Groundbreaking research led by B.W. (Joe) Poovaiah could revolutionize agriculture and dramatically reduce world hunger.

Dr. Poovaiah and his colleagues recently discovered how to produce dwarf crop plants by altering a specific plant gene. The findings indicate that plants could be size-engineered to fit specific needs.

More recently, Dr. Poovaiah’s team discovered a method to induce nodulation, a key step in the nitrogen-fixing process in plants.

The prestigious journal *Science* published articles on both discoveries.

Imagine a future in which:
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- Plants grow without the application of nitrogen fertilizers, reducing pollution
- Growers decrease their reliance on petroleum-based energy

Dr. Poovaiah isn’t alone in his research quest. Dozens of Washington State University researchers daily seek knowledge and discoveries to drive innovation and transform lives.

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Making Electric Power Safer, More Reliable, and More Economical®
features

24 Bellevue Metropolitan
by Hannelore Sudermann • photos by Matt Hagen
Since 1869, Bellevue has morphed from pioneer settlement to Norman-Rockwell small town to burgeoning suburb of Seattle. Now, with the help of a handful of WSU-trained architects, it’s high-stepping into its new role as one of Washington’s most vital urban centers.

CRAFTING A CULTURE
by Hannelore Sudermann

30 The Man Who Gave Away Mountains
by Andrea Vogt • photos by George Bedirian
Raised in the shadow of Whitman County’s Steptoe Butte, Virgil McCroskey ’99—that’s 1899—spent inordinate amounts of time scheming, plotting, conniving, and contriving to piece together large chunks of land—including Steptoe Butte itself. Then, to make sure they’d always be protected, he gave them away.

35 Establishing a Solid Foundation
by Andrea Vogt • photos by Rajah Bose
With the rapid expansion of Washington’s wine industry came an influx of uncontrolled plant materials that spread diseases across the state’s vineyards. Markus Keller and Gary Ballard, both of WSU’s Prosser research center, are the pointmen in a state- and industry-wide effort to keep Washington’s vineyards clean.

38 Rare Bird
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Audubon himself would have trouble keeping up with this dynamo. Artist, author, and photographer Paul Johnsgard ’55 gives us a glimpse into his lifelong obsession with birds.

BOOKS, BOOKS, AND MORE BOOKS
WHERE TO WATCH IN WASHINGTON
by Cherie Winner

COVER: Art, love, and a vibrant urban life are alive and well in the revitalized Bellevue, Washington. See story, p. 24. Photo by Matt Hagen.
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Rawlins to retire

President V. Lane Rawlins has announced his retirement from Washington State University. WSU’s ninth president says he will serve through the next academic year. He plans to spend his remaining time as president focusing on legislative issues, continuing to improve the quality of education at WSU, and moving forward on the WSU Foundation’s fundraising efforts.

Rawlins, who will be 69 when he retires, joined the Department of Economics in 1968. He later chaired the department and went on to become vice provost before leaving for administrative posts in Alabama and Tennessee. He and his wife, Mary Jo, returned to WSU in 2000. As president he set a new strategic plan and expanded the branch campuses in Vancouver, Spokane, and the Tri-Cities into regional hubs for higher education.

For a more detailed story about Rawlins’s retirement, visit Washington State Magazine Online, wsm.wsu.edu.

Bucking the trend

I really enjoy reading Washington State Magazine, so I paid careful attention to the article “Foreign Stories” in the Summer 2006 edition. In that article, the following information was provided:

“...the number of international students attending Washington State University has dropped precipitously. For spring semester, enrollment was down to 538 graduate students and 582 undergraduates—down 8 percent from spring term last year—and this is the second year of decline. But WSU is no worse off than the rest of the nation, says Paul Svaren, the University’s international enrollment manager. The decline here matches the national trend.”

This claim that we “match the national trend” seems to be at variance with the report Open Doors 2005 from Institute of International Education, arguably one of the major sources of information available on international education in the U.S. In a press release from that organization dated November 14, 2005, the following points were made:

“In 2004/05, the number of international students enrolled in U.S. higher education institutions remained fairly steady at 565,039, off about 1% from the previous year’s totals…. This marked the sixth year in a row that America hosted more than half a million foreign students. This year’s numbers indicate a leveling off of enrollments, after last year’s decline of 2.4%. Some campuses reported significant increases in enrollments while other campuses reported declines.”

As I understand it from this report, the national trend is in the neighborhood of 1-2.4 percent yearly declines and that the downward pattern is leveling off nationally. I was alarmed to read that WSU is in an 8-percent decline. This is clearly not the national trend—and the reasons for our 8-percent decline may be worth investigating.

Elizabeth Siler, English as a Second Language Specialist
Washington State University
Thanks for the memories

Your Summer 2006 publication was like a wonderful Homecoming Weekend. It had longtime friends, eager students, and a catch-up on campus changes and plans.

I lived in McCrosky Hall 1939-41 (“Foreign Students”) and was president one semester. As everything goes global, what long-lasting worldly friendships those students will have.

My husband of 66+ years—Gene Bronson ’42—was on the WSC golf team. He too had his own golf course on the family’s “North 40” in the 1930s. (“Coffee-Can Country Club”).

My roomie—Beth Flynn Hayton ’43—owned property on the Cowlitz River that was condemned after Mount St. Helens erupted (“Journalism’s Grandest Prize”).

I was born and raised in Seattle. Often I would truck through the woods to south of Alki Point to dig butter clams for Sunday dinner. This was in the late ’20s and early ’30s. We “Ate Well to Save the Sound” without knowing it.

“The Making of Mountaineers” was really exciting. I am enclosing a letter Chris Kopczynski wrote to one of my grandchildren after he scaled Mt. Everest in December 1981. Chris is a family friend, and he wrote personal letters to each grandchild to encourage them to have a goal in life. His was Mt. Everest, and as we all know he succeeded.

Thank you for taking the time to read this.

And Thanks for the Memories.

Mary (Chase) Bronson (’43 Food and Nutrition)

The tuna-can variant

Bill Morelock’s article “A Course of One’s Own” parallels the course that my older brother Pete (Al) and I constructed in our early teens in the 1930s. One day we watched this fellow hitting golf balls nearby, and we asked him what he was doing. He explained the game of golf and gave each of us an old Titleist golf ball. We were fascinated and decided to build our own golf course, which we did in our five-acre cow pasture. Since the ground was rough, we cleared an area about two feet in diameter, slanting it to the center where we embedded a tuna fish can. We built nine such holes on the five acres with distances ranging from 25 to 75 yards apart.

For clubs, we cut off tree limbs that had angles shaped like clubs and sawed off the face of the head so that it would hit the ball squarely. Another source was from old touring cars that used hickory wood to shape the roof of the car. This course had many hazards, not the least of which were the fresh cow droppings; however, we had a “clean and place” rule to cover the times we were in that hazard. Pete holds the record for taking only 29 strokes to play the nine holes. Since then golf became our lifetime favorite sport that I am still playing today at the age of 86.

John M. Hooper ’42
Santa Rosa, California

PS: Pete lettered at WSU in basketball and baseball in 1936-39, and I lettered in basketball in 1940-42 and played on the 1941 championship team that went to the NCAA finals. My business career was with Stauffer Chemical Company, retiring as vice president, manager, western region.
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Take a look at the photo to the right. If you were told that Cobbler is a collie and Crash is a golden retriever, you’d have no trouble picking them out of the group. Their coats, colors, and features mark them as members of distinct breeds.

What’s not so obvious is that their differences are more than coat-deep. These dogs may harbor genetic differences that could determine whether a treatment their veterinarian prescribes will help them—or kill them.

Katrina Mealey, a veterinary pharmacologist in WSU’s College of Veterinary Medicine, has launched a study of how different breeds of dogs react to common medications. Just as a dog’s genetic heritage can predispose it to certain health problems—hip dysplasia in German shepherds and cancer in boxers, for example—it can also affect the dog’s ability to respond to medications.

“Different breeds react differently to different drugs,” says Mealey. “If you test a drug in a beagle, it’s fine”—but in a herding dog the same drug could be lethal.

Mealey first ventured into the field of pharmacogenetics a few years ago, when she discovered that dogs of herding breeds have a high risk of carrying a mutation that renders normally harmless drugs deadly. She found that three-quarters of collies and up to 10 percent of other herding breeds, such as Shetland sheepdogs and Australian shepherds, carry a mutation that disables a protein that pumps drugs out of cells. With the mutant form of the protein, drugs accumulate inside cells and eventually reach toxic levels.

The problem first showed up as a bad reaction to ivermectin, a leading heartworm preventative, but it involves a wide range of other drugs and chemicals. Abamectin, an ingredient in lawn-care sprays, is labeled as being safe for pets. Mealey showed that’s not true. It’s safe for dogs with the normal form of the pump protein. For dogs with the mutant form, it’s a killer.

Even common over-the-counter drugs can be deadly. In clinical tests, normal collies that were given the standard dose of the anti-diarrhea medication Imodium® did fine. Collies with the mutation, however, began to stagger and become comatose. All the dogs in Mealey’s study recovered after being given an antidote, and were later adopted by area residents. Unfortunately, she says, many dogs nationwide were not so lucky.

“Dogs were euthanized for horrible neurological problems, when all they had was this adverse reaction to the drug,” she says. Her work led to a simple test for the mutation: owners run a swab along the inside of their dogs’ cheeks and send it to Mealey’s lab for analysis. The test has become standard procedure for collie breeders.

Mealey is now looking for mutant forms of an enzyme that, in humans, is involved in metabolizing about half of all medications used. She hopes to get DNA samples from at least 25 unrelated dogs of every one of the 150-plus breeds recognized by the American Kennel Club and United Kennel Club. Donor dogs need not be registered with those organizations, but they must have an AKC or UKC “puppy number” the researchers can use to confirm their ancestry five generations back.

“We’re not snobby,” says Mealey. “We just need to know that they’re purebred and they’re not related to another dog in the study. We don’t want to find a family problem instead of a breed problem.”

The breed-specific aspect of her work has drawn the attention of the Food and Drug Administration and National Institutes of Health. Both agencies sponsor research exploring the links between genes and drugs in humans. Mealey says her collie work drew a huge response from...
**Terrell Honored**

Last spring, amid smiles and tears and tales from years past, nearly 100 Washington State University officials, students, alumni, and faculty gathered in the atrium of the New Library to rename the 1994 building the Terrell Library in honor of president emeritus Glenn Terrell.

Ever warm and easygoing, Terrell, who had traveled from Seattle with his wife, Gail, accepted applause, hugs, and handshakes from his friends and former staff before sitting down to the dedication.

At the May event, Terrell said that the dedication of that particular building was especially meaningful, since the library is truly the center of the University.

Medical researchers have developed a few tests for humans like the one Mealey developed for dogs, and the push is on for more detailed information about how individual patients respond to various drugs. About 100,000 Americans die each year as a result of adverse reactions to medications, and another two million suffer serious side effects, largely due to a mismatch between drug and patient.

A few of the key proteins involved in drug responses have been identified. For instance, humans have a pump protein similar to the collie protein. A person with a mutant form of that protein or the drug-metabolizing enzyme would have problems handling many different medications.

Since differences in our bodies’ ability to respond to drugs derive from our genetic makeup, they are also related to our racial or ethnic heritage. Identifying which drugs will work best and which will cause problems for specific groups of people will eventually improve patient care. However, it also goes against our inclination to ignore racial and ethnic differences. The issue came to a head a couple of years ago, when doctors prescribing their black patients and white patients different heart medications faced charges of racism. It’s an emotionally charged issue in which historical inequities sometimes make it difficult to even ask the relevant medical questions.

“It’s easier for us to go for breed-related differences,” says Mealey. “The FDA is very interested in it, because it’s easier to talk about breed differences than race differences. I think that maybe they can come to it this way. It makes sense.”

For more information, visit Mealey’s Web page at www.vetmed.wsu.edu/depts-VCPL.

—Cherie Winner
Getting serious about
BIO DIESEL

If we’re going to get serious about reducing our dependence on imported oil and producing car and truck fuel from plants, there’s a bit more work to do. Although it’s true that you can make biodiesel out of almost any oil, even if it’s been used in a fast-food fryer vat, using any old oil as fuel for your car or truck can lead to problems, says John Browse, professor at the Institute for Biological Chemistry. One of his lab's research projects, undertaken about six years ago, concerns the production of biofuels from crop plants.

Ethanol, made from corn, is an eco-friendly fuel for gasoline engines. Biodiesel, made from vegetable oil, is the equivalent alternative fuel for diesel engines. The problem is that, as is the case for humans, you don’t want to put just any vegetable oil in your fuel tank. Oils that are high in the smaller polyunsaturated fats, like the ones you and I aren’t supposed to eat, make a bit of a mess in an internal combustion engine too, says Browse. Studies in other laboratories have shown that those fats tend to produce nitrous oxide, a harmful component of smog, and diesel made from them is unstable and can clog fuel lines or damage engine parts.

Luckily, some plants do make fats that can work well in your vehicle or have other uses in the chemical industry. One is made by the castor bean plant, and a gene involved in its production has been introduced into Arabadopsis thaliana, the small mustard-family plant that is the plant researchers’ work-horse organism.

While it might seem more straightforward either to grow castor beans and harvest the oil from them or to take the less desirable oils made by standard crop plants such as canola and change them via chemical manipulation or refining, neither would work well. Castor is a poor crop plant, says Browse. And altering oils chemically is extremely expensive and would have to be done for each new batch of oil. An appropriately engineered oil-seed plant will yield the desired oil each time.

The initial work such as Browse's is done in Arabadopsis instead of crop plants, because Arabadopsis is well studied and understood. It has served as an excellent model system for oil-seed crop species, proving true between 80 and 90 percent of the time, says Browse.

The good news is that the Arabadopsis transformed with the castor gene makes the desirable fat. The bad news is that the plant doesn’t make much of it. “We believe it’s because the plant doesn’t know what to do with the unusual fat,” says Browse.

Browse and his lab are using three different approaches to try to increase the amount of desirable fat that the transformed plant makes, from the current 17 percent of the oil its seeds produce to 80 or 90 percent. They’ve already managed an almost two-fold increase.

The first approach involves the production and testing of a large number of other castor bean genes in a relatively short period of time. It’s a novel approach based on pulling together for the first time several new developments in plant biology, says Browse.

The second approach is to produce mutant plants, an approach Browse has used for 25 years. This time they’re mutating the plant that produces the 17-percent-desirable oils and looking for improvements.

Finally, Browse's research team is using what they now know about the biochemistry of seed oil production to target genes likely to make a difference in the amount of the desired oil produced. They have introduced a half dozen such genes into plants and found that some of these genes can, in fact, make a large difference.

All of this work, as well as the work done by the rest of Browse's group on the biochemistry of plant membranes, involves using basic science while considering long-term, practical goals. The ultimate aim is to find an industrial partner who will move the technology out of Arabadopsis and into a crop plant such as canola, something that makes sense because it takes a lot of work and a long time to get from a perceived practical application to a marketable product.

That the entire process is time consuming even before an industrial partner is on board is evidenced by the 25 years of fundamental research in labs like Browse’s that it's taken for work on plant-oil biochemistry to begin to yield benefits we will be able to use. The first should be available soon in the form of soybeans and soybean oil with an altered, healthier oil content. Others will follow shortly, whether for food uses of oils, biodiesel, nutraceutical applications, or the use of plant oils as chemical feed stocks for industry.

“If that’s an advertisement for research in higher educational institutions and for focusing on feeding the engine of basic research, then it’s a very good one,” says Browse.

—Mary Aegerter
The coming of age of teen film

As a teen, Sarah Hentges had Wonder Woman and Princess Leia as her pop culture role models. One flew an invisible plane, and the other lived in another galaxy. Neither offered much of an idea of how a young American woman should be.

As a Washington State University graduate student, Hentges is on the trail of other American teen icons like Natalie Wood's Deanie, who suffers sexual repression in the 1961 Splendor in the Grass, and Lindsay Lohan's 2004 Lola, who is striving to be the center of attention in Confessions of a Teenage Drama Queen. She has dedicated much of her post-graduate education to examining the evolution of teen films and how girls today are shaped by pop culture, whether it's delivered to them by Britney Spears coming of age in Crossroads or Hilary Swank struggling with sexual identity in Boys Don't Cry. She even wrote a book about it, a rare feat for someone who hadn't yet completed her doctoral thesis. "I think part of it is luck," she says of getting Pictures of Girlhood published in 2005. "I had a topic that was really hot at that moment."

Hentges hit upon the idea while working on her master's degree at Oregon State University. During a teen film class there, she noted that all the movies focused on boys' experience. "At the time, there weren't that many films for girls," she says. And in boy films she encountered general girl stereotypes: the girlfriend, the tomboy, the trashy girl, and the mean girl. They weren't the best examples of girls for girls.

"A lot of our cues came from films that weren't really about us or for us," says Hentges. And yet, girls may pick up outside cues more than boys, she says, adding that she saw a need for more complex and varied examples of girls on film.

But the focus was soon to change. As Hentges dove into her project looking at teen movies, a rich new wave of films began flowing into theaters, from mainstream Disney remakes like Freaky Friday to avant-garde and independent projects like Love and Basketball—about an African-American teen who follows her dream to become a professional basketball player—and Saved!, which concerns a girl at a Christian high school who gets pregnant trying to cure her gay boyfriend.

"In the last 10 years, films about girls . . . have just exploded," says Hentges. Which led her to the next step: "I wondered, how are girls
making sense of all these films?”

In her book Hentges looks at the girl images these films present and considers how they affect popular perceptions of girlhood. She focuses on films made in the last 20 years and considers how they deal with issues like race, sexuality, music, empowerment, and rites of passage.

