

Washington State

m a g a z i n e



The Rawlins Presidency

A Strong Chapter in the
WSU Story Concludes

Also in this issue: Counting Cougs, Hops+Beer, A Lavender Landscape **and** Bobo Brayton's Game



no bones about it

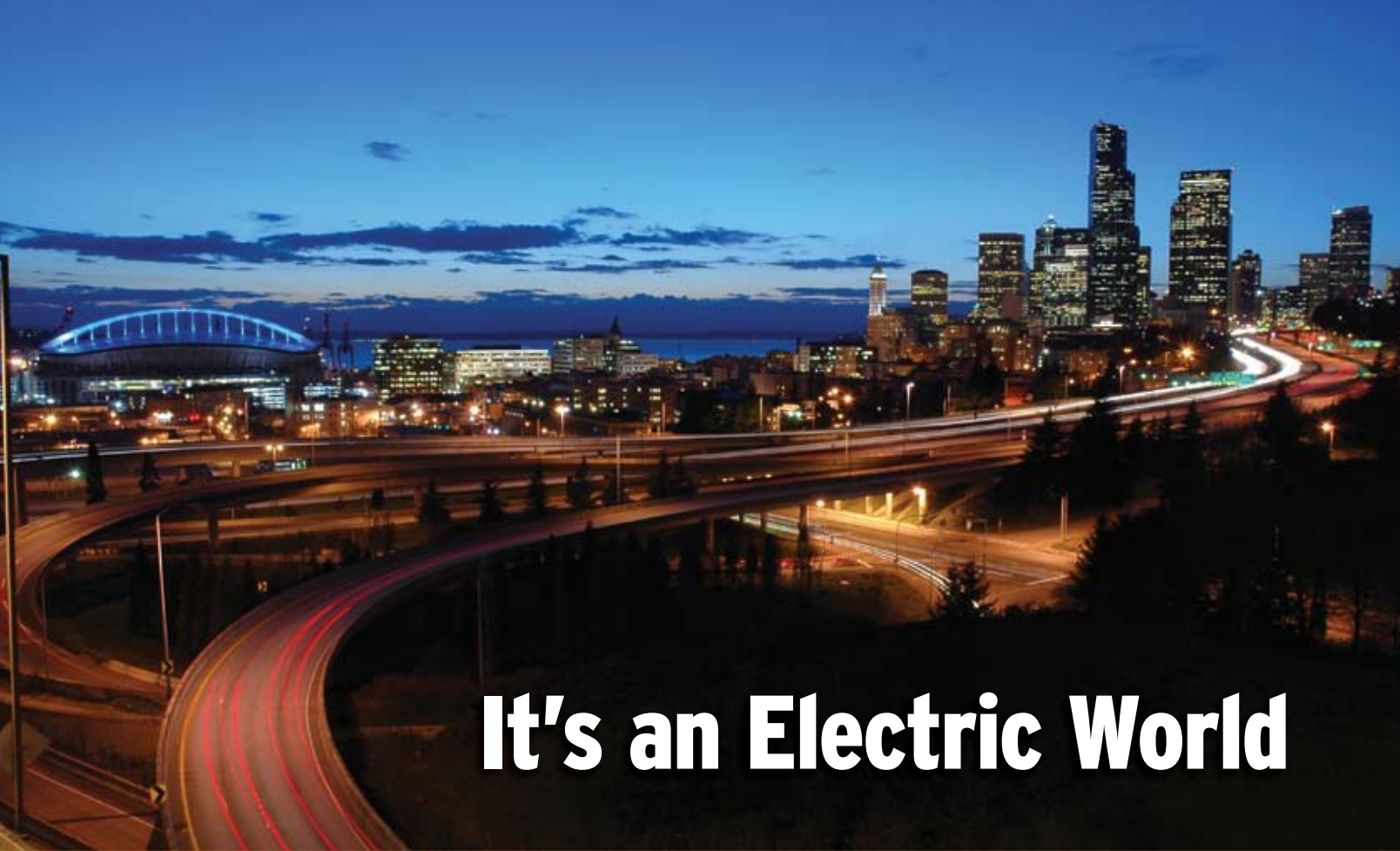
Cutting-edge research led by Susmita Bose could one day substantially improve the quality of life for millions of people. It could also dramatically cut health care costs.

Starting at the molecular level, Dr. Bose is developing biomaterials—most notably nanoscale calcium phosphate—that mimic natural bone. The early results offer promise of a bone implant that simulates the properties of natural bone.

Imagine a future in which:

- Bone implants last a lifetime, making repeat replacement surgeries unnecessary
- Health care costs related to bone replacement surgeries plummet
- New jobs and businesses are created to manufacture the new implants

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



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features

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by Hannelore Sudermann

With Lane Rawlins, Washington State University has “become what a lot of people envisioned it could be.” Even though he has plenty of ideas of what to do next, it is time to hand over the presidency.



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The Presidents

The fledgling Washington State Agricultural College hired and fired two presidents in two years. But then Enoch Bryan arrived, with his vision of a college of science and technology “shot through and through with the spirit of the liberal arts.” Since Bryan, the succeeding presidents of Washington State University have established something of a rhythmic cycle of stirring things up and reconciliation, with lots of good drama and ideas mixed in.

26 Counting Cougs

By Cherie Winner

Photography by Robert Hubner

Between 1995, the year before Washington banned the hunting of cougars with hounds, and 2000, the number of human-cougar encounters nearly quadrupled. Although encounters have returned to pre-ban levels in some areas, the public perception is that cougars are making a comeback—and must be stopped. But Hillary Cooley and Rob Wielgus insist that much of what we think we know about cougars is wrong. And their argument rests with the young males.

• BIOLOGY BY THE NUMBERS



COVER: V. Lane Rawlins steps down as WSU's ninth president, having given the University a stronger sense of itself and its role in the state. See story, p. 22.

Illustration by Steve O'Brien.



CHRIS ANDERSON

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34 Hops and Beer

By Hannelore Sudermann
Photography by Chris Anderson and Robert Hubner

Raising the raw ingredients for beer can be just as complex and interesting as growing grapes for wine, says Jason Perrault '97, '01. Like grapes, hops have different varieties and characteristics. Perrault, fourth-generation heir to a hops-farming legacy, runs a hops breeding program for Yakima Valley growers, helping to ensure that Washington continues to provide three-quarters of the hops grown in this country.

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FIRST WORDS

WELL INTO HIS *Historical Sketch of the State College of Washington*, Enoch Bryan, our first enduring president, summarized the first few years of Washington State College by quoting Virgil describing the efforts of Aeneas: "of so great a difficulty was it to found the Roman race." Bryan's reference to Virgil reflects not only his classical education from Indiana and Harvard universities, but also the magnitude of building a great university on a treeless hill just outside a barely populated farm town in eastern Washington. Bryan assumed the presidency of Washington State Agricultural College and School of Science in 1893, a year after Grover Cleveland became U.S. president and only four years after Washington attained statehood.

From the beginning, Bryan faced pressure to focus entirely on the agricultural part of his college's name. He found that approach worse than shortsighted. "The separation of 'culture' and 'utilitarian' ends in education is impossible," he declared in a speech later in his career.

Before coming to Pullman, Bryan was president of Vincennes University in Indiana. On the faculty at Vincennes was a young and visionary scientist named William Spillman, who followed Bryan to Pullman and helped build a powerful agricultural research foundation. Among other projects, Spillman recreated Mendel's genetics experiments towards the end of developing more vigorous wheat varieties for the Palouse.

Bryan nourished his young faculty scientists and scholars while blissfully rejecting any notion that science and the liberal arts could ever be split into "two cultures." He believed equally in liberal education and the scientific method, with a giddy and idealistic zeal. "The so-called 'laboratory method,'" he said, "should supersede subservience to authority."

Oddly true to his classical background, Bryan's agricultural vision also gave his life a tragic turn. While still president of Washington State College, Bryan sank an enormous amount of hope and money into the Riviera, a utopian agricultural community on a bench along the Snake River. In spite of the site's great potential, attempts to divert water from the Tucannon River and to bring in enough electricity to run irrigation pumps failed, and Bryan's dream of an agricultural paradise along the Snake succumbed to a lack of irrigation water. When Bryan retired from WSC in 1915, he was both exhausted and broke.

But not broken in spirit. It is a huge spirit, in fact, that can maintain a vision for both a utopian community and what we might consider a utopian university. In his 22 years as president of WSC, Bryan built a diverse faculty from a founding five to the approximately 140 who joined him on stage at his last commencement as president. Of 116 bachelor's degree graduates, 40 took degrees in agriculture and 45 in the liberal arts.

Toward the end of his historical sketch, which he wrote after he'd returned to WSC as a professor of economics, Bryan considered the citizens of Washington who had received their education from the college: "The liberal education which has permeated every part of their scientific and technical progress, while in college, reaches into every phase of their lives as men and women. Has the labor and the sacrifices and the money expended to produce this been worth while?"

"It has been worth while," he assured himself.

—Tim Steury, Editor

WSU professors transform the world.



Imagine the impact they'll have on your son or daughter.

Professor Grant Norton and his colleagues in the School of Mechanical and Materials Engineering are using advanced nanotechnology to develop a fuel tank for storing hydrogen gas—leading the way in addressing pressing energy and environmental issues.

Student researchers play vital roles in Dr. Norton's work—one example of the hands-on research opportunities provided to our students. It's a critical way we prepare students for success in the 21st century.

You know the difference WSU made in your life. This summer, learn how we can prepare your child for the future.



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Membership Matters



How much of a difference can one person make?
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Membership helps expand our involvement in student recruitment and scholarships, equity and diversity initiatives, and University advocacy, to name just a few. Membership allows us to develop new programming, networking events, and online services that help meet the growing needs of our alumni. We are making a positive and lasting impact on WSU, thanks to the involvement and support of our members.

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WASHINGTON STATE UNIVERSITY
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Evolution and skepticism

WHEN I WAS A STUDENT the lecture rooms in Todd Hall used to have chalkboards that stretched the whole width of the front of the room. Clubs and organizations would use the two far ends of the board to post announcements of their meetings and activities. One spring in 1973 my roommate and I spent a whole afternoon going from room to room erasing the boards and posting our own announcement. It went something like this: IS EVOLUTION TRUE? /SCIENCE AND THE BIBLE /Room 234 7:30 pm May 23.

I just read your current (evolution) issue from cover to cover—enthusiastically. I obviously did not appreciate the beauty of evolution back then. But I do now, and like Will Hamlin, have become a student of skepticism. He concludes his article with: “Faith in doubt can give us the backbone to change our minds.” (My biggest influence was Carl Sagan’s book, *A Candle in the Dark*.)

Philip Krogh '74

WE ARE APPALLED by many statements in the spring 2007 edition of *Washington State Magazine*. . . .

Think for a moment about this quote: “In a way, every biologist is an evolutionary biologist.” Consider also what was offered as proof: “‘In drug design, or in taking natural products from animals, there’s an underlying recognition by the scientist that the way that’s operating [in those animals] is the way probably it’s going to work on humans,’ says Anelli. And that similarity is due to shared genetic history.”

Are these factual statements? They seem to imply that biologists did not exist prior to Darwin. They also suggest that preschoolers who recognize similar features in humans and animals grasp the notion of shared genetic history. In past ages, when royal food was tested for poison by feeding it to dogs, was it because the people were evolutionists?

Contrary to what was proclaimed with glib certainty, many current biologists openly reject Darwinian evolution, and believe that our almighty Creator spoke each

kind of animal into being. God made man and the animals exactly as revealed in the first chapters of Genesis in the Bible.

Common features are to be expected in those fearfully and wonderfully designed by one marvelous Creator!

For a list of biologists with advanced degrees who reject the idea that humans evolved from other forms of life go to www.icsi.org/research/index/research_biosci/

Marcus Pederson '80, '82

Joanne Pederson '81

Lark Christianson '75

Daniel Walker '83

Catherine Walker '84

AS AN ALUM OF WSU, let me thank you for the Spring 2007 issue of *Washington State* and congratulate you and your staff for a wonderfully integrated and informative handling of “The Beauty of Evolution”!

As a former member of the English faculty at WSU, let me compliment Will Hamlin on his nicely crafted essay on “Why Doubt? Skepticism as a Basis for Change and Understanding”!

And, as an ordained minister in the Presbyterian Church (USA), let me affirm the compatibility of some forms of evolution with my understanding of the Christian faith.

Will Hamlin contends that welcoming doubt as a companion in our search of truth “creat[ed] the intellectual opening for Charles Darwin’s realization about our origin.” I would contend that doubt also allows us to honestly face the unknown aspects of our search and to recognize the presence of mystery in life. In Shakespeare’s *King Lear*, referred to by Hamlin, suffering draws both Edgar and his father, Gloucester, to find hope in the presence of so much that appears wrong in their world. The blind and discouraged Duke asks his guide (Edgar) to lead him to the cliff-side where he hopes to end his life.

Edgar does not, and his unsuspecting father pitches himself onto flat ground; when he awakes to find himself still alive, he cries out, “Away, and let me die.” Edgar’s skepticism, however, leads him to suspect that the world is not as bad as his father

believes; he challenges his father with this advice: “Thy life’s a miracle. Speak yet again.”

Wendell Berry comments on this Shakespearean quote in this way: “We can give up on life also by presuming to ‘understand’ it—that is by treating it as predictable or mechanical. The most radical influence of reductive science has been the virtually universal adoption of the idea that the world, its creatures, and all the parts of its creatures are machines—that is, that there is no difference between creature and artifice, birth and manufacture, thought and computation” (*Life Is a Miracle*, 6).

I think Will Hamlin rightly contends “that what passes as unremarkable for some may seem miraculous to others—especially those who suffer.” All of us eventually will find it is our time to suffer, and it is then we can be hopeful that something remarkable remains for us to enjoy.

Thank you, again, for a provocative issue. Well done!

Doug Rich ('74 Ph.D.)

THE ARTICLE AND ART of Ray Troll are great! I am working at OMSI (Oregon Museum of Science and Industry), where Ray Troll’s art enhances the Amazon exhibit. You can find out more at omsi.edu. I’m glad he’s a Cougar!

The science and learning at OMSI are very valuable, art like this enhances the experience!

Arlene Palshikar '65

AS A GRADUATE in biology as well as veterinary medicine from WSU I felt the last magazine was preoccupied with the topic of evolution. My son is an undergraduate taking anthropology there currently as well. It is clear that much that is emphasized is provided by people with clearly atheistic viewpoints. They made comments in the newsletter that are offensive to Christian people like ourselves and really made me wonder what is being emphasized in the sciences now compared to when I was in school. The separation of church and education becomes much broader with such emphasis. As a member of the President’s Associates group I was not particularly impressed with some of the authors’

writings. I assume this has not become the general stance of the college at this time.

Jerry Winters '85 D.V.M.

I WAS VERY DISAPPOINTED to see most of the spring 2007 WSM devoted to promoting evolution. We usually enjoy the articles about interesting research, places, or people. But the series of articles was blatantly proselytizing and the pervasive Darwin-worship was offensive.

I did enjoy the article on skepticism, but not as the author intended. Evolution desperately needs a healthy skepticism to puncture the myths and show its dogma false. But evolution has become the state religion that punishes those who would try to criticize it. How would a modern Copernicus or Galileo be received, if they tried to publish data showing evolution in error?

In the next issue I hope you will balance the evolution series with another on creation and creation science, or at least give some noble skeptic a chance to show evolution's errors.

Chuck Stewart ('68 ME)

Our new prez

CONGRATULATIONS TO Dr. Elson Floyd on being named the 10th president of WSU. I was a student at Eastern Washington University when he held several administrative positions there. He was a great contribution to EWU, and the WSU regents have made an excellent choice in selecting Dr. Floyd.

P. Opong-Brown ('96 M.A. Communication)

Jazzman

IT WAS SO GREAT to read about Horace Alexander Young in the online version of *Washington State Magazine*. It was wonderful too see a member of our fine music faculty featured in such a way. I think sometimes we don't know how much real talent we have in our small community. Mr. Young is a true example of that. Our music faculty bring with them a plethora of experience and history that

can and do benefit the school, the students, and our community. As a graduate of WSU and proud Cougar, I count my time with Mr. Young as some of my most beneficial.

Kudos to you, and congrats to Mr. Young.

Julie Silvera-Jensen ('00 B.M., '02 M.A.)

Yes, it is a chestnut

I WAS ENJOYING the Spring 2007 issue when I came across the "Vaulting Ambition" article. Nice and positive, but as a horse person I would have hoped for a little more. WSU was started as an agricultural and technical college, and we have one of the leading veterinary colleges in the world. And though our animal science department has had to cut back on their equine program, I would hope that articles coming out of our University would be accurate. Specifically, the article refers to the "bay" horse Darby. Darby is a chestnut! May not seem like much to non-horse people, but it is a major error in the equine world.

Hope I have not offended Ms. Sudermann.

Tague A. Johnson '86

According to his owner, he is, indeed, a chestnut quarter horse. —Ed.

More than fuel

YOUR "PANORAMAS" ARTICLE about Robbie Cowgill concerns me. My husband and I raised three athletic children who were involved in basketball from a young age and into college. We are familiar with the high caloric needs of active, growing children. Robbie has a lack of fruits and vegetables in his diet! It's a stretch to consider the potatoes and corn as adequate vegetable consumption.

I encourage him to add a salad daily to his current diet AND one apple, one orange, and one banana. These are easy changes and could keep him from getting mono or pneumonia, which are very common problems for young adults. His health is not

only important for him, but for the team that depends on him to play at every game.

*Betsie Snoey ('67 Home Economics)
Mukilteo*

A couple of other readers encouraged Robbie Cowgill eat to more apples. —Ed.

Student recruitment

AS A PARENT of a WSU junior, I read with interest your article on recruiting [Winter '06-'07]. My children have heard me say many times, "It's all about the presentation..." I would make that comment about everything from gift wrapping to going on a job interview and eventually, college acceptance letters. Our son Jordan (our first born) started a pretty thorough investigation of colleges when he was a high school junior. Our family took a four-state road trip that summer to visit private and public universities in the Northwest. Jordan's high school GPA and standardized test scores apparently caught the attention of the various colleges, because the recruiting letters started arriving in the mail. He applied to four colleges in Montana, Idaho, Oregon, and Washington (WSU). He was accepted to all, but by far the WSU acceptance letter and accompanying package of WSU info was the most impressive. Even more impressive (especially for proud parents) was the unsolicited packet of information that arrived only a few days later with an academic scholarship offer. The other colleges invited him to apply for their scholarships, but WSU's acceptance package and almost immediate scholarship offer was the deciding factor for our son's college choice. The information was professional, welcoming, and thorough—it did not give us the impression of "impersonal" or "form letter." Jordan is now a journalism major and is minoring in film studies; WSU has been a good fit for him. The Cougar Academic Award designated for out-of-state students has been a big financial help. Your admissions office is doing a very fine job. Again, "It's all about the presentation..."

*Cynthia Bowers
Billings, Montana*



V. Lane Rawlins

World Class. Face to Face. It's not a slogan, it's a plan.

Only a little more than a year after I arrived at Washington State University, America and the world were shocked by the events now simply known as "9/11." It is difficult to assess how much our lives were altered by that event and the chain of actions that followed. Afghanistan and then Iraq became the centers for the "war on terrorism," and intrusions on our freedom and privacy that would have been unthinkable only a few years ago became somewhat commonplace. The war in Iraq is now four years old and is nothing remotely related to what we expected. Furthermore, we really do not know where we go from here. I believe that 9/11 is probably the defining event for the generation of students now in college.

Perhaps related to this issue, it also seems to me that our public discussion of different religions, philosophies, races, and backgrounds has reached a new level of intensity. In this discussion, being politically correct too often means that opinions and reasonable debate are stifled by labels. At both the national and local level, this tension is evident in discussions of issues as diverse as immigration, foreign policy, and trade relations.

These are by no means the only big and thorny issues facing this generation. A host of relatively new concerns often put science, scientists, and universities squarely at the center of the debates. Global warming, genetically modified organisms, worldwide epidemics, stem cell research, and cloning are among the issues that have made it from the scientific journals to the news and talk media.

So, what does all this have to do with Washington State University? I believe the "World Class. Face to Face" tradition of our university provides a vision for tomorrow's learning environment that is ideal for reasoning together on these important matters. Only with a lot of face-to-face interaction among caring and educated people can we learn how to think about things more clearly and objectively and reach balance in our views. The University is a place that thrusts together people with vastly different backgrounds and education. Students gain wholly different perspectives when they work with people from other cultures and nations. There is an equally profound experience

when our world-class scientists work directly with undergraduate and graduate students, sharing perspectives born of decades of experience and investigation. Exposure to fields beyond immediate career interests serve to expand and broaden our vision, and this breadth is required in every student curriculum plan.

If we are to have a better world, we have to take this work seriously. Frankly, it is appalling how little our students know about the rest of the world and how they avoid foreign languages and history. It is equally concerning that most of them consider mathematics and science too hard or too boring. As a nation, we are waking up to some of these deficiencies and attempting to modify our educational system. But we all admit that we do not have a clear vision or plan for what we need to do.

I do not pretend to know all the answers, but my experience tells me that the most effective way to learn is by doing things together. In that face-to-face experience we are more likely to understand both the problem and each other. In the research university the opportunity is greatest, I believe, because researchers and teachers are the same people and are required to be leaders in their fields and academic disciplines. Thus, faculty and students intermingle in a learning environment that is aimed at addressing the big issues and problems of the world. Focusing on what we are trying to learn, rather than on defending our existing positions, brings us together and advances both our abilities and our knowledge. I found as a faculty member years ago that the roles of teacher and student were often reversed when students were direct participants in the research process. I believe that the future is bright for WSU and others universities that are up to this challenge.

Let me take this opportunity to congratulate my successor, Dr. Elson S. Floyd, as the 10th president of Washington State University. I believe we have selected a man who can help us refine our dream and attain higher levels than ever before. If we give him our full support, his chances are greatly improved. As my seven years as president come to a close, I want to thank the entire University family for their support and for making Washington State University a better, stronger, university.

QUESTIONING

A few years ago, when an academic publisher approached Dirk Schulze-Makuch about writing a book on the search for extraterrestrial life, the astrobiologist couldn't resist.

"You're not often getting asked to write a book about life in the universe," he recalls. "It was just too tempting."

Life in the Universe: Expectations and Constraints was published shortly before Schulze-Makuch joined Washington State University's Department of Geology in 2005. Co-authored by Louis Irwin of the University of Texas-El Paso, the book takes a close look at what's really necessary for life—not life as we know it here, but life as it might be on other worlds.

"We're looking at what is physically and chemically possible. It's just fun to think about, what is really needed?" says Schulze-Makuch. He has made a career of studying organisms

that live in out-of-the-way places, first, tracing the movement of microbes through groundwater and soils on Earth, and now, speculating about how organisms might make their living on other planets.

According to Schulze-Makuch, so far all of our efforts to find life on other planets have suffered from a powerful bias: we keep looking for forms of life like those we know on Earth.

"What always kind of bothers me is that a lot of people are what I would call 'Earth-centric,'" he says. "I don't think there is anything magic in how we are put together. Life is always adapted to its environment, wherever it is."

He says our view of what's possible has expanded greatly since the mid-1970s, when researchers first found microbes living in hot springs in Yellowstone National Park. Since then, we've discovered organisms

suited to life in vinegar, salt mines, and toxic waste. Researchers have even found microbes living within basalt rock along the Columbia River—two miles down, with no sunlight and no apparent means of support. Experiments have shown that the subterranean microbes metabolize—or "eat"—minerals in the rock.

