

CONNECTING WASHINGTON STATE UNIVERSITY, THE STATE, AND THE WORLD • SPRING 2003

Washington State

m a g a z i n e



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STORY

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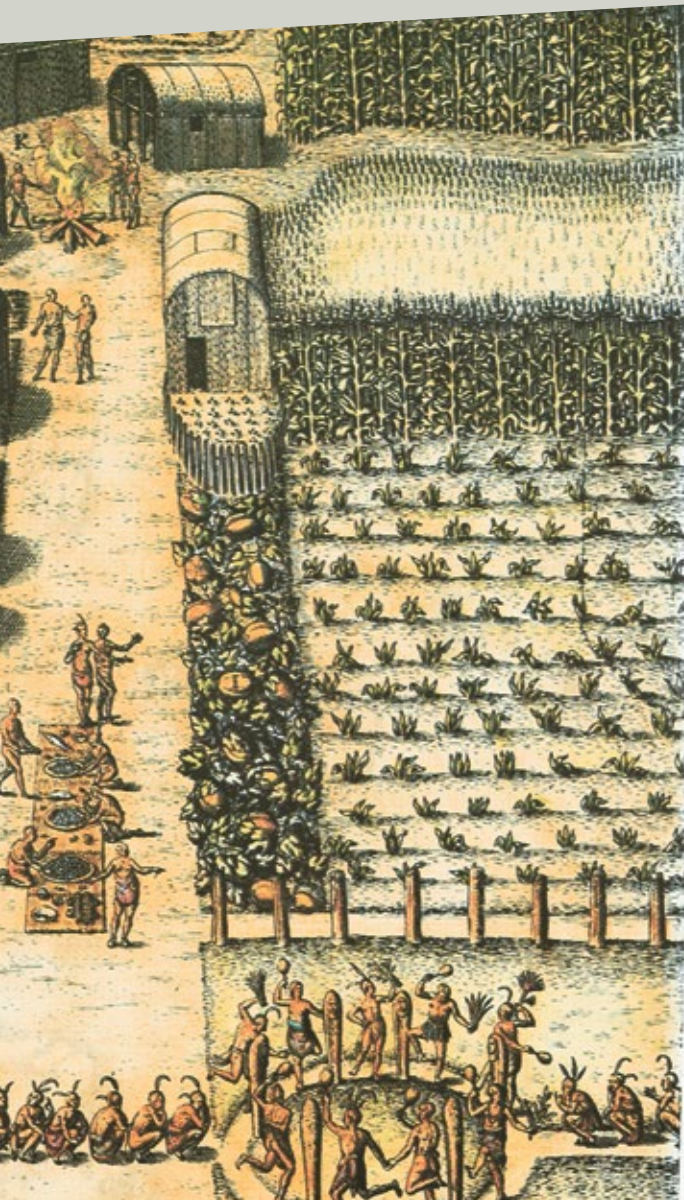
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WashingtonState

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VOLUME 2, NUMBER 2, SPRING 2003

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

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

Board of Regents, Washington State University ©2003.

Views expressed in *Washington State Magazine* are those of the authors and do not necessarily reflect official policy of Washington State University.

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

TO SEND THIS MAGAZINE: *Washington State Magazine* is distributed free of charge to graduates, donors, faculty, and staff of Washington State University. With a gift of \$25 or more, you can have WSM sent to someone who is not currently on our mailing list. For details, go to <http://washington-state-magazine.wsu.edu/send.html> or contact Sherri Hemphill at 509-335-1686, hempfill@wsu.edu

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LETTERS

Interpretation not necessarily fact

Dear Editor:

The recent article in "Panoramas" sounds a familiar alarm about

the dangers of manmade greenhouse gases. The relationship between carbon dioxide and global warming is a subject that seems to have only one axiom, and that is that carbon dioxide increase in the atmosphere *causes* global warming. The contrary position that rising temperature causes an increase in carbon dioxide in the atmosphere gets absolutely no publicity.

This position is not too hard to support, and is something most of us have observed when we open any carbonated beverage that hasn't been properly refrigerated. A warm soft drink will often overflow its container while a colder drink won't. The explanation for this is simple—you can dissolve more carbon dioxide in cold water than you can in warm water. So if you take the largest carbon dioxide sink on the planet (ocean water) and warm it up just a little bit, you increase the atmospheric concentration of carbon dioxide in a virtual instant.

Global temperatures have been rising slightly during the last 150 years. The assumption that the carbon dioxide spawned by the industrial revolution has been the cause of this temperature increase is a popular belief that may be more myth than fact. . . .

The research done by Richard Gill is interesting and well reported. However, interpretation (that is, hypotheses or theories) should not be reported as fact, to wit ". . . the increase has been especially rapid in the last 150 years because of the industrial revolution and land cultivation." At least a portion of the increase is due to other factors such as ocean warming, and to imply otherwise is to oversimplify a complex balance in nature. I urge you to guard against reporting that represents interpretation as fact.

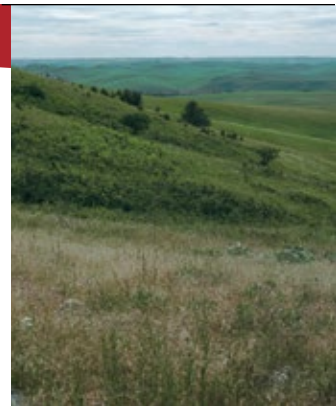
Dale M. Short, *Geology '73*

Cougar Logo

I am a big Cougars fan. I was wondering what the logo on the football helmet says. I thought it said "WSU," but my friend says it's "WSC," the "C" being for Cougars. Thanks.

James Isom, *Kansas City, Kansas*

The cougar-head logo was created in 1936 by Randall Johnson ('38 Fine Arts), then a student employed as a sign painter at Washington State College. His boss, Fred G. Rounds, superinten-



ROBERT HUBNER

dent of buildings and grounds, made sure that the official designation "State College of Washington" was included on campus signs, vehicles, and other college property. He asked Johnson to come up with something shorter and less cumbersome to convey the same message in a more attractive style. Within an hour of the request, Johnson presented his boss with the now famous cougar-head symbol. The original logo incorporated the letters, W, S, and C in the shape of a snarling cougar, the school mascot. When Washington State College became a university in 1959, Johnson redesigned the "C" in the cougar's jaw to a "U."

After graduating from WSC, Johnson became advertising director for the Washington Water Power Co. in Spokane, and held the position for 38 years, with time out for military service during World War II. He retired in 1978 and still resides in Spokane.

Deeter Well Respected

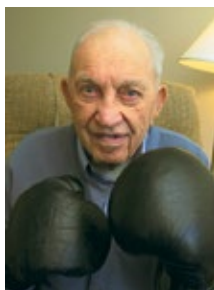
Dear Editor:

I met Ike Deeter [Nov. 2002 WSM] when I was an aviation cadet at St. Mary's Pre-Flight School in Moraga, California during WWII. At the time I had no idea that I would ever be a student at Washington State College. He coached boxing, which was required of all cadets. Ike took me aside and told me to hold my hand as if I were carrying a pitcher of water and, even though I was left-handed, to box right-handed so my strongest fist would be forward. When you hit your opponent with your left fist, he will think you've got a better one in reserve and will step back.

At St. Mary's Ike was well respected, as was Buck Bailey [WSC baseball and assistant football coach], who was also on the staff.

In the fall of 1947, I transferred from San Jose State College to WSC to take forestry. Several fraternity brothers were on the boxing team, but none had boxed before. At the time, Ike headed up an intramural boxing program. When he saw students with boxing potential, he moved them up to the varsity. One fraternity brother made the team. When the University of Wisconsin came to Pullman, he beat the national champion in an upset that was no surprise to Deeter or him, as he was well coached.

Clayton Wray '50
Lummi Island, Washington



Ike Deeter

ROBERT HILBNER

Dear Editor:

I took a boxing class from Ike Deeter during the fall semester 1955 and always considered him one of my better instructors at Washington State.

I remember him well, while other instructors have faded from my mind. He assumed you knew nothing and worked up from there. He taught conditioning exercises, and exercises that improved coordination and reflexes, as well as the actual boxing.

Besides teaching me to keep my elbows pulled in, he also taught me to keep my weight on the balls of my feet and how to move my feet. Now I am 66, and younger women tell me I am a good dancer. Most of them don't know I learned the footwork from a boxing coach.

Fred E. Camfield '58
Vicksburg, Mississippi

Camfield ('58 Civ. Engr.) is secretary general, International Association for the Physical Sciences of the Oceans of the International Union of Geodesy and Geophysics in Vicksburg.

Dear Sir:

I [Glenrose Gleason] am writing this letter for my husband, Harry D. Gleason.

I just finished reading the winter issue of WSM. I was interested in the article and picture of Ike Deeter. I remember him being around the gym when I was there from 1931 to 1935. Like him, I didn't think I would live to be 90, but I am still here. I think it was all the running up and down the Pullman hills that made me so healthy.

I enjoy your articles about the 4-H clubs in Washington. I was active in the 4-H as a boy. Later on I was an extension agent in Whatcom, Island, and Skagit counties. I don't think the college as a whole realizes what an impact the 4-H [had on] it. In Whatcom County alone we had 60 boys' and girls' 4-H clubs with over 500 members. The clubs were helped by 60 4-H adult leaders, who made it possible for many young people to have contact with the college extension service and opportunities to visit the college.

One of my fondest memories was being able to go to Pullman on the train from Chehalis and being able to see the college. I never turned back until I graduated in 1935. Then as an extension agent, I realized how valuable it was to work with the 4-H clubs and leaders for 13 years.

When I left for college in 1931, all I had was a \$100 scholarship from the Union Pacific and \$40

in my pocket. Needless to say during the depression I had some hard times, but by batching with other boys and doing our own cooking we did graduate!

Harry D. Gleason '35, Olympia

WSU Veterans Memorial

The photo of the WSU Veterans Memorial, page 76, Winter 02-03 WSM, is great. Are there names on it from the Gulf War? I know of at least one WSU grad, Eric Hedeon, who died in the conflict. He was a member of the Phi Gamma Delta fraternity and a good friend. If he is the only one from that conflict to die, he still deserves to have us remember him along with those from WWI, WWII, Korea, Vietnam, and any other conflict our nation has been involved in.

If you could look into how the memorial is updated I would appreciate it.

Were any WSU grads killed in the terror attacks of 9/11?

JO1(SW) Todd Hack '90
NAVAIRES Whidbey Island, Public Affairs Officer

Air Force 1st Lt. Eric Hedeon ('87 Arch.), 27, was the lone known WSU casualty of the Persian Gulf War. He died February 5, 1991, aboard a B-52 bomber that went down in the Indian Ocean after apparently losing an engine. He was the plane's electronic warfare officer. Three of six crew members were rescued, and two others were missing after the plane crashed while returning from a bombing mission to the tiny island of Diego Garcia 2,000 miles south of the Persian Gulf. Hedeon came to WSU from Wenatchee and received his commission via the AFROTC program. He had been on active duty three years.

Retired WSU registrar David Guzman chaired the WSU Veterans Memorial Committee. He reports Hedeon's name is on the circular plaque shown in the photo. The names of more than 300 WSU war dead are listed on the various plaques at the WSU Veterans Memorial. Names will continue to be added to plaques, but not to the circular plaque.

Hedeon's father, Gerald, an Air Force pilot in Korea, and his mother were present at the dedication of the memorial on Veterans Day 1993. To Guzman's knowledge, no WSU casualties were reported in the terrorist attacks of September 11, 2001.



PANORAMAS

When the Cougar football program was at its bleakest, he was at his best.

THERE'S NO GIVE-UP IN JASON GESSER

DARKNESS HAD DESCENDED on one of the nation's most fabled football stadiums, but down in the north end zone, there was only light, sweet light. It seemed to spark from the synergy between several thousand exuberant Washington State University fans at the Rose Bowl and the smile on the face of the most successful quarterback in the history of the school.

And they chanted buoyantly and clapped between the cheering: "JAY-son GESS-er . . . JAY-son GESS-er . . ."

Yes, there may have been better quarterbacks than Jason Gesser at WSU.

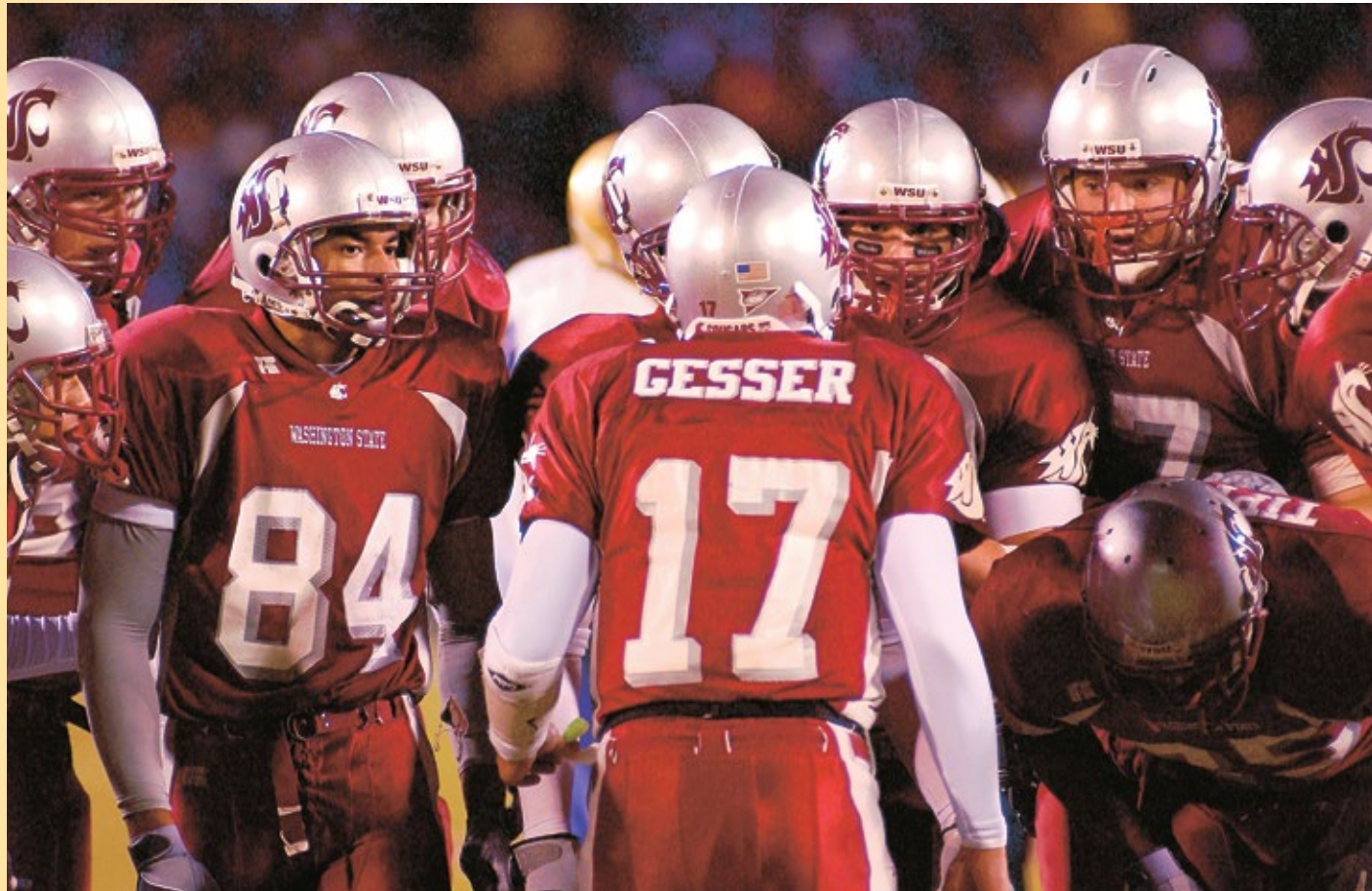
Jack Thompson was a prototype of his era—big, strong, able. Timm Rosenbach could beat you throwing and running. Mark Rypien would become a Super Bowl MVP. Drew Bledsoe's combination of height and arm was almost revolutionary, and it took him to a Super Bowl. Ryan Leaf could see everything developing and then strike.

For a combination of being for-

midable and fortuitous, however, none of them matches Gesser, who leaves Washington State as the quarterback who won the most. He had to stay longer than most of them to do it, he had to have good players around him, but Gesser walked out of more stadiums happy than any of his predecessors. He leaves WSU having helped author consecutive double-digit-victory seasons.

He had said the Rose Bowl would do it, that successfully guiding a

Gesser directed the Cougars to 24 wins during his career and shared "Pac-10 Offensive Player of the Year" honors with USC quarterback Carson Palmer.



ROBERT HUBNER

team to the best bowl game would fulfill all his goals. And now, after WSU's 48-27 victory over UCLA [December 7 in Pasadena], a rose clenched in his teeth, a white cap commemorating a Pac-10 championship, his celebration photograph about to grace the sports cover of both the *Los Angeles Times* and *Daily News*, Gesser's race was won.

"When he was young, seventh or eighth grade, he used to set goals for himself," said his dad, Jim, from Honolulu. "The goals he set were amazing."

He wanted to throw 80 touchdown passes in high school. One year he set out to have no interceptions. He threw one.

But WSU fans shouldn't dwell only on the numbers—the 24 victories he started, the school-record passing yards. They should never forget the day he dragged his right leg onto the storied Rose Bowl turf and laid it all out there, just because that's what he does.

"That guy's all heart," said offensive guard Billy Knotts. "There's no give-up in Jason Gesser."

Given the importance and the national stage, Gesser's day might have been the college equivalent of Willis Reed's lamed-legged performance in the NBA finals of 1970, or Kirk Gibson's off-the-bench, bum-wheeled bomb as the Dodgers beat Oakland in the 1988 World Series.

But then, so much about Gesser didn't seem to add up, starting from the time he arrived at WSU. How was a kid from Honolulu going to adjust to life in Pullman?

"I remember when I first chose this place," he says. "Even the people in Hawaii said, 'Why'd you choose Washington State? It's in the middle of nowhere.' My reason was simple enough: I knew this was the right place for me."

He sometimes seemed fragile, but he was always throwing his body at yard-markers, at safeties, at

whatever got in his way. He and others recall his defining moments as late in that freshman season of 1999, when he had a bad thumb but led a team of meager capability to a victory at Hawaii.

On one play, he dove for the chains and in his words, "got cleaned in the ribs." Wincing back to the huddle, he had established a tone. Safety Billy Newman told him that from that moment forward, everybody in the program knew that nothing less than a best effort would do.

He led. He was a rarity in college football, a three-time captain. He walked the walk.

"Just the way he's handled this football team," says offensive coordinator Mike Levenseller. "In every phase, he's a leader. You want a place to stay, you stay with me. You don't have a ride, I will pick you up.

"I think that's his legacy. I'll always be able to use Jason with the younger players in the program now. I'll talk about his commitment level."

In the program's bleakest hours, Gesser seemed at his best. Against a revived Cal team in late September, when WSU's season could have died an early death, he had a dislocated rib, and he threw for 432 yards.

Rien Long's simple assessment of his teammate after the Rose Bowl-clinching game? "He's a hero."

Levenseller says Gesser was unmatched at preparation among the WSU quarterbacks he's been around. It would enable him to establish before the snap what was going to unfold.

Sometimes that would lead him to a terrible, perplexing throw. But that's what happens with competitors—they give it a shot. A couple of times, Gesser made public utterances that were intemperate—the officials cost the Cougars the Oregon game in 2001; something to the effect that they would have

won the 2002 Apple Cup if he'd been able to remain upright. He was indomitable.

In school, he gravitated toward broadcasting. His favorite class was 465, "the best hands-on experience you could ever have," taught by WSU's longtime public-address announcer Glenn Johnson.

It was a newsroom brought to life, in which 12 to 15 students put on the news, sports, and weather.

By the time his senior season began, Gesser had already walked through May graduation ceremonies and was only three hours short of a degree. It provided him the perfect dry run to become a coach, to spend hour upon hour in the film room and looking at formations on the dry-erase board, doing what coaches do.

"I'd say sometimes I should be getting paid for all the stuff I'm doing with them," Gesser says good-naturedly. He estimates his weekly investment—practice, weight room, film study, and meetings—at 45 to 55 hours.

Now, his horizon is wide. He talks about wanting to play pro football. Then he'd like to be a color commentator. And he wants to coach. Is he big enough for pro football?

"I think so," says Jim Gesser. "We're all cheering for Drew Brees [San Diego Chargers] this year. Jason is a little bit smaller, but they're both the same kind of quarterback. Then there's [Jeff] Garcia [San Francisco 49ers] out there. Where'd he come from? Nowhere."

Jim Gesser's son is asked what

part of the football experience has been best, what little slice of it he would like to hang onto.

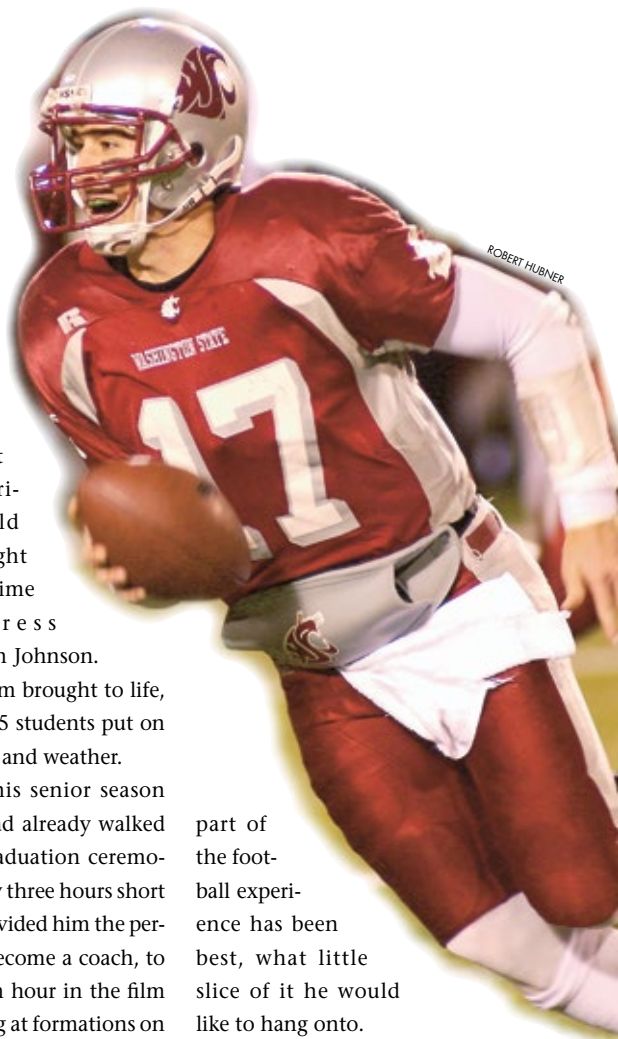
"I think it's playing against somebody, having a big game, where it's hard-fought, and the defense stops them, and we go out to run 'Victory O,'" says Gesser, referring to the kill-the-clock offense.

"You're kneeling the ball down and you know they can't do anything about it. Your sideline is going crazy, your huddle is going crazy, the stadium's going crazy. I'll always cherish that."

Jason Gesser got to do that a lot. But when you recall the victories, also remember the valor. ■

—Bud Withers

Bud Withers ('70 Comm.) is a Seattle Times sports writer. He is the author of two books: Ralph Miller: Spanning the Game, 1990, a biography of the late Oregon State University basketball coach; and BraveHearts: The Against-All-Odds Rise of Gonzaga Basketball, 2002.



IS THE SKY STILL BLUE IN EMERALD CITY?

by Kathie Meyer '92

Now that the economy has stalled, are the Seattle unemployed here to stay, or are they packing the U-Haul?

WHEN I MOVED to Washington's west side, I pursued a different career and landscape. When I was laid off last year, I decided to stay put rather than move where the job market held more promise. I thought I was following my heart, but according to Richard Florida, author of *The Rise of the Creative Class* (New York: Basic Books, 2002), I was following a trend.

Florida, a Carnegie-Mellon economics professor, theorizes that those in "creative" occupations "drive" the economy, that corporate profits and economic growth are highly dependent upon the labor of a variety of workers in inventive occupations. This wide range of 38 million workers includes computer programmers, scientists, professors, artists, designers, architects, and writers. They are society's "thought leadership," designing products and ideas that can be applied in many different ways.

Florida also says cities that understand the "creative class" and work to attract them—and companies that hire them—are more likely to thrive economically, because the "creatives" aren't merely seeking a job and a paycheck. They want a certain quality of life too.

Certainly Seattle has all the qualities Florida believes a city needs to flourish—authenticity, outdoor recreation, diversity, and cutting-edge cultural opportunities. Using Florida's criteria, Seattle ranks fifth behind San Francisco, Austin, Boston, and San Diego.

I wondered whether Florida's theory has stuck now that the economy has stalled. Are the Seattle unemployed here to stay, or are they packing the U-Haul? Are people still moving in despite one of the highest unemployment rates in the country?

Brad Augustine '84, a well-known former Pullman restaurateur turned Seattle real estate developer, says, "I don't see a lot of people leaving Seattle or an exuberant amount of 'for sale' signs. People want to be here for the quality of life, so wonderful because of the natural beauty. Living here is pretty unique because of the proximity to water. [In addition,] we have a top-notch museum and symphony hall and the Marion McCaw opera house is under construction.

"Downtown is an urban village, and that's important. You don't want a nine-to-five downtown; you want active street life all of the time."

Still, one can't ignore the effect of the current recession. According to Dupre & Scott Apartment Advisors, Seattle's Belltown vacancy rate is an unbelievable 10.1 percent. Augustine acknowledges it's probably middle management and the average worker feeling the biggest pinch. "Those are the ones most likely to leave."

Greg Weeks, a '78 Ph.D. who studied under Lane Rawlins, is now director of Labor Market and Economic Analysis at the Washington

State Employment Security Department. Says Weeks, "I think a lot of people that had trouble because of the tech wreck have moved to other locations. There are some high-tech centers still doing well like Austin and the research triangle in North Carolina [Raleigh-Durham ranked no. 6 in Florida's study]. We've heard a lot of anecdotal information indicating displaced Seattle residents have moved on, but we don't have good data to track people as they're laid off and move from state to state.

"However, healthcare is booming, and Microsoft never really had a slowdown. The finance industry and real estate have tended to stay stable."

Augustine and Weeks both believe Seattle will hold its own. Augustine, a fifth-generation Seattleite, remembers a catch phrase from the early 70s, the only time in the last 40 years net migration was negative for longer than one year: "Would the last person to leave Seattle turn out the lights?" He notes, "Seattle is in a different position this time around. This is a little different economic arena. We are not the small city we used to be." ■

FURTHER READING

Liebowitz, Stan. *Re-Thinking the Network Economy: The True Forces that Drive the Digital Marketplace*. New York: AMACOM, 2002. An analysis of the successes and failures of e-commerce, using basic laws of economics.