In many cases, the mainstream films show a world where everybody is well off and the biggest problem is deciding what to wear to the prom, she says. But we all know adolescence is a wild ride. Nor are teens, who can be quite thoughtful about their dreams and circumstances, as stupid as mainstream culture pretends, she says. Now independent movies and movies made by women writers and directors are addressing these points.

To support her work, Hentges has relied on scholarship and resources in WSU’s Comparative Ethnic Studies and Women’s Studies programs.

Now Hentges has had her own coming of age—that of honing an expertise. When she finished her master’s degree, she decided she was done with the subject of teen films. She thought, “that was not the kind of academic I wanted to be,” says Hentges, who completed her Ph.D. this summer. “But now it’s coming full circle, where I realize it’s very much a part of what I want to do.”

Some films simplify the teen experience, but others are pushing into new space, redefining what it means to be an American teen. Those films, tackling serious subjects and presenting alternative role models, may effect cultural and social change, and/or be a reflection of that change already underway in our society, says Hentges. “The more pop culture can act in those empowering ways,” she says, “the better off we’ll be.”

—Hannelore Sudermann

The first student residents of the Friel Music House give an impromptu performance around the Friel family’s grand piano. Violin major Inga Zornes turns the music pages for voice major Christopher Wang and organ graduate student Nola Swanson.

A home for music

You don’t always need an address to find the Friel House. Just follow the music.

A short walk from the Pullman campus, a group of music-minded students have found a home on C Street. The house looks small from the curb, but its three stories shelter seven students, and still have room for a formal dining room, a large kitchen with a breakfast nook, a living room, and a library.

The house is named for the Friel family, and for 54 years was home to Washington State University basketball coach Jack Friel and his wife, Catherine.

Catherine Friel died in 2003. Last year, her family agreed to sell the College Hill property to the University, furthering the school’s plans to offer theme housing for students in the neighborhood. “She would have loved it,” says attorney Wally Friel, the son who lived in the house from 1942 until he married in 1954. The family was most concerned that “some slum lord would buy it and put 30 college kids in it.” That it has become a resource for WSU is even better, he says.

The school invested about $400,000 to buy the property and update it with new windows, neutral paint, carpet, new bathroom fixtures, and fire protection. But in a way, Mrs. Friel and her family still inhabit the house.

To get to her room at the back of the house, Nola Swanson had to wander between a strawberry-colored couch and an orange sherbet chair in the Friel living room. “This is better,” says the graduate music student, gesturing to the bright pieces. “When we first saw it, the whole house was pink.” It was one of Mrs. Friel’s favorite colors, she says.

Despite the rosy hue of it all, Swanson loved the place, the size of it, the full kitchen where she and her housemates could bake cookies, the bedroom off the kitchen furnished with the Friel family antiques, and that she was hand-selected to live there. “But the fact that I would be living with music students, that was the biggest draw,” she says.

Swanson was picked by Gerald Berthiaume, the director of WSU’s School of Music and Theater Arts. Carefully selecting the students is key to the house’s success, he says. He wants tenants who will respect the old house and its furnishings, but he also wants to provide roommates who will stimulate one another’s musical interests.

So far, it seems to be working. Several of the students invited friends and family over for dinners served on Mrs. Friel’s china and entertained them with impromptu recitals at the Steinway, which belonged to Mrs. Friel’s mother.

Chris Wang was the first student to move into the master bedroom on the top floor. For $339 a month he had an old four-poster bed, a walk-in closet, and a great view to the north. He devoted hours this spring to cataloguing the books left behind by the family, a task which prompted him to learn more about each member. Knowing whose house it was enriched his time living there. “I liked everything about this house,” he says. “What a great way to spend my senior year.”

—Hannelore Sudermann
All That Glitters

The shimmering nano-alchemy of Lai-Sheng Wang

Lai-Sheng Wang places a tinker-toysish thing onto a visitor’s palm. Many such toys line the Washington State University physics professor’s Pacific Northwest National Laboratory office in Richland. The object at hand—12 steel balls hinged to red plastic tubes twisted this way and that—form a perfectly symmetrical, 20-sided icosahedron.

Wang also displays a daughter-fashioned Father’s Day card that testifies to his paternal greatness. He spends time with the family, washes dishes, cooks, and is always kind. Mixed in there is a gilded item that truly separates Wang from all other pops on earth: he fathered the gold buckyball.

The word “buckyball” derives from “Buckminsterfullerene,” a hollow cluster of 60 carbon atoms discovered by Richard Smalley at Rice University. Wang worked with Smalley until joining WSU in 1993. He is also an affiliate senior scientist at the Department of Energy laboratory. The “hollow gold cage,” as Wang calls it, is the official reason for today’s visit, but Wang is full of surprises.

The cluster’s practical use is unknown, though gold is valued as a catalyst and component of advanced electronics. What truly excites people is the cluster’s status as the first buckyball-like structure made of metal.

Because of their tendency to clump, metals have presented a special challenge to architects of the very small. One group in Europe theorized that 32 atoms was the hollow-cage gold analog to carbon 60. But Wang’s team elicited what is called the photoelectron spectra—a physical signature—of the gold 32 cluster and found it just another compact clump.

Wang’s group already knew that at 20 atoms gold assumed a 3-D pyramid shape and that clusters of 15 atoms or fewer remained flat. So they concentrated on the clusters between 16 and 20 and, buttressed by theoretical calculations that tease out specific geometry, found that all but one possible configuration of 16, 17, and 18 atoms were open in the middle.

After they published this finding last May in Proceedings of the National Academy of Sciences, the news escaped the arcane world of materials science to engage a larger cultural conversation. The New York Times carried a story that prompted a Princeton mathematician, a New York playwright, students, and other readers from all over to bombard Wang with helpful suggestions for an original name. Wang thanked them but resisted.

Why? Wang explains that the gold is lovely but unstable; it can maintain its shape only while free-floating in a vacuum or in pressurized gas. It is the metal-cluster equivalent to a sickly but adorable puppy in a pet store window that you have no intention of buying.

Back to the toy with 12 atom-balls. Shouldn’t it have 16 to 18 atoms?

No. Wang announces, “It is tin!”

A second hollow metal cluster! Wang quietly slipped the tin findings into a chemistry journal a month after the gold study. This cluster he actually named “Stannasphere,” after the Latin word for lead.

Amelia Veneziano, a junior at Washington State University, has a weakness when it comes time to do her homework. When she settles into her Pullman apartment and turns on her computer, instead of researching a paper or e-mailing a professor, she keys into her personal reflections and posts them on her blog.

Veneziano, “a virgo and a journalism student at wonderful wazzu” according to her internet Web-log page, spends at least five minutes writing about her latest crush, her deeds for the day, the results of the “What are you looking for in a relationship?” quiz she got from a friend, and, of course, how much homework she has.

Then, with a click of a button, she sends her story into cyberspace, where her friends, her parents, and just about anyone anywhere else can simply tap a few keys and peer into her college life.

Blogs, short for “Web logs,” are the new, big, and perhaps most popular extracurricular activity on campus. About 20 percent of Americans aged 18 to 28 create and use them, and about 41 percent read them, according to a recent study by the Pew Internet and American Life Project.

It’s a technological version of a social network for this age group,
“tin.” After what happened with gold, he says, he’d have felt uncomfortable making a big deal out of this one.

Still, he can barely contain his excitement. Tin’s perfect mini-buckylike symmetry suggests it is more robust than gold at holding its shape. And like the gold cluster, tin is more than 6 angstroms across, (roughly a ten-millionth the size of a comma), large enough to contain other metal atoms. Such configurations, according to Wang, can act as “chemical building blocks for cluster-assembled nanomaterials.”

Time to cross the hall between Wang’s office and his lab in the sprawling W.R. Wiley Environmental Molecular Sciences Laboratory. Off to one end is a large, U-shaped apparatus that performs the photoelectron spectroscopy. Photoelectrons carry all of the structural information, a physical-chemical fingerprint, about the clusters from which they came.

On one side of the U is a laser that vaporizes atoms from a metal sample affixed to a tiny drum inserted into the machine. This creates a hot plume, tens of thousands of degrees, of distinct atoms that are cooled by high-pressure helium gas. The material condenses into clusters of a few atoms to a few hundred atoms, swept along by the helium and sorted according to how fast they make it across the bottom of the U to the far side. There the clusters, each with a known number of atoms, are pulsed with another laser to shake loose their atoms’ photoelectrons.

The other fork of the U is the end of the line, a 12-foot tube Wang calls “a race track” that the photoelectrons must traverse to reach a detector that will yield the spectra for calculating their structure. First, though, the quarry must be coaxed along by a strong magnetic field, or “magnetic bottle,” that keeps all these photoelectrons that have been flying off the clusters in all directions on the race track and moving toward the detector.

Of the handful of U.S. groups performing photoelectron spectroscopy, Wang says, “we have the best magnetic bottle, which allows us to detect 99 percent of the electrons. Since there are so few, we don’t have the luxury of throwing any away.”

Wang frequently refers to what he does as “alchemy,” an “intellectual curiosity.”

“If you want to make it big,” he says, “you have to make material, come up with a sample”—something you can see in bulk, rather than isolated clusters. “Look at the Buckyball. It’s very stable in air. Any idiot can make it—even a physicist.”

A nickname might help, too. Stannaspherene? Hard sell. How about Haleyball, for Jack Haley, the actor who played the hollow Tin Man in The Wizard of Oz?

The alchemist will take it under advisement, maybe save the nickname for when he puts another atom inside the cluster and gives the Tin Man a heart.

—Bill Cannon,

Media Relations, PNNL

says Steve Jones, a senior research fellow at the Pew project and a professor of communication at the University of Illinois at Chicago. “It’s just the novelty of it,” Jones says. “It’s a natural thing you want to do. You go to college, meet new people, and this [blogging] is a great way to meet people.”

Students at WSU are no exception. Whether it’s posting their class schedules on Facebook or building a blog of their own through any number of Web-log sites, they’re out there sharing their personal details, favorite songs, dating habits, hobbies, pictures, and politics.

Leah Dauer, an M.B.A. student, used her site on blogger.com to write about her summer job as a revenue management intern at the Princeville Resort in Kauai. The blog, which she originally planned to use as a weekly journal but seems to update daily, is part of the school requirement for the position. In it, she raves about the resort, the food, and the locals. Her blog is riddled with pictures of geckos, birds, and beaches, as well as details of working in departments like sales, catering, revenue management, and the front desk at a luxury resort.

At the same time, a group of Rogers Hall residents used a Facebook Website to keep in touch over the summer. Through it they offered links to their blogs and shared details about their summer jobs, being back home in places like Bellevue, southern California, Spokane, and Denver, their adventures, and their recollections of the past year at school.

Erin Mellon (’09 Pol. Sci.) says keeping a blog is as easy as e-mailing and allows her friends to catch up on what she’s doing without having to track her down and talk to her in person. “I don’t have to take significant effort to know what is going on with my friends or tell them news about myself,” Mellon says. “I don’t have to make six phone calls.” Mellon uses her blog to talk about her weekly activities, and sometimes will post a news story to stir debate among her friends.

“I’ll post an article from the New York Times, and all my conservative friends will jump all over,” says Mellon, whose views are liberal. “It’s a good forum for discussion, a good view of what others are thinking.”

Mellon thinks carefully about her postings. She has a policy of not erasing any of her blog entries, and defends controversial entries by saying it was just what she was feeling at the time. About 10 to 15 people read Mellon’s blog regularly, with one as far away as Maryland.
However, students sometimes forget that whatever they post is accessible to everyone, not just their friends, Jones says, and that can have consequences. “By and large, what they post feels private,” he says. “It is usually for people at school, a circle of friends, your social network to view [what you write]. So it doesn’t feel like you are posting publicly. But you are.”

Even though students may get very personal, the point of online journals is that the blogger knows someone out there will read it. Adam Clark (‘07 Mech. Engr.) used a blog as an outlet when he was struggling with loneliness his sophomore year. Blogging allows people to write out emotions they may not have another way to express, he says. Back then only one person read his blog, but knowing that was enough for him to feel better. “It’s a pity tactic,” Clark admits. “If you write something sad, people will write something encouraging. It’s a good way to get people to think about what is happening.”

Most students agree that being so open about their lives isn’t a problem. But Mellon says people should know the consequences of posting their thoughts and emotions online for everyone to view.

“I’m not ashamed of what I write up there,” Mellon says. “If they don’t like it, then they don’t have to read it.”

But for most students, the blog is just one more way to socialize, and to write and think about, and possibly enrich, their college experience.

—Amy Trang ’06 and Hannelore Sudermann

Students design schools for Sri Lanka

A group of six students in civil and environmental engineering worked with Washington State University’s new student group of Engineers Without Borders and Asiana Education Development (AED), a Seattle-based nonprofit organization that runs schools for orphans in Sri Lanka, to design two schools that will be rebuilt in the region destroyed by the December 2004 tsunami. The organization is working to rebuild nine of its schools that were destroyed.

When completed, the schools, which will cost a total of about $100,000, will hold about 720 students altogether and contain about two dozen classrooms.

Student Alex McDonald started the WSU chapter of Engineers Without Borders about two years ago. Hoping to find a way to be of service to the community, McDonald stumbled upon the organization, which formed in 2000 and does community-based, sustainable engineering projects around the world. The WSU group’s initial project was the relocation design of a potable well system for a nonprofit group that does work on the Yakama Indian Reservation.

After the tsunami struck, McDonald read about efforts by AED to provide relief in Sri Lanka and to rebuild the schools. In addition to education, the schools in Sri Lanka provide a safe haven from the child prostitution and kidnappings that are of constant concern in the region, says McDonald.

McDonald contacted Adam Salmon, AED’s director, and EWB-Puget Sound Professional Partners (EWB-PSPP), a chapter of Engineers Without Borders in the Seattle area. Eventually, McDonald brought work on the design of the two schools—including initial site information provided by EWB-PSPP—back to WSU, where he worked with Professor Dan Dolan to make it part of two senior design projects.

The students’ projects promise to have a large, long-term impact on the lives of many children in Sri Lanka, says Dolan. Students participating in the project have had the opportunity to provide service, but they also are learning about engineering in a global marketplace, a skill that they will need after they graduate, he adds. Specifically, they have to carefully tailor their projects to their clients’ individual needs, which may be quite different from what Americans might expect.

“I want to introduce the students to an international view of how to do projects,” says Dolan. “The world is getting too small to do it our way only.”

The students were also particularly eager to help out in the tsunami relief efforts.

“I am interested in helping people,” says Matthew Ellis. “It’s why I became an engineer in the first place.” Besides Ellis, students who participated on the two projects include Ben Hoppe, Robyn Lee, Dan Westley, John Farleigh, and Joshua Horky.

In their designs for the projects, the students had to overcome several challenges. The schools had to be built to withstand the regular cyclones that hit the region. The buildings had to be feasible and safe for kids, meeting design parameters for a classroom setting. At the same time, the students had to take into account the particular construction practices and building techniques found in Sri Lanka, says Ellis. Furthermore, turmoil in the region has made it difficult to get information on just what the school sites looked like, he adds. Because of concerns about kidnappings, one of the schools will have a security wall around it.

EWB-PSPP has reviewed the student designs and is in charge of project management. Although construction was scheduled to begin before the end of 2006, civil strife in Sri Lanka might delay the building of the schools.

—Tina Hilding
Making decks safer

Most of us don’t lie awake at night worrying about our decks. But we should.

The deck is the most dangerous part of the house, says Don Bender, director of the Wood Materials and Engineering Laboratory at Washington State University.

Decks cause more injuries and loss of life than any other part of the home structure. Except for hurricanes and tornadoes, more injuries may be connected to deck failures than all other wood building components and loading cases combined.

News stories often report that decks fail because of being over-loaded with people. Bender, however, disagrees. “Many decks collapse before they reach their code-required design load,” he says. “In fact, we’re lucky that we don’t load the decks to their capacity.”

For his part, Bender, a structural engineer, likes to look under a deck before he goes onto it.

Working with colleagues Frank Woeste and Joe LoFerski at Virginia Tech University and David Carra- dine at the Wood Materials and Engineering Laboratory, Bender is developing design guidelines for making residential decks safer. “It is appropriate that we have two universities from the East and West to attack a national problem of this magnitude,” he says.

The engineers recently published an article in International Code Council’s Building Safety Journal, read by approximately 40,000 building inspectors and officials throughout the United States, disclosing their findings about deck failure.

The national building codes offer little coverage on residential decks, says Bender. And, because decks look relatively easy to build, homeowners attempt to add on decks themselves, rather than work with a professional.

Decks most commonly fail at the ledger when they are connected to the house by insufficient fasteners. Compounding the problem, most decks don’t have a back-up structure, such as a support under the deck next to the house. Without this redundancy, when the deck ledger fails, the deck collapses catastrophically—without warning.

Furthermore, metal fasteners can corrode, and wood can rot under a deck, where most people don’t bother to look. New materials, like chemicals used to preserve lumber, contain high levels of copper. That copper interacts with steel fasteners and can accelerate corrosion. Fastener manufacturers, such as Simpson Strong-Tie, provide information on selecting corrosion-resistant fasteners (www.strongtie.com/ftp/bulletins/TPTWOOD06.pdf).

Finally, deck railings are rarely constructed to withstand code-prescribed loads. Although the rails and posts may be strong enough, the connection between the deck and the railing post consistently fails at low load levels. Many deck-railing constructions are “grossly inadequate,” says Bender.

Based on experiments conducted at WSU and Virginia Tech University, the researchers say builders should carefully stagger lag screws or bolts to attach a deck to the house and follow exact distances for the bolt spacing. They also recommend structural supports near the house. Using hardware similar to a “seismic tie down,” they also tested ways to make deck railings safer.

The group’s recommendations on deck-ledger connections were recently incorporated into the Virginia and Indiana state building codes. They were also submitted for inclusion in the International Residential Code at a hearing in March 2006 and will be voted on at the fall 2006 meeting.

