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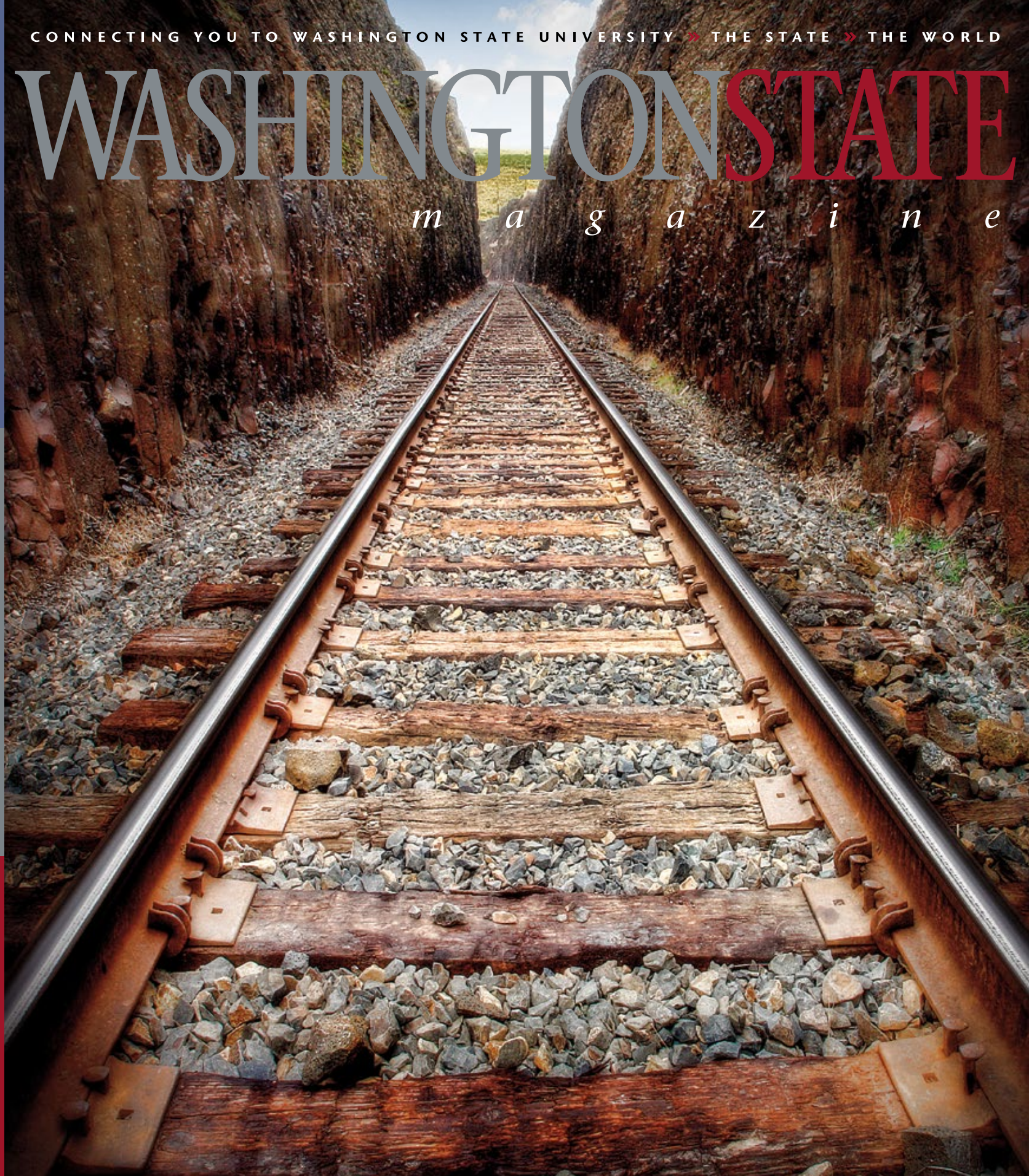

Track to the Future

CAN PASSENGER RAIL RETURN TO THE PALOUSE?

v9n1


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WASHINGTON STATE magazine

FEATURES

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DEPARTMENTS

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Cover photo: Railroad tracks through the basalt cliffs at Palouse Falls State Park. *Photo by David Hogan.*

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Creating a Clean Technology Future

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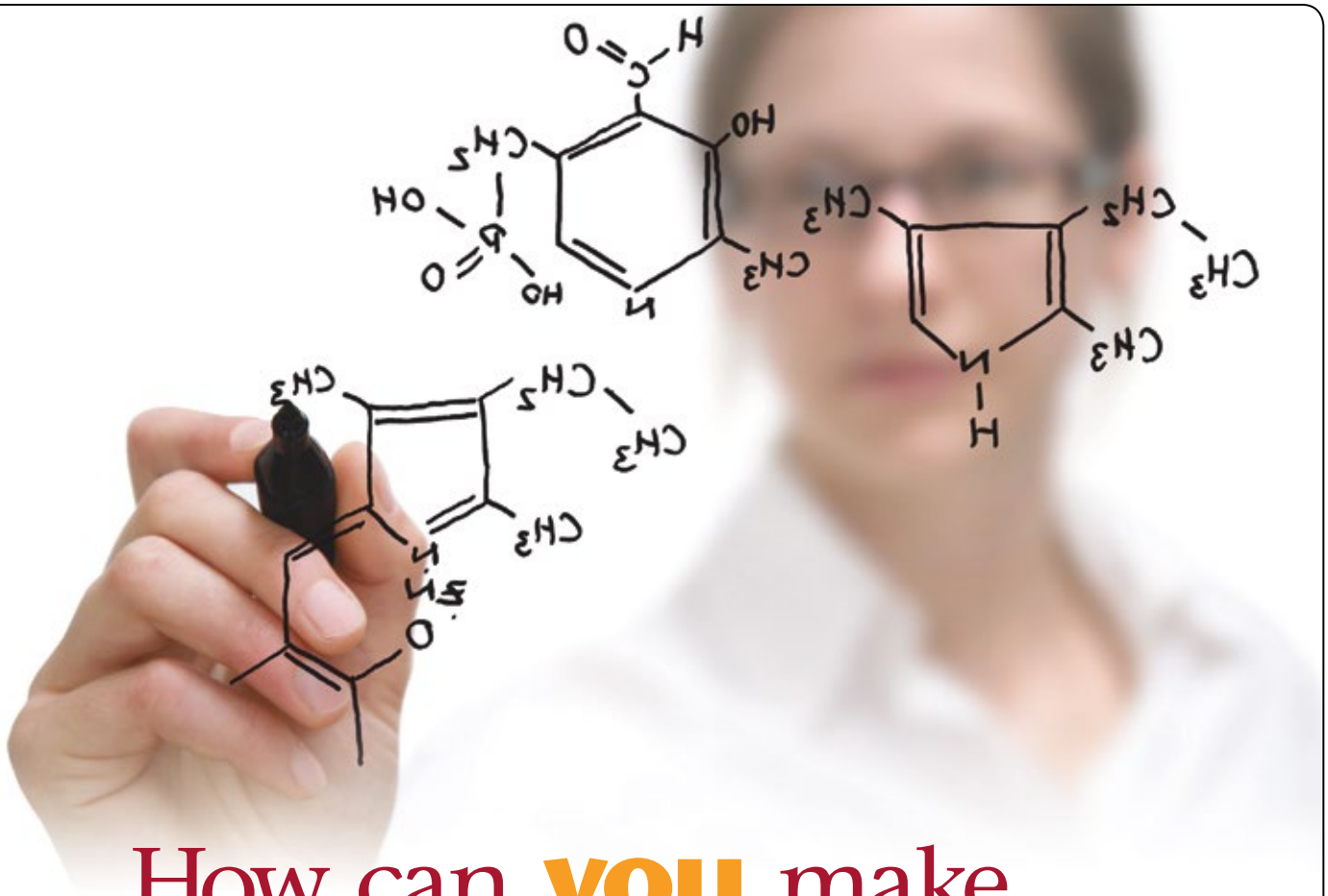

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Cultivated thought : : Near the end of an otherwise lackluster speech to the Wisconsin State Agricultural Society in September 1859, Abraham Lincoln suddenly shifted gears heading into his peroration.

Having compared two conflicting theories of labor, he continued, "This leads to the further reflection, that no other human occupation opens so wide a field for the profitable and agreeable combination of labor with cultivated thought, as agriculture."

Although my son would likely question the intellectual appeal of spreading manure, Lincoln's observation resonates, at least in moments when the laborer/scholar is not exhausted.

Lincoln went on to suggest what fields might provide food for agricultural contemplation. Chemistry assists in the analysis of soils—and in the selection of manures for fertilization. Botany is of obvious assistance in dealing with any crop. And had the field existed at the time, Lincoln certainly would have mentioned nutrition. For surely, as farmer/philosopher Wendell Berry has observed, "Eating is an agricultural act."

Within the burgeoning genre of food commentary, it has become a matter of course to bash, in many cases rightly so, the status quo of food production, agricultural practices, and imposed taste. But in the case of nutrition science, the criticism has at times become confused, conflating disparate, and often conflicting, voices and disciplines into the conspiratorial specter labeled by one critic "nutritionism," suggesting a plot to enrich food corporations and make us fat.

Michelle McGuire and Kathy Beerman, WSU nutrition professors and authors of a nutrition textbook recently released in its second edition, shrug off such generalizations.

I suggest that people's anxiety about food might lead them to turn on nutritionists, who seem always to be changing their minds. One day, for example, butter's bad for you. The next, it's fine.

That's the nature of science, says McGuire. There is no perfect experiment that's going to answer every question. "That's not how science works."

Beerman concurs. "Like other sciences, nutrition evolves." Sometimes information is overstated or simplistic, whether of necessity or through interpretation in the media. "I think that's one of the reasons you see inconsistencies and contradictions.

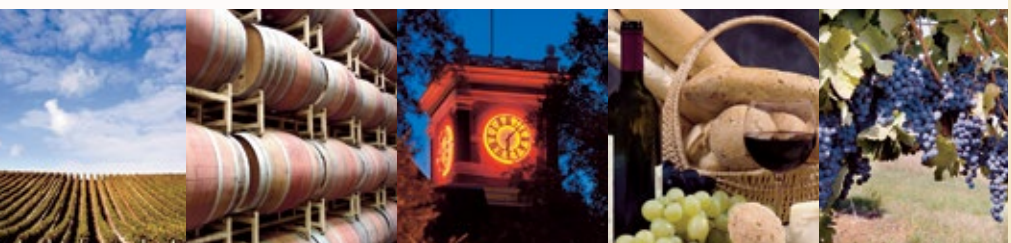
"But another part of it is if we don't fully understand something, it might be better to give the public some guidance rather than no guidance. If we didn't revise our recommendations, we'd still be saying margarine, no butter."

Driven by a complex mix of environmental, ethical, and nutritional concerns as well as ideology and nostalgia, food issues, like so much else these days, have become maddeningly polarized. Perhaps we'll never agree on how we assess the quality of our food.

But McGuire and Beerman's textbook represents the best of the University's mission, providing a cool-headed, scholarly assessment of the current state of the science, a solid and provocative base for Lincoln's cultivated thought.

Tim Steury, Editor

For more on McGuire and Beerman's text, Nutritional Sciences*, visit wsm.wsu.edu/discovery.*



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WASHINGTON STATE magazine

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WASHINGTON STATE UNIVERSITY
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letters

We want our print edition

I doubt that I pull up the Summer 2010 version of Washington State Magazine, though I may. I generally read the magazine over lunch, when I'm taking a break from a day in front of the computer—I don't want to have lunch with the machine! I may pick it up some other time, but that's pushing it. I have no doubt of the economic necessity of only putting the issue on line—I'm only glad I went to WSU 40 years ago when I could afford it!—but it doesn't work well for me.

Ruthann Knudson PhD '73
Great Falls, MT

Re going to an online format. It's a bad idea. Fine for bank statements, bad for leisure reading.

Roger Crawford '86
Pullman

Digital publication? I have a big IMac, but still do not use it for reading publications. The local paper tried digital, but failed. I think this will probably pull the plug on lots of us older Cougs. It's much like fiscal cuts locally and the first thing is hours in the library, because reading books is going out of style. Good luck with what you have to do, have enjoyed the Mag. while it lasted.

Dennis M. Rees '56
Kailua Kona, HI

Whatever happened to home economics?

The summer 2009 issue arrived just shortly after we returned home from the Golden Grads reunion. The WSC graduating class of 1959 had seventy plus College of Home Economics graduates and quite a few of us were able to reconnect at the reunion. Many of us also asked the same question as the magazine article, "Whatever happened to home economics?"

The article infers that post World War II college home ec. programs focused on making women become good homemakers and keeping them focused on domestic life instead of professional fields of study. The 1959 grads entered professions, both in and out of their homes.

Now high school home economics programs are disappearing around the country and there are fewer home economics teachers available to teach students the basic skills needed to survive the current recession. The once proud WSU College of Home Economics is no more. It has been broken up and blended into other programs. Although remnants of the old programs still exist, Dorothy Price recognizes that, "The soul of Home Economics is not here" (at WSU).

Thank you *Washington State Magazine* and author Hannelore Sudermann for asking such a pertinent question and providing some "very home economical ideas" emphasizing the importance of Home Economics.

Jo Klarich '59
Zillah

Loved at last

Truth be told, I don't know exactly why I am receiving *WSM*. My guess is either because you just send to all of your alumni as a gift or because I didn't know how to say "No" every time a cheerful WSU student called to tell me about wonderful events happening on the campus and then ever so politely asks Dr. Yang for a donation.

Since I didn't go out of my way to pay and subscribe to the magazine, I can't say I appreciated it immediately. It always comes in with a pile of junk mail. I never like to sort the mail the instant I get it. But as my desk gets piled up, eventually I sit down and grudgingly go through the pile. Somehow the magazines from WSU always manage to escape the fate of being thrown into the recycle bin, even though I didn't really pay for it like a few others I actually did. The single reason that I cannot allow myself to throw it out along with the other junk mails is entirely because of the wonderful cover art. The cover always grabs me the instant when I hold it in my hand to decide its fate within a split second. The cover is simply too good to be thrown away. So I always sigh, reluctantly put it aside into the "to be read" pile, and tell myself that I will read it when I have time.

Sometimes it takes weeks, sometimes months, for me to eventually pick it up and read a few articles. I have to say I am actually impressed with it every time when I read it—I guess I don't know what to expect from

letters

WSM, but whatever that is, you've exceeded my expectation. I want to especially commend your art editor(s) because the layout and the graphics are just superb, in addition to the eye-catching cover art. The last issue (v8n2, Spring 2009) is an excellent example. The graphic design for the three featured articles "What is Art For?", "The Love Letter" and "You Must Remember This" is just so beautiful—I enjoy them as much as, if not more than, the content of the articles.

I was so impressed by the featured articles and the designs that for the first time, I actually read every page of the issue. I think I finally have come to appreciate *Washington State Magazine*!

Thank you and keep up the good work!

Liuyang Lily Yang PhD '95
Portland, OR

Another first for Texas

"A Player to Be Reckoned With," by Jason Krump (Fall 2009) was one fascinating article. Duke Washington may have been the first African-American to openly play on a Texas field, but he was not the first to play on a Texas gridiron.

Morris Moe Williams from Alabama played, secretly, against Trinity University in San Antonio, in 1947, as a member of the Mexico City College team, the Aztec Warriors.

Mexico City College (MCC) was founded in 1940 by two American educators, Dr. Henry L. Cain and Dr. Paul V. Murray, to serve the large English speaking community in Mexico City.

This story of intrigue and disguises is from "The Mexico City College Story: The History 1940–1962," Note L, Page 5, online at www.mexicocitycollege.com:

"…When they arrived in the Alamo City, Dean Murray was shocked to discover that the State of Texas had laws that prevented Negroes playing on the same field as whites. But he was determined that his one Negro player, Moe Williams was not going to be deprived of playing in the game simply because Williams was not white. After some thought, he came up with a plan…

"First, he had the team suit up at the hotel. Then, they went by chartered bus to the stadium. All the players wore their helmets so as to help disguise Moe and raced into the dressing room and then on to the field. Moe wore his helmet the entire game, removing it only in the dressing room during halftime.

"Aside from all of that, the game was a total disaster for the Aztecs of MCC. Trinity University ran rampant over MCC by a score of 73 to 6.

"Nevertheless, one person found solace in the midst of such a devastating defeat. A writer for the 1948 yearbook noted, 'The Trinity game was the first time a Negro Williams played among whites on a Texas gridiron.' The Aztecs may have been crushed on the field, but 'Anyway we made history.'"