Kathie Meyer '92 welcomes e-mail from WSU friends and classmates at kmeyer@olympen.com.



Rebuilding a City, Repairing Psyches

"YOU CAN'T PUT THE BLAME on one side. Everybody has made some contributions to the misery."

So thought Rafi Samizay, professor in the School of Architecture and Construction Management at Washington State University, as he stood in what is left of his high school in Kabul, Afghanistan. As he tried to chat cheerfully with students about favorite teachers they shared, the remains of the school teetered around them. Classes are still held in part of the building that was blown up, so students have to gingerly make their way across a second-story, narrow piece of concrete that falls off to nothing. Others walk below. Where there is no building, classes are held in tents on the floor slab.

To whom should he direct his anger? The Russians? Neighboring countries? The Americans? The Taliban?

"I was gone. Maybe I was responsible," he says with a survivor guilt that few can begin to fathom.

Samizay swore he would never return to Afghanistan when, fearful for his life, he and his young family fled the country more than 20 years ago. As a Western-educated professor and former chair of the Department of Architecture at Kabul University, Samizay and others like him were highly unpopular with the Soviets when they invaded. He stayed as long as he could—until the feeling that death was imminent became overwhelming.

For years after he left, he had nightmares about being in Kabul.

Last fall, as the emotions within him raged, he returned to pick up the pieces and rebuild.

At the request of the minister of urban development and housing in

Kabul, Samizay was there to lead a conference on rebuilding the city. Using e-mail and cell phones and with no funding source, he put together a conference with 40 presentations and 250 professionals from the U.S. and several other countries. Given the devastation of the city and the lack of funds, many of his colleagues thought the task would be impossible to pull off.

At the conference, the group tackled the biggest issues the city faces and worked to come up with recommendations. How does one preserve Kabul's distinct heritage in the context of the annihilation of the past 20 years? They also addressed infrastructure needs of the city and housing issues. Homelessness and squatter settlements are a tremendous problem in Kabul. During the 20 years that Samizay was gone, the population of the city has increased from 750,000 to more than two million residents. The group also focused on planning and institutional development, including such things as who is going to pay for rebuilding, and

what kind of organizational and institutional framework will work.

Samizay's particular emphasis has been rebuilding Kabul University. He is working to develop a master plan for the university. His other projects include development of a building for the School of Architecture, housing for faculty on campus, and development of a student activity center on the campus.

The student activity center is an attempt to secularize the university, so students are able to have a life away from fanaticism—an impossible idea during the time of the Taliban.

Students in Samizay's classes often think that the role of an architect is to design a project that someone else has thought of and prepared. He is quick to insist that their more important work is creating ideas first.

"After years of experiencing cruelty, people's psyches are so scarred," he said. "We need to create an atmosphere of hope and use buildings as catalysts to spark other ideas." ■ —Tina Hilding



Rafi Samizay fled his native Afghanistan during the Soviet occupation. Now he is helping rebuild Kabul.

SOLID FOOTING

AH, FOR THE SAFETY and comfort of computer modeling in a cozy office.

Instead, Athanasios Papanicolaou, assistant professor in the Department of Civil and Environmental Engineering at Washington State University, found himself in a small boat in the churning waters of the Tacoma Narrows during a "peak tidal event" taking water velocity measurements, soundings, and underwater pictures of the bottom of the channel.

"I was a little nervous," he admits, recalling his guide's efforts to avoid vortices in the current.

Papanicolaou and graduate student Kyle Strom have been working to determine exactly how much of a scour hole tides make around the caissons that hold up the Tacoma Narrows Bridge. The work is funded by Parsons Inc., an internationally known engineering firm.

The Tacoma Narrows's high winds, stiff currents, and steep banks make bridge building there a challenging engineering feat. The first Tacoma Narrows Bridge, known as "Galloping Gertie," failed in 1940, offering a textbook case on engineering failure. The current Tacoma Narrows Bridge was built in

Tacoma Narrows Bridge



the 1950s and, while in excellent condition, is now over 50 years old. Construction of a new Tacoma Narrows Bridge, parallel to the existing bridge, is set to start in 2003.

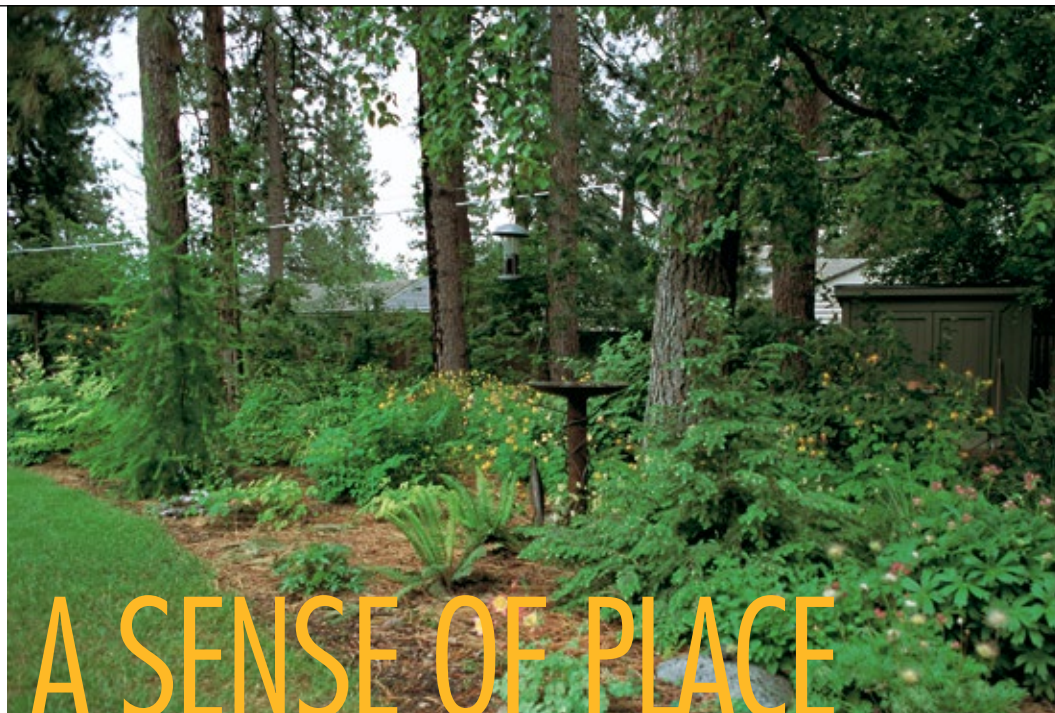
Papanicolaou's work is important for planning construction of the new bridge, including the effects the new bridge will have on the existing bridge. Computer models had shown that the hole created by tides in the area could be as big as 120 feet deep. Papanicolaou's measurements showed a maximum hole of less than 10 feet during the peak tidal event of the year.

Papanicolaou's work included lowering a GPS unit to make sure that the boaters were in the correct locations for measurements. They measured water velocities and changes in the bed bathymetry, using a sonar device. No one had ever taken such measurements, so the researchers were able to determine what size of bed material provides the most stability as the tides flow over them.

The work will also be used in construction of the new bridge to assure that the size of the scouring holes remains within acceptable limits.

Papanicolaou and Strom are now using historical data to study the long-term cumulative effect of tidal movements on the scouring holes around the bridge. ■

—Tina Hilding



TONIE FITZGERALD

A SENSE OF PLACE

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

SOME GARDENERS work to change conditions in their yard to create havens of greenery and blooms with plants that wouldn't grow there otherwise. They amend the soil to suit plants' needs, they water a lot during the summer, and they give added protection to non-hardy plants.

More and more gardeners, though, are saying "No!" to extra tasks, choosing to work *with* nature instead of *against* it. They are using nature as a model in creating yards and gardens that reflect the natural beauty of the place where they live. They're determining the aspects their yards share with surrounding natural areas—sun, shade, rocks,

slopes—and they're choosing plant communities (groupings) that exist in similar natural settings. Perhaps without knowing it, these gardeners are reclaiming their sense of place.

Here in Washington State, gardeners talk about the "wet side" and "dry side" when referring to the two sides of the Cascade Mountains, but our landscape is much more varied than that. Anyone traveling across the state can start at the ocean shoreline and ride through lowland forests, mountain forests, grasslands, and desert all in a matter of hours. As the scenery changes, the traveler is actually passing through different ecosys-

tems. Ecosystems are areas with communities of plants and animals closely related to their physical surroundings.

Washington State is home to nine different ecosystems, all of which can be seen traveling east to west on Highway 20, and all but one can be viewed from I-90.

My Spokane yard is in what's called the Ponderosa Pine ecosystem. This ecosystem extends through much of eastern Washington in areas between 2,000 and 3,000 feet in elevation. It blends at its upper edges with the Mountain Forest system (3,000-5,000 ft.) and at its lower reaches with grassland and sagebrush systems. Winters in

PONDEROSA PINE PLANT COMMUNITIES

UNDERSTORY TREES — quaking aspen, Douglas or Rocky Mountain maple, water birch, hawthorn, choke cherry, Rocky Mountain juniper.

SHRUBS — mockorange, redbud, dogwood, Oregon grape, wild rose, currants, thimbleberry, oceanspray, ninebark, spirea.

WILDFLOWERS — wildstrawberries, lupine, buckwheat, pearly everlasting, alumroot, penstemon, yellowbell, prairie smoke, long-leaved phlox, showy aster, blue-eyed grass, goatsbeard, shooting stars.

GROUNDCOVERS — kinnikinnick, twinflower, several ferns, wild ginger.

VINES — white clematis, blue clematis.

WASHINGTON STATE'S ECOSYSTEMS San Juan Islands • Coast Forest • Subalpine • Alpine • Mountain Forest

the Ponderosa Pine system are cold with sub-freezing temperatures; summers are hot and dry. Only 10 to 20 inches of precipitation fall yearly here, classifying it as “high desert” in some guide books.

When we bought our house in 1996, the backyard was a large rectangle of lawn grass with a single line of shrubs around the fence. Several towering pine trees stood scattered throughout the lawn. Aspects this yard shared with nearby natural areas: pine trees. No understory shrubs and plants, no soft layers of accumulated pine needles, no chattering birds or chipmunks, no seasonal interest. Our yard simply had turfgrass struggling to survive in the shade of pines. It had most likely been mowed, fertilized, and watered on a regular basis since its planting sometime in the 1950s.

Our goals in naturalizing the backyard were to do less watering, mowing, and raking of pine needles and to attract more wildlife. We kept enough of the lawn to suit us, but over half of our yard is now like a sanctuary with all the sights, sounds, smells, and feel of a Ponderosa Pine forest.

How to naturalize around existing trees: Stretch a rope or garden hose along the ground to mark the area under trees to be naturalized. It is not necessary to remove the turf if it is killed first and covered with a layer of top soil/compost mixture. There is a quick way to kill turf using an herbicide and a slower, non-chemical way:

Quick method: Use Round-up herbicide according to label directions. When turf is completely dead—after about two weeks—cover it with a three- to four-inch layer of compost/top soil mixture.

Add new plants by planting right through the topsoil and dead turf.

Slow method: Spread at least a quarter-inch layer of newspapers over the area of turf to be eliminated. Wet the papers to keep them in place, and cover with a three-inch layer of topsoil/compost mixture. Leave in place for at least three months. The newspaper layer prevents grass from growing through the topsoil. Add new plants by planting right through the topsoil and dead turf.

Choose plant communities known to be associated with Ponderosa pines by observing them in nature or referring to native plant guides and nursery catalogs. (See chart, page 8.) Non-native plants can also be used as long as they are shade- and drought-tolerant and hardy. Place plants where they can grow to their mature size without pruning or transplanting later on. Layering vegetation under the pines with large shrubs, small shrubs, and groundcover plants will attract and support a variety of birds and beneficial insects.

While new plantings are getting established, water regularly the first summer season or two and maintain a layer of fine bark mulch to keep weeds out and conserve soil moisture. After the second summer, watering once a month may be adequate, and the fallen pine needles will take over as natural mulch. As the plants increase in size, watering and weeding tasks are greatly diminished or eliminated. ■

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

ONE HOT LINK

CHECK IT OUT: WSU's Ownbey Herbarium Web site
www.wsu.edu/~wsherb/

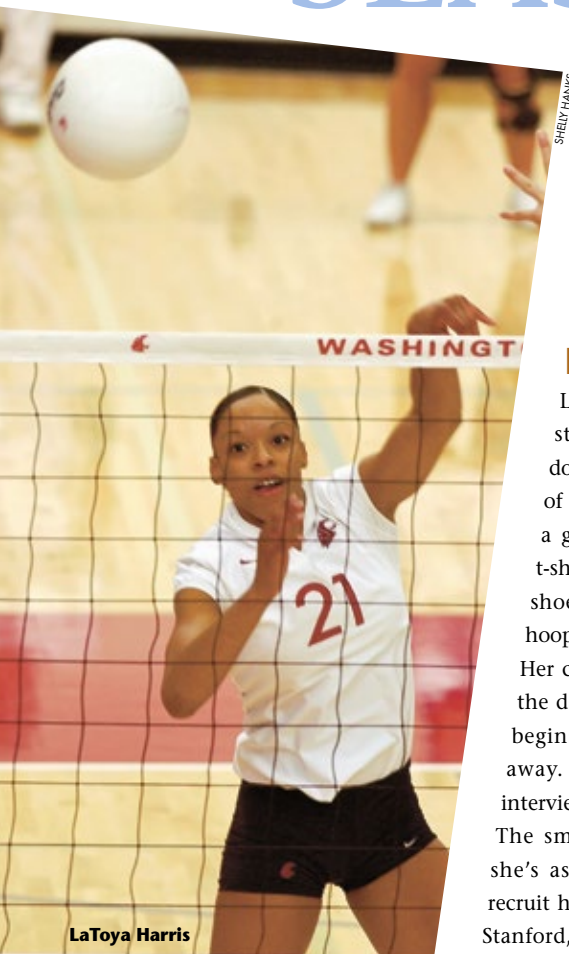


LARRY HUFFORD

“FROM RAINFOREST TO GRASSLAND,” on WSU’s Ownbey Herbarium Web site, takes you on a virtual tour of Washington plant communities, from Cape Flattery on the northwestern tip of the Olympic Peninsula to the confluence of the Snake and Grand Ronde Rivers at the southeastern corner of the state. Along the way you not only learn about the state’s varied plant communities—coastal forest, temperate rainforest, salt marsh, Cascade forest, timberline & alpine, sagebrush steppe, meadow steppe, butte slope, and riparian—you also get what amounts to a private viewing of the gorgeous color photographs of Larry Hufford, herbarium director. Hufford’s photos also appear on two similar programs, “Native Plants of the Palouse” and “Delicious Pieces: The Vegetables We Eat,” as well as pages devoted to plants of Moscow Mountain, Kamiak Butte, Smoot Hill, and the Rose Creek Reserve. Lest you think this site too regional in its focus, check the “Links” page, www.wsu.edu:8080/~wsherb/links.html. This is your springboard for online travel to Chicago’s Field Museum, the New York Botanical Garden, Britain’s Kew Gardens, the National Botanical Institute in Capetown, South Africa, and the Australian National Botanic Gardens, among other destinations. You can also access sites on flora projects and databases, plant systematics and evolution, ethnobotany, poisonous plants, bryophytes and lichens, gardening and horticulture, and botanical directories. So log on and enjoy!

—George Bedirian

SEASONS|SPORTS



SHELY HANKS

"I've always believed that size doesn't matter..."

—LaToya Harris

IT'S LATE November. LaToya Harris's red-knit stocking cap is pulled down tight over the tops of her ears. She's wearing a gray 2002 Apple Cup t-shirt, blue jeans, running shoes, large gold-colored hoop earrings, and a smile. Her classes are finished for the day. Volleyball practice begins at 2 p.m., an hour away. There's time for an interview. The smile? It widens when she's asked about efforts to recruit her out of high school. Stanford, the Arizona schools,

and Oregon sent inquiries. Nebraska and Wisconsin did the same. Then came a second round of letters. Politely as they could, each school implied she was "too short" to play big-time college volleyball.

Was she disappointed? Yes, but not discouraged. From her single mother, Barbara, a typesetter, and her grandmother, Mae, she learned to be strong. Things happen for a reason. You have to work hard to be the best.

The 5-foot-7 Harris wasn't "too short" to earn 12 varsity letters at Portland's Parkrose High. She was a two-time all-state catcher in softball, scored 39 points in a basketball game, and Parkrose retired her volleyball jersey.

While other Pac-10 Conference schools overlooked her, WSU didn't. Impressed by Harris's "explosiveness and competitive-

ness," coach Cindy Fredrick gave her an opportunity to play Pac-10 volleyball at WSU.

"I've always believed that size doesn't matter," says Harris. "It's how hard you work . . . the love for the game you have in your heart."

And she credits her mom for making sacrifices for her to participate in volleyball clubs and in summer leagues, where she would hone her skills and gain exposure. "It didn't matter what the sport."

At WSU the right side-left side hitter made an instant impact. She was a member of the All-Pac-10 Freshman Team. As a sophomore she was All-Pac-10. She repeated as a junior, battling back from summer knee surgery and the loss of her grandmother to cancer. As a senior, she gained All-Pac-10 status again as one of the Cougars' most consistent performers and the "go to" player.

"Look at all her honors—All-Pac-10, All-Tournament," Fredrick says. "They reflect what other coaches are seeing as well."

WSU assistant volleyball coach Mashallah "Farokh" Farokhmanesh once commented, "Without LaToya, we're a good team. With her we are an exceptional team."

That was the case in mid-November, when the 17th-ranked Cougars stunned no. 1 Stanford in four games in Bohler Gym. The victory was particularly sweet for the seniors, their first over Stanford.

"I feel any team is beatable," Harris says. Her contributions that evening included career and season highs of 29 kills and 18 digs, plus three service aces. She is one of only three Cougars with more than

WSU ADVANCES TO ELITE EIGHT

Washington State rode an eight-game win streak to the Elite Eight in the NCAA Division I Women's Volleyball Tournament before the ride ended December 13, 2002 in Gainesville, Florida. The host, sixth-ranked University of Florida (34-2), defeated WSU in four games to keep the 10th-ranked Cougars (24-8) from advancing to the Final Four. WSU's only other appearance in the Elite Eight came in 1996.

"We lost to a really good team tonight. There's no embarrassment in that," said Cougar coach Cindy Fredrick.

Florida, sparked by three All-America players, has won eight consecutive Southwest Conference titles.

A night earlier, WSU defeated University of Northern Iowa (34-3) in three games. Cougars Adrian Hankoff, LaToya Harris, and Victoria Prince were named to the six-member all-tournament team.

WSU opened championship play as the 12th seed nationally, and was sent to the regional tournament in Manhattan, Kansas. There the Cougars disposed of Oral Roberts (22-10) in three games. Then they topped 22nd-ranked Kansas State (21-9) 3-1.

Fredrick has directed the Cougars to 22 or more victories per season six times in her 14-year career at WSU. ■

SPORTS|SEASONS

1,000 digs and 1,000 kills in their careers. Her 143 career service aces top WSU's list.

A powerful left-handed jump serve at the top of a 31-inch vertical leap sets her apart from the field. When she goes up to hit, she can see over the net and the open spots on the other side. On defense, she's always in the "pursuit" mode. "It's something you can't teach," Fredrick says. "You either have it, or you don't."

In the backcourt she likes to stay low to the floor to field digs. At the net, she strikes like a cobra, hammering the ball down the line or across court. On occasion, she'll drop a "dink" in front of a surprised foe. Over the years, she worked hard to improve her blocking and now gives herself a 7.5 on a 10-point scale. When taller players try to hit the ball over or past her, she says, "I take that personally." She also takes seriously the reputation of Cougar volleyball and expects others to keep the standard high.

After graduating in May, Harris plans to test her skills in the pro volleyball camps. Someday she wants to be a coach—"just like Cindy.

"She's always made me feel like one of the family . . . like a daughter. She's there for her players, on and off the court."

The interview over, Harris excused herself to prepare for the Cougars' final Pac-10 series against Oregon and Oregon State on the road.

Somehow her brilliant four-year volleyball career at WSU seemed too short. ■ —Pat Caraher

LONG WINS OUTLAND TROPHY, FOUR NAMED ALL-AMERICA

Washington State's Rien Long proved to be more than a "West Coast wonder." The 6-foot-6, 286-pound defensive tackle earned the Outland Trophy as college football's top interior lineman for 2002.

"He put us on the map tonight," coach Mike Price said of the junior from Anacortes. They attended the College Football Awards Show together December 12 in Orlando, Florida.

Long was picked for All-America first honors by the Associated Press and the Football Writers Association. His regular season statistics included 20.5 tackles for loss, 13 sacks, and three pass deflections.

Three other Cougars earned All-America recognition. Senior offensive guard Derrick Roche of Kent was named to the American Football Coaches Association's first team, and AP second team. Quarterback Jason Gesser was a first-team choice of *College Football News*. Long and senior cornerback Marcus Trufant, Tacoma, earned first-team honors from ESPN.com. Trufant also was named to AP's second team. ■



Rien Long

KEVIN GERMAN

Patient Doba pays his dues, realizes his dream

WASHINGTON STATE didn't need to conduct a national search for a new head football coach when Mike Price resigned December 17. His successor was already on campus. He was familiar with WSU, Pullman, and the Pac-10.

Bill Doba, defensive coordinator at WSU since 1994, was introduced less than 24 hours after Price announced he had taken the top football coaching job at University of Alabama. Doba waited 41 years for his day to come.

"I could have gone to my grave and not missed a thing about my coaching experience, but this is a coach's dream," Doba, 62, said at a campus media conference.

Athletic director Jim Sterk ticked off the attributes that weighed heavily in Doba's hiring—his loyalty, dedication to coaching, knowledge of football, and how the Cougars "play heart and soul for Coach Doba."

During the 2002 season, WSU limited Pac-10 opponents to only 59.4 yards per game rushing.

The South Bend, Indiana, native coached high school football for 12 years, then spent 15 years as an assistant at Indiana, Purdue, and The Citadel. He was the lone hold-over from Price's original 1989 staff.

Now he wants to build on recent successes to take Cougar football to new heights.

He believes more games are lost on the blackboard than on the field. He doesn't ask players to do something they aren't capable of. And he doesn't play them until they are ready.

Doba's base salary is \$500,000 per year. With incentives, he could earn \$800,000.

He has no reservations about becoming a head coach at age 62.

"You've got to start somewhere. I just started later." ■ —Pat Caraher



ROBERT TURNER

Bill Doba

THE PRICE ERA

Mike Price's victory total (83-77, pre-2003) is second only to Babe Hollingbery's (93-53-14), 1926-42. Price won three of five bowl games and Pac-10 titles in 1997 and 2002 en route to the Rose Bowl. The Cougars' 1998 Rose Bowl appearance ended a 67-year drought. He won 10 games in 1997, 2001, and 2002, and nine in 1992. *The Sporting News* 1989 Pac-10 Coach of the Year received the same honor from his Pac-10 peers in 1997 and 2001. On the down side, WSU's back-to-back winners in 2001 and 2002 were Price's first. His 3-11 record against Washington includes a current five-game skid.

LETTERS FROM VLADIVOSTOK

"THIS IS THE BEST research project I've ever had. It's invaded my life in a very good way." So says Birgitta Ingemanson, associate professor of Russian at Washington State University, about her current project transcribing and editing more than 2,100 letters written by an American, Eleanor Pray, in Vladivostok between 1894 and 1930.

The collection consists primarily of letters written by Pray and her sister-in-law, but also includes hundreds of photos taken by Pray of Vladivostok before the Russian Revolution and World War I. The array of letters and photographs provides glimpses of the city's culture, politics, and merchant life from an American woman's perspective. Vladivostok, which sits on a peninsula overlooking the Sea of Japan in the easternmost part of Russia, today has a population of approximately 750,000 people. When Pray was there in the early 1900s, Vladivostok had about 20,000 residents from many cultures and backgrounds.

Raised in New Hampshire, Eleanor Lord married Frederick Pray in 1894. Frederick's sister, Sarah Smith, was married to an American merchant, Charles Smith, who ran a store in Vladivostok—"The American Store." The Smiths asked the Prays to join them in Vladivostok and help run the store. Eleanor agreed to go for two years but ended up staying for 36.

Pray loved the bustling merchant life of Vladivostok. She writes of days filled with playing tennis, translating English for other merchants, and watching the Russian Naval fleet on the bay from her house. Her husband held a post in Vladivostok with the U.S. Consulate for five years prior to the Russian Revolution.

Following the Russian Revolution in 1917, the Prays were forced to close down their store. Shortly thereafter, Frederick Pray died. Eleanor was heartbroken. Even though her daughter and her sister-in-law, whom she was extremely close to, left to live in Shanghai during the

revolution, Eleanor refused to leave Vladivostok. She wrote that she did not want to lose the house she had grown so fond of. "I cannot imagine living where I cannot see the two bays."

During the seven years she lived in Vladivostok alone, she worked in a department store as an accountant and English translator. As a volunteer for the Red Cross and YMCA, she helped Russian soldiers and some of the hundreds of thousands of refugees from the eastern front who boarded ships in Vladivostok to flee the war-torn country.

Soviet rule shut down most independent merchants, and Pray soon found she had no work. She eventually joined her sister-in-law and daughter in Shanghai, but she never forgot her beloved Vladivostok.

Pray and her family endured a second world war while in Shanghai, where they were put in a prisoner-of-war camp. Pray survived the camps and ultimately moved back to America. She died in Wash-

ington, D.C., in 1954. Her daughter, aged 96, still lives in New England.

Birgitta Ingemanson has spent the last five years piecing together Pray's life through her letters and photos, together with Pray's granddaughter, Patricia Silver, who started collecting and organizing the materials in the 1970s. With the help of several WSU graduate assistants, Ingemanson sorted the letters by themes and topics.

In September 2002, Ingemanson and Silver traveled to Washington, D.C., where Ingemanson made a presentation at the Library of Congress on her research into Pray's life and the history of Vladivostok. While Silver intends to eventually contribute the entire Pray collection to the Library of Congress, she donated the first piece—an album of Pray's photographs—to the library's Photo and Print Department.

Identification with Pray runs deep for Ingemanson, who was born in Sweden but has been drawn to Russia since she was a young girl. She has traveled to Vladivostok eight times and helped organize the exchange program between WSU and Far Eastern State University in Vladivostok in 1987. Ingemanson intends to co-edit a book on the Pray collection with Patricia Silver. Meanwhile, the collection and its insights into a period of history when many documents were destroyed by the Soviets will provide lasting valuable scholarly information and teaching materials for schools, as well as a supplement to archives and museum exhibits.

"Mrs. Pray was a remarkable, admirable woman," says Ingemanson. "Her collection is what I'll be working on for the rest of my life."

—Megan Nazari

Eleanor and Frederick Pray, c. 1896, in their home in Vladivostok. The desk in the background is where Mrs. Pray wrote most of her thousands of letters.



How do we perceive sound?