As director of the WSU wood lab, Bender has researched a myriad of issues related to wood materials and design. In addition, he has taught hundreds of college students and building professionals about design of timber structures and advanced wood engineering.

Still, he says, “this project is probably going to have more of a positive impact on public safety than any other thing I’ve done in my career.”

—Tina Hilding
Building a better treadle pump—one step at a time

The first thing Jeff Evans, a recent graduate in entrepreneurship, did when he started his senior project was to locate Malawi on a map.

He and engineering students Travis Meyer, Kyle Kraemer, and Dan Good have since learned a lot about this African country, third poorest in the world, and developed a treadle pump they hope will make a positive difference for people there. They traveled to Malawi in March to test their product. Working with Peter Wyeth, associate scientist in International Programs, Trent Bunderson, associate director of International Programs, and faculty advisors Denny Davis and Jerman Rose, the team was part of a unique entrepreneurship class sponsored by the College of Business and College of Engineering and Architecture that requires interdisciplinary student groups to design products and develop a potential business venture plan.

The treadle pump that farmers currently use in Malawi is basically a “stairmaster that sucks up water,” says Evans. Although not exactly high-tech, the pump dramatically reduces irrigation time, compared to using buckets, and can mean the difference between health and malnutrition for poor families.

The pumps are mostly manufactured in India and made of steel, which is imported with high tariffs. Costing about $100, they consume half the annual income of the average Malawian. The farmers have to move the heavy pumps during the day and take them home each night to prevent theft. The Malawian government wants a treadle pump that could be manufactured within the country and maintained with easily replaceable parts.

The students worked to develop a lightweight pump that can be made locally. They built their pump primarily out of PVC, commonly available in Malawi. They worked with two nonprofit agencies, Total Land Care and the Land Resource Center, to learn about the business culture—all the factors that will determine their product’s feasibility and usefulness. These agencies were absolutely essential to the project’s success, says Davis, helping the students find materials, conduct testing, and make contacts for manufacturing facilities, delivery systems, and marketing.

“How do you do marketing in Malawi?” wonders Evans. “Here we have whole [academic] departments that study how to market to Americans, but it’s difficult with our limited access to know what they do in Malawi.”

The students presented their project both in Washington State University and University of Washington business-plan competitions. Judges at the UW competition gave the group a special $2,000 award for “social responsibility focus.” They also each made a personal contribution, encouraging audience members to do the same.

The Malawi project is one of a few student projects that has potential to take off and solve a real human problem, says Davis. It brings together skills and experiences that 21st-century engineers and entrepreneurs need—hands-on learning, entrepreneurship, product development, and global experience. Taking these projects to the next step will require formal funding mechanisms for product and business development, he adds. Travis Meyer has recently formed a nonprofit organization, hoping to raise funds to make the project viable. Davis and Rose are seeking funding for a second student team. For more information, see www.mtp4life.org.

—Tina Hilding
In Watermelon Heaven

If sublimity is a perfectly ripe watermelon, then where do 101 varieties take you?

I used to think watermelon was pretty much watermelon. Aside from some variability in ripeness and sweetness, you taste one, you taste them all. I am pleased to report that, as with a select few other things, I was wrong.

Last August I was fortunate to be in Vancouver on the day that Carol Miles hosted her watermelon tasting. That summer, as well as the previous, Miles had conducted variety trials of small “icebox” watermelons, in order to determine their suitability for organic production by small farmers in western Washington.

The immediate results were proffered on a long table beneath a tent in back of the Vancouver Research and Extension Unit, 101 varieties in a wide spectrum of red and yellow. I did not taste every one, though I tried—enough to convince me that I must always question my assumptions, for those melons wandered all over my sensory map, as wonderfully wide a diversity of flavor as of color, but also of firmness and juiciness.

It’s one of those benevolent jokes of evolution that the watermelon originated in the Kalahari desert of southern Africa. Although it is not known when the plant was first cultivated, watermelon harvest is depicted in 5,000-year-old Egyptian hieroglyphs. Watermelons were placed in Egyptian tombs, presumably as sustenance for the afterlife.

By the 10th century, watermelon had made its way to China, which is now the world’s largest producer. In 2004, China grew over 150,000,000,000 pounds of watermelon. The U.S., the fourth-top producer, grew just short of 4,000,000,000 pounds. That’s approximately 115 pounds per capita for the Chinese, as opposed to about 18 pounds for each of us, which, if you’ve ever been to China, will come as no surprise.

Then again, watermelon did not reach the U.S. until relatively late. There is some reference to watermelon being introduced to American Indians in the 1500s. French explorers found natives growing them in the Mississippi Valley. Watermelon was first cultivated in Massachusetts in 1629, and the first American cookbook (1796) had a recipe for watermelon-rind pickles.

For some time now, Miles has been testing varieties of crops for small farmers and market gardeners—baby corn, wasabi, ginseng, and so forth. Although none of these crops will ever challenge our agricultural commodities such as wheat and apples, they present small growers with valuable additions toward diversifying their production and pleasing a local market.

Perhaps the most dramatic result of Miles’s trials arose out of her need to determine ripeness in order to reach an accurate comparison of the varieties tested. Melons must ripen fully on the vine. They have few starch reserves before ripening, so they do not continue to ripen after picking. In their initial trial in 2004, Miles realized they had no accurate way to determine whether a melon was fully ripe. Time-honored methods, such as thumping, turned out to be worthless.

“For the life of me, we can’t tell what’s a ‘nice hollow sound,’” says Miles.

However, two other tests, when combined, turned out to be a perfect indicator. “Where the vine attaches to the melon are two little leaves,” says Miles. “They’re not true leaves, but like a cotyledon. When the tendril turns brown and the leaflets turn brown, it’s ready.”

Unfortunately, this is not a test that can be conducted in the grocery store or fruit stand. So we watermelon connoisseurs must hope that Miles’s findings are widely disseminated among growers. This year’s tasting—of 140 varieties—takes place on August 30. Everyone is welcome.

—Tim Steury
In the first three months of 2006, two images of female athletes and their subsequent media interpretations played on television and front pages across the country. The first one showed Lindsey Jacobellis during the 2006 Winter Olympic Snowboard Cross competition falling after a jump near the end of her run. Headlines such as “Showboating Costs Snowboarder Gold” suggested that she tried for a “hotdog” finish which led to her subsequent second place. Apparently, with no one close behind her lead, Lindsey grabbed her snowboard in a showy move and lost control. In interviews, Lindsey claimed “I was having fun. Snowboarding is fun. I was ahead. I wanted to share my enthusiasm with the crowd. I messed up. Oh well, it happens.”

A few months later, Kristi Yamagoka, a cheerleader for Southern Illinois University, fell backward 15 feet onto her head from atop a human pyramid and suffered a concussion and a chipped vertebra at the base of her neck. The accident was certainly an unfortunate event, but interestingly, Kristi received national attention for her “loyalty and toughness” when she continued to perform cheer arm motions as she was wheeled off the court on a stretcher. On NBC’s Today Show, Kristi explained, “I’m still a cheerleader—on a stretcher or not. So as soon as I heard that fight song, I knew my job and just started to do my thing.” Further, she admitted that her biggest concern was that her cheerleading squad and the basketball team would be distracted by her accident.

Jacobellis’s explanation that she was having some fun, along with Yamagoka’s argument that it was the cheerleader coming out in her, speak to the contradictory status of contemporary American female athletes. Historically, organized sport has been one of the most masculine-identified institutions in American society, and women’s entrance into sport has been tested, but not just by men. At the turn of the 20th century, female collegiate athletics was controlled by female physical educators whose goal for female collegiate sport was not only to encourage physical activity among women, but also women’s moral well-being. This was exemplified in “play days,” which took the place of intercollegiate competitions and emphasized social interaction and harmony. The mantra for this feminine model of athletics was “sport for all,” meaning that participation was valued over competition. The approach was in direct opposition to the male model, which lauded fierce competition, individualism, and commercialism, and resulted in large numbers of injuries, particularly in football. In 1905, the National Collegiate Athletic Association (NCAA) was created to
decrease these catastrophic injuries. Although this organization helped institutionalize the masculine model of sport, the feminine model continued to prevail within women’s collegiate athletics.

But several factors led to the undoing of the feminine model. The failure of U.S. female athletes to secure gold at the Olympics during the Cold War encouraged the NCAA and other male athletic organizations to begin the slow process of acquiring control of women’s collegiate athletics. With the second wave of feminism during the 60s and 70s, many women athletes and feminists wanted to increase female participation in sports and also wanted the resources and benefits male athletes received but which the feminine model did not compete for. Further, the social shifts engendered by the Women’s and the Civil Rights movements also contributed to a rethinking among some women regarding the female athletic model, which was anti-varsity, anti-scholarship, anti-competitive, and anti-Olympic.

With the passage of Title IX in 1972, the controversy regarding women’s status in sports changed from a philosophical discussion to one of legality. The implementation of Title IX, often by federal court order, encouraged females of all ages to participate in sport. However, this legal challenge also shifted the discussion of the purpose or philosophy of sport, which the earlier female educators had encouraged, to a more technical and legal discussion. While there has been an exponential increase in girls’ participation in sport since the inception of Title IX, there has also been a general acceptance of the masculine model of sport as demonstrated by the power of the NCAA over both men’s and women’s collegiate athletics.

So what are the meanings of Lindsey and Kristi’s falls? Lindsey was belittled both for what she did that led to the fateful fall and for how she explained it. First, most sports commentators were incredulous that she would blow a substantial lead in an Olympic competition through a showboating or “styling” type of move. But several commentators noted that snowboarding itself is about style and that Lindsey’s style had already been commercialized through photo shoots and Visa commercials. Thus her board grab was part of the sport itself, as well as a typical move by many male athletes who are celebrating their physical prowess. Think here of slam-dunks. Lindsey’s fall could be read as a focus on individualism and bravado, a mainstay of professional sports throughout the nation. At the same time, her comments about the “fun” of the competition and that she “messed up” speak more to the earlier feminine model of sport as found in the play days.

Kristi’s fall is more problematic than Lindsey’s, since whether cheerleading constitutes a sport is still an ongoing controversy. Although cheerleading began as an all-male activity at elite universities over 100 years ago, its feminization during World War II and its sexualization in the 1970s via the Dallas Cowboys Cheerleaders have contributed to its entertainment and non-sport status. However, in the last 20 years, with the focus on competitive cheerleading, the inclusion of gymnastics-oriented stunting, and the participation of more men at the collegiate level, the status of cheerleading has shifted somewhat. The fact that Kristi could receive such a serious injury as a cheerleader speaks to this change. Some commentators compared her actions of continued cheering with a concession to male athletes continuing to play with severe injuries, and she was labeled tough. At the same time, Kristi’s worries of distracting the team and her squad place her fall and her sport back into the traditional feminine model of sport, and in many ways, into the traditional model of femininity, that of concern for others.

Two female athletes. Two public falls. And multiple ways of making sense of both. But perhaps these two falls and how we make sense of them could lead to a creation of a third space for female athletes, one that encourages both competition and fun and both individual accomplishment and concern for the team.

—Pamela J. Bettis, Assistant Professor, Department of Teaching and Learning

Bettis is coauthor of Cheerleader! An American Icon, published by Palgrave Macmillan in 2003. For information, see http://www.wsm.wsu.edu/bookstore/faculty/societyculture.
Before there was Wisteria Lane, there was the French royal court at the Palais du Louvre in Paris. It was a place of forced marriages, lovers and infidelities, imprisonments and poisonings, sword fights and murders. And that was just within the castle walls.

A little bit of that past is hidden in Washington State University’s archives, in a delicate book with a yellow leather cover. It is a firsthand account of life there with details of some of the greatest scandals and intrigues of French history.

The 378-year-old vellum-paged book holds the memoirs of Marguerite de Valois, also known as Queen Margot. She was a daughter of Catherine de Medici and King Henri II of France, sister to two kings of France and the ex-wife of a third, and often a pawn in her family’s political maneuverings. The book was printed in 1628 in Paris, 14 years after her death.

Margot was lovely and well educated. According to the accounts of court visitors, she pursued her studies more vigilantly than her brothers and sisters, could speak several languages beautifully, and was a clever conversationalist.

Women of the French nobility at that time were extraordinarily influential, says French history professor Steven Kale. They were married to rulers in nearby kingdoms to stabilize their families’ political influence but were often at the crossroads of conflicting alliances.

Her memoir focuses on 1565-1582, until her 29th year. She describes a country in turmoil, with Catholics and the Huguenots/French Protestants fighting for power and a family that was just as fractious. She relates how one brother first urged her to be their mother’s confidante and then turned the queen against her by suggesting that Margot might marry and give away the secrets of the throne. According to her account, she came through the incident having learned how to navigate her family intrigues.

History has it that her lover was Henri Duc De Guise, the founder of the Catholic League, a group of influential French aristocrats formed to stifle the growth and influence of the Protestants.

But then her family forced her to marry Henri, king of the French province of Navarre, and head of the Protestant Huguenots in an attempt to make peace between the Catholic and Protestant factions. The plan failed. Days later, the St. Bartholomew’s massacre was initiated in Paris by French soldiers and Catholic clergy, just as some of the country’s most influential Protestants were in Paris for the wedding. “Allegedly the bodies clogged the Siene,” says associate professor Sue Peabody, who teaches European history at WSU Vancouver.

Margot was caught in the middle, Catholic by birth and yet married to a Huguenot. The newlyweds were in the palace of the Louvre when the attacks began, and the young queen saw one man killed at her feet. For three years after the massacre, she and her husband were kept prisoners at the castle.

Margot’s account shows that she quickly learned to work between both sides to prevent further tragedy. Though her book ends before she turns 30, Margot lived on to age 62. Her marriage to Henri of Navarre was ultimately annulled. And, after Margot’s brothers died, Navarre became King of France.

How such a precious book came to be in the WSU archive collections is still a bit of a mystery. According to the accession documents dating to 1938, the book was purchased for 94 cents. It appears to be part of a collection of more than a hundred books purchased from a bookseller in England. Most are tomes from the 1600s and 1700s, and are French or Italian.

Among the collection, interestingly, is a counterpoint to Margot’s account, the memoir of Henri Duc de Guise.

—Hannelore Sudermann
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From the wide windows of his office, Dan Meyers is watching the city of Bellevue grow up. Over the past eight years he has seen a sophisticated city emerge from the footings of a sleepy suburb.

AS VICE PRESIDENT of design and construction for Kemper Development, Meyers has been in the thick of Bellevue’s changes. The 41-year-old Washington State University alumnus has already had a hand in more major projects than most architects ever hope for. It’s a good fit for someone who knew he wanted to be an architect since the ninth grade.

Meyers’s biggest project to date stands just across the street from his office: a multi-use, gleaming glass tower containing a hotel and condominiums, and beneath it, a shopping center. The $360-million Lincoln Square is the most ambitious project ever undertaken in the suburb-city of 100,000.

But in 2003, when Meyers and a team of architects at Sclater Partners inherited the project, it was nothing more than a gaping hole on the upper end of Bellevue
Way, a rebar- and concrete-lined eyesore in the core of downtown.

The development, conceived in 1997, was to cover two downtown blocks and hold a theater, restaurants, and million-dollar residences with spectacular views of the Cascades, Lake Washington, downtown Seattle, and the Olympic mountain range. It promised to lead Bellevue out of suburbia and into a new life as a major Northwest city.

But it seemed the project couldn’t get past the parking garage.

In 2000 it had been sold to a Canadian developer, who broke ground for the mixed-use highrise, but had to stop when the dot-com bubble burst and emptied out Bellevue’s office market, costing the project more than just tenants.

When the first developer couldn’t make it work, a second bought in. But that effort failed, as well.

So the Lincoln Square project went looking for developers again. This time more than 60 proposals made the rounds. The offers boiled down to Meyers’s biggest project to date stands just across the street from his office. The $360-million Lincoln Square is the most ambitious project ever undertaken in the suburb-city of 100,000.

Meyers’s employer, Kemper, Bellevue’s biggest developer, owned by third-generation Bellevue native Kemper Freeman Jr., and really the only company with the money and the guts to do it.

The developer and a team of architects from Sclater Partners had combed over the project details for months prior to the purchase. “We were there when the padlocks were cut off the construction trailers,” says Sclater’s Scott Kunnanz ‘91. Kunnanz and three co-workers, all graduates of WSU, discovered
reams of documents and drawings left behind when the project was abandoned.

They donned helmets and mining lanterns and trudged down the five levels of the 12-acre parking garage to the bottom floor to find standing water and no electricity. “It was like an abandoned mineshaft, or an Egyptian tomb,” says Kunnanz, who had done similar spelunking in WSU’s steam tunnels 15 years earlier.

A lanky guy who seems anything but in a hurry, Kunnanz had the urgent task of taking stock of the garage, figuring out where it went wrong, and righting it so the rest of the project could continue.

The garage was so poorly configured, it would have taken 15 to 20 minutes just to drive through on a normal business day. Every one of the stairs was out of compliance. It needed new ramps, relocated ventilation, and larger parking spots.

“And it had to be fast,” says Kunnanz. “We were operating under existing permits that were about to expire.”

Slow growing

MOVING FAST has never been one of Bellevue’s strengths. The pioneer town was born out of a densely wooded wilderness that for decades sat quiet while Seattle frothed into a lively port city. In 1869, a Seattle baker named William Meydenbauer rowed the three miles across the deep blue waters of Lake Washington and staked a claim on land that curved around a charming bay.

By 1900, 100 people had settled along Meydenbauer Bay, and another 300 were living close by. They came for the abundant timber, land, and wildlife. But jobs were scarce in Bellevue, so folk worked in Seattle to pay for improvements to their east-side land. And as late as 1909, they were shipping their children across the lake to high schools in the city.