If such life forms can survive on Earth, asks Schulze-Makuch, why do we continue to look for the most ordinary kinds of terrestrial life on other planets? Why not look for organisms that could use minerals or magnetism as a source of energy? Or those that use something other than water as an intracellular fluid?

The latter possibility arose last December, when he and Joop Houtkooper of Justus-Liebig University in Germany suggested we already have evidence pointing to the existence of such organisms on Mars. They analyzed

results from experiments done by the *Viking* lander in the mid-1970s. Those results are often cited as proof that Mars is lifeless, but some of them have been so hard to explain, they were officially chalked up to instrument problems or unusual chemical reactions in the Martian soil.

Schulze-Makuch and Houtkooper hypothesize that Mars is home to microbes that use a mixture of water and hydrogen peroxide as their intracellular fluid. Such a mixture would provide three clear benefits in the cold, dry Martian environment. It can stay liquid down to -56.5°C ; when it does freeze, it doesn't form cell-destroying ice crystals; and it's hygroscopic, which means it attracts water vapor from the atmosphere—a valuable trait on a planet where liquid water is rare or nonexistent.

Schulze-Makuch says that despite hydrogen peroxide's



SHE'S HOME by Tim Steury

The photograph of Annie Williams (*below*), in a dress woven from mountain goat wool, was taken for the 1893 World Exposition in Chicago.

When her husband-to-be Michael Pavel took her home to the Skokomish reservation in the summer of 1996, it was revealed that Susan Pavel couldn't cook. "The attitude," she says, "was, well, let's teach you some useful trade. Like weaving."

And with that, Susan Pavel ('99 Ph.D.) joined the revival of Coast Salish weaving.

Susan and Michael, a Washing-

ton State University faculty member in education, were living with his uncle, Bruce Miller, a master weaver.

"He started me at the beginning, carding the wool, spinning the wool, dying the wool, working up the loom. Actual weaving was maybe a third of the process."

Susan spent the whole summer, working six to eight hours a day, weaving her first piece, which she gave back to Uncle, her teacher.

"The tradition is, when you learn a new craft or new skill

and produce something, you give it away."

Weaving is an esteemed occupation within the Coast Salish tribes. However, in what was both a result and cause of cultural upheaval, the Salish joined the industrial revolution around the turn of the 20th century, turning to industrially woven blankets and cloth. For a period of more than 40 years thereafter, says Pavel, only three people in Washington were actively weaving within the style she now practices. Now an accomplished weaver,

Pavel estimates she has taught her craft to more than 500 people.

Traditional weavers used a variety of materials—cedar, various plant fibers, and hair of the wool



THE QUESTIONS

reputation as a disinfectant, when it's accompanied by stabilizing compounds, it performs useful functions in many Earth organisms. Some soil microbes tolerate high levels of hydrogen peroxide in their surroundings; one species even uses it in its metabolism.

"We may be wrong," says Schulze-Makuch. "But it would explain the *Viking* results. It's a little unusual for Earth organisms to adapt like this, given that there's plenty of water on Earth, but it's not impossible."

Besides, he says, whether Earth creatures use it or not is irrelevant to the situation on Mars.

"It's a different planet," he says with a laugh.

Schulze-Makuch says the *Viking* tests were the same ones microbiologists use to detect microbes in soil here on Earth. Quarter-teaspoon-sized samples of dirt scooped from the Martian surface were mixed with

water and other substances, then baked and examined for organic molecules that would show the samples had contained living organisms. The tests were the quickest, simplest way to detect microscopic life forms that use Earth-style metabolism.

Although the tests included nothing sinister, the fact that they would have killed any microbes in the samples grabbed headlines worldwide. After a solid initial report by the Associated Press, the straightforward science story morphed into lurid accounts of how the *Viking* mission had killed Mars's native fauna. The low point might have come when an Italian astronomy teacher emailed Schulze-Makuch, saying that newspapers in his country were running stories about NASA "murdering" Martians.

"You could get the impression [from press reports] that

NASA just went there killing organisms, and that's not what happened," says Schulze-Makuch. "At some point it got very bizarre. Some of the people who interviewed me said, 'we didn't kill ALL the life on Mars, did we?' No, of course not!

"Nobody makes a big deal of it when every day in a microbiology lab, there are zillions of microbes getting killed," he says. "Of course it would be nice if we don't have to do that, but ethically it's probably not a big problem."

Despite the goofy press reports and occasional sniping from colleagues with more pedestrian views, Schulze-Makuch and Houtkooper sparked the curiosity of NASA researchers. A lead scientist for the *Phoenix* mission, which launches August 2007

and will land on Mars May 2008, has enlisted their help in designing experiments to test for hydrogen-peroxide-containing microbes. This close to launch, the equipment for the mission has already been chosen, so the new experiments must be done with the materials already on board; but it's a great first step, says Schulze-Makuch.

Meanwhile, he will keep pressing the issue, as we send probes to worlds where life might thrive in the atmosphere (as on Venus), in lakes of liquid methane (as on Titan, a moon of Saturn), or other unearthly environments.

And for those who view his notions as wacky science fiction, he has a concise response.

"I think most of that is narrow-minded," he says. "I think it's a lack of imagination."



TO READ MORE about Schulze-Makuch's work, go to <http://researchnews.wsu.edu/physical/80.html> and <http://wsunews.wsu.edu/detail.asp?StoryID=6225>

Susan Pavel '99 recreated the dress with wool gathered by her husband, Michael. Modeling the result, now owned by the Heard Museum in Phoenix, is her niece Shelby (below).

dog, which has now disappeared. But the most prized fiber was the wool of the mountain goat, which, due to the goat's habitat, is enormously time-consuming to gather.



At some point, says Pavel, Michael had gathered enough mountain goat wool to begin work on a dress modeled after one worn by Annie Williams, photographed for the 1893 World Exposition in Chicago.

"When I wove it, I just wove it," says Pavel. "I didn't measure it to anybody's body."

But when she discovered that it fit her niece, Shelby Pavel, and further, that Annie Williams was Shelby's distant aunt, Pavel named the dress "She's Home."

FOR MORE INFORMATION AND PHOTOS

of Pavel's work, go to: www.coastsalishweaving.com.

Exhibitions of work by Pavel and others:

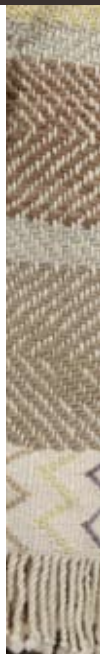
Burke Museum, March 3-Sept. 3, 2007
www.washington.edu/burkemuseum/inthespirit/.

Seattle Art Museum (due to reopen May 5). For its permanent collection, SAM purchased a blanket by Pavel, titled, "dukWXaXa't3w3l" ("Sacred Change for Each Other").

Also: Squaxin Island Museum and Research Center (20 miles north of Olympia, off 101).

Skokomish Nation Tribal Center and Health Clinic, Skokomish Nation.

Suquamish Resort, Poulsbo.



HAPPY—AND HEALTHY—EVER AFTER

by Robert Streng and Cherie Winner



WSU psychologist John Ruiz explores how your spouse's personality can help you heal... or speed your demise.

"In sickness or in health..."

That noble sentiment of the traditional marriage vow says your spouse promises to stick with you if you get sick. What it doesn't say, and what a study by Washington State University psychologist John Ruiz and researchers at the University of Pittsburgh and Carnegie Mellon University now shows, is that your spouse's personality can help you heal—or speed your demise.

And, in the happiest of endings, being satisfied with your partner, no matter what his or her personality, is like an inoculation against all the bad things wrought by depression and anxiety.

Drawing on a subject group of 111 couples in which the husband had coronary artery bypass surgery, Ruiz and his colleagues assessed aspects of personality, symptoms of depression, and overall marital satisfaction for each patient and spouse prior to the surgery and again 18 months afterward.

They found that in general, the personality of the wife predicted the depression level of the patient during recovery. A patient married to a neurotic and anxious spouse was more likely to report symptoms of depression 18 months following the surgery. The study focused on anxiety as a general personality trait, not as a natural response to one's spouse experiencing a health crisis.

"In other words, the spouse's

personality—quite independent of the patient's own personality—exerted a major influence on how well the patient was feeling and progressing towards recovery," says Ruiz.

The link between patient depression and health problems isn't new; over the past several years, doctors have recognized that cardiac patients who are depressed run a significantly higher risk of heart attacks and death than those with an optimistic outlook. What's new is the demonstration of how profoundly cardiac patients can be affected by the people closest to them.

"We've known for some time that a patient's personality and mood before surgery influence their own mental and physical recovery following surgery," says Ruiz. "We also know that a partner's personality and mood can affect us in the short term. What we were hoping to answer was whether a partner's personality traits are also determinants of our own long-term emotional and physical recovery from a major health challenge."

Now, thanks to Ruiz, we know that the personality of the patient's spouse might be a big factor in aiding his recovery—or pushing him into depression.

"Our study suggests that there's a distinct possibility that a spouse's personality can increase depression, which may then lead to these negative physical outcomes," he says.

Ruiz found that the cheerfulness factor works for both partners. Caring for a spouse after surgery can be demanding and stressful, even when the recovering patient is upbeat, he says; in his study, the wives caring for neurotic, anxious partners were more likely to show signs of strain and depression a year and a half after the surgery.

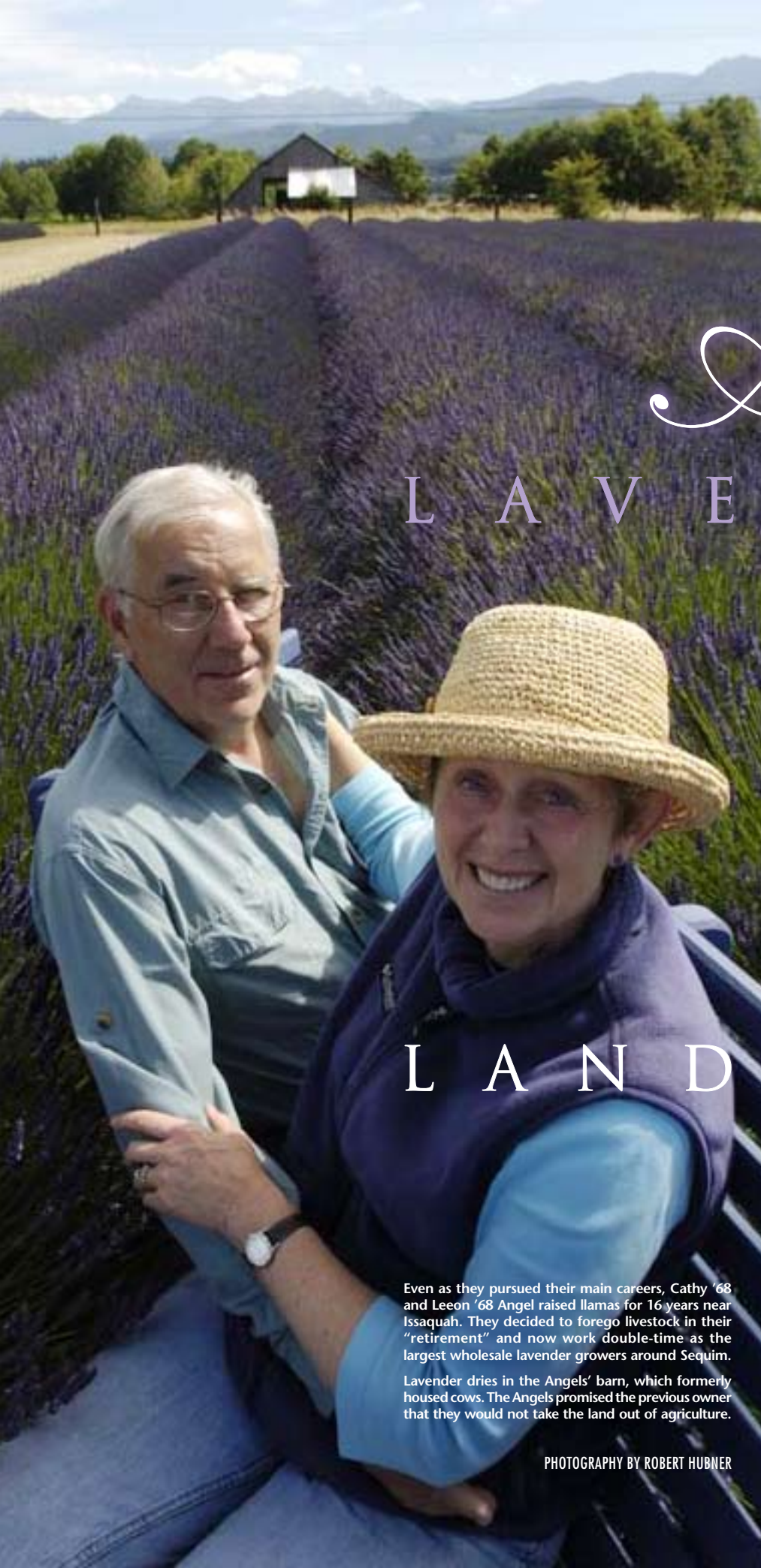
He says he doesn't know yet what it is that more neurotic spouses do that causes depression in their partners.

"Are they creating more stress, or being less helpful, or burdening a person who is already having a difficult time with their own needs?" he says.

A more optimistic result of the study showed that marital satisfaction trumped the other findings.

"Being married to a neurotic, anxious person was only harmful for those who were unhappy in their marriage," he says. "Heart patients who were happy in their marriage were able to overlook their spouse's [neurotic] characteristics."

Ruiz plans to examine the issue further as he follows the couples from the study and embarks on new projects exploring how our personality traits affect our family and friends. In the meantime, he says, if you're facing cardiac problems and you're happy in your marriage, don't worry. Love conquers all.



A LAVENDER

The landscape west of Sequim has, no doubt, always been beautiful. There's an obvious advantage to having the foothills of the Olympics on the near horizon. But add fields of lavender, and you have jaw-drop stunning.

Beauty is obviously a constant here. But where Cathy '68 and Leon '68 Angel planted their lavender seven years ago, dairy cows once grazed. And not too long before that, you might have seen a band of Clallam people heading across the meadow toward the Dungeness River to fish. Or north toward Sequim or Dungeness bays to dig shellfish.

by Tim Steury

LANDSCAPE

Even as they pursued their main careers, Cathy '68 and Leon '68 Angel raised llamas for 16 years near Issaquah. They decided to forego livestock in their "retirement" and now work double-time as the largest wholesale lavender growers around Sequim.

Lavender dries in the Angels' barn, which formerly housed cows. The Angels promised the previous owner that they would not take the land out of agriculture.

PHOTOGRAPHY BY ROBERT HUBNER





LAVENDER

is a recent development around Sequim. By the 1990s, more traditional agriculture in Clallam County had slipped into a steady, sadly predictable, decline toward development. In response, a group of local citizens gathered to figure out a way to keep area farmland from sprouting too many weekend condos. Then someone thought of lavender, a Mediterranean plant ideally suited to Sequim's mild, dry climate.

When lavender started blooming around the valley, the Angels had already moved to Sequim from Issaquah and were raising llamas on another property not too far from here. When their current property came up for sale, they promised the owner they would keep the land in agriculture. And so they have, adding a strong wholesale component to the area's growing lavender-based agritourism economy.

A couple of miles away, Barbara Collier Hanna '81 runs Lost Mountain Lavender. Whereas the Angels retail their products through their shop, All Things Lavender, in Pike Place Market, and open their farm to the public for only a few days in July during the annual Lavender Festival, Hanna's farm is open much of the year. She opens her field of lavender to customers who want to pick their own and tends a small

shop on the property, where she sells lavender-based products ranging from soap to honey from bees that have grazed on lavender. She makes many of the products herself, including lavender-filled pillows and sachets. Even though she does a lively business over the Internet, 80 percent of her sales take place at her farm.

If the physical move to Sequim was not far for Hanna and the Angels, the career move was dramatic. Hanna and her husband, Gary—now a freelance illustrator—were very successful in the '90s Seattle software boom. But the nosedive of the industry in 2000 prompted a change in direction.

"For 25 years, I convinced myself I liked the security of working for somebody else," says Hanna. "And there's something very nice about the consistency of paychecks and having your benefits paid."

But following the demise of her company, which had only recently thrived with the rest of the industry, "I guess I came to not trust that as much anymore."

Leon Angel had not expected to be helping his wife run such a successful agricultural business when he retired following 30 years with his accounting partnership in downtown Seattle. His retirement present to





himself, an elegant French-made airplane, sits idle on a landing strip nearby for most of the farming season. His time is consumed instead by the vintage seed cleaner that he modified to clean the lavender buds not only for their own crop but also that of Hanna and other growers.

Cathy Angel majored in sociology at Washington State University, then switched fields to become project manager for a commercial food-freezing equipment company.

Although the Angels had raised llamas for 16 years, they decided, when Leon retired, that animals tied them down too much and so looked for a different form of agriculture. "We decided maybe a crop would be fun," says Cathy.

Now, as the largest wholesale producer in the valley and with 30,000 bundles of lavender drying in the barn, the irony of that move is hardly lost on them.

SEQUIM HAS COME to refer to itself as the "Lavender Capital of North America." Even though the valley's production is miniscule in relation to the world market, their niche is unique. Provence, for example, from which the Sequim growers drew their inspiration, devotes most of its

lavender production toward the distillation of lavender oil rather than toward value-added products and lavender-focused tourism.

Hanna's love of gardening plus an apparently equal love of variety has resulted in her three-acre farm supporting 120 different varieties of lavender, from the large, deep-blue-blossomed Grosso to Melissa, an English culinary lavender with a peppery taste. Hanna is doing more of her own propagation, as it can be hard to get some varieties through other growers.

The Angels have kept their varietal retinue to 14, with their dominant variety being Grosso, which lends itself nicely to floral arrangements as well as buds for processing into other products. They have also started growing Goldenseal, a high-value, medicinal root crop that takes years to mature. They may start harvesting next year—if they have the time.

Even though lavender's history as a medicinal, culinary, and floral plant reaches back beyond Roman times, lavender as an agricultural enterprise is new to North America. There is no ready market for bulk lavender, and so the growers of Sequim have drawn lavenderphiles to their fields, through hard work, enterprising marketing, and enhancing an already beautiful landscape. ●



Top photos: When Barbara Collier Hanna '81 abandoned the software industry of Seattle to become a lavender farmer, "the first couple of months out here, it felt like I'd just jumped out of an airplane without a parachute." Seven years later, the pastoral lifestyle seems to suit her just fine.

Hanna grows 120 varieties of lavender on her three acres. She hires local youths to help with the harvest in July.

Bottom photos: Scenes from the Angels' farm.



Curtis Beus, director of Clallam County Extension, has played an active role in starting the lavender industry around Sequim. He is author of the much-consulted **Growing and Marketing Lavender**, which is available through Extension Publications at its Web site: pubs.wsu.edu.

This year's Sequim Lavender Festival is July 20-22, lavenderfestival.com. See also lostmountainlavender.com and sequimlavenderfarms.com.

Baseball's My Game

by Shannon Bartlett



Top: Chuck "Bobo" Brayton hitchhiked to Pullman from Birdsvew in 1942. Pullman's never been the same. Photo by Robert Hubner. **Above:** Bobo Brayton in 1972, the year he was an assistant coach for the American team in the Pan-Am games in Nicaragua. Photo by Robert O. Bullis, WSU Photo Services.

"Bobo's my name, baseball's my game," says Frederick Charles "Bobo" Brayton as he sits down across from me. His face crinkles into a grin. "That's what I tell everybody."

At age 81, Brayton doesn't appear intimidating—former Washington State University catcher Scott Hatteberg describes him as "a Yogi-Berra-type guy"—but Bobo's career overwhelms me. Brayton won 1,162 games in his 33 years at WSU and was honored as the co-namesake of WSU's baseball field.

Brayton played baseball with his father in Birdsvew, Washington (near Mount Vernon), from the time he was eight years old—and not your everyday father-son game of catch. Dad pitched for a local team and would practice those pitches with Bobo.

Seventy years later, Brayton recalls his father.

"He never did anything without me," he says. But Herbert died in a logging accident in July 1936. "[My dad] was bringing in the last log before lunch," Brayton says of the accident. "A snag fell and hit him."

Brayton maintained the character learned from his father throughout his life: helping his family; in college; during the World War II draft; and, of course, through 44 years of coaching.

However, WSU wouldn't have Bobo were it not for a roller rink. In '43, planning to attend Western Washington University, Brayton ran into friend Dick Morgan at Hamilton Skating Rink. Morgan was starting at WSC, playing football, and Bobo thought Dick's plan sounded better than Western.

Three days later, Brayton's stepfather "put my trunk on a train," and Bobo hitched to Pullman. He was heading toward Vantage, when the late summer sun caught up with him. "Evening found me standing on a prairie outside of Ellensburg," he says. "I just about gave up."

But he pressed on, making his way to Spokane, staying at the YMCA, and then heading to Colfax the next morning. In Colfax, Brayton walked down "the longest road I've ever seen in my life. It was so

hot." Once he reached the end, he bought a 7up—to this day he remembers that drink—and hitched to Pullman. There, he stumbled across athletic department worker Shorty Seaver and was introduced to Babe Hollingbery. "Babe commented on how great my legs looked," Bobo says.

Bobo played football, basketball, and baseball his first year. In fact, basketball was where Brayton got his nickname. When the basketball team rode trains to away games, Bobo got motion sickness. Teammate Bob Renick would walk down the train aisle teasing people, Brayton says. "Bob would yell, 'Come see Bobo, the dog-faced boy,' like in the circus. I was too sick to be mad."

Before he could finish his WSC education, Brayton was called to serve in '44. After a stint in the Air Corps (where he was boxing heavyweight champ in his extension, knocking out people "colder than a fritter"), Bobo briefly defected to UW because of the G.I. bill. Fortunately, by February '45, he was back at WSU.

Bobo married Eileen Lyman December 21, 1947. On New Year's Day 1948, they fought their way from Kirkland through a snow-storm, running out of gas at their doorstep in Pullman.

Herbert Brady Brayton was born September '49—"the apple of my eye," Bobo says—and after Bobo graduated with a degree in physical education in '50, the young family moved to Yakima, where Bobo began coaching Yakima Valley College baseball.

"The first season ['51] we didn't win the division, and I was really disappointed," Bobo says of the YVC team. But his players came back with a vengeance, winning the division the next 10 straight seasons and the State Junior College Championship nine times.

In 1959, an accident nearly ended Bobo's life. While he was pitching warm-ups, a line drive shot back, hitting him in the head. "I was on my hands and knees on the mound," Bobo says. "It should have killed me, but it didn't." Brayton began wearing a batting helmet whenever he coached.

The helmet was what pitcher Mel Stottlemire first noticed when joining the '61 YVC team. "He was very aggressive in practices," Stottlemire says, "and he knew what he wanted." After finishing 7-2 that year, Stottlemire signed with the Yankees and eventually won a World Series ring before becoming New York's pitching coach. "I taught Mel that sinkerball," Brayton says. "He made a living off that pitch."

The same year Stottlemire was perfecting his sinkerball, rumors swirled about Buck Bailey's retirement. When Buck and the Cougars played at YVC, he and Bobo took a walk on the field. "I said, 'What's with this job over at WSU?'" Bobo recalls. "Buck put a big ol' raw hand on my shoulder and said, 'Charlie, they're treating me like I'm from I-de-ho.'"

Buck did retire, and Bobo was hired in '62. Pat Crook, number one catcher for Buck, caught for Brayton that first year. "I knew it was going to be tougher than playing for Buck Bailey," Crook says. "Bobo had us work out more. We came in third in the conference, behind OSU and Oregon."

Unfortunately, Buck would not get to see his protégé coach for long. In '64, Bailey died in a car accident.