Christine Portfors, a neuroscientist, tends a lair of 23 tropical moustache bats at WSU Vancouver in order to tease apart the question of how they distinguish between sounds—for example, between those they use for echolocation and those they use to communicate.

Bat communication sounds, like speech sounds, are very complex in terms of frequency and timing, says Portfors. Beyond that, “We don’t know anything about how the brain actually processes those types of sounds.”

Earlier work by Portfors revealed that bats have neurons that are very sensitive to the timing of the echolocation sound, between when they emit it and when the echo comes back. Firing at different times, the neurons create a mental map that analyzes target distance information. Other neurons are so sensitive that bats can pick out a particular species of moth based on the amplitude modulation of the echolocation signal.



MARK SCHRIER

Christine Portfors. For more about her research—and about bats—check her Web site, www.vancouver.wsu.edu/fac/portfors/portfors_home.html.

Bat talk. Portfors is currently focusing on the sounds bats use to communicate with each other. How their brains process communication sounds is apparently very similar to how humans process speech. Neural strategies seem to follow a common pattern among mammals.

Portfors is conducting experiments to determine what these communication sounds actually mean. How, for example, does a mother bat distinguish between her pup’s call and that of another?

Our understanding of how the auditory system does this is poor, says Portfors.

This current focus reflects Portfors’s interest in behavior, an unusual sympathy for a neuroscientist. However, the ultimate question piquing her curiosity is neurological.

When you hear a sound, its frequencies are processed in your ear by the cochlea, the spiral-shaped cavity in the inner ear that contains the nerve endings necessary for hearing. From there, the sound is split into different frequency components. Like a piano, says Portfors, high frequencies on one side, low on the other.

Conventional scientific wisdom has it that the individual frequency components stay within this sequential process, running individually through the auditory system. An initial neuron that responds to a high frequency will project the signal to another neuron higher up the auditory system that responds to the same frequency. But at what point, asks Portfors, does the brain put the signals together? At what point, and how, does that complex mixture of frequency modulation and timing become a sound in the brain?

Portfors has shown that this integration occurs at a lower evolutionary level of the brain than was hitherto thought. It was previously believed that it takes place at a very high level of the cortex. Portfors has shown that it actually occurs somewhere in the more primitive midbrain.

Recognizing a voice. Besides filling some big gaps in our knowledge about how the auditory system works and suggesting some very tantalizing evolutionary implications, Portfors’s work also has practical applications. She is part of a scientific advisory board for a company that is developing software for voice identification.

“Basically, we’re modeling what we know about the auditory system,” she says.

Her work on this project, which is directly related to her basic research, concerns how we group the different components of sounds together. Even the best computerized voice recognition systems have great difficulty interpreting more than one voice, which is a struggle in itself. A human voice is unique, composed of a number of components working together. It may contain components identical to that of another voice, but the combination makes it distinct. Software that could isolate and analyze these components would greatly improve voice recognition systems. By drawing on the work of research scientists, says Portfors, the company she works with is trying to reverse-engineer the brain.

—Tim Steury

WHAT DON'T WE KNOW?

SMOKE & ASTHMA

FOR AS LONG as Jami Hinshaw can remember, she has coughed, sneezed, sniffled, and felt miserable every September. When she was nine, the Spokane native and WSU alum was diagnosed with asthma.

Last fall, Hinshaw was fighting her usual symptoms, but she was also carrying a portable air quality monitor in a backpack as part of a study to better understand the health effects of agricultural field burning. Researchers from Washington State University are working with their counterparts from the School of Public Health at the University of Washington to examine volunteers' exposure levels to atmospheric pollutants coming from field burning in the region.

Controversy has swirled in recent years around the practice of field burning. A lawsuit was settled in 2001 that charged the state of Washington with violating the Americans with Disabilities Act by issuing wheat-burning permits to farmers. The state of Idaho is also being sued because of health concerns arising from agricultural field burning practices.

With the help of funding from the Environmental Protection Agency and the Washington State Department of Ecology,

researchers in WSU's Laboratory of Atmospheric Research gave air quality monitors last fall to asthmatic volunteers to carry throughout the day. They also placed monitors in the volunteers' homes to measure their exposure levels to particulate matter in the air during the field-burning season. At the same time, the volunteers' asthmatic symptoms were carefully monitored over an eight-week period.

The study also looked at the chemical composition of the smoke to better understand just what might make people sick.

Information from the data could eventually be used to set standards for particulate matter that better reflect its health effects. While the Environmental Protection Agency set standards regulating small particulate matter in the mid-1990s, the exact mechanism of how the tiny particles affect health is not well understood.

"There is a lot of anecdotal evidence that links health effects to the presence of smoke in the air," says Candis Claiborn, associate professor of civil and environmental engineering. "But it's been difficult to assemble enough hard data to find a statistically significant association.

"We want to know more about

people's exposure to agricultural field burning. We also want to know if exposure to this smoke affects asthmatic adults. We hope the study results will help us better understand smoke exposure risks and reduce future health risks."

Because this is the first study of its kind, the work will most likely result in more study, says Claiborn. However, in the long term, she envisions that finding a direct health effect could lead to new guidelines on how to manage smoke. For instance, if the researchers find that air quality causes the most health problems during the night hours, perhaps guidelines could eventually call for burning earlier in the day, allowing the smoke to dissipate before nightfall.

"I think that eventually they will be able to manage smoke, so that farmers will be able to burn, and people won't be affected," says Claiborn.

For her part, Hinshaw enjoyed participating in the study and didn't mind carrying around her specialized pack, in spite of curious looks from friends and co-workers.

"I thought it was much lighter than the bags I used to carry around as an undergrad," she says. ■

—Tina Hilding

Foundation Honors Creighton



JOHAN W. "Jack" Creighton, Jr., Bellevue, received the Weldon B. Gibson Distinguished Volunteer Award at the Washington State University Foundation Dinner Gala in the Beasley Performing Arts Coliseum last fall.

The annual award, established in 1981, recognizes an individual who has demonstrated sustained, exemplary service and achievement on behalf of Washington State University and the WSU Foundation.

Cited for his leadership and unselfish devotion to WSU, Creighton earned praise from nominators for his work as co-chair of the national steering committee for Campaign WSU. The multi-year effort raised a record \$275 million in private gifts to the University. The successful campaign led to Creighton's further involvement with WSU as vice-chair (1996-98) and chair of the WSU Foundation Board (1998-2000).

Creighton and his wife, Janet, became involved with WSU when daughters Julia ('83 Fine Arts) and Jennifer ('85 Bus. Adm.) were students. The couple's commitment to education is expressed in the endowed scholarship and graduate fellowship they established at WSU for students of Native American descent.

In September Creighton retired as chairman and CEO of UAL Corp. (United Air Lines) and remains on the UAL board, where he has served since 1998. He was president and CEO of Weyerhaeuser Co., 1991-97.

The Gibson Award is named for the late Weldon B. Gibson, the WSU Foundation's founding chair and a founder of the Stanford Research Institute, now SRI International. ■

—Pat Caraher



ROBERT HUBNER

MOUNTING A DEFENSE AGAINST BIOLOGICAL INVADERS

Whatever its impact on trade,

the World Trade Organization has opened the doors to biological invasion, says Dick Mack. A professor of botany at Washington State University, Mack is a leading authority on invasive species and lead author of *Predicting Invasions of Nonindigenous Plants and Plant Pests*, a report recently published by the National Research Council.

Invasive species are those that are introduced, whether deliberately or not, only to find their new home much too accommodating. Whereas a plant might be an inconspicuous face in its home crowd, it could become the ubiquitous bully in a new ecological crowd with no defense against its aggressiveness. A prime example in the intermountain West is cheatgrass (*Bromus tectorum*), the focus of much of Mack's research. Introduced to the U.S. in the 19th century, probably as a stow-away in grain seed, cheatgrass has dramatically transformed the ecology, even the landscape, of much of the West. Like most invasive species, cheatgrass has few predators or competitors in its adopted home and spreads across the landscape unchecked.

Other invasive species include the zebra mussel, which probably snuck into the country on the hull of an ocean ship and has since spread throughout the Great Lakes and beyond, crowding out native species, voraciously consuming the food supply of native species, virtually changing the entire lake ecosystem.

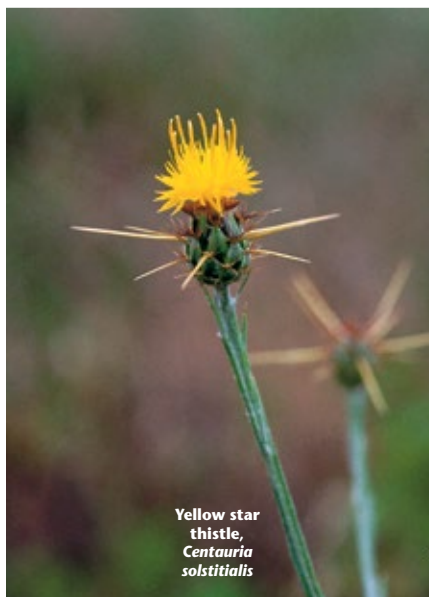
One estimate places the cost of invasive species from lost crops and control measures at \$137 billion a year. Moreover, says Mack, "The indirect and ecological costs of losing native species because of attacks by or competition with invasive species may be incalculable."

So how do you keep every foreign species out of the country? You don't.

First of all, says Mack, few foreign species will become invasive. Most intruders simply can't make it on their own in foreign territory. It might be too cold or too dry, or the species may simply die before it's able to establish a viable breeding population.

Furthermore, most of this country's agriculture and much of its horticultural industry is based on introduced species. Most of these species are perfectly content in their allotted and cultivated space. However, a new cheatgrass or kudzu could wreak havoc with a vulnerable agricultural—or natural—niche.

Raising the specter of an unprecedented wave of invasion is the global movement toward free trade. Trade restrictions have often served double



"The indirect and ecological costs of losing native species because of attacks by or competition with invasive species may be incalculable."

—Dick Mack

duty, protecting domestic industry and also keeping out potential invaders—or the invisible pathogens that might accompany imported produce or commodities.

Now those safeguards have been substantially altered, says Mack.

"We can't keep foreign species out anymore based simply on intuition," he says. "The WTO has now said that for a member nation to keep something out, they have to have a scientific basis for doing so."

One example is the running battle between Japan and Washington over soft fruit. Japan has effectively kept Washington cherries out of its markets by claiming the threat of disease. Whether or not that threat is legitimate is not the point, as such claims have been, in effect, a trade barrier.

Now, says Mack, if Japan is going to turn back our cherries, the WTO requires a scientific basis for doing so. And that information requires expertise and money.

Introduction of species is currently overseen by APHIS (USDA's Animal and Plant Health Inspection Service). However, APHIS only has resources to conduct spot checks of

less than 2 percent of all incoming shipments at borders and air- and seaports.

In response to the increasingly open borders, Mack and his committee recommend a multiple-tier screening process at the border. "For some you give them a clean bill of health, they're already here, or there's nothing that we know about their background that's been a problem. Others would have to go through a filter process.

"There are different ways of going about this," he says. "One, there are categories of species that we could say are problems right off the bat."

For example, anything that's parasitic is a potential problem. Also, plants that have brightly colored fruits, seeds that are very attractive to birds, are potential problems, as birds are absolute experts at moving seeds about the landscape. Such plants cannot be automatically restricted, says Mack, but they should raise a red flag.

Mack then recommends a second line of defense, early detection and rapid response.

"Any invasion—whether zebra mussel or cheatgrass or yellow star thistle—probably started out with a very small population. You could have stamped it out in an afternoon. It's not insurmountable," he says. "But a lot of species are involved we've never encountered before, and we must develop a better interception program right now." ■

—Tim Steury

The More You Learn: Distance Degree Program Celebrates Its Tenth

"After I finished, I wish an education for everybody in the country."



Michele Candela, with Distance Degree instructor Faith Lutze (political science), 2002 Commencement weekend.

WHAT IT CAME DOWN to was that Michele Candela needed a college education—but it was going to have to come to her rather than her going to campus. When she made the trip from the Kitsap Peninsula to Pullman for commencement last May, it was the first time she'd ever set foot on campus. Or met, face to face, the staff of the Distance Degree Program who helped her achieve a bachelor's degree in social science (with a 4.0, it should be mentioned), working from the private classroom she shares with a husband and four children a few miles outside of Kingston.

"If you look at learning as something the teacher gives you, I don't think you'll make it," she says of the experience of studying, on her own, five classes a semester, 50

hours a week, reading the same textbooks and writing the same papers as her Pullman classmates, but watching the lectures on tape or computer and discussing ideas over a live Internet connection called "Speakeasy."

Candela's four kids, 17, 12, 11, and 7, did pretty well with her schooling, she says, once they got over initial resentment about having to do more housework. They had their favorite—and least favorite—video lecturers. They loved Nancy McKee's "Gender Across Cultures" class. Twelve-year-old daughter Autumn took her mother's education particularly seriously and has since fought her way into the college-track program at her school. She wants to study veterinary medicine, most likely at WSU.

The kids had a lot of pride in her achievement, says Candela. The only thing they can't understand is why her degree hasn't transformed magically into a 50-grand-a-year job.

"WE sacrificed," she quotes them, laughing. "Now where's the money?"

For now, Candela is still at the same job she's had for years, waiting tables at the Kingston Inn, just up from the ferry dock.

"I like my work, I like people, but it's time for something bigger." However, she has no intention of taking her newly won degree elsewhere. "I want to stay here. To me that's the point."

A common response among DDP graduates, says Cliff Moore, associate director of Extended University Services, is how they put what they learned right back into the community. That's exactly what Candela has in mind. She wants to get into counseling or some other form of social service. Not having anything lined up yet doesn't seem to faze her a bit. She's got some irons in the fire.

The Distance Degree Program is celebrating its 10th anniversary of serving the place-bound student who, like Candela, has no other way of getting a college education. The average age of the DDP student is 36. Seventy-three percent of its current 1,922 students are women. DDP has served not only every

county in the state, but 45 states and 16 countries.

Against those figures, a question lingers. What drives a student to read computer lectures and study for exams without the companionship, and motivation, of fellow students?

Two things, says Candela. "When you work in this field, you'll meet some waitress, maybe 60, 70 years old. And she's bitter, and she's hopeless, she's miserable to be around. And I realized one day, shortly before starting this program, I could wake up one day and be that woman."

But driving her more, she adds, is a love of learning.

"The more you learn, the more you want to learn. After I finished, I wish an education for everybody in the country. I think a lot of things would be different." ■

—Tim Steury

For more information about Distance Degrees, see <http://distance.wsu.edu/>

Written a good book lately? We'd love to hear from you!

SEND NEWS OF YOUR ACCOMPLISHMENTS via e-mail to caraher@wsu.edu; by fax to **509-335-8736**; or by snail mail to:

**Washington State Magazine
Washington State University
Pullman, Washington 99164-1227.**

Please include the year(s) you graduated, the degree(s) you received—e.g., Bachelor of Business Administration—and your current address and occupation. Obituary notices may also be sent to WSM.

Cougars Mentoring Cougars

During their final weeks as nursing students, seniors from the WSU College of Nursing are immersed in the science and practice of professional nursing through a senior practicum experience. During the three and a half week session, they are matched with a nurse preceptor, employed at a clinical site, for a comprehensive feel of what being a professional nurse truly entails. "They are at the hipbone of the mentor, paired for 105 hours, doing the majority of assessments and patient care a professional nurse in that role would normally do," said Freddi Van Gemert, faculty supervisor.

The presence of hundreds of College of Nursing graduates working in clinical and hospital settings throughout the state creates opportunities for alumni to mentor soon-to-be graduates. Of the 73 senior students from the fall 2002 graduating class, 21 were matched with former WSU College of Nursing graduates.



Photos courtesy of Lani Ellingsen

An Intensive Training Experience

The senior practicum experience is designed to foster leadership, critical thinking, decision-making, and practice entry-level skills. Students are placed in their area of professional interest, apply clinical and theoretical concepts in a concentrated clinical area, and demonstrate the role of an entry-level professional nurse under the guidance of a preceptor. In addition to the 105 hours in the clinical setting, the students spend another 40 hours in orientation, seminars, and preparation time. Students are required to report to their faculty daily via journal and log entries describing their progress toward objectives and interaction with patients.

According to Van Gemert and fellow faculty supervisor Naomi Lungstrom, the level of preparedness the students bring to their practicum experience is a great advantage. "Our students are fortunate to be able to pick and choose from many professional offers," said Lungstrom.

Face-to-Face Interaction

Sara Yandila-Johnson was matched with Krista Dean Chambers (Spring '99) on the Labor and Delivery floor at Deaconess Medical Center in Spokane. Johnson felt

very comfortable asking Chambers about specific processes. "She knows what it's like to be in my shoes, on the brink of beginning my nursing career plus the pressures of coursework, clinicals, and exams." Chambers said seeing her daily work through the eyes of students is valuable. "I wanted Sara to see what we do and why, and for her to enjoy the entire experience, because I enjoy what I do."

Herb Pryor was matched with Iris Carlson Cantlon (Spring '81) in the Acute Care Unit at Holy Family Hospital in Spokane. "She was very supportive of me. It was great to have a mentor I could lean on as I adjusted to taking care of patients on my own with confidence."

For Many, a Gateway to a Career

Because the senior practicum experience is tailored to student interests and offers the opportunity to observe student skills on the job, several graduating seniors are offered positions with their practicum sites in their area of interest or with comparable sites in other cities. Pryor has been offered an internship position in the Acute Care Unit at Holy Family Hospital upon his graduation. Holly Jackson, who did her senior practicum in the Mother and Baby Unit at Deaconess Medical Center, was offered a job in the Childbirth Center at Northwest Hospital in Seattle. "The practicum experience at Deaconess was the clincher for me and the hospital, because they usually don't hire new grads," Jackson said.

Many of our nursing students continue to rely on the financial support of alumni and donors. The College of Nursing awarded more than \$86,000 during 2002 to 56 undergraduate and graduate students for an average scholarship of \$1,485. Your continued contributions to our scholarship and advancement efforts will measurably impact the College of Nursing's efforts to address the growing nursing shortage.



World Class. Face to Face.



ROBERT HUBNER

Philip Abelson, shown here at the dedication of Abelson Hall, has led a dynamic scientific life, having made contributions in such diverse fields as biochemistry, chemistry, engineering, and physics.

ALUMNI PROFILE PHILIP & NEVA ABELSON

Pioneers on the Knowledge Frontier

by Pat Caraher

TWO OF WASHINGTON STATE UNIVERSITY'S most celebrated alumni were recognized by their alma mater in a public ceremony last September, when Science Hall on the Pullman campus was renamed for Philip H. Abelson and his late wife, Neva Martin Abelson.

During a three-day visit to WSU, Abelson met with University administrators, deans, chairs, and directors. He also checked research being conducted by graduate students in the sciences.

Over the years, he and Neva have been generous supporters of WSU student scholarships.

"I really enjoyed being here," he said, pausing to reflect on his own college days in Pullman. "I had the advantage of being mentored by people who were kind to me." Those

During World War II Philip Abelson's uranium separation process at the Naval Research Laboratory in Washington, D.C., was adopted by the Manhattan Project. At the end of the war, his report on the feasibility of building a nuclear-powered submarine eventually led to the U.S. program in that field.

people included professors Carl Brewster, chemistry, and Paul Anderson and S. Town Stephenson, both physicists.

Abelson's parents enrolled in Washington State College in 1905. The family home was within a block of the newly named Philip and Neva Abelson Hall. His father, Olaf, received a degree as a civil engineer in 1909. Working with Olaf in his teens, young Abelson became a skilled surveyor. From his father he learned, "If there's an objective you wish to accomplish, you analyze that matter and determine what you need to know, or what you need to do to solve the problem."

A serious, eager scholar, Abelson initially enrolled in the chemical engineering curriculum in 1930. "Chemistry, because I like chemistry," he

explained. "Engineering, to please my father."

Philip and Neva met when they were undergraduates in chemistry. Although they didn't take classes together, Philip soon discovered Neva was a top scholar. And he was taken with her sense of humor. They married in 1936. Soon both were study-

cause of death or mental retardation.

"I was enraged at seeing those otherwise normal babies dying from Rh incompatibility, and feeling helpless to prevent it," she said during a 1989 interview at WSU.

During World War II, there was an acute need to study blood transfusion reactions among members of the armed forces. Recipient of a joint fellowship from the University of Pennsylvania and Harvard, Neva was charged with trying to discover a serologic method for detecting Rh antibodies. At the Boston Blood Grouping Laboratory, she and Dr. Louis K. Diamond together developed the simple, and now common, test for the Rh factor. Their findings enhanced the treatment of hemolytic diseases of the newborn and opened the door for safer blood transfusions.

Both Abelsons are recipients of the WSU Regents' Distinguished Alumnus Award, the highest honor the University bestows on a graduate. Philip was the first honoree in 1962, the year the award was established. Neva was recognized in 1989. She died in 2000. Philip said, "There were very few couples who shared as many intellectual topics."

Abelson considers himself a physical chemist, although most of his important research has been in nuclear physics. His wide-ranging interest in science was apparent at Washington State College. He completed a degree in chemistry (1933) in three years. Two years later, he had a master's degree in physics. He obtained his doctorate (1939) in nuclear physics at UC, Berkeley. There it was his good fortune to work under the general direction of Ernest O. Lawrence in the early days of the famed Radiation Laboratory and the cyclotron.

In his dissertation, Abelson described the first identification of many important products of uranium fission. And he collaborated with U.S. physicist Edwin McMillan to discover the chemical properties of a new element,

neptunium. Later he developed the liquid thermal diffusion process to partially separate uranium-235 from uranium-238.

During World War II Abelson's uranium separation process at the Naval Research Laboratory in Washington, D.C. was adopted by the Manhattan Project. At the end of the war, his report on the feasibility of building a nuclear-powered submarine eventually led to the U.S. program in that field.

Abelson doesn't talk about the Manhattan Project—code name for the U.S. government's push to develop the atomic bomb. But the project paved the way for post-war production of plutonium, as well as research on nuclear energy. Historians suggest the project is most likely responsible for the quick end to World War II.

When Abelson was inducted into the National Academy of Sciences (NAS) in 1959, the occasion and his accomplishments were well noted.

"He [Abelson] . . . could have affiliated himself with any one of seven sections of the Academy, because he has made distinguished contributions to biochemistry, chemistry, engineering, geology, geophysics, microbiology and physics," wrote Frank L. Campbell, then associate editor of the *Journal of the Washington [D.C.] Academy of Sciences*.

Abelson registered with the NAS as a geologist. In 1971, he served as president of the Carnegie Institution. He still lives in Washington, D.C. During his 22 years (1962-1984) as editor of *Science* magazine, he would write some 600 editorials, one every other week. Neva would type and proofread many of them.

"When you overwrite about 20 percent, you can be real tough about what you throw out," he said. He would accumulate a wealth of information, often consulting with many people before writing. He said he wanted to have a "broad scope" of what he was going to



Neva Abelson's work in pediatrics and pathology led to the now-common test for Rh factor in newborns.

ing at University of California, Berkeley.

Neva was one of the first women to earn a medical degree from Johns Hopkins University, and the first woman to be in charge of the hospital's nurseries there. Later she was a professor of pediatrics and pathology at the University of Pennsylvania. Her work in pediatrics piqued her interest in the Rhesus factor and its relation to blood disease in tiny infants, which at the time was a likely

tackle in mind. Then he would think about the data. Was the material worth bringing to an audience? What crucial points did he want to make?

"The readers of *Science* magazine were not inclined to suffer fools gladly," he said. "If you had any kind of a sentence that would give them an excuse to write a letter to the editor, they would do it."

As he prepared to depart from Pullman for his return to Washington, D.C. following the re-naming of Science Hall, Abelson said he planned to attend a three-day retreat on Chesapeake Bay with 30 or 35 *Science* staff members, including its European component. The staff typically meets in retreat twice a year.

"I'm meditating on a message now," he said in his soft, almost whisper-like voice. "I will listen until I feel there is an appropriate moment [at the retreat] to intervene. If that moment doesn't come, I won't intervene."

During a 50-minute interview with the scientist it was obvious he hasn't lost his passion for learning or his search to "identify important trends that are likely to affect science and society in the coming years."

"I've made a real effort to stay in touch where the knowledge frontiers were developing," he said. "If your knowledge base grows, and you are alert and lucky, you will find on some occasions a topic that greatly needs investigation."

Abelson said he and many other scientists were disappointed by President George W. Bush's slowness to appoint an advisor in the important area of scientific endeavor. Abelson added, "In budget considerations, he [President Bush] certainly has not recommended the kind of investment in the future that could be justified."

What would it take to bring about change?

"Some new crisis," Abelson said, shrugging his shoulders, his hands upturned. "A new crisis in health, because everyone is interested in health."

Abelson believes the pursuit of knowledge is a matter of following one's own inclinations and curiosity. He still makes the five-mile trip from his home to his office daily, where he puts in a full eight-hour shift, if not longer, with the American Association for the Advancement of Science.

"There are very few people at age 89 that management is willing to keep around," he said.

And his advice for students today?

"Keep learning." ■



Between Hu THE ART OF



Kernal with Black Dog,
2000, oil on canvas,
48 x 60 inches.

mor and Menace GAYLEN HANSEN

by Sheri Boggs

FORMER WASHINGTON STATE UNIVERSITY professor Gaylen Hansen has lived and worked in the Palouse region for more than 30 years. During the 1960s and 1970s he was instrumental in putting—and keeping—WSU's fine arts department on the map. And yet, as a recent coffee-table book of his work would seem to attest, he was never compelled to record his impressions of the area in landscapes. There is nothing in *Gaylen Hansen* so recognizable as

Sheri Boggs is arts and culture editor of The Pacific Northwest Inlander.

GAYLEN HANSEN

Steptoe Butte, or the sinuous curve of a highway through voluptuous rolling hillsides. Neither are there forests, farmhouses, or small-town Main Streets. There are, however, fish, creeks, and dogs. There are also the colors—the deep honeyed gold of harvested wheat, the pewter gray of the sky in November, even the dark red of twilight during burning season—that will always mean “home” to anyone who has loved the Palouse. And there are knights, cowboys, bison, and horse-sized grasshoppers that initially have nothing to do with the immediate vicinity but have everything to do with the artist’s interior landscape.

“I don’t directly paint the Palouse, but my work is undoubtedly influenced by my life here. It’s a process of imagination; it’s not a direct interpretation,” said the 82-year-old artist in an interview last August. “This area is good for a painter this time of the year.”

Published September 2001 by the Linda Hodges Gallery in association with the University of Washington Press, *Gaylen Hansen* offers both an extensive color catalogue of his works, and also an insightful look at his career and life. Halper’s engaging prose draws us into the story of a pragmatic young man who could drive six horses on a plow at the age of nine, who began painting by copying *Saturday Evening Post* covers, and who



Gaylen Hansen, 1990.

PHOTO BY GORDON BROWN

came to WSU to develop an arts department he could be proud of.

“I was offered a job. And I needed one,” he remembers, with a chuckle.