Joseph M. Quinn '70
Independence, OR

Correction

Our article on potatoes in the Fall 2009 issue contained two errors. The president of Johnson Agriprises is Orman, not Oren, Johnson. Also, the Go Cougs potato shed east of Othello owned by Johnson Agriprises holds 18,000 tons, not 36,000. We regret the errors.

PHOTO ZACH MAZUR

Opening new doors to green

by Larry Clark :: The soaring ceiling, room-length fireplace, and glass doors that open to the outdoors give the lobby the flavor of a ski lodge crossed with an open-air café. However, the ambience of Olympia Avenue—Washington State University's new residence hall—masks its eco-friendly bones: the exposed wood comes from old buildings, a retractable screen shades the lobby when it's too sunny, and the floors are polished decorative concrete.

"I love the space. It's just so exciting to live in a brand-new hall," says sophomore Hannah Donaldson, one of about 230 residents of the new building. Donaldson, an animal sciences major from Sultan, points out that information throughout the building helps residents learn about the many sustainable features.

Olympia Avenue Hall boasts geothermal heating and cooling, a reflective roof, less water use, construction waste management, and sustainably-certified or recycled materials—all of it from within 500 miles of Pullman.

The first residence hall built on campus since 1971, Olympia Avenue sits on the hill above Rogers and Orton Halls, with water-sipping native plants in the front.

"A huge cistern underneath the parking lot collects rainwater funneled from the roof of the building to water the landscaping," says Meg Autrey, residential education director in charge of the new hall. She and the Olympia Avenue staff educate residents on the building's assets, along with tips to promote sustainability in the hall.

The "green" features aim toward Leadership in Energy Efficiency and Design (LEED) Silver rating, a stamp of approval for sustainable construction, which Olympia Avenue expects to secure next year.

In addition to the environmental aspects, students can take advantage of leading-edge technology wired into the building. Computers pick up 60 TV channels over the high-speed connection and access the Internet via top-of-the-line wireless networks.

A card-based security system enhances the high-tech structure. Students and staff use their Cougar cards to get into the building, ride the elevators, enter a floor, and open their rooms. If they lose or forget a card, a convenient ATM-like machine in the lobby can issue a temporary replacement.

"The keyless system is really nice, because I don't like having a bunch of keys. All I need is my card," says Donaldson. "I feel a lot safer."

After swiping the card, passengers ride the elevator to an olive-green carpeted hallway with a clean, new smell. The hallway ends at a common room labeled "chow," featuring a full kitchen, TV, couches, and—as with many areas of the building—lots of windows to bring in natural light.

Off the kitchen, three high-efficiency washers and dryers fill a laundry room.

"Parents are as excited about the space as the students are. They love the new furniture, the spacious rooms and kitchens," says Autrey.

"One mom was so impressed, she bought new pots and pans for the floor's kitchen."

A study lounge—called the "cram room"—on each floor, a full classroom, and advising room on the ground floor help students prepare for class. Autrey says freshman seminar classes will be held in the building's classroom, and faculty or peer advisors may choose to have office hours or hold study sessions in Olympia Avenue.

Many of the rooms have private bathrooms, and the public bathrooms aren't crowded, according to Donaldson. Whimsical towel and basket icons decorate the door, and signs explain how much water is saved each year by the efficient sinks, toilets, and showers: the equivalent of 141,840 glasses of water per bathroom.

Natural light welcomes students who live and study in WSU's new, sustainably built residence hall. *Photos Zach Mazur '06*

In her room, Donaldson shows off the connections for computers and the low-flow sink, but the eye is drawn up and out. Light pours in from the tall window—with a strategically placed overhang to shade the room when the sun is low—and warms the high-ceilinged space. Outside, the golden Palouse hills roll into the distance toward Moscow Mountain.

"I feel so spoiled living here," says Donaldson. "I don't even call it my room. I call it my apartment."

For photographs of the new hall visit wsm.wsu.edu/gallery.

Is organic more nutritious?

by Tim Steury :: This summer saw the publication of a study of the nutritional value of organic versus conventional foods by scientists with the London School of Hygiene and Tropical Medicine. Based on a review of 55 articles they judged of satisfactory quality, the scientists, led by Alan Dangour and funded by the governmental Food Safety Agency, concluded that "there is no evidence of a difference in nutrient quality between organically and conventionally produced foodstuffs."

Preston Andrews, WSU professor of horticulture and a prominent researcher of nutrient value of organically grown food, is irked by the report, published in the *American Journal of Clinical Nutrition*, both by its conclusion and its methods.

For one thing, says Andrews, "They don't understand field research." Back to this in a moment.

In spite of the icy response to the report by a good many others than Andrews, a close reading of the article and its allowances detracts somewhat from its conclusiveness.

Dangour and his colleagues write, "We did not address differences in contaminant contents (e.g., herbicide, pesticide, or fungicide residues) or the possible environmental consequences of organic and conventional agricultural practices because that was beyond the scope of our review."

Given that these factors have been the main focus of many of conventional agriculture's critics, one might shrug off the impact of the paper.

However, the "nutrient density" of organically produced food has been actively promoted by its proponents, including Andrews and other participants in the Organic Center, which supports some of Andrews's work. The Organic Center's mission is "To generate credible, peer-

Is organically raised food nutritionally superior? As they say, more study is needed. *Photo Robert Hubner*

reviewed scientific information and communicate the verifiable benefits of organic farming and products to society."

In a report similar in scope to the FSA report (though not peer-reviewed), the Organic Center last year assessed 236 "matched pairs" of measurements including an organic and a conventional sample of food in 97 published studies. Andrews was an author of the report along with WSU associate professor of pharmacy Neal Davies, WSU pharmacology and toxicology doctoral student Jaime Yáñez, and other Organic Center scientists.

The Organic Center study found that organic foods were more nutritionally dense in 61 percent of the cases. The conventional foods were more nutritionally dense in 37 percent of the cases. The study considered these nutrients: four measures of antioxidants, three precursors of key vitamins (A, C, and E), potassium, phosphorus, nitrates, and total protein.

In three-quarters of the cases, the organic foods contained higher levels of phytonutrients, including antioxidants and polyphenols.

The FSA study identified 162 studies, 55 of which they considered of satisfactory quality. Their analysis found that conventionally produced crops had a higher content of nitrogen, and organic crops had significantly higher content of phosphorus and titratable acidity. They found no evidence of a difference in the other eight nutrients considered: vitamin C, phenolic compounds, magnesium, calcium, potassium, zinc, total soluble solids, and copper.

Organic Center scientists faulted the FSA study for actually identifying significant differences, then dismissing them. For example, Dangour and his colleagues found conventional foods to contain higher nitrates, which are widely considered a potential health hazard.

They also criticized the FSA for omitting measures of some important nutrients, including total antioxidant capacity.

But the main problem with the FSA report, says Andrews, was their screening methods, in part due to the absence of matched pairs.

All that the FSA study required was that the varieties of food crops or animals had to be named, but not be the same, says Andrews. Different varieties of the same crop can vary wildly in their nutrient levels.

Likewise, matching soils were not required in the FSA study, nor was proximity.

The Organic Center study required that identical varieties grown on identical soils in close proximity be compared.

If the contending studies prove anything, it's that such a study is difficult at best. According to Andrews, "The claims of health benefits for organic foods are difficult to make conclusively because so few studies have tested the question directly."

As far as he knows, there has never been a long-term epidemiological study of the health effects of eating organic versus conventional food.

It could be argued that nutrition is a moot point, at least in a society in which, on the one hand, food is plentiful, and on the other, the price of organically raised food places it beyond the reach of those who could most use the increased nutrition.

Michelle McGuire, a nutrition scientist at WSU, is a spokesperson for the American Society for Nutrition, which publishes the *American Journal of Clinical Nutrition*, and wrote the press release regarding the FSA study. She notes that we have solid data on only a handful of the hundreds of nutrients in our food.

Referring to the Dangour study, she says, "I don't use that study as evidence that organics aren't more nutritious; it's evidence that we don't have evidence that they are. We really don't know that much, yet."

McGuire does say that she often buys organically grown food, not because she's particularly concerned about nutrient content, but because it tastes better.

Andrews in fact led one of the few studies that has attempted to measure the sensory factor. In a study published in *Nature*, he and colleagues used blind taste tests which found that organic Golden Delicious apples were sweeter and less tart, especially after long-term storage. A continuation of that study, published in *HortScience*, found that consumers rated organic Gala apples firmer and with better texture and flavor than conventional Galas.

Stormwater central

by Hannelore Sudermann :: There's nothing mundane about the new parking lot at the WSU research and extension center in Puyallup. It is a state-of-the-art polluted water collection system. The 70-some parking spots are specially designed to drain the water from each space into separate collection cells.

Example of pervious pavement (left in photo) and and a street-side swale in Seattle's High Point neighborhood. *Courtesy Green Infrastructure*

The project, which broke ground last summer, is an early step in the station's efforts to become a leader in Low Impact Development techniques, providing guidance for the rapidly developing community along the Puyallup River Valley. In this case, the station will look at how to capture and clean stormwater runoff so that it doesn't contaminate waterways, damaging salmon runs and polluting Puget Sound.

The station, jointly with the City of Puyallup, received a $1 million research grant from the state Department of Ecology to start the project. The organizers are hoping the scope and quality of the effort will bring in more funding to keep it running. "It's like we have purchased the Porsche, and one gallon of gas," says Curtis Hinman, a water resource specialist with WSU Pierce County Extension. "Now we need more to drive it."

Besides the pervious pavement and collection cells, the project includes several 20x20-foot rain gardens, depressions in the earth where the water will be deposited to see how different plants absorb and handle pollutants. Finally, large containment tanks will hold different mixes of soils to see how the pollutants filter through or are retained. This test site is one of the first of its type and scale in the world.

Though the WSU research station in Puyallup was built more than a century ago to serve the farmers in western Washington, this new project fits the role of the facility, says director John Stark. It's an experiment station, where the university can "experiment" with new ideas and technology for the benefit of the general public.

"In this area our farming is declining," he says. And the population is on the rise, so the station is focusing on more urban issues. Storm water runoff from streets and parking lots is a major concern for the local streams and rivers as well as for the Puget Sound. That is why projects like these will focus on environmental toxicology as well as reducing the flow of runoff water. Hopefully someday, he says, more developers and businesses will start using this technology.

For photographs of stormwater runoff landscapes visit wsm.wsu.edu/gallery.

Housing by the numbers

by Hannelore Sudermann :: From his corner office in Johnson Tower in the midst of Washington State University's Pullman campus, Glenn Crellin is far from the most populated parts of the state. Still, from his vantage, he contemplates rental rates around the Puget Sound, home sales in Spokane, and real estate in Moses Lake.

Crellin is the state's real estate numbers guy and in mid-summer he's just about to release a report that will stir up homeowners and real estate agents with news that home sales were showing some positive signs.

Crellin and his reports appear regularly in newspapers throughout the state. He's also well placed in Washington where for some the real estate market is a spectator sport. In recent years, Internet blogs, posted by agents and consumers alike, have scrutinized the real estate market—watching condo projects go up, reporting on housing sales, following new listings and new neighborhoods on a daily basis.

Back in the 1980s real estate interests approached the state about creating an objective source to look at sales activities and provide reports about the behaviors of buyers and sellers in Washington. In answer to the request, the WSU Board of Regents created the Washington State Center for Real Estate Research at WSU in 1989. Crellin, an economist who worked for the National Association of Realtors in Washington, D.C., was hired by the University to direct the center in 1993.

The quarterly housing reports are the bread and butter for the center, but the team, which each semester includes at least five business students, also tackles projects that look deeper into the stories. This fall they created a survey to discover just how much of an effect the $8,000 tax credit had on boosting home sales. "I want to focus on the credit as well as look at the Home Valuation Code of Conduct," says Crellin. The conduct code was recently accepted by Fannie Mae and Freddie Mac, the nation's leading mortgage holders, to protect homebuyers and lenders from appraisers overvaluing properties. But realtors have complained that the new code is stifling home sales. Crellin wants to see if that is the case.

:: continued page 22

Our Story

"...But I got my way, and we went to play tennis instead. The golf course was right nearby, so we walked out on the golf course, and he asked me to marry him there. And we've been married 42 years." :: *Listen to this and other sports memories recorded by public history students at football games this fall.*

wsm.wsu.edu/ourstory

Oakesdale station platform perspective *by WSU landscape architecture students* Jodie Knopp '09, Nick Hamad '10, Todd Hargrave '09, and Hugh Severs.

Track to the Future

:: *by Hannelore Sudermann* ::

IT WAS ONLY A FEW DECADES AGO that Northern Pacific Railroad ran daily trains from Spokane through Pullman and down to Lewiston. And train cars loaded with students and steamer trunks came over the Cascades delivering their lively loads to packed stations filled with eager classmates awaiting their friends.

Bob Scarfo, an associate professor with Washington State University's Interdisciplinary Design Institute, and his landscape architecture students have evoked some of that romance with a project urging the reintroduction of passenger trains to the Palouse. Only now, along with the romance of the rail, they're citing contemporary reasons like oil scarcity, climate change, an aging population, and public health in general.

One way to meet the resulting needs is with trains, Scarfo recently told the Pullman City Council. The project, titled Powering the Palouse, would use the existing tracks running from Spokane to Lewiston. They would need to be upgraded to get the speeds necessary, but at least they're already in place, he says. The route would start in Spokane and run through Oakesdale and Rosalia. Scarfo's students believe that with the return of passenger trains, these sleepy farm towns could come back to life.

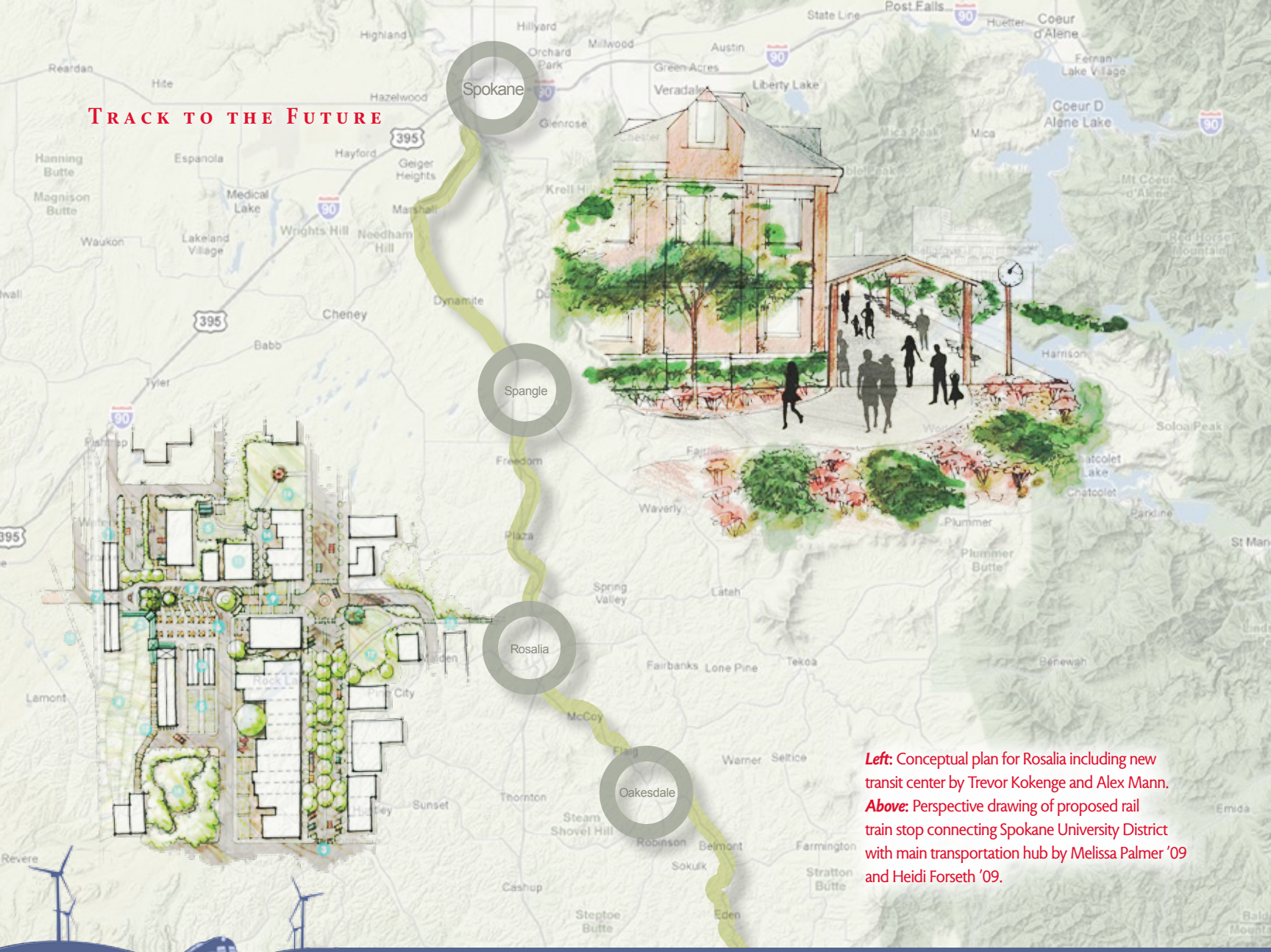
They drew up plans for new stations that would serve as centers of the communities, with parks nearby and farmers' markets in the parking lots and plazas.

