECTIONS

new junior officer. I was pleasantly surprised to be informed that I would be personally sworn in by Mr. Murrow and, mid-morning, was ushered into his office. I was completely tongue-tied in his presence and do not remember doing much more than nodding and saying “yes sir” and “no sir.” He invited me to sit down, and he talked fondly about his days at Pullman, and to my surprise, I found out that we had both grown up in the Skagit Valley. He said he had scanned the list of new officers and was pleasantly surprised to find one lone Cougar among the mostly Ivy League pedigrees. For this reason, he had singled me out for special treatment. The only other person he swore into the Foreign Service that summer was another Washingtonian, from Whitman College. As far as I know, I was the only WSU grad he ever personally entered onto the governmental roles.

After that, as I was going through my training, I frequently encountered Murrow in the elevator going and coming from work or during the occasional sessions we had as interns with the top brass. He always remembered my name and made it a point to ask how I was doing and exchange pleasantries. Unfortunately, it was not too much later that he had his operation for lung cancer. I was in the building lobby the day he returned, and he smiled rather wanly and waved a hello. But he looked in very bad shape. His farewell speech to the agency employees came not long after. It was a somber occasion with a lot of tears in the eyes of those who were there. I have to say that he was one of the most decent, courtly gentlemen I have ever had the privilege to meet.

Robert A. (Bob) Fulton '62

For more on the legacy of
Edward R. Murrow, visit:
<http://murrow.wsu.edu>

Being Coug

Great article (“How Coug Are You?”, fall 2005), and I think it could/should be a regular part of each issue. Great stories, and being a Coug, as we all know, is very special and unique.

My two good buddies, and there used to be three, annually trek for Homecoming from Portland to Pullman, and prior to the Shaker's Bar closing made up and wore “Cougar Roadtrippers” t-shirts. JC (just call him “J”) Lofberg '68 has “68 Wazzu” on his car. I ('67) go J one better by having a WSU tattoo on my right ankle . . . since my 50th birthday! Rob Dunlap '72 is the former owner of the just-sold White Horse Bar & Grill in Portland, which for several years has been the “official” Cougar bar in Portland for watching televised Cougar football games. The place got jampacked (100-125 people) on Saturdays, complete with Butch in costume and J setting up deejay gear and playing the Fight

Song that the full house sang after every Cougar score and virtually everyone there was always in full Coug dress/gear . . . beads, hats, shirts, you name it! We roadtrip in Rob's '88 Lincoln Town Car appropriately nicknamed “The Rolling Sofa.” Gas gets spendy, but hey . . . we're Cougs after all! Our late comrade, Tom Alway '80 is always on the roadtrip with us in spirit! Tom's car's license plate (CougCar) hangs at the front entry of the Big River Grill in Stevenson, Washington, Tom's home town. Roadtripping entails singing the Cougar fight song and telling great Wazzu stories up and back, and we laugh all the time. What a great weekend!

This is what being a Coug is, as we all know, and as Jim Walden notes, a “special” feeling that can't be described or explained to non-Cougs.

This is just one example of “How Coug Are You?” We all are Cougs all the time, you know!

Jeff Clausen '67

I am gratified that someone is still using the term “WAZZU.” In the fall (2005) issue of *Washington State Magazine* (“How Coug Are You?”) the term is used to describe fashion at WSU. In light of the recent attempts by powers-that-be to eradicate this term from the language, I am elated to find that it is still being used, in a publication no less. Thank you for continuing a great tradition.

Joe Adams,
College of Nursing



ROBERT HUBNER

Portals of discovery

Your fall issue article entitled, “The Portals of Discovery” (fall 2005) states that “Mutated genes don't get passed to all of an animal's offspring, so over several generations, they tend to occur less often in the population.” The first part of that statement is true, but the second part is actually untrue, although it is a very common misconception.

In 1908, Godfrey Hardy and Wilhelm Weinberg showed that, in a large population with random mating, a new mutation will be maintained at a constant frequency over all subsequent generations. This is known as the Hardy-Weinberg equilibrium.

In an experimental situation where those conditions aren't met, a mutation might indeed occur less frequently in later generations; but in a large natural population, a new mutation will persist unless it is so deleterious that it kills the individuals who carry it, or renders them unable to reproduce.

Paul Lurquin, Professor
School of Molecular Biosciences
Pullman

In the work described in the article, the population was small, and their breeding was not random—researchers mated the experimental mice with normal mice—so a genetic mutation would be expected to show up less frequently in each subsequent generation. However, Professor Lurquin is absolutely right about the fate of mutations in larger populations. Thank you for pointing this out.



ROBERT HUBNER

Glycemic index

As someone who was once overweight and borderline diabetic and who achieved both a healthy weight and blood chemistry by making sweeping dietary and exercise changes, I was glad to see that the recent issue of *Washington State Magazine* (fall 2005) sought to raise awareness of the effects of diabetes. However, I was dismayed to see that the article continued to perpetuate a misunderstanding about foods with a high glycemic index (GI).

The example given by Mr. William Foster comparing a potato to refined sugar was particularly disturbing in implying that eating the sugar could in effect be healthier than eating the potato. A Snickers bar also has a GI rating of roughly two-thirds that of a baked potato, and yet I doubt if many dieticians and doctors would recommend replacing potatoes in one's diet with Snickers bars.

The glycemic index was developed in 1981 to help those people concerned with blood sugar levels, primarily diabetics and athletes, understand the extent a food raises blood sugar levels using a scale of 0-100. While it's true that a food with a higher index has a greater increase in blood sugar compared to low-index foods, using the GI as part of maintaining a healthy diet is much more complicated than just that, as low GI foods aren't necessarily more healthy.

For example, foods that are high in fat take longer to digest and therefore tend to have lower GI values; the GI is only a rating of individual foods and is not for food combinations, nor does it take into consideration how the food was prepared. Eating a baked

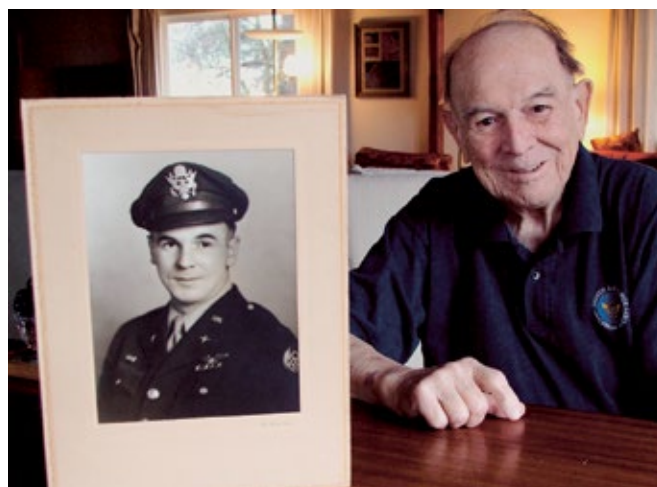
potato as part of a meal with a mix of other foods with lower indexes affects one's rate of digestion of all foods, and the potato should therefore merit a lower rating. Additionally, one must take into consideration the glycemic load, which accounts for the amount of total carbohydrates in a serving, or, simply put, portion control. Eating small amounts of food with a high GI has less impact on blood sugar levels than overeating foods with lower GIs.

The bottom line is that the GI is a very small part in all that must be considered in establishing a healthy diet, and you did a disservice to your readers by allowing this misconception of the importance of the glycemic index to stand unchallenged. The article should have ended with the advice of talking to a registered dietician for anyone interested in learning about making changes to their dietary habits.

John R. Gulczynski '99

Operation Chowhound

When I read the article about Professor Robert Miller (fall 2005), I remembered that I was that student who lived in the Netherlands when our liberators dropped the much-needed food from their airplanes.



BRAND MILLER

I have always been very grateful for those brave pilots; there were no guarantees that there would not be any German snipers.

Mendelssohn Street (Utrecht) was, indeed, renamed by the Germans because of the composer's Jewish background. It became Vivaldi Street. I do not know whether this is still so today.

*Feronica Calissendorff
Burlington*

Finch Memorial

Read with interest your article on Finch Memorial Hospital (spring 2005).

My husband, a WWII vet, attended WSU from 1947, graduating in 1951. We had a premature baby born at Finch on October 24, 1950. Her intended birth date was January 10, 1951. She wasn't given any chance of survival. At birth the doctor estimated her weight at a pound and a half. My reason for writing this letter is to commend the nursing staff at Finch. Our daughter had 24 hour watch care. Finch did not have sophisticated equipment needed for preemies.



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They cared and they improvised. Her oxygen was bubbled through a pint jar of hot water changed every 20 minutes. That was to protect and moisten her fragile lungs, as the doctor said her heart could not withstand a cough.

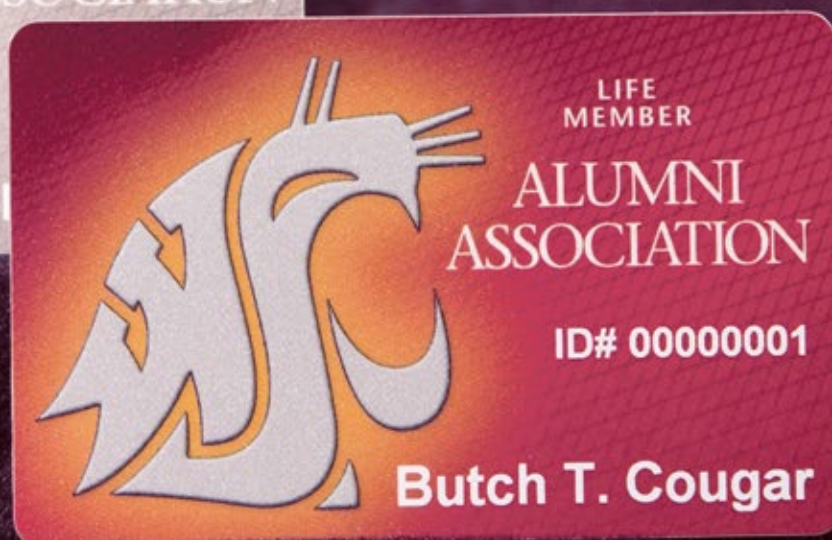
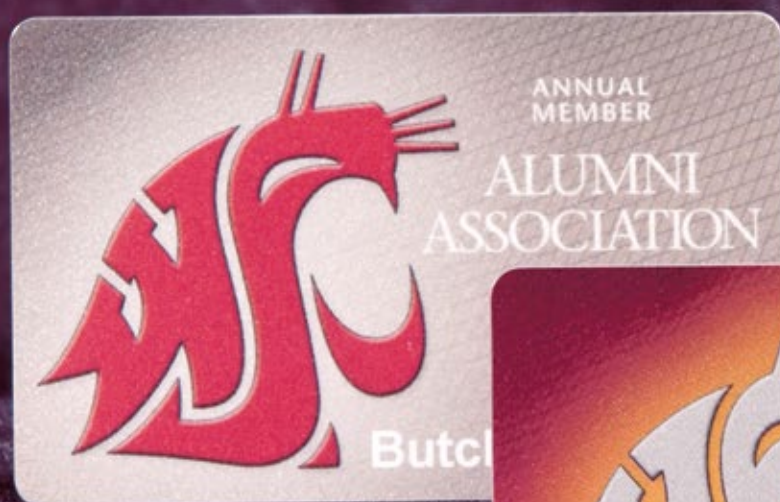
There was a small rocking chair beside her small residence, usually occupied. Later we learned the reason. Our baby would not infrequently stop breathing. The nurse would thump the bottom of her tiny feet, which would anger her enough to start breathing.

My husband had an 8 a.m. class near the hospital. Every morning our three-year-old son and I would walk with him to the hospital to see how the baby was doing before his class.

The baby finally went home with us in December in time for Christmas. She weighed four pounds, five ounces and looked pretty big to us. We gave a long name—Donnette Suzanne Patterson—to a tiny baby. And we do not believe she would have survived but by the grace of God and the nurses at Finch.

*Donna Patterson, spouse of
Don Patterson '51*

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HANGING ON BY A WHISKER

What geology hath put asunder, biologists are joining back together.

LISA SHIPLEY SAYS she often gets calls from people who are convinced they have pygmy rabbits in their yard.

"I try to be really nice and not laugh," says the Washington State University wildlife biologist. She runs through a quick checklist with each caller: Do you have sagebrush in your yard? No. Do the bunnies have a fluffy white tail?

Yes. Sorry, they're not pygmy rabbits.

Would that they were.

Pygmy rabbits were last seen in the wild in Washington in 2001. Plagued by shrinking habitat, disease, and wildfire, populations that had been declining for years seemed to crash in the late 1990s. With extinction looming, federal and state wildlife officials decided to

This juvenile pygmy rabbit, cradled in colony manager Becky Elias's hands, is about two-thirds the size of an adult.

Pygmy rabbits are the smallest rabbits in North America, and they are the only rabbits that can thrive on a sagebrush diet.

There's a hole in its ear where researchers removed a plug of tissue to use as a source of DNA, which helps the team trace family relationships in the colony.

round up the remaining rabbits—all 18 of them—and begin a captive breeding program.

Some of the rabbits came to WSU, where Shipley and her colleagues Rod Saylor, Linda Hardesty, and Nina Woodford have been trying to produce enough healthy animals to release back into the wild. Other breeding colonies were set up at the Oregon Zoo in Portland and Northwest Trek near Eatonville, Washington.

Despite the rabbits' dire situation in the wild, Shipley says the recovery effort began with optimism.

"Rabbits, wow, they should be able to breed like crazy," she recalls thinking. But the animals weren't as amorous as expected. Bunnies of both sexes routinely fought and rarely mated. Facing a time crunch—pygmy rabbits live only four or five years, at most—the

WSU team scrambled to figure out what would get them in the mood to mate.

Housing them in larger pens helped. In a big enough enclosure, one female and two males co-existed peacefully and produced multiple litters in one season. Another key factor was keeping them on soil. A mother-to-be needs to be able to dig a natal burrow where she will give birth, and where the kits will stay until they're weaned.

But keeping the rabbits on soil exacerbated another, potentially devastating problem: disease. During their first two years in captivity, the pygmy rabbits died at a frightening rate. Kits would be fine one day and dead the next, victims of an intestinal parasite. Adults succumbed to an infection caused by bacteria that live in the very soil the rabbits needed in order to breed.

Woodford, a veterinarian, says these bacteria usually pose a threat only to animals—or people—with severely compromised immune systems, such as patients in the late stages of AIDS. The pygmy rabbits' susceptibility hints that their immune systems might be deficient, perhaps because of inbreeding as their wild populations shrank.

Several factors contributed to their decline in the wild. Pygmy rabbits live among sagebrush growing on deep, soft soils throughout the inland Northwest. That would seem to be a vast enough area to support plenty of bunnies, but geology—the Columbia River and the patchiness of their deep-soil habitat—has kept Columbia Basin pygmy rabbits separated from those in Oregon and Idaho for as long as 70,000 years. That isolation led to genetic differences that make the Washington rabbits unique, and worth saving as a distinct form of the species.

POP ART in Pullman

But isolation has also created problems. Populations in Washington, already separated from their kin in neighboring states, got cut off from each other as their habitat became more fragmented by agricultural development. Each population became more inbred and more vulnerable to disease outbreaks and predators.

In a last-ditch effort to save the Washington pygmies, the recovery team decided to bring Idaho pygmy rabbits into the breeding scheme. Saylor says such out-breeding, or “genetic rescue,” was used several years ago to boost survival of the Florida panther by addition of a few panthers (or cougars) from Texas.

So far, the genetic rescue mission is working. Since bringing Idaho rabbits into the mix, dozens of kits have been born and raised to maturity. They’ve gone on to be mated with pure Washington rabbits to produce second- and third-generation bunnies that have 75 percent or 87.5 percent Washington genes—close to the original strain, but with a much greater chance of sustaining themselves in the wild.

“It looks like the intercrossed animals are going to save the day,” says Saylor. With about a hundred mostly Washington pygmy rabbits now doing well in captivity, wildlife officials will decide this fall when and where to start releasing pygmy rabbits back into the wilds of central Washington.

Shipley says the breeding program calls for a different measure of success than that applied to most research projects.

“It’s not one of those, ‘I want to get a lot of publications out right away,’” she says. “It’s bigger than that, and I think we should all feel pretty good about being part of it here at WSU.” ■

—Cherie Winner

THIS FALL, Washington State University’s Museum of Art is showing more than 70 works by pop artist Roy Lichtenstein. Entitled *Roy Lichtenstein Prints 1956-97*, the exhibit offers a comprehensive record of the artist’s evolution. Lichtenstein explored commercial and comic book images and painted them in immense scale, utilizing bright colors, simple lines, and the dot patterns associated with newsprint reproduction. Although his work was controversial in the 1960s, it changed the way America looked at and thought about art.

The exhibit, from the private collection of Jordan D. Schnitzer of Portland, Oregon, continues in Pullman through December 16 before moving to the Henry Art Gallery in Seattle from February 25 through May 7.

If you can’t attend the exhibit, you can still see it in a full-color catalogue. The Museum of Art has produced a 95-page trade book, *Roy Lichtenstein: Prints from the Jordan D. Schnitzer Collection*, with essays by



Reverie (from the portfolio *11 Pop Artists, Volume II*), 1965, screenprint by Roy Lichtenstein.

the curators about Lichtenstein and his role in American art. For purchasing information, visit *Washing-*

ton State Magazine Online, wsm.wsu.edu/bookstore/Alum-Art-Books.html. ■

BREWING UP BUSINESS

The Small Business Development Center celebrates 25 years of success.

MARK BURR and his business partners, Nina Law and Skip Madsen, dreamed of owning their own beer brewing business. After a visit to Port Townsend a few years ago, the trio began to investigate buying the historic Town Tavern and turning it into the Water Street Brewing and Ale House. During the course of his research, Burr discovered the Small Business Development Center (SBDC), hosted by Washington State University, and made an appointment with Kathleen Purdy, business development specialist with the Olympic Peninsula Regional Center of the SBDC.

The SBDC is designed to help small businesses overcome hurdles. This year, the SBDC celebrates 25 years of success, having grown from a modest office on the WSU Pullman campus to 27 training and counseling centers throughout the state. Burr and his partners joined the more than 72,000 clients who have availed themselves of the center’s no-charge counseling services over the years. Purdy herself, who celebrated her 10th anniversary with the SBDC this year, has served over 1,600 clients.

They had the know-how and the enthusiasm, but the three prospec-

tive brewers lacked the stacks of cash it takes to buy a business. Between them, they had the equity on Law’s Seattle home and a modest amount of money for “something of a down payment,” says Law. But it was their combined experience in the hospitality industry that excited Purdy, who gladly helped them out.

“Purdy played a huge role in helping us develop a business plan. She also helped us do a cash flow analysis on the existing business in order to find its fair market value,” says Burr.

“A business plan is where you run the business on paper,” says

Purdy, who over the years has helped others generate \$20 million in investment funds. "If someone is starting a business, they should have a plan, even if they don't need a loan."

With their business plan and cash flow analysis in hand, Burr, Law, and Madsen felt ready to approach Mariner Bank for a Small Business Association (SBA) basic 7(a) loan, one of the most common types of small business loans. With it, the government will reimburse the lender for a percentage of its loss, if payment default occurs. "The dialogue with the bank revolved around the business plan," says Burr. After considering the request, the loan officer agreed there was potential in the trio's business strategy and approved the requested bank note, allowing them to start negotiating to buy the business. The SBDC's assistance with this loan and others totals nearly \$800 million in capital formation

for small businesses in Washington over the past 25 years.

Then came the hard part. The Town Tavern closed its doors April 30, 2004, and the new owners scrambled to get ready to reopen in time for Port Townsend's annual Rhododendron Festival the second weekend in May, the first festival in the town's summer schedule of events designed to attract tourists. "We had two weeks to paint, prepare, hire staff, and move ourselves to Port Townsend. We kept pushing back the opening, until finally we opened the Wednesday before Rhody Fest," says Law. "We didn't even know how to run the cash register," adds Burr. When they did open, the doors rarely stopped swinging, thanks in part to an article in the local newspaper featuring the new micro-brewery in town.

A year and a half later, Burr, Law, and Madsen still barely have time to catch their breath. They've weathered one winter season when

business slows and survived unexpected mishaps such as a car crashing through the front door. And, although they say it's too early to claim financial success, there have been patches of blue sky on the horizon. In June this year, Madsen's brewing expertise garnered gold, silver, and bronze North American Beer awards for his Old Wookie Barley Wine, Quadubbel Bypass, a Belgian strong ale; and Smokestack Weizen, a German hefeweizen, respectively.

The three entrepreneurs credit the SBDC as one of their greatest resources. Because the center also aids established small businesses, the Water Street Brewing owners still go in for check-ups with Purdy, says Law. To show their appreciation for helping them achieve their goals, the owners have named a special brew just for her—Purdy Pale. ■

—Kathie Meyer '92

MAYBE TOMORROW

Graduate student follows his heart into uncharted territory

JUST AS Washington State University political science student Steve Overfelt was finishing his master's degree coursework and preparing to write his thesis, he decided to put it off. And his advisor, Prof. Martha Cottam, encouraged him to do so.

Was this evidence of deteriorating academic standards at WSU? Hardly. It was a response to the tsunami that devastated coastal communities in Southeast Asia on December 26, 2004.

"I'd spent Thanksgiving in Indonesia doing research for my thesis on non-governmental organizations (NGOs), so I really wanted to go back to help," Overfelt says. "But nobody wanted my physical labor, only the cash in my pocket. After a while, getting told 'no' became normal."

Determined to be of use, Overfelt teamed up with classmates Joe Huseby and Paul Anderson, also students of Cottam's. The three formed their own nonprofit organization called Tsunami Relief Boats. They applied for a grant, which is still pending, and raised several thousand dollars—enough to send Overfelt to Sri Lanka for four months, beginning last May. Their original intention was to replace lost fishing boats for coastal fishermen.

"We found that you can't just walk in there and give someone a boat," Overfelt says. "The most

Water Street Brewing and Ale House entrepreneurs Nina Law, Mark Burr, and Skip Madsen, and their SBDC mentor, Kathleen Purdy.



KEVIN NINBURG

important thing we've learned is to not come in with your own agenda, but to work with the locals."

Overfelt cooperated first with an established Sri Lankan NGO called Sarvodaya, and then began working with Project Galle, a trust established by British residents of the Galle district of Sri Lanka (www.projectgalle2005.com).

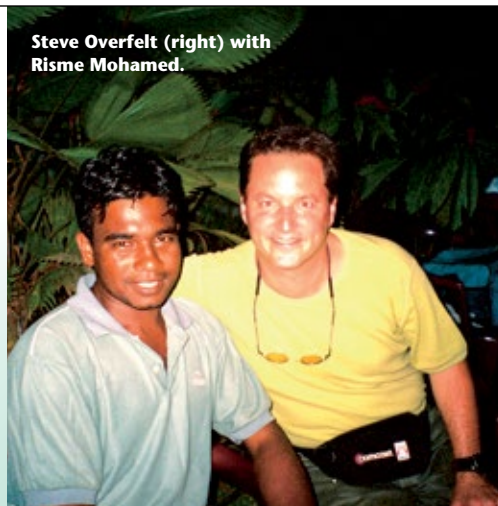
"They have done great work," Overfelt says. "In the beginning it was food packs, and health packs, and tents. Then it was getting the tent-camp people into temporary housing. They have meticulous records of who lives where, and the conditions and needs in the camps."

Overfelt helped teach English, build housing, and fill plastic bags with a corn/soy mix for distribution, and he attended lots of meetings. He found his niche as a liaison officer with Project Galle.

"My job was to connect the dots, to move information from place to place. For instance, the reconnaissance teams brought back information that tents were flooding when it rains, so drainage ditches needed to be dug. I was responsible for calling the appropriate individuals to arrange it," Overfelt says. "There were multiple issues, but no follow-up with solutions—so this sped up the process and made people's lives easier."

"I have come to find that here, and perhaps in this line of work in general, you must be able to find victories in the smallest details," he says. "Sometimes the only thing I can say I accomplished one day is that I learned a better way to get a water tank into a camp. It didn't get the tank there, yet. But maybe tomorrow."

Prof. Cottam is very proud of



Steve Overfelt (right) with Risme Mohamed.

"The desire to do this kind of work must come from within. Just because you may not know anyone who has done what you are thinking about, doesn't make it a strange idea. It just means you will learn that much more."

—Steve Overfelt

A scene from Katugoda, a suburb of Galle, Sri Lanka, where Steve Overfelt has been helping recovery from the 2004 tsunami. Katugoda was largely flattened.



Tsunami relief volunteer with Sri Lankan children playing ring-around-the-rosy.



her advisees, despite the temporary delay in Overfelt's academic progress.

"The initiative, energy, and belief in public service that Steve, Joe, and Paul demonstrated shows the exceptional quality of our graduate students—and that theoretical concepts learned in classrooms at WSU can indeed be effectively translated into public policy and public service globally," she says.

"Steve has gained a completely different perspective on relief work, including a full recognition of the importance of involving the local community in the process of helping them recover from disaster. He developed skills in the realm of transitioning people from tents, to temporary housing, to permanent housing, all of which will be neces-

sary in the Gulf region after Katrina. Not many Americans have this kind of experience with the long-term consequences of such enormous disasters."

As the one-year anniversary of the tsunami approaches, and people in our own country begin the process of recovering from Hurricane Katrina, Overfelt recommends that other students follow their hearts if they are led into the "uncharted territory" of disaster relief.

"The desire to do this kind of work must come from within," Overfelt says. "Just because you may not know anyone who has done what you are thinking about, doesn't make it a strange idea. It just means you will learn that much more."

Overfelt returned to his Moscow,

Idaho, home in early September to visit with his children and check in with Cottam. Then it was back to Galle in late September for another three months of volunteer work.

Progress is slow, Overfelt says, but he copes, along with the patient Sri Lankans.

While the needs are still huge, and rubble from the tsunami damage still sits, awaiting cleanup, Overfelt loves his work and the Sri Lankans who have befriended him.

"What marvels me continually is their lack of defeatism. They smile more often than not. They treat a stranger as if he were a relative. They make it easy for me to want to help them." ■

—Carol Price Spurling

A SWEET BUZZ

ENTOMOLOGIST Steve Sheppard has never gotten over his wonder at how people came to raise swarms of stinging insects for the honey they produce.

"To see this guy dumping out thousands of bees to collect honey from their hive. . ." He shakes his head. "It's amazing that humans ever figured it out to do that."

But the Washington State University associate professor, who not only keeps bees himself, but unflinchingly opens beehives with his bare hands, understands the passion for honey.