“I was teaching at Yakima Valley Junior College at the time, so it seemed to be an improvement.”

Halper describes how Hansen helped WSU’s Department of Fine Arts become a vital and surprisingly connected arts community, and also

how his work evolved with such distinct style and subject matter. His years of working as an abstract painter and of studying composition lend themselves to his visual tall tales, in which humor and menace keep cautious company. Hansen’s alter ego, the Kernal, is a stoic wanderer on horseback who encounters dogs, wolves, enormous insects, and even larger fish. In other compositions, for instance, “Bison and Sleeping Person,” Hansen explores the often fine line between the hilarious—the large dark bulk of a bison hiding behind a twin bed—and the subtly ominous.

Honored in 2001 with a grant from the Flintridge Foundation, Hansen continues to work but is less interested in running in regional contemporary art circles than he is in simply making art.

“I’m just doing my own thing right now. I’m pleasing myself, and fortunately, it does seem to please other people.” ■

For more information, see <http://www.washington.edu/uwpress/search/books/HALGAY.html>

Images from the book, *Gaylen Hansen*, courtesy of Linda Hodges Gallery, Seattle; produced by Marquand Books, Inc., Seattle; color separations by iocolor, Seattle.



Bison, Fish and Tulip, 1992, oil on canvas, 48 x 76 inches.



Fisherman, 1995, oil on canvas, 60 x 76 inches.



Dancing, 1997,
oil on canvas,
48 x 60 inches.

RESILIENT CULTU

by John Kicza

Much of what you learned in your early American history class is wrong. New methods of analysis and translation of extensive records left by the Indians themselves are dramatically changing our understanding of the dynamics of Indian-European interaction.

DURING the Columbian Quincentenary of 1992, I was disturbed by common misconceptions, held even by scholars, concerning the character of European-Native American interactions in the colonial period. I decided that my next major research project would be an interpretive synthesis of the colonial encounters in the Americas and of the ways in which native peoples responded to these encounters and maintained their separate cultures.

In order to make valid comparisons of the encounters over such a vast area and involving so many distinct peoples, my first task was to classify the indigenous cultures based on their systems of agricultural production and the types of societies that resulted.

Sedentary societies

Sedentary peoples practiced agriculture on land of sufficient quality to enable them to reside in one location. They could thereby develop large urban populations that were subdivided into different social ranks and craft specializations. In the Americas, all of the sedentary societies were located in Mexico and Central America—an area commonly termed Mesoamerica—and in the Andean Zone, the mountain highlands and adjacent coastal lowlands that extend from Colombia into northern Chile. Many people lived in communities that numbered in the thousands and even tens of thousands. Tenochtitlan, the Aztec capital, contained over 200,000 residents when the Spanish arrived; Cuzco, the Inca capital, contained around 60,000.

Both sedentary zones contained dozens of distinct ethnic provinces, many of which spoke mutually unintelligible languages. These provinces had developed state structures, complete with royal dynasties and governmental bureaucracies, well over a thousand years before contact with Europe. They frequently conducted warfare against neighboring provinces, and the victors sought to construct empires, demanding tribute payments or labor service from the vanquished.

Many Mesoamerican societies maintained official scribes who composed their records and histories. (Unfortunately, no similar group seems to have emerged in the Andes.) Most of the surviving documents and carvings from the pre-contact era have been translated, providing insights into provincial and dynastic histories. Soon after the Spanish conquest, some members

The Codex Nuttall, a widely studied pre-Columbian Mexican manuscript, provides an intriguing glimpse into the art and culture of the early Americas. It depicts the events in the life of a great military and political hero, 8-Deer Tiger Claw, the second ruler of the second dynasty of Tilantongo. He lived from 1011 A.D. to 1063 A.D.

A page from Codex Nuttall: facsimile of an ancient Mexican codex belonging to Lord Zouche of Harynworth, England, with an introduction by Zella Nuttall. Cambridge, Massachusetts: Peabody Museum of American Archaeology and Ethnology, Harvard University, 1902.

Courtesy of Manuscripts, Archives, and Special Collections, Washington State University.

John Kicza is professor of history at WSU. He has actively researched Indian-European interactions since pursuing his doctorate in Latin American history at UCLA in the early 1970s. His book, Resilient Cultures: America's Native Peoples Confront European Colonization, 1500-1800, was published fall 2002 by Prentice Hall.



time

RES

A New Understanding of the New World



line

c. 18,000 BC
First people
crossed Bering
Sea Land Bridge?

c. 10,000 BC
Points and
scrapers,
Venezuela

9000-6000 BC
First indisputable
evidence of
Eskimo culture?

8500 BC
Marmes
Rockshelter,
Washington

7700 BC
Archaic cultures,
Northwest
Coast

5000 BC
Maize in use in
Mesoamerica

3500 BC
Cotton cultivated
in South America

1500 BC
Oldest known
South American
metalwork

1200-400 BC
Olmecs, Mesoamerica
Maize in North
American Southwest

185 BC
Pit houses
appear in Four
Corners area

of these Mesoamerican societies learned to write their indigenous languages in the Spanish alphabet, producing a vast body of documentation, much of which has been preserved.

Semi-sedentary societies

Much of the Americas in 1492 was occupied by semi-sedentary societies. They dominated the eastern half of North America, parts of the American Southwest, the large islands of the Caribbean, and much of central and east-

ern South America. Semi-sedentary peoples practiced agriculture, but the less fertile land they inhabited required that they move periodically to a fresh site within their boundaries, where they would clear and burn the underbrush.

Such land use restricted the amount of food each community could produce. This, in turn, limited the size of the population and the complexity of the social and political hierarchies. They did not develop states, but instead were commonly led by chiefs who shared power with village councils. Although semi-sedentary peoples engaged in considerable warfare, because of the mobility and independence of their communities, they could not construct enduring empires.

Women enjoyed considerable authority in a number of these societies throughout the Americas. Family identity was calculated through the female line, and the senior female in each lineage group presided over the long houses or residential compounds in which her relatives and their mates dwelled. These women were influential in village councils and could order their male descendants and in-laws to go to war.

Nomadic societies

Non-sedentary or nomadic peoples relied on hunting and gathering, dwelling in deserts, hard-dirt plains, rugged mountains, and tropical jungles that frustrated all efforts to cultivate crops. These bands consisted of small family groups with no permanent social differentiation. Highly mobile, they typically migrated with the seasons, which permitted only low population density.

Political alliances among nomadic peoples rarely endured, and the formation of empires was impossible. These societies dominated much of North America west of the Mississippi River, the small islands in the Caribbean, and the least fertile parts of South America,

most notably the pampas of Argentina. Like the Great Plains in North America, the pampas did not become productive agricultural land until cultivation by heavy plows was introduced.

Successful societies, easy conquests

The very success of the sedentary peoples of Mesoamerica and the Andes in developing densely populated, complex societies made them more vulnerable to Spanish expeditions and helps to explain the speed of the conquests. Spanish administration of these sedentary societies, the conversion of the natives to Christianity, and the collection of tribute and labor service all relied on the retention and use of traditional indigenous political structures and practices. Colonial governors simply replaced their Aztec and Inca predecessors; otherwise, they counted on established native institutions to govern effectively.

Continuing human contact between Europe and the Americas made inevitable the spread of Old World diseases, such as smallpox, typhus, measles, and influenza. Lacking contact with the Old World for many thousands of years, the Native Americans had not developed any natural resistance to its epidemic diseases. Thus, when these ailments erupted among the densely populated sedentary societies, great numbers of people became gravely ill and died at the same time. Over the first century-and-a-half of contact, disease reduced the native population to only 5 to 10 percent of its pre-contact size. Although their numbers then slowly began to recover, this enormous die-off caused a simplification of the indigenous cultures, as various crafts and other specialized activities could no longer be supported. Also, these enormous civilizations lost much of the cultural vibrancy and unity that had characterized them for many hundreds of years before

A RICH AND REVEALING TROVE Literacy was widespread in precontact Mesoamerica, and not surprisingly the indigenous peoples learned to write their own languages in the Spanish alphabet. Within a generation or two after the conquest, many communities had their own scribes to record local council meetings, land transactions, private wills, and similar documents. They also wrote down their community histories. The native societies thus produced a vast amount of documentation for their own purposes, reflecting their own values, practices, and institutions, without the intervention or translation of any Spaniards.

Since the 1970s, some historians of Latin America, particularly a group centered at UCLA, have learned some of these languages and immersed themselves in this documentation. They have published path-breaking studies on various native societies in colonial Mesoamerica that contribute an intimacy and depth of analysis that is unrivaled by the scholarship on indigenous peoples anywhere else in the Americas.

timeline

200 AD Small villages appear in Southwest	400 Bow and arrow in use	900 Agriculture practiced in most of Southwest	1000 Norse settlement, Newfoundland	1100 Fortifications built around Northeastern villages, indicating widespread warfare	1492 Christopher Columbus lands on Guanahani	1511 Spanish priest de Montesinos condemns cruelty toward Natives	1520 Cortés defeats Aztecs at Mexico City	1532-3 Pizarro conquers Incas	1539 de Soto pillages way through Southeast	1542 Iroquoian nations invaded by Algonkian nations
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From Ernst and Johanna Lehner, *How They Saw the New World*. New York: Tudor Publishing Company, 1966.

Samuel de Champlain helps fight off Indian forces as they attack the Iroquois stronghold of Ticonderoga. Originally printed in the *Voyages du Sieur de Champlain* by Jean Berjou, Paris, in 1613, the image illustrates how powerful tribes utilized the early colonists as allies in their own long-established rivalries, and how quickly the local Indians appreciated the advantages of European technology.

contact, and the native societies became more limited in their reach and vision.

The continual, widespread dissemination of goods and ideas that had characterized Mesoamerica and the Andes for well over a thousand years became greatly curtailed after the conquest. This did not result from any intentional Spanish policy, but simply from rule by an external power. Cultural exchanges over long distances and involving many people now transpired largely among the colonists, as they gradually increased in number across these zones. At

the same time, indigenous cultural life became increasingly local and circumscribed. The native peoples now lacked any larger cultural and political entities with which to identify.

Most Indians had only periodic exposure to Spaniards, whether colonial officials, churchmen, or private individuals. The colonists lived primarily in cities. Their movement into the rural areas dominated by native villages was very gradual.

Indigenous communities continued to be governed by their traditional elites.

The tribute and labor service that they delivered to the colonial government was similar to that of the pre-contact era and was likewise administered by their own governors. Even when Indian laborers were summoned to perform labor service in the cities or on Spanish estates, they did so under the immediate supervision of their own leaders, worked in groups, and had at best occasional contact with any Spaniards.

The Christianization of the sedentary peoples is often misunderstood. These societies had traditionally incorporated

1565
First permanent European settlement in North America, St. Augustine
Sweet potatoes and tobacco introduced to England

1606
English settlement in Virginia

1615-40s
Hurons and other tribes create vast trade network

1616-20
Smallpox ravages New England Indians

1620s
First Virginia War
Pilgrims arrive in Massachusetts

1626
Dutch buy Manhattan from Shinnecocks

1671
Apaches begin migrating to the Southwest from southern Plains

1680
Pueblo Revolt

1689-97
King William's War
Louis XIV, France, declares war on Britain

1754-63
French and Indian War

1769
Franciscan missions established in California

1777
Articles of Confederation

the major god of any conquering power into their local pantheons, as they reasoned that it had shown its effectiveness through the victory of its believers. So it is more accurate to refer to the acceptance of Christianity by these communities than it is to their conversion. In fact, a chronic shortage of Spanish priests prevailed, and few proselytized or lived among the natives. Priests assigned to extensive Indian parishes traveled periodically to their various communities, spending much time only in the largest of them. The form of Catholicism that developed in native communities emphasized devotion to the saints, religious brotherhoods, the social ties of ritual godparenthood, and the sponsorship of public festivals on religious holidays that also promoted community identity.

Colonial treatment of native people

On most issues, no sharp distinctions can be drawn between the character of native-European relations in the colonies of one country against those of another. For example, the general view holds that French and Dutch colonies in North America cooperated closely with indigenous peoples, while the English sought to drive them from their colonies. In fact, significant exceptions can be found in all three cases.

The colonists of French Canada certainly maintained friendly relations with the native societies of that region; however, in the Mississippi territory, French settlers massacred Natchez villages and drove the survivors from the area. Dutch traders at Fort Orange—later named Albany—traded peacefully with surrounding Indian peoples for several decades. But Dutch settlers around New Amsterdam—later New York City—attacked local native societies to eliminate them. Finally, while English colonists in Connecticut massacred the Pequot people, they carried on a lively trade in deerskins with local tribes in the Carolinas. When few deer remained, however, these English pitted local tribes against each other to obtain slaves to sell.

The few Spanish who settled in Paraguay cooperated with the local Guaraní society from the very founding of the colony. The colonists joined them in combat against the hostile nomadic peoples who surrounded them. Tremendous intercultural exchange took place, with the Spanish adopting as many Guaraní cultural practices as the natives did theirs. All inhabitants became bilingual. The colonists learned that Guaraní men would work for them only when the female heads of their lineage groups instructed them to do so. The settlers therefore incorporated one, two, or sometimes even several Guaraní women into their households to gain access to workers. Within a few generations, all members of the “Spanish” sector of society were biologically *mestizos*, the Spanish term for people of mixed-race ancestry. However, the few prominent families of the colony continued to term themselves as “Spanish,” for it was inconceivable that a colony’s elite could be otherwise.

Thus, colonists of the different European countries never followed a consistent policy towards the Indians. Instead they sought close relations with local native societies that controlled trade in a valuable commodity, such as furs or hides. But when the Indians had no such resource, colonists typically had no qualms about attacking them or driving them away to gain their lands.

Tribe against tribe

The material gains available from trade or political alliance with the colonists gradually transformed the nature of warfare among native societies. The increased use of firearms made combat far more deadly than before. Instead of being characterized by small bands of warriors conducting sudden attacks against each other in forests and glens distant from settlements and inflicting few deaths in battle, warfare among the Indians began to involve the destruction of enemy villages and the driving away of survivors to gain control over an entire region and its resources. These “remnant societies” of survivors were sometimes destroyed, but more often they were adopted by intact tribes in the

region. Adoption of outsiders, both individuals and groups, into tribal communities as full and equal members was a longstanding tradition among the Indians.

Almost inevitably, tribal peoples throughout the Americas experienced a sometimes lengthy period of military alertness against a local European colony. The two sides might not be actually fighting all the time, but war could break out at any time. This required indigenous communities to modify some longstanding political and cultural traditions. The colonists, belonging to hierarchically ordered societies, pressured the natives to designate political leaders with the authority to enter into binding decisions and treaties. Tribal societies traditionally practiced consensus politics, imbued local councils with decision-making authority, and elected temporary political chiefs and war chiefs to conduct diplomacy and to lead their forces in battle. But to respond more effectively to continual threats of war and European demands, many native peoples began to name permanent chiefs and war chiefs, sometimes even permitting sons to succeed their fathers in these positions.

At the same time, this increase in warfare encouraged native communities to become more dispersed, causing the authority of tribal leaders to weaken over the years. Further, the customary authority of senior women in these societies decreased substantially because the continuing military threat highlighted traditionally male functions and concerns, and because the cultivation of crops—so often a female activity—was often disrupted and gradually became less central to their existence.

I have pointed out other notable similarities and differences related to Indian-colonist interactions in *Resilient Cultures*. Only a book-length treatment can include the individual histories and case studies necessary to illustrate the complexity of this important historical process and the impact it had on the lives and cultures of the millions of people, both native and non-native in origin, who have since called the Americas their home. ■



Washington's Senator Patty Murray is busy during the Senate break touring the state, assessing concerns.

Whirlwind Tour

by Treva Lind • Photography by Shelly Hanks

A tree-lined main street buzzes with mid-August activity as the town of Dayton wakes for business. The Seneca plant for canning asparagus and sacking seed peas looms large at the edge of this Eastern Washington community,

"We've such a diverse state, from dense forests to remote rural areas, high tech to agriculture."

— Patty Murray

and across the highway, a Columbia Grain Growers elevator offers another reminder of Dayton's agricultural ties. Tourism is also important to the 2,500 residents here.

A block from downtown, about 20 community leaders gather in a meeting room adjacent to the library. They're awaiting U.S. Senator Patty Murray (D-Wash.), scheduled on this Thursday morning for a roundtable discussion on community concerns.

She's running about 10 minutes late. With a decade in Congress under her belt, Murray looks unruffled as she walks in with, "Hi, everyone." People in the room pause, then stand as Murray circulates around with handshakes. She greets a county commissioner, a bank CEO, two senior citizens, a superintendent of schools. Others are with economic development, health services, the Farm Bureau, and the Port of Columbia.

With a welcome from the mayor, the one-hour meeting begins. Dressed in a gray-green pantsuit, Murray settles into a chair with paperwork on her lap and pen in hand.

"This is our August break, but it's an extremely busy time," she explains. That's an understatement. Murray's schedule is jam-packed with stops around the state during Congress's one-month recess. The visit to Dayton comes at the end of a week spent viewing a new overpass in Auburn, touring a light rail facility in Tacoma, discussing security at the Port of Tacoma, and commissioning a U.S. Coast Guard patrol boat in Port Angeles.

"What I do in what I call 'recess' is to get out to as many communities as I can to find out what people are most concerned about," Murray says.

She's heard a lot about prescription drug costs and Medicare reimbursement rates affecting health care. Murray has intro-

duced the Medi-Fair Act to raise the state's Medicare reimbursement rate by almost \$1,500 per recipient up to the national average.

"It's a number-one issue facing doctors and health care in rural communities. They can't afford to keep open, or they're turning away patients."

She also hears about the state's economy and transportation. Murray's itinerary included tours of Columbia Valley vineyards and a stop in Walla Walla to discuss highway widening before hitting Dayton, Pomeroy, and Clarkston.

Her cross-state travels distantly echo another August trip she took 30 years ago from Bothell to Pullman, where she completed a degree in recreation at Washington State University in 1972. Later, as a young mother, she tackled the state legislature when funding cuts threatened a co-op preschool program her children attended. Her grassroots campaign to save the program triumphed, and her "mom-in-tennis-shoes" image stuck. Murray served two Shoreline School Board terms. In 1988, she was elected to the state senate.

Campaigning as one who lived the issues affecting families and pushing education, Murray was elected in 1992 to Congress. She became the youngest female senator to balance dawn-to-dusk politics with parenting two children. She won reelection in 1998.

Murray's son and daughter are grown now. She and husband Rob are even grandparents. But even as she has played key roles on Senate transportation and agricultural appropriations panels, she still lists education and families as top passions.

"I came to the Senate as an advocate for children and families," says Murray. "I have been able to impact education and health care issues, including working to reduce class sizes

Murray visits with Pataha citizens following lunch served by the children, right, in the historic Pataha Flour Mill, just east of Pomeroy, Washington.



“...I found my own voice”

in the early grades and requiring our teachers to have training in technology. The issues that affect families personally are always close to my heart.”

Today in Dayton, Murray is ready to hear what's close to the hearts of residents.

She briefly describes Congress's work on homeland security, prescription drugs, health care, pensions, an energy bill, and a new trade agreement. Supportive of the President's need to negotiate trade—helpful for Washington's agricultural, biotech, software, and aircraft industries—Murray warns about guarding the state under a new energy bill. “We need to make sure it meets with our needs, with our dependence on hydropower.”

When Murray turns to community leaders, Jennie Dickinson of Dayton's Chamber of Commerce appeals for help in the possible closure of four regional parks on the Snake River. Faced with a massive budget shortfall, the legislature cut funds for state parks on leased land, including Lyons Ferry, Central Ferry, Crow Butte, and Chief Timothy on U.S. Army Corps of Engineers property. The corps lacks funds to operate the parks and may have to destroy the facilities to return the land to its natural state, Dickinson says.

Listening, Murray nods and takes notes. She touches the pen to her chin, asking about costs to keep the parks open. Murray offers to see if her staff can work with officials, with the first goal to stop any destruction.

Since making that offer, Murray's office has held four community meetings, gathering together state and local officials, concerned citizens, and the Army Corps of Engineers in an unsuccessful effort to find a way to keep the parks open. Murray also offered to try to secure federal funding, if other funding partners stepped forward to help.

Around the room, the discussion turns to the complications of patients' privacy regulations, apple tariffs, paperwork hassles for special education, teachers, and high prescription costs. Murray tells the group she's newly appointed to the Agricultural Appropriations Committee and urges them to suggest funding priorities.

The hour is up. Murray excuses herself, but it's another 10 minutes to the door as people greet her.

Outside, Murray climbs into the passenger side of a white Grand Cherokee. She turns to her Eastern Washington director, Judy Olson, in the driver's seat. “You want to follow up on talking to the corps?” Murray queries. This reporter and two Murray staffers settle into the vehicle's back seats for the 35-minute drive to Pomeroy.

In the car, we first discuss Murray's role in education. According to her staff, Murray secured \$1.2 billion to hire teachers in 1998. Under the plan, school districts annually receive formula-based distributions to hire teachers and reduce class sizes in the early grades. The funding reached \$1.6 billion for

PATTY MURRAY didn't see a future in politics when she left Washington State University in the early 1970s. In fact, her hopes of getting a college degree at all were nearly dashed when her family fell on hard times.

The second of seven children, including an identical twin sister, Murray first spread her political wings at WSU when she led her Streit-Perham residence hall in protest to allow women to wear pants instead of dresses to the dining hall. She was soon elected Streit-Perham president.

“That was my first time away from home,” Murray recalls. “I've a twin, and we chose to get as far apart as possible, she to Western Washington and me to WSU. We chose that to allow us to grow on our own, and I found my own voice.”

Her father, Dave Johns, who managed a dime store, was diagnosed with multiple sclerosis when Murray was 15. In a few years the family lost his income, and by age 19 Murray was worrying about finishing at WSU.

“I wondered, am I going to have to go home, get a job, and help raise my brothers and sisters?” But her family got help, including job training for her mother. Murray received Pell grants and student loans. All seven siblings are now college graduates—a firefighter, a lawyer, a computer programmer, a sportswriter, a homemaker, a junior high school teacher, and a United States senator.

Once the youngest woman among U.S. senators, Murray has more female colleagues now. As of the 2000 elections, the U.S. Senate had 13 women. “We meet once a month for dinner to discuss the issues important to us, as well as how one another are doing.”

Her family's support is also key. When her children were still home, they would watch C-Span and often knew the issues such as TV program ratings for children. “Actually they watched me on C-Span to see when I'd come home,” Murray laughs. “They had it figured out before I got home. You have a very real perspective.”

Murray flies back to Western Washington every weekend and spends time with family, including one grandchild. Sometimes, she enjoys fishing or hiking.

“I do try to take time every weekend to take walks with my husband and to gather our family together.”



2001. However, for 2002, the teacher hiring initiative was combined with teacher-quality programs, resulting in \$2.85 billion for both teacher training and hiring.

"But Senator Murray succeeded in ensuring that no school district currently receiving class-size [teacher-hiring] grants would have its funding cut, so they could maintain the progress that had been made in reducing class size," says her spokesman, Todd Webster.

Washington ranks 19th nationally in teacher pay, with an average salary of \$42,143, according to the American Federation of Teachers. When asked about any gains in education, Murray smiles.

"It's an on-going effort. It used to be education was a last priority. I've worked hard to reverse that. I will continue to push education as a top national priority."

One of only a few senators to use Pell Grants and loans toward college, Murray also lists priorities of protecting student financial aid and supporting higher education.

Other issues press in, though. Washington had the second highest unemployment rate nationally behind Oregon for much of 2002, and Murray runs through some reasons.

"The agricultural economy has really been devastated, the Pacific Rim countries are not buying as much, the energy costs and the whole California crisis and pricing [that] closed the aluminum plants, then the dot.com leveling." She pauses. "And then September 11. Boeing has lost a lot of employees, about 30,000." A recent United Airlines bankruptcy threatens to cancel more Boeing orders. Murray was the architect of legislation to allow Boeing to build and then lease 100 wide-body 767 jets to the U.S. Air Force.

The state must regroup, Murray says. "We have to say, 'Where are the new ways to create jobs? Where are the new potentials for businesses? What are the big attractions or barriers?' One barrier is the transportation system unless we do something."

A great economic prospect is Washington's wine industry—especially with WSU support, Murray adds. "We need good research: crops that are disease-resistant, how to grow better crops. It could be a part of another WSU program to educate and hire wine industry managers. Now a lot of our [industry] scientists come from California."

WSU has an Irrigated Agriculture Research and Extension Center in Prosser, and Murray met August 14 with representatives of six Columbia Valley vineyards as well as with retired WSU horticulturist Walter Clore, a pioneer in Washington's wine industry. The more than 160 wineries in the state also attract tourists, Murray says. "The wine industry offers value-added dollars through tourism. People stay at hotels, eat dinner, buy gifts."

Until she was unseated last fall as chair of the Senate Transportation Appropriations Subcommittee, Murray managed transportation spending bills in the Senate. That was good news for the state.

A 2002 spending bill signed into law earmarked \$190 million for state transportation, a jump from \$60 million a year before. Among projects, it covered new city buses, bridges, ferries, highway construction, scenic byway work, west-side light rail, and airports.

During her tenure on that panel in the Senate, Murray felt pressure from both fellow Democrats as well as Republicans such as Sen. John McCain (R-Ariz.), who criticized \$3 million in the 2002 spending plan for a maritime museum in Seattle and \$4.7 million for a Coast Guard patrol boat built in Washington.

Murray contends that transportation is linked to improving the state's economy and quality of life. "Transportation impacts our abil-

ity to attract new businesses and jobs. The reason businesses say they're not moving to the state or leaving is the gridlock.

"More work needs to be done. I've been able to make an impact."

She admits being a veteran helps in the Senate, as does passing a learning curve. "I think I've gotten my master's degree in 80 different subjects. We're such a diverse state, from dense forests to remote rural areas, high tech to agriculture."

Time is running out for questions in the car. Just outside of Pomeroy, Olson stops by the roadside to give Murray time to end the interview and review for the next stop.

We drive to the U.S. Forest Service's Pomeroy Ranger Station to find Port of Garfield manager Lora Brazell. Murray won Senate support of \$500,000 toward an access road and bridge connecting to a nearby light industrial area, and Brazell briefly shows off the site. Then, everyone

heads to a scheduled luncheon at the Pataha Flour Mill restaurant.

The dining room of the 1878 rustic building holds about 30 people—a good turnout for harvest time. The owner's children and their friends escort the senator inside. Murray shakes the hand of a young girl near the entrance. "Hi, I'm Patty," she says.

At a podium, Brazell thanks Murray. "With this road and bridge we will get a chance to try to help the decline in our agricultural economy by diversifying through light industry," Brazell says.

Murray stands to speak, vowing to keep the project as a priority. As Pomeroy residents talk, they echo many of Dayton's concerns: transportation, schools, and health-care costs. Murray urges continued dialogue and gives a nod to the region's tourism, praising the restaurant. "This is a tourist destination. You have a gem here, and you have the most professional wait staff," referring to the children.