Now Bobo had a legacy to carry—and he met it head-on. The '65 team sailed through the northern division and played Cal-Berkeley for the championship. "These kids I brought in, they made up their minds that they were going to the College World Series," Brayton says.

And they did. The team beat Cal—a fitting tribute to Buck—and headed to Omaha. There, WSU became famous for playing the then-longest game in CWS history: 15 innings against Ohio State, with OSU finally winning 1-0.

Brayton continued coaching division-winning teams, capturing the title every year from '70 to '79. The team again made the World Series in '76.

Many of those '70s games included arguments with umpire C.J. Mitchell—good-natured, of course. Today Mitchell praises Brayton for his innovations in college baseball playoffs. Brayton worked on that while president of the American Baseball Coaches Association Rules Committee. "Teams couldn't beat the Trojans, for example," Mitchell says, "Bobo made brackets where you get in [the playoffs] different ways. Basketball picked it up from baseball. He won't take credit for it, but I'd give him credit." Former WSU sports media director Dick Fry agrees with Mitchell. "The present playoff system is largely a result of Bobo's preparation and influence," Fry says. "His hand in there is unmistakable."

The essence of Bobo, according to his players, colleagues, and friends, is that everything he did was for the good of baseball.

Brayton was an assistant coach in the '72 Pan-Am games in Nicaragua and took pitcher Joe McIntosh with him. (See "Baseball is a Family," wsm.wsu.edu/stories/2005/February/baseball.html) The American team became baseball ambassadors. "We played all over," McIntosh says. "In Managua, Granada, and Leon."

Back in Pullman, Brayton orchestrated the building of Bailey Field in the late '70s. After problems at the old place (located where Mooberry track is now) with players hitting line drives into the "Lake de Puddle" center field, Bobo knew it was time to rebuild.

First, he raided the torn-down parts of Sick's Seattle Stadium, including bleachers and foul poles, and sold them in a fundraiser—but kept a few bits for the WSU field. "The first fence at Bailey field was from Sick's Stadium," he says.

Now, with the money he needed, Brayton got to work. "He'd go out each day, dig around in the dirt, and one day a field appeared," Bobo's son, Fritz Brayton, says. Fellow Cougars pitched in. WSU football coach Jim Walden helped put in the first-base retaining wall; players carried bricks; several farmers built the center-field fence with 10-foot-high plywood boards. "I had a heart operation one December," says Brayton. "I come back out in January, and it's 10 degrees or less, and farmers were putting seats together with bolts. I just stood there and cried."

With the improved field, the Cougars went on winning. Brayton had his 700th, 800th, and 900th wins in '83, '85, and '88. In '88, they won 52 games.

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1988 also marked the rise of

John Olerud. Brayton

describes "Oly" as speaking softly and carrying a big stick. "I always started my lineup by putting J.O. in the number three spot," he says.

Even in "The Show," Bobo's rules stuck with Olerud—such as not playing catch in front of dugouts to keep foul lines and grass edging intact. "It wasn't that it was wrong, because guys in the big leagues did it," Olerud says. "But at Washington State, you didn't."

Following on Olerud's major league heels was Scott Hatteberg, current Cincinnati Reds player. Like Olerud, Hatteberg says Bobo stays with him. "I still hear his voice in my head when I'm on the field sometimes."

Bobo has staying power in the minds of everyone who's known him. "We learned a lot more on the field than just baseball," says Rob Nichols, an infielder from '86-'90. Bob Stephens, pitcher and assistant coach in the '60s, says Bobo always kept in touch with players. "When you graduated, you didn't leave the program," Stephens says, "You became a bigger part of it."

These days, Bobo and Eileen tend their Red Cougar Ranch. The couple has a menagerie of animals: four horses, four cats, two dogs, a mule, even a goose. They owned 11 horses in the '60s, Eileen says. "When we were younger, we did a lot of trail riding," she explains. Bobo pats Grande, an older quarter horse, and whispers, "You gonna outlive Bobo?"





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it's rhubarb pie time!

by Tim Steury

Barry Swanson, professor of food science, and I see eye to eye on at least one significant issue. We like our rhubarb pie to be made exclusively with rhubarb. NOT strawberries. Just rhubarb.

However, Swanson actually prefers his rhubarb as sauce, over ice cream. Although Swanson does no research on the tart vegetable, he is an avid enthusiast and considers it an acidic parallel to his work with cranberries. And obviously, given his rhubarb enthusiasm, Swanson is from the Midwest, where every old farmstead has a rhubarb patch. "Mom always made rhubarb pie in the spring," he says.

Rhubarb is also known by Midwesterners as a spring tonic, a purgative. In other words, a laxative, says Swanson.

In fact, the use of rhubarb as food is relatively recent. But it goes way back as a medicinal, particularly in China. Rhubarb was first mentioned, as a purgative and stomachic, in the Chinese herbal *Pen-king*, which is believed to date from 2700 B.C.

Medicinal use, however, was generally limited to the roots. Rhubarb found its way to Europe by way of Turkey and Russia. It was first planted in England in 1777 by an apothecary named Hayward. Someone obviously decided to try the stems, found they were great with substantial amounts of sugar, and rhubarb thus joined our culinary heritage.

Many of the 60 accessions of rhubarb maintained by the Western Regional Plant Introduction Station here at Washington State University are medicinal, says collection curator Barbara Hellier ('00 M.S.). The WRPIS is one of four plant-introduction stations in the USDA-ARS National Plant Germplasm System, which is responsible for collecting and maintaining seed and clonal germplasm. The station here actually maintains the backup collection, the main collection being in Palmer, Alaska.

Hellier says those 60 accessions represent a pretty good selection of the world's rhubarb cultivars, though the selection of species within the genus could benefit from further collecting.

Washington is the largest producer of rhubarb in the nation, with most of it grown around Sumner. When I spoke with him in late February, Tim Laughlin, the sales manager for the Washington Rhubarb Growers Association, said the growers were sending out 1,500 15-pound cases of hothouse rhubarb a week. Outside field season runs from March to September, resulting in about 65,000 20-pound boxes. Although some Washington rhubarb is sent frozen to Japan, most is sold domestically, fresh for household consumption and frozen for restaurants.

Although the climate of Sumner is apparently ideal for rhubarb, the variety grown there, Red Crimson, adds greatly to the crop's quality. Laughlin said a Michigan grower recently tried to buy some, but the cooperative's farmers wouldn't sell any for less than \$200 a bulb.

With a pH of around 3.1, rhubarb is not quite as tart as one might think from chewing on a raw stalk (a lemon is about 2.0). It just doesn't have any sugar to balance out the acidity. Try substituting it for other acidic ingredients. (I'm working on a rhubarb-chipotle barbecue sauce.) However, as Swanson insists, rhubarb is best at its simplest. Just chop some up and heat with a little water and sugar to taste, which will be quite a bit. Pour the sauce over your favorite ice cream.

If you Google the WSU Web site for rhubarb, you'll turn up lots of good rhubarb recipes, generally in spring editions of Extension newsletters.

By the way, don't eat the leaves. With high levels of oxalates and, probably, anthraquinone glycosides, they are toxic. Swanson says you'd have to eat a lot to do any harm. But why bother, when you've got the stalks?

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Fighting for a Free Press

by Annette Ticknor

Brian Schraum ditched school for several days in January. The 19-year-old Washington State University junior wasn't playing hooky, though. He was testifying in Olympia on behalf of a free-press bill he inspired.

Schraum, a communication major, is trying to protect high school and college newspapers from censorship. House Bill 1307, which Schraum helped Rep. Dave Upthegrove (D-Des Moines) craft, would put the full weight of editorial decisions in the hands of the student editors. Even in high schools.

Last year, as editor of the Green River Community College newspaper, Schraum realized that while he had the freedom to print what he chose, that freedom wasn't guaranteed. The Running Start student wanted to set up an agreement with the school's administration to make the paper's editorial autonomy official.

Censorship hadn't been a problem, but he wanted to be sure it wouldn't become one, especially after hearing about a federal court ruling allowing other colleges to censor.

At first, the community college administration supported his effort, but not for long. "I guess they talked to their attorney and they were like, 'Well, we don't know,'" Schraum says.

So he changed tactics and contacted Upthegrove, who had once visited one of his classes. "I shot him an e-mail one day. ... I wasn't expecting to hear much," he says. Then one afternoon the newsroom phone rang. He picked it up and was stunned to hear Upthegrove on the other end of the line.

They met last summer at an ice cream shop in Des Moines. There, surrounded by milkshakes and sundaes, they laid the groundwork for a bill that would bring national attention to both Upthegrove and Schraum.

"I've enjoyed working with Brian. He is a nice guy and easy to work with. He is level-headed, smart, and a good communicator," Upthegrove responded via e-mail from a hearing. "I feel very comfortable having him join me in meetings and having him as the public face for the bill."

"He is an articulate spokesperson on the issue," Upthegrove wrote. "He has responded to media inquiries, joined in a meeting with the Attorney General's Office, has spoken on several public panels, and has educated and rallied student press colleagues around the state."

Opponents of the bill argue that newspapers at public schools are sponsored by state money, so the administrators of those schools have the right to control the content. Schraum argues that newspapers are public forums, even at high schools.

"There's no knowledge requirement for the First Amendment," Schraum says. "I don't think it's a matter of maturity, for me anyway, it's a fundamental rights matter."

"I don't think we ought to put this qualifier—'well you have to reach this age' or 'you have to have this level of education or maturity'—to be protected by the Constitution."

Schraum's work is important, because students can't learn editorial judgment if they have principals and other authorities making their decisions, says John Irby, WSU associate professor of communication. "In the real world, the publisher—who I would equate to the administrator—in most cases does not get down to reading copy in

advance," Irby says. "The best publishers leave it up to their editors to make editorial decisions."

The only way to teach responsibility is to put it in the hands of the students, he says.

Many student journalists attended the hearing in January to support the bill—so many, in fact, that a partition in the committee room had to be removed to make space. "I think the number of students who showed up probably spoke louder than any testimony," says Schraum.

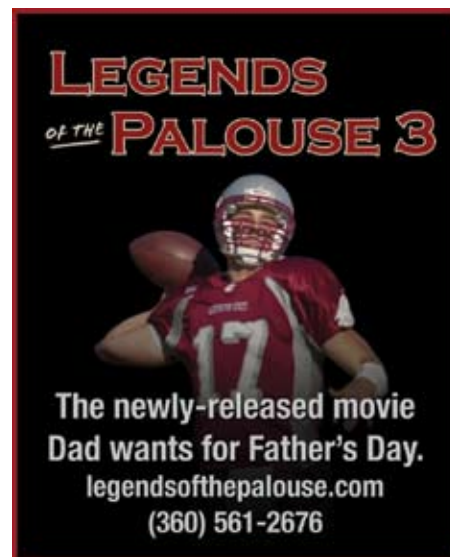
He also credits the help of Mike Hiestand of the Student Press Law Center, a national nonprofit agency that provides legal support for student journalists.

"So there's a lot of people that are supportive, but it's not a WSU effort. It's pretty much Brian's efforts," Irby says. "I wish it was a WSU effort."

While most first-year WSU students are out socializing and studying, Schraum has been meeting with legislators and giving interviews to news organizations across the country. *USA Today* wrote an editorial in support of the bill and praising his efforts. The *Seattle Times* has editorialized against it.

Schraum has made numerous trips to Olympia during the process—he says he pushed for legislation and put the time into it because he wasn't sure anyone else would.

"It's important to me," Schraum says. "This whole movement has been the single most valuable thing that I've ever been a part of."



Jane Goodall Visits Pullman

Nearly 6,000 people came to Beasley Coliseum the evening of March 8 to hear Jane Goodall speak about chimpanzees, conservation, and her own growth from shy child to scientific celebrity. In the early 1960s, she became the first person to observe chimps using sticks to dig up termites to eat. That finding demolished the notion that tool use is a distinctively human activity and led to other studies showing that chimps have high mental abilities and a rich emotional life that includes joy, anger, grief, and embarrassment. What remains uniquely human is our complex speech and the ability to share ideas, said Goodall; no one will ever see several thousand chimps sitting still and listening to another chimp talk.

— *Cherie Winner*



SHELLY HANKS



WSU had much to cheer about this basketball season. The Cougars ended 26-8, tying the record for the most wins in school history. And it gets better—all players except senior Ivory Clark return next year.

HOOP DREAMS

Cougar fans are still shaking themselves awake from the dream that was the 2006-07 basketball season.

The sweet reverie set in early this winter during a game against Gonzaga at Friel Court. For the first time in years, a scrappy bunch of mostly juniors and sophomores showed us that channeled energy, resiliency, and strategic coaching could add up to victory. The Washington State University win shattered a seven-game losing streak against the Zags and started a season loaded with ending streaks and broken records.

Sports analysts who predicted we'd finish at the back of the Pac-10 were forced to take a second look at Tony Bennett, the young head coach in his first year in charge. In 2003, his father, Dick Bennett, came out of retirement to rebuild WSU's basketball program. He brought along Tony, a former NBA player, to work as his assistant. Each year the Bennetts pushed the program forward, preparing us for a series of thrilling second halves and nail-biting overtimes. Now with Tony as coach, WSU has had its first winning season in more than a decade. With 26 wins, the team tied the school record set in 1941.

When they started, there were no stars, just a bunch of really solid players. When one was guarded, another stepped in to shoot the three-pointer or get the rebound. Derrick Low, Ivory Clark, Daven Harmeling, Taylor Rochestie, Kyle Weaver, Robbie Cowgill, Aaron Baynes, and others. They were regular guys on campus who in a few short weeks this winter became heroes of the Palouse. They believed the Bennett dream, and it took them all the way to the No. 2 spot in the Pac-10. Then it carried them to Sacramento, where they played the first two rounds of the NCAA Tournament, extending the magic into mid-March.

The Cougars became the talk of every sports show and the sleeper team on every bracket. The sportscasters couldn't help but notice how the players used what they learned in the first half of the game to win in the second.

The team didn't disappoint. They pounded Oral Roberts in the first round of the tournament. In the second round, they stuck with Vanderbilt into double overtime. It was a hard game to watch. In the end, they lost. And just like that, the best basketball season in a long, long time was over.

A few hours later, the players were home in Pullman asleep in their own beds. And the rest of us were wondering what to do with our Thursday, Friday, and Saturday nights.

A few things are certain, though: First, after what we've seen this winter, it won't be so easy for the Cougars to sneak up on their opponents anymore. Second, since most of the players are sophomores and juniors, the same team will be back on Friel Court in October. And, third, we're all counting the days until next season.

— *Hannelore Sudermann*



PHOTOS BY ROBERT HUBNER



“It felt like coming home”

by Hannelore Sudermann

HIS FIRST THOUGHT was that it was too late. It was 1999, and V. Lane Rawlins caught word that Washington State University was looking for a new president. The 62-year-old was in his ninth year as president of the University of Memphis, and he and his wife, Mary Jo, were looking forward to retirement after a long career in higher education.

But then he had a second thought: “I felt good, I felt energetic. I figured that there were some things that I could do that could make a difference in five years.” So he pursued the job, committing to

work at WSU for at least five years. He would stay on for seven.

“It felt like coming home,” says Rawlins, who in 1968 started his career teaching economics at WSU. Coming home meant that he could reconnect with his friends in Pullman, where he lived until 1986, and that he could be closer to family who lived in the Tri-Cities.

“We wanted to find someone who had some affection for the University and some connection to the Northwest,” says Peter Goldmark, former president of the Board of Regents and chair of the search commit-

DEPENDING ON HOW YOU COUNT, Elson S. Floyd becomes Washington State University’s tenth, eighth, maybe twelfth, president. Whereas the tenures of the first two, Lilley and Heston, were tumultuous, brief, and of corresponding effect, other interim presidencies, including those of Wallis Beasley and William Pearl, were more subdued, yet productive and vital to the progress of WSU.

Regardless of how you count our presidents, though, the story of WSU and its presidents is rich, wonderful, and filled with drama, pathos, and even a little scandal here and there. Obviously, much has changed over the past 115 years. When George Lilley was named the first president of Washington State Agricultural College, 59 students and five faculty arrived on campus to find one building, the “Crib,” perched on top of College Hill.

As President Floyd takes the helm, student enrollment statewide pushes 23,000, and WSU asserts its presence in Tri-Cities, Spokane, and Vancouver. The University now comprises more than 1,300 faculty and 799 buildings across the state. At graduations this May from Pullman to Vancouver, the 217,000th student will receive his or her diploma from Washington State University.

ROBERT HUBNER

George Lilley May 1891–Dec. 1892

Academic field: *Mathematics* | Degree: *Unknown* | Age when hired: 37

Starting salary: \$4,000 | Faculty: 5 | Faculty salaries: \$2,000 (males) \$1,500 (females)

Price of a loaf of bread: \$.03

Major challenges: *Imagine starting a college from nothing.*

John Heston Dec. 1892–Aug. 1893

Academic field: *Education, Master’s degree, Penn State* | Age when hired: 39

Starting salary: \$4,000 | Number of faculty: 5

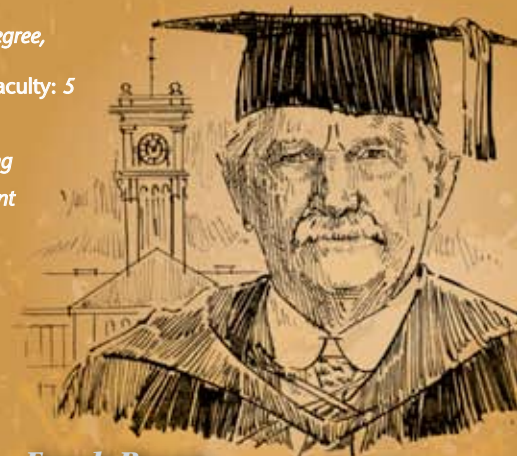
Price of a loaf of bread: \$.03

Major challenges: *Just about everything*

Life after WSU: *Later served as president of Dakota State University.*

John Heston

Endured rotten cabbages and eggs thrown by students angry at dismissal of Lilley. Resigned following lowered enrollment, change in Board of Regents, and lack of support from new board.



Enoch Bryan

George Lilley

Somewhat mysterious figure. Students liked him, but he was fired by regents over competency and integrity issues.

1892 > Agricultural College, Experiment Station and School of Science of the State of Washington opens (Grover Cleveland elected U.S. president)

1893 > Stock market crash: “Panic of 1893”

1894 > First varsity football game, WSC 10–Idaho 0

1895 > Name changed to State College of Washington; first issue of *Evergreen*

1897 > First graduating class of seven
1899 > Enrollment 481

1902 > First master’s degree

1905 > School renamed State College of Washington
1906 > Enrollment 1,371

1913 > President’s house completed, for \$25,000;

First homecoming (Woodrow Wilson inaugurated as U.S. president)

tee that found Rawlins. The group, which had surveyed faculty and staff about what qualities they wanted in the next president, was also looking for someone who had already been head or second-in-command at a major research institution.

"We really had to recruit him," says Goldmark, explaining that Rawlins never expected, or even dreamed, he would come back to WSU. "I think it really capped his career in a way that he had not foreseen."

At the time Rawlins was hired, WSU had a reputation as a party school, had branch campuses around the state but no real plan to organize them, and was struggling with issues with enrollment and research development.

Rawlins knew he could attack the party label right away. "I've worked in the South. I know what a party school is," he says. "We were not like that. It was just that we hadn't worked hard enough on the academic image."

So, with the help of a new "World Class. Face to Face." slogan, Rawlins and his administration started working on image and enrollment. "We had slipped," he says.

As the ninth president of WSU, Rawlins took the time to study the successes and failures of his predecessors. He started with Enoch Bryan, the first president to stay a substantial amount of time and the one who pushed for the school to be a comprehensive university. Then came Ernest O. Holland, who fulfilled Bryan's vision. "The programs were put in place, the faculty were hired, and the buildings were built," says Rawlins. "We became a beloved land-grant institution."

Next came Wilson Compton, who shook things up. "He wanted to compete with the Eastern universities," says Rawlins. He was good at pushing the school, but stepped on some toes in the process. In the end he was fired. C. Clement French, "a careful man, a man of high principle," was a steady leader, but not equipped to handle the social and student unrest that came in the 1960s. That's why Glenn Terrell was such a good choice, says Rawlins, "He was not here to change our direction, but to reach out to the students. He wanted this to be a haven. His nature was to be inclusive and reach out."

Sam Smith took over in 1985. He had a big vision for the school, branching it across the state with the Distance Degree Program and campuses in the Tri-Cities, Vancouver, and Spokane. "It was a strong idea," says Rawlins. "But when you take a big bite like that, not all of it is chewable."

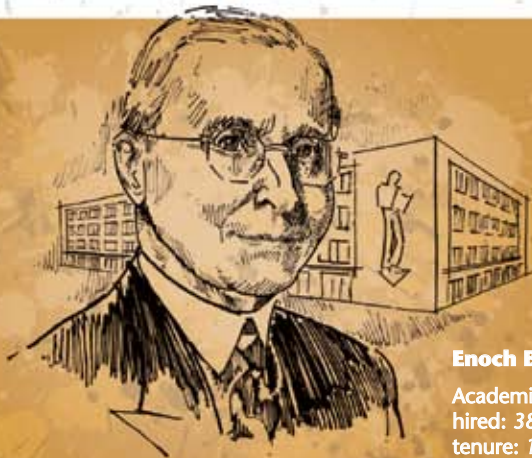
Rawlins arrived to find a school struggling to sort out what it wanted to be and where. "Our reputation as an undergraduate institution was suffering, and our research productivity was just measured by dollars and a few other things ... it had been pretty flat for a while." In the fall of 2000, several months after returning to Pullman, Rawlins invited the University community to join in identifying the school's weaknesses and strengths, with the goal of developing a strategic plan. Among the ideas that emerged were improving the quality and diversity of the student body, recruiting high-quality faculty, and creating a new campus culture.

Part of the plan's success was the process. It brought out and engaged many members of the campus community, investing them in the University as a

ILLUSTRATIONS BY STEVE O'BRIEN

THE PRESIDENTS

by Tim Steury



Ernest O. Holland

Holland led WSC through WWI, the Depression, and WWII. Reorganized WSC into five colleges and four schools. Greatly expanded library. The Cougar became mascot under Holland.

Enoch Bryan 1893–1915

Academic field: *Classics, Master's, Harvard University* | Age when hired: 38 | Starting salary: \$4,000 | Number of faculty by end of tenure: 140 | Average faculty salary: \$1,500-1,600

Price of a loaf of bread: \$.03

Life after WSU: *Became Idaho's Commissioner of Education for several years. He'd lost a large investment in a utopian agricultural venture and so was broke. After Idaho, President Holland appointed him a research professor.*

Namesake: *Bryan Hall and Tower*

Ernest O. Holland 1916–1944

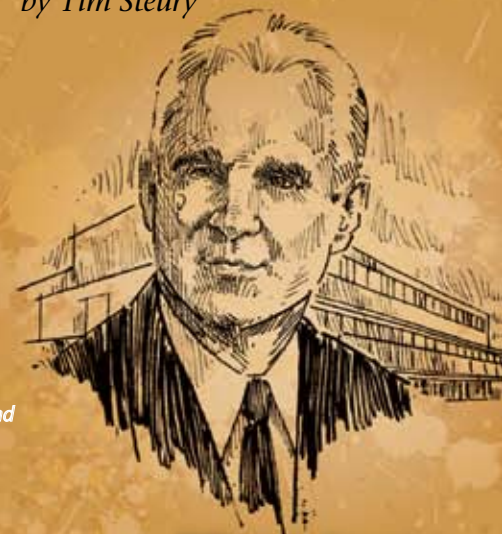
Academic field: *English, Ph.D., Columbia University Teacher's College* | Age when hired: 41 | Starting salary: \$6,000 | Faculty: 750 | Faculty salary: *Instructor in French made \$1,200*

Price of a loaf of bread: \$.07

Major challenges: *Conflict in legislature regarding duplication of courses at WSC and UW. Although he and President Suzzallo of UW were great friends before moving to Washington, they gradually became bitter rivals.*

Namesake: *Holland Library*

Life after WSU: *Stayed in Pullman, died five years after retirement.*



Wilson A. Compton

Compton was a businessman and immediately set to organizing WSC's outdated business practices, thus stepping on many toes belonging to both faculty and regents. He is the only WSU president featured in an article in *Life* magazine, which documented his successes and ouster by the regents. Interestingly, he was then passionately attacked and defended in letters to the editor. A strong defense came from Keith Jackson, president of the Class of 1954.