Over the next few years fields were cleared for strawberries, forage for milk cows, and produce that the pioneers trucked in to Seattle to sell. In the 1910s, a Japanese community moved in, bringing families who worked small tracts of land and pooled their resources to build a large packing house and a thriving agricultural community. Theirs is one of Bellevue’s sadder histories. Fifty-five Japanese families from Bellevue, about 300 people, were interned at camps in California and Idaho during the Second World War. Few ever returned.

The war changed the community in other ways. Workers flocked to the area for jobs in nearby shipyards and at Boeing in Renton, where they made B-29s. But Bellevue didn’t have enough stores, schools, or services to meet their needs.

Kemper Freeman Sr. seized the opportunity, and in 1946 opened Bellevue Square, with the Bel-Vue Theater, Frederick & Nelson as the anchor store, and restaurants like the Kandi Kane offering places for friends to meet. Freeman’s son Kemper Jr. was a toddler when Bel-Square first opened its doors. He would inherit the business, his family’s legacy of building community, and much of downtown.
Where, among the tall towers, chain restaurants, and glass-fronted retail stores of the new Bellevue, you may wonder, is the city’s heart? What keeps this corporate paradise from being just like any other cold and faceless metropolis?

Those questions are nagging the community as well. The Bellevue Arts Museum, tucked into the middle of the most recent development on NE 6th Street and Bellevue Way, may have found one of the answers. But it wasn’t easy.

After spending $23 million to lure a big-name architect like Steven Holl and build a statement-making, award-winning art museum, the Bellevue arts community had to close its new museum in 2003, citing budget, attendance, and staffing problems. It was just two years after the grand opening. The avant-garde building had been put in place to transform Bellevue from a suburban enclave to an authentic city. But somehow the innovative building, the contemporary art it housed, and the up-and-coming community it was designed to serve didn’t mesh. “The very public failure in Bellevue has sent a shudder through the museum world,” said a New York Times story in 2004.

It took a new curator, $3 million in interior renovations, and the revival of a half-century-old concept to save the museum. The inspiration for recasting the museum was the Bellevue Arts and Crafts Fair, which dates back to 1947. The popular fair was one of the first in the region, attracting 30,000 visitors the first year and 60,000 the next.

By rediscovering that arts and crafts mission and changing focus from fine art to creative arts, the Bellevue Arts Museum is returning to its role as the Pacific Northwest’s center for exploring art, craft, and design. When the museum opened for a second time in June 2005, it featured an artful teapot exhibition, a show of glass from the early days of the Pilchuck Glass School, and art nouveau-flavored iron work by Albert Paley. The mix of arts and crafts seems to have succeeded. Now the museum not only features fine original pieces, it offers art classes and workshops, and emphasizes Northwest artists.

The museum also runs the annual Arts and Crafts Fair. This July marked the 60th year of the downtown event, which lately has drawn more than 300,000 people to the city’s streets.

Bellevue is returning to its roots in other ways, too. The Eastside Heritage Center has reinstated the Strawberry Festival, one of Bellevue’s earliest community events. Then there is Old Bellevue itself, with its pedestrian-friendly streets, locally owned businesses, and the Norman Rockwell flavor that developed in the community in the 30s, 40s, and 50s.

In many ways, yes, Bellevue has all the streetscapes and upscale shopping you can find in any big city, says architect Dan Meyers. Still, “we are creating a memorable place. That’s what’s next.”
Many in the city, including sometime detractors of Kemper Development’s domination downtown, are grateful the project was revived. It broke Bellevue out of its rut. At the time the first tower was erected, it was the second-largest multi-use project under construction in the country.

By the early 1950s, Bellevue’s population was surging. An attractive suburb, with architect-designed homes sprouting on subdivided farms, it had golf courses, shopping, schools, and spectacular water and mountain views to lure families across the floating bridge from Seattle. Realizing the need for a general plan and government, the citizens voted in 1953 to incorporate as a city, trail- ing Seattle by 88 years and its east-side sister, Kirkland, by 48.

Charles LeWarne, a Washington State historian who grew up in Bellevue, recalls the days when his family lived in a bungalow on Northeast Fourth Street and ran a 10-cent store downtown. LeWarne describes four very different Bellevue: the pioneer settlement, the small Norman Rockwell-type town of the 20s and 30s, the burgeoning suburb of Seattle from the 40s on, and today’s metropolitan city. “I find the story of Bellevue fascinating,” says the 75-year-old scholar. “My parents could have never imagined what has happened with the high-rise buildings and offices.”

From the 50s until just recently, Bel- levue was stuck in its identity as Seattle’s bedroom community. “It was thought of as this sort of lily-white suburban neighborhood,” says Bellevue’s deputy mayor, John Chelminiak (’75 Comm.). It was a place with super-wide streets and super-sized blocks (600 feet, rather than the 200 feet in most cities), a place where you didn’t go too far without a car.

In the 1980s, a few office buildings stretched into the sky—the pink-hued Skyline Office Tower, the blue-toned glass Symetra Financial Center (also known as the Rainier Plaza), and the 27-story rose-colored City Center Bellevue building. But for food, arts, culture, music, and even work, residents still piled into their cars and drove to Seattle.

Then Microsoft and other technology companies settled nearby, and Bellevue began to change. Firms like Onyx, Western Wireless, and Expedia stirred new development downtown, luring major chain restaurants and stimulating more local housing.

City planners had a vision of pedes- trian corridors breaking up the long blocks, public spaces and parks scattered throughout, a farmers market, an artists’ community. But then, “In 2001 we had a real serious downturn in the economy,” says Chelminiak. Tech stocks dropped, layoffs came. And the construction crews drove off.

**Coming of age**

IT’S AN EARLY spring morning, and the Lincoln Square architects are already busy at their desks at Sclater Partners. The small firm, tucked on an upper floor of a vintage Seattle building on Olive Way, has close ties with Kemper Devel- opment, often refining and executing the developer’s plans for Bellevue’s center. Sclater’s architects are experts in designing for retail and parking, and in recent years have branched out to all types of projects, including housing, schools, and hotels. Thanks to their work, Bellevue may have permanently lost its label as a sleepy suburb.

Architect Brad Smith ’88 pushes aside a half-eaten muffin to collect papers for a meeting 20 minutes away in Bellevue. Like his classmate, Dan Meyers, he watched Lincoln Square’s early troubles from a close perch. His view was from the Bellevue Arts Museum just next door, where he was the local project architect for New York architect Steven Holl, who designed the building. He loved the initial look of Lincoln Square, which he describes as much more modern than what was ultimately built, but was sick to see how slowly the proj- ect was progressing. “It was a real drag to go down and see that right across from the art museum. It just felt blah.”

When Kemper bought in, Sclater quickly carved up the project. Kunnanz got the garage. Michael Chaplin ’90 was assigned the ground level and retail areas. And the hotel and condomini- ums, which didn’t require total over- hauls, but needed serious fine tuning, went to Smith. Rick Deno ’71, the senior statesman of the group, won the task of creating features like the atrium waterfall and the elegant and airy sky bridges that would connect the project with the rest of the neighborhood. On this morning, Deno stands at his work table, refining the design for a second, more complicated bridge.

Chaplin, who is nearly swallowed by the stacks of plans that surround his desk, says the task of reconfiguring the retail portion and connecting it to the street outside was a fun challenge. He had to raise the theater ceilings to accom- modate larger screens, and redesign the project in a way that welcomed pedestrians in from the street. Since all the steel was already fabricated and sitting in a yard, he was limited to the materials on hand. “It’s like you had all these tinker toy parts and you had to play with them so you’re not throwing them out.”

Chaplin’s experience is a metaphor for the whole project: the team had the plans and ideas; they just needed to rearrange a little—or a lot—to make it work.
Many in the city, including sometime detractors of Kemper Development’s domination downtown, are grateful the project was revived. It broke Bellevue out of its rut. At the time the first tower was erected, it was the second-largest multi-use project under construction in the country.

“I don’t think I talked to anyone who wasn’t excited to see the job start up again,” says Dave Harrison, vice president of Skanska USA, the building contractor. The 1983 WSU construction management graduate oversaw the 25 contractors on the project. Smith and Chaplin were on site practically every day. It was just the two of them, and they were able to keep up with all 25 Skanska people, says Harrison.

The team built Lincoln Square in just 21 months.

The success of this project has spurred investors to put more condominiums and more buildings throughout downtown Bellevue.

“Lincoln Square was the tipping point in becoming a true downtown,” says Chelminiak. “Now you have a feel there in those blocks, a vibrancy. The restaurants, the theater.” And high above it all, the serene condo units with spectacular views. “Our downtown is filling up with 20- and 30-somethings and 50- and 60-somethings” seeking the life only a city can offer, one with great public spaces like the 20-acre city park, and great stores and restaurants, he says.

The city has big plans to balance its building with livability. Officials would like to connect downtown with the waterfront by creating a green corridor, or recreation trail, from downtown’s core through a neighborhood to Meydenbauer Bay. They also plan to add a Performing Arts Center to Bellevue’s already lauded cultural offerings like the Bellevue Arts Museum and the Meydenbauer Theater.

To top it off, Bellevue has shed its “lily-white” reputation, says Chelminiak. “Twenty-five percent of our population is foreign born. We are an extremely diverse community now.” “It’s a very exciting time to be here,” says Chelminiak. “In roughly 70 years, we have gone from strawberry patches and pea patches to this metropolitan city.”

With satisfaction, Meyers strolls through the new Lincoln Square condos as workers wearing blue shoe covers put the finishing touches on the wood floors, the balcony doors, and the marble fireplaces. Starting at $400,000 and featuring creamy carpets and floor-to-ceiling windows, these gems can cost as much as $6 million. The tenants have waited years for their new homes. Most are trading a large house and quiet neighborhood for a luxury condo downtown with Nordstrom next door and world-class cuisine just an elevator ride away.

Meyers looks to the north, where by 2007 the last piece of the project, an office tower which will house Eddie Bauer’s corporate headquarters, will be completed. “I think the perspective of what is suburb and what is urban is beginning to change,” he says. “If you want to take a new palate and create a new architecture, Bellevue is the place to do it.”
The Pool is Shaded by maidenhair ferns and thirsty red cedars, but his initials, “VTM 1964,” are still visible, etched in shaky script at the bottom of the concrete basin that captures spring water off the mountainside.

Virgil Talmadge McCroskey, a Colfax pharmacist from one of eastern Washington’s most prominent pioneering families, carved his initials into the bottom of this concrete basin at age 88.

Though he passed away a quarter of a century ago, the spring and the forested ridge from which it bubbles up are part of the legacy of land left by a man ahead of his time: The wheeling, dealing Whitman County bachelor—one of the first graduates of Washington State University—spent his life and fortune amassing thousands of acres for the rest of us to enjoy.

In the beginning, the odds were overwhelmingly against him—state legislators repeatedly refused his gifts, locals gossiped about his eccentric ways, family members were convinced he was squandering their wealth, and there was no end to the red tape and backbreaking labor the parks would require. But by the time he died in 1970, McCroskey’s visionary conservation efforts had made headlines in Life magazine, which heralded him by the nickname locals had been calling him for years: The Man Who Gave Away Mountains.

Today, most residents of the Palouse have benefited at least once from McCroskey’s gift of Steptoe Butte. A narrow road winds several times around the naked peak, which rises abruptly from the soft folds of farmland between Colfax and Spokane. The view from the top spans 360 degrees—from the Palouse Country’s gentle hills, quilted in a colourful patchwork, to the mountains beyond. The requisite scenic drive up to the top of the butte is a ritual for students and their families arriving for the start of school or football games, for
The requisite scenic drive up to the top of Steptoe Butte is a ritual for students and their families arriving for the start of school or football games, for foreign students eager for a bird’s eye view of their new home, for couples searching for the most romantic sunset, for paragliders learning to take flight, for professional photographers from all over the world.
Between the mid-1920s and 1955, McCroskey made a series of shrewd, strategic land deals to patch together parcels of land he was convinced were worthy of perpetual protection.

BORN IN 1876, McCroskey traveled west from Tennessee as a toddler with his parents and nine siblings on an immigrant train. The family stopped in Hollister, California, while McCroskey’s father went ahead by boat from San Francisco to Portland, Oregon, then by river steamer to Almota, Washington, and finally by stage to Colfax. After locating a 640-acre homestead near Steptoe, he sent for the 11 members of his family. When they arrived at the base of Steptoe Butte, they found their father had already begun constructing a crude, one-room cabin with an attached kitchen and a leaky roof.

They spent the first difficult summers on the Palouse busting sod, plowing under bunchgrass, and preparing the fields for crops. The winters were severe and accompanied by deprivation and illness. Virgil worked the farm until he was college age. In 1892, he joined the first preparatory class at the newly created Washington Agricultural College and School of Science, now WSU. He graduated in pharmacy in 1899, and, after personal encouragement from “Dr. Bryan,” as he called the college’s third president, he went on to complete two other degrees, in history and economics, one year later. He was one of the first editors of the Evergreen and “can tell you all about the early history of the college, especially the potato patch and the rotten egging,” recalled the 1899 Chinook yearbook. He went to work as a pharmacist in drugstores in Walla Walla, Waitsburg, and Olympia for the next five years. In 1903, he bought the Elk Drug Store in Colfax, which he operated for another 20 years, a period in which “it wasn’t too hard to get a prescription for alcohol during prohibition,” recalls one Whitman County resident.

That same year, 1903, McCroskey became a charter member of the Washington Outing Club, qualifying by a successful ascent of Mount Rainier, which had only recently been preserved as one of the first national parks. A series of other inspirational outings to Mt. Hood and other Northwest peaks would follow.

In 1938, he embarked on a formative automobile road trip to Tennessee to see his birthplace. On his way home, he drove across the southwestern U.S. and toured Grand Canyon, Zion National Park, Bryce Canyon, Painted Desert, Yosemite, Sequoia National Forest, and Crater Lake. The next year he visited Yellowstone National Park and the Grand Tetons, also by car.

Energized by his visits to America’s new national parks, as well as his world travels—he eventually toured Asia, the South Pacific, and New Zealand—McCroskey felt increasingly called to promote a similar park preservation concept on the Palouse, with hopes of designating the region’s natural wonders as state parks. And unlike today’s conservationists, who cringe at road building, McCroskey placed particular importance on creating access for motorized vehicles to the sites, convinced, as Roosevelt was, that the automobile would revolutionize Americans’ appreciation for nature—simply by getting them there.

Over a 30-year span between the mid-1920s and 1955, McCroskey made a series of shrewd, strategic land deals to patch together parcels of land he was convinced were worthy of perpetual protection.

The large McCroskey family had great influence. Virgil’s father, who was once county sheriff, was credited with drawing thousands of Tennesseans to Whitman County. Virgil’s uncle was a prominent farmer, banker, and state senator and one of WSU’s first regents. One brother became a Superior Court
judge, another the mayor of Colfax. Family affairs—weddings, deaths, land deals—made headlines in Spokane.

The family eventually grew so big the joke was that you couldn’t go bird hunting near Steptoe without hitting a McCroskey.

In 1927, Virgil and his brother, George, began lobbying to preserve Steptoe Butte as a historical landmark, a desire shared by the Washington State parks commission, which placed it on its list of proposed parks in 1927. More than a decade later, in 1936, Spokane conservationist Aubrey White traveled to Colfax to pitch McCroskey’s cause to the skeptical Colfax Chamber of Commerce.

“He had a heck of a time,” recalls Lavelle Gardner, an Oakesdale history buff who remembers McCroskey’s battle.

Slowly, McCroskey won over or out-negotiated each and every recalcitrant landowner on the butte. The process spanned nearly 20 years.

**YET MCCROSKY’S** fight was only beginning, for one park was not enough.

In 1939, while he was waiting out one Whitman County farmer foe—it was still seven years before Steptoe Butte would become a park—McCroskey, then 63, purchased the first right of way for his next project—a state park in neighboring Idaho, which extended into Washington’s Whitman County. Commonly called Skyline Drive, Mary Minerva McCroskey State Park is today Idaho’s second largest state park, at 5,400 acres. Named after McCroskey’s mother, and dedicated to all pioneer women in the inland Northwest, the forested spine stretches across Idaho’s Latah-Benewah county line and into eastern Washington. As a boy, McCroskey often picked huckleberries and picnicked under the trees there with his family. The views from the top encompass four states.

For the next 15 years, he battled scornful legislators, he worried family members who feared he was squandering their fortune, and he puzzled local townspeople, who remember him as an eccentric playboy driving into Oakesdale in a white Buick convertible upholstered with red leather, his white hair flying wildly in the wind.

Youngsters were fascinated by the tall, weathered adventurer’s exotic travels to Asia and the South Pacific, but wary of his affection for cheap park labor. He often rounded up groups of Boy Scouts and other local youths and hauled them up to the ridge in the back of a pickup truck to help build trails, tables, and roads.

McCroskey was not a strict preservationist. He used chemicals to stop a moth infestation and allowed many non-native flowers, shrubs, and trees to be planted. He logged some of his lands for revenue and labored tirelessly to punch a 26-mile road across the future park’s ridge. He made calculated land deals, even waiting out unwilling landowners and then buying their land at a discount after their deaths, recalls logger and retired shop teacher Terry Doupe of Tensed, Idaho, who knew McCroskey personally. A Benewah County commissioner, Doupe helped found the Friends of McCroskey group and is its acting president. As a teenager, he and his father logged at McCroskey’s request. He once asked McCroskey why he worked so hard on land to give away.

“He said, ‘I have traveled all over the world. I have seen what happened to the land. There will be clearcuts done,’” Doupe recalls. “The joke has always been that we’re 20 years behind around here. But he was looking that far ahead.”