A team of students who focused on Pullman thought a station could be built just below WSU's old steam plant, where campus meets up with public paths and bicycle routes. It's where the train delivering coal to the University used to stop. The location is ideal, Scarfo told the council, because it's close to downtown and "would be accessible to a number of groups of people in the community." Let your imagination go—besides hauling passengers and freight, the railcars could provide wireless Internet or hold classrooms. The stations could rent bicycles and smart cars. "The train is more than just a taxi. It's a vehicle for change," he said.

In Spokane, the train would meet up with the city's future light rail-style transportation system. Students could take it up to the WSU Spokane campus, or just use it on the weekends to visit the city. Commuters might live in one town and ride the train to work in another. Places like Rosalia, where the townspeople were very interested to hear the students' ideas, could be revitalized, said Scarfo.

The Pullman council was intrigued by the idea. "Students would love to get on the train and go to Spokane," said Councilwoman Ann Heath. "They'd get more business. We'd probably get more business as well."

Track to the Future



Left: Conceptual plan for Rosalia including new transit center by Trevor Kokenge and Alex Mann. ***Above:*** Perspective drawing of proposed rail train stop connecting Spokane University District with main transportation hub by Melissa Palmer '09 and Heidi Forseth '09.

Bob Smawley's memories of the passenger rail go back further than most—to 1938, when as a 10-year-old he would board the evening train in Pullman to sell newspapers to the passengers. "It was the 5:45 Northern Pacific," he says. "And sometimes the selling was pretty good and the train would start before I'd finished." A few times the conductor would have to stop the train a half-mile down the track to let Smawley off. "He would say, 'I never want to see you on my train again,'" says Smawley '52. "But then the next time, he'd help me on."

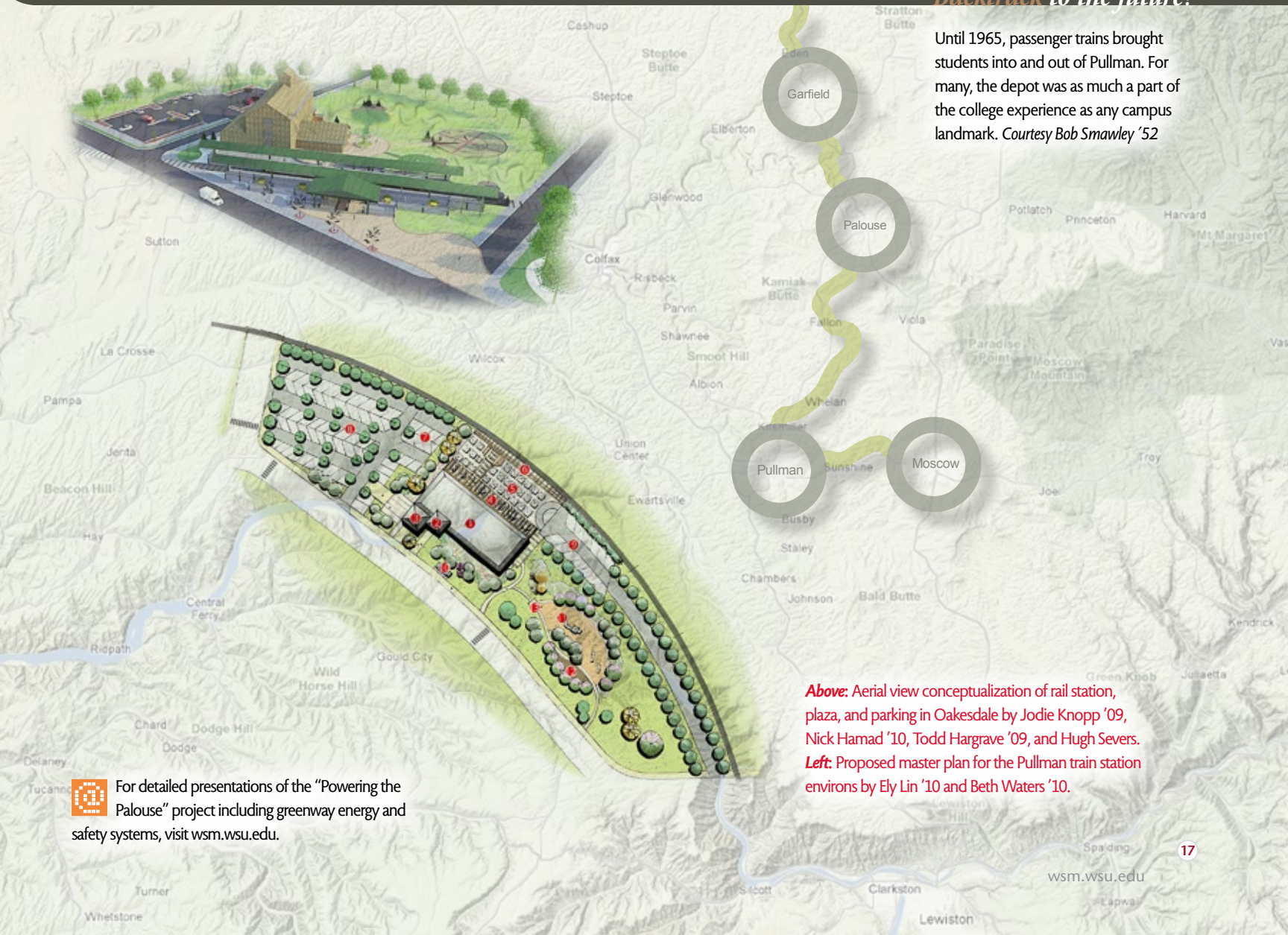
The train was such a part of the community. It brought the town to life each fall as it delivered students. Then during the holidays and breaks, a special train would head north to Spokane and then turn west across the state to climb Stevens Pass and descend into Everett. From there it would drop south to Seattle and Tacoma. When the sports teams traveled, they took the train, and the marching band and hundreds of students would rally at the depot to see them off.

After Northern Pacific closed its route, the Palouse was served for a time by a small commuter train that ran between Lewiston and Spokane until 1965. Carol Smawley '52 would sometimes take her children on the train up to Spokane for the day. "It was a pretty ride," she says. "It meandered through the Palouse." It took two hours to get there, but was a fun trip to make.

Reinstating a route like that would be a fairly simple effort, Scarfo told the Pullman City Council. The trains, the engines and the track are already in place, and the short lines have just started an $80 million project to improve the tracks for freight. "Without even knowing it, we're taking a step in the right direction," he said.

Backtrack to the future?

Until 1965, passenger trains brought students into and out of Pullman. For many, the depot was as much a part of the college experience as any campus landmark. *Courtesy Bob Smawley '52*



Above: Aerial view conceptualization of rail station, plaza, and parking in Oakesdale by Jodie Knopp '09, Nick Hamad '10, Todd Hargrave '09, and Hugh Severs. ***Left:*** Proposed master plan for the Pullman train station environs by Ely Lin '10 and Beth Waters '10.

For detailed presentations of the "Powering the Palouse" project including greenway energy and safety systems, visit wsm.wsu.edu.

Doubling back

Above and opposite: Childhood friends Drew Bledsoe and Chris Figgins '96 have regrouped to produce Doubleback wine. *Photos Robert Hubner*

:: *by Jason Krump '93* ::

DREW BLEDSOE may be best remembered by Washington State fans for what he accomplished on a snowy day in November 1992.

And while visions of Bledsoe, receiver Phillip Bobo, and a snow bank are foremost in their memories, these days, Bledsoe wants Cougar fans to know him not only for great plays but for making great wine.

"It is very important for me that people know that this is a true passion of mine," he says. "We are very committed to producing only the best wine that we can."

On a sweltering July day in Walla Walla, Bledsoe's passion is on display.

This day marks the bottling of Bledsoe's first vintage of Doubleback, a Cabernet Sauvignon which will be released in 2010, and he is not just an observer in the process. He and his family, including wife and co-founder Maura and their four children, are unloading boxes and setting bottles on the assembly line, where, once filled and corked, they will eventually be sealed and numbered.

"It's been a labor of love and very much a group effort," Bledsoe says during a rare break. "To see it come to fruition is really exciting."

For Bledsoe, the name Doubleback symbolizes his journey taken from his football life to post-football life.

"I grew up in Walla Walla, left, and lived this big other life playing professional football then double-backed and came back to Walla Walla," he says. "Being able to come back here and have a presence with a wine project is really damn exciting."

Well before his retirement from a 14-year NFL career in 2007, Bledsoe realized the importance of planning for when his playing days were over.

"Fairly early on in my career I started to recognize that when I was done playing football I wasn't going to be able to sit back and play golf every day," he says, "I knew when I was finishing up with football that if I didn't have something to apply that passion to I would end up in trouble.

"You make that transition from this super-intense profession where you are just daily and weekly on the firing line; you step away from that and if you don't have a place to apply that passion, you see a lot of guys end up in trouble. To be able to come back to my

old hometown and partner with my childhood friend, Chris Figgins, it's a confluence of events that makes it a fun and cool story."

Figgins was exploring a transition as well. Already well-established in the Walla Walla wine industry as CEO and winemaker of Leonetti Cellars, Figgins was looking to branch out into consulting. He learned of Bledsoe's interest in wine, and became interested in partnering with his childhood friend and fellow Coug (Figgins graduated from WSU in 1996). But he needed to know just how serious that interest was.

"We sat down for lunch and five minutes into the conversation I realized I was being interviewed," Bledsoe recalls.

"We hadn't been in contact at all during his career," Figgins says, "and sometimes, money changes people, and I wanted to make sure it wasn't a giant ego coming back. It was really cool to see the same guy, still rock solid. I started to quiz him on wines he liked, and I came to appreciate his palate and what he was after in the wine. I realized philosophically we were aligned."

"He was peppering me with questions: What I like? How I view the industry? Why get into it?" Bledsoe remembers. "I quickly recognized that I better answer these questions the right way. If I can get Chris Figgins to be my winemaker, I am ahead of the ball game in a huge way. If I can pick any winemaker, Chris would occupy the first three spots. We get along great, and it has been a really great relationship."

In a way, Bledsoe is a student once again. But instead of being in a WSU classroom, or a film study room, his new classroom is his McQueen Vineyard, overlooking the Walla Walla Valley.

Walking through the vineyard, Bledsoe explains the process of caring for his vines.

"If you starve them for water, make the roots really dig, and then thin them out, the grapes that are left really develop some nice complexity and depth," he explains.

"It's almost like you treat them how you would treat a little kid. If you give them everything it wants, then it grows up spoiled with no depth to it. If you make it work for it, teach your vines some work ethic, they got to work for it. If they do then you end up with some great fruit."

The art of planting and caring for vines is just one of the aspects that attracted Bledsoe to the discipline.

"The whole process intrigues me from being able to start with a piece of dirt and end up with a work of art in a bottle," he explains. "I got to the point in football, I don't want to say where I knew everything, but it was not intellectually challenging on a daily basis anymore. In this business you literally keep learning every day for the next 50 years because it is continually changing and evolving and new and different all the time.

"That part is really exciting to me. In order to produce great wine I'm going to have to learn and evolve with it."

And he is happy to have Figgins alongside.

"Chris has been in the wine industry since he was born," Bledsoe says. "Having a guy like that who can give you the scientific knowledge but have the instinct that comes from a lifetime experience is invaluable. Our friendship reconnecting has been really, really cool. That will continue to grow as well."

The connection between Bledsoe and Figgins extends from their love of wine to their association with Washington State University.

"I remember the time when Drew decided to go to Wazzu it was a pretty big deal," says Figgins, "because he could have gone anywhere, and he chose to go to Pullman rather than doing the more obvious route of Notre Dame, Florida, or USC," adds Figgins. "For him to look in his backyard I thought was really, really cool. It speaks to the whole Doubleback project, of just, hey this place matters, where you are from matters."

Returning to Walla Walla evokes memories of his own for Bledsoe, not only of his hometown, but his time at WSU.

"I like to say that I don't have any regrets, but looking back on it, my time at Wazzu was awfully short," Bledsoe admits. "I was there two and a half years. I loved every minute of it.

"I wouldn't go back and change the decision because it worked out really well, but I wish I could have spent more time there. I really enjoyed it."

And the one game he enjoyed most was the 1992 Apple Cup, what WSU fans fondly refer to as "The Snow Bowl."

"It still is and always will be my favorite memory in my whole career," says Bledsoe, whose career included two Super Bowls while with the New England Patriots, including the Super Bowl XXXVI championship team. "Playing in that game with the snow flying, against the Huskies, and then beating the Huskies, was just awesome."

In the future, when Cougar fans reminisce about that game, their memories may well be accompanied by a glass of Doubleback wine. «

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CLAMS

by Hannelore Sudermann

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DISPLACED BY THE SALMON AND ECLIPSED BY THE OYSTER, the clam is perhaps the forgotten star of the Puget Sound. But once it was the main seafood symbol of the region. Even before restaurateur Ivar Haglund made his "Acres of Clams" restaurant a Seattle landmark, the clam's status was lodged on the shores of Northwest Native American lore. In fact it had a role in the origin of man. According to Haida tradition, Raven discovered a large clamshell on the beach and looked inside to find dozens of little people. Lonely for someone to play with and trick, he coaxed them out of the shell and thus populated the land.

On the north end of Penn Cove on Whidbey Island one day early this fall, Eugene Thrasher lifts his clamming gear out of the trunk of his car. A trained WSU Beach Watcher with more than 1,000 volunteer hours under his belt, he has been digging and eating clams in Washington for half a century. Thrasher is the guy to ask if you want to learn how to find and dig a clam.

Thrasher's clam interest started soon after he moved to Washington to take a job at Boeing. There one of his coworkers urged him to try the bivalve. "So I went to Ivar's and ordered clams," he says. The experience was painful. "They had sand in them," he says with a grimace.

When he told his coworker, the man said he really ought to go out and dig his own. "So that's what I did," says Thrasher. "And there was sand. Again." Then the coworker told him about soaking the clams overnight with cornmeal which the creatures would use to clean the sand out themselves. "So I dug some more clams, added some cornstarch to their water and guess what?," he says. "Once I cooked them, they were all gooey." He had to sort out that he needed corn*meal*, and not starch, and he finally had the clam dinner he was seeking as well a lifelong interest in finding and harvesting clams. Thrasher tells his story as he treks out across the inlet to a muddy, sandy beach, bucket in one hand and shovel in the other. "You walk along the beach and where one squirts up, you know they're all there."

Just across the inlet two people are flinging their shovels, mud piles up around them as they carve a three-foot hole in the beach. Thrasher tsks, noting that they're making it harder than they need to, and they're damaging the beach for the remaining wildlife.

Thrasher's way of digging clams is elegant and simple. He spots several holes clustered within a 10-inch radius and says, "There are butter clams here, six or seven of them." He pushes his shovel into the mud and pulls up a chunk of soil, then another shovel-full, then another. "Dig quickly, as deep as you can and expand the hole," he says, "You end up digging one hole and you get four clams."

But don't sort through the dirt while you're digging, he adds, or you'll lose the clams left in the hole. Also, put all the dirt in one place, that way it's easier to fill in the hole when you're done.

Clamming seems complicated. With tidal charts, required shellfish licenses, daily limits, knowing where to look, identifying a "clam show" (a hole or dimple made in the sand by the clam's neck), knowing that the shovel should be on the water side of the hole, or a long metal tube called a "clam gun" has to be slanted toward the dunes, it's almost too much. But to watch Thrasher do it, a little know-how, a little finesse, and you'll have dug your limit in no time. Moments after he starts his small hole, three medium-sized butter clams (about three inches wide) lay on the surface.

Thrasher's butter clam is just one of the treasures offered on Washington's shores. A rarer, meatier, treat lives out on the soft sandy beaches of the coast from California up to Alaska. Because it looks like a large unopened straight razor, it is called the razor clam. It is one of the first signs of spring in Alaska for historian Katherine Johnson-Ringsmuth, PhD '05. The low tides of the season reveal thousands of the meaty razor clams. People and bears flock to the shores to dig them up.