People prize it as a delicacy and demand it as a staple. They cherish some honeys for their color and admire others for their subtle flavors or distinctive tones. They even seek honey as a cold remedy and an allergy fighter.

Honey bees were introduced to the Americas by European colonists in the 1600s. But people had been consuming the amber nectar long before that. Seven-thousand-year-old cave paintings in Spain depict

people keeping bees. The ancient Egyptians offered honey to the gods. It was a factor in Greek and Roman myths.



Entomologist
Steve Sheppard

ROBERT HUBNER



ROBERT HUBNER

The seasons ensure a diversity of honeys with an array of flavors and aromas.

In Washington, bees and beekeepers on both sides of the Cascades produce a range of honeys from clovers, wildflowers, berries, and trees. On the east side, honey bees pollinate tree fruit, black locusts, and wild plants like fireweed, which produces a fruity, smooth honey popular among aficionados. On the west side, nature's little foragers find blackberries, lavender, and wildflowers. The bees' pollen sources and the seasons ensure a diversity of honeys with an array of flavors and aromas. So great is the variety that Sheppard has the students in his popular honey bee biology class try 30 to 40 different samples just to get a sense of the range.

The best honey in the world is

the sort you grew up tasting, says Sheppard. He came of age in the south, where Tupelo honey is the most famous and sought after. But he had a taste for the clear, very delicate sourwood honey. He also enjoys the dark, heady Black Forest honey made from aphid honeydew.

Here in Washington, we're used to the sweet, mild clover, or the blackberry, which offers a delicate, flowery perfume in a thick, viscous honey—that is, when we can find them.

Most of the honeys in the grocery store are the Sue Bee types. They're sweet, but bland. That's because they're blended and often processed to higher temperatures to eliminate sugar crystals. It's done to suit the tastes of the American consumer, says Sheppard, adding that the high heat drives out all the aromatic little volatiles that give the honey its distinctive flavor.

If you're hunting for honey, Sheppard has a few words of advice: buy from a local bee keeper if you can. He or she will tell you more about how your honey was produced and processed. If you must buy at the store, look for comb honey. You'll know it wasn't brought to too high a heat during processing, otherwise the comb would have melted. Finally, if your honey is crystallizing, don't throw it out. Simply set the container in a warm water bath and watch the crystals dissolve.

The best places to find local honey are farmers' markets, natural foods stores, and county fairs. You can also look for sources online at the National Honey Board's www.honeylocator.com and at the Puget Sound Bee Keepers Association site, www.pugetsoundbees.com. ■

—Hannelore Sudermann

ANN CHRISTENSON'S TIME PIECE

BRINGING DISPARATE images together into a unified whole seems to come naturally to ceramic artist Ann Christenson, professor of fine arts at Washington State University. It's particularly evident in one of her most recent projects—a sundial.

Christenson was one of several artists invited by the University of California, Berkeley, to submit a design for the sundial, as part of the renovation of a courtyard within the Clark Kerr Campus at the university. The limitations imposed upon the design—that part of the area containing the sundial could

be flat and that sundial parts be theft proof—led Christenson to choose an analemmatic sundial of tile and bronze incorporated into the courtyard floor. Analemmatic sundials are usually in the form of an ellipse with proportions determined by the latitude of the location or the way the sun's rays hit the earth. In Christenson's design, which she named *Momently*, the person viewing the sundial serves as the vertical "stick" whose shadow indicates the time.

Christenson was fortunate to have her son, Jack Schonbrun, as a



RIGHT (detail) and BELOW: *Momently*, University of California, Berkeley, by WSU fine arts professor Ann Christenson.

collaborator on the project, as his skills complemented hers. Schonbrun, a postdoctoral associate in biophysics at the University of Washington, researched the mathematics for the sundial and calcu-

lated its proportions, as well as the date scale for the line on which the viewer stands—an unequal scale that relates to the length, rather than number, of days.

Christenson's design places the sundial within a 20-foot circle divided into quadrants. The hour markers on the sundial alternate between Roman numerals, traditionally used on sundials, and the hand signs of American Sign Language, a reference to the history of the space, which originated as the California School for the Deaf and Blind. There also are stylized zodiac signs, another tie to traditional sundials.

Each quadrant includes a mosaic image of antique Spanish lace, a tie to the Spanish style of the area's architecture; a mosaic figure from the natural world, such as the Coopers hawk that nests on campus; and a diagrammatic representation in bronze of part of the geometry of the sundial.

Electronics were central to the project, as its implementation occurred in five separate locations. Christenson's design was translated into a full-scale computer model. "If everyone followed the model, then when all the parts got to Berkeley, they should fit together like a giant jigsaw puzzle," says Christenson.

The tiles were made at Quarry

In Christenson's design, the person viewing the sundial serves as the vertical "stick" whose shadow indicates the time.



Tile in Spokane. Prototypes of the bronze inlays were made in Portland, Oregon, and the bronzes were cast at the Walla Walla Foundry. Tiles and forms for the bronzes were cut with water jets at Precision H2O in Spokane.

The tile mosaics were made in

Christenson's studio by several different people. Since there was no formula for translating the design into mosaics, there often were stylistic differences between individual mosaics that had to be reworked in order to create a uniform whole. This meant late nights for Christen-

son, who spent many hours looking over the day's work and making any necessary adjustments.

On the site at Berkeley, concrete was poured to surround the sundial and form the pathways that divide the circle into quadrants. It was then up to the tile setter, who pre-

pared the tile bed, set the tile and bronzes, and grouted. That the pieces of the puzzle all fit is obvious to sundial viewers and a relief to Christenson.

"I've never done anything like this before," she says. "The process was a tremendous learning experience." ■
—Mary Aegerter



MEDIEVAL MISSIVE: An Ancient Document Rediscovered

A SACRED and significant artifact of European history—a genuine papal bull from the Middle Ages—was recently found tucked among the books and papers of Washington State University's Manuscripts, Archives, and Special Collections.

A bull, or bulla, named for its original form as a bubble-shaped metal plate, and later for the lead seal affixed to an official document, was most often a legal missive from

the pope. Papal bulls did everything from advocate for an individual's safe travel to advise the citizens of a country to follow their king.

The written communication from the pope now at WSU once protected a house for lepers in the French city of Caen. It came from Innocent III, the pope who took the medieval papacy to its greatest heights. Reputed to have been strong and humane, Innocent III was also known for his lengthy disputes with France's Philip II Augustus and England's King John. And it

was during his papacy that the Fourth Crusade and the Albigensian Crusade took place. Innocent III died suddenly of a fever in 1216, just 38 days after the bull was written.

The document may have continued to rest forgotten in the files, but for a preservation grant to organize the manuscript archives. One day late last spring, librarian Cheryl Gunselman, who was new to the archive collections, was working in the small manuscripts collection, painstakingly sifting through hundreds of boxes to check on their contents and familiarize herself with the materials, when she pulled out a content paper that listed a papal bull dating back nearly 800 years. "In my mind, I was thinking, 'This has got to be a photo copy,'" she says. "But when I pulled the folder out, it had a weight to it." Opening the folder, she saw a single sheet of ancient vellum to which was affixed a lead seal marked with the imprimatur of Pope Innocent III. Her heart quickened.

She immediately took the bull to the library's conservation lab, where the conservator built a special case for it. And then Gunselman set about discovering how a bull signed by a pope in Perugia, Italy, long before Europeans ever set foot in the Americas, came to be in Pullman.

"There's no question, this is the real thing," says Gunselman, who notes the original silk cord and seal are still intact.

Professor Paul P. Kies, who taught English here from 1924 through 1956, brought the bull to campus. He had spied it for sale in a catalogue from a French dealer in 1951, and for 8,200 old francs—which at the time amounted to a mere \$24.65, according to a handwritten note—picked up the document for the library.

"That's remarkable," says Gunselman, noting that today it might be impossible to buy a bull at any price.

The bull was donated to the manuscripts collection by the Friends of the Library that year. Though she hasn't found any paperwork explaining why the bull was sought out for the archives, Gunselman theorizes that because of Pullman's remote location, the librarians wanted to develop a broad collection of examples from distant times and places so students could see history up close. A librarian says as much in notes written about other similarly unique acquisitions, including fragments of letters on papyrus.

Now the library wants to let students and scholars know about the bull. "We plan to try to take advantage of it being here," says Gunselman. Besides sharing it with the general education classes, she hopes to get the attention of scholars around the country. "From what we can determine," she says, "there aren't many of these in the United States."

■ —Hannelore Sudermann

Pope Innocent III's papal bull dated June 8, 1216, confers protection on a house for lepers in France. To read a translation of the bull, as well as other documents from the archives, visit www.wsulibs.wsu.edu/holland/masc/masc.htm.



COURTESY OF WSU MANUSCRIPTS, ARCHIVES, & SPECIAL COLLECTIONS



David Kramer and his research group in the Institute for Biological Chemistry designed and built equipment that allows them to explore the “proton budget” inside chloroplasts in living leaves.

SHEILA HANES

Rewriting the book on **PHOTOSYNTHESIS**

TOSS OUT THAT OLD biology book you were hanging onto for reference. The chapter on photosynthesis is about to be rewritten, thanks to work by David Kramer and his research team at Washington State University’s Institute of Biological Chemistry.

Using instruments they designed and built themselves, Kramer and his group—including his wife, Atsuko Kanazawa—are peering into chloroplasts to learn how they convert solar energy into the chemical energy that nourishes the plant and, through the food chain, human beings and all other animals as well.

Kramer’s lab has changed the field of plant physiology by exam-

ining what he calls the “proton budget” inside chloroplasts in intact living leaves. During photosynthesis, green plants use energy from light to split water molecules into protons, electrons, and oxygen. If you look at a textbook diagram of the process, you’ll see all kinds of detail about what happens to the electrons—and almost nothing about the protons.

“That’s a whole half of the way that the plant works that had never really been observed in a living plant,” he says.

The problem has been that the conventional way of studying photosynthesis is to grind up leaves, put them in a soupy mash in a test tube, and evaluate what happens

when the mash is exposed to light.

That approach works fine for tracking electrons, but it utterly destroys the spatial arrangement that characterizes the proton side of the business.

Inside every chloroplast are dozens of flattened, membrane-covered compartments called thylakoids. In high-power photographs they look something like stacks of hollow pancakes. During photosynthesis, light jars electrons loose from water molecules and sends them skimming through a series of chemicals embedded in the outer surface of the thylakoids. At the end of their journey through this “transfer chain,” the electrons are stored on a chemical called NADPH, which the plant can later use as a source of energy.

Scientists have long known about this transfer chain, because as the electrons move along it, the energy they carry causes the chemicals to change color ever so slightly—and because the chain works even if the leaves have been ground up and the chloroplasts and thylakoids broken open.

The protons are another story, one that’s been largely untold until now. Scientists knew that protons move through the thylakoid membranes to the inside of the pancakes and somehow power the production of ATP, the energy-storing chemical all earthly organisms rely on.

But nobody knew how they did it. Textbooks and most plant physiologists said that as protons pile up in the thylakoids, they lower the pH there (make it more acidic); and that the plant harnesses that difference in pH between inside and outside to drive the synthesis of ATP.

That explanation didn’t satisfy Kramer. First, it was untested, and untestable, because no one could see what was happening inside thylakoids. Second, to have enough of a pH difference to drive the system, the fluid inside the pancakes would have to be nearly as acidic as lemon juice—a condition that would destroy other components of the system.

“It makes no sense, because none of these enzymes will work [at such low pH],” he says. He proposed that much of the energy from the positively charged protons gets stored as an electric field rather than as a pH gradient. Then, he and his colleagues invented the instruments that let them find out what was really going on in the thylakoids.

Their completely non-invasive, hand-made instruments deliver pulses of light to a leaf and sense slight changes in the color of light emitted by the leaf in response. Protons don’t have color, but carotenoids in the membrane change color, depending upon how much electric field there is across the membrane.

“Nature has done us a really amazing favor. It’s provided us with a volt meter,” says Kramer of the color shift. Using his nifty new instrument, he found the electric field across the thylakoid membrane is about 100 millivolts. That doesn’t sound like much, but the membrane is so thin that the field can reach nearly a quarter of a million volts per centimeter. That is definitely enough power to run the molecular machine that makes ATP. And the pH doesn’t go low enough to destroy the chloroplast.

“We’re really happy about this, because we’ve now changed the textbooks,” says Kramer.

Even better, plant physiologists now have a way of studying the inner life of plants without destroying their subjects. ■

—Cherie Winner

WHEN BUOY MEETS BARGE

Tow-lane charts enable ocean-going towboats and crabbers to coexist.

"YOU LOOK OUT on the ocean, and it looks huge. It looks like there's space for anybody or anything out there.

"But," says Steve Harbell, "really there's a lot going on."

Take, for example, crabbers and ocean-going towboats. Historically, the two have not mixed well off the Pacific coast. Dungeness crab fishermen typically set 400 to 500 pots in the waters off Washington's coast. Multiply that by 228 fishermen, and you get a thicket of buoys attached by monofilament to the pots 50 to 250 feet below.

That same ocean, near shore, is a towboat highway over which huge boats towing barges laden with various commodities sail up and down the coast every day of the year.

When towboat and barge meet buoy, the crab pots lose. At least in the best-case scenario.

Crab pots cost about \$150 apiece, so towboat encounters can be costly to the unfortunate crab fisherman who sets his pots in harm's way.

But harm can also come to the towboats. Hiring a diver to clear the lines from the towboat drive shaft can cost \$1,000. If the line gets drawn up into the propeller shaft bearings, the towboat may have to go into dry dock for repairs. Dry dock and out-of-service time can cost the owner over \$100,000.

Some 30 years ago, the Oregon State University Sea Grant program set out to remedy the situation,

which, not surprisingly, caused tension between the two industries. Navigation charts were negotiated and developed, establishing lanes designated for towboats to the exclusion of crab pots. The charts cover the crab fishery area all the way from San Francisco north to Cape Flattery.

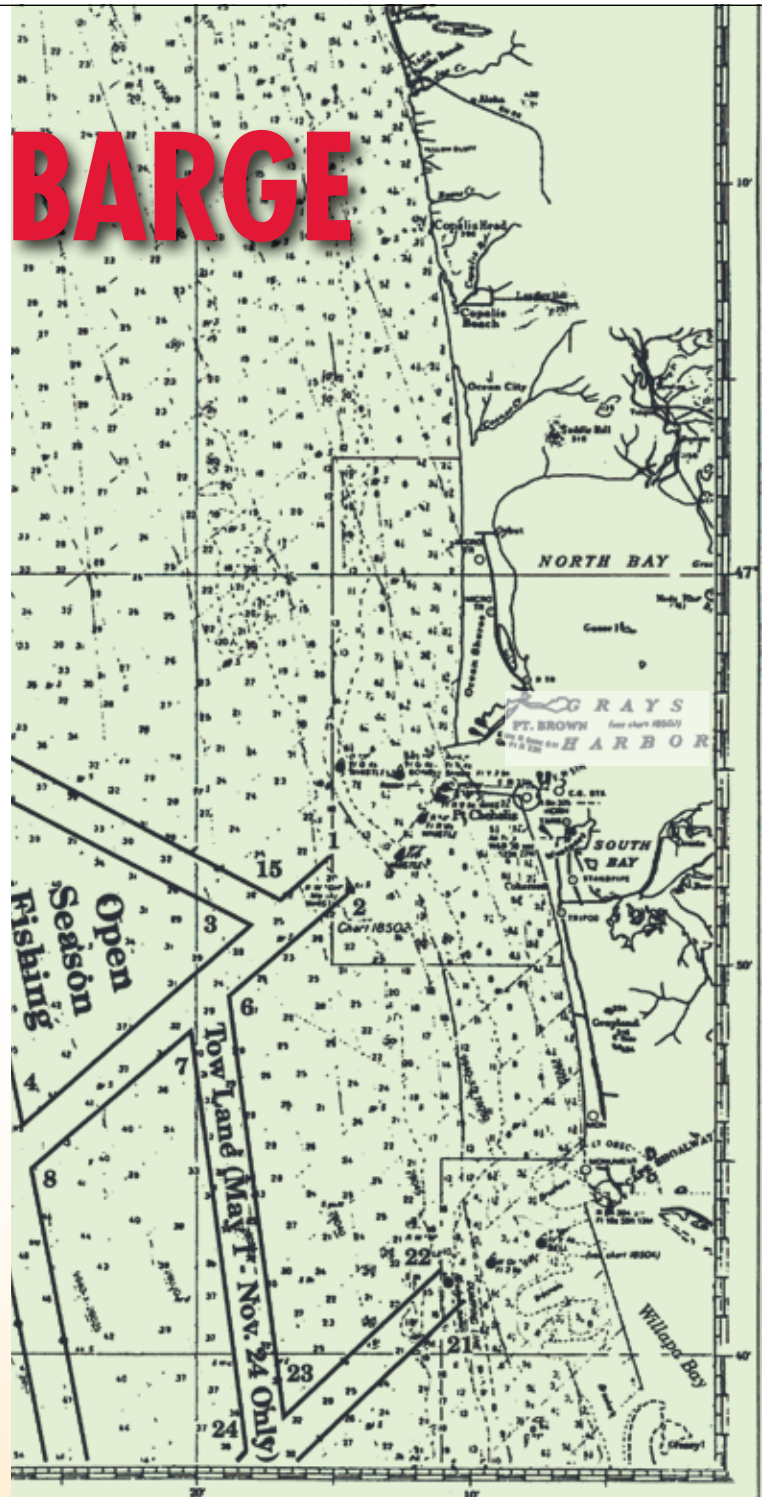
OSU dropped the program in the early 1990s. Industry took it over for a while, which meant, says Harbell, it fell to the head of the crab fishery in Ilwaco to keep things going.

Harbell, who has a joint appointment with Washington State University Extension and University of Washington Sea Grant, took over the program in 1997. The tow-lane charts are anything but static documents, and maintaining them requires several meetings a year.

After making final changes in the spring, Harbell sends the charts to about 1,200 commercial crab license holders in Washington, Oregon, and California and to 300 towboat companies and 20 shipping agents.

When fuel prices started rising, changes were made to some of the inside lanes to shorten distances. Lanes also change seasonally, moving in closer to shore after May 1, when the crab season has tapered off. Besides alleviating tensions and economic loss, the program has opened about 500 square miles of ocean to crab fishing, says Harbell.

Compliance with the tow-lane



Tow-lane charts cover the crab fishery area from San Francisco north to Cape Flattery. Pictured here is a section off Grays Harbor.

charts is good, says Harbell, as both crabbers and towboat operators clearly benefit by adhering to the charts. The agreement does have some legal teeth, through Coast Guard enforcement.

But so far it's not been needed, says Harbell. "We'd like to stay with a gentlemen's agreement." ■

—Tim Steury

Steve Harbell is also chair of both Grays Harbor and Pacific County Extension.

MAGPIE FOREST is like something out of the *Wizard of Oz*, a strange green land in the middle of a field.

Nestled in a 33-acre parcel of wheat north of Pullman, the 14-acre tract is a remnant of the original Palouse prairie. Last spring, Washington State University purchased the property from a local landowner to protect it from being developed.

Accessible only through a network of game trails, the spot is covered with hawthorn thickets, quaking aspen, mountain ash, and native shrubs, grasses, and flowering plants. The University hopes to upgrade these trails and encourage people to visit the property. Plans for an access road and parking lot are underway.

The University wanted to preserve one of the last relatively

untouched pieces of Palouse prairie left, says Mel Taylor, WSU's director of special projects and external relations. The site will serve as a research facility for students and faculty to study the wide variety of native plants found in the Palouse.

Rod Sayler, associate professor of natural

resource sciences, says that many groups already use the site for study. Thanks to the school's preservation of the land, he hopes to be able to cultivate plants there that were once found throughout the Palouse, and re-introduce them in other sites. He also wants to increase the size of the existing forest.

The local community has welcomed the move to purchase the forest and protect the native prairie at a time when land around it is being developed into student apartments, says Tom Lamar, executive director of the Palouse Clearwater Environmental Institute, based in nearby Moscow, Idaho. "It's great WSU has taken on the challenge,"

he says. ■

—Lisa Stone '06

MAGPIE FOREST

Protecting a piece of the past

To see more photos of
Magpie Forest,
visit our Web site:
wsm.wsu.edu

ADORNING THE WORLD

The opening of the Metropolitan Museum's exhibition was the first time the visiting Marquesans had seen these representations of their culture.

IN CONJUNCTION with the opening at the Metropolitan Museum of Art in New York City of *Adorning the World: Art of the Marquesas Islands* (May 10, 2005–January 15, 2006), Carol Ivory, who was the advisor and consultant for the show, lectured on Marquesan art, her research specialty, at the Barr Graduate Center. Attending the lecture were 15 Marquesans, a remark-

able fact in that the Marquesas Islands are marvelously remote. To reach the Marquesas, one must first reach the already remote Tahiti, and then travel another 800 miles.

At the end of the lecture, Toti Te'ikiehu'upoko, the director of the Marquesas cultural organization, stood and noted to the crowd that this was the first time he'd heard a lecture on the Marquesas that did not start out with Paul Gauguin.

Or Herman Melville, for that matter. Or Thor Heyerdahl. In other words, few westerners are familiar with the Marquesas themselves, let alone their art, except through the accounts of a few intrepid western observers.

Ivory, who is professor of art history and chair of fine arts at Washington State University, is deeply satisfied that the show at the Met will give at least a few previously uninitiated westerners a glimpse of Marquesan art.

Our ignorance is perhaps understandable, due not only to the Marquesas' isolation, but also to a certain peculiarity of the culture itself, at least from our perspective. There is no word for "art" in the Marquesan language, Ivory writes in her essay in the exhibition catalogue. For lack of an equivalent, the seminal Marquesan-French dictionary translates art as "curiosity" or "antiquity."

Although such notions are foreign to the Marquesan understanding of their art, they do reflect, ironically, our difficulty in grasping it. Ivory notes in her essay a bias on

the part of the Met that art is old.

Few of the objects in the exhibition, in fact, date more recently than the 19th century. Most of the objects, which include feathered headdresses, finely carved tobacco pipes and war clubs, and various body ornaments, left the Marquesas long ago with missionaries, officials, tourists, and anthropologists. The opening of the Met exhibition was the first time the visiting Marquesans had seen these representations of their culture.

Indeed, the Marquesans lost much of their knowledge of early art forms, says Ivory, due not only to the objects being taken from the islands, but also as a result of their conversion to Christianity and the prohibition of traditional practices, internal strife, and widespread death from introduced diseases.

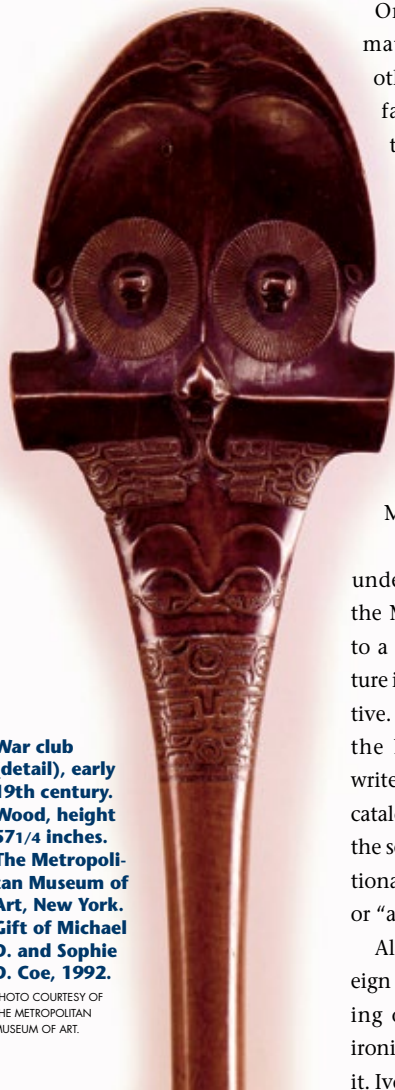
In spite of such adversity, says Ivory, Marquesan art did not die out. Rather, it has been transformed. In addition to traditional carving, contemporary Marquesan art revolves mainly around the dancing, chanting, and singing associated with festivals, and the regalia and costumes that go along with these activities.

"Marquesas," says Ivory, "is alive, exciting, and beautiful."

Ivory visits the Marquesas once a year. Every year, she is invited to lecture on Marquesan art on a combined freighter-tour ship that sails amongst the Marquesan islands from Tahiti. The boat goes to all six of the inhabited islands. "And then," she says, "I'm there," far from New York and Pullman, in the islands that provided the subject for Melville's first book, *Typee*, and where Gauguin died. ■

—Tim Steury

For information about the exhibition catalog, Adorning the World: Art of the Marquesas Islands, coauthored by Carol Ivory, see wsm.wsu.edu/bookstore/Fac-Art-Books.html.



War club (detail), early 19th century. Wood, height 57 1/4 inches. The Metropolitan Museum of Art, New York. Gift of Michael D. and Sophie D. Coe, 1992.

PHOTO COURTESY OF THE METROPOLITAN MUSEUM OF ART.

A TINY SHRIMP THREATENS TO TOPPLE AN INDUSTRY



Oyster farmer Dick Wilson holds an adult burrowing shrimp, one of the threats to his business in Willapa Bay. The shrimp compete with oysters for food and weaken the substrate on which the oysters are raised, causing them to sink and die.

HANNELORE SUDERMANN

The stakes are high. The shellfish industry represents well over \$60 million to the state's economy.

OYSTER GROWER Dick Wilson can hold one of the biggest threats to his livelihood in the palm of his hand—a pink, gnarly, destructive, burrowing shrimp.

Two indigenous species of burrowing shrimp—ghost shrimp and mud shrimp—are taking a serious toll on shellfish farms in Willapa Bay and Grays Harbor. Ghost shrimp turn the usually firm, underwater substrate upon which oysters and clams are grown into the consistency of quicksand, according to Wilson. That leaves the cultivated shellfish to literally sink and die. Mud shrimp build a static, U-shaped burrow. When they reach high population densities, they too can soften the substrate, while filtering out the same plankton shellfish and other organisms eat.

"This is very much an Achilles'

heel of the industry," says Wilson, who has grown oysters on Willapa Bay for the past quarter century. "Natural predators include sturgeon, sculpin, and flat fish, but what have we done to our fish? Helped them disappear. If we can't control burrowing shrimp, I'm pessimistic about the future of the entire shellfish industry in Washington."

And soon, oyster farmers will be fighting the battle against burrowing shrimp without their most effective tool to date—carbaryl. In an effort to avoid expensive legal battles with environmental groups opposed to the pesticide, growers already are reducing their use of it and have agreed to voluntarily stop using it altogether by 2012.