But while McCroskey wanted to give willingly, the myopic bureaucrats working in the state house did not readily accept his gift. He requested two stipulations: that cattle and sheep be prohibited from grazing in the park and that it be named after his pioneering mother. Two north Idaho legislators in particu-
“McCroskey said, ‘I have traveled all over the world. I have seen what happened to the land. There will be clearcuts done,’” Terry Doupe recalls. “The joke has always been that we’re 20 years behind around here. But he was looking that far ahead.”

Virgil and brother Milton McCroskey atop Steptoe Butte, 1890s.
TUCKED AWAY in an obscure, windowless office in southeastern Washington’s dry, rolling vineyards, there’s a coveted map that is the blueprint for the past, present, and future of the $3 billion Washington wine industry.

The map identifies what varieties are planted where in the state’s “foundation-block” vineyards, where all the certified clean plants for Washington State’s 125 wine varieties originate and are carefully protected with regular tending, testing, and monitoring.

The map is kept highly confidential—literally locked up—so that these state-certified varieties cannot be stolen or compromised.

Only two men have access. Markus Keller, a Swiss-born scientist who oversees the viticulture program at Washington State University’s Prosser research center, and Gary Ballard, a wine industry jack-of-all-trades who left the private sector for a job managing the state’s foundation-block vineyards.

“The map’s something not to be given to anybody,” says Ballard, walking slowly among the vineyards, inspecting a row of Grenache. “It only comes out here once a year when it’s time to cut wood.”

“Cutting wood” is Ballard’s vernacular for the annual ritual of trimming 18-inch branches from these grapevines for distribution to the state’s certified nurseries. The nurseries then propagate them, creating what’s known as the “motherblock” of clean plant varieties, from which plants are then sold to growers and wineries.

The map—or rather, the vines and wines it represents—is the Washington wine industry’s life insurance, health plan, retirement, and 401K all rolled into one.

It is where the industry will turn in case of a major disease outbreak. It is the historical record of the state’s existing varieties. It is an investment in the future—through new varieties that are being tested, cleaned, and approved for distribution to the state’s nurseries, growers, wineries, and eventually your dinner table.

It all starts here, in WSU Prosser’s tissue culture labs, greenhouses, and foundation-block vineyards. Unless, of course, you are an upstart winery owner smuggling Sangiovese varieties from Italy to eastern Washington in your cowboy boot. Or a friend of a
friend who just returned from Burgundy with a few French “sticks” in your suitcase. Or a shady entrepreneur offering to weave the hottest new varieties of vines into decorative baskets and wreaths in order to pass customs in Seattle.

Sound far-fetched? We won’t name names, but it has happened here. And it is among the reasons why new diseases, pests, and viruses are posing an ever-greater threat to one of Washington’s most promising new industries.

“You get a winemaker who really, really wants a certain variety because it’s a hot market, and that puts pressure on the grower,” explains Sara Spayd, until recently a food scientist and enologist at Prosser. She is now a viticulturist at North Carolina State University. “For awhile, we lost control of plant materials because we didn’t have enough of the right thing during the time of the major industry expansion. When demand exploded, material came in, in suitcases, wreaths, or however else.”

Now, nearly a decade later, vineyard acreage has ballooned from 11,000 to more than 30,000 acres, and the greed accompanying the boom is reaping what it sowed—illegal “dirty plants” spreading debilitating vineyard diseases like leaf roll and crown gall bacterium.

When a recent virus survey by the Washington State Department of Agriculture (WSDA) revealed the presence of some debilitating viruses not previously known to exist in the region, industry leaders realized doing nothing was no longer an option. They quickly mobilized and cast their financial and political support behind efforts to revitalize WSU’s foundation-block program, originally established in 1961 by Walter Clore, considered the grandfather of the Washington wine industry.

“That [virus survey] sent up the red flag across the industry, which realized, ‘hey, we need to be a lot more careful,’” says Mike Means, vineyard manager at Canoe Ridge Winery in Walla Walla and board member of the Washington Association of Wine Grape Growers. “There’s a lot of people who jumped into the industry in recent years that didn’t have a history with wine grapes and their potential problems. We want to help educate the newcomers of the importance of using clean plant material in order to not put the whole industry in jeopardy.”

The state—and federal government—has quarantines that prohibit importing vines without proper certification, but that hasn’t always acted as a deterrent.

“We don’t check our borders, we don’t have the capability,” explains Tom Wessels, manager of the plant services program at the WSDA. “We have a rule that says only certified grapevines can come into Washington, but there is nothing to stop a grower from taking a truck down to California, loading it up with grapevines, and driving back with them.”

Over the last year, however, most perpetrators weren’t growers, but rather major home and garden retail box stores that sell garden-variety vines for decorative planting in yards, say, to cover gazebos or arbors.

“It’s frightening.” says Ballard. “[The big box stores] will go to Timbuktu or wherever they can get the cheapest plants and truck this stuff in here . . . bypassing all regulatory bodies.”

When smugglers are caught, the WSDA requires such clandestine plant material be either sent back or destroyed. Technically, all grapevines that arrive in Washington State must have a “clean plant passport,” called phytosanitary paperwork. But clearly there are ways around the system.

Keller recalls driving up to one Washington wine tasting event and being surprised to see large signs pointing out the vineyard’s fancy Portuguese varieties, something he knew had not been cultivated legally. Inside, he asked the winery’s server about it.

“She smiled politely and said, ‘Oh, our owner just went to Europe and brought these back,’” Keller recalls, shaking his head incredulously. Then she poured him a glass of port.

The European import stories are the scariest scenarios, says Wessels, since Europe has “things that would really be serious if they got loose here.”

Another concern is the small boutique wineries overeager to get their foot in the door of a lucrative industry. A five-acre winery newly licensed in the Chelan area produced its first crop of Syrah this year, but when an October freeze injured some plants, crown gall set in, and the winery’s crop was devastated. “Why?” asks Ballard rhetorically. “Because they planted dirty vines.”

Crown gall is only one of several problematic diseases. Leaf roll was detected in the late 90s at the beginning of the industry’s big boom and began rapidly spreading. Now, the bright red leaves of vines infected with the virus wave from the vineyards like red danger flags in a sea of green.

“There are infected vineyards,” says Spayd, “vineyards that need to come out,” not only because of the risks they pose to neighboring crops, but because grapes from these infected vineyards are poor quality. Leaf roll, for example, changes sugar accumulations, which can affect the color and phenolic properties of wine. Recognizing that poor-quality grapes will lead to poor-quality wines, many of the state’s larger wineries have been among the most aggressive supporters of WSU researchers’ efforts to tighten control over plant materials and the spread of disease.

“The industry is aware they purchased a problem when they expanded so rapidly,”
Keller says, “but they are also driving the demand to clean up their act.”

Some, like Hogue Cellars, started rejecting grapes from infected plants. That got growers’ attention. Now, Hogue requires all its grape suppliers to test material before it goes into the wine supply.

Recognizing that a well-funded program for certifying clean vines is a matter of self-preservation for everyone, the wine industry has begun lobbying state and federal legislators to help secure funding for the Prosser research center, whose program to certify, monitor, and protect the Northwest region’s grape supply is called the Northwest Grape Foundation Service, one of just two such regional services in the United States.

The other is Foundation Plant Services at UC Davis in California. The grape service programs at WSU Prosser and UC Davis are now poised to be two major anchors for a new national certification and regulatory program being set up for the American wine industry. The National Clean Plant Network will create at least four nationally recognized grape repositories (WSU, UC Davis, Missouri State University, and Cornell University). The state legislature has also recently stepped up its support, appropriating $1.5 million for a new laboratory facility that features separate “dirty rooms” and “clean rooms” for handling disease-infested varieties. Last year, five new viticulture and enology positions were created at WSU.

While Washington’s industry continues to expand—an average of one or two wineries open in Washington State each week—most of the Northwest Grape Foundation Service’s expansion this year has been a result of becoming a regional, rather than solely statewide, organization that also serves Oregon and Idaho. This year, all the new grape selections—29 total—were to satisfy other geographical areas outside of eastern Washington (mostly Pinot Gris, Chardonnay, and Pinot Noir destined for Oregon, Idaho, and western Washington).

One of the biggest challenges now is predicting and responding quickly to the market’s whims.

“We saw Pinot Noir sales start soaring as soon as the movie Sideways came out,” Keller says. Vineyard after vineyard of Riesling was pulled out of Washington State in the 70s and 80s and replaced with Merlot and Chardonnay, he adds. Now Riesling’s hot again.

“Growers call me and say, ‘I need Riesling, how many cuttings can you give me right now?’ I say, ‘Five,’ and they say, ‘Well I need 50,000!’ The temptation [to go elsewhere] is always there.”

Alongside Pinot Noir and Riesling, Italian Sangiovese and the Tempranillo from Spain are on the hot list. But to meet demand, growers here must either bring in the plant material legally from out-of-state sources, which can be expensive, or wait the two years it takes to introduce a new variety. The process goes like this. First, Ballard procures clean plants, usually from Foundation Plant Services at UC Davis. Then, using a dissection microscope, he snips a tiny tip of the plant, about the size of a grain of sand. In a tissue culture lab free of bacteria, yeast, and fungi (cleaner than a hospital operating room, he boasts), Ballard uses an autoclave to clean and sterilize the vials and nutrient mix into which the tips are inserted. By two weeks they are the size of a pinhead. By two months, the size of a pea. Once the plants are big enough to be moved to the greenhouse, they are again “cleaned” or indexed for viruses. After one year in the field, the plants are indexed again, and if they are clean, released to the nurseries. The nurseries then propagate the clean plants in order to fulfill demand.

Meanwhile, back at Prosser, the original is planted in the new “foundation-block” vineyard, its exact location detailed on the secret map, pulled out only when it’s time to finally cut wood—and deliver the long-awaited new variety to the state’s certified nurseries.

“This is really the only way we are going to survive,” stresses Wessels. “It’s a long-term strategy for an industry that is doing really well. We want to do everything we can to protect it.”

These two men, Gary Ballard and Markus Keller, are the keepers of the super-secret foundation-block map.
Paul Johnsgard is obsessed with birds. He studies them, writes about them, draws them, photographs them, carves wooden sculptures of them, and talks about them with anyone who will listen. He won’t mind me calling him obsessed. He uses the term himself.
JUST DON’T CALL HIM a “birder.”

“I like the term ‘birdwatching,’” says Johnsgard. “It sounds like you’re actually watching them, not just checking them off a list.”

Johnsgard, who earned his master’s degree in wildlife biology at Washington State College in 1955 and taught biology at the University of Nebraska–Lincoln for 40 years, actually watches them. He has a knack for finding things other observers have missed, or dismissed. Most famously, Johnsgard brought attention to the sandhill cranes that pour into the Platte River valley every spring on their way to breeding grounds in the far north. Others had seen the congregation of cranes, of course, but it was Johnsgard’s 1982 book *Those of the Gray Wind* that made the rest of the world take notice. Since then central Nebraska has become a springtime travel mecca, as 40,000 “bird tourists” flock to the Platte Valley every year to see the show.

THIS YEAR, I am one of those bird tourists. When I contacted Johnsgard about an interview, he suggested I come to Nebraska in late March. That way I could see the cranes.

He’s arranged for us to stay at a cabin along the Platte owned by a friend and former student. Photographer Joel Sartore will meet us there, as will a film crew from Nebraska public television. Johnsgard is in demand during crane season, and he’s doubling up on interviews.

While in Lincoln, we visit some of his favorite haunts, reaching most of them by foot. Other observers have said Johnsgard’s gangly appearance reminds them of a crane. The comparison holds, but only when he’s standing still. In motion the resemblance disappears. Cranes step delicately, cautiously. Johnsgard strides. Fast. Scrambling to keep up with him, I wonder that his health setbacks—a heart attack in 1985 and a stroke in the late 90s—haven’t slowed him down. Then it occurs to me: maybe they have.

He takes me to the Nebraska State Museum, where we admire fossil mammoths and mastodons that were unearthed from Nebraska fields. We run into the museum’s director in the hall; she says an exhibit he helped organize, of another artist’s bird paintings, is bringing a lot of new visitors into the building. We go to a nature center at the city’s Pioneers Park, where Johnsgard drops off copies of a spiral-bound nature guide he just finished—a “pseudo-book,” he calls it. We go to the Great Plains Art Center, which is closed for the installation of a new show, but Johnsgard calls ahead to get us in. The director shows me some of Johnsgard’s drawings that are part of a traveling exhibit on the natural history of the Lewis and Clark expedition. Invoking the “six degrees of separation” mantra, he recalls that a few months after he and Johnsgard met, they got to talking and realized that the director’s mother received life-saving cancer treatment from a doctor in Phoenix who had been a student of Johnsgard’s. We go to Bluestem Books, a cramped cluster of rooms in a brick storefront under a viaduct, whose owners have just bought the remainders of one of Johnsgard’s books. As soon as we step through the door, Johnsgard is rushed by a short mop of a dog. “That’s Diego,” the woman at the counter tells me. “He lives for Paul’s visits.”

BELOW: Sandhill cranes strut and dance. The red patch on their heads is bare skin, which looks brighter when the bird is excited.
PHOTOS BY PAUL JOHNSGARD.

BOTTOM: Sandhill cranes fill the air above their roost along the Platte River.
A native of rural North Dakota, Johnsgard grew up watching ducks, geese, and swans in prairie potholes. He started drawing birds almost before he can remember, and still revels in the memory of his family’s move to a town with a library that had the two-volume *Birds of Minnesota*. For a few years he hunted ducks with his father and older brother, until he decided he enjoyed bagging a photo of a duck more than the duck itself.

Johnsgard came to WSC for graduate work because his older brother Keith was there finishing up a Ph.D. in psychology, and he wanted to work with wildlife biologist Charles Yocom, who had recently published the book, *Waterfowl and Their Food Plants in Washington*.

Yocom left for another job a couple of weeks after Johnsgard arrived, leaving his new student to fend for himself—distressing at the time, but a benefit in the long run.

“It was very significant, allowing me to learn how to do field work on my own,” Johnsgard says. The O’Sullivan Dam had been completed the year before. A former student of Yocom’s had surveyed the animal life of the area before the dam went in. Johnsgard did the same after the potholes filled. He spent hours every day punting back and forth across Moses Lake in a small rowboat, noting the birds he saw and collecting specimens for the zoology museum on campus.

He went on to the Ph.D. program at Cornell’s Ornithology Laboratory and postdoctoral work at the Wildfowl Trust in England before joining the faculty at Nebraska in 1961. Since then, Johnsgard has written and illustrated nearly 50 books on birds and other wildlife. He’s also published more than 1,500 pen-and-ink drawings, 500 photographs of birds and other wildlife, and 150 scientific papers on bird behavior and taxonomy, while teaching between 7,000 and 8,000 undergraduates.

He says he was one of the first professors at Nebraska to solicit student evaluations of his teaching. I ask if he got any good tips from them. He laughs. “One young man wrote, ‘You should go down to Goodwill and get yourself some better clothes.’” He did.

Johnsgard’s squabbles with the school’s athletic department, especially with football coaches Bob Devaney and Tom Osborne, attained legendary status on campus. He was renowned for expecting student athletes to meet the same classroom standards as other students. He defied “football Saturday” parking rules and drove in to work on
game days, was often fined, and one time had his car towed. He attended the odd game whenever a visiting friend wanted to go, but lost his faculty ticket privileges in the 1980s when one guest got carried away cheering for Oklahoma.

He says he might not have come to UNL if he’d known how big football would become here, but Nebraska was only supposed to be a temporary stop-over for him anyway. His Ph.D. advisor encouraged him to apply for the job, because it would be a good place from which to look for a better one.

It seemed like a reasonable plan. He needed a job, and Nebraska, like all the plains states, was a waterfowl biologist’s heaven in spring. Fellow grad students at Cornell had visited the Platte valley and come back raving about the bird-watching bonanza. Even so, the state remained underrated as an ornithological destination.

“I was the only professional ornithologist in the state when I got here,” says Johnsgard. As he saw it, that meant the whole state was his to explore. His first spring at the university, he went out to Kearney to see the cranes. He never looked for a job elsewhere.

We head out in Johnsgard’s green Subaru Outback, which is crammed with photo equipment, Goodwill-style sleeping bags, jackets, and boots, and cracker crumbs. A nasty crack loops across the windshield.

A few miles west of Lincoln, the land rises and falls in broad, gentle swells, flatter than the Palouse hills but high enough, Johnsgard says, to make gravity-fed irrigation unfeasible. Since pioneer days, these fields had been home to dryland agriculture, primarily a modest crop of corn.

Invention of center-pivot irrigators in the early 1960s enabled farmers to irrigate the rolling fields. That, along with extensive use of fertilizers that began after World War II, catapulted Nebraska into the top three corn-producing states in the country. More corn production meant more kernels left on the ground after harvest, and more food for the cranes. A survey in the 1940s estimated

Books, Books, and More Books

by Cherie Winner

For the past 40 years, Paul Johnsgard has usually had at least three books in the works at a given time. Some of his books are technical surveys of groups such as owls, hummingbirds, and stifftail ducks. Others, like Those of the Gray Wind, are personal accounts of the landscape, history, and animals of Nebraska. For more information, see wsm.wsu.edu/bookstore/alumni/naturalhistory/.

Then there’s Dragons and Unicorns: A Natural History, a quirky little book he wrote and illustrated with his daughter, Karin, just before she went to college. With a full scholarship waiting for her, Karin’s summer plans didn’t include anything more productive than playing Dungeons & Dragons. That didn’t sit well with Dad. And when Johnsgard looked at the reference materials that came with the game, he realized that something was amiss.

“Most mythological animals are biologically impossible,” he says. For instance, dragons are usually depicted as having forelegs and wings. He and Karin decided that if dragons and unicorns did exist, the details of their habits and anatomy would have to be consistent with what’s known about real animals. The Johnsgards also slipped in a little political commentary about such things as the folly of going into battle against a dragon with nothing but a flag for armor. With all that, the book retains its whimsical nature, for, according to the book’s introduction, “to doubt the existence of dragons and unicorns is surely the hallmark of a limited imagination and a closed mind.”