Johnson-Ringsmuth became something of a west coast clam history expert after researching her book *Buried Dreams: The Rise and Fall of a Clam Cannery on the Katmai Coast*. The clam canning industry in the west started at the turn of the century with the razor clam operations in Oregon. Washington, with its rich clam beaches, came on the scene in 1914 with canneries surfacing in Aberdeen, Grayland, and Copalis. Guy Halferty, heir to a large Oregon business, moved Pioneer Packing Company to Grays Harbor. Around the same time, prohibition pushed a large brewery in Aberdeen into becoming the Surf Packing Company, another clam cannery. As market demand increased, these canneries pushed north—toward Alaska near the town of Cordova.

Digging razor clams on the west coast is a much different business than going after the butter clams in the Puget Sound or the sturdier quahogs and mud clams on the east coast. The east coast clams can be dug with big dredges, while "razor clams are very delicate," says Johnson-Ringsmuth. "They have to be dug by hand." Which was why the western canneries were at a disadvantage, she says. "It took a lot of time and was expensive." The final blow was a massive earthquake in 1964, which wiped out the clamming beds in Alaska and the canneries around Cordova, effectively closing the west coast clam canning industry.

To dig razors people use one of two tools—either a narrow shovel or the long tube called a clam gun that is inserted several feet into the sand over the clam show. The razors are fast moving—they can dig down an inch a second and go as far as five feet deep—so it's either a few quick digs and you stick your arm in the hole, or it's a single long push and pull of the tube. Getting a razor clam is a bit of work, says Johnson-Ringsmuth, but it's worth it.

Because razor clams have recently been overfished and the stocks in Washington have dropped alarmingly low, the State Department of Fish and Wildlife is keeping a close eye on them. Now the clams may be harvested only during two periods of the year—one starting in October, and the other in the spring. In some years, the days open for harvest have ranged from 15 to 35. Fortunately, surveys this year suggest the population has increased on four of the five key razor clam beaches, which means a longer harvest period.

We must mention here the king of clams, the geoduck. The world's largest burrowing clam lives in deep water and is only harvested during very low tides. It can easily weigh nearly two pounds, but it takes longer than its cousins to mature, reaching its full size by 15 years.

Today, though, when most people think of clams, it's likely the smaller Manila that comes to mind. The classic eating Manila hitchhiked its way to Washington's beaches in oyster seed shipments from Japan. They live at about half-tide level and since their siphons are short, they only bury themselves two to four inches deep.

Its cousin, the native littleneck, has about the same size and appearance, only where the manila is oblong, the littleneck is rounder.

It is the littleneck and the Manila that stole the scene in the 1950s, around the time restaurateur and folk singer Ivar Haglund made the clam the center of the Seattle seafood scene with his "Acres of Clams" restaurant on Alaskan Way. Promoting clam culture and delighting patrons with his witticisms like "keep clam," and "man can live on clams alone," he whetted the region's appetite with his steamer clams and chowders.

Ivar even urged that a stamp be created to celebrate the humble bivalve. "Clams keep their mouth shut," he wrote to Washington's U.S. Senators years ago, and they "never stick their neck out when the enemy is around."

Also a folk singer, Haglund got the name of his restaurant from a regional folk song from the 19th century. The piece describes a settler who tried prospecting for gold, endured hardship, and finally gave up and settled along Puget Sound. The last verse :

{ No longer the slave of ambition
I laugh at the world and its shams
As I think of my pleasant condition
Surrounded by acres of clams. }

For a video and more details about clamming in Washington, visit wsm.wsu.edu.

photos *by* Matt Hagen

:: *from page 14*

They're also periodically looking at where seniors are living, how the rental market is behaving, and whether affordable housing, which was required under the Growth Management Act in 1990, has remained affordable.

GLENN CRELLIN BY ROBERT HUBNER

For much of Crellin's time at WSU, he's been reporting on the significant rise of housing prices throughout Washington, and in particular in the Puget Sound region. It's definitely an exciting market to watch, he says. The market prices peaked in 2007; then just a year ago, reports showed that sales of existing houses in Washington had dropped more than anywhere else in the country. Crellin provides the context: Our state's decline started later than in most other parts of the United States, which is one reason it was so precipitous.

His expertise, while focused on the Pacific Northwest, is of national interest. This fall, Crellin presented to the California Association of Realtors his outlook for real estate markets nation-wide and in particular what was happening in the Pacific Northwest.

A few weeks ago he noted that while home prices around the Puget Sound are no longer plummeting, another downturn is impending, particularly in commercial real estate. As leases run out, many businesses that have been affected by the down economy won't be renewing their contracts, and new construction has stalled, he says. "There are some concerns for the commercial side of the market," he says. In addition, the $8,000 first-time homebuyer tax credit is due to expire December 1, which may stall new home purchases. Yes, housing is more affordable and the summer saw more activity, he says, "But we are certainly not on solid ground yet."

A century of friendships

by Hope Tinney :: The 1909/1910 Chinook yearbook devoted a full page to "The Installation of the Kappa Sigma." In the text W.M. Coulter, a founding member of the first national fraternity at Washington State College, notes that the event "marks a new epoch in the fraternal life of the College."

Indeed, according to William Stimson's student history of WSU, *Going to Washington State*, by 1918 there were seven national fraternities on campus and four national sororities, in addition to a handful of local fraternal groups. Concerned that students were spending more time on their social lives than their studies, the faculty created a committee in 1911 "to regulate student activities in the interest of better scholarship." For his part, President Enoch Bryan appointed a dean of women to keep tabs on the behavior of young co-eds.

The dean of women didn't last, but the Greek system certainly did.

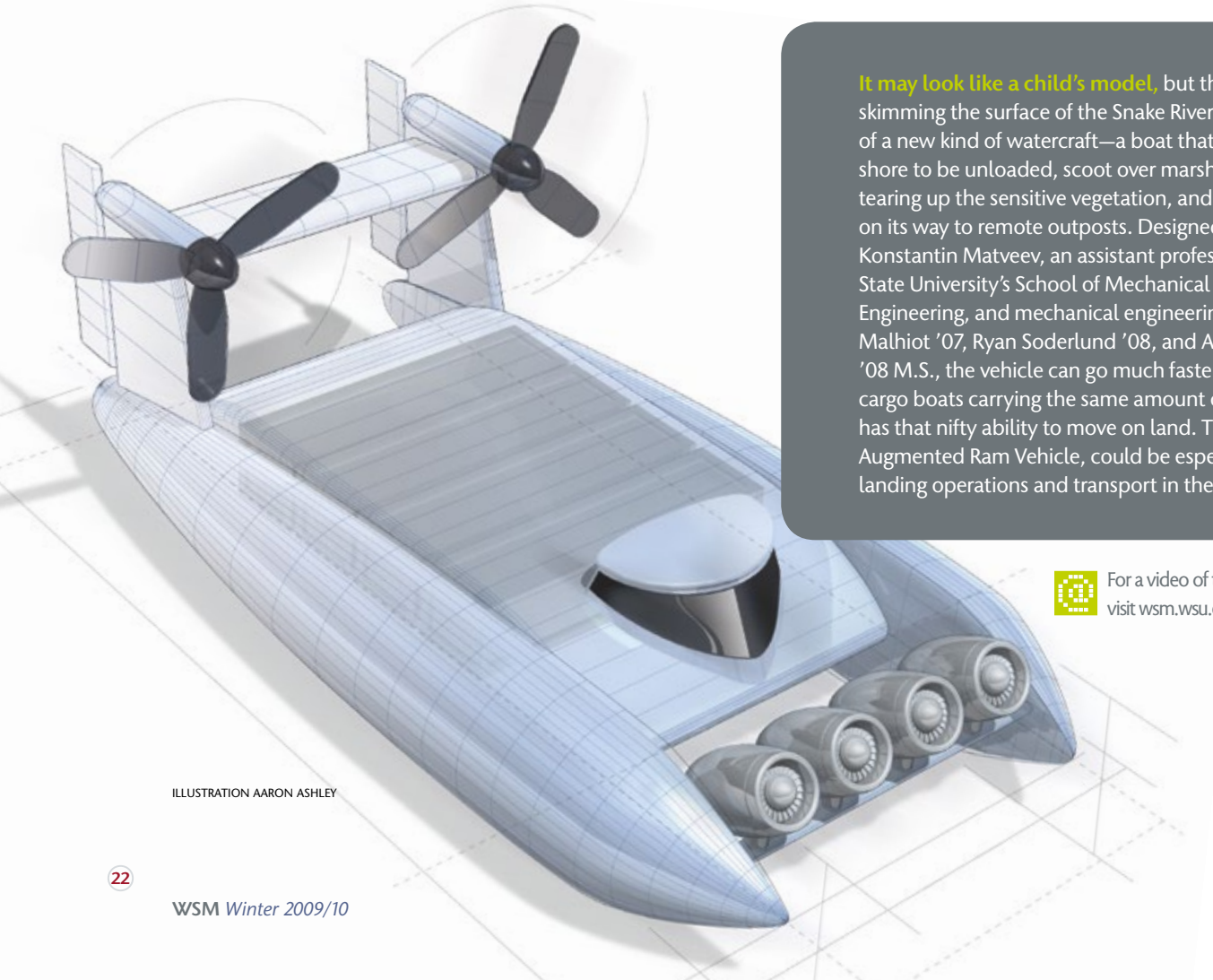


ILLUSTRATION AARON ASHLEY

It may look like a child's model, but the four-foot boat skimming the surface of the Snake River is a prototype of a new kind of watercraft—a boat that can run up on shore to be unloaded, scoot over marshy ground without tearing up the sensitive vegetation, and zoom over snow on its way to remote outposts. Designed and built by Konstantin Matveev, an assistant professor in Washington State University's School of Mechanical and Materials Engineering, and mechanical engineering students Zach Malhiot '07, Ryan Soderlund '08, and Alex Ockfen '07 B.S., '08 M.S., the vehicle can go much faster than conventional cargo boats carrying the same amount of weight—plus it has that nifty ability to move on land. The PARV, or Power Augmented Ram Vehicle, could be especially useful for landing operations and transport in the arctic.

For a video of the fast boat in action, visit wsm.wsu.edu.

WSU's Greek system students kick off a celebration of a century of Greek life at Washington State. Visit wsm.wsu.edu/ourstory for more photos and stories about Greeks at WSU.

PHOTO ROBERT HUBNER

Today there are 40 fraternity and sorority houses at WSU and 13 more fraternal organizations without houses. And the social activities of Greek members are still a concern for college administrators. But a century after the first fraternity opened at WSU, it's hard to imagine WSU without them.

Besides providing students places to live, the Greek organizations encourage them to be involved on campus, says Anita Cory, director of the WSU Center for Fraternity and Sorority Life. From the beginning Greek system students were active in student government. "I can't think of a time that one of (the ASWSU officers) hasn't been Greek," says Cory, who has worked at WSU for 16 years.

And students who have been in a fraternity or sorority tend to stay involved with WSU long after graduation. While the Cougar Nation is made up of loyal alumni from all across campus, independents and Greeks alike, leaders of the WSU Alumni Association, the WSU Foundation, and even the WSU Board of Regents often turn out to have once been part of the Greek system. Twenty out of the 37 past presidents of the WSU Alumni Association and nearly a quarter of all WSUAA members have had Greek affiliations, for example.

"We all kinda say we had the four best years of our life here and we want to give back," says Doug Thomas '87, president of the Greek Alumni Association. Life in the Greek system "provides a one-of-a-kind opportunity for young men and women to take on leadership roles and develop lifelong friendships," says Thomas, who still gets together with four of his best friends from his fraternity and their families every Christmas.

Thomas and others point out that Greeks are responsible for a disproportionately high percentage of gifts to the University. While they comprise somewhat less than 20 percent of WSU alumni, they contribute more than 60 percent of gifts, he says.

The list of notable WSU graduates who were also Greek is a long one, says Bob Smawley '52, from Edward R. Murrow to former Governor Mike Lowry and businesswoman and philanthropist Phyllis Campbell.

While members of the Greek community are proud of that legacy, their reasons for continued support focus on the future. "It holds the possibility of providing wonderful opportunities for social, intellectual,and moral growth," says Margery Rounds Muir '54, who served for years as an advisor to her sorority. Not everyone takes advantage of those opportunities, she adds, but the students who do will emerge from their college days more mature, more capable, and more confident of their abilities to make a difference. «

Coordinates

Taken a trip lately? Let us map it. Whether you're working with street kids in Bolivia, providing cover for ground troops in Afghanistan, or simply gaining a new perspective through your travel and would like to share it with your fellow Cougs, send us your ideas: wsm@wsu.edu.

wsm.wsu.edu/coordinates

JEREMY MAYES

:: *by Tim Steury* ::

how we eat is what we are

AS ONE WHO LOVES TO EAT, it is with some trepidation that I approach this subject of obesity. I'm probably considered overweight by those who determine these things, though I'm fairly confident I'm not obese. When I look down, I have an unobstructed view of my feet, and even though my inseam has not kept up with my waist size, I don't weigh all that much more than I did when I graduated from high school 40 years ago. Maybe 20 pounds. Give or take 10 or 15. You know how it is.

At least I wasn't fat as a kid. And neither were most of my generation. But that's changed, and pretty dramatically.

The Centers for Disease Control and Prevention (CDC) has been conducting an extensive study, called the National Health and Nutrition Examination Survey, of American health since the 1950s. As a result, we have a clear picture of how we've changed, in both size and health. In the 1960s, 24.3 percent of American adults were overweight. "Overweight" is defined as having a body-mass index of more than 27. (Body mass = kilograms/meters^2.)

According to this calculation, a six-foot-tall man is overweight if he weighs more than 204 pounds (uh-oh). A five-foot-tall woman is overweight if she weighs more than 140 pounds. Even though body-mass index is falling out of fashion as a measurement, it still serves well for comparison. Using that measurement, today over 60 percent of Americans are overweight. One might argue that the definitions are overly inclusive (some would say harsh). But the fact of the matter is, American men on average are 17 pounds heavier than in the late 1970s. American women on average are 19 pounds heavier.

More disturbing than us corpulent adults, however, are our kids—who are ballooning. The proportion of overweight children, age 6-11, has more than tripled since the CDC study began. According to Ruth Bindler, WSU College of Nursing, slightly more than 17 percent of youths aged 2-19 are above the 95th percentile in weight.

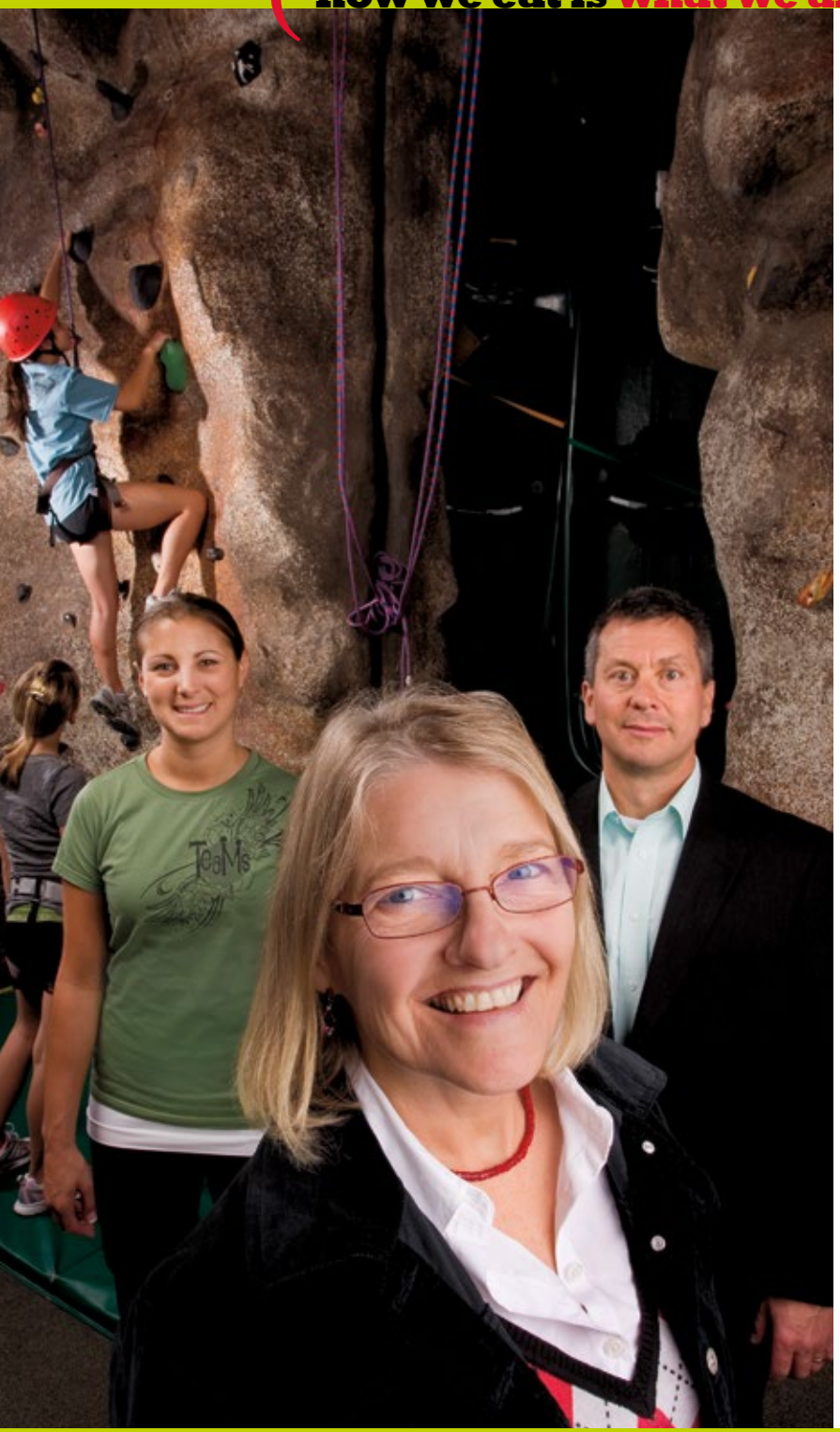
If being overweight were simply a matter of buying bigger clothes, no big deal. It's the resulting health problems that concern Bindler and her research partner Kenn Daratha.