With that, she mingles briefly; but as the group starts dispersing, Murray and her staff quietly set out for their next Washington destination. ■




Pataha Flour Mill restaurant

Treva Lind is a freelance writer from Newman Lake, Washington.

Homage to a DIFFICULT LAND

An African Scientist Returns Home

A large, ancient baobab tree with a thick, gnarled trunk and a wide, spreading canopy of green leaves dominates the left side of the image. The ground is dry and dusty, with some sparse, dry vegetation. In the distance, three people are standing near a small, dark object, possibly a dog or a small structure. The sky is a pale, overcast blue.

Albadi Toure, right, Oumar Badini, center, and Ibrahim Diallo take a break in the shade of a baobab tree on grazing lands in northern Mali, West Africa.

*Peter Chilson, assistant professor of English at WSU, is author of **Riding the Demon: On the Road in West Africa.***

Early on a windless afternoon—a brutal July day when the heat breaks 120 degrees—I’m sitting against a prosopis tree at longitude four degrees north and latitude 13 degrees west, a few miles east of the dwindling inland delta of the Niger River in Mali, West Africa. This point is about 200 miles southwest, as the river goes, of the ancient market



Oumar Badini, Washington State University research associate in biosystems engineering in the Department of Soil and Agricultural Systems Evaluation and Modeling within WSU's Office of International Programs/Development Cooperation.

*Areas of savanna I knew to be rich
in grass and forest had been laid bare,
not only by the desert, but also by a
population with a voracious need for new
farmland and wood to burn and build.*

and university town of Timbuktu on the edge of the Sahara, and a few yards from the white Toyota pickup that has arrived with supplies and water. The tree's thorny branches reach out a few feet and bend to the ground, providing space and shade for me and three other men, including Oumar Badini, a soil scientist who sits beside me, holding a global positioning unit in his hand as he makes notes on a yellow pad.

Beyond the prosopis canopy lies a world of reddish, iron-rich laterite soil amidst patches of sand—all of it flat and hard. This ground radiates solar heat that makes the afternoon air difficult to breathe. Morning winds have scoured those places where topsoil is still for the taking, leaving the sky milky white. Water from the summer monsoon and constant wind long ago took the best soil from this ground. Grass doesn't grow here, but there are still a few acacia trees, the occasional 600-year-old baobab, two species of prosopis, milkweed bushes, as well as some tamarind, balanite, and ficus trees. And it is this seemingly cursed ground that has brought us to this shade, where we take water and food and consider the four or five hours of work that remain. Over two days we've walked more than 20 miles, laying out soil study plots so that Oumar and his extended research team of extension agents, biologists, hydrogeologists, and agricultural economists can look at this ground and decide what might be done so that decades

from now, animals might graze here and farmers might harvest crops.

What supports this work is a bureaucratic mouthful—the Sustainable Agriculture and Natural Resource Management (SANREM) Collaborative Research Support Program—that brings American universities and developing countries together to tackle agricultural problems. The U.S. Agency for International Development set up the program in 1992.

This plot, one of many Oumar is laying out, is a 260-acre patch of the planet no farmer or herder will touch. We know the broader dimensions, because some 30 miles above an infrared camera mounted on a NASA satellite orbiting the earth has mapped this site. In three colors, the map shows degrees of vegetation density and soil moisture. The plot shows up mostly orange, revealing what is obvious here—this ground is devastated, plundered by unchecked farming and grazing, deforestation, and wind and water.

We are doing what Oumar calls “ground-truthing,” the work of studying what the satellite can't pick up, like soil chemistry, the types of plants that grow here, and how wind and water shape the land's battered surface. Oumar is developing a chemical profile of the soil to better understand what type of agriculture—kinds of crops and planting programs, as well as livestock grazing—this land can sustain in drought, and during the short periods of heavy and often destructive monsoon rains that plague



Near 11 a.m., Albadi, left, Diallo, center, and Oumar walk the perimeter of their soils study plot in 110-degree heat.



Seydou Sanogo, the team's driver, looks on while Oumar, left rear, Diallo, right rear, and Albadi, right front, help a villager take a soil sample from the study plot.

this region. On foot, we mark these plots roughly every half kilometer with a splash of white paint on a rock or on the trunk of this tree that shelters us. Oumar and two government extension agents, Albadi Toure and Ibrahim Diallo, dig a six-inch hole in the hard ground with a pick ax and shovel, and scoop soil, clumps of gravel mostly, into plastic sandwich bags. Oumar labels each with masking tape on which he writes the GPS coordinates. Meanwhile, Seydou, the pickup driver, meets us every five kilometers with fresh water.

I first saw this countryside in 1988 as a journalist reporting on drought in the Sahel, a narrow region that stretches from Senegal to Somalia. The Sahel seems to be in unstoppable ecological decline under the force of the Sahara and a drought begun in the late 1960s that has never really ended. I'd come to West Africa three years earlier as a Peace

Corps volunteer in Niger, which borders Mali in the northeast. I taught junior high school English for two years and stayed on to write for Western news organizations from a base in Abidjan, Ivory Coast. When I went back to West Africa to research a book in 1992, I was struck by the change in landscape in many countries. Areas of savanna I knew to be rich in grass and forest had been laid bare, not only by the desert, but also by a population with a voracious need for new farmland and wood to burn and build. The roots of the remaining baobab trees around the village in Niger where I once lived were exposed three feet above ground, revealing the depth of soil lost.

Last May I returned to Mali with an optimist, Oumar Badini, a native of Burkina Faso, Mali's neighbor to the east, and a research associate in soil science in Washington State University's

Office of International Programs. He is 44 years old, soft-spoken, lean, and balding, with a thin mustache. In the field he wears cargo pants, an old blue Polo shirt and a sweaty, dust-stained "WSU Cougars" ball cap. He has walked every one of us into the ground. Even in this heat, Oumar shows little sign of fatigue.

"Trust me," Oumar says as we begin walking early that morning. "If we can learn more, we can make better decisions about how to use this land." He raises his hands in a gesture to the land. "This is the environment, and it's something we can't control. But we can manage what we have and live on it forever. I am convinced of this. The idea is to find ways to make grazing sustainable so it does not degrade the soil, or so it is even a plus."

When the study is finished, in two years, Oumar's team will prescribe a recovery plan. This may involve new



Diallo, left, Oumar, center, and Albadi discuss GIS readings while surveying a soils study plot.

grazing and cultivation patterns. On some lands herders and farmers may work together, so that cattle fertilize the land with manure as they graze while farmers plant nitrogen-fixing legumes, such as beans. Any plan will need monitoring, with special rotation patterns between crops and animals.

In this shade with the sun directly above, only Oumar is still working, scratching away with his pen. Albadi and Diallo drink deeply from water bottles and stretch mats on the ground to prepare for the mid-day Muslim prayer. I am resting my head back against the tree trunk and holding a water bottle on my lap between my hands as if somehow I might lose it. Oumar looks up from his notes and grins at me.

He whispers, "Are you having fun?"

OUMAR SAYS, "You know, in Africa so many people want to come to the United States to work and live, and me, I am trying so desperately to find a way back to Africa." He smiles. "People think I'm crazy."

The point of Oumar's work in Mali and Burkina Faso is simple, he says. It's about independence, not just the ability of a region to feed itself, but to believe in itself.

His life runs on a four-month cycle: three months in Pullman, pulling together his research, and three weeks in Mali digging into the problems of agriculture and survival on the land. Right now, as we talk in late April 2002, he is at the end of a Pullman phase, less than a month before we return to Mali together. He folds his hands beneath his chin as a spring snow falls heavy and wet outside his office window in Bryan Hall. He wonders about the cost of what he does for a living, bouncing back and forth between a world where people barely get by on the land, and the United States, where people take food and shelter for granted. He wonders about the cost to himself and his wife, Kadija, and two children, Rachid, 13 and Mounira, 8, who were born in Burkina Faso but know little of their parents' native land or life in the Sahel.

"Kadija and I try to speak French to them," Oumar says, smiling. "But they complain. They want us to speak English." He leans back in his chair and folds his arms. "I am trying to get the best of both worlds, but sometimes . . . I don't know," he says. "I am a scientist, I love my work, but this life is hard, very hard."

Over the past year, Oumar and I have been talking about his work in weekly meetings in a local café and at my home, but mostly in his office. There, I find him at his computer, his desk piled with field notebooks, soil and weather charts, maps, and reports. He dresses impeccably in pressed long-sleeve collared shirts and khaki or corduroy slacks and polished leather shoes.

Oumar remembers the day he left his wife and young children in Burkina Faso to study in the U.S.—August 23, 1991. He lived four months in Lewiston, Idaho, learning English at Lewis-Clark State College. Two years later, when he

finished his master's degree in environmental science at WSU, he brought his family to Pullman. Oumar finished a Ph.D. in soil science and worked his way to a position as a WSU research associate on the SANREM project, working with three other American universities. Oumar also works with the Center for Remote Sensing and Geographic Information Systems in Burkina Faso, a private venture founded by Patrice Sanou, one of West Africa's leading agricultural geographers and a friend and countryman of Oumar's. Both men hope the center will one day make it unnecessary for West Africans to travel abroad for education in geography and remote sensing technology—the type of satellite technology used to map Oumar's study plots in Mali.

The point of Oumar's work in Mali and Burkina Faso is simple, he says. It's about independence, not just the ability of a region to feed itself, but to believe in itself. That work is Oumar's way back to Africa. "I want to repay what I have taken for my education. I want to be useful to my country," he says. "I want to be seen as a man of good, as someone who can make something happen. In Africa to make a difference is so important."

"YOU ARE HOPELESS," Oumar tells me, rubbing his hand over his face. I have just asked him, for the third time in as many days, to explain how teams are ranked in the World Cup and then matched in play. He shrugs and smiles. "But you're American," he says, "You care nothing about soccer."

It is May 30, and we are sitting in the shade of a high mud wall in the compound of Diallo's mud banco house in Madiama, a remote village near Oumar's research site in Mali. We are listening to a radio broadcast of the World Cup



Dicko Adama, young goatherd of the Mossi tribe, stands with his flock outside the town of Ouahigouya, Oumar Badini's hometown in northern Burkina Faso, about 30 miles east of the border with Mali.

Football Championships under way in Japan and South Korea. Madiama is the center of a district of 10 villages where farmers and herders have asked the Malian government to study the failure of local grazing lands, which is where Oumar and his team come in. We parked the Toyota outside this house that Diallo shares with his wife and two children. We drink sweet, strong Chinese green tea and eat millet biscuits, trying to work up the fortitude to go back into the bush and heat to finish the mapping project.

Seydou, the driver, sits on a stool, making tea in a small pot resting on coals in a standing wire stove shaped like a martini glass. He boils water and packs tealeaves and sugar in the pot for round after round of tea. Once the tea is ready, he raises the pot high and tilts it so the tea falls in hot ropes of steaming brown into shot glasses set on a metal tray. He offers Oumar and me a glass each, and we slurp loudly in appreciation.

Oumar licks his lips. "Seydou," he says, "You are a master!"

Then he claps his hands and shouts in French, "Hey, we've got to go." He looks around and taps his watch. "Albadi, Diallo, come on, the sun is rising, we have work to do." Between the five of us, we are one native speaker of English, one of Mossi, and three of Bambara, but we all know French, the colonial language

that is the bridge between us.

Diallo's three-year-old daughter, Kumba, wearing a long red T-shirt, wanders sleepily out of the house and into the compound, shyly staring at us. Oumar shouts, "Kummbaaaaaa," and scoops her up, the two of them laughing.

Minutes later we are driving east on a sandy track that takes us five miles to Mali's great north-south road, the country's main highway that connects the capital, Bamako, to the vast savanna and desert of the north. This is a six-meter-wide ribbon of pavement that wanders north from Bamako across the country and into the Sahara and eventually Algeria. We cross the pavement continuing east. The track turns to laterite, mostly flat with few ruts and potholes, allowing us to speed across the bush another five miles at 70 miles an hour until Oumar, GPS in hand, tells us to stop. We begin every morning this way: Tea, biscuits, the World Cup, and the dash to our walking point in the heat.

WHEN OUMAR BADINI WAS EIGHT years old, his mother took him into the bush to gather wood and show him that he could eat the leaves off a balanite tree, a deep-rooted tree that grows across the Sahel and is known for its tiny, five-petaled, light green flowers. Balanite leaves are a common food and often boiled and mixed with other vegetables

or meat. But Oumar had never seen them eaten straight from the tree. Mother and son gathered and chopped up dead branches with homemade hand axes, and then he saw her walk up to a tree and pluck the small oval green leaves from a branch and eat them. So Oumar grabbed hold of a branch and took a fistful of leaves that were thick and milky green under a film of gray dust. He tasted them with his lips and tongue, and then bit one and found it bitter.

This is important because of the year, 1966, and the place, northern Burkina Faso. And because, Oumar says, the act of eating leaves off the tree signaled hard times, a drought that persists to this day. This was the beginning of six years of no rain over the Sahel. Most livestock died, grasses vanished, and wind took the topsoil, whipping up dust storms and revealing what lay beneath—laterite the texture of a vast parking lot. In 1973, when Oumar was 14, the Niger River, one of the world's largest watercourses, dried up. This was also a time of coups d'état across the West African Sahel, when untested army officers in Mali, Burkina Faso (then called Upper Volta), and Niger tried to govern a region that was in deep desperation. As if they—as if anyone—knew what to do.

"It was shocking," Oumar says.

"Everything just collapsed." What had "collapsed" was his childhood playground and workplace, the bush, where he spent his days around the town of Ouahigouya, where his wife, Kadija, was also born. He helped his cousins and older brothers watch the family's goats and cows and tend crops during the summer rains. He would walk the bush barefoot in a dirty T-shirt and shorts. He carried a water bottle and nuts or dried couscous, clucking his tongue at his bovine charges and striking strays with a branch to keep them in line. Some days Oumar and his animals covered five miles and other days as many as 15. In those years the family had to slaughter most of the herd only to find that few people in the marketplaces had the means to buy the meat.

"The land," he says, "had nothing left to give, and all of that, everything that I

saw is the basis of what I know and do now. It was the beginning of my life as a scientist and pastoralist."

Oumar's life flows as if from that first fistful of balanite leaves. He speaks Mossi, his native tongue. He also speaks fluent French and some Bambara and Fulani, languages he grew up with. He has a degree in biology and animal science from the national university in Ouagadougou, Burkina Faso's capital. Not long after that morning in the bush with his mother, his family sent him, the youngest son, to primary school in Ouahigouya. In 1973, he left home to attend junior high school in the south-east of the country and then lycée [high school] in Ouagadougou. In 1980, he entered university. By 1986, after the drought had eased, he was in a government job in the south, near the borders with Ivory Coast and Ghana, working with villagers to manage livestock and grazing lands in a region where population needs were greater than the land could provide. He traveled in a beat-up Land Rover with an agricultural economist and a geographer, his friend, Patrice Sanou, to work with farmers who were raising only enough animals and growing enough grain to survive.

"The farmers live on the land," Oumar says. "They know what the problems are, and it's important to respect that. Our job is to fill in the gaps with science."

What Oumar's work is leading to is the idea that the Sahel's problems must be solved by the people who live there. This is the point of Oumar's and Patrice Sanou's risky side project in Burkina Faso, their geographic research and training center. The two men, and their Burkinabe colleagues, have been slowly working to develop contacts while holding down their jobs, Oumar in the U.S., and Patrice at Burkina Faso's government geography institute. So far, the center has won a few mapping jobs with the Burkinabe government, as well as contracts to train government officials and students at the national university. But the center hopes to broaden its work across the Sahel.

"The risks are great," says Oumar. "We have to build credibility with governments in the region." That is hard to do when the competition includes agencies and universities of Western countries that have long been the major players in African development. "With the training we offer," Oumar says, "we can do this job [of developing Africa] ourselves."

This trajectory brings us back to the Sahel and this hardpan laterite in Mali. Here, plants dig desperately for the means to stay alive, sending roots deep to feed on water and nutrients. The roots of the prosopis tree, known as mesquite in the American Southwest, can penetrate 30 feet, many times the



Left: Children and the school guardian, Doro Jouri (in red beret), stand in front of the director's office at the Bimbin Primary School in Ouahigouya, where Oumar Badini began his education. Below: Girls draw water from a well to wash clothes beside a community garden outside the town.



height of the tree above ground. Such plant behavior is evidence of the resilience that Oumar believes will save this land that is only 100 miles from where he grew up.

This is Oumar's land.

LISTEN TO OUMAR TALK about his work in Africa, and you can hear the fuel that drives him.

"There is almost no state in Africa that can survive three months without money from the outside," he says. We are in his office and he leans forward in his chair, his hands folded. He does not gesture. "You have these kinds of artificial states where the first thing a new African leader must do when he takes office is fly off to Paris to pledge allegiance and see what France can do for them." He pauses, and his palms fly outward in exasperation. "That is the government economic program."

Really, this is all about dependence, which Oumar hates. What motivates him is the hope that the Sahel be able to feed itself. Mali is twice the size of Texas, and 80 percent of its 11 million people depend on subsistence farming or fishing. Per capita income is \$280, and more than 65 percent of the land space is desert or semi-desert. Seventy percent of the \$730 million national budget comes from foreign aid. Mali owes \$3 billion to Western governments, the World Bank, and the International Monetary Fund. In Burkina Faso, a country the size of Colorado with a population of 12 million, the situation is little better. These are two of 15 African countries the Europeans left cut off from the sea when they withdrew from most of Africa between 1958 and 1961.

The dependence Oumar speaks of is the legacy of French rule over the Sahel from 1870 to 1961, a colonial curse, though he is too polite to say that. "We are fighting this idea that [Africans] can do nothing on their own without knowledge and expertise from the outside. This has been taught and encouraged and embedded in the minds of

most Africans. If you can't provide for yourself, what real independence do you have?" He pauses and smiles. "I don't like bosses," he says. "I want to work for myself."

"THIS IS NOT GOOD," says Seydou. Together we are standing in the bed of the pickup, hoping to catch a glimpse of Oumar, Albadi, and Diallo, hoping to see a baseball cap bobbing above the bushes or hear an answer to our shouts. They are an hour overdue. Seydou jumps to the ground and reaches in through the driver's side window to beep the horn. It is past 5 p.m., and darkness will soon fall. "I may have gotten our position wrong," he says. "They could be lost."

I say, "They can't have much water left."

Early that afternoon I had opted out of following Oumar the rest of this, our last day in the bush. The heat had exhausted me.

"I surrender," I told him. "I'm going to sit and make my notes."

So around 2 p.m. Seydou and I left Oumar, Albadi, and Diallo under the shade of a tree and drove to the next rendezvous point three miles away. Seydou parked the car beneath the canopy of a large baobab, and we waited. He lay on a woven plastic mat under the tree, and I sat in the shade of the truck, against a wheel, and worked until I nodded off. The air was still, leaving us in the silence of a place where my heartbeat seemed like an audible sound. Even the flies had gone. A quarter mile away three cows crossed the laterite on their way to better pickings, hooves clicking and scraping and cracking against the ground. Three hours passed.

But now, standing in the back of the truck, we hear the steady crunch of wheels as a farmer appears out of the

shimmering heat on an old bicycle. He wears a dusty robe and white skullcap. Slung across his back is an old handmade black powder rifle. The old man stops and raises his fist in greeting. "*Salaam alekum*," he says, using the Arabic expression of peace while staring at our truck. Seydou speaks to him in Bambara, and I struggle to understand while staring at his bicycle. The wheel rims have been patched in many places with strips of heated metal still black from the hot fire used to soften them. The strips were wound tightly around cracks in the rim, where they more or less melted in place. Seydou agrees to take the farmer to his village when we leave.

The sun is a sharp orange ball over the horizon, and Seydou looks at me and shakes his head. He says, "It will be dark in half an hour." He again mounts the truck bed, and I wander across the laterite, careful to keep the truck in sight. Alternately, we shout Oumar's name. Seydou blasts the truck's horn.

Just after six, as the sun begins to dip beneath the horizon, we hear loud voices. Three men emerge from a thicket of bushes a quarter mile off, waving and shouting, "*Whooooaa, whoooooa, nous sommes la*."

Seydou runs to meet them with water bottles. The farmer sits in the truck bed with his bike, watching. Minutes later, at the truck, Oumar drinks deeply and then leans against the cab with both hands, his head hanging between his outstretched arms as if he'd just finished a marathon. He looks at me sideways. "We're done," he says between deep breaths. "It wasn't bad, we got a little lost."

Oumar is far from done. Two days later, back in Bamako, he catches a flight to Burkina Faso to meet with Patrice Sanou and work on the next phase of his independence project. ■

Really, this is all about dependence, which Oumar hates.

What motivates him is the hope that the Sahel be able to feed itself.



by Nathan Mauger • Illustration by David Wheeler

Nathan Mauger was raised in Spokane and studied journalism at Washington State University. As a freelance journalist he has reported from the United States, China, Palestine, and Iraq. He was jailed for a month in Israel in 2002 for delivering food and medical supplies to Palestinians in the Church of the Nativity in Bethlehem. After being released, he went to work for Voices in the Wilderness, a Chicago-based campaign to end the sanctions on Iraq, and traveled to Iraq in September, staying for two months.

Regarding this article, he writes: "I wrote this shortly before leaving Iraq. The conditions there, especially for children, are terrible. Everything I'd written was about sanctions and war, depleted uranium and dead babies, and I wanted to write something more lighthearted.... What happened that day was mostly because of a government minder named Zeit who held some stereotypes, and the [Christian Peacemaker Team] people generally aren't as grumpy as they might seem reading this. When I think about the human cost of war on Iraq, I always think of the people I met in Iraq, including Zeit. This story doesn't do him justice; he was a very sincere man and extremely funny. He lives in Baghdad and has two kids. When CNN starts showing missiles tipped with depleted uranium hitting Baghdad, I'm going to be thinking about him."

I'M WALKING ALONG THE BANKS of the Tigris River in Mosul when I first hear about them. "Tomorrow, we will meet the people who are worshipping the Satan," says Zeit, our government minder.

"There are people in Iraq who worship Satan?" I ask, surprised.

Zeit says there are indeed. In the van, he clarifies the subject further—there are people in Iraq who worship the devil.

I am in the Northern Iraqi city of Mosul, population 2.5 million, tagging along with seven members of the Chris-

tian Peacemaker Team. The trip has so far been a bust, and our time has been split between not being allowed out of the hotel and not being allowed out of the van.

At lunch Zeit announces to the entire group what we'll be doing tomorrow: going to meet devil-worshipping Iraqis "for a picnic." Zeit is both excited and apprehensive about taking us to see the Iraqi Satanists, also known as Yzidians. He says they carry small knives and are "very dangerous." The local man who is our guide is also nervous. The Chris-

tian Peacemakers, most of whom are in their late 60s or early 70s, are less than thrilled.

"We'd hoped we would be able to meet some elderly people," Anne Herman, 69, says.

"The devil's been around a long time," I say.

The Iraqi Yzidians met with Saddam Hussein on television several weeks earlier. This was an extremely risky endorsement for the Iraqi president to seek. George W. Bush has vowed to "rout out" the "evildoers" worldwide, and the Iraqi government drawing support from domestic devil-worshippers would seem to invite further bombing.

Zeit and the guide from Mosul solemnly explain to us that the Yzidians pray to the peacock. But a peacock is just a bird, I say. Zeit is annoyed. "Everybody knows the peacock is coming from the devil," he says, shaking his head dismissively. "The peacock is the symbol of the devil."

The Mosul guide tells us there are followers of Yzidia in not only Iraq, but also Iran, Turkey, Syria, and Germany. They sacrifice animals.

"Like chickens?" I ask.

Zeit thinks for a moment. "Yes."

"Lambs?"

"Yes."

"People?"

"Yes."

The Yzidians of Mosul do this outside the city limits, in a town called Bashika.

"Is this what you want us to tell the American people?" asks Bill Rose, a retired postal worker. "This story?"

"This is not story. This is some kind of facts," Zeit says.

In the van, I'm growing more and more excited about tomorrow's trip to see the Iraqi Satanists. Sitting next to me is Joe Heckel, a 77-year-old Presbyterian clergyman.

"Joe, tomorrow we're going to see the devil-worshippers of Iraq," I say. "You're a Christian Peacemaker. How do you feel about this?"

Joe shoots me a sideways glance. "Disinterested," he says.

"Do you see any possible source of conflict?"

"Conflict with what?"

"With the devil-worshippers."

"No. I'd like to talk to some Christians."

Kathleen Kampmann, a 63-year-old Roman Catholic, is sitting on my other side. I ask her, "Are you excited to see the Iraqi Satanists tomorrow?"

"I was actually not interested," she says.

I can only find one other person in the van interested in meeting the Satanists—Sister Anne Montgomery, a Catholic nun. Sister Anne, 76, has seen the dark side of faith in Iraq before. (Iraq is a secular state with religious pluralism.) I like Anne—she once dove into a river and swam upstream with a sledgehammer to bang on a U.S. Trident submarine.

Years ago, Sister Anne was in Baghdad with a group called Medicine for Peace, helping to organize and fund operations for Iraqi children outside the country. The family of one of the children took Sister Anne out to dinner as a thank-you after a successful operation, which was followed by a trip to a local church holding a Darwish ceremony. During the ceremony, men stuck knives through their bodies.

"They really know human anatomy," Sister Anne says. "They actually put knives through themselves and they never touch a vital organ."

Sister Anne and I keep talking about the Darwish, Iraq, and Satan. The mood in the van is tense; the other Christian Peacemakers aren't happy about tomorrow's itiner-

ary. Then it strikes me that seeing the Satanists tomorrow is entirely appropriate; today is October 30.

"Tomorrow's Halloween," I say. "We're going to meet the Iraqi devil-worshippers on Halloween!"

The next morning—Halloween morning, that is—Zeit takes us to a hospital to see the conditions. The Christian Peacemakers are grumbling about going to see the Yzidians in Bashika and starting to come up with alternate plans.

Zeit takes me aside. He's excited about going to Bashika. I tell him the Christian Peacemakers don't want to go. In a low voice, Zeit says we can decide what to do today in a democratic way, "or I can order them to go."

"Order them," I whisper.

When we're done meeting with doctors and patients in the hospital, Zeit tells us to get in the van because we're going to Bashika. "To see the devil-worshippers," he announces.

Bashika is thirty minutes outside of Mosul. About three hundred families live in the town. Half are Arab and half are Kurdish, but not all of them worship Satan; there are also Muslim and Christian communities.

As we drive into Bashika, Zeit points out some pointy structures on the top of a hill. Those are Yzidian temples, he says.

The Christian Peacemakers are silent. The night before, I think I helped put them somewhat at ease when I asked Zeit if the devil-worshippers would kill us and eat us, and Zeit assured us they wouldn't. Several of the Christians exchanged looks after this, relieved. But then I asked Zeit if he carried a gun, and he said he didn't. This disturbing fact is no doubt on the Christian Peacemakers' minds as we enter Bashika.