To read excerpts from Dragons and Unicorns and other books by Paul Johnsgard, visit Washington State Magazine Online, wsm.wsu.edu.
Paul Johnsgard’s pen-and-ink drawings of an adult male sharp-tailed grouse and a bushy-tailed woodrat are typical of the illustrations he creates for his own books.

Johnsgard has a knack for finding things other observers have missed . . . Most famously, he brought attention to the sandhill cranes that pour into the Platte River valley every spring . . . It was his 1982 book Those of the Gray Wind that made the rest of the world take notice. Since then central Nebraska has become a springtime travel mecca, as 40,000 “bird tourists” flock to the Platte valley every year to see the show.

about 40,000 sandhill cranes migrated through the Platte valley each spring. By the 1960s, that number had grown to 150,000; and by the late 1990s, to half a million or more.

During the same period, dams and drawdowns of the Platte eliminated the spring floods that had historically scoured the river’s sandbars free of woody sprouts. The cranes, which crowd onto the sandbars at night, lost their roosting spots. Fortunately, the area is also critical habitat for three birds on the Endangered Species List—whooping cranes, piping plovers, and the inland race of the least tern. To protect the endangered birds, sandbars in the 50-mile stretch between Kearney and Grand Island are kept clear of brush by a yearly scraping with bulldozers. Sandhill cranes, along with waterfowl and other shore birds, have been incidental beneficiaries.

We exit I-80 and drive south on the Tom Osborne Expressway, named for the former football coach. Johnsgard laughs, “I don’t think there will ever be a Johnsgard Expressway,” he says. “A Johnsgard Back Alley, maybe.”

We cross the Platte and turn onto a road that parallels the river. Redwinged blackbirds—just males, here before the females to stake out breeding territories—are everywhere. A merlin on a power line scans the ground for mice. Every field seems to have a red-tailed hawk soaring overhead.

Nebraska got hammered by a blizzard a week ago, and Johnsgard is pleased to see snow still in the furrows. The fog-colored cranes show up beautifully against the patches of white. He veers from one side of the road to the other to get a better look. He says that in all his years of gawking at birds from his car, he’s never had an accident, except for running off the road a few times.

We stop to watch a few dozen cranes amid the corn stubble. Meadows wet with snowmelt and spring rains are almost as important for the cranes as sandbars. The long-billed birds rummage in the muddy soil to find snails and other meaty sources of protein. We see some cranes probing so deeply they’re up to their eyeballs in mud. Here and there a crane stops feeding and hops. Its neighbors catch the impulse, and soon several cranes are dancing. One bounces up and down a few times. Another jumps several feet into the air, its bill reaching toward the sky. A third hops, fluffs, picks up a chunk of cornstalk and flings it into the air as it jumps. Then they settle back to the serious business of eating.

A new pair floats in from the west. They tilt sideways, a maneuver Johnsgard says reduces lift and slows them down. As the cranes flutter down, they lower their spindly legs toward the ground. Landing is a soft, graceful affair, as is almost everything I see these birds do.

The cranes will stay in the area for a few weeks before moving on. It only takes them a day to get here from their winter homes in Texas and New Mexico, so they’re usually in pretty good shape when they arrive; but they need to pack on another couple of pounds of fat in order to complete their migration. Many of them nest in northern Canada; some will travel all the way to Siberia.

We turn north, cross the river again, and pull into the lot at the Nebraska Bird Observatory. The center’s director, Heidi Hughes, worked as press secretary for U.S. representative Don Bonker (D, Washington) in the 1980s. She says she sought the job because she liked Bonker’s stance on environmental issues.

“And you’re still doing environmental work,” I say.

“Wildlife,” she corrects me. “I work for wildlife.” Too many people in the environmental movement are too strident for her, she explains. “I want to be positive, not preachy.”
It’s an attitude shared by Johnsgard. Despite his concern for the river and the birds, his public persona is decidedly low-key. He writes opinion pieces for newspapers and sends letters to congresspeople, but has testified before the Nebraska legislature only once.

“I try to avoid standing up and doing that kind of thing,” he says. “I think I can be more efficient reaching people through my writing.”

That’s why the great prairie chicken battle of 2000 surprised everyone. When the state announced a lottery to award 300 permits to hunt prairie chickens in an area where Johnsgard feared the population couldn’t bear such pressure, he called on non-hunters to apply for the permits.

“Game and Parks of course never figured that anyone would apply for those permits who wasn’t intending to shoot the hell out of prairie chickens,” he says. Game and Parks figured wrong; about a third of the permits went to people who promptly tossed them in the trash. The state has since offered only very limited hunting in the area.

It was one victory in a long, mostly losing struggle. Hughes thinks prairie ecosystems like the Platte valley are in trouble, with less than 1 percent of the original acreage remaining, because most people have no personal connection to them. Although homesteaders and amber waves of grain are part of our national self-image, she says, few Americans have the kind of direct experience with the prairie that would make them care deeply about it.

“You have to sit in the fields and listen to the bobolinks and meadowlarks. You have to see the cranes,” she says. “When you get the shivers, you don’t need to be *told* the habitat is important.”

**We GRAB LUNCH AT A DINER and then drive on to the cabin, which is set among cottonwoods a couple hundred yards from the river. Photographer Sartore and the film crew arrive soon after. Just down the lane from the cabin, a two-track leads through a band of trees to a small rise along the river. One large sandbar is within pitching distance; others dot the main channel.**
We all walk here around 4 p.m. to scout the area. Johnsgard says one of the biggest roosts on the river is about a quarter of a mile downstream. It hosts twenty to thirty thousand cranes, possibly more. Since we won’t be in a blind, this is a good vantage point. If we were closer to the roost, we might spook the birds. Johnsgard says the presence of an eagle, a human, or other perceived threat can keep them circling long into the evening.

The TV crew sets up its camera and sound equipment, and asks us to walk down to a point of land at the base of the hill and then back along the water. A pair of yellowlegs skitters along the sandy shoreline, and just downstream, a group of whitetail deer edges across the water. I count eight, nine. The shapes shift, and I lose track. Maybe a dozen.

Soon after we get back to the hill the cranes start coming, a few small groups flying low out of the southwest. Pairs, pairs with a nearly grown youngster, a few singles. It’s too late now to go back to the cabin for the warm coat and fleece pants Johnsgard insisted I bring. The show is on.

The cranes are noisy, adults with their hollow, rattling call, youngsters with a higher-pitched version. They veer away when they spot us, but some stay close enough that we can hear the air whiffling through their feathers as they pass.

After a prelude of small groups, the full parade starts. We don’t matter any more; the cranes come in lines that reach almost a full 180 degrees, perhaps a quarter mile across. Line after line, wave on wave, half a minute or a minute between them, with more lines emerging from the distance as far as we can see. They come, and come, and come. My throat tightens, and I clap my hand over my mouth. I am lost.

In a gap between flights I try to jot a few notes. My writing is jerky and erratic. I’m shaking violently. It’s 7 p.m., a little past sunset. We can’t see the roost, but even a quarter-mile away, the din swamps our attempts to speak. Suddenly I realize it isn’t terribly cold out. It’s not windy, and I’ve certainly been in colder situations without shivering like this. Then I remember what Heidi Hughes told me.

I take a few deep breaths, and the shaking subsides. I scan the sandbars across from where we’re standing. Nobody there; we’re too close. Through the binoculars I see a pale gray feather drop to the water from the empty sky.

The next morning, Johnsgard calls to me through the bedroom door. It’s already ten to 6. I’d set the clock radio for 5:30, but the station it was tuned to hasn’t started its broadcast day yet. I dress in a rush. Johnsgard has said the birds usually take off all at once in the morning. A few cranes are already in the air; we hear their rustling calls. We step outside into a cold, stiff wind. That will delay the birds, Johnsgard says. They don’t like the wind.

I walk down the lane to a spot near our viewing post from the night before. Sandbars in the main channel right across from where we were last night look different this morning. I swivel the binoculars left to right. Every inch of sandbar is covered in cranes. Scattered cranes hop a foot or two into the air. Pop, pop, pop. Like a pot
starting to boil. They’re eager for breakfast, but after testing the wind, most of them settle back into the group. A few singles leave. I’m surprised they head south and southwest, into the wind; I expected they’d let the wind carry them north of the river.

Occasionally a single or small group flies back toward the river, as if they’d gone out earlier and then changed their minds. A threesome flies over, the smaller juvenile piping in front. I hear a lot of noise from the main roost and see a few dozen birds in the air, but most are still down.

Johnsgard swings by me on his way to another viewing spot.

“I told you they’d leave all at once, and they’re not doing that,” he says. “It’s too cold, they don’t want to leave.”

Still, the day is moving on, and the crowd thins as birds straggle out in twos and threes. An hour later, the sun is beginning to highlight their pale necks, and enough have left that in some areas I can count individual birds.

It is cold this morning, I’m grateful the wind is at my back. Even so, and with good gloves on, my fingers are getting numb. Johnsgard joins me.

“Had enough?” he asks.

I don’t know how to answer that.

**Where to watch in Washington**

Washington birdwatchers can see nearly 500 species of birds within the state’s borders. For maps, tips on where to find certain species, and notices of “birding festivals” and other special events, visit the Web sites of the Washington Ornithological Society (www.wos.org) and the state Department of Fish and Wildlife (wdfw.wa.gov/outreach/viewing/viewguid.htm).

**To view more photos related to this story, visit Washington State Magazine Online, wsm.wsu.edu.**
Yvonne Rodriguez ’01, ’05

Operations Supervisor for Kraft Foods.

Bachelor’s degree in biological sciences and master’s degree in business administration.

Past President of WSU’s La Alianza de WSU Alumni Alliance.

Loves to watch her daughter dance.

Member of the WSU Alumni Association.

“I joined the Alumni Association to support the alumni alliance and constituency groups. Helping the Alumni Association reach out to Cougars everywhere in support of the University is how I want to make a difference for WSU.”

On February 2, 1991, during the first Iraq war, Capt. R. Dale Storr (‘83 Mech. Engr.) was captured by Iraqi soldiers after his A-10 Thunderbolt was shot down near Kuwait. The 29-year-old Air Force pilot from Spokane was a prisoner of war for 33 days, spending a portion of that time in Baghdad’s Abu Ghraib prison, while his friends and family believed he had died in the plane crash. He was regularly beaten and interrogated by the secret police, but used techniques taught to him at the survival school at Fairchild Air Force Base to get through it.

Now a lieutenant colonel in the Washington Air National Guard, he visited with Hannelore Sudermann to talk about his time in Iraq and share details of his life today. He has worked as a commercial pilot for two major airlines and is currently flying several missions a month with the 116th Air Refueling Squadron out of Fairchild. The Spokane resident is also a co-owner of the Hi Neighbor tavern with WSU classmate Ken Lund ‘85 and co-owner of a pharmacy housed in the SIRTI building.

A whim can shape your life.

One of my friends at WSU was in ROTC. He knew I wanted to fly. Out of the blue one day he said, why don’t I come take this Air Force officer qualification test. I did really well on the pilot portion. A couple weeks later, they offered me a pilot shot. My junior year I got to go out to Moscow-Pullman International. That’s where I learned to fly in a Cessna 6161 Mike.

Strike out on your own.

I think some people get nervous flying with an instructor. I was just like, “Get out of here. I want to fly this thing by myself.” It was so much fun. I got to kick out the instructor and go buzz the wheat fields in Pullman. I just knew I was going to have a career in aviation.

Put in your time.

In 1984 I went to Vance Air Force Base in Oklahoma. That’s where I got my wings. I wanted to fly fighters right out of pilot training, but they didn’t select me for that. I stayed there as a T-38 instructor pilot for about three years. Then I competed again and got selected to fly a fighter. I went on to fly A-10s at England Air Force Base in Louisiana. The A-10 is a real ugly airplane. It’s called a Wart Hog. It has big straight fat wings for carrying lots of bombs and a butt-ugly engine sitting on the fuselage. It’s got this 30-millimeter cannon that was designed to kill tanks sticking out of the nose. It’s a slow airplane designed for ground support.

Big egos can be good things.

In August 1990, after Saddam had invaded Kuwait, our unit was deployed over to King Fahd, an airport under construction. It was a big tent city. Our squadron had about 24 planes and probably about 40 fighter pilots. Their egos are bigger than this building. But that’s what it takes. I’m not saying that’s good or bad. We can’t all be brain surgeons, and not everyone is made to be a fighter pilot. When you’re going low and fast, just a moment or two of indecision or negligence, you’re dead because you just hit the ground.

Know when to bail.

We had been scrambled to work with a Marine F-18 on the coast of Kuwait. I called to get permission to go drop on somebody. I’d have run out of gas if I had to carry the artillery back. My wingman, Eric, and I went up there and dropped our bombs. We took a little anti-aircraft fire, but it wasn’t real bad. We still had a fully loaded gun. So we went after this truck park. We were so high I missed on my first pass. I pulled off, climbed up, and re-attacked the target. As I was pulling off something hit my airplane. I never saw it. It felt like a 50,000 pound sledge hammer just hit the bottom of the jet. I knew I was in trouble. The airplane just did this big barrel roll. The wingman saw
the airplane roll over again. Then the airplane rolled over one more time. He said, “Stormman, eject, eject, eject!” I said, “No I’m not jumping out yet!” I was only three or four miles from the Saudi border. I knew if I could keep this airplane flying for just a few more seconds, I’d be in friendly territory.

I had my head buried in the cockpit. I was staring at the emergency flight control panel, and it had all these switches, and I was checking them. What have I done wrong? I think God just reached out and said, “You’re stupid,” and moved my head out. With the dive angle the airplane was at and as close to the ground as I was, I just instantly knew that I was going to hit the ground.

I could hear my chute come up. I’m like, “Oh my God I can’t believe I lived through that!” The very next thing I hear is this huge explosion beneath me. The airplane had hit the ground, and now there’s this huge fireball coming up. I’m like, “Oh man, I’m going to die in the fireball!”

Hold your breath and hang on.

I got in what’s called a good seat position. Feet together and make sure you’ve got your head against the seat rest so you don’t screw up your back, put your arms on the handrails, and up you go. Everything worked like a champ. The canopy blew off. I remember the white smoke coming up between my legs from the rocket firing.

I could hear my chute come up. I’m like, “Oh my God I can’t believe I lived through that!” The very next thing I hear is this huge explosion beneath me. The airplane had hit the ground, and now there’s this huge fireball coming up. I’m like, “Oh man, I’m going to die in the fireball!” This black smoke and fire came up, and I just closed my eyes. It got really, really hot for a few seconds. I felt this rush of cold air and looked down and saw the ground. My wingman never saw me get out. He never heard me on the radio. He went back and reported that he thought I died in the crash. The next thing I see is this truck coming from the truck park that I had just strafed coming after me. I landed and started to hide behind this sand dune. The Iraqis were there within a minute.

Use what you’ve learned.

I thought for sure they were just going to come up and kill me. They took my radio and my gun, and then there was just a lot of slapping around and punching. They had tied my hands. They had taken my survival vest off. Then they took me to a Quonset hut, where I got my first interrogation. I got kicked in the head. Beat up. I realized I better start getting smart. I better start remembering the stuff that they taught me at Fairchild. I can tell you that that training saved my life. I got another long interrogation in Basra from a guy who claimed to be a MiG-29 pilot. He actually treated me fairly well. I spent the rest of that night and full day driving to Baghdad. That’s where the real beatings began. I had three days of interrogations that were pretty intense. They dislocated my shoulder, broke my nose, my left eardrum, and busted up my left knee pretty good. These guys were trained. They knew what they were looking for. That’s where all that stuff learned at Fairchild at survival school came into use. Unfortunately, the guy who did the interrogation knew those techniques, too.

Keep your secrets.

They wanted to know everything. There were just a few things I was going to die for. We were flying out of a place called Al Jouf, and it had no protection. The Iraqis could have taken one tank there and killed a lot of people. But I’m not going to tell them that. There were some pilots in my squadron who were Jewish. They could kill them on sight. I wasn’t going to tell them their names just in case they got shot down. I had three lists: things I told them, things I hadn’t told them, but will if it comes down to me dying, and things that I’ll never tell them, because people will die.

Sometimes it’s just about luck.

The first prison I was in was the regional intelligence headquarters for the Ba’ath party. My cell was near the center of a long building. No shower. No toilet. I had two blankets. I used a boot for a pillow. It got really, really cold in there. On the night of the 23rd the Air Force targeted the building. The first bomb hit in the parking lot. A big chunk of tile fell down and hit me in the forehead. I curled up in a ball and said, “We’re dead.” The second bomb caused a section of the prison to pancake down. That sucked this big steel grate in from the window in my cell, and it landed and wedged over me. That was pretty lucky. The third bomb went through the cell next to me. It knocked all kinds of rubble and big chunks out of the ceiling. I was buried by all this rubble, but protected by the grate. The fourth bomb fell, and our part of the building stayed up.

You can live through a lot.

They eventually came for us and put us on this bus to Abu Ghraib. We called it Joliet, because it looked like the prison from The Blues Brothers. I was in the very end cell. [Navy pilot] Bob Wetzel ended up right next to me. We were able to communicate using a code, it’s like Morse code for pilots. After a while we were able to figure out there was a boarded-up window between the two cells. We could whisper to each other without the guards hearing us. You got beat if the guards caught you talking. That’s where I got Guardia. I had to use my cell for a toilet. That was gross. I lived in that for a week. I weigh about 240 now, and back then I was down to about 175.

Let them know you’re alive.