Bindler is a pediatric nurse and head of the College of Nursing's doctoral program. Daratha is an assistant professor in the Informatics Program at WSU Spokane.

"We know that a huge percentage of obese children will become obese adults," says Daratha.

Bindler and Daratha direct a multi-year USDA-funded project, called TEAMS (Teen Eating and Activity Mentoring in Schools), in an attempt to address what many consider an epidemic of overweight and obesity in this country. TEAMS engages 244 Spokane children in after-school exercise programs and as research subjects. The goal of the project is to improve the health of middle school students and prevent the development of obesity during adolescence.

Bindler and Daratha organize lacrosse games and snowshoe expeditions and take the children rock climbing at REI, in an attempt to reverse a distressing prevalence of ill-health indicators among increasingly younger



children. An extension nutrition educator, Summer Goetz, provides nutritious snacks.

TEAMS is composed primarily of middle-school kids who have no other after-school opportunities.

"Two-thirds of our children are not meeting the daily recommendation of 60 minutes of moderate to vigorous physical activity," says Daratha. "Two-thirds of the kids also spend in excess of two hours of entertainment screen time." Daratha says encouraging physical activity is the most effective approach to countering overweight and related health problems. Changing dietary habits is considerably more difficult.

In spite of the program's goals, "We were told initially that we weren't going to get kids who are obese; they weren't going to sign up," says Bindler, obviously pleased that those kids proved the skeptics wrong. Half of the participants are overweight or obese, indicating a willingness to change behavior if provided the opportunity.

Many of the physical activities included in the study are ones that children haven't had much exposure to, such as lacrosse. The reasoning is they're provided a level playing field, with no initial skill advantage within the group.

One of the problems leading to decreased physical activity among the general school population is an increasing exclusivity. If a child decides at age 13 that he wants to start playing basketball, says Daratha, he is faced with peers who have been playing in organized leagues since they were five or six.

Add to that the decreasing opportunities in general. Responding to the need to cram in more instructional time in reading and math, schools have been dropping not only organized physical education classes, but recess. That trend is highest in lower income schools.

The current sport system is set up to benefit the kids who need it least, says Daratha. "We're trying to involve as many kids as possible in physical activity."

Bindler, Daratha, and others are particularly concerned about the prevalence of metabolic syndrome in adolescents. Metabolic syndrome is a diagnostic construct, a combination of indicators of diabetic risk. Increasingly, children are showing such signs as high blood pressure, hypertension, and insulin resistance.

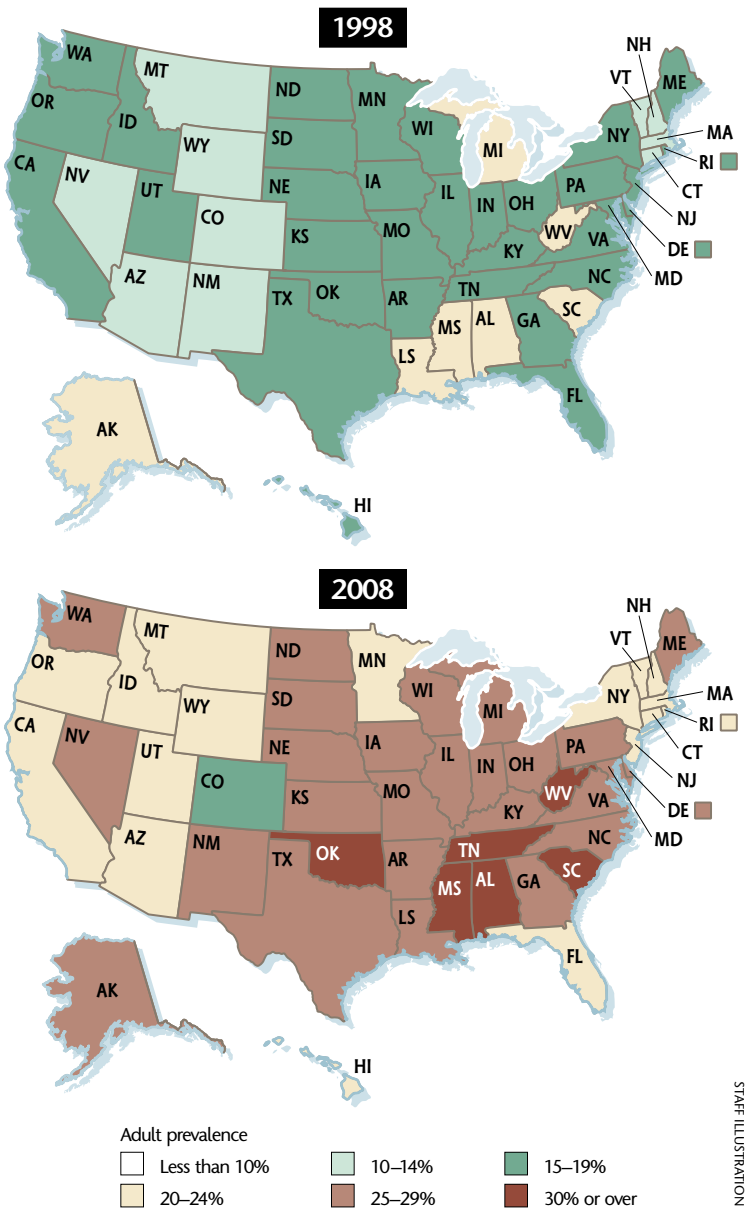
In a recent paper, Bindler and Daratha note that girls are showing an alarming increase in waist circumference. "Waist circumference, a measure of abdominal adiposity," they write, "has been associated with incidence of cardiovascular disease in adults. In children and adolescents, waist circumference has been identified as a predictor of insulin resistance."

"The prediction now," says Bindler, is that of babies born today, one in four boys, and one in three girls, will develop diabetes in their lifetime."

TEAMS researchers Ruth Bindler (*center*), Kenn Daratha, and nutritionist Summer Goetz with active kids at the Spokane REI climbing wall. *Photo Bruce Andre*

Percent of obese in U.S. adults

(BMI ≥ 30) *Source:* Centers for Disease Control and Prevention



STAFF ILLUSTRATION

For more infographics charting national and international weight gains visit wsm.wsu.edu.

Sleep it off

by Cherie Winner :: Forget working off those extra pounds. If you really want to lose weight, put on some comfy sweats, set aside a block of time, ban all interruptions—and take a nap.

Better yet, get at least eight hours of sleep every night.

That's the advice of Washington State University neuroscientist James Krueger, an expert on what goes wrong when we don't get enough sleep. Besides dimming our ability to concentrate and making us more vulnerable to infections, sleep deprivation also stokes our appetite and ratchets down our metabolism—a perfect recipe for weight gain.

"We have an epidemic of obesity in this country because, in part, people aren't sleeping," says Krueger. Experiments done with human subjects have repeatedly shown a link between sleep loss and hunger. "If you restrict your sleep, you eat more and gain weight," even though you're active for more time each day. "If you get your proper amount of sleep, you actually eat less."

With Eva Szentirmai and Levente Kapas of WSU Spokane, Krueger has investigated some of the small hormones that maintain the body's three-way balance among sleep, the craving for calories (hunger), and how fast we burn calories (metabolic rate).

One hormone, ghrelin (GRAY-lin), makes us feel hungry and also inhibits sleep. Krueger's research team recently discovered that a related hormone, obestatin (oh-be-STAT-in), does just the opposite: it inhibits food cravings and promotes sleep.

The hormonal mix in our systems regulates our behavior, but that regulation is a two-way street. Our behavior affects what hormones we produce. If you don't get enough sleep, the hormonal mix changes to enhance your appetite and increase food-seeking behavior (in other words, you get the munchies). When you're well-rested, the mix shifts toward more obestatin, which tamps down those hunger pangs.

To Krueger, it's no coincidence that the nation has both a high rate of obesity and a high rate of sleep deprivation. It's also no surprise that we're seeing both problems starting early in life, he says. "Children are staying up and playing with their computers, so they're voluntarily depriving themselves of sleep. As a consequence, they eat more and they're getting heavy."

It's possible that sleep-deprived people eat more because they feel stressed, but Krueger says stress doesn't fully account for the link between lack of sleep and increased hunger. In lab tests, rats stayed awake for days as they tapped a bar that sent current to an electrode implanted in a pleasure center in their brains. Like kids staying up late playing computer games, the rats voluntarily chose to skip sleep. They probably weren't stressed about it as they would have been had the researchers prodded them to stay awake—and still they gained weight.

Krueger, who for years has been urging people to get more sleep, thinks the hunger connection might be what finally gets us to take our sleep needs more seriously. In our society, it's common and even fashionable to shrug off sleep deprivation; but almost everyone is concerned about their weight.

The cumulative result of these obesity related health problems is even more startling.

"This is predicted to be the first generation where the kids are going to live shorter life spans than their parents," says Bindler, referring to conclusions of a 2005 study published in the *New England Journal of Medicine*. According to the study, obesity has become so prevalent that the health problems associated with it are likely to affect people much earlier in life than is now the norm.

"Adults in their 40s are already having revascularization procedures," says Daratha. Revascularization is a surgical procedure to restore proper oxygen and nutrients to the heart.

Daratha wonders whether 12-year-olds who already have hypertension and insulin resistance will even make it into their 40s.

"When will they need revasc? Twenties, thirties? Those are driving questions."

Every time Bindler and Daratha's team assesses a child, it captures over 100 pieces of information about his or her dietary habits.

"B vitamins, dairy consumption, blood pressure—there's a tremendous depth of topics because of the commitment made early on," Daratha continues. "So we're really in an exciting phase," with data ready for analysis.

Others working on the project include Sue Butkus, an extension nutritionist in Puyallup; Tom Power, head of WSU's human development department; Mike Steele, a clinical psychologist who recently went to Auburn University; and Sarah Ullrich-French, an educational psychologist.

They also had a "host of students working for us this summer," says Daratha, through a program they call Advancing the Science of Early Adolescent Health. In fact, Daratha introduces me to his two sons, both WSU students, who are working with the program. Kelvin is a junior in civil engineering. Kristopher is a freshman in pre-med.

Student employees learn to conduct literature searches and reviews, write literature reviews, formulate search hypotheses, and analyze data, says Daratha. "They report that to us, which forms the basis for papers we write during the academic year."

How do pediatricians handle the epidemic? Do they understand what they're dealing with?

"One thing we're aiming to show," says Bindler, "one doesn't even need to do a blood test for lipids and insulin and glucose" to determine diabetic risk in the child. Blood pressure and weight status mirror what's happening in the body.

It's only recently, however, that pediatricians have shed their reluctance to label kids overweight or obese, she says. In the past, worrries that the family might be offended, or the child might suffer from resulting lack of self-confidence, overrode health concerns.

"Many times families think their child is normal because no one ever said anything to them."

On the other hand, even pediatricians' increasing willingness to address the problem offers only a partial solution, as only 38 percent of children are seen on an annual basis by a doctor.

With or without a doctor's attention, a lot of overweight children are headed for the same problems suffered by those much older.

"We don't know what long-term effect hypertension will have, when kids start out with it," says Daratha.

It's the same with diabetes, says Bindler. Consider the effects of diabetes—neurological changes, retinal problems, blindness, amputations. If a person starts to suffer the effects in 40s or 50s, that's one thing.

"It is very different if you start at 19. The cost to our economy and our health care system is pretty astounding."

According to a recent study released by the Centers for Disease Control and the nonprofit research group RTI International, overall obesity-related health spending has reached as much as $147 billion a year. Obesity is now responsible for 9.1 percent of medical expenditures, compared to 6.5 percent in 1998.

Americans may still be the portliest in the world, but other countries are catching up, including their children. Our obesity rate currently stands at 32 percent. But Great Britain is close behind at 27 percent. Even China is suffering from its newly discovered Western diet and its accompanying diseases. How is it that the World Health Organization is claiming that just in the last few years we've gone from under-nutrition to obesity being our biggest collective nutritional problem?

One of the more recent interesting books on our diet and health is Michael Pollan's *In Defense of Food*, which follows closely on his popular *Omnivore's Dilemma*. The latter is the object of WSU freshmen's attention this fall in the Common Reading Program. Pollan will be visiting campus in January.

In his *In Defense of Food*, Pollan synthesizes a broad range of literature that addresses the subject of nutritional quality, from Marion Nestle's provocative *Food Politics* to Harvey Levenstein's insightful *Paradox of Plenty*. Pollan is hardly alone in arguing that as food has become increasingly refined, it has had a negative effect on our health. What he has accomplished is synthesizing an enormous amount of information on the effect of our current diet and placed it on the plate in front of us.

The most basic refinement of our food, of grain, has increased its storage life and makes it easier to digest. However, as grains are refined, by definition they lose their essential nutrients, including the germ and bran, leaving primarily carbohydrates. Refined carbohydrates have been implicated in chronic diseases, heart, disease, diabetes, and some cancers. But a more significant observation is what Pollan calls one of the simplest relationships among foods, the zero-sum: "If you eat a lot of one thing, you're probably not eating a lot of something else."

Bindler and Daratha are well aware of this relationship. About a third of the children in their study get the recommended amount of fruit each day. Only a tenth get the recommended amount of vegetables.

"And if you take away ketchup and French fries..." says Bindler.

Interest of the Consumer

"Economists tend to roll their eyes at Michael Pollan," says economist Trenton Smith. "He ignores the benefits of processed foods," such as storage life and the comparative ease of distribution.

"On the other hand, he seems to have the science right."

Right enough at least for Smith, along with fellow economists Hayley Chouinard and Philip Wandschneider, to examine Pollan's premise, that a diet composed largely of processed food can be hazardous to your health, from a market perspective.

In a recent paper, "Waiting for the Invisible Hand: Market Power and Endogenous Information in the Modern Market for Food," the economists ask, "Should the nutritional quality of the modern American diet be viewed as the natural outcome of an efficient market?"

The authors approach this question a little differently than might be expected. They point out that they do not emphasize the usual culprits of market failure, namely the moral hazard associated with health insurance and agricultural subsidies. Among other things, agricultural subsidies, particularly for corn, have been blamed for the ubiquitous increase in the use of high fructose corn syrup and its resulting health effects.

Taking a different tack, the economists argue that "the market outcome we observe is the product of a costly information problem,

Trenton Smith at the Tukey Orchard organic farm: "A credence good is a step beyond. Even after you've consumed it, you don't know the quality." *Photo Robert Hubner*

which has been exacerbated historically by a number of key policy decisions."

That costly information problem refers to our understanding of the food we eat. Citing classic economics papers, they lay out various relationships between consumer and consumed. "Search goods" are those that the consumer knows the quality of. The consumer thus will search for that

JAVIER ALDANA

good at the lowest price. Consumers do not know in advance the quality of "experience goods," but only after the goods have been consumed.

And then there are "credence goods."

"A credence good is a step beyond," says Smith. "Even after you've consumed it, you don't know the quality." Credence goods represent much of our current processed food—which in turn represents much of the interior of the modern supermarket (to the exclusion only of the fresh food on its periphery) and just about everything you buy at a fast food restaurant.

Smith likens a credence good to car repair or modern medicine. The mechanic knows everything about your car. You know nothing. All you want is for your car to run. "With processed food, it's much the same thing," says Smith.