Growers first started using carbaryl to manage burrowing shrimp in

the 1960s. According to Kim Patten, director of the Washington State University Research and Extension Unit at Long Beach, it was effective and did not have any long-term deleterious effect on the estuary's ecosystem. A single application was enough to protect the commercial oyster beds for up to four to eight years. Still, some objected to the use of the pesticide to control a native species in an estuary.

So what will take carbaryl's place? No one knows, Patten says.

"Do we have any tenable solutions in sight? The answer is 'No, we don't,'" he says. "Management alternatives are being developed that can be used in some beds under some conditions, but none that serve as a broad replacement for carbaryl. We have a long way to go."

Fortunately, Patten says, new funding from the Washington legislature and the federal government is being used to pull together a team of scientists, engineers, and growers to address the burrowing

shrimp problem. More than a quarter million dollars will be invested annually.

The 17-member team, led by WSU, includes professionals from four universities, two federal agencies, and two private institutions, including the Willapa Bay/Grays Harbor Oyster Growers Association and McGregor Co., an agricultural engineering and chemical firm based in Colfax. "What's exciting and different from previous efforts to address the problem is that we are getting a lot of new people involved, people that never would have been players before," Patten says. "It's such a difficult problem that we really want to make sure we have some outside thinking."

Wilson agrees. "I've spent 25 years as a scientist and an oyster grower, and finally, everyone in the industry is working together to solve the problem. We realize we can't play anymore."

The team will attack the issue on a variety of fronts. They'll develop a comprehensive program to map the shrimp's development between the larval stage and adulthood. They'll look at new mechanical ways to inject chemicals deep into

the substrate and/or physically remove burrowing shrimp.

They'll look into alternative chemical controls as well. They'll study the ecological consequences of any new chemicals that are advanced for control. They'll examine the reintroduction of natural predators, such as fish and crab. And they'll look at managing the parasites that naturally occur in burrowing shrimp and use them as a biocontrol agent.

"This is unquestionably one of the most complex and difficult pest management issues in the state, and I doubt that there will be one single solution," Patten says. "But there are some things that look like they have some potential."

The stakes are high. The shellfish industry represents well over \$60 million to the state's economy. Shellfish aquaculture ranks just behind the timber industry in terms of the number of jobs it creates in rural, coastal counties like Pacific County. Oyster cultivation has been proven to be an environmentally positive, sustainable activity in coastal estuaries.

Currently, there are about 100 shellfish farms in the region, ranging from small, family-run businesses to large corporate operations. Eliminating the use of carbaryl without a new way to control burrowing shrimp could have dramatic economic consequences.

"To illustrate the economic impact of the ban on carbaryl, we only need to look at an example from Oregon," wrote the team in its original proposal. "Carbaryl was banned in Tillamook Bay, Oregon, in 1985, and within six years, production had dropped 80 percent." ■

—Kathy Barnard

Kathy Barnard is the senior public relations specialist for WSU Extension.

SPORTS|SEASONS

SEASONS|SPORTS

GOING WITH THE



Don't try this at home: Cheerleader Chris Floe serves as the base for his partner, Amber Steadman, as she performs a heel stretch. It's one of dozens of lifts and throws he might do during a game.

ROBERT HUBNER

Chris Floe has worked hard to prove himself in a world of student athletes who rank their particular sports above the others, especially above cheerleading.



FLOE

CHRIS FLOE'S ARMS are covered with tattoos. The bearded senior criminal justice major towers six feet, three inches, and has biceps like cantaloupes. A pigskin jock in high school, he works nights as a bouncer at The Cougar.

He's also a member of the Washington State University Cheer Team.

When asked what drew him into cheerleading, his response is simple: "Girls."

"I got into it because of one specific girl," he says. "But really, I didn't have anything else to do during basketball season."

Floe has managed to take flack for being a male cheerleader in stride. "My buddies used to razz me a bit, but it was never anything serious," he says.

In his three years on the team, he has gained respect from his friends and classmates, especially after they see him flip, cheer, and toss 100-plus-pound cheerleaders over his head dozens of times during a game.

WSU spirit coordinator Amanda Hoppert says respect for the cheer team on campus grows if they place well in the national competitions. In 2005, they got exposure here for their efforts at USA Nationals in Las Vegas.

Floe has worked hard to prove himself in a world of student athletes who rank their particular sports above the others, especially above cheerleading. He and his 29 teammates practice three days a week, lift weights another two days a week, and perform before, during, and after every game. However, if he could have just one wish for his team of spirit folk, it would be for the rest of campus to accept them as true athletes. ■

—Erin Thomas '07

Erin Thomas is a junior majoring in communications.

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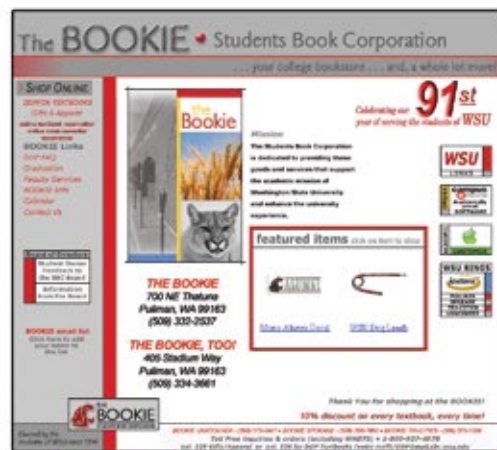
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Washington's





SEATTLE. It's hard to say when it all started. Maybe it was back in 1874, when Washington's first winery opened in Wenatchee. But then Prohibition forced that winery and its neighbors to close their doors.

Maybe it was in the late 1930s, when wine in the state rebounded, peaking at 42 wineries in 1937. That lasted until a succession of disastrous freezes wiped out the grape crops.

Maybe it was in the 1960s, when Washington State University researchers convinced fruit farmers in the Yakima Valley that they could successfully grow wine grapes.

But for our story, perhaps the best place to start is 30 years ago when Washingtonians were learning to drink and appreciate wine. It was August 1975, in a white brick house on Queen Anne Hill. A small group gathered for an impartial judging of Northwest wines. There were five experts: Stan Reed, a food writer from the *Post Intelligencer*, wine writer Leon Adams, German grape breeder Helmut Becker, *Seattle Times* wine writer Tom Stockley, and Chas Nagel, the food scientist and bacteriologist who made the first wines to be tested at WSU.

"Chas was a good judge," says Glenn White, one of the founding members of the Northwest Enological Society and host to the private tasting. "He can identify every chemical in a wine." He taught many others, including some of today's top winemakers, to do the same.

The judging started in the afternoon around the walnut dining room table. White, future winemaker Mike Wallace, and just a few others looked on. The living room offered a spectacular view over the Seattle Center to downtown and Elliott Bay. But the judges were focused on the glasses in front of them.

"There were some pretty bad wines in that group," says Nagel, noting that more than a couple samples had sulfide problems, which meant a rotten egg taste. But others were good. Nagel, excited by what he was tasting, tried talking with Becker. But the German expert diverted him, lest the discussion mar the judging. "Near the end, he started showing me glasses and giving me the thumbs up," says Nagel. "I realized he wasn't spitting it all out."

Did these people at the house on Queen Anne know they were at the beginning of something big? "It sure

Wine

CRUSH



was momentous to me," says Nagel. "In this group of experts, I felt like a rookie." As they swished and swirled, it was clear Washington had arrived on the wine scene. "You could sense things were going to pop," says Wallace, who, already infected with wine fever, started Hinzerling Winery in Prosser the next year.

Several weeks later, the group presented the winners of their tasting at the very first wine festival of the Northwest Enological Society, which, to their

TIPS ON WINE TASTING



WHO BETTER TO GIVE tips on wine tasting than WSU's own original wine maker, tasting expert, and Supreme Knight of the Vine, Chas Nagel? Here is his advice:

Trust your palate. Ultimately it doesn't matter what a judge or reviewer says, it comes down to what the wine does for you. You might be surprised to learn Walt Clore, WSU's well-known wine grape researcher, wasn't much of a wine drinker. When he did indulge, it was usually a Grenache mixed with 7-Up. Come to think of it, he probably invented the first wine-cooler.

If you're new to wine and you find the deep dark reds daunting, start with a fresh, fruity, slightly sweet wine like a rosé. Eventually your palate will mature, and you will crave more complex and more flavorful wines.

Bottle age is very important in some wines, but it's a real trick knowing that a wine you're tasting now will be better a few years down the line. Most wines are made with the idea that they'll be consumed within a year or two of purchase. Most reds tend to go downhill after that. But if you must buy to store, look for reds with deep color, high fruit character, and high tannins. They're going to last much longer.

Vintage years are years when the overall grape quality is better. There are two great ones: 1974 was ideal for cabernets from California, and 1983 in Washington produced smaller berries with a lot of flavor and color.

In general, when you're trying wines, look for color. A browning component in whites means they've oxidized, which will mar the flavor. In reds, a deep coloration is good. Hold your wine up to the light and examine it for clarity.

Smell it. Look for a floral character in Riesling, muscatel, Gewürztraminer, and to a lesser extent in chardonnay. Sauvignon Blanc's major flavorants are pyrazines, which give the effect of bell pepper or potato. Too much of this can be objectionable, which is one reason why Sauvignon Blanc is blended with a more neutral Semillon. In red wines one can expect many different flavors. Fruitiness manifests itself in cherry, blackberry, and raspberry scents, but also look for cigar, cedar, and vanilla. And be alert for off-aromas like vinegar, rotten egg, or a sherry-like odor, signs of poor winemaking and oxidation.

Now taste it. Look for a balance between acid and sugar. Look for acidity. This is important, particularly in white wines. Higher acid wines tend to be fruity, lower acid offers a bigger mouth feel, less fruit. Look at the difference between Oregon and Washington chardonnays. Oregon's are lighter and fruitier, more elegant. Washington's have more mouth feeling and are more complex.

surprise, drew a crowd of more than 300. Alongside a sumptuous dinner prepared by Seattle chefs Francois Kissel and Robert Rosellini, the guests tasted some of the winning wines from Associated Vintners, the forebear of Columbia Winery, a '71 chardonnay from Boordy Vineyards in Prosser—which closed in '75—and a '74 Johannesberg Riesling and '72 Cabernet Sauvignon from Ste. Michelle Vineyards, now a major force in the American wine industry.

Washingtonians learned to grow wine grapes through the efforts of WSU researcher Walter Clore. But equally important is the man who taught Washington how to make and taste wine. Remember, 1975 was a time when Americans drank light European rosés, or possibly something more fortified. There were only six wineries in the state, and of them, only two survived.

Clore looked to Chas Nagel to turn the early grape efforts into wine and to encourage others to do the same. Nagel made the first two vintages in 1964 and '65 and then oversaw George Carter's winemaking at WSU's Prosser Research Station. At the same time, Nagel organized tasting panels in Pullman, training graduate students and community members, many of whom didn't drink wine at home, to find and diagnose the problems in the local vintages. Wine-makers often turned to Nagel for advice. In fact, the plans for Arbor Crest Winery in Spokane were hatched by WSU alums C. Harold Mielke and his brother David at Nagel's dining room table. "We spent a lot of time with Chas," says C. Harold Mielke ('58 Zoology). "I would always bring the latest and greatest chardonnay and cracked crab, and we would talk about the wine business."

Nagel took his expertise to the west side of the state, becoming one of the founding members of the Seattle-based Northwest Enological Society and offering courses on how to taste wine. He was very particular about how it should be done.

"Honey, he never even let you wear perfume or lipstick to the tasting," says his wife, Bea.

Annette Bergevin '86 created Bergevin Lane, one of the new wave of small wineries to hit Washington in the last four years.



Annette Bergevin dropped a fast-paced life for one at home in Walla Walla, where she could work with her family.

WALLA WALLA. Annette Bergevin is focused on a different kind of perfume. The co-owner of Walla Walla's Bergevin Lane notes that her new Columbia Valley Calico Red has a certain compelling flavor. "Can you guess what it is?" she asks, as she pours a taste into a glass. I sniff and swirl and take a sip, as she leads the way into a cavernous room filled with oak casks and gleaming steel tanks.

Until a few years ago, Bergevin, who graduated from WSU in 1986 with a communications degree, had been

living in the Bay Area of California in the thick of the telecom industry. But she dropped that fast-paced life for one at home in Walla Walla, where she could work with her family. She comes by wine through her father, an eastern Washington vineyard owner. With his help and the encouragement of her business partner, Amber Lane, Bergevin started making wine. "We had a lot of support from folks around town," says Bergevin. That included help from well-known winemaker Rusty Figgins, who urged them to hire French enologist

Virginie Bourgue. Bergevin Lane's first release was in 2001, and now they've made the wine lists of restaurants and resorts throughout the Northwest. Bergevin still can't believe her path. "I wake up every morning and I think, 'Are we really doing this?'"

The young winery owner is grateful to Walla Walla's pioneers such as Rick Small of Woodward Canyon and Leonetti's Gary Figgins, two men who put the appellation on the map in the 1970s. Their standards of quality have made a name for the small wine region;

now it's up to the rest of the wineries to maintain that reputation, says Bergevin.

By this time, I've finished most of my Calico sample. It hits me. "Grapefruit!" Bergevin smiles.

Wine is changing Washington. Communities like Woodinville, Whidbey Island, and Walla Walla have caught the nation's attention, thanks to the high-quality vintages they're producing. And in the wake of their wines come elite chefs and high-end stores ready to cater to the wine-buying crowds.

Still, at 6 p.m. one Tuesday last summer, we struggled to find a place in Walla Walla for dinner. The two "hot" new restaurants were closed, the backup bistro had shut down for a wedding, and the sun-baked streets were nearly empty.

"One of the gaps we have is scope of amenities in wine country," says Ted



Freshly picked grapes are squeezed for their sugar content in a sugar refractometer. The brix, or sugar content, measured lets the winemaker know if it's time to harvest the grapes.



Debbie '79 and David '77 Hansen, Cougar Crest Winery.

Rick Small '69 (below, right) mingles with guests at Woodward Canyon on spring release weekend in Walla Walla.



In the beginning was the Yakima River Valley, where the state's

Baseler, president and CEO of Ste. Michelle Wine Estates. "Look at Napa, the number and quality of restaurants, spas, hotels, shops, and galleries. It really makes it a great experience, whether you want to try the wine or not. That's where we're still falling a little short."

There are a few other sour notes. The long-time residents still strive to adjust to the lifestyles and tastes of the newcomers. People like Adelle Ganguet, who attended WSU briefly in 1940 before coming home to marry a farmer in Dixie, can hardly imagine paying \$34 for a steak at one of the fancy new places when she can get it for \$12 at her favorite spot. "Thirty-four dollars? I'd have to eat a lot of food for that," she says.

Ganguet, ever interested in the news of the community, keeps her ears open to the conflicts between the area's traditional wheat and onion farmers and the new folk planting vineyards and building tasting rooms. A few years ago grape growers filed a law suit against other farmers to stop the aerial application of an herbicide which was harming some of the grapes.

"Yeah, there's some tension there. It's just the tension of differences of use," says Jim Hayner ('72 Econ.), a Walla Walla-based attorney. Hayner handled the case of a New York investor who grew up in Walla Walla and wanted to come back and open a winery and tasting room near town. His plans ground to a halt when his neighbors argued it would bring too much traffic to a rural area.

In spite of the occasional resistance, this corner of the state produces a dazzling collection of good wines. The number of wineries in Walla Walla, Yakima, and the Columbia Valley has grown exponentially. In four years the number of Washington wineries has more than doubled from about 170 to 360.

Among the newcomers is Cougar Crest, a small company headed by winemaker Debbie Hansen ('79 Pharm.) and her husband, David ('77 D.V.M.), who manage 50 acres of vines. The couple started making wine in 2001. They've kept their day jobs, though maybe not for much longer.

Their past year was better than they could have imagined. The Cougar Crest 2002 Syrah scored a 94 in *Wine Spectator*.



Grapes for a merlot to be made in a small boutique winery, Fidelitas, are hand-picked by workers on the Wahluke Slope in south-central Washington. The grapes head to the winery the day that they're picked.



Wineries around Washington are seeking grapes grown on Red Mountain, a 3,600-acre area in the Yakima River Valley. Here a driver takes a load to be crushed. Red Mountain grapes are considered premium by winemakers, especially for use in red wines like merlot, Syrah, Cabernet Franc, and Cabernet Sauvignon.

earliest vinifera was planted, thanks to the urging of scientists at the WSU Prosser Research Station.

"I was kind of awestruck," says Debbie Hansen, who knew the wine was good, but didn't know how the marketplace would like it. "I submitted it in a lot of competitions just to see how it would measure up." Then the *Spectator* review came out last winter. "It was read by a lot more people than I ever thought." She didn't even have a subscription to the magazine. The orders started pouring in.

What Hansen learned at WSU gave her the science grounding she needed to make wine. She then polished her skills with winemaking classes in California. "You can walk right out of pharmacy school and right into enology," she says. "The rest of it is taste, experience, and good taste buds."

On the other side of town, where Highway 12 stretches west, Rick Small ('69 Ag.) has transformed his family wheat farm into a vintner's domain. Still, he has anything but the artifice one might expect from a lauded pioneer in the Walla Walla scene. On a busy weekend last spring he stood in the middle of his Woodward Canyon

winery in a t-shirt, sandals, and shorts, chumming it up with the customers and sampling his latest chardonnay. "It's pretty good," he said, grinning and swirling. Wine junkies surrounded him in everything from their best diamonds to funky grape-themed Hawaiian shirts.

While people milled by, eager to meet him, Small pondered why Washington wine is not more widespread. He set down his glass and moved to the door, where it was quieter. "I think our story is a harder story to tell," he said. "People don't know what we do best." He pointed to the chardonnay, then mentioned the Cabernets, the Syrahs, the merlots, the Gewürztraminers, the Rieslings. "We have so many wines and grapes that we do well. People talk about Oregon and they mean Pinot, but they don't even know what the hell it is we do."

Well, a few do. On that spring release weekend, Small saw close to a thousand customers. As he talked, a limo drove by, and a private helicopter beat through the air over the winery and landed in a nearby field.

While the industry is growing fast now, Small hadn't expected it to take this long. He sees a future Washington with many more high-quality boutique wineries and a world-class reputation.

YAKIMA VALLEY. In the beginning was the Yakima River Valley, where the state's earliest vinifera was planted, thanks to the urging of scientists at the WSU Prosser Research Station.

As the Washington wine business aged, the valley changed. Like a wine, it lost its green flavor, deepened, and developed new characteristics. Last summer perhaps the biggest change was the increased focus on terroir, the French notion that place can affect the wine.

The Yakima Valley appellation is being broken up into specific American Viticultural Areas (AVAs), a federal designation. Winemakers hope to use the new AVAs like Red Mountain, Horse Heaven Hills, and Wahluke Slope to express and market the distinct growing conditions of their areas, says Gail Puryear, owner and winemaker at Bonair

In four years the number of Washington wineries has more than doubled from about 170 to 360.

Winery. Puryear and his wife, Shirley, met as foreign language students at WSU in the late 1960s. They pursued jobs in education and social work in California. Two decades ago, they decided to move home and grow grapes on five acres of weeds and alfalfa near Toppenish. While they had good customers in the nearby wineries, just growing grapes wasn't satisfying. So they mortgaged their farm, started their own operation, and made their first wine in their bathroom. Today they have a full-blown winery, including one of the oldest vineyards in the state, which they purchased from the original owner. "It's not hard to make good wine around here. It's not rocket science. Just don't screw up," says Gail. They sometimes sit beneath a locust tree in front of the English Tudor-style tasting room and watch the cars come in, many with license plates from Oregon and California, noted Shirley one afternoon last summer.

Behind their tasting room and further south across the Yakima River lies Horse Heaven Hills, Washington's seventh and newest AVA. It joins the Puget

Sound, Yakima Valley, Walla Walla, Red Mountain, Columbia Gorge, and Columbia Valley appellations.

To the north of the valley is an area vying to be Wahluke Slope. And Bonair is right in the middle of what the Pur-

years hope will become the Rattlesnake Hills appellation. The area has nearly 30 growers, 23 wineries, and its own distinct set of weather, soil, water, and cultural conditions, says Gail Puryear.

So far the AVA movement has met little opposition. But some in the industry are cautious. "The only concern I have is that we don't want Washington growers and wineries pitting themselves against each other," says Ste. Michelle's Baseler. "Up to now, it has been such a collegial atmosphere." He fears that some may start declaring their appellation better than others. "Our position is this state offers so many kinds of terroir. And it's all good."

At the east end of the valley, where the Yakima River bends north around Red Mountain, the Williams family planted the first vines for Kiona winery in 1975. Today, they still have some 30-year-old Cabernet vines in their 65 acres of grapes. The business was co-founded by WSU alumni John '61 and Ann Williams '63.

In jeans stained with grape juice and dust and with a sun-burned face, their son, Scott Williams, also a Cougar, looks more like a farm hand than a recog-



At Kiona Winery, Scott Williams '80 leans against his future.



Shirley and Gail Puryear (both '68) at their Bonair Winery.

Paul Hooper '53 (right) and another volunteer at the Northwest Enological Society's 2005 judging in Seattle discuss a round of wines being sampled by five expert judges.

The winners of this year's judging of Washington, Oregon, and Idaho wines were presented to the wine society's members at a formal dinner at the edge of Lake Washington.

A server pours a Cave B merlot that was among the entries. Winemakers rely on awards from this judging and others to know if their wines are meeting popular tastes and to draw consumer attention.



PHOTOS BY HANNELORE SUDERMANN

nized winemaker and winery manager. It would be hard to guess that he crafted the stunning Chenin Blanc ice wine that took the top award at the Northwest Enological Society judging last summer.

He has a real enthusiasm for his product, though he's quick to disclaim credit for it. "You don't have anything unless you have good grapes," he says. "Red Mountain grapes make very, very powerful, very structured wines with a lot of color and a lot of mouth feel." Most of the people who buy grapes from Red Mountain's vineyards use them as the backbone for their wines and then blend in other grapes, he says.

In many ways, the Williams family has been ahead of its time breaking sagebrush-covered land on Red Mountain and figuring out what to grow there. In others, the small operation is just now coming of age. Kiona's tasting room is still in the basement of John and Ann's house, but the family has plans to expand, with ground already broken on a new multi-million-dollar cellar and tasting room. And now they're watching as the land around is bought up by the likes of Hedges Cellars and Ste. Michelle. Since the 1970s, nine other wineries have popped up around them. And in 10 years, Scott Williams predicts, the whole Red Mountain slope will be covered with grapes.

SEATTLE AGAIN. Washington wine today is a tangle of trends. Pinot versus merlot, Riesling back in style, new appellations sprouting across the landscape, and both growers and drinkers wondering what grape they should grow next.

But that's all good news for members of the now three-decade-old Northwest Enological Society, who hosted their latest wine judging in August. They're ever willing to support and sample from Washington's wealth of wines. This year they had bottles from 190 wineries to try, including some from WSU alumni-connected wineries like Alexandria Nicole Cellars, Kiona Vineyards, Kestrel Vintners, and newcomer Saint Laurent



TEACHING—AND LEARNING—WINE

A few years ago a farmer carried a bucket of bad grapes into the lab of viticulturist Markus Keller at the WSU Prosser Research Center. Keller had never seen anything quite like it, clusters of shriveled, sour, colorless fruit. It's like the plants decided they had had enough and quit, he says. When a few other farmers invited Keller to their vineyards to diagnose the same problem, he realized the concern was widespread.

The grape shrivel is a mystery to Keller and his colleagues from British Columbia to California. The strange thing is that it's affecting red grapes in Washington, white grapes in Canada, and both types in California, says Keller.

Because the problem is so new and grape growers don't want to broadcast the bad news, Keller is struggling to grasp what's happening and where. What he does know is that it's serious. In some vineyards up to 30 percent of the grapes can be affected. Oddly, it doesn't impact all bunches of grapes on the vines, and vineyards that might have been affected last year aren't showing the problems again this year, he says.

This may be the most urgent research on Keller's plate, but it's hardly his only work. From the beginning, WSU has been in on the state's wine action with Walt Clore's grape trials, Chas Nagel's tastings, Ray Folwell's economic studies, and alumni who are now firmly planted in Washington's wine business.

In the late 1990s, WSU began work with the wine industry to develop a viticulture and enology degree program. In 2001, the school created the Washington Viticulture and Enology Wine Consortium with Yakima Valley Community College, Walla Walla Community College, and WSU Tri-Cities, offering a bachelor's degree in horticulture with a focus on wine. The WSU program currently serves 30 undergraduate students, as well as a small group of graduate students. "We anticipate the demand to grow as we see what kind of jobs these students get when they complete their degrees," says William Hendrix, chair of WSU's viticulture and enology program.

In 2003, WSU obtained \$1 million in state funding to develop the wine program, adding faculty positions and room for more students. Other schools, such as U.C. Davis, have strong wine programs, but Washington needs students trained to grow grapes and make wine with Washington's climate and soils, say the experts.

Meanwhile, the business school has retooled its beverage program to include a more deliberate focus on wines. Last year, professor of hospitality business management Dennis Reynolds invited the owner of Compass Wines in Anacortes, Doug Charles ('83 Hotel and Rest. Admin.) to speak to students about the role of wine in the hospitality industry.

Charles procures hard-to-find wines, particularly older Washington vintages. He hosts tastings offering top-line French Bordeaux alongside Washington's reds. It's a worthy comparison, he says. "Quality-wise, the best in Washington can measure up with the best anywhere else in the world." The good thing is that the University recognizes that and has found ways to contribute, he says.

Winery. Among the submissions were muscat, ice wine, and lemlberger, as well as the traditional chardonnays and Bordeaux blends.

They met early one morning last August on the 40th floor of the glass-encased Bank of America Building in downtown Seattle. While busloads of people on their way to work poured into the streets below, the attention upstairs focused on the judges silently tasting wines in their cardboard booths. The volunteers in an adjoining room, though busy opening bottles and prepping trays of glasses, did a little sampling of their own.

Sally Hooper picked a glass of Viognier, sipped, and raised her eyebrows. This was one of the perks of dedicating two long days of pouring, washing, and toting, a duty Hooper ('57 Home Ec.) and her husband, Paul ('53 Civ. Engr.), have shared for the past decade. The couple joined the wine society in its second year at the urging of friends, but only 10 years ago got into helping with the judging. "This is a tough job to get. Everyone wants to do it," says Paul Hooper, a retired transportation engineer.

In the other room, the five judges, including a wine writer from the *Washington Post* and a California winemaker, finished their rounds and then argued through what they thought deserved awards. Snippets of their talk filtered back to the prep room: the merlots were too syrupy, none merited a gold. Later, word came that the Viogniers had some pleasant surprises, and the Syrahs were sublime.