One of the peacemakers carries a cane, but it will do little good against the Satanists, should it come down to that. What will probably be of more use is the crucifix hanging around Sister Anne's neck.

The land around the town is rural. We pull up to a temple on the edge of Bashika. As we get out of the van, Zeit tells us not to use words like "Satan" and "devil" when we're talking with the Yzidians. They could become angry, he tells us. Zeit is visibly nervous.

We meet Ibrahim, who is in charge of the temple. He is portly and of average height, and he wears a kiffa around his head. (To hide horns?)

Zeit talks to Ibrahim as we're led into an open-air stone courtyard. The Christian

Peacemakers, Zeit, and I form a half-circle around Ibrahim, who does not speak English. Zeit looks at me expectantly.

"We're familiar with Christianity and Islam, but don't know anything about the, uh, other religion," I say. "Can he talk about it?"

"They love each other and make peace with each other and make peace in the world," Zeit translates. "There is no difference between the religions."

Zeit is giving me "looks" as he says this, raising his eyebrows up and down and making little nods toward the Yzidian next to him.

Ibrahim says Yzidians worship the sun, which is the eye of God.

"Do they have some literature?" Bill asks. "A book of prayers?"

Zeit and I glance at each other. Does Bill want to convert?

Ibrahim says Yzidians light candles that burn olive oil for the angels twice a week. Moreover, the peacock-angel founded the religion in 3000 B.C. "He was the headmaster of the religion—you get me?" Zeit says, his eyebrows going up and down. More questions and answers follow, with both sides purposely avoiding words like Hell and Lucifer.

Ibrahim takes us over to the tomb of someone named Mr. Uday, who wrote a text that is holy in Yzidia. I take off my shoes and go inside. The doorway is only about three feet high and leads into a small stone room with a high ceiling. A trunk-sized coffin with a cloth draped over it stands against the far wall. Mr. Uday must not have been very tall.

As we leave the church I'm disappointed; I'd hoped to see orgies and ritual sacrifice. But now I'm questioning whether or not Yzidia is actually a Satanic religion.

Zeit assures me the peacock-angel is really the devil. I ask him if he felt anything when he went inside the church.

"Yes," he says, closing his eyes and bowing his head slightly.

"Something evil?"

"Yes."

In the van, I'm almost convinced that Yzidians don't really worship the devil, that they're just a pre-Christianity religion without a relationship to Satan.

But then, as we drive by the farms outside of Bashika, on our way back to Mosul, we see them.

Kathleen suddenly points out of her window at one of the farms. "Look," she says. "There are peacocks. Amongst the chickens." ■



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Social, 6:30 p.m. Meeting, 7 p.m.

Eastside (Kirkland)—Tuesday, April 8,
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Social, 6:30 p.m. Meeting, 7 p.m.

Contact Alex Webster at 206-219-2423 or
awebster@wsuwest.edu for more information.

Spring Reunions

Golden and Diamond Grad Reunions

Members of the classes of 1953 and 1943 are invited to return for the 50- and 60-year reunions held April 23-24 on the Pullman campus.

Pine Manor Reunion

Former residents of the Pine Manor Residence Hall will be gathering for a celebration April 25-27.

To register, or for more reunion information, call 800-258-6978 or e-mail reunions@wsu.edu.

Contact us: wsualum@wsu.edu 509-335-2586
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TRACKING THE COUGARS

CLASS NOTES

1930s

Bob C. Jones ('37 Bus. Adm.), Edmonds, writes, "I am a retired banker age 87 and still kicking."

1940s

Norman L. Garlick ('41 D.V.M.) Mt. Pleasant, South Carolina, worked as a janitor at the Audian Theater in downtown Pullman for \$25 a month and held the job for five years while pursuing his degree. He writes, "My career covered many important opportunities and accomplishments in the field of animal disease control and eradication, covering almost all the states in the U.S."

Betty Saling Normandin ('41 Music, '41 Educ.) hosted six other "Senior Cougars" in her home at the Villages in San Jose, California, September 8, 2002. Those present at the luncheon included **June and Phil Lighty**, **Laura and Evan "Scotty" Hamley**, **Evie and Cliff Transeth**, and **Barbara and S.J. "Bill" Monro**. **Lola Baumann**, wife of

the late **Jack Baumann**, also attended. "It was a special time for all of us," writes **Virginia Storm Throssell** of El Cerrito.

1950s

Chellis Smith Swenson ('57 Speech, '57 Theatre Arts) who gained fame as singer "Rhinstone Rosey," and Harlan "Chuck" Jensen were married August 24, 2002 in Tacoma. Chellis, president of the WSU Alumni Association in 1981-82, has been a longtime volunteer with Habitat for Humanity in Tacoma.

Norman R. Scott ('58 Ag. Engr.) won the Cyrus Hall McCormick-Jerome Increase Case Gold Medal Award for 2002 from the American Society of Agricultural Engineers. He is a professor in the biological and environmental engineering department at Cornell University. He conducts research and teaches development of sustainable communities, with an emphasis on biologically derived fuels, renewable

energy, recycling, managed ecosystems, and industrial ecology.

1960s

Robert Boehm ('62 Mech. Engr., '64 M.A. Mech. Engr.) received the Distinguished Teaching Award and Harry Reid Silver State Research Award from the University of Nevada, Las Vegas. He is director of the Center for Energy Research at UNLV.

Barrie Grant ('62 D.V.M.) received the 2002 Dan Evans Memorial Award from the California Veterinary Medical Association for his ideals and achievements that are a positive influence on those entering the field of equine veterinary medicine. He practices at San Luis Rey Equine Hospital. His expertise is in equine neurology and neurosurgery.

Joe Hill ('62 Math), academic dean of the University of Southern Mississippi Gulf Coast since 1998, retired September 2002.

Alex Ojerio ('67 Vet. Med.), former WSU veterinary faculty (1974-82) and

director of the WSU Laboratory Resources Center, is a professor at Oregon State University in Corvallis, Oregon. He lives in Eugene, where his wife works at a local veterinary clinic.

Larry Dixon ('68 Police Sci., '70 M.A. Hist.) was presented the Community Service Award of the Auburn University Montgomery Alumni Association. His public offices include the Montgomery City Council (1975-78), Alabama House of Representatives (1978-82), and Alabama Senate (1982-present). He is executive director of the Alabama Board of Medical Examiners.

Kathryn Zebarth ('68 Home Ec.) is an elk farm manager in Brandon, Minnesota. Since graduation, she has taught home economics, worked in retail management, and oversees 400 registered elk.

1970s

Verne W. House ('71 Ph.D. Ag. Econ.) received the 2002 R.J. Hildreth Award for Career Achievement in Public Policy Education at the 52nd annual conference

Working toward a common goal

MAYBE I CAN'T SAVE the world. But I can try to make a difference somewhere. But how?

I researched several volunteer organizations, but most of them required a three-month to two-year commitment, which was not possible for me. After weeks of extensive research, I found Cross Cultural Solutions, a non-profit organization that places volunteers in different countries to gain new understanding through sharing ideas and working together toward a common goal. They offer programs from three weeks to six months in duration for those who want to help but can't afford to take a lot of time away from their jobs.

My assignment was to work for the Red Cross of Ghana in Ho, Ghana, for a four-week period, educating youths about AIDS. Ho, a town of about 50,000, is approximately 100 miles northeast of Accra, where the majority are of the Ewe ethnic group, but usually speak English along with their native Ewe and other local languages.

Ghana is heavily aid-dependent and highly indebted to external creditors. Poverty and other economic pressures constitute major factors in the spread of HIV/AIDS. For example, high youth unemployment, limited job opportunities, and the rising cost of living are aspects of the poverty cycle that promote transactional sex and early sexual relations.

The economic cost of HIV/AIDS to employers in terms of care, absenteeism,

and retraining is high and steadily rising. HIV/AIDS is expected to put severe stress on families, health care, and other sectors of the economy. Recent estimates indicate that the annual cost of treating an AIDS patient can be as high as 490,000 cedis—approximately \$70 U.S.

When the average family household income is only 175,000 cedis per month—\$25 U.S.—it is difficult to receive adequate health care, especially for those infected with AIDS or malaria.

My work for the Red Cross became more rewarding each day. Between working on AIDS awareness materials and designing a

Jennifer Bushnell and friends in Ghana.



youth center, my days were busy and fulfilling.

My supervisor discovered that my background was in architecture. The youth center he envisioned would be for vocational training for youths aged 14 to 18. The idea was for a center where youths could live and receive proper training for future skills, such as basket weaving for girls and wood carving for boys.

I began by sharpening my eraserless #2 pencil. I had an old ruler for a scale and some copier paper for my floor-plan designs. My designs became difficult at times, due to the absence of the ADA guidelines and building codes we use in the United States. The freedom of design was more difficult than I ever anticipated. I had been used to following guidelines and rules for life safety and compliance. I had no such guidelines in Ghana.

The floor plans for the Red Cross youth center were finished in two weeks.

Now, raising the funds to build this facility was my next challenge.

By the end of my assignment in Ghana, I had made great friends, who were my family for four weeks. I plan on traveling back to Ghana within the next year to see my friends and the completed youth center.

—Jennifer Bushnell

Jennifer Bushnell '97 is an intern architect in Seattle.

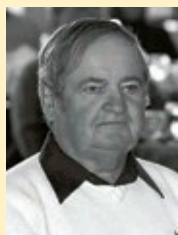
Alumni Association recognizes Woods, Prince, past presidents



Richard I. Woods

A PROFESSIONAL FORESTER and a former state senator have received the Washington State University Alumni Achievement Award.

Richard I. Woods ('58 Forestry Mgmt.), a 44-year veteran of timber harvesting, marketing, and appraising, was recognized at a surprise 70th-birthday party at the Kelso-Longview Elks Club October 6, 2002. Since 1981, Woods has owned and operated 4S Tree/Northwest, Inc. in Kelso.



Eugene Prince

Eugene Prince received the award November 2 at the WSU Dad's Weekend breakfast. He has committed more than 40 years to public service to the state, much of it as a legislator.

"His [Woods's] goal has been to maximize income from forest land, but still leave resources for the next generation," according to Charles J. Chambers, alumni director from Shelton.

Woods has held positions with the Washington State Department of Natural Resources, WSU Cooperative Extension Service, and the Federal Land Bank. Prior to founding his own company, he spent a decade as a consulting forester with the Woodland Management Co. He served two three-year terms on the Washington State Forest Practices Board and was president of the Association of Consulting Foresters of

America, 1990-92, and the Washington Farm Forestry Association, 1973-74.

Following 18 years on the Kelso City Council (1974 to 1992), he was mayor for eight years.

Prince graduated from WSU in 1952 (Agri. Engr.). After two years as an Air Force officer, he returned to Whitman County and the family farm at Thornton. He served as president of the Washington Association of Wheat Growers and commissioner of the Washington Wheat Commission.

Prince was elected to the state House of Representatives in 1980 and served for 12 years, the last six as Republican caucus chair. In 1992, he was elected to the Senate, where he served from 1993 to 1999. He sat on the state transportation and higher education committees, representing Eastern Washington and helping promote the needs of higher education, including WSU.

Following his retirement from the Senate in 1999, he was appointed by Governor Gary Locke to chair the Washington State Liquor Control Board through January 2005.

THREE FORMER WSU Alumni Association presidents also have received the Alumni Achievement Award. Melvin Pettichord ('43 Industrial Arts), Olympia, alumni president from 1962 to 1963, spent



Melvin Pettichord

his 36 years in education at Battle Ground High School. He was hired in 1941. Through 1961 he taught mechanical drawing and physical education and coached sports. He was principal from 1964 to 1971 and served as a guidance counselor before and after his tenure as principal. He earned a master's degree from the University of Oregon in 1962 and retired in 1977.

Thomas Copeland (x'51), Olympia, was alumni president from 1973 to 1974. He received the Purple Heart and Bronze Star during World War II, preceding his studies at WSU in 1946 and 1947.



Thomas Copeland

He left WSU to manage the family farm in Walla Walla. Later he served in the Washington State Legislature for 16 years. He was elected to the House of Representatives in 1956 and held many leadership positions, including speaker of the House. Following his political career, he was in charge of legislative relations for the state Department of Employment Security. He also was a founding member of the Washington Wheat Growers Association.

Mike Worthy ('77 Bus. Adm.), Vancouver, alumni president from 1990 to 1991, was honored at the November 23 meeting of the Alumni Association Past Presidents in the Lewis Alumni Centre.



Mike Worthy

He is president and CEO of the Bank of Clark County in Vancouver. At 24 he was among the youngest branch managers of Pacific National Bank, which became First Interstate Bank. He was promoted to vice president of the Bothell branch at 28 and became vice president and manager of the University District branch in 1984. When Wells Fargo bought out First Interstate in 1996, he was made senior vice president. He left the company in 1997 and has been in his present position since 1998.

Worthy, a trustee of the WSU Foundation since 1990, served as chair of the national gifts committee during Campaign WSU, which raised more than \$275 million in private donations.

—Pat Caraher

CLASS NOTES *continued*

of the National Public Policy Education Committee in Reno. The former Montana State University Extension educator was recognized for informing the public on such issues as land use, water rights and management, agriculture and taxation, as well as the Extension Service's rural leadership project. He is professor emeritus at Clemson University. Since retiring, he has taught family public policy for three years at MSU.

Colonel Michael Perini ('72 Social Studies) is director of public affairs

for Headquarters North American Aerospace Defense Command of the U.S. Air Force near Colorado Springs, Colorado. He has served on the editorial staff of *Air Force Magazine*, as deputy director for Headquarters Pacific Air Forces at Hickam Air Force Base, and as editor/publisher of *Airman Magazine*.

D. Scott Knight ('73 Polit. Sci., '76 Teaching Cert.) is a teacher and head baseball coach at Stanwood High School and a member of the Washington State High School Baseball Coaches Hall of Fame. He spent two and a half weeks last summer coaching with USA

Baseball and the Youth National Team in Tucson. He was a field supervisor/scout during the 72-team Junior Olympic tournament. USA Baseball holds two tournaments at the same time. The other, in Jupiter, Florida, features 58 teams. The tournaments are the only way a player aged 15 or 16 can be selected for the Youth National Team. At the end of the tournament, 36 players were nominated to participate in the Youth National Trials. Knight was one of five high school coaches in the U.S. to coach one of the two trials teams.

Jack D. Guske ('74 Psych.) has retired from the U.S. Army Reserve with the rank of lieutenant colonel after 28 years of service. For 13 years, he was assigned to the Army Corps of Engineers' Seattle District in Emergency Management. He continues to teach at Washtucna High School.

Robert Hergert ('74 Educ.) works for Military Professional Resources Inc. on a contract basis. He retired as lieutenant colonel after 25 years of service with the U.S. Army. For MPRI, he has taught at Command School in Fort Leavenworth, Kansas, and now is deputy program manager for the new regular recruitment program.

Chris Stokke ('77 Nursing, '89 M.S. Nursing), a retired Navy Nurse Corps Commander, is a tenured nursing faculty member at Olympic College in Bremerton. In 1999 he was elected to the board of directors of the Central Kitsap School District and is presently board president. He and his wife, Penny, live in Bremerton with two daughters.

Phil English ('77 Phys. Ed., '80 M.A. Educ., '80 Teaching Cert.) of Eisenhower High School in Yakima was named the 2001 Girls Cross Country Coach of the Year by the National Federation of State High School Associations. He has coached for more than 23 years, leading his girls' teams at Carroll H.S. and Eisenhower H.S. to a combined 207-5-0 record and eight state championships through 2001. He has also coached two boys' cross country teams to state championships. He ran cross country and track for WSU.

Alan Gross ('79 Ph.D. Psych.) was one of three recipients of the new three-year Liberal Arts Distinguished Faculty Fellowship at the University of Mississippi. The three were recognized for their teaching, research, creative accomplishments, and community service. Gross is a prolific researcher with more than 150 journal articles and book chapters to his credit.

1980s

Since **James W. Hall** ('82 Comm.) became director of community relations at Kadlec Medical Center in Richland, the hospital has received a number of awards for its efforts in relaying services to communities in the Tri-Cities. At the 14th Annual Healthcare Advertising Awards, Kadlec won the national Gold Medal in the "Special Video Production" category for *Community Health Journal*. Hall hosts the weekly program. At the 19th Annual Healthcare Advertising Awards, Kadlec earned a Silver Award for the professional recruitment advertising campaign, "The Best of Both Worlds," an effort to attract top physicians to the area. In addition, the hospital

Pailca oversees accountability within Seattle Police Department

"This is the first time a city has brought in a civilian to oversee the internal investigation process from the inside."

—Sandra Pailca

A CASE INVOLVING Asian-American teenagers detained by a Seattle police officer for jaywalking sounds routine enough, but the July 2001 incident soon unfolded into highly publicized accusations of racial profiling. The issue landed in the lap of attorney Sandra "Sam" Pailca, the first director of the Office of Professional Accountability (OPA) within the Seattle Police Department.

Pailca found that while the officer was rude to the group, his actions did not amount to inappropriate treatment because of race. The police chief agreed with Pailca's call for minor discipline for the officer, a decision unpopular both in the Asian community and with many in uniform, leading to a police guild no-confidence vote against the chief.

Such is an example of the challenging decisions Pailca makes. She was appointed to the post by the mayor and confirmed by the city council in January 2001. Seattle takes an unusual approach to professional oversight by having a civilian such as Pailca give advice to the chief, mayor, and city council on police accountability issues.

"The structure that Seattle chose is unique; there is no other structure like it in the country," she says. "This is the first time a city has brought in a civilian to oversee the internal investigation process from the inside."

A specialist in labor and employment law, Pailca oversees the police department's complaint process and reviews internal investigations, focuses on community outreach, and suggests methods to improve professional standards.

Pailca, 38, graduated from Washington State University in 1986 with a degree in political science.

The office that Pailca now directs took shape in 1999 after accusations of inadequate management of misconduct complaints, particularly concerning the alleged theft by a detective of \$10,000 from a crime scene. A citizen's review panel called for the OPA's creation to restore public confidence. Further attention came with allegations of police brutality during the November 1999 World Trade Organization demonstrations.

Formerly a King County senior deputy prosecuting attorney and briefly the county's labor relations manager, Pailca said her first OPA priorities were streamlining the public complaint process and taking a customer-service approach.

Pailca adds that the citizen's panel review of the police department didn't find significant corruption or brutality problems. "They found a clean department that needed a more modern approach that was more responsive to the community."

"Still, the office can be more effective if it takes a proactive role, such as seeking to improve standards and police/community involvement," she explains.

Among her work accomplishments, Pailca cites creating an OPA Website for users to register suggestions or complaints and to keep the public better informed. She also has sponsored community forums, explaining the office's new procedures, and speaks to numerous civic organizations.

Her three-year appointment is subject to renewal in January 2004 for another three-year term.

—Treva Lind



Sandra Pailca

SHERMAN ALEXIE: "IT'S ALL GOOD"

"This movie may contain intellectual material you may not be ready for."

—Sherman Alexie



The Business of Fancydancing leads Gene Tagaban (Aristotle Joseph), Michelle St. John (Agnes Roth), and Evan Adams (Seymour Polatkin), with writer/director Sherman Alexie.

In his edgy second film, as in his books, Alexie's not out to win any popularity contests. He admits there's not a single lovable character, as most moviegoers long for, but rather people "that are really flawed and messy."

The movie poignantly reunites two best friends from the Spokane Indian Reservation—Aristotle Joseph (Gene Tagaban) and Seymour Polatkin (Evan Adams) 16 years after they graduated from Wellpinit High School. Both characters

left the rez for Seattle, but a painful rift eventually deepens between them, as Seymour builds a successful literary career as a gay native American poet and Aristotle returns to the rez, where he condescendingly refers to Seymour as the "little public relations warrior."

Many back on the rez feel Seymour's sold out and can't stand him. But when his childhood friend dies, he feels obligated to return for the first time in years to the people there, including his college girlfriend (Michelle St. John), half-Jewish, half-Spokane Indian, now dating Aristotle.

The movie's other characters include an obnoxiously aggressive interviewer (Rebecca Carroll) who constantly critiques Seymour's work and fame, and Seymour's white lover in Seattle, who discourages Polatkin from going home to the rez for the funeral by pleading, "they're not your tribe anymore, I'm your tribe."

Alexie's first film, *Smoke Signals*, earned \$6.7 million in its U.S. theatrical release, almost four times what it cost to make—approximately the amount spent on donuts on the set of *Spiderman*, Alexie adds, while *Fancydancing* was made for the amount of money spent on coffee in *Smoke Signals*.

But unlike *Smoke Signals*, which Hollywood loved, *Fancydancing* has proved too rough around the edges for some, with its brutal portrayals of rez life, intimate gay scenes, and literary hijinks. One reviewer called a tender scene between Seymour and his college girlfriend "terrible writing," only to find out from Alexie that the dialogue was among the 35 lines in the film lifted from Shakespeare's *Hamlet*.

It has played at dozens of American film festivals, but international film festivals all rejected it. Alexie's not disappointed about the diverse response. Whether you love it or hate it or could care less, you'll get the same reaction from him: "It's all good."

"It's a weird little movie," Alexie says. "I don't begrudge the reservation for not liking it. You don't have to like it. I didn't make it for that. I love to make people laugh. I love to piss people off. . . . It's a great job. . . . I get great big checks made out to narcissism."

—Andrea Vogt

IT MAY LOOK the same today, but as Sherman Alexie walked down the aisle of the Kenworthy Theater in Moscow, Idaho, he realized his last memory of the place was, well, a little bit hazy.

"I was just recalling with a friend of mine who I went to school

at Wazzu with that this is the first time I've been in this theater sober," Alexie said, glancing around the old theater at the Palouse premier of his second movie, *The Business of Fancydancing*, last September. "And I've been sober a long time."

Eleven years, actually, he says with pride, urging other young tribal members in the crowd to follow his lead and just "put down the booze." But though he's more sober now than years past, his movies most definitely aren't. They are, in his own words, getting "rowdier and stranger." But they're still funny, he adds. And so is he.

"Are there any Nee-Mee-Poo in the crowd?" Alexie asked before the movie, referring to the presence of any Nez Perce, who shouted to let their presence be known.

"You have to go. This movie contains intellectual material you may not be ready for," he deadpanned, going on.

"How about any Coeur d'Alenes?"

Several audience members yelled.

"Have I slept with any of you?"

"All the non-Indians in the crowd are like, 'What's going on?'" Alexie joked, feigning a couple whispering to one another. "I think they're being cultural, honey."

Raised on the Spokane Indian Reservation in Wellpinit, Washington, Alexie graduated from Washington State University with a degree in American studies before becoming a literary success with his novels, *Reservation Blues* and *Indian Killer*. Though his roots are in Eastern Washington—his mother translated a song for the movie into the native Spokane language and the Spokane Tribal Council approved his filming on the reservation—that doesn't mean he always likes it or it always likes him. "Are my sons going to grow up on the rez? No. Do they go there? Yes. Will they live there? No."

Seven-eighths of the reservation is against him, he notes, and it's not hard to understand why, when he speaks with such brutal honesty—some might even say disdain—about ignorance, alcoholism, and other problems on the rez.

". . . There's not that much different between white farmers in Colfax and Spokane Indians on the rez. They're rednecks with actual red necks. I love my people, but . . . dang."

ALUMNI ASSOCIATION PRESIDENT

Eldridge sees WSU as a tight-knit family

"Anything we can do to make their jobs as alumni volunteers easier . . . , we will do."

—Ray Eldridge

RELDRIDGE doesn't usually recommend hitchhiking. However, he didn't have many options a few years ago, when his car gave out near North Bend enroute to Pullman from Seattle. Not to worry. From the back seat, he retrieved a Washington State University sweatshirt and cap, slipped them on, and thumbed a ride.

The "good Samaritan" who picked him up proved to be a Seattle-area veterinarian traveling to WSU to join his daughter for Dad's Weekend.

"That's the kind of tight-knit family we are in. Some people don't understand that about Washington State University," the 2002-03 Alumni Association president says.

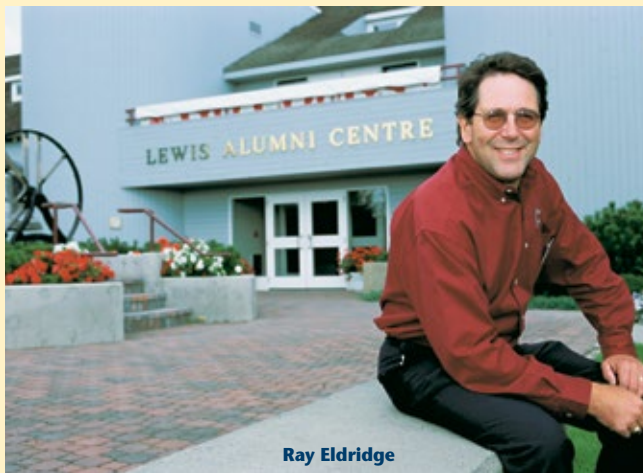
Eldridge's own WSU ties are no exception. His father, Don, attended WSU before him and praised the College of Education. Ray completed a bachelor's degree ('69) and a master's ('71) in physical education. And his son, Thom ('91 Mech. Engr.), holds three WSU degrees.

Ray was president of Rogers Hall (1966 to 1967) and helped direct WSU's intramural and recreation programs for three years as an undergraduate and graduate student. Later he served on the College of Education's advisory board. Prior to assuming the alumni presidency last May, he was two-term president of the King County Cougar Club.

He spent nearly five years as a teacher, coach, and activities director—mainly at the high school level—in the Concrete School District, not far from his native Mount Vernon.

After talking to executives in sports administration, a field he wanted to pursue, he completed a master's degree at Ohio University. It was a stepping-stone to his "dream job." In 1976 he was hired as events coordinator of the new Seattle Kingdome and eventually was promoted to manager of events services.

He cherishes memories of his 25 years at the Kingdome before it was razed in 2000 to make way for Seahawk Stadium. He oversaw six full-time employees and nearly 1,000 event workers. They were responsible for facilitating national concert tours, state high school athletic championships, the NCAA "Final Four" in basketball, and home, boat, and auto shows. Main tenants, of course,



Ray Eldridge

ROBERT HUNTER

were the Mariners, Seahawks, Sonics, and Sounders Soccer Club.

Eldridge thrived on the "three-ring circus" atmosphere. Never hesitant to help staff members, he'd pitch in to move barricades or "go sell tickets."

"Sometimes it was difficult just to stay back, coordinate, and direct," he says.

Now, as education coordinator of the Groundwater Program, Eldridge conducts programs in King County schools to educate students about groundwater protection and conservation. Frequently he meets with community groundwater protection committees in five regions within the county, where the sole source of drinking water is groundwater.

"Working with any big organization, you need to delegate . . . and share information," he says. As alumni president, he's introduced "Cougar-Es," e-mail messages he writes to alumni every two months. He credits Alumni Relations staff members Christina Parrish, Brian Bates, and Alex Webster for developing a Web link to deliver alumni news and photographs online.