Who knows how that list of 39 mysterious ingredients is going to affect your future health? And what exactly is disodium guanylate? It can't be bad for you if it's listed as an ingredient, can it? So you eat whatever it is that contains the disodium guanylate, and the additive satisfies with miraculous effect some basic salt, fat, and sugar cravings. And all you can do is just hope that the "Good For You!" label is serious.

Smith and his colleagues point to a number of changes in our diet that have led to what they consider the dietary market breakdown. But what it boils down to is "costly search." Time and literacy (and not just a casual version of either one) are required for a consumer to understand links between diet and health. Which fat is good, and which bad, for you this week? Was it unsaturated or... Can you remember?

Not only do experts disagree, but information on food labels is hardly forthcoming. There may be plenty of information on a package. But it offers little insight as to what effect the food might have on your health.

At this point, the authors suggest in a footnote a simpler term for the avoidance of "costly search," and that is "habit." In other words, it's just too hard to figure out the link between processed food and its health merits, so consumers settle for the status quo.

Perhaps an even stronger barrier to market change is the consumer's acceptance of marketing and branding. "More Fiber!" sounds good when you just caught a soundbite about needing more fiber in your diet. And if your favorite brand of cereal adds "More Fiber" on its box, well, then, Grrrrreat!

Also, the nutritional information that consumers receive comes overwhelmingly from the producers themselves, through advertising. According to the USDA Economic Research Service, all USDA expenditures on nutrition education, evaluation, and demonstrations in 1997 added up to less than 5 percent of the amount spent by the industry on food advertising. Ask your children how much USDA nutritional information they picked up watching cartoons last weekend.

Smith points out that in the 1930s, in response to concerns over inconsistent quality in canned goods, Congress considered updating the 1906 Food and Drug Act to include a grading system. They proposed standards for canned foods signified by grades that could be placed on can labels by manufacturers.

Although manufacturers had supported an earlier watered-down version, they adamantly opposed more specific grading. The legislation was also opposed by mass circulation magazines such as *Good Housekeeping*, as food companies were their biggest advertisers.

"Placed in historical context," the authors conclude, "it becomes apparent that the modern American epidemic of diet-related chronic illness is at least in part the product of a fundamental failure of the market to deliver high quality foods to the consumer."

Still, they are optimistic about the possibility for change, citing recent policies requiring labeling of trans fatty acids, which are produced commercially through partial hydrogenation. Although we were formerly encouraged to eat trans fats, it was later discovered that they had no nutritional value and in fact were even worse than the feared saturated fats they were meant to replace.

It turns out that scientific truth on food labels can indeed lead to behavior change. Once the National Academy of Sciences determined that there is no safe level of commercially produced trans fat in the diet, that it leads to heart disease, nearly every trans-fat product on the market has been reformulated.

"That this transformation took place nearly a century after the widespread adoption of partially hydrogenated vegetable oils is a lesson that should not be lost in future efforts to remedy the credence problem with processed food products."

Promoted as lower cost and healthier than butter and lard, partially hydrogenated vegetable oils were used to make margarine and Crisco. Butter and lard are once again perceived by many as superior not only in taste, but nutrition.

Smith, Chouinard, and Wandschneider propose two principles toward lessening the credence problem and improving the value of our food supply.

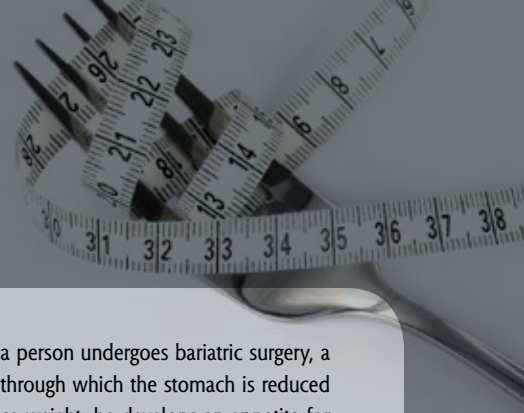
For their first principle, they cite their progenitor Adam Smith: "Consumption is the sole end and purpose of all production; and the interest of the producer ought to be attended to only so far as it may be necessary for promoting that of the consumer." Pretty radical stuff when applied to the mid-section of a typical supermarket.

Not only does this open the way to a natural preference for healthy food, if consumers can understand what they're getting, they argue, it also implies "that the interests of large producers should not be given first—nor even, perhaps, last—priority when implementing new regulations."

They also insist that food policy should be conservative, that it should err on the side of the natural, reflecting the conservative precautionary principle more generally observed in European health policy.

"There is no reason," they argue, "food standards could not be developed that inform the consumer, in effect, of the extent of processing—how far removed this product is, if you will, from the foods your great grandmother ate." ⊗

To find out the top ten caloric fast foods, and see a gallery of vintage food advertisements, visit wsm.wsu.edu.



Gut feelings

A very curious thing happens when a person undergoes bariatric surgery, a procedure performed on the obese through which the stomach is reduced in size. Not only does the patient lose weight, he develops an appetite for fruits and vegetables and loses his fondness for sweets and fat. In fact, says neuro-endocrinologist Robert Ritter, evidence shows that weight loss following bariatric surgery is not due to smaller stomach size or mal-absorption. Rather, it's an endocrine change, though why is not yet understood.

"If we can mimic endocrine change, we don't need the knife anymore," says Ritter.

That "if," though, is a big one.

Communication between the brain and the gastrointestinal tract can be very complicated. That's the one clear message Ritter derives from his research on satiation signals to the brain.

Ingested energy—food—passes through three distinct body compartments, says Ritter: the gastrointestinal tract, storage, and catabolic. Each provides signals that control food intake. Some of these signals may provide a pharmaceutical antidote to overeating someday. But so far, there is no silver bullet.

"Pharmacological approaches are transient," says Ritter.

For one thing, isolating and synthesizing those factors present a challenge. But another is that those signals can be overridden.

Take leptin, for example. Leptin is a recently discovered hormone released by fat itself, providing a satiating signal to the brain. Leptin reduces food intake by reducing meal size and may work by enhancing other peptide signals from the GI tract. However, people who need intervention have already developed a resistance to its satiating message.

Ritter's research is funded by two National Institutes of Health grants. One covers his work with satiation inducing peptides CCK, GLP-1, and Peptide 1, and their interactions. The other grant focuses on glutamate, probably the most common excitatory neurotransmitter.

Neurotransmitters are chemicals that relay and modulate signals between neurons and other cells. It's interesting, says Ritter, that the neurons themselves on the vagus nerve, the nerve that connect the GI tract and the brain, produce receptors to the same transmitter they receive, which is glutamate.

Ritter is interested in why these receptors are on the neurons and how they're used. He believes they fine-tune the strength of the sensory signal. A peptide released from the gut activates the vagus nerve. The signal is then made stronger or weaker by changing the amount of glutomate interacting with the receptors on the nerve. Blocking the receptors causes animals to increase meal size.

"So you can have all kinds of signals coming in, and if you turn the volume way down, you can still eat a bigger meal."

"There are so many things that influence intake," says Ritter. "The size of the plate, who you're with when eating, all these things can dramatically change the way you eat. But that doesn't mean that physiological feedback signals, from a clinical standpoint, may not be our first line to intervene."

:: *by Hannelore Sudermann* ::

ROBERT HUBNER/JOHN PAXSON

cUts

LAST WINTER Frank Blethen, CEO and fourth generation owner of *The Seattle Times*, stood in front of Washington State University's graduating class and warned of an end to a free press. The students may have been hoping for a blustery send-off. Instead they heard a call to arms. "America is in crisis," he told them, describing an underfunded and collapsing newspaper journalism business. Newspapers play a crucial role in a democracy, he told them; they report on government, public issues, and community life.

Blethen, a member of WSU's Edward R. Murrow College of Communication's board of advisors, made his speech not just for his own struggling business, but for a whole industry. Newspapers around the country are in bankruptcy, others have just gone away. Since Blethen spoke in Pullman, the *Rocky Mountain News*, *The Ann Arbor News*, and Seattle's other news institution, *The Seattle Post-Intelligencer* (*P-I*), have ceased printing. With the losses of revenues, reporters, and even entire businesses, 2009 may be the worst newspaper year on record.

Media critic A.J. Liebling warned of this day, though it was years before it came to pass. In his 1964 book *The Press* he wrote: "The function of the press in society is to inform, but its role in society is to make money." As revenue dependant businesses, newspapers are doomed to fail.

You've probably heard it already—papers around the country are weakened by shrinking advertising revenue, especially as internet services like eBay and Craigslist capture much of the classified ad market. Then the collapse in the U.S. economy pushed more papers over the edge. The notion that newspapers are struggling because they have lost their audience, or that they have lost credibility, is not accurate, according to a revealing *State of the News Media* report released by the Pew Project for Excellence in Journalism last spring. It's about revenue.

On March 17 Seattle transformed from a city with two daily papers to one. The *P-I*, a fixture since 1863, ended its print edition and emptied out its second-floor newsroom. "The day the *P-I* shut down was a profound day here," says David Boardman, executive editor of *The Seattle Times*. "It certainly wasn't a day of celebration." The region lost more than 100 journalists, many of whom were stellar writers and reporters who had covered the city and community for decades.

"But I think we're far better off with one healthy newspaper than two struggling newspapers," says Boardman. "Healthy" is a relative term. The *Times* also suffered major reductions in the past few years. Citing serious revenue shortfalls in the spring of 2008, Blethen announced cutbacks and layoffs, including up to 30 employees from the newsroom. Then the economy worsened and last November he announced another 10 percent reduction in the overall workforce including in his newsroom of 260. Today the news staff is much leaner, admits Boardman. It lost

WENDI DUNLAP

After covering Seattle for146 years, the *Seattle P-I* dropped its print edition and cut its news staff to 20 last spring.

production workers, copy editors, and feature reporters. But in August Blethen told *The New York Times* that his paper may have weathered the storm. It was seeing a return to monthly profit, and its circulation is up. It will survive for the next generation of Blethens including his son Ryan '99.

Still, newspapers around the Puget Sound have vanished. In the 1970s, Auburn, Kent, Bellevue, and Renton each had their own dailies. By the 1990s, those dailies were bought up and consolidated to two papers, the *South County Journal* and the *Eastside Journal*. Then in 2002, they became one paper, the *King County Journal*, which stopped publishing in 2007. And *The Seattle Times,* which once had an eight-person bureau on the east side of Lake Washington, now has just two reporters covering one of the most populated areas of the state from the Seattle newsroom.

Who is out there attending city council meetings and covering museum openings? Who is investigating stories in the public interest or writing the slice-of-life pieces that help communities to define themselves? Who is watching the politicians?

A few years ago, reporters had to fight for a spot at the press table at the state capitol. More than 30 reporters covered the legislature in 1990. By last July that number had dwindled to seven. While the state's leaders may be enjoying the lack of scrutiny, they recognized the financial plight of the newspapers and the dangers of no media coverage. In July they offered a 40 percent business tax break.

The Seattle Times, which now just has one reporter in Olympia, is sorting out how to do more with less. Boardman says he is not really fretting about just how far he can spread his remaining reporters, but concedes that the Times's editors have to be more strategic about directing coverage so stories and major events don't get missed. "We certainly feel a lot more burden from it," he says.

The dilemma isn't specific to Seattle. *The News Tribune* in Tacoma and *The Spokesman-Review* in Spokane have both cut their staffs. The state also lost two smaller papers with closing of the *Cowlitz County Advocate* and the *Lewis River News*.

Back to the Future What's left? Seattle, Tacoma, Vancouver, Spokane, the Tri-Cities, Bellingham, and Yakima still have papers, though with reduced staffs. And employees have had to take furloughs and accept cuts to their own salaries to keep their jobs. Some of the most talented and experienced writers and editors have moved out of journalism altogether.

But the daily papers are now working together to find ways to survive. Once competitors, the *Times* and the *News Tribune* now meet at the line between King and Pierce counties where they trade papers for distribution. They also trade stories from newsroom to newsroom.

The idea of an exchange came from Boardman, who realized that by sharing resources with other trusted news entities, the readers would have a better, more complete product in the end. "We all just sort of held hands and took the dive together," he says. "The people of the state are better served by us sharing resources."

Nation-wide one out of every five people working in a newsroom in 2000 was gone by the beginning of 2009, according to the Pew Center for Research. There are fewer people telling stories and fewer stories being told.

An Information (Dark) Age? While newspaper reporters may not be showing up at school board meetings and courthouse hearings, there are still eyes and ears out there—and people willing to report back to the public. In some cases it's the agency itself broadcasting news online.

The Washington Secretary of State's office has a blog. King County has a news blog, a council budget blog, and even a solid waste disposal blog.

In other cases, it's the citizens in the community who do the reporting. West Seattle has a neighborhood news blog that started in 2006 as a volunteer effort, but recently became a business by selling advertising on its Web site. One day this summer, the frequently-updated site put out an alert for a hit-and-run sideswiper, covered state cuts in the Department of Corrections, noted a bridge closure, and wrote about the opening of a new pizza resteraunt.

It's one of the better community blogs out there, says Boardman. It has good news content and credible reporting, and many of its contributers have worked as journalists for other publications.

The West Seattle blog recently joined with *The Seattle Times* and other Seattle-area community blogs including the Magnolia Voice and the Rainier Valley Post in a Networked Journalism Pilot Project to find ways the newspaper and the local blogs can collaborate on news tips and reporting. The project is funded by the John S. and James L. Knight Foundation.

Not all online news sources are equal, says Lawrence Pintak, dean of WSU's Murrow College.

LAWRENCE PINTAK, COURTESY *EGYPT TODAY*

The future of journalism could be in the internet, he says. But most Americans don't have the time or patience to wade through everything. "There's not enough time in the day to sit in front of C-Span," he says. "It is essential that we have journalists to provide those summaries for us…to filter the information into a digestible form."

The past few years have brought the rise of the "citizen journalist," people who report through blogs, Web sites, and major news organization forums. "That can be a good thing," says Pintak.

Armed with video cameras and digital recorders and with access to the internet, anyone can communicate to the general public. There are a lot of eyes and ears out there, and they're putting detailed information about major events online.

Some are activists promoting a cause. Some are blogs that provide more opinion than fact. They aren't all credible, and not all should be trusted. "At the end of the day it's just every Joe on the street and every Jill on the street writing about what he or she sees... Just because you have a computer and a video cell phone doesn't mean you are a journalist," he says. "We leave ourselves prey to misinformation and disinformation. It can be very dangerous."

The Murrow College could have a role training citizen journalists—providing workshops on the mores and ethics of journalism, schooling on how to access public records and meetings, and the basics of media law—things reporters once learned from those whom Pintak calls the "grizzled old editors in the newsroom."

And society is going to have to learn media literacy. "Everybody doesn't necessarily know that Web site X is a left-wing biased political screed and Web site Y is a right-wing biased political creed and that Web site Z is a balanced, credible news source," he says.

The Web is a cacophony of voices where everyone has access to say what they want. "The key is to help readers navigate this tidal wave of information for the best source," says Benjamin Shors, a clinical assistant professor in the Murrow College who teaches topics including reporting on the government. While most of his students won't graduate into newspaper jobs, they'll leave knowing how to find trusted news sources as well as how to get information for themselves, he says.

Pintak believes communications schools like the Murrow College could shape journalism of the future both online and off. "We have two PBS stations, radio, and satellite campuses," he says. Nobody is as well placed to try out new things. "We can serve as a laboratory for new models of journalism."

Nonprofit journalism is a possible course. "There's obviously so little investment in the industry right now. Universities are in a unique position to work with foundations to try out new approaches and find out what will work." He can see one scenario where news agencies, like universities, would receive endowments from foundations and run with a portion of the revenue coming from gifts rather than advertising.

And while the internet is a very good system for news delivery, nobody has really figured out how to make it pay—how to cover the salaries and health care for the journalists out there gathering the news of the community.

"No one knows how it's going to shake out," says Pintak. And for a while, it's going to be confusing. "But something will inevitably take the place of the old model."

The Edward R. Murrow College of Communication started as a department in 1964. In 2008, it became a college with approximately 600 students studying journalism, communications and public relations.

ROBERT HUBNER

Reinventing the Field Photographer Rajah Bose '02 knew he could be laid off from *The Spokesman-Review* from the day he started the job in January 2008. "It seemed like a natural step to come up to a bigger newspaper," he says of his departure from the *Tri-City Herald*. The *Spokesman's* editors told him they didn't expect any more cutbacks, but there was always a slim possibility. "Still, I would have taken the job if it was a guaranteed layoff," he says. "I needed to move up to the next step, and I was able to work with the people I really wanted to work with."