That night, the Hoopers and a few hundred of their wine society friends heard the final rulings at Bellevue's Woodmark Hotel. Sitting beneath a white tent, with the waves of Lake Washington chopping behind them, they learned that three of the Syrahs had met the gold standard.

On the edge of his seat, Glenn Nelson made careful notes, limiting his enthusiasm to a smile when one of his favorites made the list. Others weren't

so reserved, cheering and clapping at familiar names.

Nelson, who coordinates many of the wine society events during the year, and his wife, Judy, planned their week around this evening. They manage to fit wine into many of their activities, even tying trips to Walla Walla into WSU football weekends. "It just makes sense, doesn't it," says Judy, who was sampling a Cave B merlot during the salad course. "We love wine, we love WSU."

Along with the state's wine industry, the Northwest Enological Society has matured over the past 30 years. Today, the group has chapters throughout the region, the largest being the Seattle Wine Society, which hosted the judging and dinner. The membership still numbers in the hundreds, but now the society competes with a growing number of other wine clubs based out of wine shops, wineries, and even Boeing, proving that Washingtonians have cultivated a real taste for wine. They'll be ready for the growth to come, say industry leaders.

In the past year, pieces about the state's fast-growing wine industry have appeared in the food and travel sections of most major papers and in periodicals such as *Town and Country*, *Time*, *Men's Health*, and *Newsweek*. The word has long been out that Walla Walla can produce world-class Cabernets, that in the beginning Riesling was king, and that today Washington is the second largest U.S. state in wine-production and grape acreage.

"But we've only scratched the surface," says Baseler. "I figure the state will have 40,000 to 45,000 acres of grapes over the next five years.

"We'll be the same size as Napa," he says. "Then it starts to get serious." ■

MORE ABOUT WINE

Since we first wrote about wine in 2001, the number of wineries in Washington has more than doubled. To find a list of alumni wineries and see a photo gallery on Washington wine, visit Washington State Magazine Online, wsm.wsu.edu. To read our 2001 article, visit wsm.wsu.edu/stories/01-winter/index.html.

LIV



NG WITH ART

by Tim Steury • photography by Robert Hubner

*What happens when enjoyment
becomes passion ►*

Jim Kolva '68 and Pat Sullivan amidst a part of their collection, which includes many pieces by WSU alumni and faculty. Upper left, a painting by former fine arts faculty member Gaylen Hansen. The sculpture immediately below the painting is by Rudy Autio ('52 M.F.A.). Next to the couch is Autio's *Ravenna*. The porcelain box in the foreground is by fine arts emeritus faculty member Patrick Siler.

LIVING WITH ART



IT'S A LITTLE difficult to imagine Jim Kolva '68 and Pat Sullivan living in a 1950s ranch-style house. Even on Spokane's South Hill. But they did. And all its walls were painted Sears ivory linen.

"We added color by furniture and art," Kolva says.

But ranch-style houses have their limits. Particularly when it comes to holding large eclectic collections of mostly ceramic art. So Kolva and Sullivan moved





UPPER LEFT: Ceramic plate with veggies, egg, and fish, by Marilyn Lysohir '79, from *Bad Manners* series.

CENTER: Ceramic bear head, by Marilyn Lysohir, from *The Last Immigrant* series.

RIGHT: Hammered copper sculpture, by Harold Balazs '51.





"Sometimes it's just amazement at the thought process that went into it, how the artist conceived that."

ABOVE: Media oil wash on gessoed paper, by Patrick Siler.

CENTER: Porcelain tea pot and oval container (Oval Pot with Two Faces), by Rimas Visgirda ('73 M.F.A.).

RIGHT: Les Deux Grandes Ballons, wood block print, by Robin Dare ('86 M.F.A.).



their art downtown. Now they live in a 3,700-square-foot loft with a massive steel entry door and a 30x12-foot purple wall. It took five coats to get it right, Kolva says. "Aubergine is really difficult."

And then it took Kolva and Sullivan three months to muster the nerve to hang anything on it.

Which is understandable. The wall is lovely, large—and intimidating. You're either going to get it right or you're not.

Of course they got it right. The wall is now home to a number of paintings, including one by Gaylen Hansen, a former Washington State University faculty member. Although the loft contains creations by artists from wherever Kolva and Sullivan have traveled, their focus has been on Northwest artists. Many of them are either alumni or faculty of WSU.

And it's all just right. Tasteful and sophisticated, definitely. But also funny. One comes to mind of a poodle shorn to resemble a topiary garden by Robin Dare ('86 M.F.A.).

And did I mention comfortable? You'd think a space this size with all this art—Kolva estimates they've collected around a thousand pieces, from cups to large figures—would be like living in a museum. Beautiful and fascinating. But



hushed and austere. And hardly livable.

But this is no museum. Everything fits. Everything is a reflection of Kolva and Sullivan's tastes. Everything lives here. Including the giant ceramic rabbit lounging on a beam above the kitchen. Or the big ceramic bear head, by Marilyn Lysohir ('79 M.F.A.) in a rear alcove.

Or the urn by Rudy Autio ('52 M.F.A.), ceramically reminiscent of Matisse. Or the painting by fine arts emeritus faculty member Pat Siler, of a man gazing in wonder at shoes suspended in a night sky.

Sometimes, says Kolva, commenting on what it's like to live in such a collection, "you go through it and really don't respond to the art work, it's [a] daily routine. Other times you see a piece, think back on the artist or how you got it, or maybe a trip that you were on when you got the work.

"Sometimes it's just amazement at the thought process that went into it, how the artist conceived that."

Kolva and Sullivan's loft was originally the service building for Wells Chevrolet, built in 1926. New cars were unloaded from trains on the elevated railroad tracks right next to the building. The cars got their final service and prep before being moved across the alley bridge—now their living room—to the showroom. The building's most recent commercial incarnation was as Lambert Candy Company. The loft was the warehouse for the candy and tobacco distributor.

Kolva and Sullivan bought the building in 1997. But it wasn't easy. Banks did not exactly line up to lend them money. A former car dealership, and you want to live there, you say? Okay.

Oh, and did I mention the railroad? At the time, the railroad still owned the land the building sat on. Part of the lease agreement was that terms could change with 30 days notice.

But this space was meant to be. In a fortuitous act, Congress authorized the railroads to sell their land. A little creative financing, and it was a done deal.

Although the loft is presumably the showcase, there's a lot more to the building. Kolva has developed the additional space into two art galleries on the street level and five apartments.

Kolva bought his first piece of art from a fraternity brother at WSU. About the time he graduated, he got a letter inviting him to join the military. He became a navigator on a C-130 and was off to discover the world. He spent considerable time over the Thai-Laotian border and in Europe, where he pursued his growing interest in art, picking up indigenous sculpture as well as contemporary art in Bangkok and frequenting the Sunday art market on Bayswater Road in London. Kolva was hooked.

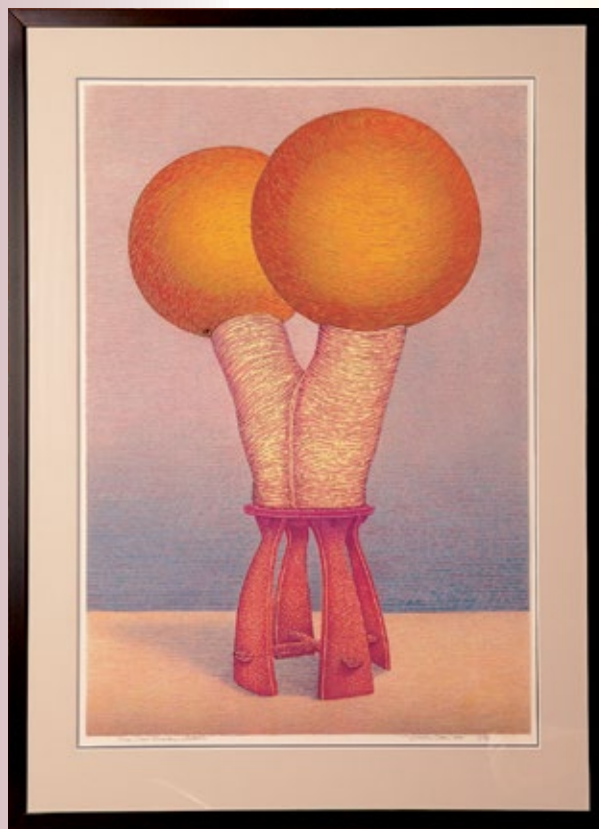
His travels also piqued his interest in design and urban landscape, how the "whole thing ties together, buildings, and how buildings are placed, and how they relate to each other and how the artwork living there is produced."

Kolva makes his living as an environmental and architectural restoration consultant.

When he returned to Spokane, he started haunting the Western Art Show, pressing an artist friend, Debbie Copenhauer, who had attended WSU, for aesthetic advice and encouragement. A couple of Copenhauer's pieces, relatively conventional in this hugely eclectic collection, but beautiful, now reside in Kolva's loft.

Meanwhile, the collecting bug had also bitten Sullivan, and as things go, the two collectors met and they joined their collections in matrimony in 1983.

"We both had the same enjoyment," says Kolva, "and I guess it grew into a passion." ■





Not Your Normal Truffle

*Head Cowgirl
Marilyn Lysohir
followed her muse West
in search of Art
and Chocolate*



Sculptor Marilyn Lysohir ('79 M.F.A.) makes chocolates for adventurous tastes. The ceramic food spread before her is from her installation *Bad Manners*.



LIKE MAY LILLIE, Marilyn Lysohir '79 came West from Pennsylvania—both, I'd venture to say, for Love. May Lillie, née Mary Manning, was an otherwise good Quaker girl who fell for Gordon William Lillie, the Pawnee Bill of Pawnee Bill's Wild West Show, when he brought the show to Philadelphia toward the end of the 19th century. After May and Bill wrote each other for a year, she followed him back to Oklahoma to ride horses and become a sharpshooter.

Lysohir followed her love of art even farther west, to Washington State University. She got her M.F.A., married Ross Coates, became a successful sculptor—and then she rediscovered Chocolate. Now May Lillie stares determinedly down the barrel of her six-shooter as the logo for Lysohir's Cowgirl Chocolates.

"You have to have an adventurous spirit to try a Cowgirl Chocolate," says Lysohir, in her new shop in Moscow, Idaho, having just moved the business out of her home and studio. She sets a bowl of chocolates down beside me.

Although the spice of adventure came later, Lysohir and chocolate go way back. She started working for a local chocolate factory when still in high school and on into college. Where chocolate and sculpture first came together was when the owner asked her to sculpt a four-foot chocolate bunny for an Easter display.

"It just got away from me," she says. "Oh, Pete, how wide are your doors?" she asked her boss after she'd finished—a question she would find herself asking

again later in life as she planned her monumental ceramic sculptures.

Thousands of people came to see her eight-foot chocolate bunny. Her turtles and rhinoceroses, too.

But let's focus for a moment on these truffles before me. At the very first bite, they're awfully good, but not that different. Made of fine European chocolate, they are sweet and dark and so delicious. And then the cayenne kicks in.

"They're different," she says, smiling, "they're rugged, they're not your normal truffle."

The pepper lingers with the chocolate in the throat. It's quite wonderful. And of course, if the idea surprises at first, it is not exactly new. Think of Mexican mole.

As the spice lingers and you get your bearings in Lysohir's Cowgirl world, you realize that where Business

begins and Art leaves off is not exactly clear. Consider, for example, that in the beginning it was sales of her art that supported her chocolate adventure.

"It was hard," she says, telling of her struggle to cover her expenses.

But then the Food Channel discovered Cowgirl Chocolates. The response crashed Moscow's Internet connection to the outside, non-Cowgirl world.

"Now this," she says, "takes care of the art."

There is no romantic regret in her observation, no longing for a more innocent art/commerce balance. Indeed, her art still resides in a number of galleries, in Seattle, Ketchum, Boise.

"Chocolates sell faster," she says. "But when you sell one \$10,000 piece of art, it takes care of you for a while."

In fact, though, she doesn't really separate the two. Think of Cowgirl Chocolates as performance art, if you

will. And it all, somehow, converges as personal history.

For example, consider her installation *Bad Manners*, a portion of which sits next to us as we talk and eat her spicy chocolates. Amidst the ceramic representations of various foods mingle, of course, ceramic chocolates.

"My art really is an extension of my history, my belief system, my value system, that I got growing up, from my parents, my aunts and uncles, my teachers."

At times that extension is very personal. A collection of life-size bronze bear heads—one of which guards Jim Kolva's loft—a large bronze bear, now in Boise, and steel flowers, from *The Last Immigrant*, commemorates her Ukrainian grandmother, who died at age 99.

Consider also *The Dark Side of Dazzle*, which includes a 24-foot-long ceramic battleship, which started with the fact that her father survived World War II. Currently, she is creating ceramic busts, based on their senior portraits in the high school yearbook, of each one of the 167 girls she graduated with in 1968.

"I'm on my 50th-something now," she says.

Meanwhile, I try the various flavors Lysohir sets before me, including a couple of new ones from the mild-mannered, non-spicy "colts and fillies" line. Raspberry lemonade. And sarsaparilla? Yes. It's milk chocolate, though. It didn't work with the dark chocolate.

"It's a very American flavor," she says. ■

www.cowgirlchocolates.com
www.marilynlysohir.com



IT'S ONLY



Mouse meets math: Richard Gomulkiewicz and Patrick Carter use athletic mice and advanced mathematics and statistics to study how we inherit the ability and desire to exercise.

A MODEL

BY CHERIE WINNER • PHOTOGRAPHY BY ROBERT HUBNER

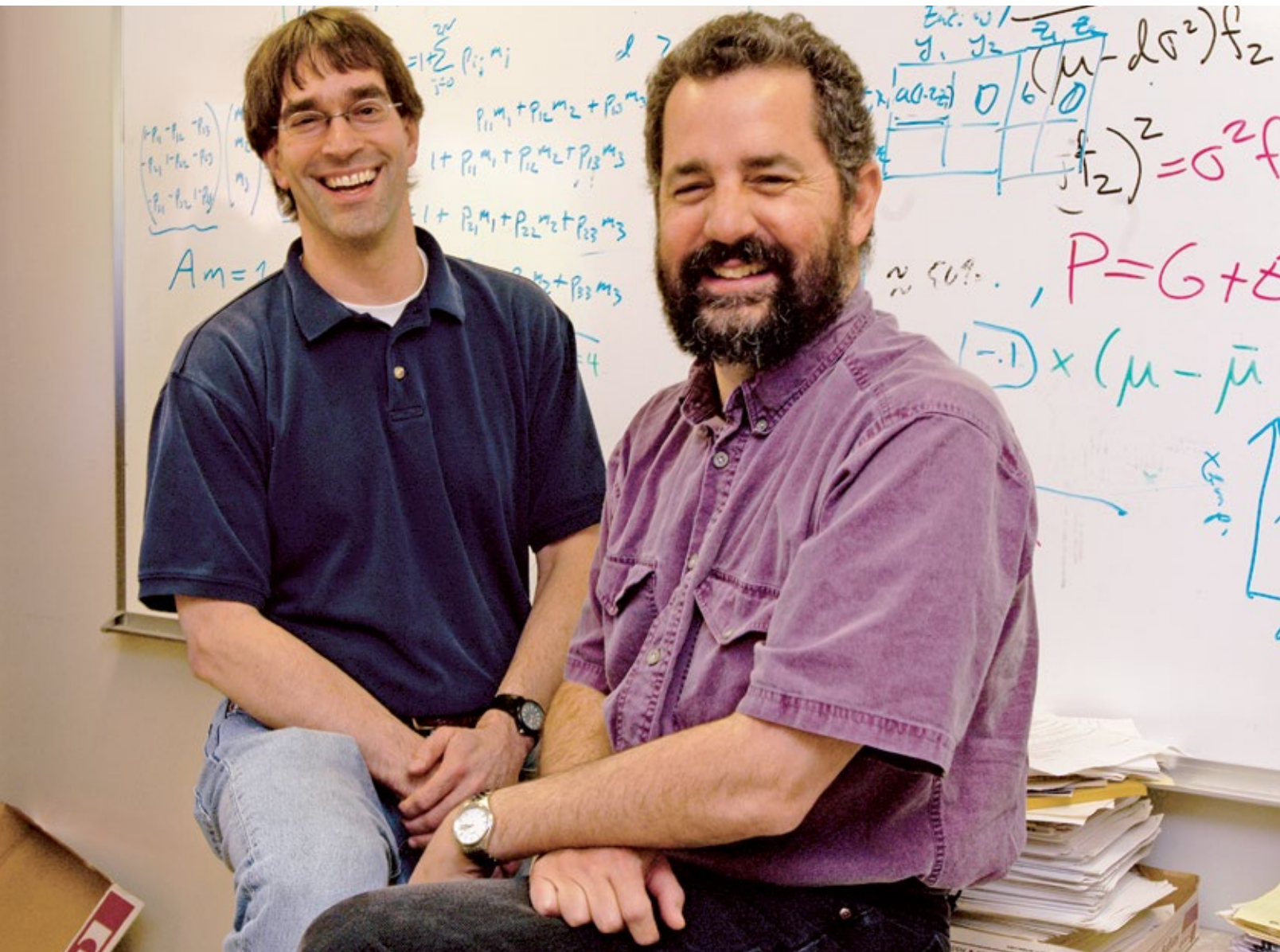
Modelers don't always expect their models to be "right." But they do expect them to help explain our world.

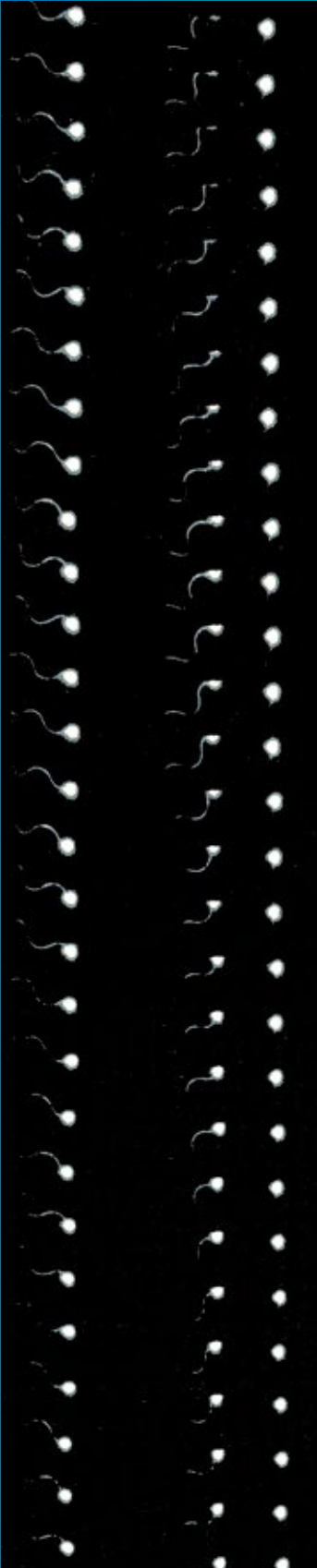
THERE'S A SCENE IN THE MOVIE *Monty Python and the Holy Grail* where the stalwart heroes first behold the castle of Camelot. Their awe at its size and beauty abruptly ends when one of them points out, "It's only a model."

Patrick Carter loves that scene. The Washington State University biologist hears the same thing from his students all the time.

"Ninety-nine percent of undergrads and beginning grad students will pooh-pooh models," he says, "when in fact, virtually everything that they know as facts in biology is model-based."

From the structure of the atom to how memory works, models permeate science. Carter says even he didn't fully appreciate that until a few years ago, when he started working with mathematician Richard Gomulkiewicz on a model of how exercise behavior is inherited. Now he enthusiastically points out models that are so deeply embedded in





MODELS, MODELS, EVERYWHERE

Dozens of researchers at Washington State University are creating models to explore challenging problems. Here's a small sampling:

Statistician **Richard Alldredge** is working to predict how much radiation is accumulated by workers in the nuclear industry during their lifetime, and where it's deposited in the body.

Anthropologist **Tim Kohler** uses a computer model to test possible reasons why the Anasazi people abandoned their villages in the Four Corners area during the 1300s.

Biologist **Charlotte Omoto** teams up with mathematician Robert Dillon to model how flagella work to propel sperm (shown left) and microbes. Dillon also makes models of pattern formation in embryonic limbs and the proliferation of bacteria in thin, tissue-like biofilms.

Mathematician **David Wollkind** models how layers of sedimentary rock fold, how stars develop in the outer arms of spiral galaxies, and the etching of semi-conductors.

Claudio Stöckle of the Department of Biological Systems Engineering works on the cycling of carbon, nitrogen, water, and energy in irrigated and dryland agricultural settings.

In the same department, **Joan Wu** combines field work with modeling to explore water-driven erosion and the use of GIS and other remote sensing techniques in hydrologic studies.

our minds that most of us don't realize they're there.

He offers an example. Our DNA has a double-helix structure that looks something like a twisted ladder. Right?

"The evidence is overwhelming that that's true," says Carter. "But that understanding is all model-based. No one's ever seen it."

Gomulkiewicz says modeling is built into the way science works.

"You don't just blindly gather data, ever," he says. "You've got some model in your mind that you're investigating. We're all modelers."

A conceptual model, such as our mental image of the DNA spiral, helps frame research questions and make general predictions. A numerical model uses math or statistics to describe the image and make quantitative predictions about it.

That sounds abstract, but models are judged by a ruthlessly practical standard. A model that consistently makes bad predictions or, worse, no testable predictions at all, gets pitched.

Only a model that consistently makes good predictions becomes part of our way of looking at the world. The model of DNA as a double helix, for instance, matches experimental evidence gathered over decades.

"That's why we have so much confidence in the model," says Gomulkiewicz. "It's done such a great job for us."

SAVING SEEDS. Some scientists make their models themselves. Others, like Carter, team up with someone who understands the questions they're trying to answer and has the math chops to put the whole thing down in numbers.

Crop scientist R.C. Johnson called on statistician Marc Evans. One of four members of WSU's Department of Statistics who consults with researchers throughout the University, Evans has a background in biology and a fondness for challenging problems.

"This one was fun, because it was a non-standard question," says Evans.

What Johnson was doing was essen-

tially plant breeding in reverse. As lead scientist at the Western Regional Plant Introduction Station, a USDA-sponsored seed bank, he, along with other staff, is charged with maintaining more than 73,000 samples of seeds, sprigs, roots, or bulbs from more than 2,700 species of plants—with as little change from their original genetic make-up as possible.

“A breeder wants to encourage genetic change through selection,” says Johnson. “We want to do just the opposite of what breeding does. We want to keep the population as diverse as possible.”

His seeds and other material, gathered from sites all over the world, can be preserved in cold storage for a few years or a few decades, but eventually must be grown to produce new seeds that can be returned to storage.

Johnson faced a problem shared by all seed-bankers: every time he grew his plants, genetic diversity was lost. In some cases, important genetic changes occur within a single generation.

Some loss of diversity is unavoidable

because of the way parental genes get divvied up among the offspring. Just as with humans, not all of mom and dad’s traits show up in the kids.

The main culprit, though, was the way the seeds were collected. The standard method was to cut all the heads from each plant and harvest all the seeds. But plants of the same kind produce different numbers of seed heads, even when they’re grown side-by-side. A small plant putting out one tenth as many seeds as its neighbors won’t contribute equally to the seed pool. Then, when researchers pull out a handful of seeds from that batch to grow another generation, odds are that handful will contain very few seeds from the low-producing plants. After growing and harvesting a few generations like this, the smaller plants—and their genes—can be lost completely.

For the purposes of a seed bank, that’s very bad news.

“Gene banks aren’t so much a thing that you have for a problem right now,” Johnson

explains. “It’s like an insurance policy. You don’t know what’s coming”—and a scrawny, low-producing plant might turn out to be the only one in the group with the genes to fight a new disease or provide a breakthrough drug.

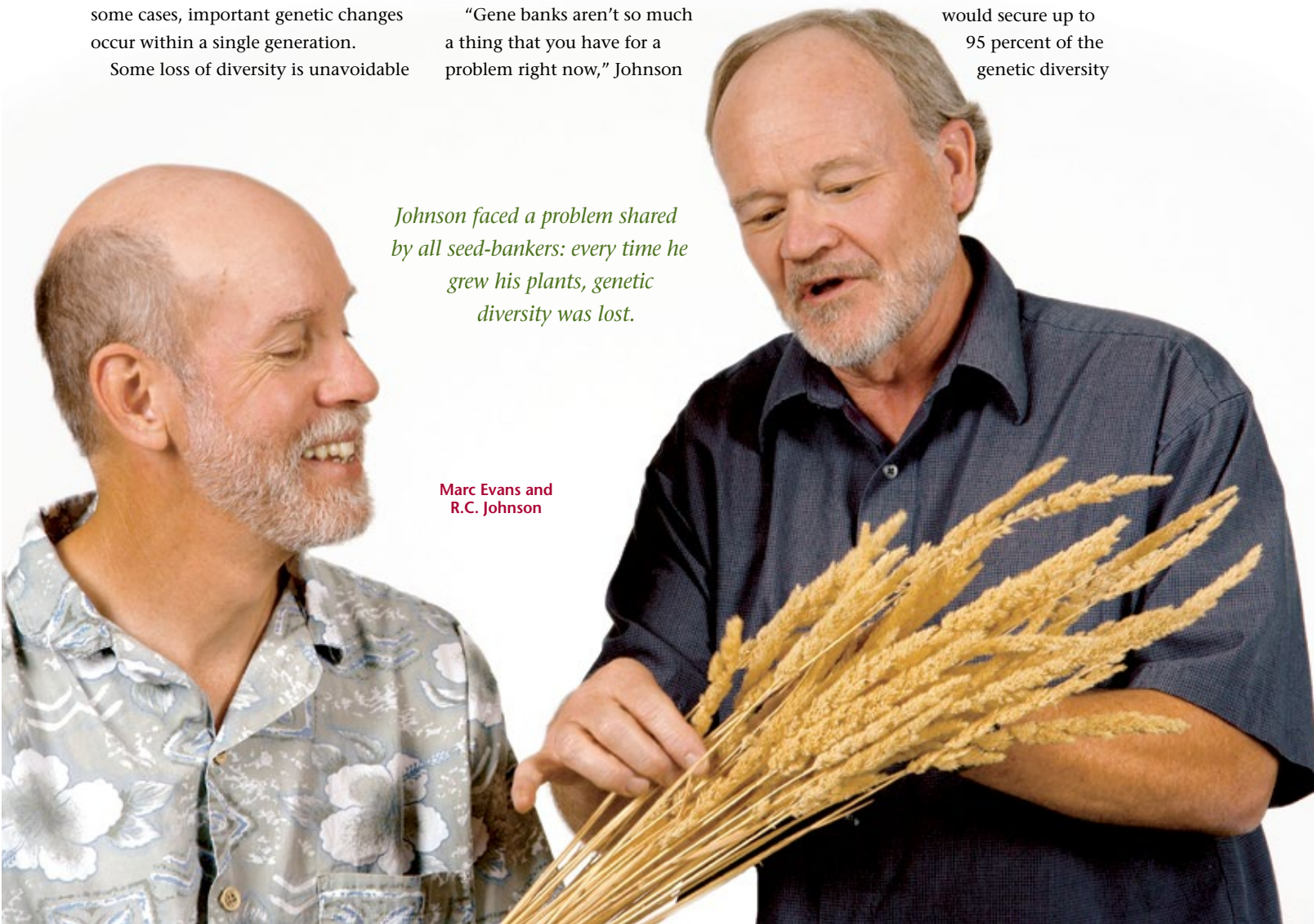
The only way to avoid losing the little guys was to hand-count the same number of seeds from each plant. For small operations that grow a few dozen plants, that might be workable; but Johnson and his colleagues grow thousands of individual plants every year. He needed to find a way to collect a similar number of seeds from each plant without ruining his budget, his schedule, or his employees’ eyesight.