Bryan envisioned a college of science and technology "shot through and through with the spirit of the liberal arts." Bryan's term saw the start of varsity football, the *Evergreen*, the *Chinook*, the Alumni Association, instruction in veterinary science, the first graduate degree, and much more. Made sure from the beginning that we would not be only a cow college.

1917 > Enrollment 2,130; Act of February 2, 1917, distinguishes major curriculum

lines at WSC and UW (U.S. enters World War I)

1916 > WSC beats Brown in Rose Bowl

1919 > Cougar adopted as mascot

1925 > Enrollment 3,129

1927 > Phi Beta Kappa chapter established, first for a

separate land-grant institution; enrollment 3,275

1929 > First Ph.D. conferred, in bacteriology

1930 > Edward R. Murrow graduates

1931-33 > Great Depression

1931 > WSC loses to Alabama in Rose Bowl

1936 > More than 2,500 students march to

demand "abolition of Ultra-conservative, dictatorial Administrative policies."

"It felt like coming home"

whole. Other results included the Regents Scholars Program, which uses scholarships to bring in high-achieving Washington high school students, redirected funds to recruit high-quality researchers for programs like the sleep study effort in Spokane; and the identification of a character and mission for each of the campuses.

"Lane stabilized a lot of the squabbling and squawking that went on around some of our branch campuses," says Chuck Pezeshki, an engineering professor and chair of the Faculty Senate. "He also reminded us that we were a Research One institution (a Carnegie Foundation classification), and that we needed to align our priorities with that in mind."

Many other elements and details will characterize Rawlins's presidency. In seven years, WSU has enjoyed a busy period of growth. The Murrow School of Communication has a new building, a new state-of-the-art plant biosciences structure now sits across the street from French Administration, and the Spokane campus has a handsome \$33 million academic center.

Football is one of Rawlins's passions and, he admits with a shrug, a slight obsession. "When it gets tight, or when you get down to the end of the game, I kind of go off and sit by myself. People leave me alone," he says. "I want to focus on the game." When it gets down to eight minutes left, Rawlins removes himself from the president's box and places his six-foot-four figure down on the field. "I want the kids and coaches to know that football, or any other of our athletic events, are not separate or apart from our university ... I don't know a better way to do that than to be on the sidelines."

His interest was rewarded with three bowl games over seven years: one Sun Bowl, one Rose Bowl, and one Holiday Bowl.

As Rawlins leaves, several major projects at the heart of campus are still in the early stages. A student-funded overhaul of the Compton Union Building should wrap up in the fall of 2008, and a four-stage remodel of Martin Stadium only recently broke ground.

While many of his goals have been realized, Rawlins is the first to admit he'd

like to complete a few more projects. "Were I younger and ready to hang on for another six or seven years, I'd say, 'Let's pull together some new focus groups. Let's gut-check to see where we are. Let's ask ourselves what is the next phase,'" he says. His next big goal would be to attend more to students. "[It]'s not that we're not attentive, but we could do more."

But Rawlins feels he doesn't have six or seven more years to devote to WSU. Instead, it's a good time to "pass the ball to the next guy."

He'll be back to work with the board at the William D. Ruckelshaus Center on issues regarding policy development and multi-party dispute resolution, and to teach a class in economics.

"I think Lane will be remembered as the president who took WSU further away from that state college where you go if you can't get into the University of Washington, says Bill Marler '82, a former WSU regent and Seattle attorney. "WSU has become what a lot of people envisioned it could be."



C. Clement French

In spite of a rather dour countenance in official portraits, French was known for his humor, pragmatism, and fairness. His presidency saw the formation of the Honors Program, KWSU-TV, the nuclear reactor, and the first academic program in computer science in the Pacific Northwest. He also greatly improved relations with the University of Washington. With the UW's cooperation, the Legislature approved Washington State University as our new name. Enrollment under French doubled.

Wilson A. Compton 1945–1951

Academic field: *Economics, Ph.D., Princeton* | Age when hired: 54
Starting salary: \$12,000 | Faculty: 939

Faculty salary: *Assistant professor of pharmacy made \$3,000*

Price of a loaf of bread: \$.09

Major challenges: *Providing classrooms and housing for GIs and families; Regent McAllister, who spearheaded Compton's ouster.*

Namesake: *Compton Union Building*

Life after WSU: *Director, International Information Administration in D.C., then headed Council for Financial Aid to Education in New York City.*

C. Clement French 1952–1966

Academic field: *Chemistry, Ph.D., University of Pennsylvania*
Age when hired: 51 | Starting salary \$18,000 (retired at \$33,125)
Faculty: 1,110 | Faculty salary: *In 1960, assistant professor of art made \$6,200*

Price of a loaf of bread: \$.16

Major challenges: *Healing campus wounds after Compton firing.*

Namesake: *French Administration Building*

Life after WSU: *Served on various higher education committees and commissions, active in Episcopal Church.*

Glenn Terrell 1967–1985

Academic field: *Psychology, Ph.D., University of Iowa* | Age when hired: 47
Starting salary: \$40,000 | Faculty headcount: 756* | Average faculty salary: \$32,900 (1985)

Price of a loaf of bread: \$.22

Major challenges: *Student unrest and social upheaval.*

Namesakes: *Glenn Terrell Friendship Mall, Terrell Library*

Life after WSU: *Pacific Institute*



Glenn Terrell

The WSU Foundation, Intercollegiate Center for Nursing Education, WAMI medical program were all founded under Terrell. But his strongest gift was his focus on students. Gen deVleming, his executive assistant, says she never made an appointment for him before 9:30 in the morning or 2:30 in the afternoon, because he was always delayed in his walk from the president's house, talking with students.

**Previous numbers included all faculty of all ranks. Information available from here on includes full-time instructional faculty of the top three ranks. Throughout, numbers are only for general comparative purposes. Compilation methods and definitions change over the years.*

1943 > Enrollment 1,530; Cougar football suspended for duration of WWII

1946 > Surge in student military veterans; enrollment 5,907

1951 > Regents order Compton to dismiss 182 employees (including vice-president); Compton resigns; new student union dedicated to Compton

1942 > Government contract training soldiers in aviation,

1944 > Cougar Gold introduced

1948 > Enrollment 7,890

1940 > Enrollment 5,109 (WWII)

Japanese, signal corps, radio, and gunnery

1945 > Enrollment 2,708

1950 > Construction begun of Holland Library

1959 > WSC becomes Washington State University



Three years after Rawlins left the University of Memphis, that school dedicated a clock tower and service court in his name. "I had some good success there," he says. "But those are not the kind of things you want your legacy to be."

He has thought about how he'd like his presidency at WSU to be remembered and has come to the conclusion that he's leaving the school with a higher level of research and education. "I would like my legacy to be that we focused on quality," he says, "a legacy that says we're big, we're statewide. We're also the best." ●

Celebrating the Rawlins Legacy

The WSU Foundation has launched a gift drive to honor the legacy of President Rawlins and his wife, Mary Jo, at Washington State University. To learn more, visit the WSU Foundation website at wsufoundation.wsu.edu.

For more information on WSU's presidents:

WSU Presidents I Have Known (or Known of), Gen De Vleming, wsm.wsu.edu

www.wsu.edu/president/university-governance/past-presidents

Creating the People's University: Washington State University 1890-1990, George Frykman



Samuel H. Smith 1985–2000

Academic field: *Plant pathology, Ph.D., U.C. Berkeley* | Age when hired: 45 | Starting salary: \$92,000 (+ \$6,000 tax deferred annuity) Faculty: 858 | Average faculty salary: \$61,383 (2000)

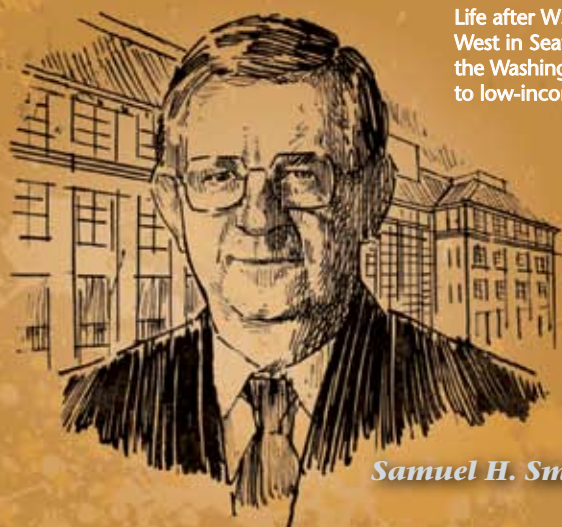
Price of loaf of bread: \$.55

Namesake: *Smith Center for Undergraduate Education*

Life after WSU: As president emeritus, established office at WSU West in Seattle. Serves on a number of boards and is director of the Washington Education Foundation, which provides scholarships to low-income, high-potential students.

Sam Smith planted WSU academically, and firmly, across the state, with regional campuses in Vancouver, Tri Cities, and Spokane.

Smith led WSU's first comprehensive fund-raising campaign, attracting over \$275 million.



Samuel H. Smith



ROBERT HUBNER

Elson S. Floyd, 50, starts work as WSU's 10th president this summer. As president of the University of Missouri, he was respected as a hard-working, charismatic, and visionary leader. He is no stranger to eastern Washington, having served as executive director of the Washington State Higher Education Coordinating Board and as vice president for student services, vice president for administration and executive vice president at Eastern Washington University.

1968 > French Administration Building dedicated

1971 > 50,000th student graduates

1980 > Mount St. Helens erupts

1990 > Bobo Brayton wins 1,000th game as baseball head coach

1960 > Honors program established

1969 > Enrollment 13,128; Vietnam protests and student unrest

1977 > Enrollment 18,160

1981 > Enrollment 19,303

2000 > Enrollment 22,015

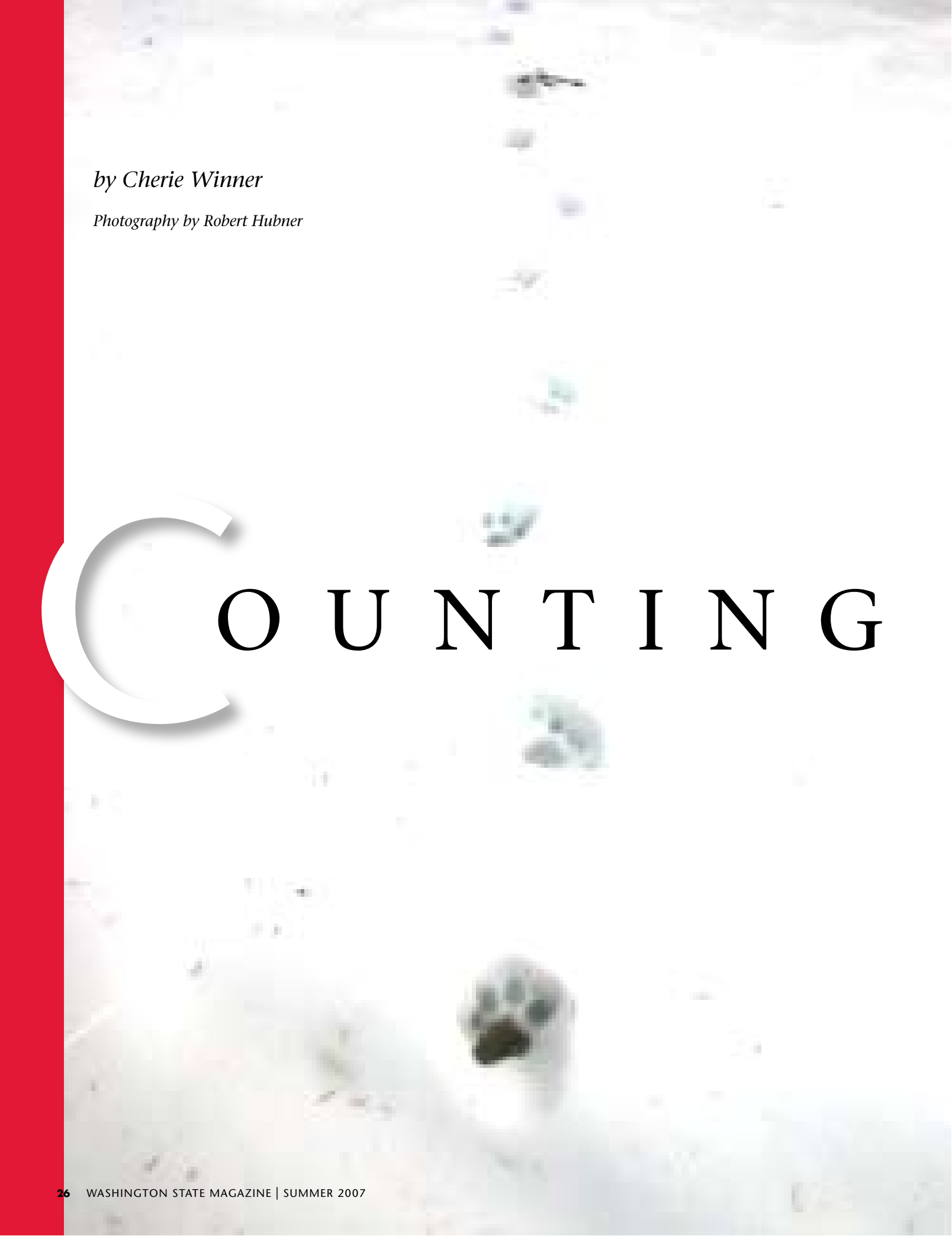
1962 > Compulsory ROTC changed to voluntary

1970 > South grandstands of Rogers Field destroyed by arson

1978 > Butch VI, last live mascot, dies at age 15

1983 > 100,000th student graduates

2006 > 211,000th student graduates



by Cherie Winner

Photography by Robert Hubner

COUNTING

"And I think in
this empty
world there was
room for
me and a
mountain lion."

—D.H. Lawrence

Wildlife biologist Hilary Cooley
sets a radio receiver to pick up signals
from a collared cougar.

COUGS



PERCHED ON A HILLSIDE a few miles from the Canadian border, raising an antenna into the air and listening for a beep from a radio-collared cougar, Hilary Cooley is doing what she dreamed of as a kid.

"I remember watching the Discovery Channel and seeing biologists on the slope with the antenna, tracking the wolves in Yellowstone just after the reintroduction, and I thought, 'that would be so cool,'" she says.

Now in her final year as a doctoral student in the Department of Natural Resource Sciences at Washington

State University, Cooley seems perfectly fitted, even fated, for the work she does. She's strong enough to wrangle a snowmobile around fallen trees and hike uphill through deep snow carrying a 30-pound pack. And she's not just a WSU Cougar; she got her undergrad degree at the University of Vermont, whose mascot is the catamount. Same creature, different name.

"Back there it didn't mean anything, because there weren't any cats around," she says. "Here it's different."

There *are* cougars in Washington—seemingly, more than ever before. In 1995, the year before a statewide ballot initiative banned the hunting of cougars with hounds, there were 255 verified human-cougar encounters in the state. By 2000 the number

had nearly quadrupled. It has since returned to pre-ban levels in some areas, but the public perception is that cougars, after their near-extirpation in the 20th century, are making a comeback—and must be stopped.

Rob Wielgus, director of the Large Carnivore Conservation Lab at WSU and Cooley's advisor, disagrees. His research team has found that in parts of the state where the number of complaints has been highest, cougar populations are either holding steady or declining. That the

big cats are becoming more visible, but not more numerous, is just one of the paradoxes stemming from the same source: much of what we thought we knew about cougars is wrong.

The main problem has been the lack of detailed information about cougars in their natural habitat. In the past, researchers might put a radio collar on just one or a few cats in an area. They had no way to draw accurate conclusions about how cougars of different sexes and ages divvy up the habitat, where and what they hunt, and how they interact with each other and with humans.

Over the past several years, Wielgus and his students have begun to fill that gap by doing intensive studies of cougars in three areas of Washington. The Selkirk Mountains, in the far northeast near Metline Falls, is home to a population that ranges into northern Idaho and neighboring British Columbia. The Wedge, in the northeastern part of the state, is a rough triangle outlined by the Kettle and Columbia Rivers and the Canadian border. The other area is near Cle Elum and Roslyn, just west of Ellensburg. The researchers use hounds to tree the cats, which are then tranquilized and fitted with transmitter collars. At the start of the study the collars only sent a VHF radio signal; now they carry both a radio and a GPS (Global Positioning System) transmitter. By collaring and following several dozen cougars, Cooley and fellow students Ben Maletzke and Hugh Robinson, and Donald Katnik ('02 Ph.D. Natural Resource Sciences) and Catherine Lambert ('03 M.S. Natural Resource Sciences) have provided a detailed look at cougar behavior—and some big surprises.

Wielgus says one clear finding from their work is that wildlife managers should not assume that an increase in complaints about

cougars means there are more cougars around. In many cases, just the opposite is true: even a declining population can lead to more sightings and more complaints, if the remaining cougars are adolescents who don't know any better than to stay away from humans.

Based on his work over the last decade, Wielgus says that with solitary predators such as cougars, age matters. One of the biggest influences on how the animals behave around humans is the age structure of their population, especially how many young males there are. And that, in turn, depends largely on how heavily they are hunted and how many big males are taken out of the population.

He explains that although cougars don't live in packs, they do have contact with others of their kind. The interactions between adolescents and adult males help teach the youngsters what is and isn't appropriate prey, and what is and isn't acceptable behavior.

Young male cougars make trouble, he says, "because they don't know what they're doing. When you have no old guys left, then no one controls the troublemakers." He says a juvenile cougar is like an 18-year-old human. Take out the dominant males who keep them in line, and "that's all you've got, is 18-year-old males running the show. Just try to imagine what the world would be like."

PHOTOGRAPHER BOB HUBNER AND I join Cooley at the Wedge for two days in January 2006. We want to see for ourselves what her research entails. With luck, we'll witness a capture and see a cougar up close.

The weather has been mild lately, and our first day with Cooley is about 30 degrees and stone clear. She says the warm weather will make tracking difficult, because bare ground and crusty snow don't hold scent as well as soft snow. The study area is mostly still covered, but the snow is less than a foot deep in some places and everywhere has the glassy look of snow that has partially melted and refrozen.

We cover many miles by truck on county and forest service roads deeply rutted with packed slush. As we drive, Cooley keeps the VHF receiver on "Scan," so it cycles through all the frequencies. When we hear a beep, she asks which frequency it is. That tells her which cougar's collar sent the signal. Cooley constantly checks in by radio with wildlife technician Gabe Wilson ('04 Wildlife Ecology) and houndsman Tom MacArthur, who are monitoring receivers in their own vehicles a few miles away. Ideally, the same cougar will be detected by more than one of the searchers, allowing them to triangulate and pinpoint the cat's location with a fair degree of accuracy.

That's not how it works today. Most of the beeps we hear are faint, except for the ones that turn out to come from Cooley's hound,



PROJECT CAT :

by Cherie Winner | Photography by Robert Hubner



ONE OF THE FIRST SIGHTS to greet visitors to Cle Elum-Roslyn's Walter Strom Middle School is a cougar skeleton. Prowling a display case in the main hallway, the bony beast is a stand-in for the school mascot, the "Wildcat." It also has another, closer tie to the students here: they are the ones who stripped and cleaned the bones and reassembled them into a fully articulated skeleton.



Facing page: Cooley checks her bearing with a compass. **Above:** Cooley and wildlife technician Gabe Wilson '04 search maps for roads that will take them close to a cougar's last known location, as reported by a GPS transmitter on the cat's collar.

Emma, whose "let's go!" whine exactly matches the receiver beep. The few times we get a decent signal, Cooley pulls over and tries to get an antenna reading from the side of the road. Every time, the signal fades or moves north into Canada, where she can't follow.

We encounter a couple of men on ATVs, who recognize Cooley and stop to chat with her. At a road crossing, an older couple in a Toyota pickup truck wave us over. They ask Cooley if she's found a cougar today, then report, "We live way back there and we haven't seen any all winter."

We rendezvous with Wilson and MacArthur, who share what they've heard from the people they've met on the road. Cooley says interpreting information from local residents is tough. Some observers are

reliable, but often there's over-reporting of cougars because of old beliefs and "groupthink."

"It's like anything in the media," she says. "When there's one report on cougars, the number of reported sightings goes way up." Most of the time, the reported "cougar" isn't a cougar. It's a bobcat, or a dog, or even—she says this has actually happened—a large housecat.

Tracks are often misinterpreted, too.

"They aren't complete nomads, they have a territory and they go around and around it," says technician Wilson. He compares the number of tracks a cougar leaves in well-traveled parts of its territory with the number of tracks we make going from our front door to the car or mailbox. If a female cougar with a couple of big

COUGARS AND TEACHING

Far left: During a capture trip, Project CAT coordinator Ben Maletzke helped student DJ Landes interpret the GPS signal that ultimately led to the capture of a cougar kitten (**below**).

Gary Koehler, a state wildlife biologist, had found the cougar, which he thinks was killed by an elk, and brought it to the school for necropsy (autopsy) by students in the Project CAT (Cougars And Teaching) program. Koehler and former school superintendent Evelyn Nelson launched Project CAT in 2000 as a way to get kids excited about real-life research. Activities range from identifying animal tracks in the lower



grades, to eighth-graders and high-school students going on capture outings with biologists. The capture trips are a great favorite, but the necropsies run a close second.

"It was amazing," says Kevin White, who was a junior in high school when the program started. "You don't really see the muscle mass until you skin it out. The whole body of those animals is just incredible."

White graduates from WSU this

year with a degree in wildlife biology, and plans to begin a master's program with Rob Wielgus in the fall. He says he was already thinking of a career in wildlife biology when the program began.

Most of the other students in Project CAT have other goals. That's fine with eighth-grade science teacher Trish Griswold, who says the point of Project CAT is not to recruit new wildlife biologists. The point is to



Eager to hit the trail, houndsman Tom MacArthur and his hounds approach fresh cougar tracks, as Cooley restrains her dog, Emma. **Facing page:** The biggest find of the trip—the mandible of a deer recently killed by a cougar.

kittens walks through a yard a few times, it can look like the cats are traveling in herds.

Cooley gets out her laptop to download the latest GPS readings from the collared cats. The collars send a signal to a satellite at programmed times; researchers can download the data at their convenience. The technology allows them to get a more detailed picture of the cats' movements than has ever been possible before.

Cooley shows us the map on her computer screen. Data points show the location of each cougar up to six times every day. Seeing all the points for a certain cat, it's easy to draw the outline of its 100- to 150-square-mile territory. A male may overlap with more than one female, but females don't overlap much with other females, and males don't overlap with other males. Where there's an area on the map with no GPS points, Cooley knows there's probably an uncollared cougar living there that she can then attempt to capture and collar.