He had less than a year. That October editor Steve Smith called a meeting and named 22 people, including Bose, to be laid off. Bose felt worse for his colleagues than for himself. "People lost their jobs that had been there eight years, people who had families to support," he says. "I don't have anybody at home waiting for a check. As long as I can get dog food, I'm OK."

Bose lived on unemployment for a couple of months, and fielded calls from friends and colleagues around the state who offered encouragement and even freelance work. Today, he has a new work life in an aged brick building a few blocks south and east of *The Spokesman-Review*. Bose and Brian Immel '07 and another friend have set up a creative studio. It's their place to do...whatever. Projects, meeting clients over a wedding shoot, portraits—Bose now has the space.

"I shot something for *The New York Times* last week, I had a wedding the weekend before that," he says. "I'm still telling stories." But there's less shooting and more meetings, and much more keeping track of bills, schedules, and paperwork. "Still, I'm having a great time with it," says Bose.

Today, if he had a chance to go back to the paper, he'd probably pass. "I have to lay down my own track," he says. "I would rather do what I'm doing now and see where it goes than take that risk again."

"Reinvention does not usually come from managers prudently charting course. It tends to come from risk takers trying the unreasonable, seeing what others cannot, imagining what is not there and creating it. We did not see much of it when times were better. Times are harder now." —the Pew State of the Media Report

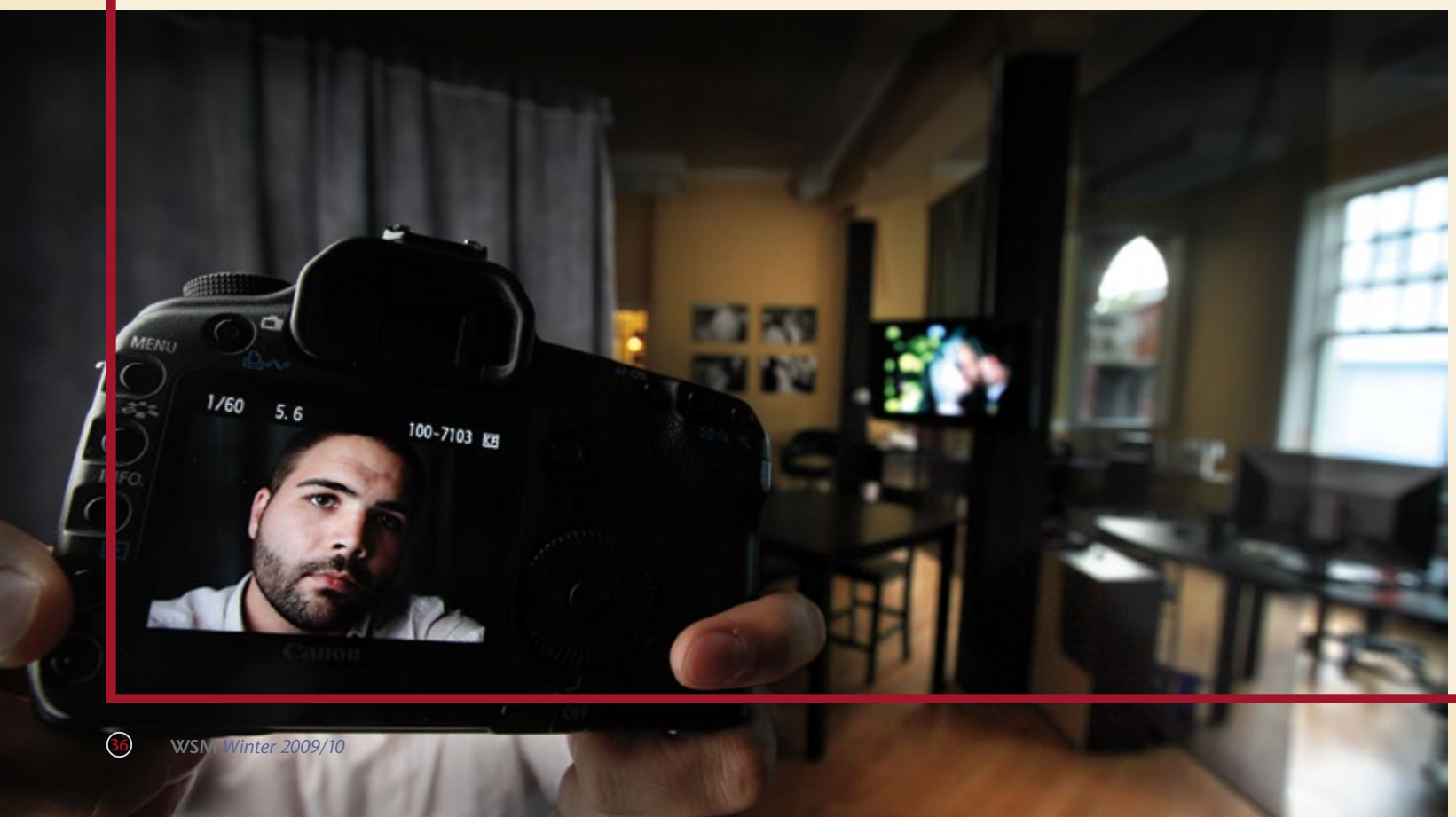
The future is in the hands of the next generation of journalists—those who have sampled life at a newspaper and have been forced to move on.

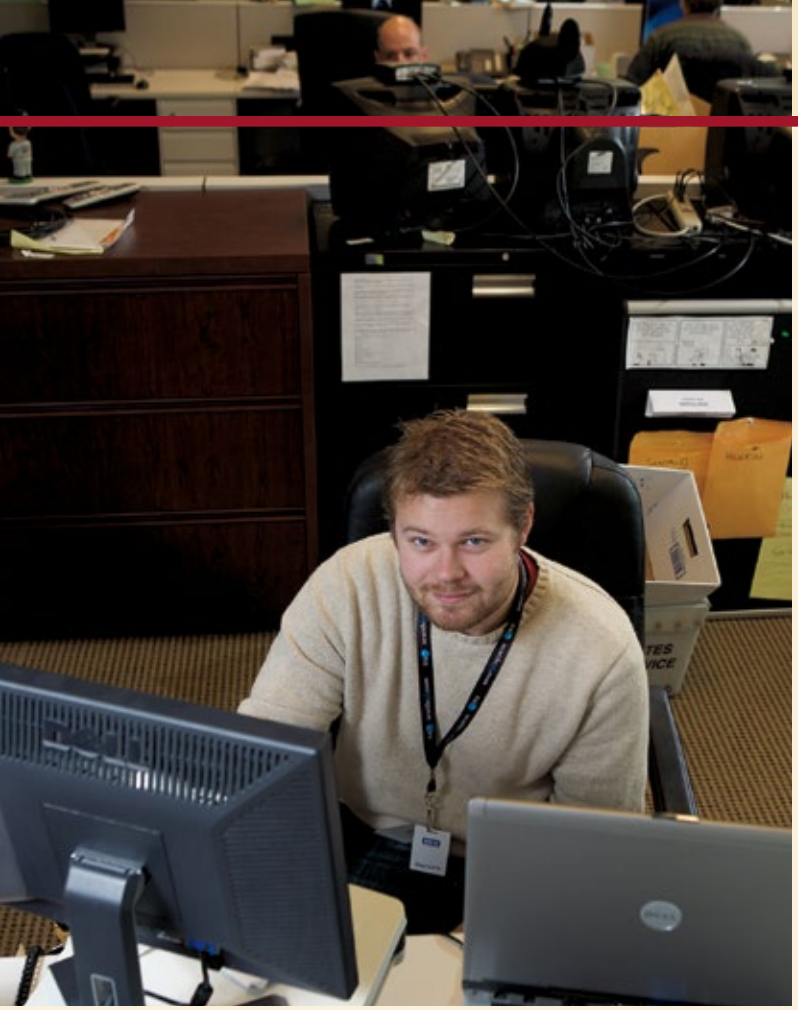
Nick Eaton '07 is the only news employee to be hired by the *P-I* after it shuttered its print edition. He's the oddball, he admits, going to a paper *after* it stops printing. But in the two years since he graduated, Eaton has been through more of a grist mill than most veteran journalists. After leaving WSU, Eaton found a job at *The Spokesman-Review*. He started interning on the business desk, but was soon moved into the night police reporter beat. Then out of the blue he was moved to Pullman to cover Cougar athletics.

Six months and he was moved back to Spokane after a senior reporter reclaimed the WSU beat. Eaton survived two layoff cycles. He was moved around some more and ultimately, because he was a newer hire, was laid off with Bose in October. Having already been through the ringer a few times since graduation, Eaton moved home to Seattle. "There was nothing left for me in Spokane," he says.

He applied to at least 40 jobs: tech writing, Microsoft, the Associated Press, fellowships. He didn't hesitate to send an e-mail to the *P-I* when the

After being one of 22 laid off from *The Spokesman-Review* last fall, photographer Rajah Bose '02 went into business for himself. *Photo Rajah Bose*





Above: Nick Eaton '07 at the Web-only *Seattle P-I. Photo Matt Hagen* ***Right:*** Lisa Waananen *'08* at Columbia University. *Courtesy Lisa Waananen*

paper shut down. "I've been through this before, I know sometimes things open up," he says. The first answer was no. Then a few days later he got a call to come interview. "That was a Tuesday. I went in on Wednesday, and by Thursday had an offer," he says. While the presses had stopped, the Web site lived on with a news staff of 20 doing everything from running the site to writing and editing stories. The first few weeks were very strange, says Eaton. They were on the second floor where the newsroom had been, a lively, exciting place when he was there a few years earlier as an intern, but now the desks were empty. It was quiet, save for the phones. "Every few minutes one of us would answer and say, 'I'm sorry, she doesn't work here anymore,'" he says.

The editors soon realized they needed stories that would draw readers online, and bring more ad revenue, so they shifted his beat from education to technology, namely Microsoft. His contribution to the future of news may be in helping the *P-I* reinvent itself as a Web-only news source.

His WSU classmate Lisa Waananen '08 has taken a different route. She didn't wait for a layoff when she left her newspaper job in 2008. Realizing the newpaper job market was shrinking, she set her sights on graduate school.

"It's easy to be unequivocally dedicated to journalism when you're still in college and putting in long but glorious hours at the college paper. It becomes harder (and even foolhardy) when you see half those college friends get laid off and the other half considered lucky when they work 60 hours a week at rural papers for $10.15 an hour," she wrote in her application essay to Columbia University.

In spite of the shrinking papers and vanishing jobs, Waananen is dedicated to journalism—whatever form it eventually takes. She is now studying digital media at Columbia.

In most cases, the online versions of newspapers have been side projects, operating alongside the "real" news efforts. Maybe that was their fatal mistake, says Waananen. Now everyone goes to the Web for at least some of their news. Whatever the future holds, knowing how to present stories online will be critical.

"I think the education I get at Columbia will make me a better journalist, but also will make me more marketable," she says. To do what, she doesn't yet know.

The immediate future promises more confusion and career changes as the news business sorts out how to survive.

Waananen hopes she'll leave grad school with a plan for doing the work that she loves—even if it isn't on paper. "If we're doing something we think is important, we should be working hard for it." ⊗

Visit the "Paper Cuts" interactive maps that show newspaper closures in Washington state and across the United States at wsm. wsu.edu.

COURTESY *COLUMBIA GAZETTE*

OLD NEWS

JUST AS SEVERAL of Washington's newspapers have vanished from the landscape, librarians and volunteers are bringing our state's near-forgotten newspapers to light. Through a project in the Washington Secretary of State's office, library employees and about 15 volunteers are digitizing the Washington State Library's extensive newspaper collection to make it accessible to teachers, students, and the general public. In addition, WSU's own Manuscripts, Archives, and Special Collections division recently assumed responsibility for an aging newspaper collection in the Holland library that contains Pacific Northwest papers dating back to 1851 as well as Colonial America papers dating to 1728.

Both collections hold rare editions of some of the region's earliest papers detailing public events, pioneer life, and the efforts of achieving territory status and then statehood. Many of these documents are too fragile to be handled by the public, and some are only preserved on microfilm. By digitizing the state library's collection, everyone can use them, says Marlys Rudeen, deputy state librarian.

Among the state's collection are the 1852 *Columbian*, a paper produced out of Olympia and the first to be printed north of the Columbia River. The state project is aiming for a sampling that provides geographical coverage of the state, with papers like the *Lynden Pioneer Press*, the *Weekly Argus* of Port Townsend, the *Spokane Times*, and the *Walla Walla Statesman*. The last one is especially interesting, says Rudeen. Some 1866 issues have conflicting accounts of the Whitman Massacre, an 1847 Indian attack on missionaries who had brought white settlers and disease into the area that is now Walla Walla.

With old paper and old microfilm, the team has found the process of scanning newspaper pages and cleaning them up to be read and digitized an incredible challenge. At times it is "insanely difficult," says Rudeen. Still, the volunteers are enjoying the work. This summer more than 6,000 images representing about 21 different newspapers were made available online.

Back on campus, archivist Cheryl Gunselman is attending to WSU's own rare selection of newspapers. When most libraries were throwing out their old bound volumes of newspapers in favor of microfilm, someone at WSU set aside this small collection for posterity, says Gunselman. In it are 90 years of newspapers from the Pacific Northwest, as well as early Colonial America. "It's a very curious collection," says Gunselman. "A librarian at some point indentified these as important or treasures, though sometimes it seems to me there is no particular rhyme or reason about it."

While there aren't the resources yet to digitize the WSU collection, a list of what's available can now be found online. As well, Gunselman regularly brings them out for viewing, using them in classes and exhibits. They detail events and more importantly provide records of how communities were built and how the people who came before us lived, she says. "These papers are great teaching tools. It's especially meaningful for the students to see these things that people of another time would have actually held in their hands." «

Read digital versions of a selection of old newspapers at wsm.wsu.edu.

by Jim Moore '78 :: illustrations by David Wheeler

LIFE *after* NEWSPAPERS

I'M SUPPOSED to be in a day-long seminar that offers helpful job-searching tips, and here I am in a chaise lounge instead, writing this story in a park, watching my dog swim after tennis balls in Lake Washington.

I made it through the morning session and got some advice about making a career change and building a better résumé. My body was in that Bellevue boardroom, but my heart wasn't, and the instructor knew it.

"You're not coming back this afternoon, are you?" she said as we broke for lunch.

Five months ago, my newspaper, the *Seattle Post-Intelligencer*, died. You could say that it ceased operations or quit publishing, but it felt more like a death, and I don't know if I'm still grieving or still in denial, but I'm still something, and it's not good.

Consciously I know it's time to pursue other things, time to embrace the old saying that when one door closes, another one opens. Maybe I'll get a cool job somewhere else.

Problem is, it couldn't be as cool as the job I had, the one I dreamed about as a kid growing up in Redmond. My parents subscribed to the

{ LIFE *after* NEWSPAPERS }

P-I, and since I was a fan of all the local teams, I read the sports section from cover to cover.

When I went to Washington State in the fall of 1974, I knew I wanted to get a degree in journalism because it might someday lead to the ultimate goal, a job as a *P-I* sportswriter.

After working at the *Ketchikan Daily News* and *Anchorage Daily News*, I started at the *P-I* in 1983. I was 25 and unprepared for a job at a large metropolitan newspaper, but the managing editor gave me a break and hired me as the sports slot guy. I edited stories and determined where they should go in the sports section.

A few years later, I became a writer, and over the last two decades, I covered everything from hoops to hydros. I was the Sonics' beat writer for six years, and I went to Augusta four times to cover The Masters and played the course twice.

I also went to the 2005 Super Bowl when the Seahawks played the Steelers, and my actual assignment was to attend Super Bowl parties and write about them. The toughest part was leaving the FHM, Maxim and Playboy parties and all that free booze and scenery to go to my hotel room to make deadline.

Seven years ago, my editors asked me to become a sports columnist. Right after accepting the offer, I got the nervous sweats and thought: "Uh-oh, what do I do now?"

My editors told me to just be myself. So that's what I've done. They gave me a silly nickname, the Go 2 Guy, but I went with it. I love golf and dogs and the less-serious side of sports, preferring to write about athletes as people.

But more than anything else, if I'm being myself, I'm a Coug and damn proud of it. When you're a Coug, you love everything about Washington State and dislike everything about the arrogant, self-righteous Huskies.

This job allowed me to put those feelings in print, and boy have the Dawgs given me material, from Slick Rick Neuheisel and his shenanigans to Paint Dry Ty Willingham and his beautiful 0-12 season.

When the *P-I* went out of business, the Hearst Corporation decided to keep seattlepi.com going, reducing a newsroom staff of 155 to 20 who run the online operation. It's said to be going fairly well. I hear positive things about ad revenue and hits.