"Alumni in one district can see what their peers in other districts have done, or are doing," he says of "Cougar Welcome" events for new students, award presentations, and how rooms were set up and signage used. "Why reinvent the wheel, when alumni groups are doing the same kinds of events? Most of our directors are involved in non-WSU activities. Anything we can do to make their jobs as alumni volunteers easier by providing ideas or staff assistance, we will do."

As the University begins to consider candidates to succeed Keith Lincoln, longtime executive director of Alumni Relations, when he decides to retire, Eldridge says the association can have some valuable input.

"We want to build on the excellence Keith has established during his tenure here."

—Pat Caraher

CLASS NOTES continued

received two Awards of Merit from the Yakima Advertising Federation's Chinnook Awards. The first was in the category of "Television" for a 30-second healthcare service advertisement. The second was in the category of "Interactive Media" for a disk-based sales program Hall created.

John L. Martins III ('82 Gen. St.) was awarded a \$500 first-place honorarium for his radio play, *The Fourth Psalm*. The play addresses a priest's aid to Latin refugees and the crisis of conscience which eventually consumes his mentor. It is scheduled for production this spring. Martins, a school teacher in Albuquerque, has been an associate member of the Dramatists Guild of America since 1984.

Steve Niemi ('82 D.V.M.) writes from Boston: "After 17 years in the biotech industry . . . I have returned to academia and biomedical research. Last summer I became director of the Center for Comparative Medicine (and chief veterinarian) at the Massachusetts General Hospital. I spent the previous 18 months commuting from Boston to Chicago (and beyond) to launch a new company, and finally needed a more rational lifestyle. I am really enjoying not traveling anywhere on business, not having to raise equity capital (especially in this market), but mostly just spending more time at home."

Barbara Greene Chamberlain ('84 English and Linguistics, Honors), director, communications and public affairs at WSU Spokane, completed the Masters in Public Administration degree program at Eastern Washington University August 2002.

Gary A. Knight ('85 For. Lang.) is assistant professor of marketing and director of the Multinational Business Program in the College of Business at Florida State University in Tallahassee.

Shannon Carefoot ('86 Nursing) works in the Critical Care Unit at Willamette Valley Medical Center in McMinnville, Oregon. Her husband, **Brent Carefoot** ('84 Bus. Adm.), is the store manager for JC Penney in McMinnville. The youngest store manager in his district, he received the 2001 Chairman's Award for JC Penney, which goes to its top stores.

Brad Fluetsch ('86 Finance) is the chief executive and chief investment officer for Raven Asset Management in Juneau, Alaska. He is a member of the Tlingit and Haida tribes and served on the National Congress of American Indians Trust Fund Policies and Procedures Working Group.

Navy Lt. Greg Braaten ('88 Comm.) completed the Advanced Technician

"Many countries have their priorities wrong"

"Evidence shows that the family medicine model is the most cost effective and provides the best care for most people."

—Dr. Robert Higgins

IF YOU ARE SICK ENOUGH and have enough money, you can get very good medical care in most countries. Sadly, however, many nations fail to meet even the basic health needs of their people.

These are the observations of Washington State University pharmacy graduate and retired U.S. Navy physician Robert Higgins. The former president of the World Organization of Family Doctors (WONCA) has visited 53 countries and witnessed health care practices in many of them.

"Many countries have their priorities wrong. They may provide liver transplants to the affluent, rather than basic health care for the majority," he says. Or they may spend their money building hospitals or training subspecialists.

Few people have a better feel for the pulse of global health care. In 1998, Higgins was installed as WONCA president in Dublin, Ireland. The organization represents more than 160,000 family doctors in 62 countries. As president-elect of WONCA and during his three-year presidency, he visited 45 countries. Helping nations, particularly developing nations, reform their health care system is difficult. Progress is being made slowly, he says.

Higgins was introduced to international medicine in Vietnam in 1966, a year after graduating from the University of Washington School of Medicine. He was drafted into the Navy and spent 12 months aboard a repair ship in the Mekong Delta. There he provided medical care for U.S. Navy and Marine Corps personnel and the wounded, combat injured, sick, and diseased. Most weekends he ministered to the health needs of Vietnam village people. While the work with the Vietnamese was fulfilling, he said he was frustrated knowing that "they wouldn't get on-going care."

For five years now, Higgins and two other family physicians have focused their efforts on training more Vietnamese doctors to work in their country's rural communities. A new six-year, \$1.8 million grant from the China Medical Board of New York supports the program.

Higgins visited Vietnam most recently in November 2002. "There's no way you can have a strong economy without a healthy workforce," he says.

Higgins and his colleagues have helped establish a curriculum and training program for Vietnamese family doctors. As part of the program, professors from Vietnam come to the United States for six to nine months to train as family medicine teachers. Three medical schools in Vietnam have been paired with the University of Massachusetts, Boston University, and the Maine Medical Center. U.S. physicians and professors spend a week with their counterparts in Vietnam annually.

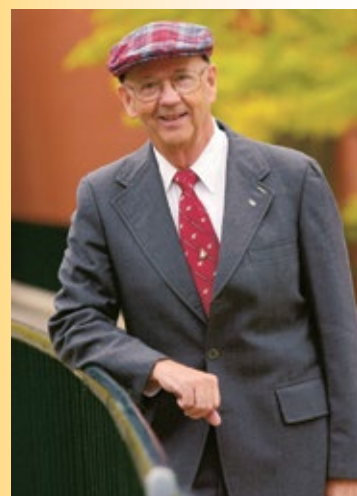
The ultimate goal is to staff some 10,000 Vietnamese commune clinics with family doctors. "It will take a while, but we are well on the way to doing this," Higgins says. "Evidence shows that the family medicine model is the most cost effective and provides the best care for most people in a country." He works closely on the program with others, including World Health Organization officials.

Although lack of education is the biggest problem facing people of the world, in Higgins's estimation, he identifies AIDS as the major worldwide health care concern, along with tuberculosis, mainly in Africa, but also in other countries. He sees education and "changing the culture" as the best hope of confronting AIDS. "Or to find a vaccine, which we haven't been able to do yet."

"Of course, starvation is another big issue that needs to be addressed," he says. Malaria still hasn't been controlled in some countries. Polio cases, once nearly under control globally, have nearly tripled in India in the first half of 2002. If they [residents of India] had good health care, they would be getting their polio shots or oral vaccine, he says.

Higgins considers family medicine "the most interesting place to practice" because of its wide variety of medical cases, and "not knowing what is coming next." Family doctors learn to know their patients better, because they see them in continuity. "I've delivered babies, set fractures, done hospital work and pediatrics," he says. "Family medicine is the most needed specialty."

—Pat Caraher



Dr. Robert Higgins

Higgins receives WSU's highest honor

Dr. Robert Higgins was reared in Pullman, where his father owned Higgins Drug Store. In college, his initial interest in engineering gave way to science. After graduating from Washington State University ('57 Pharmacy), he practiced in Wenatchee and Pullman for five years. Then he was off to pursue a degree in medicine at the University of Washington School of Medicine. After a 23-year career as a Navy physician, he retired in 1993 as a rear admiral, one of only four two-star officers in the Navy Medical Corps at the time. He is recipient of the Distinguished Service Medal, the highest peacetime military award from the Department of Defense.

Higgins held the presidencies of the American Academy of Family Physicians from 1984 to 1985 and the World Organization of Family Doctors between 1998 and 2001. In October 2002, the Anacortes resident returned to Pullman to accept WSU's Regents' Distinguished Alumnus Award.

"Washington State University is a center of excellence . . . a tremendous institution. My education here and in medical school has stood me in good stead," he says.

Receiving the award was "something I never dreamed of. I'm honored," he adds.

—Pat Caraher

Keeping busy in the bus business

"The rural route is a small part of the business, but fills a need." —Peg Motley

AFTER NEARLY three decades as a successful high school teacher and coach, Peg Motley launched Wheatland Express Charters & Tours in 1988. The venture proved to be a whole new ballgame.

The Pullman entrepreneur, mother of four, and grandmother of six had dabbled in other enterprises. While teaching in Spokane, she and her husband made and sold Country Style Horseradish. When they moved to Pullman, she opened Drop Your Duds, a self-serve laundromat. But the 1955 Washington State University alumna knew "zero" about buses.

"Initially, I was intimidated by their size," she admits as she walks between white-and-blue buses parked in a neat row in an old rock quarry one mile east of downtown Pullman.

Now she knows the difference between an alternator and a carburetor. She has more than 30 full- and part-time employees and a fleet of 17 buses. Her first bus replaced a 1985 black Cadillac stretch limo used to transport clients and promote Wheatland Travel, an earlier venture she sold, and then reacquired, last year.

What sparked the bus business idea?

Her concern for the number of WSU students, she explains, who were being killed or injured on the highway while driving across the state. An attempt to arrange charter buses to transport students during University breaks failed. So Motley purchased her own buses.

Local banks financed the startup with loans totaling around \$80,000. She also capitalized on "LINK," a Washington banking program that provides loans at discounts to women-owned businesses. In addition, the company received a two-year, \$550,000 Rural America Grant to provide bus service where it is non-existent.

During the week Wheatland Express runs two buses to Pasco, a hub for Greyhound, which takes passengers on to Portland, Seattle, and Yakima.

"The rural route is a small part of the business, but fills a need," Motley says. High ridership—an average of 8,000 boardings per year—is on the eight-mile Pullman-Moscow commuter run. Wheatland buses make the trip 11 times daily during the week. The route accommodates college students traveling between the two communities. Faculty, staff, and students ride free. WSU and University of Idaho subsidize the service equally with "a little profit margin" for Wheatland Express, Motley says. Charters provide the biggest part of the company's income.

During the summers, some of her buses have been used to transport firefighters to forest fires as far away as Arizona.

Motley pulls an occasional shift herself. She prefers the shorter runs to Spokane or touring WSU "Golden Grads" around the Pullman campus. Her oldest bus was built in 1980, the newest in 1995. With new buses costing \$400,000, she opts for good-quality used. Her first purchase was "admittedly worn," she says. "We learned a lot about buses in the process of rebuilding it."

Wheatland Express maintains a three-person office staff, two full-time mechanics, six full-time drivers, and about 20 drivers who prefer to work part-time.

Motley is proud of Wheatland Express's record for few mechanical breakdowns and the letters of commendation the company has received as a safety leader from state and federal agencies. One of the worst public-relations problems a bus company can have is for a bus to break down on the side of the road, she says.

—Pat Caraher

Peg Motley has a fleet of 17 buses.



SHEILY HANKS

CLASS NOTES continued

Communications Course at Pensacola, Florida.

Dean Pierose ('88 Hotel & Rest. Adm.) owns a successful Italian deli in Salt Lake City. During the 2002 Winter Olympics the deli catered for Sting, Dixie Chicks, Rudolph Giuliani, Desmond Tutu, the winning Canadian hockey team, Dave Matthews, and many others.

Kristal Greninger ('89 Acct.) married Cody Hassler December 14, 2001, in Las Vegas. She is a CPA with Thompson & Kreitzberg in Walla Walla.

Brian Gurley ('89 Bus. Adm.) is controller at Triumph Learning, a publishing company in New York City.

Jeff Lageson ('89 Hist., '97 Soc. St.), Lynnwood, Washington, writes: "My first short film, *The Comic Book Shop*, debuted on line at ifilm.com late last summer.

1990s

Sarah "Sadie" Moore ('91 Econ.) is vice president at Goldman Sachs Investment Bank, New York.

Corinne Tyler Isaak ('92 Humanities) has written a children's book and produced a children's CD. *Unique Monique - Moki Time* made its debut September 2002. For more information, visit www.mokitime.com. Corinne is a stay-at-home mom in Coulee City, Washington.

Christine Krkovich Jones ('92 Speech & Hearing Sci., M.A. '95 Speech & Hearing Sci.) is a speech-language pathologist for the Medical Lake School District.

Simeon Hein ('93 Ph.D. Soc.) recently published *Opening Minds: A Journey of Extraordinary Encounters, Crop Circles, and Resonance* (Mount Baldy Press, 2002). The book is about the science behind the phenomena of crop circles, remote viewing, and other related subjects. The book's Web site is www.OpeningMinds.info. Hein lives in Boulder, Colorado, where he is director of the non-profit Institute for Resonance, and also CEO and president of Mount Baldy Press, Inc.

Lawrence Thelen ('93 Theatre Arts) is author of *The Show Makers: Great Directors of the American Musical Theatre*, published by Routledge in 2000. The book came out in paperback last spring. He is producing associate and literary manager of Goodspeed Musicals, a professional theatre devoted to musical theatre in Moodus, Connecticut, where he lives with his wife.

Jim Valley ('94 Comm.) has been at KEX radio in Portland for three years. He writes, "I won two regional Murrow awards for reporting the last two years."

Jennifer Burger ('95 Human Nutr. & Foods) has been a certified physician assistant at Community Health Association of Spokane since graduating from the MEDEX Northwest Physician Assistant program August 2001.

Chris Gonzales ('96 Econ.) is a real estate loan officer for FirstBank Northwest in Moscow, Idaho.

Erin Orth Hamilton ('96 Hotel & Rest. Adm.) has worked as a manager for Red Lobster since 1996. He was promoted to general manager of Red Lobster in Lynnwood in 2000 and now is general manager of the Red Lobster Restaurant in Olympia. He and his wife, Braden, live in Lacey.

Danielle McGuire ('96 Educ.) teaches fourth grade in the Puyallup School District.

Paula Curry Donald ('98 Hum. Nutr. & Foods), a member of the Cougar Rowing team from 1995 to 1997, has been hired as assistant coach of the Kansas State rowing team. She holds a master's degree in sports nutrition from Colorado State University.

Jason Fiman ('97 Crim. Just.) and **Alice Thomas Fiman** ('97 Polit. Sci.), Olympia, report the birth of their son, Alexander Thomas, May 29, 2002. Jason is a juvenile correctional counselor, and Alice is a public information officer for the Washington State Legislature.

Navy Lt. Juan Garcia ('97 International Bus.) is participating in Operation Enduring Freedom in Afghanistan while assigned to the amphibious assault ship USS *Peleliu*.

Tennille N. Jones ('97 Bus. Adm.) is the Seattle regional manager for Junior Achievement of Greater Puget Sound. She develops and delivers presentations on JA's K-12 programs to schools and teachers in the Seattle and Shoreline school districts. She also coordinates the recruitment, training, placement, and scheduling of trained volunteers.

Rebecca Andrew Zanatta ('97 Comm.) has been promoted to executive director for the Alpha Phi International Foundation in Evanston, Illinois. The philanthropic priority of the sorority's international foundation is to combat heart disease, the leading killer of women in North America.

Michele Mahoney ('98 Soils) lives in Arlington, Virginia, and is employed by the Office of Pesticide Programs at the headquarters of the U.S. Environmental Protection Agency. She is also a Master Gardener.

2000s

Jeremy Edmondson ('00 Humanities) and **Stephanie Carlson** ('00 Soc.) were married June 1, 2002 in California. Stephanie works as an assistant in a law firm in Vancouver. Jeremy is a dis-

trict manager for ARAMARK Uniform Services in Portland.

Stacie Harris Jones ('00 Comm.) is a communications specialist with Inland Northwest Health Services in Spokane. She and her husband, Jason, were married September 29, 2001.

Jeff Evans ('00 Comm.) is assistant media relations director at Arizona State University. He is the media contact for men's baseball and women's volleyball teams. As a WSU undergrad-

uate, he worked for sports information director Rod Commons.

Navy Lt. Mark Wass ('00 Arch.) was recently designated a naval flight officer after 18 months of training in Pensacola, Florida.

Robert Biskeborn ('01 Bus. Adm.) and **Shane McKinnie** ('01 Bus. Adm.) received commissions as Navy officers after completing OCS in Pensacola, Florida.

Robert B. Casey ('01 Philos.) and his wife, Patricia, were married December 29, 2001 in Leavenworth, Washington.

Amanda Porter ('01 Zool., '01 Spanish, Honors) is pursuing a master's degree in public health at George Washington University. She has an interest in international health promotion. She writes, "I made a lot of friends and had great classes and professors (at WSU). I was challenged. I love Pullman and was sad to leave."

Hedlund Christmas trees selected for White House

FOR THE SECOND TIME in three years, trees from the Hedlund Christmas Tree Farm in Elma, Washington graced the White House during the holidays.

"I never dreamed that my passion for growing Christmas trees would get me to the White House to meet the president and first lady," said Ed Hedlund. The Washington State University graduate ('75 Forestry) started planting trees in 1980. Eight years later, he participated in his first national competition sponsored by the National Christmas Tree Association of St. Louis.

The land services supervisor for Rayonier, Inc. in Hoquiam won the 1998 competition and the honor of providing the "official White House Christmas tree" to the Clintons in 1999. He and his wife, Cindy, also attended the millennium New Year's Eve party in the White House.

In 2002, the Hedlunds won again. This time they and their son, Thomas, 14, spent more than a half hour with the Bushes in the Oval

Office. The president talked about the carpet design, his wife Laura's creation; the history of the photos on the walls; and the significance of the presidential seal—an American eagle clutching in its claws arrows and an olive branch, symbolizing war and peace.

During their four-day stay in Washington, the Hedlunds visited the Washington Monument, the Bureau of Printing and Engraving, and the Smithsonian.

Last October 18, White House staff members visited the 50-acre Hedlund tree farm. The owners had identified an 18-1/2-foot noble fir that was selected for the Blue Room, and a 12-footer for the first couple's private residence. The trees were cut November 25 and arrived by truck at the White House December 1. The Hedlunds were feted in a reception in the Blue Room and helped decorate the tree there. They reported pre-Christmas tree sales were brisk at their "Choose and Cut" operation in the Satsop Valley. They also sell wholesale to customers as far away as Hong Kong.

—Pat Caraher

Ed Hedlund, his wife Cindy, and son Thomas, 14, were among the guests who toured the Oval Room with President Bush and the first lady.





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CLASS NOTES continued

Jessica Biel ('02 Comm.) has been hired as a marketing coordinator of PRR, a Seattle-based integrated communications company.

Nancy Kikendall ('02 Human Dev.), Liberty Lake, Washington, was selected to fill one of 10 openings nationally for the master's program of American Sign Language, Linguistics and Interpretation at Gallaudet University in Washington, D.C. She told a Spokane paper, "I wanted a challenge. I think I'm in for one." Gallaudet was chartered in 1864 by President Lincoln "To serve as a comprehensive, multipurpose institution of higher education for deaf and hard of hearing citizens of the United States and of the world."

Jesse Keene ('02 Polit. Sci.) was hired by the WSU News Bureau last summer. His duties include special projects for the administration, communication and media relations, and input on WSU issues. The 2001-02 ASWSU president plans to attend law school.

IN MEMORIAM

1920s

Robert Hendricks ('29 Material Science & Engr.), 94, September 6, 2002, Seattle. Metallurgical engineer and mining executive for Consolidated Mining and Smelting Co. of Canada (Cominco). Rose from assay staff to CEO.

Theodore A. "Ted" Trowbridge ('29 Math., Honors; Educ., Honors), 97, November 4, 2002, Olympia. High school teacher/principal for 12 years before becoming an accountant in Spokane. Retired in 1969.

1930s

Helen Higler ('31 Elem. Educ.), 97, September 22, 2002, Spokane. Taught at many elementary schools for 40 years as she and her husband moved from Boise to Everett to Spokane.

Gladys Anderson ('34 Home Ec.), 92, August 9, 2002, Garfield. Taught high-school home economics in Kahlottus, Randall, Mead, and Davenport. Later was a home demonstrator and interior designer in Lincoln County in conjunction with the WSU food preservation program.

Robert Bolger ('34 Pharm.), 92, August 31, 2002, Camas. Owned and operated a drug store in Washougal from 1937 until 1975, when he sold it to Hi-School Pharmacy in 1975. Sigma Nu fraternity.

Charles Bradford ('35 Educ.), 88, August 26, 2002, Milwaukie, Oregon. High-school music and mathematics teacher in Portland Public Schools for more than 40 years, primarily at Jefferson and Marshall high schools. Profes-

sional trumpeter. Director of the Providence Hospital stage band for 30 years.

Robert E. Lee ('35 Pharm.), 87, October 9, 2002, Tucson, Arizona. Owned Best Drug Store on Main Street in Safford, Arizona, 1967-1985. President of the Safford Graham County Chamber of Commerce 1973, which honored him as 1975 "Man of the Year." Chaired the City of Safford's 11-day centennial celebration in 1975. After serving in the Air Force during WWII, he, his wife, and his parents toured the U.S. in an Oldsmobile and a 26-foot trailer. Later served in the Korean War.

Owen Lehto ('35 Hort.), 94, July 17, 2002, Spokane. After WWII service with the U.S. Army, bought a ranch near Monroe. Superintendent of landscap-

ing for the Seattle School District for 20 years. Retired in 1972. Wrote the book, *Vibrations*, published in 1974, and republished in 1992 and 1997.

Maurine Martin McLaughlin ('35 Educ.), 88, October 22, 2002, Spokane. Taught at St. John High School. Pi Beta sorority. Survivors include sons, including Dennis McLaughlin ('63 Polit. Sci., president of the WSU Alumni Association 1983-84). Memorial contributions may be made to the WSU Alumni Association, PO Box 646150, Pullman, Washington 99164-6150.

Gladys Graupner Fritz ('36 Music, '41 Educ.), 88, September 21, 2002, Spokane. Taught in Valley, in Kettle Falls, and at Central Valley High School in Spokane.

Drake enlivened the college experience

FOR 36 YEARS CHARLES H. DRAKE was a popular, well-respected professor at Washington State University. His introductory class in bacteriology attracted many non-science majors, as well as students preparing for careers in health care.

"He was an extraordinary articulate lecturer, . . . the quintessential eccentric professor who enlivens the college experience for students and opens their minds through dedicated teaching and irreverent questioning of their comfortable ideas and beliefs," recalls Martin Favero ('61 M.S. Bact., '64 Ph.D. Bact.), San Clemente, California.

Drake retired in 1981. He was 86 when he died May 20, 2002, in Pullman.

He is credited with inaugurating Introductory Bacteriology, which he taught every semester after joining the faculty in 1944. He also taught Higher Bacteria and Fungi. In his lectures he displayed a wry sense of humor and was an inveterate punster.

A typical quip: "Did you hear about the communist weatherman?" "Rudolph, the Red, knows rain, dear."

His tests included a bonus question unrelated to science. Short and barrel-chested, he was a familiar figure on campus in his cowboy boots and black Stetson.

In 1993, retired chairman Herb Nakata interviewed Drake for a history of the Department of Bacteriology and Public Health. Nakata's work provides more insights about Drake.

The Waterloo, Iowa, native's interest in biology and bacteriology was sparked in high school when he read such books as Paul DeKruif's *Microbe Hunters*. Thanks to his grandmother, he acquired a microscope to better examine the culture media he learned to make.

Drake earned bachelor's ('37), master's ('40), and doctoral ('42) degrees at the University of Minnesota.

During World War II, Drake filled in "reams" of paperwork to become a bacteriologist in the U.S. Army. Twice rejected, he tried a third time

without success.

From those experiences, he said, he learned the Army didn't want Ph.D.s.

"If you give them [Ph.D.s] an order, they will know of three other ways to do it, two of which were better. And they were right."

Drake's research

interests included the bacterial ecology of the Snake River before and after Lower Granite Dam was built.

A reserve officer in the U.S. Public Health Service, he spent the summers of 1957 and 1963 in Nevada as a radiation monitor during atom bomb tests. He also conducted a study of water pollution at Lake Tahoe in 1962.

Favero notes that at a time when the specialties of microbial physiology and genetics were just emerging, Drake would constantly point out that although the study of pure cultures of microorganisms could produce interesting and helpful results, "the study of microorganisms in their naturally occurring states was often more relevant."

Drake learned to fly in the 1960s and purchased a Cessna 150. He also was a professional whitewater guide, won medals in marksmanship and fencing, and had a vast knowledge of wines.

He and Audrey, his wife of 59 years, camped in most of the U.S. national parks and hiked in many of them.

In 1989, the Drakes created a trust to provide assistance for WSU graduate students and post-doctoral researchers in microbial ecology. Memorial gifts may be sent to the Drake Fellowship, c/o WSU Foundation, PO Box 1042, Pullman, Washington 99164-1042.

—Pat Caraher



Charles H. Drake



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IN MEMORIAM *continued*

in Nye, Montana, and White Pine, Michigan. Retired to Spokane in 1975.

Edward Burke ('37 Gen. St.), 86, September 4, 2002, Bellingham. Accountant. 50-year member of Kiwanis. Delta Upsilon fraternity.

Ethelyn Gibbs ('37 M.A. Home Ec.), 92, August 24, 2002, Spokane. Taught home economics in Malad, Idaho, and Centralia. Later worked as a secretary in the credit department at Sacred Heart Hospital, Spokane.

Crystal Carper Harworth ('37 Elem. Educ., '53 Educ.), 88, September 12, 2002, Spokane. Librarian and teacher in Northport; Colville; Trail, British Columbia; Mesa, Arizona.

Rose Robinson Hodgson ('37 Secretarial Studies), 87, September 14, 2002, Spokane. Taught in Clover Park Schools in Tacoma. Moved to Sun City, Arizona, in 1972. Member of the board of directors of the Sun City Art Museum. Started the local chapter of Sweet Adelines Society. Alpha Gamma Delta sorority.

John Hoffman ('37 Mech. Engr.), 91, October 12, 2002, Colton. Worked for Bureau of Reclamation at Ephrata and Coulee Dam. Went to work at the Puget Sound Naval Yard in Bremerton in 1940. Moved to the family farm near Johnson in 1945. Retired from farming in 1969 to become an engineer for the WSU Albrook Hydraulics Lab, 1969-76.

Dana Margaret McCulloch ('37 Social Work), 88, September 10, 2002, Seattle. Personal secretary for government offices in Washington, D.C., and in Seattle. Volunteered as a hospital aide during WWII.

Martha Brookhart ('38 Speech, '41 Educ.), 88, August 29, 2002, Spokane. Helped establish Spokane University, a college to train pastors. Air traffic controller in Seattle during WWII. High school teacher in the Spokane area for 20 years.

Arthur Irwin ('38 Educ., '43 Teach. Cert.), 94, September 5, 2002, Spokane. Taught in Zillah. Elementary school principal in Huntsville, Washington, 1932-36. Hired by the U.S. Bureau of Reclamation to serve as principal of the Coulee Dam Elementary School when the dam was constructed, 1937-44. Later became the superintendent of schools in Pateros, Metairie Falls, Prescott, and Medical Lake. Deputy superintendent of Spokane County Schools, 1955-69. Worked in personnel at School District 81 in Spokane until retiring in 1970.