When a cat's GPS signal remains in a small area for several days, the cat has probably made a kill and is staying near the carcass. When a female stays put for longer than that, she's probably denning up and giving birth. Cooley has a good idea when that will happen, because she knows when mating occurs: the signal from a male accompanies the signal from a female for several days. Cooley then counts forward three months to anticipate when the litter is due. She visits den sites about six weeks later to tag the kittens and fit them with expandable transmitter collars, so she can follow them as they grow up and move out on their own.

GPS technology has revolutionized her work, but even with the hot new tools, Cooley spends a lot of time driving and hiking.

"Without the field component, you miss a *lot*," she says. "I'm almost glad we didn't have GPS collars the first while, because we spent a ton of time out there tracking. You learn a lot just walking around out there."

Since a cougar capture doesn't seem to be in the cards today, Cooley sends MacArthur and Wilson west to try to locate the cougar she's named Faith, in hopes of getting a line on her for tomorrow. Then she, Hubner, and I go looking for a kill site. A week ago, Cooley got GPS readings that showed Old Girl hanging out in one spot for several days. The cat had probably made a kill and was staying with it as long as there was still something edible to stay with.

The three of us pile onto a snowmobile; Emma runs behind. After a mile or so of whomping over the forest road's snowdrifts, we reach a creek. It feels good to get off the machine and walk. Guided by her handheld GPS unit, Cooley leads us about a kilometer into the woods.

PROJECT CAT CONTINUED

As the group neared the den, the mother cougar withdrew and watched from a distance. The defiant kitten was named Shelby.

engage students who might otherwise have stayed on the fringes of classroom activities, and encourage them to consider college a viable option for themselves. Besides seeing cougars up close, they get to know working biologists.

This year, WSU graduate student Ben Maletzke took over for Koehler in leading the capture trips. When he drops by Griswold's classroom after school to find out who will be



joining him in the field the next day, junior Josilyn Twardoski and seniors Ryan Nelson and Marcie Maras share their latest cougar news. Maras describes scats she found that might have come from either a cougar or a coyote. Maletzke says they have different shapes and both contain a lot of hair. "This one was *all* hair," Maras says.

Project CAT is funded primarily by the state. The nonprofit organi-

zation The Cougar Fund has also contributed, and Griswold has won grants from local groups and companies. Plum Creek Lumber, for instance, provides travel money so students can share the results of their work with groups around the state. Last year eighth-graders Spencer Ozbolt, DJ Landes, and Kodi Jones even gave a presentation at an international carnivore conference in Florida.

A short way up a hill, there it is, right where the GPS said it would be. This is like no wild-life carcass I've seen during my years as a hiker. It's a circle of hair a few feet across. No bones, no hooves, no skin, just hair, in a dense layer a couple of inches deep. Cooley says the bones were probably carried off by coyotes or ravens.

Just downhill from us, Emma finds a prize: the mandible. The two halves are still together, pink-stained and fresh-looking. The teeth are high-crowned, meaning the deer was relatively young. Cooley will be able to determine the species and age in the lab.

We walk back to the snowmobile and sled out to the truck. Wilson and MacArthur check in by radio; they didn't find Faith.

THE SECOND DAY OF OUR QUEST is just as gorgeous as the first.

"It's beautiful to look at, but for what we wanted to do today, it's not very good," says MacArthur. The surface of the snow is even harder than yesterday. The dogs will have a tough time staying with the scent, but we're going to let them try. We snowmobile an hour in to a spot where he found cougar tracks the day before. Hubner rides with Wilson, I ride with Cooley, and MacArthur pulls a black plastic sled carrying Emma and his two hounds. Sooner's a black-and-tan, about 11 years old, and vocal. Newly's an eight-year-old tricolor whose previous owner used her to hunt cougars.

"She's a one-in-a-million dog," says MacArthur. She's a tireless tracker but dangerously quiet, rarely sounding off until she's on a hot scent or right near a cat.

"I figure it'll get her eaten some day," he says. "She'll be quiet, and jump a cat in the rocks, and that'll be it. I shouldn't think things like that. It worries me."

When we reach the tracks, Emma starts baying immediately. Sooner chimes in. MacArthur releases the dogs, who snuffle avidly around the tracks and then dash away up a small drainage. Emma barks often, Sooner occasionally, Newly not at all. Wilson says we can get excited when we hear Newly bark. But she never does. Within a few minutes, the dogs are back at the start zone. MacArthur urges them onto the trail again, and again they head into the woods. He follows them on foot. We sled out on



a parallel track. We see the dogs reach a bare patch, where they circle for a few minutes, then tentatively move on up the drainage. Within 50 yards, they've lost the trail.

Cooley appreciates the irony of using hounds to capture the cats that can no longer be legally hunted with dogs. She's a "dog person" herself, she says, and the chance to work with Emma is one of her favorite parts of the research. She disagrees with the argument made by supporters of the ban that hunting cougars with hounds is not humane.

Hounds tree the cat they're chasing, which allows the hunter to get a good look at the cat before shooting it. The alternative that's been used since the ban went into effect is to let people shoot on sight.

"They bundled it with a big-game package," says Cooley. "If you got a deer permit, for an extra five bucks they'd throw in a cougar tag. So there's tons of people out there trying to get a deer or an elk, and a lot of them have cat tags. The number of cats taken went way up. And the problem with that is, you can't be selective about it. You see a cat across a field and you shoot it, and you don't know if it's an adult or if it's a juvenile, if it's a male or a female." The female harvest went way up, she says, resulting in the death of existing kittens and a steep drop in the production of new litters.

"When it's in a tree, if you use a hound, you're right there, and if the hunter is experienced they can tell what sex it is and decide not to take it. It's more selective," she says.

She, Wilson, and MacArthur confer and decide our last best chance is to try to find Faith. MacArthur got some beeps from her collar earlier in the day. We ride a couple more bumpy miles and then hike to a hillside that gives the antennas access to a wide span of territory. Beep, beep. Pause. Weaker beep. The cat is moving. Cooley and MacArthur hike on a little further, down another gully and up the next hill, but come back empty. We won't see a cougar this trip.

"THAT'S WHAT'S SO EXCITING," says Cooley, upbeat by nature. "It's still rare to see them." The cats' reputation for secrecy is well deserved. Anyone who spends a lot of time in the wild has probably passed close to a cougar more than once and not realized it. Fortunately, Cooley

Ninth-graders DJ Landes and Kodi Jones helped researchers weigh, measure, collar, and tag Shelby, whose mother and grandmother have been collared and followed for four years.



The students also talk to local groups, such as Kiwanis chapters, about cougar biology and behavior. It's a great way for the community to learn more about the wildlife in their neighborhood, says Koehler.

"For the most part Project CAT has been very well received," he says. "Most people like [the fact] that the kids are getting involved. A lot of them value the rural experience—the kids getting out in the

woods and learning about the environment, rather than playing video games."

Koehler says recent growth makes the Cle Elum-Roslyn area a great laboratory to study how cougars respond to a changing landscape. With new housing developments going up in the middle of historic deer and elk range, more and more people are living and recreating in areas where they might encounter a cougar.

Project CAT gives students, and through them the whole community, the chance to examine questions like how leaving dead livestock on the ground, and feeding the deer and elk, can attract cougars and other predators.

"How we manage ourselves is important," says Koehler. "What we do is going to dictate whether we can live, or not live, around wildlife." ●

and the rest of Wielgus's team have had enough successful days to collar more than 50 cougars of all ages and gather nearly 50,000 GPS points from them.

They found that in the Selkirk Mountains and the Wedge, where hunting pressure is high, kitten survival is low and adults only average between three and four years old. In the Cle Elum area, with far fewer cougars killed by hunters, the average age is double that, and kitten survival is much higher.

In all three places—and despite the difference in hunting pressure—cougar numbers are mostly staying about the same. The Cle Elum population has a healthy number of adult males, and encounters with humans are rare. The Selkirk and Wedge populations have a lot of young males, who migrated in from nearby regions after older males were shot. Sightings and encounters are much more frequent than at Cle Elum.

"Everyone thinks the population's exploding [in the Selkirks and the Wedge], but they're not exploding at all," says Wielgus. "It's just that you've got more of these young, visible, problematic teenagers."

Despite his group's painstaking work and solid findings, some politi-

cians and cougar opponents continue to cite increased encounters as proof the cougar population is expanding. That frustrates Wielgus.

"The science is the science," he says. "People say, 'I *know* that there's more cougars than ever, because I just know.' What we're saying is, there *aren't* more now, you've just *seen* more, because you've killed all the big guys that kept out these young troublemakers.'

"Look, you have a belief. Fine. *Test* the belief. That's what we're doing now. We have study areas where they're heavily hunted, and we have areas where they're virtually not hunted at all. And the interesting thing is, the areas where we aren't hunting cougars heavily, it's virtually zero in human complaints."

He understands the concern over encounters with cougars, but says we need to find a different response than killing more of the big cats.

"Our management actions are achieving the exact reverse of what is desired," he says. "It's the shift in the age structure that results in the increased complaints. It's just disastrous. The heavy hunting that we're doing in Washington State is *causing* increased human-cougar conflicts. The putative solution is causing the problem." ●

If you see a cougar...

The Washington Department of Fish and Wildlife advises people who live near cougar habitat to keep pets and farm animals in enclosed structures at night and to bring children indoors at dusk. When hiking or camping, go with at least one other person, keep children close to you, and make enough noise (normal conversation is enough) that a nearby cougar would hear you coming and have time to move away. If you do encounter a cougar in the wild, don't run. That would trigger the cougar's instinct to chase. Try to look bigger than you are, and don't look away from the cat. If the cougar appears to be aggressive, throw rocks at it, shout, jump up and down—try to convince it you are more trouble than you're worth.



For more information, see the DFW's tips at <http://wdfw.wa.gov/wlm/game/cougar/dosdents.htm>.

For more images from the cougar outings described in this story, visit our photo galleries at wsm.wsu.edu.

BIOLOGY BY THE NUMBERS

ROBERT WIELGUS HAS STUDIED GRIZZLY BEARS in Idaho, cougars in British Columbia, and lynx in Washington. So when the Washington State University expert on large carnivores took a sabbatical two years ago, of course he went to...Paris.



ROBERT HUBNER

Robert Wielgus and his research team combine fieldwork and mathematics to study cougars, black bears, grizzly bears, and lynx. As with work by student Hilary Cooley (previous story), their work often overturns common assumptions about carnivore behavior and population size.

Wielgus went to France to help restore grizzly bears to the Pyrenees Mountains. It was a project made to order for Wielgus, who began his career as a field ecologist but who now uses math to gain insight into carnivore behavior.

"I do field work here all the time," Wielgus says. "Then I go there and just immerse myself in mathematics. I've worked with them [the French] for a long period of time, and together we do amazing things."

Along with colleagues at Paris's Mathematical Eco-Evolutionary Theory Group, Wielgus helped persuade the French government to transplant five grizzlies from Slovakia to an area in the western Pyrenees where the native bears have suffered high mortality in recent years.

Grizzlies, called brown bears in Europe, still roam the mountains along the border between France and Spain, but their num-

bers plummeted from about 200 a century ago to five in 1995. The addition of three Slovakian bears in 1997 stabilized the grizzly population in the central Pyrenees. A separate population in the western part of the range, however, has continued to struggle.

In 2004, French authorities wanted to know whether it would be worthwhile to bring in more foreign bears. If the habitat wouldn't support them, or if human-caused mortality was just too high in that area, there was no point putting money and effort into another transplantation.

Wielgus's analysis showed that neither habitat nor humanity was the problem. The problem was not enough bears, and especially not enough lady bears.

In a small population like the one in the western Pyrenees, says Wielgus, the strongest males hoard females. One big boar might lord it over three sows, breeding with each in successive years. His territory becomes home to cubs of various ages as well as their mothers. It's a sprawling, relatively peaceful family.

But if the patriarch dies, other males try to take over his realm. Disaster ensues. A female caring for cubs won't mate, and since the new males have no interest in becoming foster dads, getting rid of the cubs becomes job one. The formal name for this behavior is sexually selected infanticide.

"They don't even eat these cubs," says Wielgus. "Just kill 'em, shake 'em, and throw 'em away. They're not doing it for the food value."

They're doing it to get a faster start on a family of their own. When a female loses her cubs, she comes into heat again quickly. That clearly benefits the new male, but the population as a whole suffers. Not only are the cubs lost, but the females often become so stressed that their productivity drops. Sow bears in the western Pyrenees average just one cub every three years. At that rate, says Wielgus, the population is doomed.

The way to recovery for these bears is to boost their overall numbers, particularly the

number of females. In larger groups, with plenty of females to go around, the males become downright easygoing.

"Everyone just copulates with everyone," he says. There are too many male neighbors to defend against; and since none of the males knows which of them fathered which cubs, they leave all the youngsters alone.

Wielgus was one of the first biologists to discover sexually selected infanticide in bears. His work in the northern Rockies in the 1990s helped overturn the long-held belief that trophy hunting helps carnivore populations by removing surplus males and giving females and cubs greater access to resources. Wielgus showed that removing large males has just the opposite effect.

"Every time you kill a big male, you whack the kids of [up to] three females," he says. In fact, the sexually selected infanticide that results when large males are removed can damage populations enough to drive them to extinction.

Wielgus and his Parisian colleagues used a mathematical model called a Monte Carlo simulation to predict what would happen with the Pyrenees grizzlies over the next 30 years if different numbers of bears were added. They found that bringing in at least seven bears, six of them female, by 2007, would likely secure the group's future.

The French government's decision to bring in five female bears in 2006 is a big step toward recovery, Wielgus says. He and his colleagues will continue to press for more bears to be added, to further boost the population's chances for survival.

In the meantime, says Wielgus, the project gives students in his quantitative ecology class a whole new perspective on a subject that can seem abstract and dry compared to the big, fierce beasts they're excited about. "This is an example for my students, that this isn't just a bunch of esoteric theoretical mathematics," he says.

"Basically, this is mathematics saving species." ●

— Cherie Winner

by Hannelore Sudermann

Hops + Beer

A century ago every Washington town had a brewer eager to do business with thirsty settlers. The state was also a haven for hops growers, who settled in the Yakima Valley and made fortunes selling their hops around the world.



ALUSH POCKET OF WASHINGTON, the Yakima Valley is a really a back yard for our state. No fancy landscaping. It's our garden on the east side of the Cascades, filled with pear trees, cherries, mint, and acres of hop yards—strange and beautiful jungles of green where vines twine their way up trellises to wire canopies 18 feet above the ground.

The youngest son of a local farm family, Jason Perrault, 36, is walking us into a hop yard and explaining the challenges of growing hops nowadays, the issues of oversupply and low prices. It's early afternoon, and a dry August wind is blowing through the farm. Things around here don't start jumping until after sunset, says Jason. "Then the hops come off the vine better. The cones are less prone to shatter."

The fragile cones, which are made up of hop flowers, are almost lighter than air, but they are prized for their potency. Their acids are what influence the character of beer. Early in the brewing process, they preserve the beer and make it bitter. At the end, they provide the flavor and aroma.

As Jason walks into the yard, he reaches up and snaps off a few cones. He pulls one apart, crushing the gold-green bloom into his palm. Then he bends his head and inhales. He offers

me one and I do the same. I can almost taste the beer it will make.

We climb into Jason's truck and speed across the landscape around the town of Toppenish, as Jason points out the now-empty fields where hops used to grow. In the past 20 years many of the valley's yards have disappeared, he explains. "Now there are only about 50 or 60 families left," he says, attributing the decline to overproduction in the late '90s and early 2000s. The number of farms may be dwindling, but this quiet valley produces about 75 percent of the hops grown in the United States. Much of it feeds the big industrial brewers as well as beer makers in Europe and Asia.

A fourth-generation heir to a hops-farming legacy, Jason started working in the hops vines at the age of five, when his father paid him 50 cents an hour to help wind twine for the trellises. A few years later he had his first real job, arching the vines, which meant training the shoots from one plant in two directions to form a Y as they reach upward, a miserable task, as the plants are covered with sharp hairs.

When he enrolled as an agricultural economics student at Washington State University, he knew he wanted to go back to the valley and farm with his family. But by the time he graduated in 1997, there wasn't enough work for him



Photography by Chris Anderson and Robert Hubner



Jason Perrault '97 breathes in the aroma of drying hops at his family's farm near Toppenish in the Yakima Valley.

to join the family business full time. Instead, he returned to school to learn the science of hops breeding, earning a master's degree in crop science in 2001. Now he runs a breeding program for a group of hops farmers, including his family. "I'm kind of a step away from the farm," says Jason. "I want to do work that will not only impact us, but will benefit the whole industry. If the others go away, we're going to go away, too."

The Washington legacy of hops farming goes back to the early 1870s—years before Washington was a state—when Charles Carpenter, great-great grandfather of Stephen Carpenter '79, brought hops from upstate New York. When the Carpenter family realized the climate and soils east of the Cascades were well suited for the vines, they settled near Yakima.

A lot of what they grew was transported by horse and wagon to the Columbia River, and from there, by barge to Portland. They needed hundreds of hands to pick the crop, often hiring farm workers from as far away as Spokane and Native Americans from the Columbia Plateau who were passing through on their way from picking huckleberries.

Today Stephen Carpenter and his family are still in the business, though they've had to diversify, trading some of their hop yards for cherries, apples, and wine grapes. The Carpenters also joined with 13 other farm families, including

the Perraults, to form a company called Yakima Chief to collectively market and sell their hops. While they do plenty of business with Washington breweries, their big customers are the national and international beer makers. As a group, these families farm more than 20 percent of the hop acreage in the country.

Making beer and raising the raw ingredients for it can be just as complex and interesting as growing grapes for wine, says Jason. Like grapes, hops have different varieties and characteristics. Some make beer strong and bitter, while others produce a soothing smell and smooth flavor. One of the most commonly used hops, Cascade, was released in the 1970s by the USDA breeding program in Oregon. It's the classic taste of American beer. Anyone who's had a Budweiser knows the taste of Cascade. That USDA program is one of only four hop research programs in the country. The others include the WSU research station in Prosser, where agronomist Steve Kenny is working on new cultivars to increase yields and resist disease; and two private efforts, including Jason's, in Washington.

Through his breeding program, Jason is planting low-trellis trials, where vines are trained to grow to half the usual height. Lowering the trellises will make it easier for farmers to control disease and harvest the hops. He is administering the study

on 15 acres with support from the Washington Hops Commission. In addition, he is charged with looking for more environmentally sustainable ways for the members of Yakima Chief to farm the hops and ways for them to cut costs.

Last year a new hybrid hop from Jason's program created a buzz among craft brewers. Simcoe is prized for its strong but pleasant bitterness and its lack of astringency. The hop is appearing in microbrews around the country. Pennsylvania's Weyerbacher Brewing Company, for example, makes a Double Simcoe India Pale Ale. Here in Washington, the Anacortes Brewery uses it in its Extra Special Bitter. And Portland's Widmer Brothers features it in its Drop Top Amber Ale.

While Jason and his colleagues realized it would be hard to convince a big brewer to try the new variety, they hadn't expected such a welcome from the microbreweries. "But they were more willing to try something new," says Jason. The demand is so great, that hops suppliers can't keep it in stock.

As sunset nears, trucks fill the gravel driveway of the Perrault Farm. More than a dozen workers arrive to man the machinery and harvest the vines in the hop yard about a half mile away. There it's a race between men swinging machetes to sever the vines and a big truck nosing up behind to catch them. The vines fall in waves. As soon as one truck is filled, another takes its place.

Back at the processing house, the vines are stripped and the cones roll into a three-story behemoth, a Rube Goldberg monster of a machine bristling with belts, wires, ladders, stairs, grates, and gears. Two men climb around the apparatus, constantly tending it to keep it unclogged, while two women armed with brooms sweep up the cones that have escaped to the floor. The din is so loud, we have to shout to be heard. As everything turns, churns, and shakes, tiny petals float free and drift up into the overhead lights like thousands of little moths.

The cleaned hops arrive via conveyer belt at a quieter building next door, where they are dropped into a kiln—they will bake and dry there for many hours. Here a lone man is tending the beds as we walk in. "Drying really is kind of an art," says Jason, sticking his arm into the two-foot-deep bed of hops to get a feel for the moisture. "It's called feeling the kiln," he says. "The best dryers can just walk out there and feel the moisture content. The rest of us have to take measurements." Aromas of pine, lemon, and basil are carried on the heat of the kiln. When the hops are dry enough, they travel on another conveyer belt to a third building to cool. Once fully prepared, the hops are bundled into 200-pound bales, then wrapped in cloth, and are either stored or shipped.



Starting near sunset, workers cut the long green vines from their trellises and truck them off to farm buildings to be stripped. From there the hop cones are dried, baled, and shipped to breweries.

YAKIMA VALLEY HOP VARIETIES

Ahtanum::Amarillo::Cascade::Centennial::Chinook::Cluster
 Crystal::Fuggle::Galena::Golding::Hallertau mf::Horizon
 Liberty::Magnum::Mt. Hood::Northern Brewer::Nugget
 Palisade::Perle::Satus::Simcoe::Spalter Select::Sterling
 Tettnanger::Tomahawk::Ultra::Vanguard::Warrior::Willamette

HERE IN WASHINGTON, our beer is different. Because of the proximity of barley for malting and fresh hops in Yakima, regional brewers can make hoppier, more robust beer, a far cry from most of the post-prohibition lagers that have dominated the beerscape.

In the time before temperance, breweries spilled across the Northwest. Every little town had a brew hall—Aberdeen, Ellensburg, Fairhaven, Twisp. The City Brewery in Walla Walla was for nearly 30 years run by a widow who lived on-site. And Steilacoom had the first in the territory, built near the sawmill by Nicholas Denlin in 1854.

A great grandfather of James Bockemuehl's '68 opened a brewery with his brother near Fort Spokane in 1887. They did a brisk business selling lager to the soldiers stationed at the fort four miles up the road. They made such frequent trips to deliver beer, their horse could do it on his own, says Bockemuehl. "My grandfather was born in 1880, and he sort of grew up at the brewery," he says. "He had these great stories about working there and about riding the stagecoach from there to Hartline, paying for the trip with six bottles of beer."

Even little Uniontown, a German farming community south of Pullman, had Jacobs Brothers. A popular center for the townsfolk, the little brick brewery was home to the local Fourth of July celebrations, according to historians Gary and Gloria Meier, who wrote *Brewed in the Pacific Northwest*. Brewer Peter Jacobs would catch, cook, and serve up for free the local chickens that had fattened themselves on his leftover mash

during the previous months.

These beer halls were havens from a difficult life on the frontier. There weren't many places a man could go to socialize and relax. Women, at least those with a proper upbringing, were not included.

The halls were homes to lively discourse, clubs every man could join, and he often attended in his work clothes, still dirty from his job. "The saloon was a place where a man informed himself about the social and political matters of the day," says historian Norman Clark in his 1965 book about Washington's prohibition. In these brew halls, over lagers, pilsners, porters, and cream ales, workers forged political alliances, found jobs, and formed unions. Fed by growing populations and by demand boosted by the railroad and the Alaska gold rush, the Northwest was home to a beer boom.

Most of the old brew makers were trained German *Braumeister*, some with very familiar names, like Henry Weinhard, who came to Portland in 1856. In the late 1800s, they were drawn to the

Top: Hop flowers ripen in the warm Yakima Valley air. **Bottom:** While a worker tends the drying hops in the Perrault farm kiln, Jason Perrault reaches in to get a feel for their moisture content. **Inset:** Men drink beer in an Okanogan establishment ca. 1909. Photo by Frank S. Matsura, courtesy WSU Manuscripts, Archives, and Special Collections.



Washington has led the way in reviving the craft brew business, starting in the 1980s with a few breweries in Seattle. Today close to a hundred small-time brewers, including Fish Brewing Company in Olympia, have taken up the crusade. The brewers are out to tempt a new generation of beer drinkers by tweaking traditional recipes and crafting new organic ales (above).