Enter Evans. Using statistical theory and Johnson’s data on the number of seeds per plant, he came up with a simple and elegant sampling model.

It predicted that taking just four seed heads from each plant would secure up to 95 percent of the genetic diversity

Johnson faced a problem shared by all seed-bankers: every time he grew his plants, genetic diversity was lost.

Marc Evans and
R.C. Johnson



Brian Lamb and Joe Vaughan enjoy a sparkling clear day on the Pullman campus.



[Lamb and Vaughan's] model . . . calculates how each contaminant spreads when the air is still, blows steadily, changes strength, or swirls around obstacles such as trees or buildings.

of the parent generation. Taking more—even dozens more—would gain little additional diversity.

Johnson was thrilled. Four heads per plant is doable, even in his large-scale operation. He tested the model on plots of several species of grass. It worked. As a bonus, it can also be used by the people who collect the wild materials, to ensure they bring home samples that represent each plant equally.

Johnson is now encouraging colleagues around the world to institute the four-head sampling model in their operations.

KEEPING IT SIMPLE. Evans says he tries to keep his models as simple as possible, while still answering the questions that need to be answered. A more complicated model may be more realistic, but a simple model is easier for the researcher to understand, apply, and write about.

“Simple is almost always best,” he

says. “Simple usually does exactly what you want.”

Mathematician V.S. Manoranjan explains, “A model is not going to capture every little detail you have in your process, because nobody knows all the little details. What it’s going to do is give you a caricature of the process which captures the essential components.”

The trick, says Gomulkiewicz, is identifying which details are important enough to include.

“For students who are just starting out in modeling, their biggest mistake—not mistake, but inclination—is to include absolutely everything they can think of. . . . There’s an art to figuring out just how much detail is understandable, but also captures the important features of the system you’re looking at.”

MEGA-MODEL. While simple is best most of the time, in some cases it’s just not possible.

Brian Lamb and Joe Vaughan of

WSU’s Atmospheric Research Laboratory run one of the nation’s largest air-quality tracking systems. Local and state agencies rely on their predictions to issue pollution alerts and check for compliance with air-quality standards.

Their primary model, AIRPACT (Air Indicator Report for Public Access and Community Tracking), is a gargantuan beast ravenous for data. Every day, it gobbles up predictions of temperature, wind speed, and other weather conditions from a meteorological model run by the University of Washington.

Vaughan and Lamb also feed it information on about 100 different chemicals and 150 chemical reactions that occur in the air over western Washington and Oregon. Some of the pollutants are emissions from cars, industrial plants, or other sources. Others, such as ozone, form when emitted chemicals react with each other in the air.

The model digests all that information and calculates how each contaminant

spreads when the air is still, blows steadily, changes strength, or swirls around obstacles such as trees or buildings.

"And this is still a pretty large simplification of what actually occurs in the atmosphere," says Lamb. "Even today, we don't have the computer horsepower to try to be more explicit than that."

AIRPACT started with an atmospheric chemistry model developed by researchers at many institutions. Vaughan, Lamb, and their WSU team customized the model to fit conditions in the Pacific Northwest. They also modified it to include selected "air toxics," such as 1,3-butadiene, a carcinogen, and nitrogen oxides, which contribute to acid rain.

At first they used the model to analyze historical episodes of pollution, but their emphasis soon shifted to making daily predictions of air quality. Now, computers work overnight to provide the next day's predictions, which are posted on the AIRPACT Web site by 6 a.m. A visitor to the site (www.airpact.wsu.edu) can see the model's predictions of where each pollutant will be, at what concentration, at each hour of the day.

And the AIRPACT beast is still growing. Lamb and Vaughan are expanding it to include all of Washington, Oregon, and Idaho. They've also begun work, in collaboration with the University of Washington, the U.S. Forest Service, and the National Center for Atmospheric Research, on a project designed to predict what air quality in the region might be like in 50 years.

One influence they're watching for is pollution from Asia. The Pacific Ocean is a cleaner neighbor than, say, Detroit, but it doesn't block atmospheric contamination. Air gets around. Monitors in the region have already detected airborne pollutants traced to China's burgeoning industrial base.

"Everybody has an interest in being able to look upstream in terms of the airflow," says Vaughan. "It's all one atmosphere."

HOW DO THEY KNOW IT'S RIGHT? One puzzle modelers face is what it means when real-life observations don't match the model's predictions. Sometimes the

THE SAME, ONLY DIFFERENT

The branching of leaf veins and stream systems; swirling eddies of water and smoke; concentric coils of snail shells and baby ferns: similar patterns show up in different contexts throughout the natural world.

Since models are simply a formal way of describing a pattern, a model developed for one purpose can often be applied to an entirely different system.

In addition to their regional air quality system, Brian Lamb and Joe Vaughan also model the diffusion of gases over short distances. The model they developed to track the spread of bark-beetle pheromones in a forest has found a new application in the field of homeland security: predicting how plumes of toxins or bacterial agents might spread through a city.

Sometimes the systems addressed by one model are dramatically different. In the mid-1990s, mathematician V.S. Manoranjan worked with Air Force geochemists to understand the spread of pollutants underground. The geochemists put soil into a horizontal glass tube about 15 feet long and a few inches wide. They ran a slow stream of water through it to mimic the flow of groundwater. They then applied a contaminant at one end of the tube, and measured how much came out the other end and how long it took to get there. Manoranjan developed a mathematical model that told them how far and how fast any given contaminant would travel, depending on the size and nature of the contaminant and the porosity and "stickiness" of the soil.

In 2004, Washington State University math major Jenny Heinkel adapted his model to predict the flow of a drug from a trans-dermal patch into a patient's bloodstream, depending on the size and nature of the drug and the composition and design of the patch.

"It's the same equations," says Manoranjan. "Exactly the same. Just a different scale."

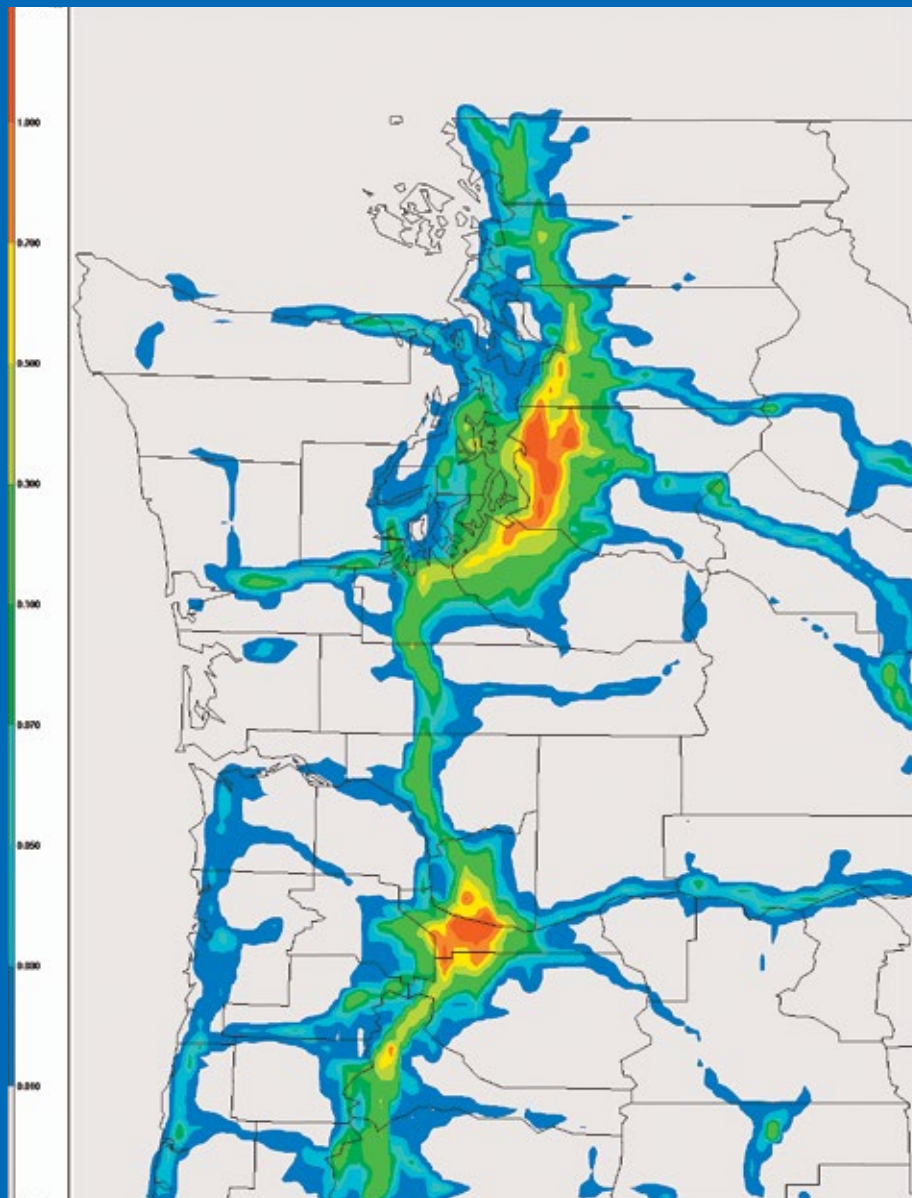
Trans-dermal patches are already used to deliver nicotine, birth-control hormones, and weight-loss supplements. Manoranjan and Heinkel's goal is to help develop a patch system diabetics can use to receive precise doses of insulin without having to undergo injections.



CHERIE WINNER

I-5 Corridor Rush-Hour Hotspots

Each day, the AIRPACT Web site (www.airpact.wsu.edu) shows hour-by-hour predictions of pollutants such as ozone, benzene, and carbon monoxide. The map below shows the pattern of airborne formaldehyde that the model predicted for 7 a.m. on Friday, August 12, 2005. Shades of blue and green indicate low to intermediate levels, which occur mainly over major highways. The orange and red "hotspots" over the Seattle-Tacoma and Portland urban centers show high levels of formaldehyde resulting from rush-hour vehicle use.



model simply hasn't been fed the right information. For a while, AIRPACT's maps showed no emissions at all along a segment of Interstate 5. Vaughan and Lamb knew that couldn't be right. They checked the model, and sure enough, it was missing the emissions data from that area.

Sometimes the model is wrong, and figuring out how to correct it can lead to a whole new understanding of the subject.

Other times, the model is right, and the discrepancy alerts researchers to something about the real situation that they just haven't found yet. Lamb recalls that when they first started AIRPACT, it consistently predicted high ozone concentrations in an area south-southwest of Puget Sound. Ozone usually peaks downwind of major urban centers. There were no ozone monitors nearby, so his team didn't know what the predicted hotspot meant.

"We couldn't say there was an obvious flaw in the model. So [the Washington Department of Ecology] put a monitor out there, and in fact they started to see some elevated ozone levels," says Lamb.

"It was a nice example of where the model suggested there might be something going on that people hadn't realized, and then they went out and looked for it and found it."

The key in that case was having the right kind of monitor in the right place. Lamb says monitors have become a tough sell with some agencies. "They really love this modeling stuff, and one of the things that we hear is, 'Oh, we can just do the modeling. We can cut back on the monitoring.'"

"And we keep saying, don't do that. We need more monitoring, not less."

RUNNING AHEAD. While Vaughan and Lamb model what happens in the region's air every day, Carter and Gomulkiewicz are trying to model a very different kind of complexity.

They head a team of eight other researchers and modelers from around North America that won a \$2.1 million grant from the National Science Foundation to develop models of the inheri-

tance of traits that change as another trait or some factor in the environment changes. "Function-valued traits," as they are called, include such features as an animal's growth rate related to the environmental temperature and its activity level related to its age.

These traits are much harder to analyze than the either/or, pink pea/white pea kinds of traits addressed by classical genetics. Without a good model, understanding how they are inherited has been nearly impossible.

Carter studies wheel-running behavior of lab mice. In mice, as in humans, the tendency and ability to exercise varies over the course of an individual's life.

"Your physical activity today is influenced by your physical activity yesterday and maybe when you were 20 years old, and maybe even when you were 40 years old," he explains. "If you want to understand evolution of a trait like that, you can't be thinking in terms of specific ages. We already have an idea of how single points like that evolve. We don't understand very well how an entire trajectory across a lifetime evolves."

In addition to creating their own models, the team plans to produce a software program other researchers can use to customize a basic model to suit their own experimental system, whether it involves slime molds, dabbling ducks, or redwood trees.

It's a tough task. Making a model is always a process of trial and error, repeatedly checking the model against reality and adjusting it as needed.

Modelers don't expect a model to be "right" from the start. They may even make a model wrong on purpose. Gomulkiewicz says he sometimes uses assumptions that are clearly wrong, in order to keep the model simple enough to be workable.

$$\Delta \bar{z}(T) = \int G(T, \theta) \beta(\theta) d\theta$$



His attempt a few years ago to model the co-evolution of plants and their pollinators bogged down in a welter of genetic detail—until he had his model assume that both the plant and the insect had just one copy of each chromosome, rather than the usual two.

He laughs.

"Of course, you're always nervous, because you know you made these assumptions that aren't right. But maybe whether or not you have one or two copies of the gene doesn't really matter in the end," he says.

The proof, as always, is in the predictions; and models with intentionally incorrect assumptions "often make pretty good predictions," says Gomulkiewicz. "They're never going to be *great* predictions, but there's a trade-off between how sharp your predictions are and how easy your model is to handle."

Ultimately, the value of a model rests on whether it illuminates what we see in the lab or in the field.

Statistician Richard Alldredge says a colleague from another university summed it up best: "All models are wrong, but some are useful."

"They're not capturing all of the truth," he explains. "They're only approximations. But some are useful. And that's where my philosophy is: OK, let's try this model, let's see if it is useful. Does it help us understand something about the real world?" ■

Horace-Alexander Young '83

Associate professor in WSU's School of Music (saxophone, flute, improvisation, combos, music marketing).

Recognized as the father of acoustic-contemporary jazz.

Conducted the National Symphony of South Africa—the first Black American ever to do so.

Loves to watch Saturday morning cartoons with his kids.

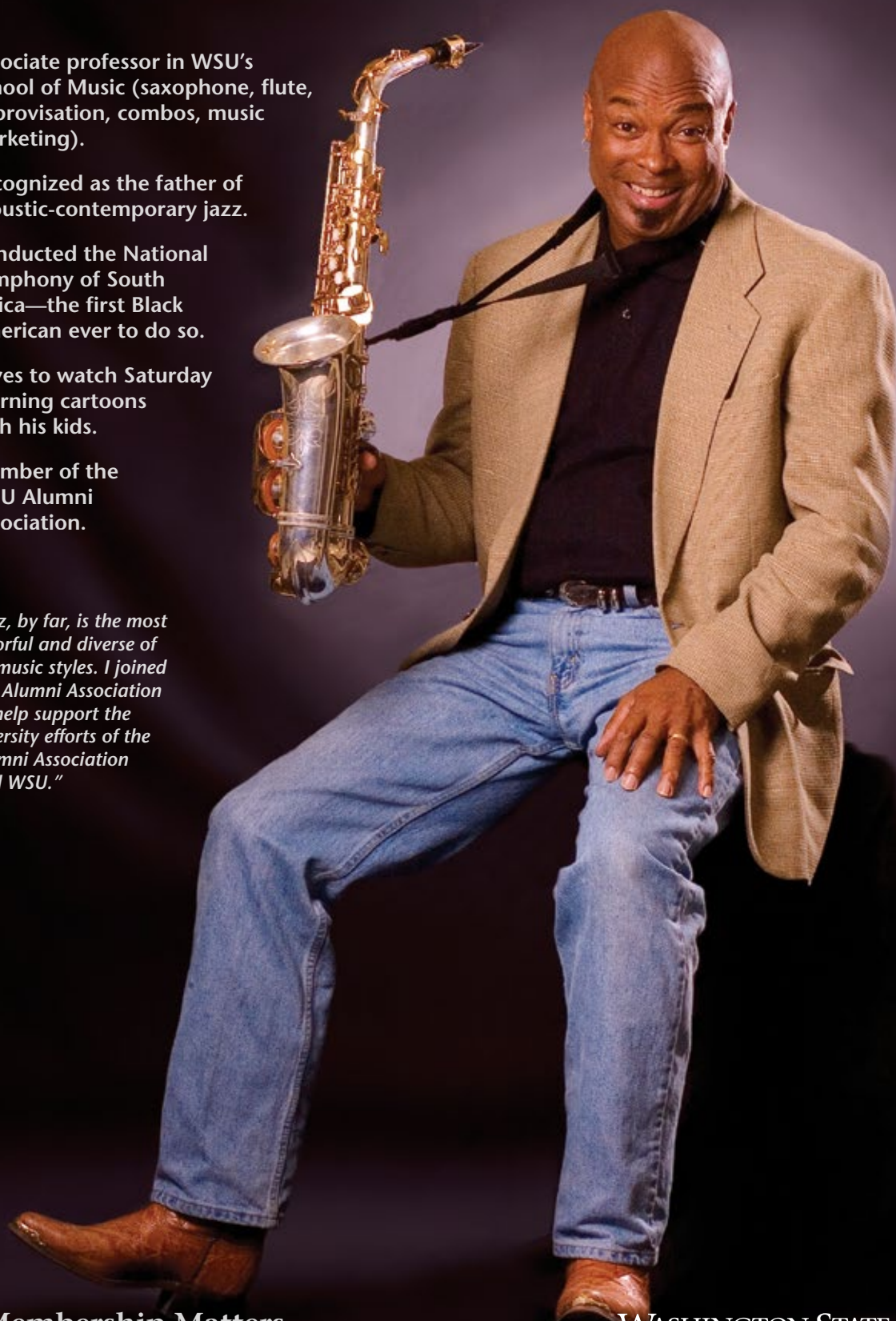
Member of the WSU Alumni Association.

"Jazz, by far, is the most colorful and diverse of all music styles. I joined the Alumni Association to help support the diversity efforts of the Alumni Association and WSU."

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*an interview with***THEODORE BASELER**

Ted Baseler is president and CEO of Ste. Michelle Wine Estates. The interview with Hannelore Sudermann took place in his second-floor office at the Chateau Ste. Michelle in Woodinville in late July. Journeying from advertising and marketing into the world of wine hasn't been the easiest trip, but certainly one worth making, he says, as he now steers Washington's largest wine company ahead. Baseler graduated from WSU in 1976 with a degree in communications. His wife, JoAnne, is also a Cougar ('75 Ed.), as is his daughter Andrea, who started at WSU this fall.

Look for what you want.

I took a job in advertising at J. Walter Thompson in Chicago, right out of graduate school. At the time, it was almost impossible to get a position with their Chicago office right out of school. In fact, they hired me first for their Detroit office. But then something opened up in Chicago, and I went for it. It was a great move. I was able to work on some really wonderful accounts like Gerber Baby Food and Ford Motor Co. The job required a lot of disciplined analysis and thinking. I love marketing, because it's really the synthesis of statistical analysis and innovative thinking.

Go home.

Then I moved back to Seattle and took a job with Cohen Webber. Seattle was different, because we didn't really have the consumer packaged goods here that we did in Chicago. But it was an exciting time to be working back in Washington.

Know when to leap.

In 1984 the vice president of marketing for Ste. Michelle was promoted to president, and he said to me, "How would you like my job?" I loved what I was doing in

advertising, and I was on a great career path. I would be leaving something I really enjoyed to come to this small winery that was losing money, making mainly Riesling, and had a few years of off weather, [all of] which was affecting its profit margin. I thought, "Boy am I getting off a big yacht to get on to a leaky sailboat?" But it was the right opportunity. I didn't realize it then, but the advertising market was contracting, and the winery was at a turning point.

Get out of the city.

It's nice to go to a winery. But it's better to go to a vineyard and see where the grapes are going. You feel you're in the

country[, and] you really get a sense of what wine is about. You can have an urbane or urban lifestyle and the country life simultaneously. It's the white tablecloths as well as rural agriculture.

Celebrate everyone's success.

People get along very well here. There is much more of a collegial atmosphere in Washington's wine group than in other, longer established wine regions. When another Washington winery wins an award, we don't get jealous. We celebrate their success. We think it's more important to grow Washington's wine industry than to just focus on our own. In every year that



Ted Baseler '76

there has been a serious freeze or other problem, we can always find a few grapes for people that will help them out. For the health of Washington, you've got to keep the good wineries going.

Believe in what's here.

It pains me when I hear friends and people in the community say, "I'm going to Napa this week to buy wine," when they could go to Walla Walla. It's as if they have the attitude that if it's abundant and it's local, it can't be that good. There are people and places around the world that would just die to have Washington wine.

It's OK to be the underdog.

It's such a healthy thing. It's like being a Cougar. You have to work a little harder, work a little smarter, and think creatively. When you are number two, which we are in Washington, compared to California, you have to be a little more fleet of foot.

Don't believe everything you see in the movies.

People think sometimes, if everybody wants it, then it's time to move on to something else. Consider the movie *Sideways*. Every time I hear that trailer with Miles saying, "Nobody's drinking merlot," I get stomach acid. The truth is, the average merlot is far better than the average pinot noir. With merlot, you get more good wine for the money. Fortunately, while the movie has increased pinot noir sales, it hasn't seemed to hurt merlot.

Hang on to the classics; they'll pay off in the end.

We started with Riesling, but it lost its cachet in the late '80s. It's a much better wine than people give it credit for. There was no question in my mind that it would have a comeback. The question was when. Then [German winemaker] Ernst Loosen came and said he wanted to make a wine with us. Lo and behold, we had the Eroica [Riesling]. It was a stunner. It has taken us places we have never been before. ■

CLASS NOTES

1930s

Constance McCormick ('35 Mus.) attended her class reunion at WSU and found she was the only one in her class there. She said she horned in on the 40th- and 50th-reunion grads, but was made so welcome by all that it was a lifetime thrill. She thanks all those who made her trip to Pullman from her home in Seattle so memorable. She is 93.

Glen Wilson ('39 Mining Engr.) and his wife, **Jeanne**, a former WSU student, are living in retirement in San Jose, California. Glen volunteers in the anthropology department at San Jose State University.

1950s

Charles E. Millard ('53 Gen. Stud.) was honored in March 2005 by having the newly surfaced track at Yakima's West Valley High School named after him. He had coached the track and cross-country teams while teaching math, chemistry, and physics at the high school for 26 years. He retired in 1982. For him, the credit goes to Jack Mooberry, who coached him at Washington State from 1949 to 1952.

Ron and Jane Baker ('55 Ag. and '56 Home Ec., respectively) celebrated their 50th wedding anniversary June 19, 2005. The two met at WSU, were married at Plymouth Congregational Church in Seattle, and established their home in Hermiston, Oregon. They are founding members of the Hermiston Christian Center.

Harold A. Sanders III ('57 Zool., Cincinnati, Ohio, retired in 1999 after 40 years with the U.S. government, then went to work for Pfizer, Inc., traveling worldwide until he retired again in 2005. Now he is a volunteer ombudsman with the Ohio Department of Health and with senior-care nursing homes and long-term care facilities. He has five daughters, some of whom live in the Seattle area.

Bruce Johnson ('59, '62 M.S. Civ. Engr.) published *Flexible Software Design: Systems Development for Changing Requirements*, in May 2005 through Auerbach Publications. Bruce is a retired associate professor of information and decision sciences from Xavier University in Cincinnati, Ohio. He lives with his wife, Carmen, in Estes Park, Colorado.

1960s

Manzoor Ahmad ('61 An. Sci.) is the 2004 recipient of the WSU Alumni Achievement Award. He lives in Pakistan, where he is vice chancellor of the University of Veterinary and Animal Sciences.

Jane Hess ('62 Mus.) received her J.D. She retired from 40 years of teaching to pursue a career in law. A quadruplegic, she has been confined to a wheel chair since a 1987 auto accident involving a drunk driver.

Sandy Gallemore ('64 Phys. Ed.) is president of both the Women Investing Now investment club of Statesboro, Georgia, and the Coastal Georgia/South Carolina chapter of the National Association of Investors Corporation. She is also executive secretary-treasurer of the Southern Academy of Women in Physical Activity, Sport, and Health.

Richard E. Betz ('65 Ag. Econ.), Hermiston, Oregon, was recently named successor to the chairman of the board of Columbia Bankcorp.

George V. Smith ('67 Hist.), Dekalb, Illinois, is associate deputy director of the Office of Library Services for The Institute of Museum and Library Services.

Paul Hirzel ('69 Gen. Stud.), Pullman, is the American Institute of Architects' 2005 Housing Committee Award recipient.

1970s

Diane Lee Alfano ('70 Ed.) retired June 2003, after teaching 33 years in Washington—29 years in Spokane and the last four in Bellevue. She moved to Gilbert, Arizona, to be near her son and became a real estate agent. She continues to do math consulting for middle school teachers, a job that enables her to travel throughout the country.

Richard Krolak ('70 Pol. Sci.) has been promoted to chief of the office of health policy and planning administration for the California Pacific Employees' Retirement System, based in Sacramento.

Claus-Michael Naske ('70 Hist.) published his 12th book, *Ernest Gruening: Alaska's Greatest Governor*, May 2004. A professor emeritus in history at the University of Alaska, Fairbanks, he was awarded the \$10,000 Usibelli Prize for excellence in research in 2001. He retired from the University of Alaska Press that same year, having served as director since 1988.