1940s

Frederick Malcolm Brown, Jr. ('40 Phys. Ed., '40 Educ.), 86, November 30, 2002, Spokane. Started teaching

in Snoqualmie in 1941. Served in U.S. Navy, 1942-46. Later coached football and taught at John Rogers High School, Spokane. Reenlisted in the Navy Reserves in 1950, served as regiment commander, recruit training commander, San Diego. Returned to Rogers High School in 1952 as a teacher and football coach, retiring in 1976. His football teams won Spokane city championships. Inducted into the State High School Football Coaches Association Hall of Fame.

Frances Thiemens Stack ('40 Home Ec.), 83, September 15, 2002, Spokane. Homemaker and 60-year resident of Spokane.

Mary Trowbridge Buckley ('41 Gen. Studies), 84, October 10, 2002, Port Orchard. Worked at Boeing during WWII. After the war, worked for the *Seattle Times* until 1967. Became a social worker for Kitsap County. Earned a master's degree in social work at the University of Washington in 1970. Joined Mount St. Vincent's Nursing Home in Seattle as a geriatric social worker. Published *The Aged Are People, Too* in 1978. Retired in 1978 but later worked at Hospice of Kitsap County, retiring again in 1999. Phi Beta Kappa sorority.

Maxine West Hallstrom ('41 Home Ec.), 81, August 2, 2002, Yakima. Taught two years at Centralia High School, 1943-45. Elementary school librarian in Highland for 23 years.

Helen Mary New Lybecker ('41 Home Ec., '42 Educ.), 83, July 31, 2002, Portland, Oregon. Home economics teacher in Garfield. Moved to Portland in 1999.

Lavinia Green ('43 Speech), 80, March 28, 2002, Oakland, California, cardiac arrest. Taught briefly in Washington, then became a bookkeeper for the Colgate Palmolive Co., retiring after 35 years.

Richard S. Hammond ('43 Elect. Engr., '47 M.S. Elect. Engr.), 81, August 17, 2000, Richland. Employed by General Electric for 15 years, and then Westinghouse—a total of 36 years at the Hanford Project. Active in Richland Light Opera and other community endeavors. Kappa Sigma fraternity.

Robert W. Neill ('43 B.A., '46 Bus. Adm.), 81, September 25, 2002, Pullman. WWII paratrooper in the 101st Airborne Division. Part of operation Market Garden, parachuting into Holland on September 17, 1944. Awarded Purple Heart, Combat Infantry Badge, Bronze Star, Presidential Unit Citation, French Fourregere, and Netherlands Orange Lanyard. After the war, took over the family business, Neill Furniture in Pullman, and operated it for 27 years.

1950s

Paul D. Ylvisaker, Sr. ('50 Phys. Ed.), 76, November 24, 2002, Portland, Oregon, leukemia. Retired physical therapist. Lived in Vancouver for the past 10 years. In the 1960s, he was active in the formation of the private practice section of the American Physical Therapy Association.

Vern Birdsell ('52 Agri., '53 Ag. Educ.), 78, August 31, 2002, Kennewick. Taught agriculture and developed a flourishing industrial arts program at Kennewick High School, 1954-82.

Ronald Chard, Jr. ('52 Phys. Ed., Pre-Med.), 71, May 14, 2002, Seattle, cancer. Served two years in the Army in Germany and worked briefly as a physical therapist before enrolling in the University of Washington Medical School. Supervised the training of about 80 child cancer and leukemia specialists as clinical director of hematology and oncology at Children's Hospital in Seattle, 1969-92. Author of more than 40 publications about childhood cancer. Helped establish the Ronald McDonald House of Western Washington.

James C. Nofziger ('52 M.S. Animal Sci., '61 Ph.D. Animal Sci.), 78, February 18, 2001, Chatsworth, California. WWII veteran and recipient of the Purple Heart. One of the nation's foremost animal nutritionists. Appointed to head the U.S. Commission on Marine Mammals by President Reagan.

James Pazaruski ('52 D.V.M.), 77, August 7, 2002, Palmer, Alaska. Served with the 32nd Infantry Division in the Pacific during WWII and earned Combat Infantryman Badge, an Oak Leaf Cluster, and the Purple Heart. Owned a private veterinary practice in Palmer.

Harry Haruyuki Taniguchi, Sr. ('52 Elect. Engr.), 71, May 25, 2002, Seattle. Retired Boeing engineer.

Leo J. Roininen ('53 Mech. Engr.), April 21, 2002, Sudbury, Ontario.

Norman Ingram ('54 Bus. Adm.), 71, November 2, 2002, Pullman. Worked for General Electric in the Tri-Cities. Assistant budget director at WSU, 1970-75. Business manager of Pullman School District, 1975-93. Basketball referee in the Tri-Cities and Whitman County for 30 years and women's basketball referee for the Big Sky Conference for eight years. Served on the board of directors for the State Accounting Committee for Public Schools, the State Accounting Association, and Pullman Memorial Hospital.

Denny Yasuhara ('54 Pharm.), 76, November 13, 2002, Spokane, pancreatic cancer. Math and science teacher at Logan Elementary and Garry Middle School in Spokane for two decades, retiring in 1989. Instrumental in the

development of Hifumi En on the South Hill of Spokane, a 41-unit subsidized housing complex for the elderly completed in 1973. Community leader in the struggle to gain reparations for Japanese Americans imprisoned during WWII. Former national president of the Japanese American Citizens League.

Shirley Heathman Boger ('56 Soc., '59 M.Ed.), 68, September 28, 2002, Hartline. Taught third grade in the Central Valley School District in Spokane.

John Angus ('57 Civil Engr.), 75, October 7, 2002, Sierra Madre, California. Engineer with the Los Angeles County Department of Public Works. His many projects included erosion control and debris reduction in the mountains, and the prevention of seawater intrusion into freshwater along the California coast. Retired in 1986 after 33 years. Published *Hydraulics in the Coastal Zone*, and presented papers at Texas A&M.

Betty Baldwin Bartlow ('59 Pharm.), 65, June 30, 2002, San Diego. Pharmacist at Mercy Hospital in San Diego for 10 years. Helped manage the family wheat farm in Sprague.

1960s

Earl Taylor ('60 Hotel & Rest. Adm.), 66, August 30, 2002, Deer Park. Began teaching in Potlatch, Idaho, and retired as a math and science teacher at Deer Park High School in Spokane.

Twila R. Hokanson Schroeder ('61 Home Ec.), 62, Corvallis, Oregon, following a long illness. Homemaker. Worked on many volunteer causes, including the Oregon State University Folk Club (faculty wives) Thrift Shop. Worked in OSU Student Activities Center taking student ID photographs. President of Gamma Phi Beta sorority at WSU, 1960-61. Mother of three children, including two WSU graduates.

James Wilson Songster ('61 Phys. Ed.), March 22, 2002, Forest City, North Carolina, died after a six-year illness.

Gail Reed ('62 Police Sci.), 61, August 10, 2002, Bellevue. Retired Army major and Walla Walla airport manager. Moved to Seattle in 1989. Manager of the Renton Municipal Airport, 1989-2001.

Rosemary Wigen ('62 Home Ec.), October 7, 2002. President of the Whitman County Republican Party.

Kenneth Ormiston ('63 D.V.M.), 62, September 12, 2002, Ontario, California. Veterinarian in Colton, California, for 32 years. Past director of the American Quarter Horse Association, past president of the Pacific Coast Horse Association, past president of the Valley Quarter Horse Association, and past captain of the San Bernardino County Sheriff Rangers.

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Social scientists say it would cost millions of dollars to replicate data sets donated to Washington State University by Leigh Stowell and Company, a Seattle-based proprietary market research company.

The data will allow researchers to answer a wide variety of questions regarding political behavior, social behavior, cultural assets, values, and lifestyle perspectives of distinct regional and demographic groups across North America. "We have had a tremendous amount of interest in this unique resource from WSU researchers and other universities across the country. It's a veritable treasure for social science researchers across the U.S. and Canada," says WSU political science professor Nick Lovrich.

To date, more than 240 original data sets have been donated to WSU. Currently, researchers and graduate students, along with professionals from WSU Libraries, are preparing the data sets for the indexing necessary to load the data onto an online access site for researchers, to be hosted by the Libraries.

RMHC Supports WSU Scholarships, Nursing, and Athletics

Scholarship recipients met Ronald McDonald and representatives from Ronald McDonald House Charities (RMHC) of Spokane prior to the WSU vs. Oregon football

game November 8, 2002. RMHC of Spokane has donated more than \$195,000 for WSU scholarships, benefiting more than 75 students in the 2002-03 academic year. RMHC also supports the Spokane Care Mobile, operated in partnership with the College of Nursing, and is a sponsor of WSU Athletics.

Microsoft Cougars Give to WSU Liberal Arts



The Microsoft products shown here are just a portion of a gift to the College of Liberal Arts from WSU alumna and Microsoft employee Norma McKinney-Roley and her husband, Pat Roley. The gift demonstrates the tremendous impact Microsoft Cougars can have through Cougar Donation Online and Microsoft's matching gift program. Software worth more than \$275,000 has been donated to the college by Microsoft Cougars including not only Norma and Pat, but also Brian and Karri LaBree, Jim Peterson, Vanessa Brown, John and Hilary Hippely, Jr., Jim and Kimberley Ruddy, and Carrie and James Olesen.



IN MEMORIAM *continued*

David E. Harry ('64 M.A. Music), 75, September 12, 2002, Spokane. Music teacher and college professor at Glennville State Teachers College in West Virginia. Returned to Spokane in 1982.

Richard B. Chisholm ('66 Educ., '80 Ed.D.), 58, September 3, 2002, Spokane. Assistant superintendent of schools in Kelso. In 1980 became superintendent of schools for School District 81 in Spokane. Retired in 1994 and became vice president of human resources for Empire Health.

Louis Kahn ('66 Ed.D.), 80, August 22, 2002, Seattle. Teacher and administrator for several years in the Bellevue School District. Helped lead the creation of Bellevue Community College, which opened in 1966. Served as BCC's first dean of instruction and became the chairman of the psychology department, where he taught. Retired at 75 to his ranch in North Bend, Oregon.

G. Duane Denny ('67 Arch.), 59, May 17, 2002, Loon Lake, Washington. Architect for the U.S. General Services Administration. His work took him to Moscow, Idaho; Petersburg, Alaska; and Kuwait.

Don "Duke" Pearson ('67 Speech Comm.), 60, August 29, 2002, Post Falls, Idaho. Began career with Bridgestone/Firestone Tire Inc., in Seattle. Managed a retail Firestone store in Spokane. Later moved to the Tri-Cities to work for Bridgestone Wholesale Truck Tire Division. Moved to Sprague in 1976 and then to Post Falls in 1995. Retired as regional fleet manager for Bridgestone/Firestone in 2002. Sigma Nu fraternity.

Dave Skinner ('69 Psych.), 54, February 11, 2002, Scottsdale, Arizona, cerebral aneurysm. Pilot for Southwest Airlines 23 years. U.S. Air Force pilot (C-141s, 737s), Vietnam era. National Rifle Association certified firearms instructor. Also had a business building custom, lightweight hunting rifles.

1970s

Lynn Keith Atwood ('72 Engl.), 52, August 25, 2002, Pasco. Taught junior high English and coached for two years. Worked at Hanford for more than 20 years as security specialist, shift manager, operations specialist, and technical editor.

Sharon Lord ('72 Soc.), 52, September 20, 2002, Spokane. Worked for the Department of Motor Vehicles in Olympia for several years. Became the operations director of the Spokane Housing Authority and developed its family self-sufficiency program.

G. Lee Fisher ('73 Ph.D. Educ.), 74, October 5, 2002, Ellensburg. Began

teaching career at high schools in Blaine, Yakima, Pasco, and Walla Walla. Became a mathematics and aerospace professor at Central Washington University.

1980s

Greg Larson ('80 Ag. Engr.), 46, July 9, 2002, Spokane, colon cancer. Joined Cominco American in 1981 as an equipment supervisor in Spokane. Promoted to sales representative in Vancouver, to assistant district manager, first in Fargo, North Dakota, and then in Minneapolis. Returned to Spokane in 1990 as manager of industrial chemical sales.

Gail Zielonka Persin ('86 Psych), 47, August 29, 2002, Vancouver, breast cancer. Moved to Vancouver in 1987. Social worker for the Vancouver Housing Authority.

1990s

Stacy Glein Yager ('90 Bus. Adm.), 34, August 21, 2002, Selah. Assistant product manager at Ore-Ida Foods in Boise. Moved to Selah in 1999. Was a product manager at Tree Top.

Sadi Mae Ellis ('98 Psych.), 26, September 3, 2002, Shoreline, cystic fibrosis. Danced with the Olympic Ballet Co. Worked at Ruth Dykeman Children's Center until January 2002.

Faculty & Staff

Knut Lunnum, 97, July 2, 2002, Yakima. WSU extension forester, 1947-68. Moved to Yakima from Pullman in 1968. Helped develop the Yakima Area Arboretum, a section of which is dedicated to him.

Alvin "Al" G. Law, 87, December 9, 2002, Pullman. Member of WSU agronomy faculty, 1941-82. In 1945, helped organize the Washington State Crop Improvement Association, which has become one of the outstanding pure seed producers in the U.S. Also organized the Northwest Turf Grass Association, the major source of research funds for turf projects in the area. Marketing specialist, USAID project, India, 1961-71, which helped country become self-sufficient in cereal production. Served on USAID Farming Systems Project in Lesotho, South Africa, 1979-82, helping improve crop varieties, crop rotations, and better animal nutrition.

Joyce Nestos Tarbet, 79, April 29, 2002, Pullman. Moved to Pullman in 1948 when her husband, Joe, took a teaching position in business administration at WSU. She was a secretary at WSU.

Taketsugu Tsurutani, 66, July 20, 2002, Minneapolis, intestinal failure. WSU political science professor and department chair, 1969-98.

Julia Bush, October 5, 2002, Alamo, California. Retired publications editor for the WSU Graduate School, 1966-77.

BOOKS, etc.

The Ministry of Leadership: Heart and Theory

By Glenn Terrell
Pacific Institute Publishing,
Seattle

I was honored when asked to review *The Ministry of Leadership: Heart and Theory*, by former Washington State University president Glenn Terrell (1967-1985). I couldn't agree more with President V. Lane Rawlins's assessment: "Anyone who loves Washington State University will find this book irresistible"; or the appraisal offered by former Washington governor and U.S. senator Dan Evans: "Glenn Terrell has produced a powerful personal memoir. He presided over Washington State University during one of the most troubling and activist periods in our nation's history. His leadership style successfully guided the University during its difficult times."

In *The Ministry of Leadership*, Terrell divides his tenure into three stages:

Stage 1, late 1960s and early 1970s—Keeping the peace during student unrest. Terrell had only just set foot on campus when student unrest hit full force. Protests ranged from the Vietnam War to racism, from migrant workers' rights to the on-campus presence of ROTC. Terrell cites an ROTC parade that was interrupted by protests. Call in the National Guard like other campuses? Not at WSU. Board of Regents president Harold Romberg, a World War II veteran, supported the decision.

Stage 2, mid-1970s—Mending fences with off-campus constituents. Meeting with interested groups across the state after the period of student unrest, Terrell implemented a solid policy of dealing with student protests.

Stage 3, late 1970s to mid-1980s—Seeking financial support for higher education. Due to the decline of state allocations for higher education, Terrell shifted his emphasis to funding issues with the state legislature and third-party groups.

There was a time when Terrell's partnership with WSU and the legacy detailed in this book were in doubt. "... Before the west-bound plane departs from Chicago, that was to carry Dr. Terrell for his interview as President of WSU, he has a sudden change of heart and departs the plane. He decided to withdraw his candidacy." He was contacted again six months later and accepted the offer to enter the enduring relationship described in *Ministry of Leadership*.

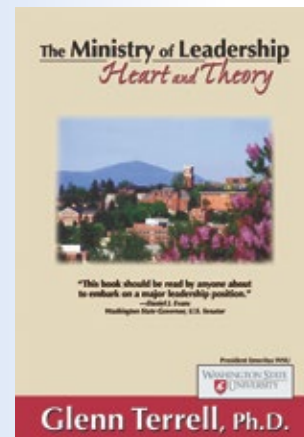
Terrell writes that "it is nothing short of a miracle" that he survived 18 years as president. I disagree. After reading his book, it is clear to me why he was so successful during his tenure at WSU and why he earned the right to name his own retirement date.

For more information, call the WSU Press at 800-354-7360 or 509-335-7880, or visit online at wsupress.wsu.edu.

—Paul Casey ('75 Political Science)
CEO, Casey Communications, Seattle

Glenn Terrell has continued his "ministry of leadership" for 16 years as academic and curriculum advisor to The Pacific Institute, based in Seattle.

Paul Casey served two terms as WSU student body president, 1973-75.



Solstice Wind Quintet Live

Published by Solstice Wind Quintet



The story of how the Solstice Wind Quintet got its name offers some clues as to what to expect from its debut CD, *Solstice Wind Quintet Live*. According to the liner notes, the

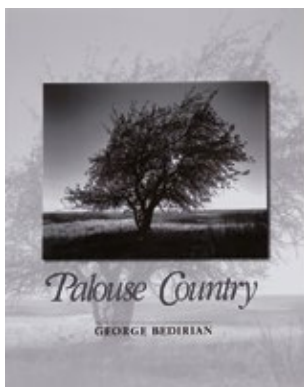
quintet was first formed in 1978 in order to present a midsummer concert at Washington State University, and its name was designed to capture “the warmth and brightness of the summer solstice.” A strong sense of that initial sunny radiance pervades this recording, but just as the last few weeks of June are sometimes overcast, rainy, and given to thunderstorms, the lightness is balanced here in both selection and sound by a deep and abiding melancholy.

Wind quintets, first coming on the scene at the end of the 18th century, are the reedy answer to string quartets in chamber music. This recording gives each voice—flute, oboe, clarinet, bassoon, and horn—a chance to display its own properties and abilities while working together within a small ensemble.

But while this particular CD might be a good introduction to wind quintets for the uninitiated, that’s not to say it’s by any means unchallenging. The recording opens and closes with two minor composers, Charles Lefebvre and Ludwig Thuille. Sandwiched in between are the considerably more well-known Debussy and Beethoven, both of whom never wrote for the standard wind quintet. The members of Solstice—Susan Hess, Roger Logan, Gary Plowman, James Schoepflin, and Ann Marie Yasinitsky—are all on the WSU music faculty and are accomplished musicians in their own right. Their considerable skill and scholarship is evident throughout, but especially so in the closing selection, Thuille’s lovely and unforgettable Sextet in B Flat, featuring guest pianist Gerald Berthiaume, also a WSU faculty member. By turns both pensive and joyous, the Sextet, as well as the entire CD, is worth many repeated listenings.

For more information, contact WSU School of Music and Theatre Arts, 509-335-3898.

—Sheri Boggs, Arts and Culture Editor,
The Pacific Northwest Inlander



Palouse Country

By George Bedirian
Washington State University Press,
Pullman, Washington

George Bedirian’s *Palouse Country* is a handsomely produced volume of over 100 duotone photographs. This revised WSU Press edition contains many previously unpublished images that provide an eloquent insight into a pre-motorized age of magnificent barn structures and the towns that supported their production.

These striking photographs of agricultural architecture are reminiscent of the photographic style of Wright Morris and Walker Evans. They are juxtaposed with the magnificent temporal seasonal landscapes of the Palouse. Bedirian has produced this volume of images as an insightful mythology to farming and the grandeur of this exceptional region. His images reflect a visceral appreciation and an understanding of the culture of the land.

In the introduction Bedirian recounts a historical perspective of the sweeping changes that have taken place on the Palouse since the last quarter of the 19th century. He then points to alterations in the social fabric of the region that were accompanied by corresponding changes in the architectural landscape. More recent changes in this fabric have also focused the energies of the region’s agricultural community into reconsidering strategies in the long-standing battle with erosion of the fertile topsoil and overreliance on chemical fertilizers.

Palouse Country also includes an insightful afterword by Terry Lawhead entitled, “Restoring the Myth of Locale.” Lawhead perceptively suggests that these photographs let him return to a personal set of experiences and appreciation he has had with the land. He offers that in these images Bedirian has captured a portrait of himself. In these photographs Bedirian takes great pleasure in what he sees and allows us to experience a sense of great depth in the commonplace.

A list of plates provides additional specific documentary information of place and title of each image. Information on some entries alarmingly chronicles the demolition of the architecture since it was captured by the photographer’s eye. One wonders—and hopes—if this might be the idea for another magnificent series of photographs that Bedirian might produce in the future.

For more information about *Palouse Country*, call WSU Press at 800-354-7360 or 509-335-7880, or visit online at wsupress.wsu.edu.

—Bill Woolston, faculty member,
School of Communication, University of Idaho;
author of the photographic book, *Harvest:
Wheat Ranching on the Palouse*

Abbott Road, Whitman County, Washington, from *Palouse Country*.



Private Gifts Create “an Excellent Environment for Research”

In Prof. Norman G. Lewis's research laboratory at Washington State University, post-doctoral fellows team with undergraduates and doctoral candidates to unlock genetic secrets in key plant species. Utilizing modern aspects of plant biochemistry and molecular biology, along with new developments in laser science, these scientists scrutinize cells to identify specific functions of genes, mapping “genomic blueprints.” Their work will help scientists gain a better understanding of gene function and apply that knowledge to improve medicines, foodstuffs, and products derived from natural resources.

While much of the scientific research conducted at Washington State is publicly funded, a good portion attracts interest from the private sector. For example, earlier research by Prof. Lewis, enabling identification of key evolutionary biochemical steps that ultimately distinguished land-based plants from their aquatic forerunners, caught the attention of the Lewis B. and Dorothy Cullman Foundation of New York. Coupled with a gift from the Connecticut-based G. Thomas Hargrove Foundation, Lewis was able to expand his research in land-plant adaptation and as a result, gain additional international attention for the Institute of Biological Chemistry in the College of Agriculture and Home Economics at WSU.

Most recently, a generous gift from the Hargrove Foun-



Professor Norman G. Lewis works with graduate students in the Institute of Biological Chemistry greenhouse.

dation to WSU created the G. Thomas and Anita Hargrove Center for Plant Genomic Research, substantially advancing activity aimed at mapping the plant genome. This research will have important applications in fields ranging from pharmacology to materials science. “Plants synthesize a broad range of compounds that have tremendous potential for pharmacology, indus-

try, and renewable resources,” says Lewis. The Hargrove Foundation's \$1 million gift brings additional postdoctoral fellows and graduate students into the program, which will accelerate the pace of the functional genomic research, advancing applications with potential to improve people's lives.

“These additional resources have created an excellent environment for research,” Lewis stresses. This private support also assists in making the progress needed to attract additional federal and extramural funding, which maintains the competitiveness of his research, Lewis says.

As the Arthur M. and Kate E. Tode Foundation Distinguished Professor, Lewis has been at WSU since 1990 and is the director of the Institute of Biological Chemistry. He teaches in the plant physiology program and the School of Molecular Biosciences. The Institute of Biological Chemistry has eight principal investigators and is a world leader in plant biochemistry.



THOUSAND WORDS

Photograph by John Snyder



Louis and Ruth Allen “Pass It On”

“You get most for yourself when you learn to share what you receive with others,” assert Washington State University alumni Louis (’41 B.Ph.) and Ruth Graham (’45 B.S.) Allen. Louis founded, grew, and sold an international management consulting firm after a distinguished career spanning more than 30 years. Ruth graduated from medical school and stepped in and out of general practice, anesthesiology, and public health. Both believe that the key to a fulfilling life is doing unto others as you would have others do unto you. This basic tenet is shared in all the world’s great religions.

It’s also the heart of the Allens’ generous gift to WSU, which funds educational opportunities for students who might not otherwise complete a college education. As the following paragraphs attest, recipients of the Pass It On Scholarships are applying this principle in their own lives.



Starla Dunn

Starla Dunn graduated cum laude in May 2002 with degrees in construction management and architectural studies. Employed at Turner Construction Company in San Francisco, Starla volunteers with the San Francisco Make-A-Wish Foundation. She considers it fortunate that giving back does not necessarily involve money. “It is also the physical and emotional

involvement in a worthy cause,” she says.

A May 2000 graduate with a B.A. in business and economics, Nicole Akre is a market research analyst at Wash-



Louis and Ruth Allen

ington Mutual in Tacoma and volunteers for Hostelling International in Seattle. For Nicole, personal rewards accompany the “Pass It On” principle. From a financial point of view, “giving back” means helping others with college (or other events) just as others have graciously helped her. “One can also give back by donating time and effort to an organization or cause,” she says. “Giving one’s time is a sacrifice that is very meaningful and makes everyone involved feel better about themselves.”



Nicole Akre



Anita Afzali

Anita Afzali graduated with honors in May 2001 with a B.S. in genetics and cell biology. Now enrolled at the University of Washington School of Medicine, she plans to continue promoting the “Pass It On” principle. Her goal is to practice medicine in underserved communities. She notes, “Whether I assist the community financially, or . . . interact directly

with the community, I believe that I am successfully contributing a part of myself assisting others. This is what ‘giving back’ promotes—the help and contribution that each individual can make to society based on their personal qualifications and abilities.”

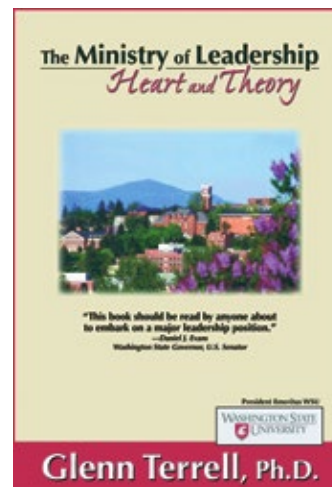
Clearly, the Allens’ commitment to the “Pass It On” principle has made an impact on these exceptional WSU graduates, who will continue to apply it throughout their lives.

"Participating in the development of Washington State University for 18 years was filled with joy, challenge, and reward. Just as gratifying is the experience of giving back to our beloved school to help ensure an even brighter future for WSU in the years ahead."

—Glenn Terrell,
President Emeritus



Glenn Terrell, seventh president of Washington State University, served from 1967 to 1985.



What's Your Legacy?

Glenn Terrell led Washington State University for nearly two decades, including the turbulent late sixties and early seventies. In *The Ministry of Leadership*, Dr. Terrell recalls his years as WSU president and the accomplishments of his presidency. One of those accomplishments was the creation of the WSU Foundation, organized by volunteers to enhance the mission of the University through private donations.

In addition to the Charitable Gift Annuities Dr. Terrell funded through the WSU Foundation in 2001 and 2002, proceeds from the sale of his book will go to the Foundation in support of Dr. Terrell's favorite WSU priorities.

To purchase the book, contact the WSU Press at 800-354-7360 or 509-335-7880, or order online at wsupress.wsu.edu.



A bequest to fund scholarships, endow professorships, or support other University priorities will allow you to leave a lasting legacy at Washington State University.

For more information on bequests, contact the Gift Planning Office, Washington State University Foundation, PO Box 641925, Pullman, Washington 99164-1925, 800-448-2978, gift-planning@wsu.edu, <http://wsufoundation.wsu.edu/giftplanning>