The war ended, but we didn’t know it. They came in the middle of the night and grabbed us. They took us to a Republican Guard prison. There I had a mattress. I had a piece of pita bread, a tangerine, a hard-boiled egg. I could hardly eat it all. They let us go to the water closet and clean up. They shaved us. This guy comes by and says, “What’s your name?” “Richard Storr.” He says, “You’re a captain, U.S. Air Force. You’re an A-10 pilot. You were shot down the 2nd of February. You go home in 15 minutes.” I didn’t believe him. They marched all of us to a bus and sprayed us down with perfume. We got turned over to the Red Cross at the Novotel in Baghdad. Bob Simon [the CBS News reporter in the same prison] got released a few days before we did. He told the Air Force that he talked to a guy who said he was Dale Storr. Then the Air Force called my mom and said, “Watch CNN when the POWs get released, because your son might be one of them.” That’s how she found out. She saw me walk off the airplane in Riyadh. It may have been harder on my family than it was on me. I thought everybody knew I was alive.

It could be worse.

Everybody who joins the military takes the same chance. Some of us get to [face serious danger] and others don’t have to. The worst part was not knowing how long you were going to be there. I tried not to think about what I was going to do when I got out. Before being a POW, I was a lot more focused on my job. I didn’t spend nearly enough time with my friends and family. Now, there isn’t a day that goes by that something doesn’t remind me of being back in prison. Everyone has a bad day once in a while, but for me, it’s always: It could be worse. I could be back in prison.
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Art and Enterprise: Jordan Swain ’00

So I’m riding around Bellevue with this very high-energy 27-year-old painter, and I’m starting to think, “Well, maybe I should take up painting.” That’s how infectious my companion is. She makes it sound like so much fun.

Jordan Swain ’00 offers me a warm diet soda from her emergency stash of supplies she keeps in the back of her car because she often doesn’t have time to stop and eat. We pull into Children’s Village, a safe haven in Renton for women and children who have been homeless, refugees, or victims of domestic violence. Swain and other artists donated their time and talent to brighten the rooms of the shelter with murals. Swain transformed one large playroom into a jungle. A friendly-looking leopard reclines on a tree branch directly above a nonplussed monkey. Across the room, an equally nontreating lion emerges from the underbrush.

Her work here, as well as other venues, is donated, but excellent publicity for her business, Jordan Swain Fine Art, an intriguing blend of fine art and children’s art. Although she paints children’s art on canvas, most of her work is murals, many of which are in children’s bedrooms.

At last count, 63 of her murals enliven walls of various habitations around the area. Much of her business comes about by word of mouth, and much of it is repeat business.

Although she says the murals are her passion and she exudes little artist’s angst or torment, she admits to a certain tension between her “fine” and children’s art.

“It’s almost like a crisis,” she says. “I want to be an artist, on the one hand, and be taken seriously. But some people think all I do is little kids’ murals.”

But shortly after, she tells me that sometimes she’ll stretch a canvas, not knowing which direction her imagination will take her. Each requires a completely different mindset, she says. I suspect the choice is more anticipation than crisis.

She avoids the conflict to some extent by generally avoiding copyrighted images such as Teletubies and their ilk and trying to raise the mural images to a fine-art level.

“Children are a lot more sophisticated than we think,” says Swain. She also teaches art to children, through private lessons and at the Kirkland Arts Center. Children appreciate things like color, she says, and often ask about the meaning of things. Regarding the murals that are proposed for their rooms, she says that she has yet to encounter a child who’s not known what he or she wants.

She’s witnessed some battles, though, recounting in particular one little boy who insisted he wanted the Death Star on his bedroom wall.

Deciding on a theme involves some creative psychology on Swain’s part. One recent commission, for example, was for a girl who wanted unicorns and mermaids. Swain knew that she’d outgrow those ideas in about six months and persuaded her client instead to go with a Parisian theme.

Jordan’s grandmother is a painter, who taught her progeny to “never stay between the lines.” The creative impulse seems to permeate the whole family. Jordan’s sister is a musician. “I don’t think my parents ever told us to be doctors or lawyers.”

Although her painting at Washington State University tended toward the moody and symbolic, the seed of her interest in murals was planted by her advisor, Ruben Lira, who informed her that the Research Park was looking for some art.

“I said, well, I can show them some paintings.” But Lira suggested she propose a mural.

Which she did, even though “I had no idea what I was talking about.” But evidently, Lira did, and Swain figured it out, as her rainforest mural still resides at the Research Park, a visual legacy that students rarely enjoy. ■

—Tim Steury

Jordan’s husband, Clifton ’00, is a manager with Automatic Data Processing and an avid promoter. They met at the Homecoming game when they were freshmen. See www.jordanswainfineart.com for more about her art.

CLASS NOTES

1930s
Winnifred (Castle) Olsen (‘38 Soc.) was honored as a distinguished graduate by the Olympia High School Alumni Association in April for her service to the community.

1940s
Robert W. Stephens (‘43 Mining Engr.) and Mary Helen (Laney) Brimple (‘43 Pharm.) were married and went on a seven week trip to Australia and New Zealand.

1950s
Jay Rockey (‘50 Gen. Stud.) was honored as a distinguished graduate by the Olympia High School Alumni Association in April for his service to the community.

Neil Moloney (‘53 Police Sci.) has released Renaissance Cop, his second in a series of police crime novels. Moloney is the former chief of Washington State Patrol and director of the Colorado Bureau of Investigation.

1960s
Paul Tomlinson (‘62 Pol. Sci.) was the recipient of the 2006 Jefferson Award, honoring individuals in service to others. Tomlinson is the acting life coach supervisor for the Congregations for the Homeless, a single-men’s shelter in Seattle. He helps shelter residents find housing and employment.

Clark Colwell (‘66 Police Sci., ’68 Soc.) has retired from the Lincoln County Prosecuting Attorney’s office after working as a special deputy for 10 years. He also worked for 21 years as a deputy prosecutor for Spokane County.

1970s
Sam Carroll (’70 Math.) retired from 33 years of teaching mathematics. He received a diploma of accounting from the local technical and further education institute. Carroll was recognized by the Queensland Association of Mathematics Teachers for his years of service. He is currently doing part-time bookkeeping and banking, and is volunteering time at the homework help center.

See Class Notes, page 54.
Cougar Pride Reigns in Seattle this September.

Join the Cougar Nation September 13-16 for an action-packed four days in Seattle designed to spread Cougar Pride throughout the Puget Sound region. There’s something for Cougars of all ages.

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Check out the Welcome Reception at Columbia Tower for President’s Associates and WSU Alumni Association Life Members, and The Innovators Fall Luncheon Lecture, part of the dynamic series that brings distinguished faculty to Seattle and Spokane to deliver presentations on cutting-edge research.

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A great sail:  
Scott Carson ’72

The meeting happened a few weeks after Scott Carson had accepted his new job. In December 2004, Carson (’72 Bus. Admin.) was put in charge of the Boeing Co.’s Commercial Airplanes Group sales team and mandated to recapture the lead in the worldwide airliner market, which had been seized by European rival Airbus. It was a tall task—Airbus had out-sold Boeing in three of the previous four years.

To complicate the problem, says Carson, he had to deal with some lamebrain sales procedures installed by a previous chief financial officer. Carson was reviewing the procedures with his top sales executives. He couldn’t believe some of the hoops his sales teams had to jump through—each designed to ensure Boeing hit a profit target on every sale by limiting each sales team’s ability to cut deals in the field.

Carson had been the chief financial officer who had designed the sales process, with the goal of “keeping the sales guys from going crazy.” But now the tip was on the other wing. Carson says he looked around the table in disbelief. “Good lord,” he said. “What idiot did this?”

“My CFO for sales leaned over and said, ‘Boss, you did.’”

“It was all of the processes that we had put in place,” Carson says. “Some of it, frankly, was not necessary. It was embarrassing.”

But Carson says he learned something: “If you’re trying to prevent people from making mistakes, you’re making a mistake. It’s a lesson for leadership.”

Carson apparently learned his lessons well. In 2005, Boeing sold 1,002 commercial jets, smashing the previous one-year sales record for the company.

Leadership and learning are two big themes for Carson, who in the past decade has become one of Washington State University’s top donors.

In 2005, he and his wife donated $275,000 to create the Scott and Linda Carson Center for Professional Development in WSU’s College of Business. It’s goal: to teach graduating students some of the non-academic skills they’ll need to succeed in business and to help them make a “graceful and effective transition from the academic world to the professional world,” according to Carson.

By fall 2006, Scott and Linda Carson will have given more than $1 million to WSU—not including the tuition checks for four of their five children, who have also graduated from the school. They include Kristina (’96 Home Ec.), Kelly (’99 HRA), Shelley (’04 Bus. Admin.), and Steven (’06 Bus. Admin.) A fifth child, Sandi, graduated from University of Washington.

He and Linda were glad to do it, Carson says. WSU, he says, literally changed his life.

Carson grew up on Mercer Island, the son of a Boeing test pilot. “I always knew I wanted to work in aviation,” he says. “For those of us growing up in Seattle, that meant Boeing.”

Carson went to summer school to get his aviation mechanic’s certificate, but studying was never a priority, he says. “I wanted to work on planes and avoided studying.”

He served two years in the U.S. Air Force in Vietnam as a staff sergeant and an armament crew chief in a special operations unit. He “loaded ordnance during the daytime, and kicked flares from transport aircraft at night.”

After finishing his tour of duty, Carson came home and worked for a time at Boeing, only to be laid off during the “Will-the-last-person-in-Seattle-please-turn-off-the-lights!” layoffs of the early 70s. He also met Linda, who made one thing perfectly clear, Carson says. “She insisted that any serious intentions in our relationship had to be accompanied by a college education.”

WSU, he says “was kind enough to admit me.”

So Scott and Linda got married, packed up their belongings, drove to Pullman, and enrolled. They moved into a little house on Wayne Street, he recalls. “At the time, it was the last civilization before the wheat fields.”

On the edge of those wheat fields, Carson, who’d never been much interested in school, “discovered that I really enjoyed learning and actually turned into a fairly good student.” The experience “helped me to realize that I had some potential as a student, and a person.”

Carson hasn’t forgotten that. A corner of his office at Boeing’s Longacres Park headquarters is a shrine to WSU memorabilia, and he has a custom-painted crimson-and-gray Shelby Cobra with a “Cou-bra” vanity plate that he drives at WSU homecoming and other events. Carson’s a trustee of the WSU Foundation, and is Boeing’s executive liaison to the University, which helped him steer a $99,000 grant to help create a wireless classroom at WSU.

After graduating with a bachelor’s degree in business, Carson took a job with Safeco, selling investments. It was his first sales experience, and it involved a lot of cold-calling. But he says “I didn’t particularly enjoy that.”

In 1973, he went back to Boeing as a financial analyst, this time to stay.

Selling jets to airlines is a unique occupation. The deals often are worth billions of dollars, and a particularly big one can sway the U.S. balance of trade. Boeing and Airbus sales teams often negotiate with key officials from governments that own national airlines.

For most of this decade, the field has been dominated by John Leahy, the American-born supersalesman for Europe’s Airbus SAS. Leahy is known for his patrician looks, French cuffs, and tenacious, deal-closing pitches.

Carson, on the other hand, is “the antithesis of the brash Leahy,” according to Lee- ham Co. analyst Scott Hamilton.
Carson doesn’t argue.
“I’m not an over-the-top, pushy sales guy, and that’s where he [Leahy] seems to come from,” he says. “I actually like John, but he can be a bully sometimes when he closes a deal. That’s not very Boeing-like, and it’s certainly not very Carson-like.”

Instead, Carson says his approach is team-oriented and strategic.

To compete with Airbus, Boeing has loosened the leashes, Carson says. Instead of having to run proposed deals past Chicago headquarters—like a rookie car salesman conferring with the sales manager—Carson’s team has more authority to make deals in the field.

Before they meet with a customer, they discuss what Airbus is likely to offer, and build their sales pitch around that, Carson says. As a result, when Airbus offers to cut its price, the Boeing team has already been cleared to make a counteroffer.

“It allows us to be more nimble,” Carson says. “We’re asking for what we need once, instead of four or five times. All of that has freed the guys up,” he says. “We’re getting better-quality deals, so everyone wins.”

Carson’s strength, according to Larry Dickenson, Boeing’s vice president of sales for Asia, is in helping his sales teams prepare and win sales campaigns. Dickenson has been in his job for more than 20 years, and says Carson’s the best sales chief he’s worked under.

“I only wish I had had this relationship earlier in my career,” he says.

Carson’s career has taken him full circle. In 2005, he returned to Vietnam, leading a Boeing sales team. “I’d never seen Hanoi from the ground,” he quips. “The last time I was in Vietnam was in vastly different circumstances.”

Carson says the one great lesson is that companies need “processes that support people,” and not people who know how to work the process.

“People will never learn if you don’t give them enough rope,” he says. “Don’t try to avoid every mistake scenario.”

After not quite two years on the job, the industry perception is that Carson seems to have succeeded in changing Boeing’s sales culture, says Paul Nisbet, an analyst with JSA Research in Rhode Island.

“They’re being much more customer-attentive than what they’ve done in the past, and they’re not quite as arrogant.”

Teal Group analyst Richard Aboulafia in Virginia describes the sales effort as “aggressive and confident” and “less obsessed with making every deal make the numbers.”

“They’ve got wind behind them,” Aboulafia concludes. “And a great sail.”

—Bryan Corliss

An aerospace writer for the Everett Herald, Corliss (’86 Comm.) is currently studying as a Knight-Bagshot fellow at Columbia University.

Laurie Carlson: Doing the things she likes

On the 90-minute commute from Cheney to Pullman to attend graduate school, Laurie Carlson’s eyes often strayed from the road to the cows grazing the rolling hills of the Palouse.

Carlson, who was completing her Ph.D. in history at Washington State University, found herself wondering what the animals were eating, how they were fed, and what their days were like.

To answer her questions, she decided to raise them.

Her interest in the animals also inspired her to write Cattle: An Informal Social History, looking at the symbiotic roles of cattle and humans.

It’s often like that. She recently published a children’s book about Thomas Edison, a notion that came from a visit to her eight-year-old grandson’s elementary class. The result is a biography of Edison filled with activities and experiments for kids to try.

As a child, Carlson mailed stories to magazines. As an adult, before she dared to do her first book, she attended a romance writer’s conference just to be around the other writers.

“I didn’t know what I was doing,” Carlson says. “I thought I could write romance. I thought I could write fiction.” Instead, she realized that to be a writer she needed to go with her strengths, teaching and history.

After several years of teaching first grade, her creative drive led her to write her first children’s book, Kids Create, still her best seller. Encouraged by her success in the children’s genre, Carlson wanted to expand her audience. But “I was scared to write for adults,” Carlson says. “I didn’t feel I had enough education.”

Her fear pushed her into completing a master’s degree in history from Eastern Washington University in 1998. Once that was done, it just made sense to go after a Ph.D. in history.

By the time she got to WSU, Carlson was a confident grad student, says associate professor of history David Coon. She was more accomplished in her professional career than most doctoral students, having been a published author for many years. Her dissertation was about WSU’s first agriculture scientist, William Jasper Spillman, a suggestion from Coon. In 2005 her research yielded William J. Spillman and the Birth of Agricultural Economics.

“She is relentless in her pursuit of information,” Coon says. “She’s fearless in the sense that nothing dissuades her from writing a book about a subject.”

Carlson has written 20 books so far ranging in topics from the Whitman Mission to the history of the sewing machine—and has garnered reviews from the likes of Atlantic Monthly and New Yorker.

Carlson’s kitchen table is covered with magazines and yellow pads scribbled with notes, some of which may make it into Carlson’s next book, which has the working title of The Sunlight Solution: How Indoor Life is Killing Us. The idea was spawned by one of her family showing symptoms of rickets, which is caused by vitamin D deficiency.

Her creative drive and love for the environment and good food led her to start a magazine, Field and Feast, in 2005. She is the editor, photographer, and designer of the quarterly publication focusing on food and how it gets from farm to table.

Carlson fills her days cultivating her interests, whether raising chickens for organic eggs—another idea inspired by simple curiosity—researching her next book, or planning to relocate her farm to the Willamette Valley. Carlson will keep adding to that list, because once something interests her, it’s hard to keep her from pursuing it.

For information on books by Laurie Carlson, see wsm.wsu.edu/bookstore/alumni/childrensbooks and wsm.wsu.edu/bookstore/alumni/history.

—Amy Trang ’06
Mark Schlichting (‘70 Music Ed.) was named School Orchestra Teacher of the Year by the Washington String Teachers Association and National School Orchestra Association, and was inducted into the Washington Music Educators Association’s Hall of Fame. He has been teaching in Bellingham since 1970.

Bill Kleiner (‘71 Hort.) has retired for the third time after moving from Alaska. Bill says he likes being his own boss in the many hobbies he enjoys.

Shari Elington (‘72 Ed.) and husband Doug went to a reunion of Volunteers in Service in America (VISTA) in Casa Grande, Arizona, in March. Shari and Doug met in 1973 while participating in VISTA. Shari is a teacher at Issaquah’s Cougar Ridge Elementary.

Peter T. Kong (‘72 Chem. Engr.) was appointed corporate vice president and president of Arrow Asia/Pacific in April. Arrow is a provider of products, services, and solutions to users of electronic products.


Steve Whybark (‘75 Police Sci.) has retired after being Mason County sheriff for 12 years. He now lives in Kitsap County.

Dino DiCianno (‘77 Econ.) was named director of the Taxation Department in Nevada last March. He was deputy director of the department’s tax compliance division since 1996.

Robert Romero (‘79 Comm.) was appointed general director of the YMCA of Yakima in May.

Tom Pounds (‘81 Elec. Engr.) is working as an electrical engineer in Albuquerque, New Mexico. He is doing his best to keep the WSU flag flying on ESPN College Game Day shows. Look for him this coming football season.