David Cotton ('72 Police Sci.) retired after serving 25 years with the Pierce County Sheriff's Department.

Michael Miller ('73 Pol. Sci.) was promoted to statewide director of litigation and field services for Legal Aid Services of Oklahoma, Inc.

Michael Drake ('74 Bus. Admin. & Mktg) was promoted to senior vice president of Columbia Bank in Tacoma.

Michele Johnson ('74 Police Sci., '75 M.S. Police Sci.) has been promoted from president to chancellor of Pierce College in Lakewood, Washington.

Guy Kazuo Murashige ('74 Pol. Sci., Hist.) is a service director for United Airlines. He has been traveling around the world working for United in the 30 years since he graduated from WSU. He plans to retire in a couple of years and move to Vietnam.

John Filicetti ('77 Ind. Tech., '77 Ed.) is Program Management Office director for Children's Hospital in Seattle.

Judson H. Clendaniel ('78 Bus. Admin.) founded The Clendaniel Co., Inc., a commercial real estate appraisal and consulting business. He is a member of the Appraisal Institute and a past member of the Shoreline Board for the City of Bothell. He has written a number of books, including one on telecommunications infrastructure. He is married and has two children.

Dan Jamison ('78 Hist., Ed.) is in negotiations with the Sherwood School District in Oregon to succeed Ron Saxton as superintendent.

Bryan Lawlis ('79 Biochem.) has been appointed to the board of directors of GlycoFi, Inc. He lives in California.

David W. Mitchell ('79 Psych., '81 M.A. Ch. Dev.) recently opened the Tri-Art Gallery in Richland, selling fine art outdoor sculpture. He also operates a counseling business.

1980s

Lisa Beckett ('81 M.S. Phys. Ed.) is professor of physical education at Pomona College in California. She has been a faculty member there since 1987 and serves on the NCAA West Regional Advisory Committee.

David Bricka ('81 HRA) is executive director of the La Conner Chamber of Commerce. Previously he was general manager of the Three Rivers Inn in Sedro-Wooley and assistant director of the 2005 Tulip Festival.

Scott D. Furman ('81 Ag.) is Okanogan County's assessor and was recently elected president of the Washington State Association of County Assessors. He has been employed by Okanogan County since 1984.

James P. Merryweather ('81 Biochem.) is executive vice president of Ciphergen Biosystems Inc. in California.

Phillip Meske ('81 Comm.), Castiac, California, and his wife, Kathleen, have founded MeskesMusic, offering seminars and materials for using music as a classroom teaching tool. Among their materials is a CD with music by Kathleen and lyrics by Phill. To view their materials see www.meskesmusic.net.

Charles Tilton ('81 Mech. Engr.) and **Donald Edward Tilton** ('85 Mech. Engr.) have expanded their company, Isothermal Systems Research Inc., in Liberty Lake. The company is expected

HONDURAS

What Patients We Saw!

During those long, hot, humid, and exhausting days, we saw, experienced, and accomplished things we had never before imagined possible.

WE WERE A TEAM, 24 strong, who came together for 10 days in the early spring of 2005 to travel to Honduras. We were nurses, physicians, dentists, dental hygienists and assistants, optometrists, and support personnel on a mission to provide medical, dental, and eye care to people who were otherwise unable to obtain it.

Our way was carefully prepared for us by an advance team of in-country personnel who work with Worldwide Heart-to-Heart Ministries, our mission sponsors. We flew into the city of San Pedro Sula, carrying all our equipment, supplies, and medications in 48 pieces of checked luggage. We were comfortably housed in the Flamingos Hotel in Omoa, on the Caribbean coast. From that base, we ventured forth to conduct six outreach clinics in the hard-pressed Honduran villages and countryside. During those long, hot, humid, and exhausting days, we saw, experienced, and accomplished things we had never before imagined possible.

Among the seven registered nurses on the team were four Washington State University alums. We were Tamara Norton '04, Jeanne Hamer '05, Therese Jensen, and Rita Catching, all nursing graduates of WSU Vancouver. Assisted by our able interpreters, we worked in the clinics as primary caregivers to our patients. And what patients we saw! In six days we served more than 4,000 people. They came from the surrounding countryside and plantations, the poorest of Honduras's poor, sometimes walking for miles, then waiting for hours in the stifling heat. Often, we were able to offer little more than a week's worth of aspirin. That is not to suggest that we saw only patients with minor complaints. On the contrary, we saw everything from gangrene to uncontrolled diabetes to elephantitis. Sometimes, all we did was listen, but that was more than our patients were used to. One person was overheard to say, "We just want to know that we have not been forgotten."

Our workdays spanned eight to nine hours. The clinic sites were in schools or community centers. The facilities were basic, lacking air conditioning and running water.

The dental team pulled teeth non-stop, until they had blisters on their hands. The poor of

Honduras have no dental care, and their diet consists mainly of carbohydrates. Often, the dentists had no choice but to perform full-mouth extractions, leaving individuals, often relatively young, to live toothless from then on. Dentures are priced beyond the reach of the people we served.

The optometrists distributed more than 2,000 pairs of reading glasses and nearly 4,000 pairs of sunglasses, as well as a limited number of specialized prescription glasses, which they matched as best they could to their patients. One little girl with severely crossed eyes showed a dramatic change within minutes of donning glasses. For the first time in her memory, her eyes began to uncross, and she was able to look straight ahead.

We gave out much more than medications and glasses. Each child received a toy. We offered toiletries to the women and nail polish and lip saver to the teens. By the time we closed each clinic day, we had exhausted our day's allotment of toys and gifts. Fortunately, we carried enough of the most-needed medications.

In Honduras, one of the poorest countries in the Western Hemisphere, breathtaking scenery clashes with man-made waste and degradation. The people, struggling to survive, create dwellings wherever they can out of whatever they can find. Often, they're surrounded simultaneously by piles of trash and dramatic natural beauty. There is almost no middle class. People are either very rich or, most often, very poor.

Hurricane Mitch devastated much of Honduras in 1998, damaging more than 30 percent of the arable land, destroying 40 percent of the housing, and wiping out all the bridges over the many coastal rivers. Now, seven years later, those bridges are just beginning to be replaced.

As is always the case in efforts such as ours, we received from our experience much more than we gave. We met intrepid Honduran peasants who, in spite of daunting odds, are hopeful for the future. We met other international volunteers selflessly working to help Hondurans improve their lives. Regardless of our personal political leanings, most team members agreed that what the Honduran people need



TOP: Tamara Norton ('04 M.S. Nurs.), Honduran clients, and Rita Catching.

ABOVE: Interpreter and clients with Jeanne Hamer ('05 B.S. Nurs.).

most are opportunities to improve their lives, educate their children, provide for their families, and care for their beautiful country.

—Rita Catching ('03 M.S. Nurs.)

PERU

In the Middle of the Jungle with No Walgreens

IN SUMMER 2004 my husband, Stuart, and I made our first trip to Peru. We traveled with a charitable organization that hoped to build an orphanage and medical clinic there. Having completed my second semester of nursing studies at the Washington State University Intercollegiate College of Nursing, I was the most medical-savvy person on the trip. But that didn't stop us from doing a lot of good work. We set up clinics in Iquitos, a port city of about 400,000 residents near the headwaters of the Amazon River, and worked farther downriver in less populated areas with the Yahua and Bora Indian tribes. We were amazed at how little

access some of these communities had to medical care.

While we were able to help a number of people on that visit, we knew we needed to go back. So this year, working with WSU nursing faculty members Carol Allen and Deborah Swain, we organized a two-week trip with the help of the People of Peru Project and invited my nursing classmates along to organize day clinics and assist the lowest income communities in Iquitos, far up the Amazon.

The response was so great we ended up with 15 students and three recent graduates, all willing to pay for the trip out of their own pockets. What some didn't have, they earned through yard sales, fundraisers, and just plain begging from friends and families.

The setting was exotic, with the jungle all around us and the city wholly unreachable by road. But it wasn't that glamorous. We saw raw sewage in the streets and beneath the houses. One of the most striking neighborhoods was Belen, where the houses are built over the river. Belen's community bathroom was a plank that led out over the river. All the waste went directly into the Amazon, just 20 yards from where people were bathing and washing their clothes.

We set up health clinics in homes and compensated the families who hosted us with food. On our first day, we saw about 300 people. In total, we were able to reach about 600 families and solve more than a few medical mysteries, like the outbreak of rashes in the neighborhood of San Pablo de la Luz. It appeared these rashes were related to contaminated bathing water. We shared cortisone creams and provided education on boiling water, finding other water sources, and under-

standing what problems can occur when water is contaminated.

Probably the biggest issue was dehydration. So many people had headaches and dizzy spells. Even though the area was constantly hot and muggy, we figured most were drinking the equivalent of one eight-ounce glass of water a day. One of my nursing classmates, Charissa Graham, spearheaded the hydration outreach, encouraging our clinic visitors to take simple measures like sanitizing drinking water by leaving full plastic bottles in the hot sun.

We easily addressed many basic health issues, such as pregnancy, parasites, bladder infections, and STDs, through education and prevention. When people needed more care than we could offer—one woman had symptoms of tuberculosis—we sent them to the regional hospital. A lot of the volunteers used their own money to cover the hospital charges.

This experience was good for us as nursing students and graduates. You never know how creative you can get, until you're in the middle of a jungle with no Walgreens nearby and need to come up with a bandage that isn't going to fall off a child's foot, even when he's running barefoot in the mud. The trip

... we were able to reach about 600 families and solve more than a few medical mysteries ...



also gave us a different perspective on community health from the standpoint of an impoverished population. Forcing us totally out of our comfort zone, it helped us appreciate what some of the patients coming into our hospitals and clinics here at home may be experiencing.

—Vicky Sattler '05

The WSU Intercollegiate College of Nursing provides opportunities for faculty and students to work with vulnerable populations in such locations as Belize, Honduras, Ecuador, Egypt, Ukraine, Crimea, India, and Pakistan. These faculty-student health care teams are always in need of funding for travel, food, and lodging, and of donated supplies such as prescription and over-the-counter medications and basic hygiene and medical items. For information on how you can help, contact Debbie Haberman at 509-324-7340 or habermad@wsu.edu.



ABOVE: A Peruvian family gets schooled in over-the-counter medication by a volunteer from the WSU Intercollegiate College of Nursing.

LEFT: WSU nursing students Dea Ross and Ryna Hansen with children of a village in Peru, where WSU students, faculty, and alums held a medical clinic.
PHOTOS COURTESY OF CAROL ALLEN.

CLASS NOTES *continued*

to grow to 1,000 employees in the next five years from the current 200.

Joseph Villagomez ('82 Psych.) was appointed secretary of public health for the Commonwealth of the Northern Mariana Islands.

Sheila Geraughty Leek ('83 Pol. Sci.) has been promoted to real estate portfolio and leasing manager at Sterling Savings Bank in Spokane.

Robert Littlejohn ('83 Ph.D. Bot.) is headmaster of Trinity Academy in North Carolina.

Jackie Balzer ('84 Soc.) is dean of student life at Oregon State University, Corvallis.

Susan Joanne Bauer ('84 Comm.) has been chasing her three kids, Nicole, 10, Drew, 8, and Blake, 3, while working part-time at Pacific Northwest National Laboratory as a media relations specialist. She and her husband will be celebrating their 17th wedding anniversary.

Steve DeSordi ('88 Math.) assumed command of the U.S. Air Force's 28th Operational Weather Squadron at Shaw Air Force Base in South Carolina. He was recently transferred from Sembach Air Base in Germany, where his squadron won the 2004 Fawbush-Miller Award for being the best weather squadron in the Air Force.

Barbara Ann Finnell ('88 Ed., '95 M.A. Sp. and Hear. Sci.), Chandler, Arizona, is self-employed as a home health speech therapist. She previously taught special education children for 13 years in Coeur d'Alene, Idaho.

Steven Edward Reynolds ('88 Arch.) is the CAD manager at Davis Carter School, a large architecture firm in Alexandria, Virginia. He is in charge of production standards and quality control. His other good news this year comes in the form of Clara Maud, the newest addition to the family.

1990s

Debbie (Hamilton) Dailey ('90 For. Lang. and Lit.) just moved to Helena, Montana, with her husband, George, after living in Coeur d'Alene, Idaho, for years. She played piccolo in the Coeur d'Alene Symphony and oboe in the Coeur d'Alene Chamber Orchestra. She also strutted her stuff as a Red Hot Mama and worked as a paralegal. She is the mother of five, ages 7 to 31. She now works for Montana Legal Services Association, is learning the cello, and is happy and healthy.

John Morgan ('90 Comm.) recently joined In-Store Broadcasting Network as director of research and analytics in Salt Lake City, Utah.

Peter Unagaro ('90 Bus. Admin., Mgt) has been named president of the Cray

Company, Seattle's supercomputer maker.

Marty Dickinson ('91 Gen. Stud.) has been appointed president of the Downtown Spokane Partnership. Previously she served as vice president of both the Spokane Regional Chamber of Commerce and Spokane Area Economic Development Council.

Ayako (Moriya) Hufford ('91 Bus. Admin.) has accepted a position with Merrill Lynch Tokyo, leaving a job with ABN-AMRO in August.

Andy Lee ('91 Hist.) lives in Jamison, Pennsylvania, and works as a pilot for JetBlue Airways.

Mark Mosely ('91 Gen. Stud. and Soc. Sci.) was named manager of Freightliner's St. Thomas, Ontario, plant.

Carolyn Calhoon-Dillahunt ('92 Engl., '96 M.A. Engl.) was recently elected secretary of the National Two Year College Association, a branch of the National Council of Teachers of English. She is co-chair of the TYCA conference this year. She is also secretary of the Yakima Regional Library Board and a volunteer with the Pegasus Project, a therapeutic riding program. She teaches English and directs the writing center at the Yakima Valley Community College.

Kathy Hanpa ('92 B.A. Arch. Stud.), Belgrade, Montana, married Tim Russell May 28, 2005, in Bozeman, Montana. Kathy is an architect with JLF & Associates in Bozeman, and Tim is a production lead with Cherry Tree Design. Kathy is originally from Montana, and Tim is from Portland, Oregon.

Toby Charles Schwarz ('92 Bus. Admin., '96 Ph.D. Ed.) is the head track and field/cross country coach at Whitworth College. He was promoted to full professor in the Department of Kinesiology.

Gregory M. Davies ('94 Bio.) and his family have recently moved back to the Bay Area. He will be working at Egan

BEING SACAGAWEA

FOR THE PAST TWO YEARS historian Jeanne Eder has been traveling in Sacagawea's footsteps. Donning a traditional dress as well as another woman's persona, Eder has toured the West performing her interpretation of an older and wiser Sacagawea who, years after the Journey of Discovery expedition, has time to reflect.

Eder ('00 Ph.D. Hist.) teaches at the University of Alaska, Anchorage. A Dakota Sioux who grew up on the Fort Peck Indian Reservation in northeast Montana, she researches the lives of historic Native American women and portrays them in Chautauqua-style performances.

Playing the most famous woman of the 1800s has its challenges, says Eder. "People tend to get lost in the character and then feel that the character speaks for all Indians." She often gets questions from the audience that don't even pertain to Sacagawea or the Lewis and Clark Expedition—questions like, "Why do Indians have such high rates of alcoholism?" and "How come Indians don't pay taxes?"

Even so, she enjoys stepping into the character of a strong and independent woman. Sacagawea—alternatively spelled Sacajawea—was a Shoshone who grew up in the matrilineal culture of the Hidatsa. Women in this community had the power, says Eder. Sacagawea couldn't have helped but be influenced by that.

Eder's portrayals of Sacagawea throughout Washington, Oregon, and Idaho were organized in collaboration with the Washington State University history department to fill a gap in events organized to commemorate the expedition. "There's a ton of material on Lewis and Clark. No shortage," says WSU history professor Sue Armitage. "Where there is a shortage is in material on how the Indians felt.



Historian Jeanne Eder '00 dons traditional Indian attire for her portrayals of Sacagawea.

COURTESY OF WSU DEPARTMENT OF HISTORY

"The way in which you present the Indian side of the story is not to lecture at white people, but to make them feel they are a part of the Indian world," says Armitage. Eder does just that. "And her Sacagawea is not a 15-year-old girl. She is a mature woman looking back with some humor."

Though some history books have Sacagawea dying at an early age, others claim that she went on to live many more years with the Shoshone in Wyoming.

For her portrayal, Eder taps into the oral histories of Indians who claimed they or their family members encountered Sacagawea long after the history books have her dying. For Eder's Sacagawea, the expedition was just one of many life experiences.

—Hannelore Sudermann

A new hotel in
an old Seattle
landmark

THE FIXER



Craig Schafer '76

AT FOURTH AND VIRGINIA in Seattle, where Beltown meets downtown a few blocks from Pike Place Market, a trendy restaurant and residential district meets up with the city's retail center. It's here that hotelier Craig Schafer '76 has made his mark.

His upscale Hotel Andra is nestled in the 1926 brick corner building once beloved as the low-cost Claremont Hotel. Built as an efficiency apartment building and retaining the same spacious rooms, the boutique hotel is touted by the likes of *Fortune* and *Condé Nast Traveler* magazines and the design industry for its appealing modern look and central location.

The building's neighborhood has also found a new life. Once an edgy part of downtown, the spot is now lively with business traffic by day and foodies searching for the perfect dinner at night. "We're in walking distance of some of the best restaurants in the city," says Schafer.

It took several years, but in 2002 Schafer bought the building from an owner who needed to sell. He ran it as the Claremont just long enough to get a feel for the building and the neighborhood. Then he closed it for major renovation.

"I had a vision of what I wanted it to be. I wanted to offer something the market lacked, and I had a vision to create something that spoke a lot to Seattle," he says. Schafer picked up some of the Scandinavian feel of old Seat-

tle with clean, modern design as well as the cool, deep colors of a community on the water. Then he settled on the name Andra, which is Swedish and can mean "change" or "other," an apt metaphor for that part of downtown.

"I've been in that changing neighborhood for 16 years now," says restaurateur Tom Douglas, who in 2004 opened Lola in the ground-floor corner space of Schafer's building. Douglas also owns the acclaimed Dahlia Lounge, just across the street from Andra, and the Palace Kitchen around the block. He recalls the days when his Dahlia Lounge was one of the few businesses to draw people to the neighborhood at night. "Back then some of my customers got mugged."

The business owners worked together to get rid of a convenience store that seemed to draw trouble. That was a turning point for the neighborhood. Now new businesses like Schafer's have taken root in the area's old architecture. "Craig has done a beautiful job," says Douglas.

A native of Tacoma who earned a degree in hotel and restaurant administration at Washington State University, Schafer started learning to be a manager at Westin Hotels in southern California. While he loved the industry, he couldn't see himself as general manager of a single hotel. Instead, he came back to Washington to get an M.B.A. at the University of

Puget Sound and work as a consultant for hotel property developers.

All of his work was true training for striking out on his own. He went on to Colliers Macaulay Nicolls International, setting up and heading the company's first office in North America. "I learned so much about financing, about what works and doesn't work," he says.

He started investing in properties, finding opportunity where there was distress. Problems with the owner, misdirection, or bad marketing were all things that he and his fellow investors found easy to correct.

That led to the purchase of the old Meany Tower Hotel, an art deco building on the edge of the University of Washington campus. The large chain that owned it wasn't targeting the university audience. Schafer and his partner were able to go in, strip away what wasn't working, and redirect the property. Today it's the much more successful Best Western University Tower Hotel.

The Andra project has provided new challenges for the entrepreneur, who likes fixing things. As he walks through, he inspects the spacious rooms, tweaks the curtains, and chews over placing new pieces of art. "I try to think about the room as you enter," he says, pointing to a stylish coat hook near the door. "What is it you don't have in a hotel room that you might have at home?"

—Hannelore Sudermann

CLASS NOTES *continued*

Junior High in the Los Altos School District, one of the top districts in California. He'll teach physical science to 8th-grade students and will supervise an environmental awareness club.

Jeffery Hellam ('94 Rec. and Leisure Stud.) is the proud owner of Hellam's Vineyard wine shop in La Conner.

Maureen Johns ('94 Comm.) has a new little "future Cougar" in the family down in Texas. Little Miss Lorraine is scheduled for the freshman class of 2023 in Pullman! Go COUGS!

Jody (Gabriel) Cameron ('95 Math., Ed.) recently moved to Ellsworth Air Force Base in South Dakota after five years in Europe. She is mother to Lexi, 6, Payton, 4, and Caroline, 2.

Shelley Richards ('95 Civ. Engr.) was married to David Rodriguez October 2004. They live in Portland, Oregon. She also received a promotion to environmental design oversight manager for Oregon Bridge Delivery Partners.

Michael D. Bajema ('97 Crim. Just.) is a captain in the US Army. He returned from his second tour in Iraq with the 1st Armored Division after having been awarded the Bronze Star and Army Commendation Medal. He recently took command of a Brigade Reconnaissance Company in Friedberg, Germany.

Bret F. Busacker ('97 Bus. Admin.) has joined the Cincinnati office of Thompson Hine LLP as an associate in the employee benefits and executive compensation practice group.

Joe Eschbach ('97 Mech. Engr.) was hired by Astoria Software of San Mateo, California, as chief marketing officer.

Colleen O'Neal ('97 Ed.) is principal of Homelink and CAM schools, K-12 parent-partnered alternative schools in the Battle Ground School District. She is also treasurer for the 18th Legislative District Democrats.

Julie Linahan ('98 Comm.) was named Newport Beach Conference and Visitors Bureau incentive travel industry sales manager.

April Owen ('98 Bus. Admin. and Acctg) was rehired by BDO Sideman in Spokane as tax senior associate.

Kari-Ellen Elsdon ('99 Hum. Dev.) completed her M.Ed. in guidance and counseling in June 2004 and married

Travis Elsdon in August of that year. She now works as a counselor at Wilson High School in Tacoma.

Grady and Rian Emmerson x'99 and x'00 welcomed Talia Rose to the family September 12, 2004. Grady is the new head football coach at North Central High School in Spokane.

Amy Huckabay ('99 Bus. Admin., For. Lang.) was hired by Pulakos and Alongi Ltd. of Albuquerque as a CPA, tax supervisor.

2000s

Cory Cameron Carpenter ('00 Bus.) is regional sales manager for JELD-WEN, manufacturers of pools and windows in West Sacramento, California. He is active with the local alumni association.

Chris Cashman ('00 Comm.) and **Cara Hildt** announced their engagement

CAROLYN SCHACTLER

INSPIRED BY MANY SOURCES



Carolyn Schactler '49

WHILE AT Washington State College, Carolyn Campbell Schactler of Yakima was a violinist and swimmer in the synchronized group Fish Fans. She later taught both of these skills, but it was her designing and sewing that launched her career and led to international recognition. Although she graduated with a B.A. in music in 1949, she says, "That wasn't really my thing. I had been designing and making clothes in my spare moments ever since I can remember. That was really my forte."

Schactler studied at home and abroad, earning an M.A. from Central Washington University and doing postgraduate work at the University of Texas and Potchefstroom University in South Africa.

In 1976, she joined the faculty of CWU, where she taught for 28 years. She was the director of the Apparel Design Program and taught students to make garments from the ground up. They learned everything from pattern making to historic costumes.

Schactler regularly wins both national and international design competitions. One of her latest creations is named *The Blue Danube*. Made of a shimmery, hazy blend of blue, green, and purple fabric, the evening gown has a diagonally cut bodice and large skirt with a detachable bustle of harmonizing color. The design is gorgeous enough to tempt any woman, but wearable enough for real people to own.

Inspiration for a design can come from many sources. "I'm inspired by lots of wonderful designs from eons ago. I can be inspired as when my granddaughter said, 'Grandma, design something about Scheherazade.'" Schactler threw herself into the project,

researching the character and what people from her time period wore. She chose the sumptuous fabrics suited to the Persian princess and then designed and created the costume.

Schactler loves all parts of the design and execution process. "I love thinking it, because I get an idea and begin to develop it in my mind. I nurture this idea till it begins to grow and I have to do something with it. I love the idea of getting the pattern made, whether it be by draping or flat pattern. The next step is choosing the fabric, but sometimes I have the fabric first. It depends on how I'm inspired—and then I love putting it together. I like doing handwork. If I didn't, I'd be in deep trouble, because some of the garments require many hours of doing handwork." One of her designs for this year's design competition includes an extremely time consuming '20s beaded cloche hat.

Schactler has donated her personal clothing collection to WSU's Department of Apparel, Merchandising, Design and Textiles. The collection contains nearly 300 items of clothing and accessories dating from about 1840 to 1970. Some of the items are vintage, and some are replicas Schactler designed and made for teaching purposes.

Selected items from Schactler's collection were shown last August in an exhibit in the CUB Gallery entitled, *Lace, Lawn, and Lingerie in the Belle Epoque*.

Schactler's accomplishments are all the more remarkable in light of the fact that she and her husband, Dick '49, have reared six children. Two of them are Cougars, as are several grandchildren. Schactler's father, brother, and father-in-law are also Cougars.

—Gail Miller ('79 M.A.)

CLASS NOTES *continued*

and plans for a July 9 wedding in Bellingham.

Shannon George ('00 Biochem., '02 M.S. Chem.) has been hired by HollisterStier in Spokane as a new product discovery scientist.

Edith Suzanne Marshall ('00 D.V.M.) earned her M.P.V.M. degree from UC Davis in '04. Now she is working as a researcher for the Center for Animal Disease Modeling and Surveillance in California. She has also volunteered on two trips to Guatemala with the Rural Area Veterinary Service.

Dana (Erickson) Repp ('00 Ag. Econ.) and her husband, Aaron, announce the birth of their first child, Derek James, on November 30, 2004, in Pullman. Aaron farms near Dusty, and Dana is a stay-at-home mom.

Shawn Kendall Martin ('02 Comm.) has been producer and director of KSMQ Public TV of Austin, Minnesota, since August 2002. His third child, Lily, was born June 11, 2005.

Ying "Yvonne" Du ('03 Ph.D. Civ. Engr.) was hired by Integrus Architecture of Spokane as a structural engineer.

Jessica Frazer ('03 Bus. Admin.) has a new position as senior business systems analyst for Harland Financial Solutions in Bellevue.

Bill Graffis ('03 Gen. Stud. and Math.) is pursuing a career as an artist. His gilding work can be seen on display around much of the Houston area.

Colin Andrew White ('03 Bus. Admin.) has just published his college honors thesis, which he wrote with former WSU professor Dave Croasdel, as a book titled, *Case Studies in Knowledge Management*. White is a systems analyst for Deloitte Consulting in Seattle.