American West, where they could ply their trade among thirsty loggers and pioneers. Weinhard's Portland brewery was soon followed by Andrew Heimrich's Seattle Bay View Brewing Company, where Rainier's Steam Beer was first made. At the same time, Leopold Schmidt liked the artesian water in Tumwater and opened what years later became the Olympia Brewing Company.

And then suddenly, the breweries and beer halls disappeared.

On December 31, 1915, Washington enacted its state prohibition law, a good four years before most everyone else. Organizations like the Women's Christian Temperance Union and the International Order of Good Templars enlisted churchgoers and tapped into the polarizing tensions that came from rapid population growth, immigration, and urbanization. They argued that many of society's ills could be traced to drunkenness and vice stemming from alcohol use, particularly in the cities.

As the nation followed suit, the move to Prohibition drove thousands of saloons and small breweries out of business. Several of the bigger breweries were able to survive by producing other products. Olympia's parent company, for example, made sparkling apple juice. But the small-town

breweries disappeared, most believed forever.

By the end of the 1920s, public sentiment turned against Prohibition. It was clear that the law hadn't reduced the social ills of poverty, crime, and mental illness. In fact, it had created a black market for alcohol and benefited organized crime. The repeal succeeded in 1933, but the beer culture that returned was only a shadow of what it had been in the early days. The larger breweries started up again, but they changed their products to meet a wider taste. The local beer halls had been devastated. Instead, big plants were bottling lagers and pilsners, golden-colored mass-market beers that were believed to have a wide appeal.

As beer sales expanded, product selection narrowed. The big beer companies started consolidating. In just the past few years, even the big names in the Northwest, Olympia and Rainier, were bought up and closed down. Today most of the beer in America is produced by just three companies: Anheuser Busch/Budweiser, Miller, and Coors. In 2005 these three accounted for nearly 80 percent of all beer sold in the United States. The same fate befell Europe, except that the diverse legacies lost there were centuries old, not just decades.

Caught up in all this change, the hops growers in Washington could well have gone the way of the saloons. Instead, thanks to a series of bad harvests in Europe during World War I that increased international demand for American hops, Washington doubled its hop acreage between 1920 and 1930. So when Prohibition ended, the hops vines were ready.

Prohibition changed home brewing as well. The raw materials for beer were in abundance, but brewing spirits in your own kitchen was still against the law, which stigmatized what for many families had been a way of life.

In 1979 California senator Alan Cranston introduced federal legislation to make home brewing legal again. President Jimmy Carter signed it into law and sparked a revolution. Stores started stocking and advertising beer-making materials. Well-traveled beer fans like Charlie Papazian, author of *The Complete Joy of Home Brewing*, announced that there was more to the beverage than the few lagers America could find in its stores. In their own homes and kitchens, brewers rediscovered stouts, ales, and bocks. What people like Papazian were saying, and what the homebrewers discovered, was that it really wasn't that hard to make a good beer, and that there was something out there to suit anyone's tastes.

After honing their beer-making skills, many home brewers went into business, starting up the first modern microbreweries and boutique beer-making operations in the country. Again, the West Coast was a center of activity, particularly Seattle. In the early 1980s, Redhook's founders, Gordon Bowker, who started Starbucks, and Paul Shipman, a former wine maker, were serving European-style brews in an old brick trolley-car barn in Fremont. They noted that Seattleites were big tap-beer drinkers, and they understood the charm of a local beer. Their Trolleyman pub, a warm haven on a rainy day, tapped into that near-forgotten nostalgia for the old-world beer hall, where anyone, this time including women, could step inside, have a beer, and unwind.

A century after the first brewing boom in Washington, beer was back. Kalama's Hart Brewing released its first Pyramid Pale Ale. Thomas Kemper started producing lagers out of Poulsbo in 1985. Hales Ales opened its doors in Colville.

And Seattle had its share: Noggins, the Pike Place Brewery, and the Big Time Brewing Company.

In 1989 James Bockemuehl '68 and several business partners recreated the Fort Spokane Brewery. Housed in an old brick hotel in downtown Spokane, it drew customers eager to sample the award-winning Red Alt and Bulldog Stout. It was a lively time for beer in Spokane, says Bockemuehl. The Fort Spokane shared the city with at least three other microbreweries, and none of them were hurting for business.

But in the mid-'90s, microbreweries all over the state hit a plateau. Domestic consumption of beer had declined from a high point in the 1980s. Many of the early efforts, including the Fort Spokane project, did not survive. "It did produce some great beer, but did not have proper management," says Bockemuehl, a financial advisor for whom opening a brewery was a side project.

In a recent annual report, Redhook's managers attribute the drop in business to changing tastes, citing concerns over health and safety, and attitudes towards beer of a generation born after World War II. Many had traded their craft beers for cosmopolitans and martinis. It may also be that those home brewers who started commercial breweries in the late 1980s didn't have the stamina or the business plans to keep going. "They may have not had enough of a cushion for challenges," says Arlen Harris, head of the newly formed Washington Beer Commission.

Like many of the craft brewers, Harris started home brewing in college. Little did he know his hobby would become a career. The notion of home brewing came to him after a visit to his uncle in Bellingham. "We made beer together and sampled some beer from a previous batch," he says. "The flavors and aromas that filled the kitchen—it was just a blast." Harris could make home brew in his college apartment for less than the cost of two cases of cheap beer, and it tasted better.

After graduating in 1993 with a liberal arts degree, he landed a bank job at "a desk in a back office staring at a computer screen all day." When a friend with a brew pub in Anacortes called asking for help, Harris jumped at the offer. He worked eight years at the La Conner Brewing Company as assistant and then head brewer, before getting tagged by Rogue Brewery. As a member of the brewing community, Harris got a taste of the issues facing the craft breweries in the region. It's a highly competitive market. First the beers have to compete with the mega-beer corporations, which dominate beer sales and flood the market with their products. Then the local breweries have to compete with a new wave of craft



Arlen Harris '93, head of the newly formed Washington State Beer Commission, gave up a job making beer to go into lobbying and marketing on behalf of the state's craft brewers.

ROBERT HUBNER

After honing their beer-making skills, many home brewers went into business, starting up the first modern microbreweries and boutique beer-making operations in the country. Again, the West Coast was a center of activity, particularly Seattle. In the early 1980s, Redhook's founders, Gordon Bowker, who started Starbucks, and Paul Shipman, a former wine maker, were serving European-style brews in an old brick trolley-car barn in Fremont. They noted that Seattleites were big tap-beer drinkers, and they understood the charm of a local beer. Their Trolleyman pub, a warm haven on a rainy day, tapped into that near-forgotten nostalgia for the old-world beer hall, where anyone, this time including women, could step inside, have a beer, and unwind.

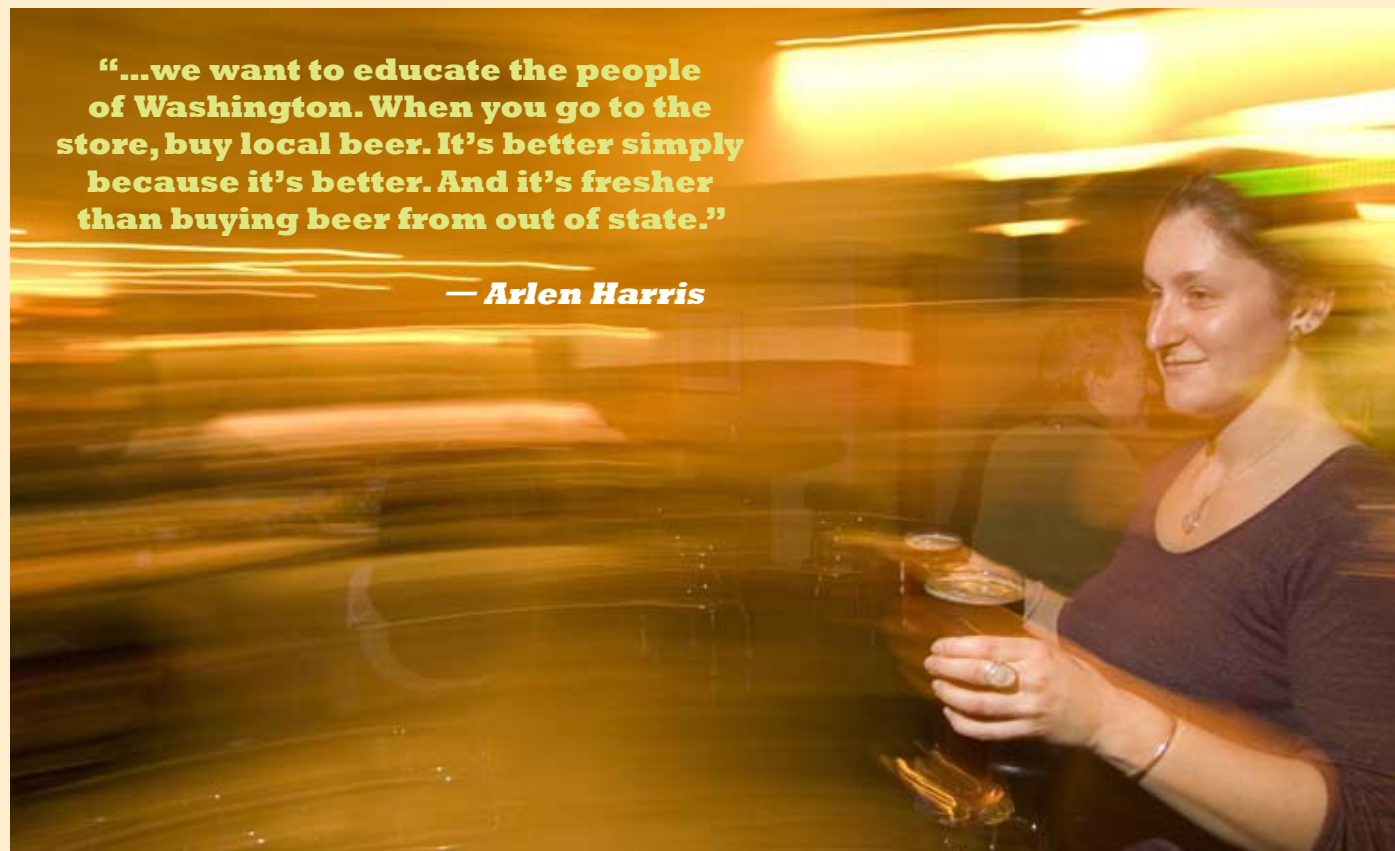
brews from Colorado, Oregon, and California. And lastly, beers from around the world have arrived on our supermarket shelves. More than 90 percent of the beer consumed in Washington comes from out of state.

In a way, that's good news for the consumer, says Harris. Now more than ever, the consumer has the most choices. But it's bad news for the small-time brewers. Something had to be done to give the modern *Braumeister* a boost, says Harris. First, a Washington Brewers Guild was reorganized in 2000 to lobby the state legislature and local governments on behalf of the beer makers and build a community of brewers. Together the breweries work

and has since developed an international reputation for high-quality wine. The experience of the wine industry shows the brewers that by joining together to market their beers, they can reach a wider audience, says Harris. In the 1970s Washington had no wine at all. Today it has more than 450 wineries and a world-wide reputation. Washington's beer is just as unique and high in quality as its wines, says Harris, and it's more affordable and was part of the landscape when the state was founded. "I think beer goes better with food than wine does," says Arlen. "I might want a pinot noir with my tenderloin, but if I'm having oysters on the half shell, I want a pilsner from a local brewery."

"...we want to educate the people of Washington. When you go to the store, buy local beer. It's better simply because it's better. And it's fresher than buying beer from out of state."

— Arlen Harris



ROBERT HUBNER

on issues like supporting a bill allowing brew pubs one additional retail location, and another that would strengthen laws regarding stolen metal, including kegs.

Harris has traded his life as a brewer for that of a lobbyist, moving to Olympia to work on behalf of the guild as its executive director. His efforts to unite the craft breweries in the state paid off in November, when, after polling the state's 82 craft breweries, the Washington Department of Agriculture approved a Washington Beer Commission to market for and promote Washington's microbreweries.

The brewers are taking a leaf from the book of Washington's wine industry, which started its own commission in the 1980s

The beer commission is supported through a 10-cent fee on every barrel. The money will be well spent, says Harris. "First and foremost, we want to educate the people of Washington. When you go to the store, buy local beer. It's better simply because it's better. And it's fresher than buying beer from out of state."

With all the history and the past success of the microbreweries, why aren't craft beers, particularly Washington's, more popular?

Maybe it's time people start thinking of beer as less of a blue-collar beverage reserved for sports events and the summer. It's a treat, a regular feature at the dinner table, and part of our history. ●

Horace-Alexander Young '83

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

Recognized as the father of acoustic-contemporary jazz.

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

Loves to watch Saturday morning cartoons with his kids.

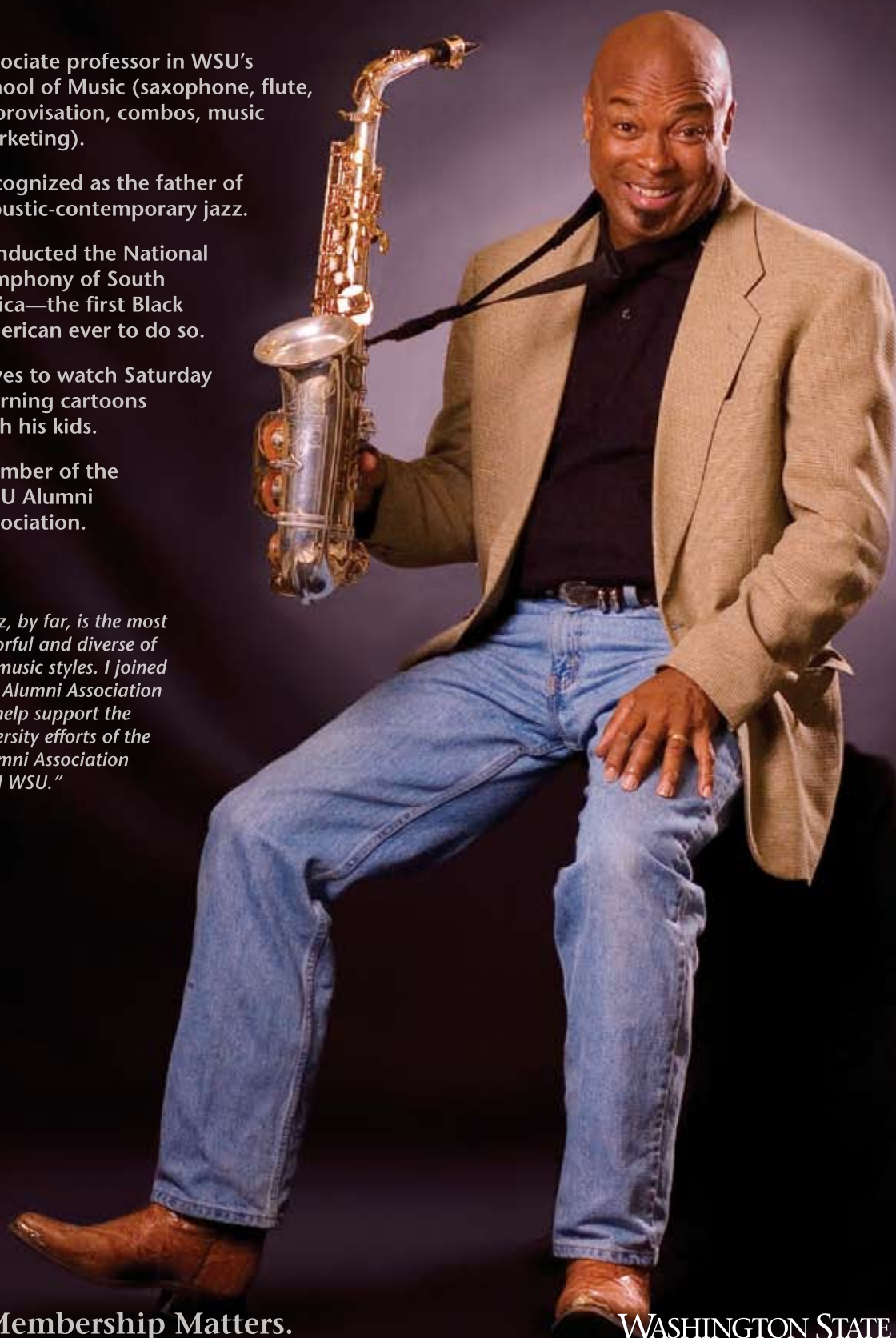
Member of the WSU Alumni Association.

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ROBERT HUBNER

WHAT I'VE LEARNED SINCE COLLEGE

Robert Keppel

'66 Police Science, '67 M.A. Police Science

IN 1974, during Robert Keppel's second week as a major crimes detective with the King County Sheriff's Office, he was assigned the cases of two women who had gone missing on the same day from Lake Samammish. They turned out to be two of Ted Bundy's victims, and the beginning of Keppel's career-long study of serial killers. Keppel left the Sheriff's Office in 1982 to become the lead criminal investigator for the Washington State Attorney General's office. At the same time, he worked on the Green River Killer Task Force.

From death row in Florida, Bundy contacted Keppel, offering to help him find the Green River Killer by helping him understand how serial killers think. In 1995, the series of interviews with Bundy became a book, *The Riverman: Ted Bundy and I Hunt for the Green River Killer*.

Keppel earned a Ph.D. in adult education at the University of Washington. He is now a visiting professor of criminal justice at Seattle University, an associate professor at Sam Houston State

University, and author of several criminal justice textbooks and true-crime accounts. Keppel also consults on major homicide cases around the country.

Meeting Hannelore Sudermann for breakfast at the 12th Avenue Café in Issaquah last winter, about a half mile from a famous site, Taylor Mountain, where Bundy dumped his victims, Keppel reflected on how he became a homicide detective, his work on the Green River Killer case, and his efforts to pull confessions from Ted Bundy.

Choose a career.

I was raised in an atmosphere of police officers. After my dad left the [Spokane County] sheriff's department, he eventually became the senior liquor inspector for the state of Washington on the eastern side. He would have small poker games at our house with the chief of the state patrol, sheriff, the head of the liquor board, and they were all friends. I'd watch them play. They were delightful people. They were true professionals. And they just liked each other, and they worked together so nicely. They talked about cases and mutual problems. That's when I decided I wanted to become a police chief.

Watch and learn.

My dad became a store detective for Rosauers supermarkets. He was chief of security. When I was in high school, I would run down shoplifters for him. I got to watch him interview shoplifters. It wasn't a case where he wanted to take somebody to jail. It was a case where he wanted to get their confession [of previous shoplifting] so he could get restitution for the store. My dad never talked to me like he talked to them. He could twist around what somebody would say and get to the truth of things before 10 minutes were over. How did he know? How could he even tell that they were shoplifting? I couldn't see it.

Go to the experts.

In those days, everybody [teaching in the program at WSU] was a cop. These people were like V.A. Leonard, the early guru of the police science program at WSU. He worked for August Volmer [who built up the Berkeley Police Department and went on to become one of the leading criminal justice experts in the country]. I used to hang around the police sciences office at night just to hear the stories. Then we had Henry Moore, who was a retired secret service agent and a splendid interrogator. And, of course, Felix Fabian [father of astronaut and WSU alum John Fabian]. He was a tremendous professor. I took fingerprinting and identification from him.

Take some detours.

I stayed at WSU and got a master's degree. I was avoiding the draft at the time. I saw that there was a school exemption. I registered for graduate school and, lucky for me, the police science department needed a teaching assistant. My classmates were all military police, very experienced people. That summer I went directly into the King County Sheriff's Office, I was on patrol for six months. But then I got my draft notice, and that was the end of that.

Come to your senses.

[Keppel joined the U.S. Army Military Police Corps, earned a commission, and went to Vietnam.] In the 11 months that I was there we patrolled our own people. We had every experience known to mankind: drug overdoses, suicides, murders, hostage situations in villages. It was a great police experience. I just about stayed in the army, but I came to my senses. I felt comfortable. I was ahead of my contemporaries. But the experience of being in King County, being a deputy sheriff, overrode all that stuff.

Writing well can help you.

I didn't want to be a detective. I wanted to be a police officer. I was a uniform guy. But I wrote good reports. The captain of detectives came to me and said, "Would you please take that test?" So I did. After I became a detective, I never had a uniform on again. . . . I spent a year and a half as a burglary larceny detective first. Then they had an opening in homicide, because some guy stressed out, he had heart palpitations or something. So they wanted somebody young and energetic. . . . I knew nothing about homicide work.

Disarm your suspect.

With my first case . . . I had to go to Enumclaw. A factory owner up there in a cement factory had been stabbed a number of times. The suspect was in custody. I walk into the detention room they had this guy in. He gets up and I go like this [tilts his head way back]. He's six foot seven, probably 280 pounds. It turned out he was only 17. He had been hitchhiking from Texas,

befriended this guy [the victim] and was sleeping out in the truck in the back. He knew where this guy kept his cash inside. When he pried open the cash drawer, the bell went off. That alerted the wife and the owner in the back room, where they slept. The owner came out and the man grabbed a pair of calipers and stabbed him over 60 times. . . . I decided I would process him for evidence first. I felt maybe if I stripped him down that would be a weakness for him. It worked. Without his clothes he felt really out of place. He told me what happened.

Get the details.

Paperwork didn't scare me. I knew it scared everybody else around me. They hated it. If you went to a crime scene back then there might be 20 officers at the scene. One guy writes a report and nobody else writes anything. Well I changed that. I started asking them for what they saw and what they did.

I used to go in in the morning at five o'clock and I'd get home six or seven o'clock every day, six or seven days a week. There was so much paperwork, I couldn't stand not going through it. So I had to make time to do it.

Keep your memory sharp.

I can remember names, dates, times, places. That's your business. My students go crazy, because I say, "OK who were the four victims found on Taylor Mountain?" They want to know, "Why do we have to know that?" I say if you want to be a criminal justice person some day, you're going to have to know names, places, case numbers, routing numbers, everything.

Serial killers—more are out there than we know.

Everybody knows the famous ones that the newspaper headlines cover. Nobody knows all the rest. All the rest are more dangerous. There are more of those out there that kill two, three, or four people.

Go in prepared.

I was Bundy's primary contact. Dave Reichert [who later became the King County sheriff] and I went in to interview him. He

was shaking, he was sweating. He looked in ill health, because he just got out of 30 days segregation for having escape implements in his cell. He wasn't really the Ted Bundy you'd expect, self assured. ...

[Before going to Florida] I started talking to a clinical psychologist and a psychiatrist... We didn't know what to expect from a guy like Bundy. ... Not only were they giving us information to save our mental health, how not to become involved in the fantasy life of Bundy, but also how to structure questions in a such a way that when he answered them he would be answering them as though you were interviewing him for his crimes. He and the Green River Killer just happened to do the same stuff, like take two people in one day. The question would be "Why would a killer like this take two people in one day." He said, "The guy must be very active." Then we asked him to elaborate.

Build relationships.

We were interested in what Bundy had to say about the Green River Killer. But we were also interested in building a relationship with him, figuring in the future he would want to talk. ... His confessions [to his own crimes] didn't start until four days prior to his execution. About three weeks before that I got a phone call from his civil attorney asking if I would participate in a debriefing of him. She said he wants to talk about where remains would be found. [Bundy confessed to killing eight named victims in Washington, helping Keppel close a number of King County cases].

Sometimes you keep it to yourself.

I don't know why I did this. I never told my family anything about what I did. They'd see me on TV, in the film at a crime scene. ... My wife knew that I was involved in things, but none of the details. My children didn't really know my involvement in the Bundy case until *Riverman* was written. Then they were shocked. It wasn't like I was in a homicide unit investigating a case, closing a case, opening another one. I was on this one for a couple of years before I got to do any of that stuff. That's kind of the way things went.