Glen Gettier (‘83 Math.) is a human resources specialist for the United States Department of Agriculture-Forest Service. He lives in Coeur d’Alene, Idaho.

Greg Fenich (‘84 Bus. Admin.) returned to Tokyo in 2005 as the financial controller for Microsoft Japan after three years in Singapore as the Asia regional business controller for Microsoft.

Lewis Lee (‘88 Elec. Engr., Bus. Admin.) is co-founder of the Spokane-based Lee & Hayes. The law firm represents large technology companies and in the past two decades has grown to include 35 attorneys in offices in Seattle and Denver, as well as Spokane.


Brenda Morrow Baker (‘90 B.A., ‘92 M.A. Comm.) is the enrollment and public relations director for the Olympia Waldorf School.

Thomas Rockefeller (‘91 Elem., Sec. Ed.) is superintendent of schools for the Mead School District. He was previously superintendent of the Pullman School District.

Maria Kalafatich (‘92 Gen. Stud., Soc. Sci.) was hired as a rector by the Winndermere Tacoma-Professional Partners Office in March. She is a Gig Harbor native.

Kenneth Liasius (‘93 Pol. Sci.) was named special assistant to the President and deputy press secretary by President George W. Bush in March. Liasius was previously the deputy director of media affairs at the White House.

Yong Wang (‘92 M.A., ‘93 Ph.D. Chem. Engr.) was named the 2005 Pacific Northwest National Laboratory Inventor of the Year. He has developed highly active catalysts to help reduce energy consumption and address environmental concerns in the chemical industry. Wang has won many awards, including a Presidential Green Chemistry Award, and holds 57 issued patents.


Steven Davidow (‘97 Civ. Engr., ‘99 M.S. Civ. Engr.) earned his structural engineering certification from the state of Washington. Steven has been working at DCI Engineers in Spokane for six years.

Andrew Jordan (‘97 Bus.) and his wife, Michelle, announced the birth of their daughter, Delaney Jean, July 8, 2005. The family lives in California.

Ryan William Young (‘97 Bus. Admin./Mgmt.) has received his M.B.A. from Rollins College and was married March 3. He is a senior financial analyst for the Walt Disney World Resort in Orlando, Florida.

Kenneth Archer (‘99 Soc. Sci.) and Leslie La Motte (‘98 Fin.) were married February 17, 2006, in Lahaina, Maui. The couple lives in Seattle.

Michael Mortimer (‘98 Bus. Admin., Comm.) was hired by Blue541, a small ad agency in Coeur D’Alene, Idaho, as a production supervisor.


Audrey Johnson Anderson (‘01 Ed.) and Sam Laidlaw Anderson (‘00, Fine Arts) were married April 1, 2006, in Pullman.

Jeff Jaeger (‘02 Comm.) was hired as a morning and weekend evening reporter at CBS affiliate KUTV in Salt Lake City, Utah.

Sara Matuska (‘03 Comm.) is a promotions coordinator at Citadel Broadcasting. She has been doing on-air work for Oldies 101.1 FM in Cheney as weekend talent and the morning show’s “Hollywood Reporter.”

Jennifer Mayer (‘04 An. Sci.) and Robert Phipps (‘05 Landscape Arch.) are engaged to be married. Jennifer is attending the College of Veterinary Medicine at WSU, and Robert works for Hopper, Dennis and Jellison in Vancouver.

Casey Elizabeth Christman (‘05 Comm.) is a leadership consultant for the sorority Alpha Gamma Delta. Her most recent assignment was colonizing a new chapter of the sorority at Virginia Tech University in Blacksburg, Virginia.

Abbie (Kammerzell) DeMeerleer (‘05 Ag. Comm.) is married to Chuck DeMeerleer (‘01 Ag. Econ.) and is working for the WSU College of Veterinary Medicine as the assistant director of admissions.

Reginald Earl Duncan (‘05 Sport Mgmt.) is a para-educator in the Tacoma School District. He is planning to attend graduate school in fall 2006.

Angela Kolczyński (‘06 Comm.) has accepted the position of director of communications and event planning with the Renton Chamber of Commerce.

Class Notes, from page 50.
In Memoriam

1930s

Marjorie Allmendinger ('36 Hist.), 92, February 1, 2006, Puyallup.
Virginia Rogers Pearson x’38, 90, March 19, 2006, Spokane.
Alice Marie (Burke) Schuchman ('39 Fine Arts), 89, February 11, 2006, Sacramento, California.

1940s

Edna Mae Eskelson ('41 Home Ec., '72 M.A. Sp. Ther.), 86, October 8, 2006, Spokane.
William Shinichi Yorozu ('42 Hort.), 92, March 27, 2006, Seattle.
Ralph Lee Richmond ('49 Ag.), 82, April 11, 2006, Coeur d’Alene, Idaho.

1950s

Clayton Junior Wray ('50 For. & Range Mgmt.), 81, February 12, 2006, Bellingham.

1960s

Patrick Bunten ('66 M.S. Ed.), 79, January 9, 2006, Port Orchard.

Faculty and staff

Dorman D. Anderson ('63 Arch. Engr.), 66, March 4, 2006, Seattle. Anderson taught architecture at WSU for seven years and served on the WSU Foundation’s Board of Trustees.
Sam Dietz ('63 Ph.D., Plant Path.), 78, February 22, 2006, Pullman. Dietz was the head of the USDA Germplasm Departments at WSU.
Eleanor King, 77, March 18, 2006, Pullman. Eleanor worked as a clerk for WSU in the 1950s, then as an extension aide to the pesticide specialist in Cooperative Extension, and in the entomology department until she retired in 1991.
John R. Sokatch, 77, February 8, 2006, Oklahoma City. John completed his postdoctorate at WSU in 1958 working in the field of bacteriology.

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Bunker Hill finally has a book worthy of its history, BH, during its heyday, was one of the nation's most important mining and smelting operations, and wielded unprecedented influence over Idaho politics. At the time it closed in 1981 it produced 15 percent of America's silver and zinc, and 17 percent of its lead. Much has been written about BH. But this is the first book to encapsulate its entire history, from lode discovery to company closure. Aiken weaves together many stories. Hers is one of the best tellings of the oft-romanticized origins of the mine that Noah Kellogg's donkey might or might not have discovered. She deftly handles the long and often violent history of labor strife. She notes the company's impact, positive and negative, upon the community of Kellogg. She provides detailed biographical sketches of various corporate leaders who guided the company's fate. Her graphic descriptions of mining accidents can make a reader cringe.

Perhaps Aiken's greatest contribution, however, is her careful recording of the company's environmental history. As much as anything, it was Bunker Hill's—and its corporate buyout successor, Gulf Resources and Chemical Corporation's—lack of responsiveness to a growing environmental disaster that forced closure. This lack of responsiveness was a tired, repetitive tale by 1981. As early as 1899 farmers complained that mining and milling wastes damaged their crops and livestock. Well aware of studies that showed a smelter in Kellogg would produce unhealthy lead emissions, BH nonetheless commenced smelter operations in 1917. It knew workers inside the smelter would suffer even more than residents outside. Whoever worked in the smelter "may become leaded," wrote a visiting surgeon in 1918. In 1935, one BH worker, noting that all the trees around Kellogg were dead or dying, stated, "The only thing that grows here is the undertaker's business and the graveyard."

BH's response to environmental criticism throughout its history remained essentially the same: utilize corporate deep pockets to outlast claimants bringing civil suits; crank up the public relations machine; and toss out a few dollars and a few fabulums to convince people that the company cared about worker safety and possessed an environmental consciousness.

Only with the growth of state and federal environmental regulations in the 1970s, and the full strength of government enforcement capabilities, did the company finally run out of options. Its years of corporate profit-taking at the expense of environmental cleanup proved to be the leading reason for the company's failure. Gulf Resources, after moving its assets overseas, declared bankruptcy, leaving taxpayers to foot the bill for one of the nation's largest Superfund sites.

Today, many in Kellogg blame government regulators, not corporate managers, for the company's demise. But this book sets the true, and complicated, record straight. It is an admirable effort, painstakingly researched, and engagingly written.

For more information, see wsm.wsu.edu/bookstore/alumni/history. —Keith Petersen '73, Idaho Coordinator, Lewis and Clark Bicentennial.

The Dozier-Jarvis-Young Quartet: You Guys From Around Here?

The photo of the Moscow/Pullman highway which graces the cover of the Dozier-Jarvis-Young Quartet's debut CD release, You Guys From Around Here? brought the memories flooding back, as I settled down to listen to the opening track, "Homecoming." You see, I'm able to easily answer that particular query, since I was from "around there" for a little over eight years. In one of the group's earlier incarnations—the Dozier-Jarvis-Jensen Quartet—I performed regularly at Roger Johnson's venerable Pullman music establishment, Rich's, and at clubs and concert halls throughout the Pacific Northwest.

My objectivity as a reviewer having now been fully compromised, let us forge ahead with a well-deserved tribute to a group that has been making great music on the Palouse for over two decades.

Keyboardist Dody Dozier, with her husband, Dick, on bass and good friend, Dave Jarvis—percussion professor at WSU—on drums, form a rhythm section that has swung, rocked, samba-ed (Is that a word?) and funk'd (if that's a word, it's a dangerous one!) its way through a repertoire that is the very definition of "eclectic." Try to imagine the world's largest iPod library on a continuous "shuffle songs" cycle, and you get the picture. The trio decided to tempt fate by inviting a saxophonist into their inner circle—charter member Rich Shanklin, followed by yours truly, and ultimately WSU jazz professor Horace Alexander Young—and the group has been a quartet ever since.

You Guys From Around Here? Faithfully captures the kaleidoscopic blend of styles that the quartet has built its reputation upon in live performances throughout the Palouse region. Several of the selections—"Homecoming," "Pipes of Pandora," "On Green Dolphin Street," "The Heather on the Hill"—have been in the group's book for a number of years. I've always been particularly fond of Dody's beautiful and innovative rendition of "Heather" (from the musical, Brigadoon), which calls to mind some of the best work from the groundbreaking fusion group, Weather Report. Horace Alexander Young brings a new dimension to the quartet with his swinging, soulful vocalizing on Bobby Timmons's "Dat Dere" and the Duke Ellington classic "I'm Beginning to See the Light." The quartet's penchant for Latin music—Afro-Cuban, Bossa Nova, Salsa, etc.—can be heard on "Estamos Aí" and Dave Jarvis's original composition, "Samba for the Children."

The act of juggling so many divergent styles in one program has obviously become a very natural thing for the Dozier-Jarvis-Young Quartet. The flow from one track to the next attests to the ease with which the group is able to weave its syncretic blend of music into a cohesive whole. Every performance by the quartet is sure to contain something for everybody, and let's hope for the sake of the folks living in the Moscow/Pullman area these guys stay around there.

For more information, see http://cdbaby.com/cd/dijyquartet. —Brent Jensen

Jensen ('89 M.A. Music) is an assistant professor of music at the College of Southern Idaho in Twin Falls.
Gail Stearns's biography, *Writing Pauline: Wisdom from a Long Life*, is the story of an ordinary eastern Washington woman who came to some extraordinary conclusions in the twilight of a long and often frustrated life.

Stearns, director of the Common Ministry and an adjunct faculty member in Women’s Studies and the Honors College at Washington State University, wrote the biography based on notes, journals, and oral interviews with Spokane native Pauline Thompson, an educator, nurse, veteran, and activist who died in 2000 at age 95.

Stearns notes in Chapter One that “one cannot understand Pauline without acknowledging paradox.” Paradox is a constant theme throughout Pauline’s life and Stearns’s book about it. In religion, she was raised a strict Methodist, had a falling out with God, and later reconverted to Christianity. In relationships, she waded in and out of heterosexual and homosexual affairs, was pro-choice, and yet believed marriage was a moral imperative for women. In politics, she was a patriotic veteran, yet criticized U.S. policies, had communist leanings, and was arrested for political activism.

Raised in the Spokane area, Thompson entered pre-med at WSU in 1921 after feeling called by God to become a doctor. She was—perhaps unjustly—barred from medical school when a physician proclaimed her not strong enough for the physical rigors of medical training, a setback that left her professionally and personally unfulfilled for years. She then shifted her academic focus, earning two master’s degrees in English and a Ph.D. in education from Columbia University.

Despite a successful career teaching English, she was continually pulled toward medicine. After several failed relationships with men—including one marriage and two abortions—she decided to go to nursing school, and there initiated her first homosexual experience, falling in love with her senior nurse. The woman left her three years later, a rejection that catapulted Pauline into several pointless heterosexual relationships, notably with a married father-of-two who was the school librarian where she taught.

Feeling called to “fight for democracy,” she enlisted as an army nurse in World War II, working in U.S. migrant labor camps and eventually the Army hospitals of France, where she began a long-term relationship with a fellow female nurse. They denied their homosexual relationship in order to remain on active duty, but after the war, moved into a house together in Berkeley. Pauline eventually left her for a man—an affair that also went nowhere.

Her longest love, while unrequited, was a decades-long infatuation with her female Jungian analyst under whom she studied for years and credited with helping transform her “fool’s life” into something more meaningful. The further she delved into Jungian analysis, the more she linked Carl Jung’s philosophy with a religious quest to find Jesus. After retirement, she embraced the Quaker religion and intensified her political activism, leading to several arrests for civil disobedience at anti-nuclear protests.

Stearns describes an elderly Pauline as someone who left “one of two immediate impressions...”

“Either one felt Pauline had lost her mind, or at least simply talked too much and he or she could not get away soon enough, or one sensed she was a wise elder and was eager for further conversation with her.”

*Writing Pauline* is similar. Pauline’s ramblings about religious symbolism and Jungian psychology sometimes seem muddled and strange, while other reflections are poignantly sage. Stearns balances this paradox aptly, and helps the reader appreciate Pauline as less of a “batty old woman” and more of a “wisened elder.” She writes with authority when theorizing in the introduction and conclusion, helping simplify the crisscrossing themes of feminist theory, theology, and Jungian psychology. But academic twist aside, *Writing Pauline* is mostly about a regular woman wrestling with career, religion, sexuality, politics, and self-reflection. She wasn’t prominent or famous. But her struggles with some complicated cultural issues imparted an important lesson—that wisdom gained over the course of a long life can be life’s biggest gift.

Stearns writes, “as I learned the stories of her life, I sensed an incongruence between the foolishness of her youth and the depth of perception she achieved in her old age.” By sharing those life stories, Stearns illuminates one woman’s path from “foolishness to wisdom.”

For more information, see wsm.wsu.edu/bookstore/faculty/biography.

—Andrea Vogt

Andrea Vogt is a freelance journalist and author of Common Courage: Bill Wassmuth, Human Rights and Small Town America.
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Thanks to generous private support, 4,898 students received scholarship support at WSU in 2005-06, averaging $2,847 per student. With the estimated annual cost for a WSU education in 2006-07 totaling more than $18,228*, the generous support of thousands of alumni and friends opens doors to a WSU education for deserving students every year.

* Total includes tuition, room, board, books, fees and miscellaneous expenses.

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A 3-million dollar gift from John W. (Jack) and Janet M. Creighton will create The Corps of Discovery Endowed Chair in History at Washington State University. This represents the department’s first endowed chair and the largest single endowed chair at the University.

The Creightons chose the name “Corps of Discovery” to denote cutting-edge scholarly research, pushing forward the horizon of learning and adding to the existing body of knowledge. “At the request of Thomas Jefferson, Meriwether Lewis and William Clark did just that by opening the eyes of the young republic to the resources and wonders of the American West.

“By thoughtfully establishing this endowed chair, the Creightons are making a major and lasting impact on an important field of study at WSU,” said WSU president V. Lane Rawlins.

“The Corps of Discovery Chair should be transformational directly in the field of American West history, because WSU’s history department has had strengths in that field for several decades,” said John Kicza, chair, Department of History.

The Creightons have made significant contributions to a variety of areas at WSU over the years, including the College of Liberal Arts, Native American scholarships, the Museum of Art, and the Alumni Association. Jack serves on the WSU Foundation Board of Governors and is a past chair of the WSU Foundation, and Janet is a founding member of the College of Liberal Arts Advisor Council.

“Few people have advanced our University more than Jack and Janet,” said President Rawlins. “Through their unwavering commitment and generosity as donors and volunteers, they have distinguished themselves as leaders, creating a lasting legacy of excellence for the students and faculty at Washington State University.”

LAST LOOK

A gravel path winds through an avenue of silver maples and other trees on the Washington State University golf course. University officials say the maples have become a hazard, since they’re prone, in their mature condition, to drop their limbs without warning. The path and all the trees will be removed to make way for the expansion of the present nine-hole course to an 18-hole, 315-acre facility.
Gift creates WSU’s largest endowed chair.

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“The Corps of Discovery Chair should be transformational directly in the field of American West history, because WSU’s history department has had strengths in that field for several decades,” said John Kicza, chair, Department of History. “This Chair will elevate substantially the department’s reputation in the academic community and our ability to attract quality faculty and graduate students.”

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Bryan (’96, Ag. Bus.) and Tiffany Barbre (’96, Bus./Acc.) know it is never too early to plan for the future. When they completed their Wills, they chose to designate a portion of their estate to the WSU Foundation for business, agriculture, and athletics at WSU.

For Bryan, a credit analyst at Bank of America, and Tiffany, director of financial reporting at Costco Wholesale, supporting WSU through estate planning seemed like the right thing to do. “WSU provided the educational and social foundation that allows us to perform confidently and successfully in our careers today and we feel these opportunities should be extended to others.”

By designating a bequest to the WSU Foundation through their Wills, the Barbres are creating a legacy to enrich the WSU experience for future generations of students and faculty while retaining the ability to alter their plans to fit their needs.

For more information about creating your WSU legacy through your Will or Living Trust, contact the Gift Planning Office at 800-448-2978 or by email: gift-planning@wsu.edu.