Liz Commeree ('04 Bus. Admin., Mgmt.), Spokane, was hired by Northwestern Mutual Finance Network as assistant director of development.

Melissa Marie Elliott ('04 Psych.) just completed her first year at Gonzaga University in a master's program for school counselors. She is also working in a practicum at Willard Elementary School, Spokane.

Jennifer Marie Lasher ('04 El. & Sec. Ed.) was married to Steven Ray Short November 27, 2004, in Ridgefield.

Nathan Rea ('04 Agribus.) has joined the Washington, D.C., office of Rep. Greg Walden as a staff assistant.

Jana (Smith) Sutton ('04 Hist., Ed.) married **Jeff Sutton** ('02 Engr.) December 6, 2003. The two met as residents at Scott-Coman Halls and then started dating a few years later when they were resident advisors.

IN MEMORIAM**1920s**

Evert Benson ('28 Hort.), 100, March 5, 2005, Yakima.

1930s

Maurice Weldon Compton ('33 Econ.), 98, May 5, 2005, Seattle.

Jeanne Jewett ('33 Soc.), 93, May 6, 2005, Portland, Oregon.

Olga M. Parkin ('33 For. Lang. and Lit.), 94, Tampa, Florida.

Richard E. Green ('35, Ag.), 92, July 5, 2005, Spokane.

Katherine (Kay) McCoy Lamb ('35 Mus.), 93, June 1, 2005, Kennewick.

Firth J. Chew ('37 Bus. Admin.), 91, August 7, 2005, Spokane.

Ralph C. Husom ('37 Acctg), 89, March 31, 2005, Spokane.

Phyllis A. Burnam ('38 Soc.), 88, January 24, 2005, Lake Oswego, Oregon.

Dorothy I. Castle Curlett ('38 Home Ec.), 87, April 27, 2005, Olympia.

Muriel Maxine McCown Hagwell Laverty ('38 Hist.), April 28, 2004, Longview.

Betty Siegel ('38 Sp., '39 Ed.), 88, May 29, 2005, Portland, Oregon.

Elvina F. Magill-Verduin ('39 Engl.), 97, April 2, 2005, Lynden.

George D. Oswalt ('39 Bus. Admin.), 90, April 28, 2005, Bellingham.

1940s

Don W. Clarke ('40 Vet. Sci., '41 D.V.M.), 86, May 6, 2005, Palm Springs, California.

Louis E. Mikota ('40 An. Sci.), 88, May 11, 2005, Mount Vernon.

F. Louise Ayars ('41 Home Ec.), 85, July 18, 2005, Kirkland.

Jack Gardner Field ('41 Mus.), 87, June 6, 2005, Kirkland.

Marian Edwards Rathbun ('41 Home Ec.), 84, February 18, 2005, Portland, Oregon.

Bertil H. Dennis ('42 Bus. Admin., Acctg), 84, April 7, 2005, Visalia, California.

Ruth J. (Hahner) Meyer ('42 For. Lang.), 84, July 1, 2005, Benton City.

Arleen C. Otto ('42 Home Ec., '47 Ed.), 85, April 24, 2005, Tempe, Arizona.

Howard Strobel ('42 Chem.), 84, June 4, 2005, Durham, North Carolina.

James A. Zimmerman ('42 Vet. Med., '43 D.V.M.), 86, May 8, 2005, Salem, Oregon.

Eleanor Bundy Zimmerman ('43 Lib. Arts), 80, September 13, 2001, Salem, Oregon.

Irving Friedman ('44 M.S. Chem.), 85, June 28, 2005, Lakewood, Colorado.

Mervyn C. Mahoney ('44 Vet. Sci.), 82, May 2005, Centralia.

Inez E. (Polenske) Stack x'47, 80, July 2005, Spokane.

James Chappell ('49 Elec. Engr.), 80, February 18, 2005, Shelton.

Max Arthur Davidson ('49 Ag.), 84, March 8, 2005, Oregon, Wisconsin.

Terry Meade ('49 Gen. Stud.), 81, February 26, 2005, Sacramento, California.

David K. Rowand, Jr. ('49 Gen. Stud., '50 Ed.), 81, Troy, Michigan.

1950s

Robert S. Baker P.E. ('50 Mech. Engr.), 81, May 10, 2005, Walla Walla.

John Sperry Gullikson ('50 Gen. Stud.), 77, May 25, 2005, Marysville.

Robert S. Miller ('50 Gen. Bus.), 78, February 22, 2005, Richland.

John Kenneth Fox ('51 Pol. Sci.), 78, July 18, 2005, Bozeman, Montana.

David E. Langdon ('51 Zool.), March 28, 2005, Arlington, Texas.

Keith Tatsch ('51 Mech. Eng.), 76, July 16, 2005, Edmonds.

Harold Toplitz ('51 Pharm.), 88, April 11, 2005, Pequannock, New Jersey.

Glenn Earl Macklin ('52 Pharm.), 74, March 17, 2005, Ventura, California.

Donald Fletcher Miller ('52 An. Sci.), 80, February 22, 2005, Hoover, Alabama.

Jack Leroy Smalley ('54 Pharm.), 73, 2005, Bremerton.

John (Jack) Allen Inions ('57 Ag.), 72, May 29, 2005, Grandview.

Donald H. Jenkins ('58, D.V.M. Vet. Sci.), 82, March 3, 2005, Neillsville, Wisconsin.

Dr. Lesnick Westrum ('58 Zool.), 70, May 14, 2005, Seattle.

1960s

Carol Lenore Hess Bagley ('60 Engl., '66 Ph.D. Am. Stud.), 85, Spokane.

Bonnie Jean (Berg) Pogrell ('63 Econ.), 64, May 24, 2005, Portland, Oregon.

Genevieve McDonald ('64 M.A. Home Ec.), 90, June 28, 2005, Newport.

Stephen G. Porter ('65 Ag. Econ.), 61, July 29, 2005, Chehalis.

Gerald D. Williams ('65 Ag. Econ.), 62, July 8, 2005, Prosser.

Dennis Ross Friedrichs ('66 Math.), 64, June 17, 2005, Kennewick.

Steve Menard ('67 Elec. Engr.), 61, February 28, 2005, Spokane.

1970s

Donna Rehm Frazier ('72 Soc.), 55, May 1, 2005, Seattle.

Bilal Hashmi ('72 Ph.D. Soc.), 69, Seattle.

Mary Lou Harting ('73 Elem. Ed.), 55, May 17, 2005, Renton.

Everett William Hamilton ('76 Ag.), 51, July 5, 2005, Prosser.

1980s

Martha Evans Kiersch ('80 Ph.D. Psych.), 59, May 6, 2005, Fresno, California.

Matt Kosmata ('84 Elec. Engr.), 43, April 10, 2005, Hood River, Oregon.

Steven Olaf Arno Kreck ('84 Gen. Stud.), 44, June 23, 2004, Modesto, California.

Christa "Cissa" Hilbish ('87 Soc. Work), 40, May 1, 2005, Liberty Lake.

1990s

Byron Richard Jones ('94 HRA), 36, December 20, 2004, Beaverton, Oregon.

Kathy (Jensen) Sande ('94 Vet. Sci., '97 D.V.M.), 37, July 2005, Spokane.

Diana M. Harrington ('95 M.A. Ed.), 48, August 3, 2005, Vancouver.

Dana Fishback ('97 Ed.), 31, June 8, 2005, Richland.

Andrew Gene Pack ('98 Biol.), 28, July 22, 2005, Portland, Oregon.

2000s

Michele Leeb ('00 Soc. Sci. Gen. Stud.), 27, February 28, 2005, Portland, Oregon.

John Charles Benward ('01 Ed.), 47, September 2004, Kennewick.

David Michael Way ('01 HRA), 31, May 3, 2005, Greensboro, North Carolina.

Tracee June (MacCaskill) Hauger '04, 46, May 26, 2005, Kennewick.

Faculty and Staff

Thelma L. Blegen, 95, March 2, 2005, Benton City. She worked as a dietician at WSU until she retired in 1972.

Bernard Earl Bobb, 87, July 4, 2005, Pullman. Prof. Bobb taught history at Washington State College/WSU from 1949 until his retirement in 1981.

Marguerite C. "Bubs" Espy, 63, June 17, 2005, Potlatch, Idaho. She worked at the College of Veterinary Medicine as an animal technician from 1977 until her retirement in 2000.

BOOKS, etc.

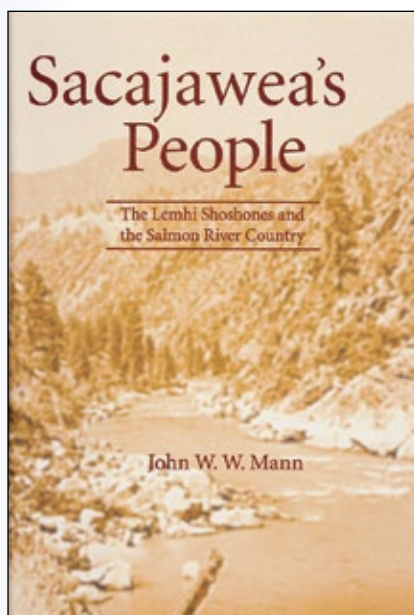
Sacajawea's People: The Lemhi Shoshones and the Salmon River Country

By John W.W. Mann '01
University of Nebraska Press, Lincoln, 2004

This year, the bicentennial of the Lewis and Clark Expedition, we are again reminded of the role Sacajawea played in that long journey westward. However, Sacajawea's tribe of origin, the Lemhi, has gone largely ignored. Only recently have historians given any significance to what Native American history offers us past the late 19th century. It's this oversight that John W.W. Mann ('01 Ph.D. Hist.) addresses regarding the Lemhi tribe's heroic struggle to maintain its separate ancestry, cultural heritage, and identity during the 20th century in *Sacajawea's People: The Lemhi Shoshones and the Salmon River Country*.

It is, frankly, an excruciating and confusing tale of bureaucratic warfare. To be brief, on February 12, 1875, President Grant established a reservation for the Lemhi people, a move that met with an immediate and successful effort of rescindment. Shoshone, Bannock, and Lemhi tribal leaders had signed the Fort Bridger Treaty in 1868; however, authorities failed to recognize the Lemhi as a separate people with their own culture. A treaty granting the Lemhi a reservation of their own went unratified in the U.S. Senate. At the crux of the matter was the threat of displacement of the Lemhi to the Fort Hall reservation near Pocatello, Idaho, occupied by the Shoshone and Bannock tribes, with whom the Lemhi had little in common culturally. Chief Tendoy forestalled the inevitable until 1906, but finally signed an agreement to remove his tribe to Fort Hall in exchange for \$4,000 annually for 20 years.

Although the government paid a portion of the monies owed, it did not live up to its full promise. Tendoy's successors, Toopompey and Wince, unsuccessfully pursued collection of what remained in government coffers. Later, when Fort Hall residents approved a constitution under the Indian Reorganization Act of 1934, the Shoshone-Bannock Tribal Council became the official decision-making body for all reservation residents regardless of tribal origin. Now the council had the power to decide who could claim any money collected from the government by reservation residents even though, paradoxically,



cally, the Lemhi had a legal right to the money as their own.

It is never clear in the telling of this story how much money was eventually collected and which payments resolved which litigation process. In addition to the annuities owed under the removal agreement, the Lemhi also fought for fiscal settlements regarding aboriginal land wrongfully seized and their fishing rights in the Salmon River country.

To bring the story up to the present, the Lemhi recently presented a petition to the Branch of Acknowledgement and Recognition (BAR) of the Bureau of Indian Affairs to restore their recognition by the federal government as a tribe. However, the BAR has restored recognition to a mere eight of the 105 groups that have submitted petitions. Even then, although the BAR recognized the Duwamish tribe of Seattle during the Clinton administration, the Bush administration rescinded the decision.

Sacajawea's People is a difficult read, especially in its recounting of the Lemhi's litigious history, and would have been better served with a timeline to help readers keep track of the chronology. Nonetheless, it's a much-needed account of the historical clash between a government based on European ideas and a small tribe clinging tenaciously to its culture, identity, and sense of place. Mann should be commended for relating a story that is just as hard fought as the journey aided by Sacajawea 200 years ago.

For more information, see wsm.wsu.edu/bookstore/Alum-History-Books.html.

—Kathie Meyer '92

Kathie Meyer is a frequent contributor to Washington State Magazine.

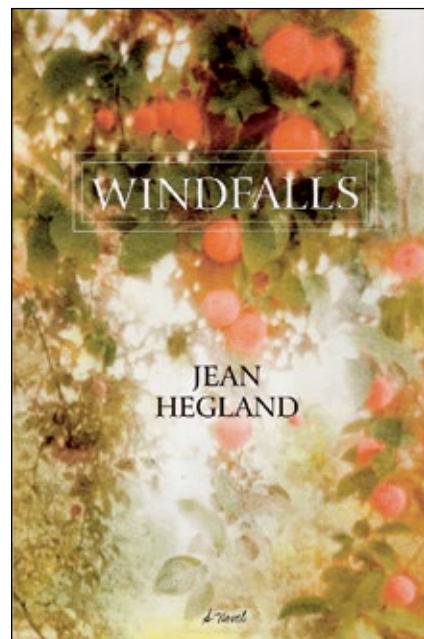
Windfalls

By Jean Hegland '79
Atria Books, New York, 2004

To be a mother or an artist? Or both?

Anyone interested in women's quest stories that explore these central questions will find Jean Hegland's second novel, *Windfalls*, to be essential reading. Readers who know the Palouse will enjoy her vivid descriptions of Spokane and eastern Washington. Indeed the entire book seems to cast a golden-red glow on the lives of its struggling main characters, Cerise and Anna, like the "last ruddy light . . . , burnishing the fields and illuminating the roses, deepening the crimson" in a Palouse sunset.

Hegland (B.A. '79) earns a solid place for *Windfalls* in the tradition of women's quest novels headed by international literary stars such as Margaret Atwood, Doris Lessing, and Margaret Drabble. The double quest of Cerise and Anna will please readers who enjoy strong plots that focus on the characters' confrontations with devastating life events that forever change them. The single mother, Cerise, loses both her beloved son as well as her home, a modest trailer, in a fire after her artistically gifted daughter, Melody, decides to leave home in anger. With her entire world engulfed by smoke, Cerise moves forward, refusing to surrender to the moment. The



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BOOKS, etc.

privileged and comfortable Anna learns painfully that the middle-class demands of marriage and motherhood threaten to extinguish her life as a photographer. When her husband loses tenure in Washington and takes a position in California, she finds herself unable to loosen the ties to her two daughters long enough in this new place to view it through her camera lens.

When they meet accidentally, Cerise is a homeless bag lady named Honey who has found a position in a day care center and reveals extraordinary artistic talent as well as

profound psychological insights into children. Eventually Cerise enters Anna's household as a babysitter and enables Anna to re-emerge as a photographer. But Cerise's journey does not stop here. Anna, as the reader will discover, unknowingly helps Cerise find her daughter through her photography.

By the end of the novel, all the questions seem resolved, at least momentarily, and everyone is happily repositioned. Even Cerise's wandering no longer seems driven by catastrophe. We are left with the confidence that she, too, has found her own "gentle light" in "the mutilated world" that Hegland

has created. Disasters may seem to take away the dreams of the Cerises and Annas, but their innate human creativity, coupled with "the world's rough grace," empowers them to re-find their centers or to build new lives. Their stories of courage in *Windfalls* offer hard-won wisdom to us in this new world in which we find ourselves following Hurricane Katrina and the attacks of 9/11.

For more information, see wsm.wsu.edu/bookstore/alum-fict-books.html.

—Camille Roman, Associate Professor of English, Washington State University

TWO BOOKS BY BRIAN AMES

Head Full of Traffic

Pocol Press, Clifton, Virginia, 2004

Eighty-Sixed:

A Compendium of the Hapless

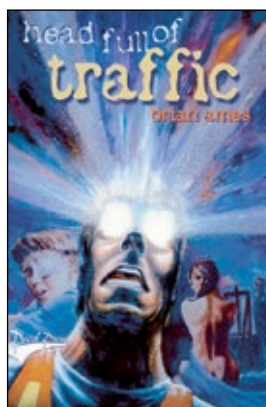
Word Riot Press, www.wordriot.org, 2004

If his two latest short story collections are indicative, Brian Ames '85 is a prolific writer of unsettling talent. Releasing both *Head Full of Traffic* and *Eighty-Sixed: A Compendium of the Hapless* in 2004, Ames packs 22-plus pieces into each collection. Granted, many of the works run only a few pages, but these are stories brief only in word length. Rich language and dense atmospheres are Ames's literary tools, and he manages to convey entire tableaux in single sentences. "He doesn't fully comprehend meter or rhythm, only understands the voltage through his cortex, manifested in sudden spastic knee bouncing, rapid articulation, back and forth, of his head." And thus, the first story in *Eighty-Sixed*, "The Man Who Loves Jimi Hendrix," is a harbinger of the rest of the collection. From story to story, Ames drastically shifts beats, not allowing the reader to predict what thematic notes he will strike next. This discordant quality drives the collection along. A writer sells fake anecdotes to addicts and drunks to recount during 12-step meetings; a modern-day Cyclops is stood up on his wedding day; Ajax, Hector, and Dionysus make appearances. It's as if in many of these stories ancient gods and heroes are manifested as frail humans, unaware of their divinity. Guns and weapons also play a large part in *Eighty-Sixed*. In the story "Physics Package," a man purchases a black market sidewinder missile and discov-

ers it growing like a living thing into an intercontinental doomsday device.

"Van found in this a powerful metaphor for coming miracles." Dinosaurs, dodos, and other extinct creatures are illustrated on the book's cover alongside a hapless human. Ames seems to be saying our continued existence on this planet is far from assured.

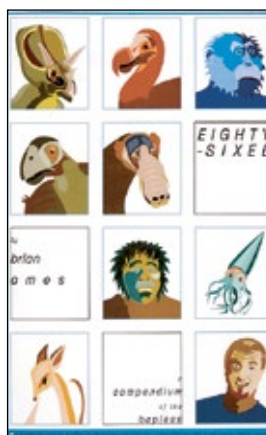
In *Head Full of Traffic*, ostensibly labeled a collection of horror pieces, Ames skillfully adds his own flair to the genre. In "Carnival," a crazed carnie imagines an apocalyptic midway. "Weeb staggers away from the Fun House, swivels that cornpone head when he



hears tearing metal. Carriages of the Octopus rocket into space, occupants trailing one long scream. To his right, up against one of the Port-a-Potties, a carnie's smacking a skank's head with a ring-toss bottle. The glass slowly reshapes the skank's melon with each blow, as if his head were fashioned from children's clay." The savage yet humorous prose sets an intoxicating mood until the reader, like Weeb, cannot distinguish delusion from reality. In many of the pieces in *Head Full of Traffic*, Ames relies a bit heavily on the horrific denouement to close the deal, as in "Istvan the Painter," where a woman is ravished by the eyes of the title character, and realizes she carries his demonic spawn in a forced epiphany: "'Mama,' it seemed to gurgle." Not as psychologically subtle an ending as in, say, Henry James's *The Turn of the Screw*, but effective in what the piece is attempting to accomplish.

Overall, Ames doesn't allow his spectacular plot elements to overtake the conflicts of character nor the line-by-line writing itself, which is always a hallmark of fine fiction. It's obvious Ames is passionate about language, and between both collections he skillfully manages to entertain and disturb at the same time.

—Lee Minh McGuire '03
Lee Minh McGuire is working on an M.F.A. in fiction writing at the University of Illinois at Urbana-Champaign.



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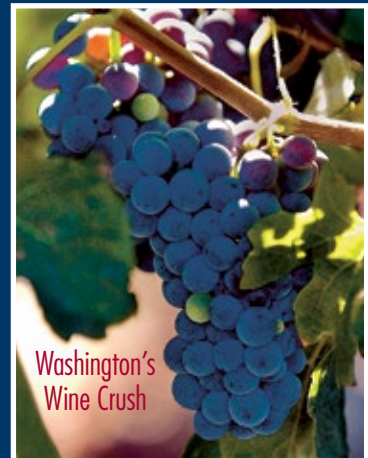
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2004-2005 ANNUAL REPORT



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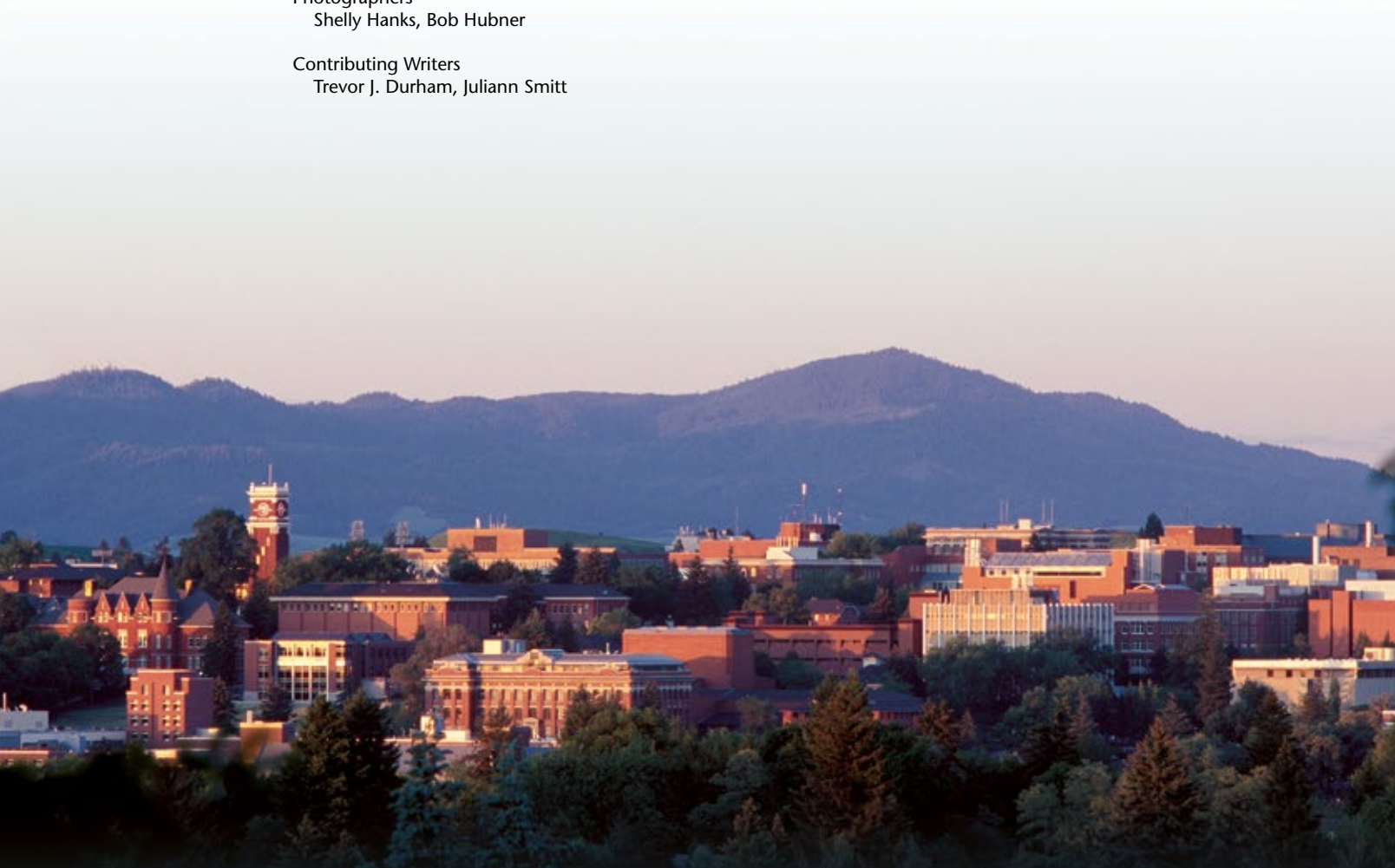
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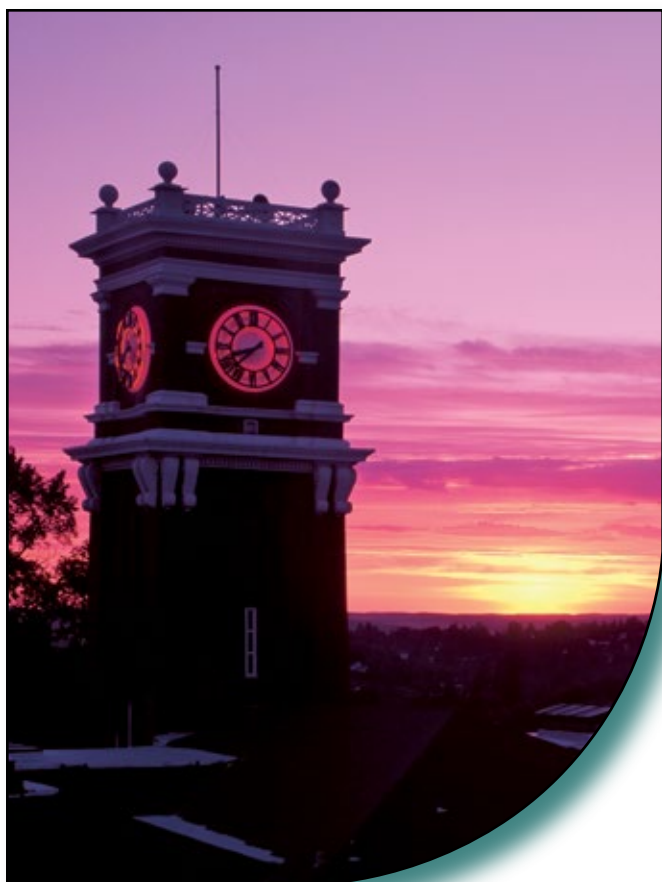


Table of Contents

Message from the WSU Foundation President and Chair	64
Message from President V. Lane Rawlins	65
World-Class Faculty	66
Scholarship Opportunities	68
Cutting Edge Research	70
Building Cougar Pride	72
Private Support	74
Financial Report.....	75
Board of Governors/Trustees	77



Transforming Our Future

at Washington State University



WSU Foundation President
Len Jessup



WSU Foundation Chair
Mikal Thomsen

Through the implementation of the 5-year strategic plan under the leadership of President V. Lane Rawlins, Washington State University established several ambitious University-wide benchmarks and goals. Among other things, these goals addressed enhanced undergraduate education, student scholarship, development of cutting-edge research, faculty retention, and diversity among faculty and students.