COURTESY DANA PATTERSON

Dana Patterson ('06 Ph.D.) finds her new job as director of the Coretta Scott King Center at Antioch College "a perfect fit for me in light of what I want to do."

Dana Patterson **The Path Ahead**

Yellow Springs, Ohio, is a small college community with a rich history of social justice. It was a stop on the Underground Railroad and, much later, home to Antioch College, where civil rights activist Coretta Scott King went to school.

Dana Patterson, who completed her Ph.D. in higher education administration at Washington State University last spring, was seeking a career that would lead her into social justice and human rights activism, when she applied to be first director of the new Coretta Scott King Center at Antioch. Looking at the job description, she realized, "It's a perfect fit for me in light of what I want to do and what I have done."

In the early 1990s, Patterson worked as a parenting specialist at a substance abuse treatment facility for women in Lexington, Kentucky. Later, she was director of the Multicultural Resource Center at Emporia State University in Kansas, a good preparation for her time directing the Talmadge Anderson Heritage House at WSU. She has been a foster parent and has furthered her education, all the while working on issues of equality, diversity, and intellectual freedom.

As a graduate student, she drew from all those things to determine the focus of her studies.

Tying together issues of family, gender, and race that for many black women in higher education have been obstacles, she had her topic: "Divorcing the doctor: Black women and their intimate relationships during the doctoral process." The work allowed her to look at her own experience and those of seven other African-American women in higher ed. She explored how they saw themselves, how they related with their families and communities, how they maintained relationships within the academy, and how they nurtured their own intellectual development. She wove her own life, her interests, and her work into her studies. "I give this advice to people all the time: Every paper, every project, every opportunity that comes your way, use it to build on your dissertation."

When Patterson finished her degree, she and her family moved to Chicago, where she settled in to spend time with her daughters and look for work. In late September, the phone rang. Antioch, five hours away in Ohio, was ready.

While the job is a good fit, it's not necessarily a comfortable one, admits Patterson. There is a lot of challenging work to be done. As director she will guide students and the Yellow Springs community to seek out injustice and to push for social change. One of her first efforts this past winter was to speak

with the local human relations commission about the shrinking availability of affordable housing which was affecting people of diverse backgrounds. That sort of thing is just the beginning of what the center can do locally and nationwide, says Patterson.

For Patterson, Coretta Scott King is a source of inspiration, a guidepost. "I'm from where she's from," says Patterson, who spent her childhood in King's home state of Alabama. "I have four children, she had four children. And now here I am getting to carry on the legacy she left in this space."

—Hannelore Sudermann

Rob Barnard

An Uplifting Endeavor

When Rob Barnard '84 was earning degrees in architecture and construction management, his professors scheduled project deadlines and tests on the same day.

"What that was teaching you was time management, how to work with a small amount of sleep and under pressure," says Barnard, who brought that work ethic home to Portland. During the next two decades, the once-sleepy Rose City gained acclaim for

innovatively solving urban problems, including transportation woes that vex most cities. Barnard's blueprints are all over that reputation.

In magazine rankings last year, *Men's Journal* deemed Portland the best place to live in the United States, praising its "nearly flawless" public transit system; *Prevention* christened it America's best walking town; and *Bicycling* named it the nation's top place to pedal.

But in 2005, Portland's reputation had seemed ready to unravel.

The city was building the West Coast's only aerial commuter tram between Oregon Health & Science University on Marquam Hill to former industrial land along the Willamette River. OHSU had agreed to anchor that South Waterfront redevelopment with future expansions there—but only if the city built the tram, which would provide a three-minute ride down the hill and over Interstate 5 to connect the campuses.

Two years into the tram project, however, construction was behind schedule and far over-budget, eventually reaching \$57 million. OHSU officials were worried. Residents beneath the tram route were incensed. Politicians were talking. The media was frenzied. Careers were on the line.

That's when Rob Barnard "parachuted in," as one admirer describes it.

Early in his career, the newest architect at

Zimmer Gunsul Frasca worked on the gleaming Portland Convention Center before managing construction of a nearby MAX light rail station.

Vic Rhodes lured him to the city, where Barnard managed a series of transportation-related improvements that renewed the once-frayed Lloyd District into a commerce and entertainment mecca. Barnard moved to the Eastbank Esplanade, transforming neglected

riverside real estate into an attractive pedestrian parkway. He was solving the city's

worst railroad and roadway bottleneck when he was assigned to take over the tram project in late 2005.

Rhodes, by then a private consultant, himself got caught in the tram's political blender. He made this parting recommendation: "There's one guy I know that can get the job done for you, and that's Rob Barnard."

"His work ethic was borderline manic," says Geoff Owen ('95 Civ. Engr.), Barnard's counterpart at tram contractor Kiewit Pacific Co. in Vancouver. "He brings to the table a feeling of partnership instead of one of antagonism."

Barnard, in his own words, came in as an "agent for change" on a project mired in cost overruns due to design upgrades and spiking steel and concrete prices. Getting the tram back on track required a realistic budget, sufficient staff, complex engineering solutions, and a rededicated team.

Barnard handed over the keys to the tram December 1 last year, two weeks ahead of schedule. Once the sleek Swiss-built aerial cars took flight, the din of praise nearly drowned old criticisms. The *Oregonian* editorialized that "... the tram will burnish the city's reputation for innovation and renovation." The *New York Times* called the ride "a thrill."

Polite and diplomatic, Barnard refuses to lay blame and is eager to share credit. "It's not 'The Rob Show,'" he says.

The stakes went beyond the South Waterfront, where a burgeoning riverside community promises 10,000 jobs and 5,000 high-rise condominium dwellers.

"If the tram hadn't been built," says Mark B. Williams, OHSU's South Waterfront director, "right now we would be in the middle of a mega-lawsuit between OHSU and the city."

That in turn could have stifled Portland's progress.

"To do great things, you have to have partners. Nobody has a big pot of money," Barnard says. "It is just a tram, but it's a symbol for what the region does. We take a complex problem, look at innovative solutions, pool our resources, and build it."

Barnard is on to the next great thing, joining TriMet to manage the transit agency's expansion



In 2005, Portland's aerial tram was seriously behind schedule and faced huge cost overruns. That's when Rob Barnard '84 "parachuted in."

of light-rail service in downtown Portland, part of a larger plan for light rail, including ambitions to cross north into Vancouver.

"I would love the opportunity to work on those [projects] if TriMet thought I was the right person to do it," says Barnard, who works five and a half days a week for his new bosses and Sundays wrapping up the tram project. "I still have to prove myself and do a good job."

—Eric Apalategui

Jill Harding

A Love of Nature

When Jill Harding was growing up in Maple Valley, Washington, there was a patch of woods on her street where she nurtured a love of nature. Then the trees vanished, victims of urban development elbowing out from Seattle and Tacoma.

"Those woods won't be there for other kids," Harding says, a twinge of sadness still in her voice.

Yet here she was on a sunny August morning, helping to preserve a much different development site: the Lewis and Clark Expedition's 200-year-old winter encampment. The land surrounding Fort Clatsop in northwest Oregon once more is cradled by conifers.

Harding ('92 Wildlife & Wildland Rec. Mgt.) is the chief of visitor services for the Lewis and Clark National Historical Park. The collection of parks includes Harding's post at the fort, an exhibit near Astoria that depicts the life of Lewis and Clark's Corps of Discovery during the famously dreary winter of 1805-06.

The expedition's bicentennial placed Harding in the path of throngs of tourists retracing parts of Lewis and Clark's 4,000-mile route to the Pacific Ocean.

After graduation, Harding landed a job as a National Park Service seasonal ranger at Fort Clatsop, earning a permanent job there three years later. Since 2002, she has overseen the "front line" interpreters and attractions that helped draw 245,674 visitors in 2005.

"We're the ones that are throwing the party," she says of her crew, which in the summer swells to about 40, including employees and volunteers.

"She's a very, very creative person," says Chip Jenkins, superintendent of the historical park. "When there's something that needs to be done, we turn to Jill and she does it."

Harding has needed to do plenty to gear up for the bicentennial. She and her staff updated exhibits, films, and publications to tell a fuller story, including perspectives of Clatsop Indians and other tribes whose ways of life changed forever when settlers followed Lewis and Clark.

The bicentennial enabled the development of new attractions that will long outlive the anniversary, including the six-and-a-half-mile Fort to Sea Trail, with a trailhead at the fort, and the Salt Works in present-day Seaside, where Lewis and Clark's men boiled sea water to obtain salt.

Meanwhile, the Park Service struck a partnership with Oregon and Washington to tie the region's rich collection of historical sites into one park, a collaboration that had never been tried on such a scale before.

And then in late 2005, an errant ember from an open fireplace

transformed the rustic 50-year-old Fort Clatsop replica into a pile of charcoal overnight.

"The next morning at nine o'clock Jill was there with her staff . . . and she worked to make sure that people were still welcomed, even though the fort had burned down," Jenkins says. Harding turned the fire itself, as well as the archaeological excavation and rebuilding project that quickly followed, into "teachable moments" for visitors.

At Fort Clatsop, under Harding's direction, interpreters dress in period costume but don't necessarily pretend to be specific members of the expedition. They do tell the tales in unexpected ways. For example, Harding encourages her staff and volunteers to speak from the viewpoints of the expedition's common men.

"Most people know the big names of the expedition," Harding explains. "In any situation, if you want to get the scoop about the big guns, you talk to the enlisted men."

"They pay a lot of attention to authenticity there. I think they do it in a very powerful way," says Sam H. Ham, a professor of communication psychology at the University of Idaho. "Unlike some other operations in a similar ilk, they do it in a way that isn't cheesy."

Ham ('74 For. Mgt., '78 M.S. For. & Range Mgt.) also is director of the Center for International Training and Outreach and an expert in nature-based tourism. When he leads international groups around the Pacific Northwest to glean ideas for operating their own country's tourist attractions, he likes to



BILL WAGNER

Jill Harding '92 has encouraged her staff at Lewis and Clark National Historical Park at Fort Clatsop to speak from the viewpoints of the Expedition's common men.

schedule a stop at Fort Clatsop. Not only is the site managed well, Ham says, but his groups see an effective and respected female manager—something they might not experience in those countries where women are less often promoted to positions of leadership.

"I want them to see good role models, people who have good integrity," Ham said. "Jill certainly [has] filled that bill in flying colors."

—Eric Apalategui

● **For more information about Fort Clatsop and other attractions in the Lewis and Clark National Historical Park, go to www.nps.gov/lewi or call 503-861-2471, ext. 214.**

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CLASS NOTES

1930s

Ruth Walker Willard ('33 Phys. Ed.) celebrated her 95th birthday in November. She taught physical education in the Shelton School District for more than 25 years, which is why she is in such great shape today! She also rides her exercise bicycle daily. She raised two Cougar daughters, **Betsy Willard Close '72** and **Cindy Willard Zapotocky '70**, and still lives in Shelton.

1950s

Burton K. Peterson ('57 Pharm.) and his wife, **C Jean (Phillips) Peterson x'58** celebrated their 50th wedding anniversary in June 2006. Their grandson is in his second year at WSU.

Gay Cox ('59 Phys. Ed.) retired in June 2006, after 44 years teaching in the exercise science and wellness department at Grossmont College in El Cajon, California. She is looking forward to golf, home projects, and RV travel.

1960s

Terry F. Steiner ('62 B.A. Hist., '67 M.A. Sp. & Drama) was named outstanding civilian volunteer by the Sandpoint Ranger district for work on trails and recreation projects. He is Idaho board chairman for Back Country Horsemen of Idaho. He retired in 1999 after 32 years as director of theater at Spokane Falls Community College.

Judy (Sanders) Fletcher ('63 Ed.) and husband Bill have moved off their boat and become "land animals" again. They've moved to Houston, Texas.

Hugh Campbell ('63 Phys. Ed., '69 M.A. Teaching) retired as president and CEO of the Canadian Football League's Edmonton Eskimos in October 2006. He came to the Eskimos as head coach in 1977. He also coached the Los Angeles Express and the Houston Oilers. He is a member of the Canadian Football Hall of Fame.

George Murdock ('64 Ag.) is the new editor and publisher of the *East Oregonian* newspaper in Pendleton. Previously, he was superintendent of the Umatilla-Morrow Education Service District for eight years. He and his wife have three children and four grandchildren.

Gregory Goodrich ('68 Psych., '74 Ph.D. Psych.) is supervisory research psychologist and optometric clinical research fellow program coordinator at the Western Blind Rehabilitation Center, at the Veterans Affairs Palo Alto Health Care System. A researcher in the field of blindness and low vision, his current projects are in low vision reading and mobility, low vision devices, and eccentric viewing.

John Swenson ('68 Pharm.) celebrated his 62nd birthday in the summer of 2006 by climbing Mt. Rainier with his three sons. It was hard work, but the awesome views made it all worthwhile.

1970s

Heidi Behrens-Benedict ('70 Int. Des.) completed the restoration of her family Craftsman home in Asotin, Washington, and opened it as a week-stay hunting and fishing lodge that sleeps six. The Web site is www.thecreeksidelodge.com.

Gary Bennett ('70 Phys.) is chair of the science council of the newly created Center for Space Nuclear Research at the Idaho National Laboratory. He gave three presentations at the Fourth International Energy Conversion Engineering Conference in San Diego in June 2006. And he participated in two Pullman book singings of his novel, *The Star Sailors*.

William O. Carter ('73 Polit. Sci.) has been appointed to the board of directors for the Pinnacle Bank of Oregon. Carter has been the president of Pacific Northwest Title of Oregon since 1988.

Bruce Johnson ('74 Comm.) is now a consultant working Navy programs for a Virginia Beach defense contracting firm.

Richard Duval ('77 Comm.) has published his first book of photographs, *Stern Words and BowLines*, in which he focuses on wooden boats throughout the Northwest. In the past year he was selected by Northwest Cellars as a supplier of images for labels in custom wine orders, had three images chosen by a national card company, and received awards from the Kenmore, Port Townsend, and Magnolia arts festivals. His work can be seen online at www.duvalimages.com.

Donna Randall ('79 Soc., '82 Ph.D. Soc., '84 M.B.A.) is the first woman to be chosen as president of Albion College in Albion, Michigan. She starts the job July 1, after wrapping up her duties as provost of the University of Hartford in Connecticut. She will be the 15th president of the 172-year-old liberal arts school.

1980s

Jeanne Grainger ('80 Comm.) is senior account supervisor at E.B. Lane, a Phoenix, Arizona-based advertising and public relations agency.

Mariano Morales Jr. ('81 For. Mgt.) practices personal injury law as a trial lawyer in Yakima, where he has owned a practice since 1994. After graduating from WSU, he obtained a law degree at the Catholic University of America. He is involved in youth and safety issues through various community programs, including Toys for Tots and Coats for Kids.

Sherill (Lambruschini) Zemek ('81 Psych.) graduated with a master's degree in organizational psychology in 2005 from Antioch University-Seattle. She is a staff analyst and is doing some internal consulting at the Boeing Company.

Gregory S. Porter ('82 Bus. Admin. '83 M.B.A.) has been named the 2007-08 chairman of the Washington Policy Center, a Washington state non-partisan public policy research organization. Porter is a principal of Berntson Porter & Company, certified public accountants and business consultants in Bellevue.

Steve Ellersick ('83 Elec. Engr.) has worked for Boeing for 24 years. In November 2006 he was selected as an associate technical fellow in displays, optics, and lighting systems.

Tim McGillivray ('83 Comm.) is communications director for Pomona Unified School District. His wife, Dr. Aniko Imre, is an assistant professor at the USC School of Cinematic Arts. They live with sons Fergus, Finnian, and Simon in Claremont, California.

John Mueter's ('83 M.A. Mus.) one-act opera, *Everlasting Universe*, will premiere in August at the Folly Theater in Kansas City, Missouri, sponsored by the Kansas City Opera. As an artist in residence last November at Skidmore College in Saratoga Springs, New York, he supervised the premiere staging of his opera, *Music on the Waters*.

Robert Rayborn ('83 Ph.D. Ed.) was named head of Northwest Regional Education Laboratory's Center for Research, Evaluation and Assessment. Previously he was president and chief operations officer of TruNorth Research, an educational assessment and publication company in Concord, California.

Shelley Patterson ('84 Crim. J.) is the new assistant coach for the Seattle Storm, Seattle's Women's National Basketball Association team. After playing college ball at Washington State University, she went on to play in the WNBA and serve as head coach for the National Women's Basketball League's Chicago Blaze. Most recently Patterson was assistant coach for the Charlotte Sting.

Dwight D. Dozier ('86 Soc. Sci.) has been named interim associate vice president of university advancement at the University of Louisville. He has been with the university since 1989. He is active in the Louisville community and is chairman of the board of the local Public Radio Partnership. He is also a jazz drummer, has toured Italy and Switzerland, and released two CDs.

Jim Drinkwine ('88 Comm.) joined Green River Community College as a business program developer. He is working at the college's Kent campus.

Mike Utley x'89 was named 2006 Walter Camp Man of the Year. After suffering a spinal cord injury as a defensive lineman with the Detroit Lions in 1991, Utley worked towards his own rehabilitation and inspired many others. The Walter Camp award acknowledges individuals with football histories who have contributed to their community, country, and fellow man, as Utley has done by establishing the Mike Utley Foundation to help people with spinal cord injuries.

1990s

Erin (Bergin) Voorheis ('91 Engl.), her husband, Mark, and children, Robbie and Peyton, celebrated the birth of Thomas Carmichael and Lillie Jean November 21, 2006. The family lives in Oakton, Virginia.

Scott Hatter ('92 HRA) and his wife, Teresa, received the Baja Fresh National Franchise of the Year award for the three restaurants they own and operate in the Boise, Idaho, area.

Steven Reames ('92 Comm.) is the executive director of Genesis World Mission, a faith-based organization providing charity medical care locally and internationally. He and his wife, **Tami** ('95 Soc. Sci.), live in Boise, Idaho, with their four children.

Michelle Scannell ('92 Land. Arch.) has owned her own business, Garden Designz, since 1999. She provides landscape designs, consultations, and horticultural services for gardens. She and her husband, Ray Mayes, live in Bothell.

Peter F. Galbreath ('94 Ph.D.) has contributed to a chapter of *Salmon 2100: The Future of Wild Pacific Salmon*, featuring the opinions of 36 fisheries professionals. Recently published by the American Fisheries Society, the book is about how to save wild salmon runs. It can be ordered at <http://www.afsbooks.org/x55050xm.html>.

Robert Pagliarini ('95 Psych.) is celebrating the success of his book, *The Six-Day Financial Makeover*. He recently appeared on ABC's 20/20 to provide a financial makeover on a family struggling with its finances.

Katie Christiansen ('97 Wom. Stud.) and her husband, **Eric Christiansen** ('98 Crim. J.), of Seattle welcomed baby Sophia Grace June 16, 2006. Sophia already has her own tiny cougar sweatshirt and wore it all through Apple Cup.

Matt Drew ('97 Adv.) was voted employee of the year for 2006 at the marketing company Campbell-Ewald for his work on the Chicago Chevrolet account.

Jennifer (Fois) Lech ('97 Comm.) is vice president of academic affairs at Grand Canyon University, Phoenix, Arizona.

Keri (Fuller) Doolittle ('98 Hum.) and her husband, Mark, welcomed Ryland Steven Doolittle into the world October 4, 2006. The Doolittles live in Spokane.

Josh Meek ('99 Ed., Engl.) and his wife, Courtney, welcomed their first son, Hayden Thomas, in September 2006. They live in Moses Lake.

2000s

Garrett Fisher ('00 Bus. Admin.) and his family welcomed daughter Allison Nicole February 4, 2007.

Matt Staples ('00 Biol.) has moved to the Seattle law office of Perkins Coie LLP, where he will focus on licensing, e-commerce, and issues of privacy and data security.

Julie Stern ('00 Comm.) is a reporter and editor for KVOS-TV in Bellingham.

Kelly Cordell ('01 Wildlife Mgt.) is a full-time wildlife biologist with Chelan County's public utilities district.

Farouk Dey ('01 M.B.A., '02 MED Counseling) and his wife, Amel Rais-Dey, were blessed with the birth of their son, Ilyas Dey, in December 2006. Farouk is the

associate director for career development at the University of Florida.

William Craven ('02 M.B.A.) was named head of pricing and analysis of the British Nuclear Group in Sellafeld, England. He lives in the UK with his wife, Sheri, and children, Amanda, Holly, and Will.

Ying Yvonne Du ('03 Ph.D. Engr.) passed the Civil Engineering PE exam in October 2006.

Kristy Leber ('03 Chem. Engr., '05 M.B.A.) married **Cameron Smith** ('05 Hist.) October 7, 2006. Kristy is a nuclear engineer at Puget Sound Naval Shipyard, and Cameron is the assistant manager for Bank of America in Bremerton.

Stephanie (Spencer) Van Riper ('03 Bus. Admin.) married Scott Van Riper August 19, 2006. They live in California.

Vitaliy Shved ('03 Bus. Admin.) is a financial reporting accountant for Tully's Coffee in Seattle.

Kathleen Davey ('04 Movt. Studies) and **Matthew Taylor** ('04 Lib. Arts) were married September 3, 2006. They live in Spokane with their golden retriever, Marley.

Rebecca (Babka) Day ('04 Comm.) and her husband, **Ashley Day** ('03 Polit. Sci.) were married last spring. In July 2006, they welcomed their son, Peyton Grant. The family lives in Tacoma.

Kristina (Hunter) Newhouse ('04 Elec. Engr.) and **Adam Newhouse** ('04 Comp. Engr. and Elec. Eng.) were married in Kennewick July 2006. They live in Spokane.

Sarah Skilling ('04 Comm.) is copy editor for *Homebuyer's Guide* in Irvine, California.

In Memoriam

1920s

Veta May (Tower) Jacobsen x'29, 98, December 24, 2006, Chicago, Illinois.

1930s

Mabel Rita Dahlin ('30 Home Ec.), 97, December 29, 2006, Vancouver.

Betty H. Manning ('31 Lib. Arts), 97, January 11, 2007, Silverdale.

Dan Magnuson Reaugh ('32 Polit. Sci.), 95, November 9, 2006, Bellevue.

Walter Cline ('32 B.A. Ed.), 99, December 2006, Ocean Park.

Carolyn Berry ('35 M.S. Engl.), 2006, Wilmington, North Carolina.

Lloyd Donahue ('36, B.S. Mech. Engr.), 93, April 15, 2006, Pasadena, California.

Josephine (Bankson) Blakkolb ('36 Bus.), 82, February 19, 2007, Clarkston.

Elizabeth Felgenhauer ('36 For. Lang.), 92, September 15, 2006, Spokane.

Philip E. Bloom ('37 Ag.), 92, August 1, 2006, Ellensburg.

Randall A. Johnson ('37 FA), 91, February 16, 2007, Spokane.

Donald L. Rasmussen ('37 Hort.), 91, December 15, 2006.

Glen D. Williams ('37 Chem.), 92, November 29, 2006, Spangle.

Mary Lou Kimzey x'38, 91, September 22, 2006, Spokane.

John H. Tweet ('39 B.S. Mech. Engr.), 89, December 7, 2006, Tolland, Connecticut.

Donna (Hoy) Chase ('39 Home Ec.), September 2006, Port Angeles.

Ernestine Nelson x'39, 100, December 16, 2006, Olympia.

John H. Tweet ('39 Mech. Engr., '40 M.S. Mech. Engr.), 89, December 7, 2006, Tolland, Connecticut.