Private support is critical to achieve these ambitious goals. As demonstrated in fiscal year 2005, it can also be a good indicator of success; 2004–05 ranked among the best years in the history of the WSU Foundation. More than \$49.4 million in private gifts and grants, coupled with significant

growth of the endowment to more than \$231.8 million were among many highlights for the Foundation during the past year.

The WSU Foundation thanks all the generous alumni and friends who provide the fuel that WSU needs. We look forward to working with each of you in order to take the WSU Foundation to the next level.

Go Cougs!

Len Jessup

Leonard M. Jessup
President
WSU Foundation

Mikal Thomsen

Mikal Thomsen
Chairman
WSU Foundation,
Board of Governors



WSU President
V. Lane Rawlins

This is an exciting time to be a Cougar. Washington State University is now entering the third year of a 5-year strategic plan, and as you will read in this annual report, we are seeing the fruits of our labor.

As exciting as our present successes are, the University is poised to achieve much more over the next several years. During this time, we will embark on a series of initiatives that will allow us to expand the reach of scholarships and fellowships, attract and retain the world's best faculty, conduct life and industry-changing research, and construct the state-of-the-art facilities necessary to accomplish our educational and research goals.

It cannot be overstated how important the role of private support is to the vitality and success of WSU. More and more, as tuition rates increase and state funding decreases, private contri-

butions are called upon to cover the widening gap. Over the years, gifts large and small from our generous donors have been the driving force in creating the world-class university we have today.

We know you share Washington State's passion for excellence and commitment to quality. WSU's strategic direction is ambitious and we will need your help to achieve our goals. But together, with your leadership, influence, and personal investment, we will realize the potential for Washington State University as a top-tier research university.

Sincerely,

A handwritten signature in black ink, reading "V. Lane Rawlins". The signature is written in a cursive, flowing style.

V. Lane Rawlins
President, Washington State University



Transforming Our Future *Through World-Class Faculty*

Dr. Behrooz Shirazi is an international expert in high performance computing. While serving as chairman of the Computer Science and Engineering Department at the University of Texas at Arlington, Dr. Shirazi set a course to boost the department's standing to be ranked among the top programs in the country. Within five years, the department's research budget had doubled, and the university became the founder of one of the world's leading conferences on pervasive computing and communications.

As the newly appointed director of the School of Electrical Engineering and Computer Science (EECS) and holder of the second Huie-Rogers Chair in Computer Science, Dr. Shirazi is determined to make a similar impact at Washington State University.

Endowed faculty positions like the Huie-Rogers Chair often make a significant difference when attracting the best and brightest, like Dr. Shirazi, to the University.

"Dr. Shirazi accepted this position for many reasons, including the high potential and bright future of the School of EECS, its relatively young and energetic faculty, and its already established reputation," says Anjan Bose, former dean of the College of Engineering and Architecture and chair of the search

committee that hired Dr. Shirazi. "That the position is an endowed chair also made a difference for Dr. Shirazi. It will allow him to continue his research and scholarly activities even while he takes on a big administrative job."

Washington State's endowed faculty positions create opportunities and rewards for the top instructors and researchers in their respective fields, providing the additional resources needed to keep the University moving forward. By growing the number of endowments to retain and recruit renowned faculty and researchers, WSU is assured of its place among the very best public undergraduate research institutions.

During fiscal year 2004–2005, more than \$1.3 million was distributed in support of endowed chairs and professorships at WSU, providing more than 51 faculty across the University with the necessary resources to continue their ground-breaking research.

"There is a transformative effect and an influence that is great. Those extra dollars are critical," explains Fran McSweeney, vice provost for faculty affairs. Distinguished professorships and endowed chairs supplement existing salaries, provide "bridge funds" for new and ongoing research, enable travel to professional conferences, and



provide stipends to hire research assistants. Faculty members appointed to endowed positions demonstrate best practices and excellence in service, improving the quality of a WSU education, she adds.

Endowed positions also advance the reputation of research and scholarship at Washington State and give the University the worldwide visibility that attracts top educators and quality graduate/professional students and

undergraduates, according to McSweeney.

President Rawlins agrees. "Experience shows that excellent faculty attract other excellent faculty and high-achieving students."

"The more endowed faculty positions we have at WSU," says McSweeney, "the better WSU will be."



"Experience shows that excellent faculty attract other excellent faculty and high-achieving students."

—President V. Lane Rawlins

Transforming Our Future

Through Scholarship Opportunities

Washington State University junior Vanessa Alford plans to own her own restaurant or record store someday. As a business entrepreneurship major she is well on her way to becoming a successful businesswoman. But her career goals, and even her ability to attend WSU, may not have been within reach if not for the scholarship support she now receives.

Vanessa earned a 3.98 GPA at Arlington High School in Arlington, Washington, where she took part in numerous activities, including tennis, National Honor Society, Key Club, Future Business Leaders of America, Spanish Club, Junior Achievement, and Running Start. For her efforts, Vanessa was named a Crimson Regents Scholar and is a recipient of a Glenn Ter-



rell Presidential scholarship, National Merit scholarship, and a Washington State Scholar scholarship.

"These scholarships made it possible for me to attend college and definitely made WSU much more attractive to me," says Vanessa. "It would have been difficult for my family to take on enough loans for me to afford college at all if we hadn't had the help of scholarships."

Sophomore Clayton Byers also has lofty goals following graduation. A mechanical engineering major with a minor in aerospace studies, Clayton plans to become an Air Force pilot before transferring to the civilian aviation industry. Like Vanessa, scholarships play a significant roll in his ability to pursue his educational and career goals.

A native of SeaTac, Washington, Clayton earned a 3.8 GPA and was involved in leadership, track, and band at Mt. Rainier High School. He is a recipient of the Academic Excellence Award, the DeVleig Scholarship in

Electrical Engineering, and the Harold Frank Scholarship in Electrical Engineering. Clayton also receives a scholarship through the Air Force ROTC program.

"Without scholarships, affording college would put a heavy burden on my family," says Clayton. "I would probably be attending a community college, working my way through school, and living at home."

Since 1970, annual in-state tuition for undergraduates at WSU rose from \$432 to \$5,506 per student in 2005–06. Tuition increased more than 50 percent during the last five years alone. During fiscal year 2005, the University awarded 4,762 students a total of 6,825 academic scholarships. The average award per student was \$2,891.

"The dedicated alumni and friends who continue to support WSU's scholarships make a real difference in the lives and futures of thousands of students every year," says President V. Lane Rawlins.


"I am indebted to the donors who

make these scholarships possible," says Clayton. "They have opened a world of opportunities for me."

Vanessa agrees. "Without the generosity of donors and the scholarships they support, I would not be at WSU and my goals would likely be very different from what they are today."

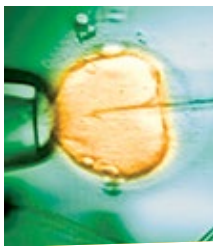
With the estimated total cost of attending WSU during the 2005–06 academic year, including tuition, room and board, books, and miscellaneous expenses, topping \$15,000 for in-state-resident undergraduates, scholarship support is more critical than ever before.

"As tuition and other costs continue to increase, raising the bar for scholarship support has become a top priority for our University," says Rawlins. "It is imperative for the health of this institution and for the future of our state that we provide deserving, qualified, and talented students—regardless of their financial background—access to the world-class opportunities at Washington State."



"Without the generosity of donors and the scholarships they support, I would not be at WSU and my goals would likely be very different from what they are today."

—Vanessa Alford, WSU Junior



Transforming Our Future

Through Cutting Edge Research

In 1988, R. James Cook led the team of researchers at Washington State University who made the first field test of a genetically modified organism in the Pacific Northwest—a microorganism for control of root disease in wheat.

Seventeen years later, Dr. Cook's WSU colleagues continue to discover new ways to ensure a healthy crop. Using the tools of biotechnology, teams of researchers are developing high-yield, disease-resistant strains of wheat. Their efforts improve the quality of crops and profitability of producers in the state's \$525 million wheat industry, saving millions of dollars in environmental costs as a result of decreased pesticide use and soil erosion.

"The current focus on disease resistance and agronomic traits is only the beginning. Biotechnology will set new standards in what consumers can expect in quality of food products for health and nutrition," Dr. Cook points out. Beyond improvements in food and food production systems, he says, "we can expect major advances in the use of crops to produce specialty proteins for industry, medicine, and, ultimately, biofuels."

Agriculture, genetics, veterinary medicine, microbiology, pharmacy, and bioengineering are prime examples of industries and research programs

touched by biotechnology research at WSU. "Biotechnology is an institutional strength," emphasizes Jim Petersen, vice provost for research. "Biotechnology research has an economic impact of \$1.5 billion, which makes lives better and creates jobs and businesses for Washington state. The impact made by WSU biotechnology research is evident in the large number of companies commercially applying, producing, and/or delivering the outcomes of our research."

According to the Office of Research, 10% of the \$175 million per year in total research expenditures at WSU is supported by non-governmental sponsors such as private foundations, businesses and corporations, and individuals.

Major growth in biotechnology-related research at WSU occurred during the past decade when research centers, academic programs, and University-wide degrees were created in this field. Established in 2003, the Center for Integrated Biotechnology took WSU's interdisciplinary research to the next level. Since its inception, the center has experienced steady growth in the number of participating faculty, along with increases in funding for its administrative function and core laboratories in genomics, proteomics, mo-



molecular biology, bioinformatics, and plant transformation, notes Director Michael Skinner.

One hundred eighty-five faculty from 22 departments participate in the center. The center's annual report for 2004–2005 highlights the growth in research grants and awards received by participants—a total that surpassed the \$34 million in extramural support awarded to investigators in 2003–2004. Additionally, patent activity among faculty is up over the previous year, Skinner says.

President V. Lane Rawlins points to the newly constructed 93,000-square-foot Plant Biosciences building on the Pullman campus as the cornerstone of an interdisciplinary research and

education complex that will sharpen WSU's expertise in health and life sciences, safe and secure foods, and environmental and natural resource sciences.

"These buildings, and WSU's commitment to biotechnology, are an investment that will pay immeasurable returns to the state's economy, the students, research, and the University," Rawlins maintains. "It is imperative for everyone in the state that WSU stays on the cutting edge of biotechnology."



Transforming Our Future

Building Cougar Pride

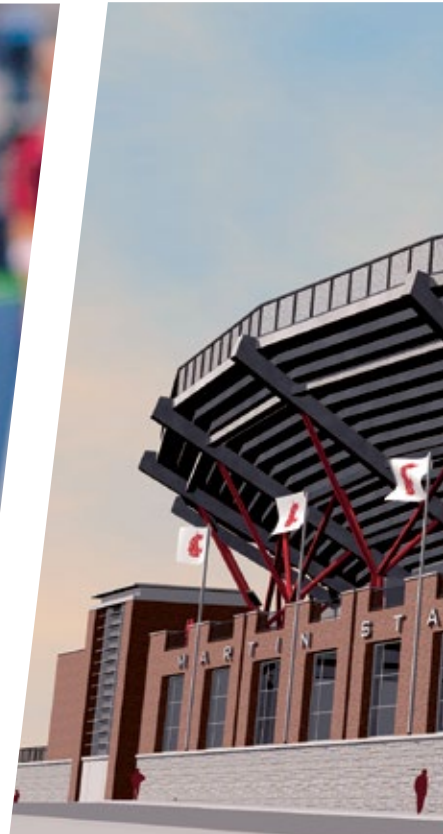
Butch leads the Cougar football team onto the field for its 97th meeting with its Apple Cup opponent, the Washington Huskies. The final game of the 2004 season is about to begin and from where he stands along the sideline, Director of Athletics Jim Sterk looks at Martin Stadium's gathering crowd and sees more than another season of Cougar football coming to a close—he sees the future of WSU's storied athletic program in a panorama before him.

Since its last renovation in 1979, Martin Stadium has been a comfortable home for the Cougars, providing for the needs of fans, players, and coaches for more than 26 years. But the ever-changing national landscape in collegiate athletics, coupled with record

attendance created by unprecedented success on the field in recent years, has brought to light the facility's limitations in addressing the needs of the football program and its growing fan base.

Increased facility demand is a good problem to have, according to Sterk. "We are experiencing growing pains—something that our Pac-10 peers at Oregon and Oregon State have also experienced and addressed in recent years. The renovation of Martin Stadium is critical if Cougar football is to continue to be successful, not only in the conference, but on the national stage."

The athletic department is currently in the programming and conceptual design phase of the renovation process. "This exercise will help us deter-



"We want to elevate the game day experience in Pullman to match Washington State's 'World Class. Face to Face.' reputation and become the envy of our visiting competition."

—Jim Sterk, Director of Athletics

mine what we need and what we can construct on the Martin Stadium site," says Sterk.

In addition to expanding the general and premium seating to accommodate additional Cougar fans and generate much-needed revenue, the completion of all phases of the renovation will improve access to and from the stadium, reduce congestion on the stadium concourses, provide better concession areas, and create adequate restroom facilities.

"We want to elevate the game day experience in Pullman to match Washington State's 'World Class. Face to Face.' reputation and become the envy of our visiting competition," Sterk said.

"Making these significant improvements to our facility will help Cougar athletics remain competitive and will assure our fans, players, and coaches a memorable game day experience for decades to come."

"Capital projects, such as the stadium renovation, golf course expansion, or construction of a performing arts center are about more than just improving extracurricular facilities at Washington State University," says President V. Lane Rawlins. "These facilities will play a critical role in fostering a world-class campus experience for our students, faculty, and alumni on the same level as the nation's best research universities. It's about building Cougar Pride."



Transforming Our Future

Through Private Support

By supporting Washington State University's world-class students, faculty, research, and programs, the University's 47,159 donors in fiscal year 2004–2005 helped to ensure that the University will continue to transform the future of the state, nation, and world.

As a result of the generosity of donors, alumni, and friends, the WSU Foundation raised \$49,468,884 in gifts and private grants, and an additional \$4,000,162 was pledged during fiscal year 2004–05, which ended June 30, 2005. This represented the second-best year in the 26-year history of the WSU Foundation!

The WSU Foundation's endowment finished the year at \$231.8 million, an increase of \$27.2 million—or 11.9 percent—over the previous year's total. Gifts to the endowment during fiscal year 2004–05 totaled \$11.8 million,

creating twenty-nine new endowed scholarships, six endowed graduate fellowships, and one endowed professorship/chair.

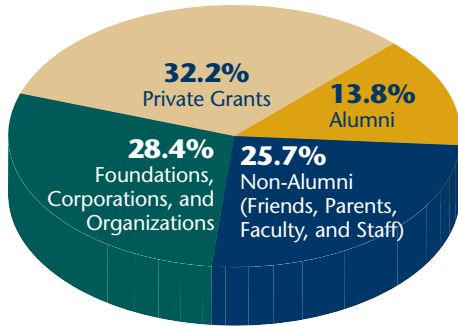
For a third year in a row, the President's Associates—made up of individuals and organizations making annual gifts of \$1,000 or more—set a new record with 5,036 members, an increase of more than 5.1 percent over the previous fiscal year. President's Associates gifts totaled \$29,104,107, representing 58.8 percent of the total private support during fiscal year 2004–2005.

Gifts of any size represent an investment in WSU's traditions, present excellence, and future direction. Thank you for your commitment to excellence and for your investment in higher education at WSU.

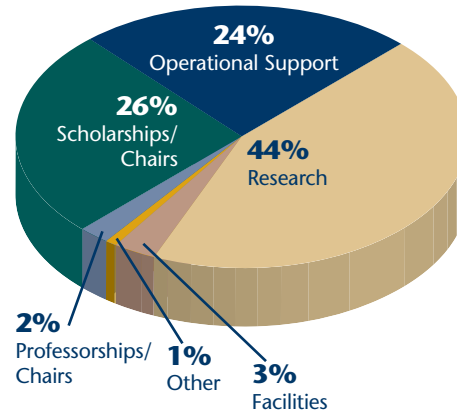
2004–2005 Highlights Include:

- **Gifts totaling more than \$4.3 million** from the estate of Herb and Margaret (Peg) Eastlick to benefit future students and faculty. After their deaths—Herb's in 2002 and Peg's in October 2004—their estate was apportioned to the Herbert L. Eastlick Scholarship, the Margaret G. Eastlick Regents Scholarship, and the Herbert L. Eastlick Professorship. Including the estate gifts, their lifetime gift total is more than \$6.6 million—the fourth-largest individual lifetime contribution in the University's history.
- **A commitment of \$3 million** from Harold and Diana Frank to establish the Harold Frank Engineering Entrepreneurship Institute in the College of Engineering and Architecture. The institute will give students the tools and experiences necessary to pursue their entrepreneurial goals by sponsoring programs designed to bring the ideas of student innovators to the marketplace and by providing support for mentors and resources to help students create innovative products within multidisciplinary teams.
- **An unrestricted gift of \$1.1 million** from the estate of Richard and Joyce L. Smith to WSU's Greater University Fund. Gifts to the Greater University Fund are distributed at the president's discretion to support the greatest priority areas of the University.
- **A gift of \$275,000** from Scott E. Carson, his wife Linda, and their family to create the Carson Professional Development Center in the College of Business and Economics. The center will provide thousands of WSU students with professional and leadership development opportunities—including mock interviews, professional presentation practice, and coaching—to supplement their academic programs and to prepare them for top internship and career placements.

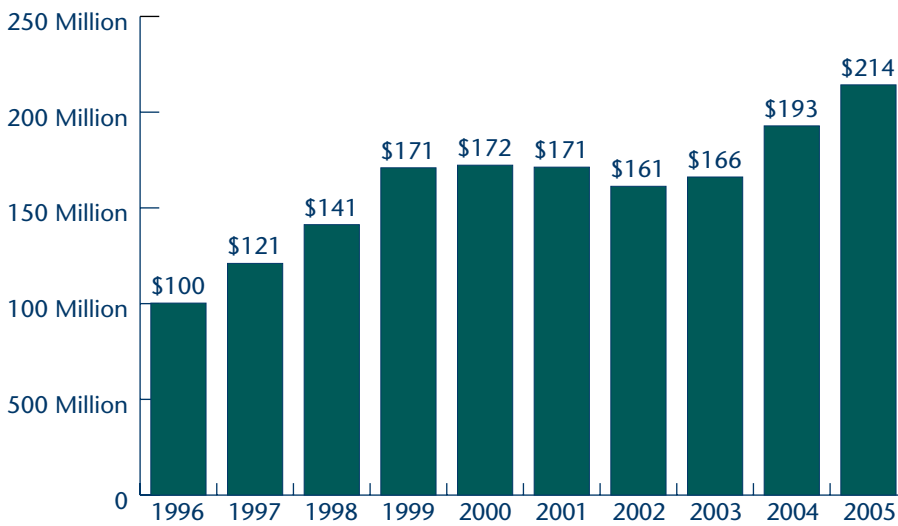
Gifts and Grants
by Source



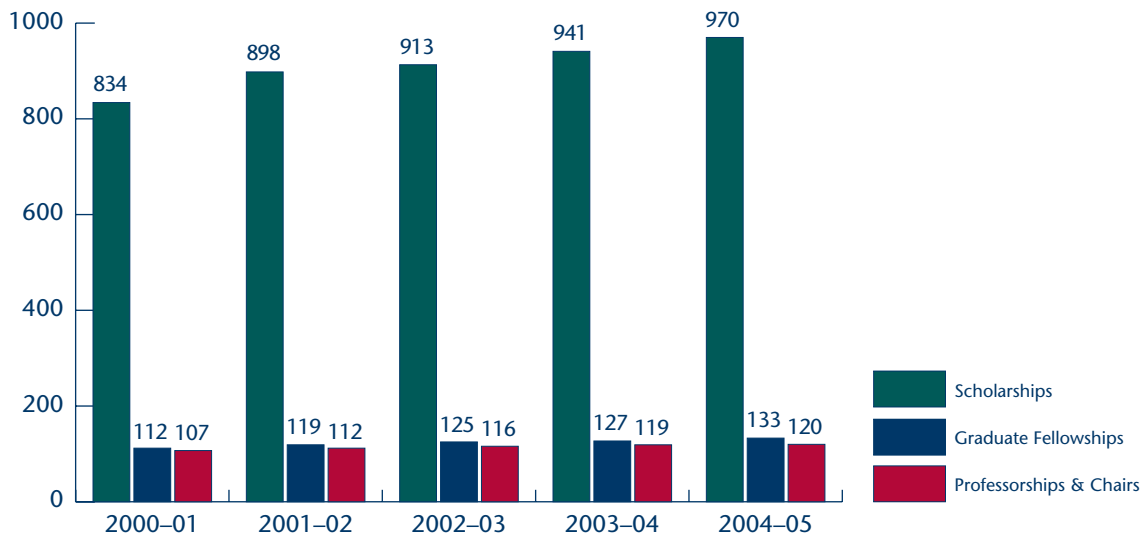
Gifts and Grants
by Designation



WSU Foundation Net Assets, 1996–2005



Growth in Endowed Scholarships,
Fellowships, and Professorships

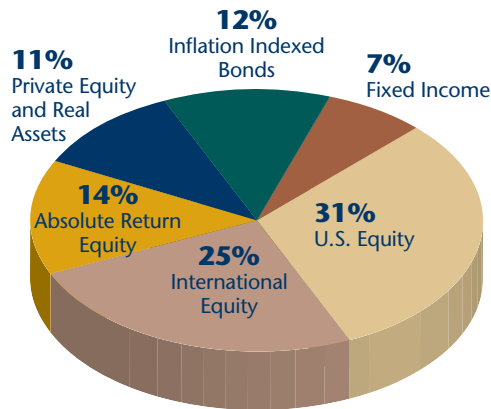


Endowment Investment Strategy

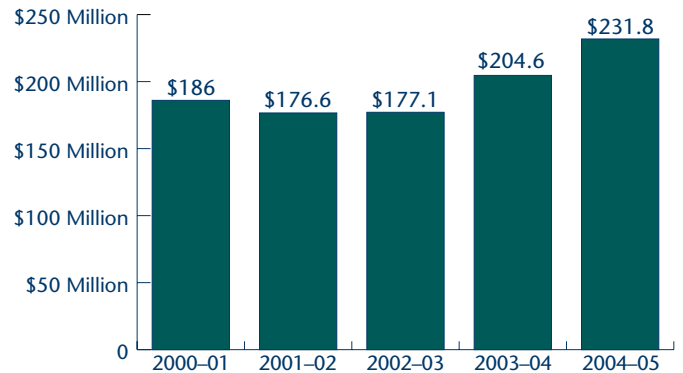
The WSU Foundation's endowment supports the educational mission of Washington State University by providing a reliable source of funds for current and future use. The income/payout from each endowment fund is used for the purpose established by the donor in the gift use agreement. Individual endowment funds are commingled for investment purposes to maximize returns and minimize investment and administrative costs.

The WSU Foundation engages a number of professional managers who are assigned specific investment mandates for equities, fixed income, and alternative investments to help ensure the endowment's portfolio generates a total annualized rate of return, net of fees and spending, that is greater than the rate of inflation over a rolling five-year period.

**Endowment Net
Asset Mix, 2004–05**



Endowment Value, 2000–05



Endowment Distribution

The Foundation's spending policy governs the rate at which funds are released to fund holders for current spending purposes. This policy is based on a target rate set as a percentage of a rolling market value. The current rate is 4 percent for fiscal year 2004–05. The WSU Foundation Board of Governors reviews and approves this rate annually. Investment returns earned in excess of the approved spending rate are retained in the endowment principal to protect against the effects of inflation and to allow for growth. During periods of investment market decline, endowment distributions for newer funds may, if needed, reduce the fund value to ensure predictable funding is available for individual endowed fund program activities and objectives.

**Gifts to Endowment and
Investment Returns, 2000–05**

	Total Gifts to Endowment	Endowment Investment Return
2000–01	\$14,961,561	-2.9%
2001–02	\$11,225,089	-4%
2002–03	\$8,509,045	+2.9%
2003–04	\$10,870,313	+15.8%
2004–05	\$11,812,596	+9%

All totals as of June 30, 2005

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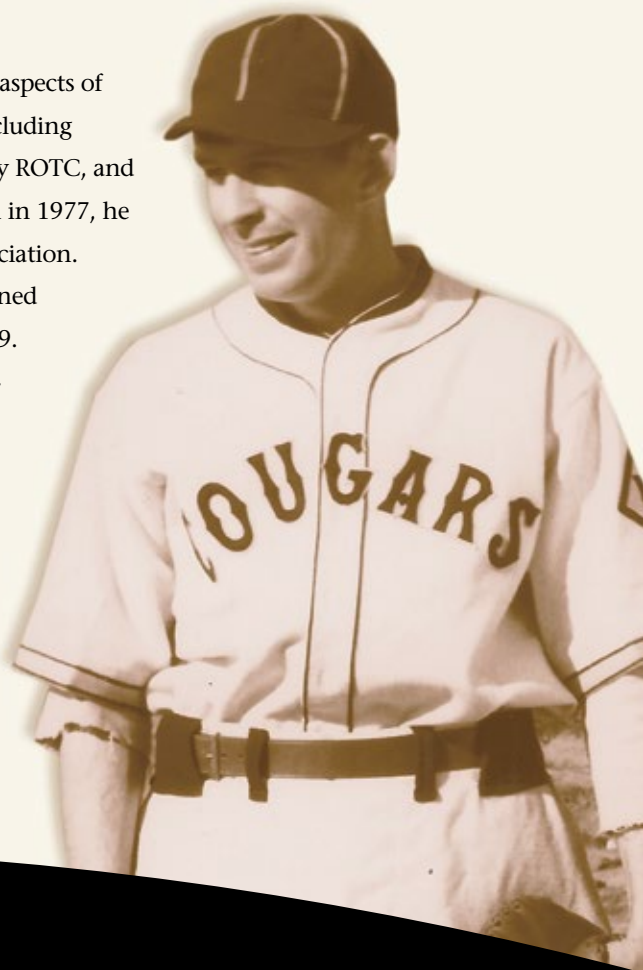
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WHAT'S YOUR LEGACY?

Joe Caraher ('35 Ed.) was involved in many aspects of student life at Washington State College, including Crimson Circle, Lambda Chi fraternity, Army ROTC, and the varsity baseball team. In 1947, and again in 1977, he served as president of the WSU Alumni Association. His love, dedication, and loyalty to WSU earned him the Alumni Achievement Award in 1979. He spent more than 50 years in the newspaper profession.

With smart estate planning, Joe—who had given steadfastly to WSU for each of the previous 44 years—created his WSU legacy through a bequest to his favorite University programs. Although he passed away in 2004, his legacy continues to provide for future Cougars.



The WSU Foundation provides a FREE planning kit. For more information about creating your legacy, contact the Gift Planning Office at 800-448-2978, gift-planning@wsu.edu

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