1940s

Edward T. Connell ('40 B.A. Bus. Admin.), 87, September 18, 2006, Yorba Linda, California.

James F. Steiner Sr. ('41 Bus.), 88, January 8, 2006, Fairfax, Virginia.

Edward Kirk Gebert ('42 Phys. Ed.), 86, December 11, 2006, Everett.

Hubert F. Donohue x'42, 84, 2006, Dayton.

James Edward Zimmerman ('42 Chem.), 85, December 12, 2006, Reno, Nevada.

Richard A. Busch ('43 Civ. Engr.), 86, January 18, 2007, Spokane.

Walter B. Crowl ('43 D.V.M.), 89, December 14, 2006, Twentynine Palms, California.

George Duby ('43 D.V.M.), 88, January 22, 2007, Chehalis.

Milan Felix DeRuwe ('44 Econ.), 90, May 4, 2006, Spokane.

Eugina (Masterson) Dow ('46, Gen., Phys. Ed.), 82, August 16, 2006, Vancouver.

Marjorie Ellen Erickson ('46 Bus.), 82, November 18, 2006, Spokane.

Sharon M. Bracken x'47, 77, September 24, 2006, Seattle.

Janice Miller ('47, Sp. & Hear. Sci.), 80, November 30, 2006, Pullman.

Grace Parks ('48 Home Ec., Chem.), 80, August 16, 2006, Palouse.

Robert C. Seaman ('48 Gen. Stud.), December 18, 2005, Cupertino, California.

John Alvin Grimm ('49 An. Sci.), 84, July 9, 2006, Martinez, California.

Joanna R. Krogsdale ('49, Zool.), 81, September 13, 2006, Oceanside, California.

Thomas W. Jones ('49, Zool.), 80, October 31, 2006, Hood Canal.

1950s

Beverly Blankenship x'50, 77, October 18, 2006, Seattle.

D. Girard Clark Sr. ('50 Ag. Econ.), 81, January 27, 2007, Whitman County.

Dorothy M. Costello Graham ('50 Lib. Arts), 80, February 1, 2007, Spokane.

Orlo Park ('50 B.S. Gen. Stud., '51 B.A. Ed.), 81, October 13, 2006, Anchorage, Alaska.

Norman G. Ross ('50 Mus. Ed.), 84, December 22, 2006, Dayton, Ohio.

Kerry Gowan Anderson ('53 Mech. Engr.), 77, December 20, 2006, Seattle.

John Sieburth ('51, M.S. Bacteriol.), 79, December 7, 2006, West Kingston, Rhode Island.

H. Alan Snyder ('52 Phys. Ed., '58 M.A. Phys. Ed.), 77, January 31, 2007, Seattle.

Robert E. McConnell ('52 Arch. Engr.), 75, October 22, 2005, Oro Valley, Arizona.

Victor S. Anderson ('53 B.A. Bus. Admin.), 75, November 22, 2006, Vancouver.

Kenneth W. Braget ('54 Ag.), November 2006, Dupont.

LeRoy Gallagher ('54 D.V.M., M.S. '80 Vet. Sci.), 79, October 8, 2006, Silverton, Oregon.

Frank B. Golley ('54 M.S. Wildlife Biol.), 76, October 8, 2006, Athens, Georgia.

Murray C. Henry ('54 HRA), 81, December 11, 2006, Sun City, Arizona.

Norma Jean Kinney x'54, 74, January 22, 2007, Spokane.

Walter Carter ('55 D.V.M.), 81, August 15, 2006, North Plains, Oregon.

Sharon (Runner) Kindya ('55 Ed.), 73, October 31, 2006, Spokane.

Joseph John Lawrence ('55 Soc.), 78, January 30, 2007, Mt. Pleasant, Michigan.

Dale Noyd ('55, Psych.), 73, January 11, 2007, Wenatchee.

Robert Edward Johnson ('58, B.S. Elec. Engr.), 73, 2007, Spokane.

Martha Howe ('59, M.S. Phys. Ed.), 84, October 2006, Tipton, Iowa.

1960s

Jay Allen Yerxa ('60 Hort.), August 2006, Spokane.

John David "Bud" Schaffer ('61 B.S. Mech. Engr.), 74, December 12, 2006, Sandpoint, Idaho.

Sherman Michael Coe ('65 Mech. Engr.), 63, February 10, 2007, Seattle.

Emmett E. Hatch Jr. ('65 Mech. Engr.), January 8, 2007, Menlo Park, California.

Roma Mae Lindbloom ('65 Ed.), 77, November 4, 2006, Auburn.

Marsha Jo (Beernink) Klausler ('67 Elem. Ed.), 61, November 14, 2006, Ojai, California.

1970s

Elaine S. Collins ('70, B.A. Gen. Stud.), 58, 2006, Naperville, Illinois.

Larry G. Bettsworth ('71 Pharm., '98 Pharm. D.), 58, August 13, 2006, Spokane.

Bradley E. Crumpler ('71 Sci.), 57, December 15, 2006, Vashon Island.

James E. Rangland Jr. ('72 Comm.), 56, January 31, 2007, Oroville, California.

William C. Broughton ('73 Ag. Econ.), 59, February 20, 2007, Palouse.

Becky (Gillette) Dunn ('75 Bus. Admin., Ed.), 54, December 6, 2006, Danville, California.

Robert Haggerty ('78 Bus. & Econ.), 51, November 13, 2006, Shoreline.

1980s

Laura (Wright) Friedman x'80, 48, December 10, 2006, Burlington.

Marcia Lee Zakarison x'81, 50, March 5, 2007, Bellingham.

Paula Gmelch ('84 Child and Fam. Stud.), 59, March 1, 2007, San Francisco, California.

John Edward Miller ('89 Ph.D. Ed. Admin.), 62, December 20, 2006, Pullman.

1990s

Brian S. Freeman x'95, 31, January 20, 2007, Karbala, Iraq.

2000s

Tara Clarke x'06, 21, August 18, 2006, Mount Vernon.

Staff/Faculty

Earl Dickinson ('70 Ph.D. Vet. Sci.), 78, October 16, 2006, Lincoln, Nebraska. Former professor, associate dean, College of Veterinary Medicine, 1958-73.

Laura C. Dustan, retired faculty, November 29, 2006, Greensboro, North Carolina. She was a professor and dean at the Intercollegiate Center for Nursing Education in Spokane.

Allen Feldner, retired staff, 91, November 23, 2006, Albion. He worked in housing.

Maud Hall, retired staff, 89, January 30, 2007, Clarkston. She was a cook at Wilmer-Davis and later at the Alpha Kappa Lambda fraternity.

Alfred Koepp, retired staff, 60, January 2, 2007, Albion. He was a research technician in Food Science and Human Nutrition.

Gene R. McLam, retired staff, 84, January 9, 2007, Pullman. He worked at the physical plant.

Thelma F. McLam, retired staff, 82, January 8, 2007, Pullman. She worked as an accountant.

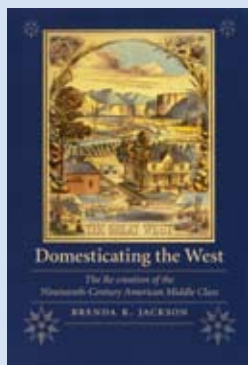
E. Clair McNeal, retired faculty, 77, February 13, 2007, Lewiston, Idaho. He was an admissions officer for WSU.

Eleanor Morrison, retired staff, 88, February 9, 2007. She worked in the libraries.

Rita Sullivan, retired staff, 84, January 24, 2007, Galesburg, Illinois. She was a member of WSU Extension.

Jan Timmermans, retired staff, 74, November 19, 2006, Pullman. He worked in housing.

Ruth Van De Riet, retired faculty, 85, December 24, 2006, Gresham, Oregon. She worked at the WSU Extension in Shelton.



Domesticating the West: The Re-Creation of the Nineteenth-Century American Middle Class

By Brenda K. Jackson '02
University of Nebraska Press
Lincoln, 2005

In *Domesticating the West*, Brenda K. Jackson '02, a Washington State University history Ph.D., explores the settlement of the West by the 19th-century middle class. Specifically, Jackson presents a dual biography of Thomas and Elizabeth Tannatt, middle-class migrants from Massachusetts to Washington Territory in the late 1800s.

Jackson begins her book by examining the middle-class backgrounds of the Tannatts and their experiences prior to and during the Civil War. Jackson effectively demonstrates that both Thomas and Elizabeth grew up solidly middle class, in terms of relative wealth, status, and privilege, though Thomas's situation was a bit more precarious. As a result, Jackson argues, "throughout his lifetime, Thomas worked diligently to maintain position and status and to not allow himself to be dislodged from the place he coveted in America's nineteenth-century middle class."

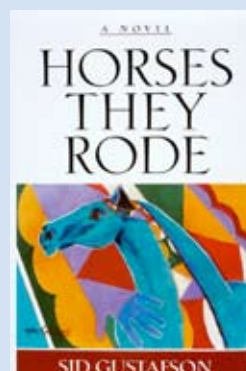
That desire to maintain their middle class status brought the Tannatts West. Jackson convincingly argues that opportunities declined in many towns in the Northeast following the Civil War. This was certainly the case in Manchester, Massachusetts, the Tannatts' hometown, and that lack of opportunity drove Thomas to explore employment in the West. Following a stint as an engineer in the Colorado mining industry, Thomas landed a job in management for Henry Villard and the Oregon Improvement Company. In his new position Thomas played a key role in successfully drawing immigrants to settle the vast lands of eastern Washington along newly established rail lines in towns like Endicott, Colfax, and Pullman.

Thomas and Elizabeth both became community leaders as well. Thomas served as mayor of Walla Walla and a member of the Board of Regents of the new Washington Agricultural College and School of Science (now WSU), while Elizabeth headed the Walla Walla chapter of the Women's Christian Temperance Union. Together, the couple used their influence to help create the Steptoe Monument, in part in homage to a West Point classmate of Thomas's who was killed in a battle with Indians. Through these organizations and activities, the Tannatts helped instill their middle-class character and values into Western society.

Jackson's book deftly shows how late-19th-century middle class migrants like the Tannatts helped shape the society, economy, and cul-

ture of the American West and the nation. The Tannatts' story should appeal to those interested in the history of the American West and, particularly, eastern Washington.

—Robert Bauman, Assistant
Professor, Department of History,
WSU Tri-Cities



Horses They Rode

By Sid Gustafson '77
Riverbend Publishing
Helena, Montana, 2006

Midway through Sid Gustafson's new novel, *Horses They Rode*, I found myself put in mind of all the second chances I have had. His take on the reknitting of family, friendship, and one man's tumultuous life is such a story—a tale of second chances where hope effervesces across a storyscape of high country, horse corrals, drunkenness, and regret that seems, at moments, irresolvable. It's a wholly American novel, for of course, America is a land forgiving of first mistakes—where a shot at trying again is fair and right.

Wendel Ingraham, Gustafson's protagonist, is a ranch hand who has roamed Washington State's Inland Empire, Idaho's panhandle and Big

Sky Country on a multi-year binge, leaving a daughter and a broken marriage in his wake. A series of experiences, including encounters with a high-school sweetheart and with mentor, companion, and part-time Blackfoot medicine man Bubbles Ground Owl, leads to his sobriety and amends.

Wendel and Bubbles take jobs as hands on a ranch where they worked as youths. And this is where the novel cries its message in earnest. The protagonist is never so competent as when he's reunited with his beloved horse. The symbiosis that is rediscovered between them, a language of faithfulness and trust, portends atonements awaiting Wendel. A gathering of horsemen and their mounts prompts language from Gustafson that is a gorgeous but gritty admixture of potential:

"Whoever they were, whatever breed of horsemen, they brought horses and they brought hope, hope that horses could revive a manifest heart."

At the ranch there are additional reconciliations required of Ingraham. In their execution, he emerges whole, "...grateful for all the people who'd gathered to live the life they knew best, everything and everyone connected, men and animals, fishes and birds, grass, trees and stars."

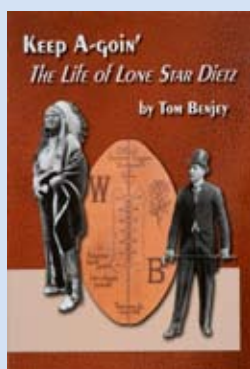
As in his first novel, *Prisoners of Flight*, Gustafson often joyfully eschews writing conventions. By turns, his forms are starkly tangible or cloaked in mythology. His prose is exuberant and accessible. Rhythmic, he often reads like a long poem: "Parents want their children with

them, children of the land, something about having your children with you on the land, native children on native land."

Horses They Rode is a one-sitting book. And it's the kind of book about something important in a world full of books about unimportant things. People should like it.

—Brian Ames '85

Ames's first novel, Salt Lick, is scheduled for release in summer 2007.



Keep A-Goin': The Life of Lone Star Dietz

By Tom Benjey
Tuxedo Press, Carlisle, Pennsylvania
2006

It's hard to imagine Washington State drawing three straight coaches from the premier football school in the country, being the toast of football fans in the West, and winning the Rose Bowl. One of those three men coached the only victory Washington State ever took in the New Year's Day classic. He counted the legendary Jim Thorpe, Pop Warner, and Knute Rockne among his friends.

This man also coached the NFL team that became the Washington Redskins. In fact, the controversial nickname is said to honor him. He was also an artist and an entrepreneur.

Keep A-Goin', by Dr. Tom Benjey, sometime software developer, college

teacher, and a weapons control maintenance man who lives in Carlisle, Pennsylvania, tells the story of the coach, William Henry "Lone Star" Dietz, and considers the many mysteries that surround the man.

Arriving in Pullman in the fading days of the administration of President Enoch A. Bryan, Dietz installed the single-wing offense he had learned as a player and coach under "Pop" Warner at Carlisle Indian Industrial School and led Washington State to an undefeated season and a berth in the first modern-day Rose Bowl football game.

After WSC won the game at Pasadena, the *New York Times* reported that California and Nebraska were among the teams seeking to woo Dietz away to be their coach.

Dietz was good copy wherever he went, from his arrival in Pullman on the train in 1915 right down to his visit to the Rose Bowl reunion in 1956 and a last trip to Pullman that same winter.

Benjey is particularly interested in the mysteries surrounding two parts of Dietz's life. One is whether Dietz was the Native American he claimed to be.

Less than a week after WSC played in the Rose Bowl, the *Los Angeles Times* quoted an *Oregon Journal* sportswriter as saying Dietz was not an Indian and that Lone Star was "but a stage name." But John Ewers, writing in the magazine *Montana* in 1977, accepted Dietz's claim from a 1912 issue of the *New York Sun* that he was Indian. Then in 2004, Linda Waggoner, who was teaching at Sonoma State, wrote in *Indiana Country Today* that Dietz was definitely not Indian.

Benjey believes Dietz's claim, arguing that at a time when native-born whites harbored negative attitudes toward Indians, Dietz wouldn't have invented such a background. But he lets readers in on enough of the con-

troversy that ultimately they will be able to decide for themselves.

Whether Dietz was Native American or not, his claim contributed to his being indicted in 1919 of falsifying his draft registration in claiming that he was Indian. Indians did not have to serve in the military. In the highly charged atmosphere that had developed during World War I, shirking the draft was not a good idea. After a hung jury the first time around, Dietz ran out of money and had to plead no contest. He was sentenced to a month in the county jail.

Dietz later coached at Purdue, Louisiana Tech, Wyoming, Haskell Institute, and Albright College, as well as in the NFL, but his star had been tarnished. He died in 1964, virtually penniless.

Sometimes Benjey tells us more than we want to know. Sometimes his evaluation of the historical evidence is doubtful. But he tells a good

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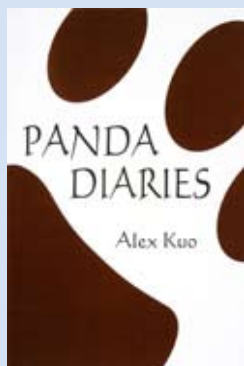
story and includes lots of illustrations. His excitement about Lone Star Dietz is infectious.

Dietz's WSC team beat Brown, 14-0 in a driving rain in that first Rose Bowl game in Pasadena, which was virtually the national championship game.

When the Cougars get to the Rose Bowl next time, let's remember that first time and that first victory. Thanks to Benjey's book, we can do that.

—Owen V. Johnson '68

Johnson teaches journalism and history at Indiana University.



Panda Diaries

By Alex Kuo
University of Indianapolis Press
Indianapolis, 2006

In *Panda Diaries*, Alex Kuo's latest novel, a panda mailman chastises his improbable cohort, Ge, for buying into its pop image. "You're supposed to be in intelligence. You've seen me smoke. If I relied only on that bamboo diet, we'd all be extinct by now. That's just a story our lobbyists invent for the foreign journalists in Beijing when they have nothing else to write about." And unlike the surly postal carriers of America, this zoological civil servant is, in many ways, more contemplative and human than Ge can claim to be. A colonel in the Chinese secret service, Ge has been exiled to

Changchun, an armpit city in the frigid northeast corner of China, after refusing to follow the party line in the wake of the Tiananmen Square Massacre of 1989.

Kuo, a professor of English and writer in residence at Washington State University who taught in Beijing during the spring of 1989 and later as a Senior Fulbright Scholar in Changchun, is able to expose the vagaries and deceptions of this tumultuous era without polemics. There is a morality beyond politics and borders, espoused by a chain-smoking panda bear who criticizes American historians Arthur Schlesinger and Stephen Ambrose as easily as he questions Ge. Using multiple storylines, Kuo reveals Changchun as the least of Ge's worries. From an estranged wife and son, to an underling officer who still embodies the implacable ambitions of the Cultural Revolution, to short asides in which the absurd historical context of modern Sino-Western relations are exposed, Ge's disjointed narrative serves as a metaphor for the helpless individual in the face of obdurate global politics, by which governments reserve "the right to expansion and the right to kill everything" in their way, and the calculated mistreatment of animals is a political act.

Panda bears, like diplomats or soldiers, serve as ambassadors for governments less concerned about their personal welfare than their ability to further nationalistic interests. Why are westerners so enamored of these creatures, Kuo seems to ask, as zoo directors beg the Chinese for more bears, and crowds clamor for the chance to gaze upon the black-and-white wonders? Most average Chinese find our fixation with the bears perplexing. Perhaps these fuzzy emissaries serve to settle

American misgivings about a foreign nation we are taught to distrust from an early age. The panda bear, recently rescued from near-extinction, now commands six-figure rental fees, with the Chinese government even demanding a percentage of souvenir profits. If history has proven that species die out when their usefulness to humans expires, then the panda's existence relies on its profit-making abilities and talent for international détente.

There is language of great compassion in *Panda Diaries*. Besides the infamous images of child armies thrusting Mao's *Little Red Book*, or the lone student standing down tanks in the summer of 1989, there are scenes silenced by history's enormity. When Ge is orphaned as a boy by the Cultural Revolution and exiled to the northern forests, the death of his sickly classmate reminds us of these hidden tragedies. "Let's not lie about

this. That boy inside this deerskin tent is dead. His breathing had stopped in the middle of the night, and Ge could not mirror the motes of vapor rising from him in the morning. He has left his story with us."

Panda Diaries is a timely novel. Just last year, the gifting of two giant pandas to Taiwan touched off a maelstrom of suspicion and accusations of backroom politicking. If a nation or a people are to be judged by how they treat the most helpless members of their society, then all parties in this global farce need to be held accountable, and all citizens beware. As Kuo succinctly states, "The lord is our shepherd, and were it not for random providence, we could all be sheep and be led away to slaughter."

—Lee Minh McGuire '03

McGuire is a lecturer in English at the University of Illinois at Urbana-Champaign.



IRA Legislation Offers a New Way to Support WSU

The Pension Protection Act of 2006 offers a new way to support WSU.

For a limited time, you may give directly to WSU from your IRA without reporting additional income. If you are age 70 1/2 or older on the date of the gift, you may be able to take advantage of this opportunity, which can:

- Help you maximize Social Security benefits.
- Assist those whose income level triggers a phase-out of exemptions or those whose gifts exceed their deduction limitations.
- Benefit those who typically use the "Standard Deduction."

To learn how this or other gift planning opportunities might benefit you and Washington State University, contact the Gift Planning Office at 800-448-2978 or e-mail gift-planning@wsu.edu.

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PRESIDENT OF WASHINGTON STATE COLLEGE from 1916 to 1944, Ernest Holland was seldom photographed with such a relaxed smile. The children with him are his niece and nephew. If you have any information regarding this photograph, we'd love to hear from you. *Photograph courtesy WSU Manuscripts, Archives, and Special Collections.*

Celebrating the Rawlins Legacy

Gift drive to advance graduate and undergraduate students' educational opportunities

Inspired by the impact of President V. Lane Rawlins's leadership at Washington State University, several generous donors have made significant gifts to the University in honor of the president and his wife, Mary Jo.

Notable among these gifts is an anonymous donation of \$1.5 million from a former WSU faculty member and his wife to support graduate student fellowships. A Seattle-area business leader also made an anonymous gift of \$500,000 to support graduate education at WSU.

"In addition to honoring the legacy of President Rawlins, these tremendous gifts will enable WSU's graduate program to strategically invest and drive excellence in identified areas, to foster innovative interdisciplinary research, and to be a catalyst for new training grants for graduate students," said Howard Grimes, dean of the Graduate School.

A third gift, \$500,000 from the Boeing Company, commemorates the Rawlins legacy with \$450,000 to fund scholarships for women in engineering and the remainder to support other important University priorities.

The WSU Foundation invites alumni, faculty, staff, students, and friends of WSU to join in celebrating the enduring impact of the University's ninth president through contributions that foster student success.

"President Rawlins's passionate belief in the linkage between world-class research and outstanding undergraduate education—'the main thing,' as he called it—has been the focal point around which the University accomplished many milestones during his seven years of leadership," said Larry Culver, chair of the WSU Foundation. "The gift drive is a meaningful opportunity for all of us to say 'thank you' to Lane and Mary Jo Rawlins for all that they have done for Washington State University."

Contributions to honor the retiring President and Mrs. Rawlins should be directed to the Regents Scholars Program to fund scholarships for high-achieving undergraduate students from throughout the state of Washington. Established during Dr. Rawlins's presidency, Regents Scholars is now one of WSU's most successful scholarship and recruitment programs.



*V. Lane and
Mary Jo Rawlins*

To make a gift in honor of President and Mrs. Rawlins or to see the progress of the honorary gift drive, visit <http://wsufoundation.wsu.edu/rawlins-legacy.html>, or call the WSU Foundation at 800-448-2978 or 509-335-6686.

For more information about the Regents Scholars Program, visit <http://regents-scholarship.wsu.edu> or e-mail regents-scholarship@wsu.edu.

WHAT'S YOUR LEGACY?

Retired veterinarian G. Caroline Engle ('67 D.V.M. Vet. Med.) will continue to make significant contributions to the field of veterinary medicine, thanks to her thoughtful planned gift to the College of Veterinary Medicine at Washington State University.

After 28 years of annual giving to WSU and including the University in her estate plan, Caroline established a Charitable Remainder Trust which will create the *Caroline Engle Distinguished Professorship in Research on Infectious Diseases* in the Department of Veterinary Microbiology and Pathology at the time of her passing. The professorship will provide critical resources for examining the cause and treatment of infectious diseases in animals.

Her gift of a professorship will also serve to attract further support for the infectious diseases research program, says David Prieur, VMP department chair. "Dr. Engle's wonderful gift will have a substantial impact on the department's major research focus of developing the requisite information for the control of infectious diseases of animals in the years ahead."



For more information about creating your WSU legacy through a planned gift, contact the Gift Planning Office at 800-448-2978 or by e-mail: gift-planning@wsu.edu.

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