I write two columns a week for the Web site on a freelance basis. It keeps me busy, and I'm grateful for the work, but it doesn't pay the bills. I miss the paychecks, but more than that, I miss my newspaper and the people I worked with, the camaraderie we'll never have again.

I go to the office now and feel like I don't belong there anymore, probably because I don't. I'm a graying journalist as it is, and it's even more apparent when I enter a dot-com newsroom filled with reporters and editors half my age blogging and tweeting.

It's a whole new cyberworld out there, and I'm the dinosaur dude who's trying to figure out where to go from here. I walk down the circular staircase to where the newsroom used to be and make a right to go to the sports department. I take a few steps and pass the "Employee of the Month" plaques before catching myself and stopping: "Wait a minute, there's no sports department anymore." Our once vibrant newsroom is a ghost town of empty desks and darkness.

I shake my head, but I don't dwell on it. I have too much to be thankful for—I've got my health, a great family, a loyal golden retriever, and severance pay that will ease the transition to whatever's next.

I tell kids who still want to get into journalism to do it, by all means. Even if newspapers go away, there will always be a place for good writers. Just trust that you will be in demand.

In my case, I would have preferred "keep the job" over "keep the faith," but that's not an option anymore. It is, in fact, time to move on to parts unknown.

Jim Moore isn't alone in his search for a life after newspapers. Among his colleagues, two are writing novels, one isn't doing anything and says he is drinking too much, a few are writing about sports for internet sites, and one moved home to Ohio and is attending graduate school.

Talking Turkey

New DNA techniques have made saving a bag of trash for over 30 years well worth it. The story extracted from that trash should give you a new appreciation of your holiday turkey.

:: Cherie Winner ::

STAFF ILLUSTRATION

When archaeologist Bill Lipe returned from a dig in Utah's redrock canyon country in 1972, he brought with him several bags of treasure. It wasn't something most people would recognize as valuable; no fine pottery or knapped flints or bone whistles.

Lipe brought back trash.

He and his colleague R.G. Matson had spent the better part of a week excavating a midden, a garbage heap that had been used by different cultural groups from the early years AD well into late Pueblo times, in the 1200s. He thought it time well-spent; trash is one of the best sources of information about any culture, ancient or modern. Just think of what your own trash says about you and your household.

The midden lay in a natural rock shelter. Nearby stood a rectangular enclosure made by closely-spaced sticks a few feet long, stuck into the ground. Based on its size and the number of ancient turkey droppings on the ground, archaeologists think the Pueblo people who made the enclosure kept turkeys in it. Whether they did or not, the pen is so distinctive that the site was named for it: Turkey Pen Ruin.

BILL LIPE BY ROBERT HUBNER

What caught Lipe's attention was that turkeys had clearly lived at the site long before Pueblo times. Deep in the midden, in layers laid down by Basketmaker II people between 100 BC and 500 AD, he and Matson found hundreds and hundreds of dried turkey poops.

It seemed unlikely that the poops, or *coprolites*, could have come from wild turkeys that happened to forage at the site. But it was almost as unlikely that they came from domesticated birds. The Basketmakers were early agriculturists who tended fields of maize and squash and stored their surplus corn in pits and bins made of stone slabs. Keeping modest flocks of turkeys might have fit their lifestyle just fine. But where would the turkeys have come from? Turkeys were originally domesticated by pre-Aztec people from wild turkeys in central Mexico, before 200 BC. Had domesticated turkeys been brought north from Mexico, as maize and squash had been? Or had the Basketmakers domesticated turkeys themselves, from the wild "Merriam's" turkeys that roamed the Four Corners region?

Lipe and Matson knew the poops could hold the answer. Their field crew dug out a tower of trash, a stack 50 centimeters square and a meter and a half deep, and Lipe lugged it to the Museum of Northern Arizona, where he was assistant director. A few years later, when he joined the WSU faculty, he brought the midden material with him.

"It doesn't sound like much, but that's really a lot of dirt. It weighs a lot," he says. He tried to analyze DNA from the Turkey Pen poops with the help of WSU molecular biologist Gary Thorgaard, who uses DNA analysis to trace the relationships of modern-day trout, but techniques for extracting DNA from such old specimens weren't well-developed at the time.

"Ancient DNA is really tricky," says Lipe. "The potential for contamination is so high, because the DNA is usually degraded."

SO THE BULK of the midden material sat in storage until 2007, when Brian Kemp joined the faculty. The enthusiastic, fast-talking Kemp specializes in extracting and analyzing DNA from ancient materials—bones, teeth, mummified poops. Using "new tools to study old problems," he had worked on questions such as the origins of American tribal groups and the migration of early peoples southward along the Pacific coast.

"He has so much energy. He's a lot of fun to work with," says Lipe.

Kemp is all for investigating ancient trash heaps. For him, the conventionally pretty kinds of archaeological finds don't hold a candle to well-preserved poops. In some ways coprolites are even better than bones as a source of information about ancient people or animals. In addition to providing the DNA of the individual that produced them, they also tell us what that individual had eaten.

"They're a perfect repository," says Kemp of preserved poops. "These things are a perfect source for studying ancient population genetics."

But Kemp had never worked with non-human DNA before, and when Lipe suggested the turkey poops might be worth a look, he hesitated. He and Cara Monroe, his lab manager, fiancé, and fellow archaeologist, ran some samples to see whether the work was feasible.

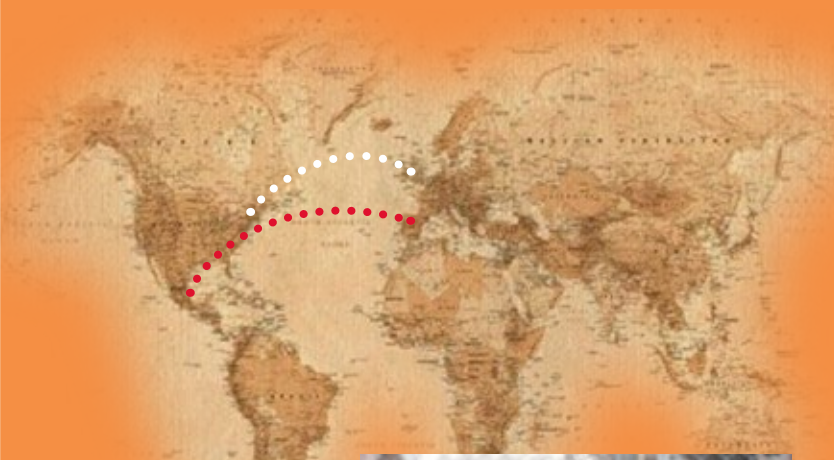
"I didn't know anything about turkeys. And I have to say, I wasn't particularly interested in it—until it worked," says Kemp. "But once it worked, and it worked well, it was like, ohh, this could be *big*."

Kemp's lab is broken into separate rooms, one for handling ancient samples and the other for handling present-day material. He's a pretty free-wheeling guy, but he insists that everyone in the lab obey one rule: Never, ever go from the Modern room to the Ancient room. If you have work to do in both, do the Ancient first. If you must do something in the Modern room first, when you're done there, go home, shower, and change clothes before heading into the Ancient room.

The worry is that cells (and their DNA) from modern-day organisms might contaminate the ancient samples. The lab's strict procedures do a good job of reducing contamination, but "foreign" DNA still sneaks through at times—which isn't all that surprising, when you think about it. The samples have been in a trash dump for more than a thousand years; how could they *not* be contaminated?

Midden material is loaded with human hair, and Kemp's grad student BreAnne Nott has found tiny bat hairs in the turkey poops (not because the turkeys were eating bats, she hastens to explain, but because the poops came from a site under a rocky overhang that probably sheltered bats). Contamination by mouse DNA is common, probably because mice had the run of the midden for generations. "When you open up the bags of midden from the Turkey Pen ruin site, it smells like mouse urine," says Kemp. "It's overwhelming, like you don't even want to be in the room, it so much smells like mouse urine."

In one corner of the Ancient lab, a tall metal cabinet holds cardboard boxes and brown envelopes bulging with zip-lock bags containing specimens: feathers and bones from various species, as well as coprolites—human, dog, undetermined, and, of course, turkey. Most of the turkey poops are 2-3 inches long and a bit bigger around than a standard yellow pencil. They're brownish-gray, dry and crumbly, but amazingly intact considering they were produced by birds that lived more than 1,500 years



NARRAGANSETT HERITAGE BREED—NATIVE WILD AND COLONIST DOMESTIC CROSS. *COURTESY AMERICAN LIVESTOCK BREEDS CONSERVANCY*

MELEAGRIS GALLOPAVO—FAVORITE DOMESTICATED ANIMAL AMONG THE AZTECS. *STAFF PHOTO/ILLUSTRATION*

Like tomatoes and tobacco, turkeys were a gift from the New World to the Old. Europe had no turkeys of its own, wild or domestic, but when the Spanish came to the New World in the early 1500s, the Aztecs in Mexico already had herds of turkeys numbering in the hundreds of birds. The species had been domesticated by pre-Aztec people before 200 BC. The Spaniards took Aztec turkeys back to Europe, where they thrived. They became popular as barnyard fowl and favorites of bird fanciers, who bred an array of showy, distinctive strains from the basic Aztec stock. Within a couple hundred years they'd become such a symbol of holiday abundance that Scrooge proved his new-found humanity by buying the Cratchit family the huge turkey hanging in the butcher-shop window. And when the Pilgrims and other immigrants started their new lives in America, they brought turkeys with them—turkeys descended from birds that originated in Mexico.

{ *From Aztecs to Tiny Tim* }

ago. That they are still recognizable is a testament to the preservative power of a dry climate and the sheltered location in which they were left.

To get DNA from a turkey dropping, Kemp cuts across it and scoops a small sample out of its interior. He says cells from the intestinal lining continually slough off and join the soon-to-be fecal matter, ending up all throughout the poop, not just on the surface. In fact, he purposely avoids sampling the surface of the poops, as those are the areas most likely to be contaminated by things like mouse urine.

He puts each small sample into a plastic test tube and adds a chemical solution, bringing it back to life, in a sense. "These things soak up *so* much liquid. They get totally black and really gross-looking," says Kemp, who adds that a successful retrieval is obvious to everyone in the room. "It smells like being on a farm. Once you rehydrate them, they are very distinctly bird crap."

After extracting whatever DNA they can get from the samples, Kemp and undergraduate student Scott Wyatt hone in on sequences that come from mitochondria, the energy-generating structures within cells. For studies like this one, mitochondrial DNA (mtDNA) has two big advantages over DNA found in the nucleus. First, each cell has only one set of nuclear DNA but about a thousand sets of the mitochondrial DNA, which makes the mtDNA easier to find. Second, mitochondria are inherited only from the mother; they are among the goodies stored in every egg prior to fertilization. By examining an individual's mtDNA, Kemp can learn what genetic lineage (or *matriline*) the individual's mother belonged to, which enables him to construct a moms-only family tree. Making a tree using nuclear DNA would be much harder, because with rare exceptions, any particular sequence could have come from either the mother or the father.

Kemp and Wyatt look for three short stretches of DNA that accumulate mutations at a rate that allows the researchers to trace relationships over a span of several hundred to several thousand years. If the same sequences from two strains have few differences, the strains split from each other fairly recently. The more differences they have, the further back the strains diverged and the more distantly they are related.

Kemp compared DNA from Turkey Pen poops with the same sequences from six modern-day subspecies of wild turkeys, which had been established a few years ago by a researcher at Northern Arizona University. That would tell him how closely related the Turkey Pen birds were to those subspecies. He also wanted to compare them with DNA from the Mexican turkey that had given rise to the Aztec bird, the one already known to be domesticated. That comparison posed a special problem: The Mexican subspecies has been extinct for decades.

"We needed something that would baseline what we were looking for," recalls Monroe. "I just immediately thought, 'oh, the Smithsonian should have something.'" Sure enough, the zoology section of the Smithsonian had specimens of the Mexican bird that had been collected around 1900. She and Kemp wrote a proposal asking for small samples from the birds, and were rewarded with a package of barely visible bits of toe-pad tissue. "It was a *tiny* amount," says Monroe. "It was like a *fleck*." Kemp's team was able to extract useable DNA from eight of the 12 samples, enough to give them the baseline data they needed.

WHILE KEMP AND WYATT went after the DNA, graduate student BreAnne Nott looked for pollen grains within each turkey poop, for clues about what plants the turkeys had eaten. Her results are

still preliminary, but so far Nott has found pollen of juniper, willow, and wildflowers—plants that turkeys (wild or domestic) might pick up while foraging near the Turkey Pen site. She's also found substantial amounts of maize pollen. Maize means people, says Nott, and while wild turkeys could have picked up maize pollen by foraging in or near the fields, the amounts of it that Nott is finding—in one poop, 70 percent of the pollen grains were from maize—argues against casual acquisition.

To Kemp, the conclusion is clear. The turkeys weren't just eating. They were being fed. They were domesticated.

Even more convincing evidence of domestication came from the DNA analysis. Among the dozens of Turkey Pen turkey poops Kemp and Wyatt have evaluated so far, only two maternal lineages appeared. Populations of wild turkeys in the area around Turkey Pen have at least 17 maternal lineages; if the midden poops had been made by wild birds wandering through the site, or if the people were simply catching wild turkeys and holding them in camp until slaughter, several more matrilines would be represented in the poops.

Not only that, but the most abundant Turkey Pen lineage is also the predominant matriline found in turkey bones from 36 additional archaeological sites around the southwest. Camilla Speller and her colleagues from Simon Fraser University identified it at sites spanning thousands of square miles and more than a thousand years of occupation.

BRIAN KEMP BY TYLER TJOMSLAND

There's no question the Turkey Pen birds were domesticated, says Lipe. "The people were controlling their breeding. That's the definition of domestication.

"This is what [the Basketmakers are] focusing on. They and their descendents are conserving, for more than a thousand years, one particular variety."

The DNA results also presented a new puzzle. When Kemp compared the dominant Turkey Pen matriline to the lineages found in the six wild subspecies, he got a shock. That matriline is rarely seen in the wild subspecies found in the region—and it did not occur at all in the wild Mexican turkeys that gave rise to the Aztecs' domesticated variety.

If the Basketmaker birds were not derived from local populations of wild turkeys or from Mexican birds, where did they come from?

Kemp's family trees showed the unexpected link: Basketmaker turkeys were close relatives of turkeys native to *eastern* North America and the Gulf Coast of Texas and northeastern Mexico.

"It's a total surprise to everybody," says Lipe. The finding has big implications for our understanding of early Native American cultures. It means turkeys were domesticated at least two separate times: once, before 200 BC, by pre-Aztecs in central Mexico; and once by people yet undetermined, probably at about the same time, somewhere to the east or southeast of Turkey Pen Ruin. Exactly where, and by whom, remains to be discovered. Turkey remains from that period in the central and eastern United States haven't been studied as fully as those from southwestern sites, but that is beginning to change. Kemp recently started collaborating with a colleague who found turkey bones in an early Moundbuilder site in Alabama, to find out what lineage those turkeys belonged to.

What excites Lipe the most is that the DNA results confirm what the historical accounts suggested. Like tomatoes and tobacco, turkeys were a gift from the New World to the Old. When the Spanish came to the New World in the early 1500s, Europe had no turkeys of its own, wild or domestic, but the Aztecs in Mexico already had flocks of turkeys numbering in the hundreds of birds. The Spaniards took some of those birds back to Europe, where they thrived as barnyard fowl. They became favorites of bird fanciers, who bred an array of showy, distinctive strains from the basic Aztec stock. Within a couple hundred years they'd become such a symbol of holiday abundance that Charles Dickens had Scrooge prove his new-found humanity by buying the Cratchit family the huge turkey hanging in the butcher-shop window. And when the Pilgrims and other immigrants started their new lives in America, they brought turkeys with them—turkeys descended from birds that originated in Mexico.

Kemp's lab even analyzed DNA from present-day supermarket turkeys, and found that they are quite different from North American wild turkeys, but they differ from the Mexican wild turkey by just one mutation. In other words, the turkey on your table this Thanksgiving is descended from birds tended by Aztecs.

AS FOR *WHY* the turkeys were domesticated, Kemp has a hunch about that too, and it does not involve a Basketmaker version of Thanksgiving. He thinks the birds were initially kept and bred for their feathers, only later becoming a major food source.

Turkey feathers, like maize pollen, played an important role in southwestern rituals and ceremonies. The Basketmakers also used them to make sturdy, warm blankets that warded off the chill of high-desert winters. Feathers were split down the quill and each half was then twisted with yucca fibers to make strong cord with the feathery parts fanning out around it. Woven into a blanket, such cordage gave the cloth heft, fuzz, and insulating power.

While fragments of turkey feather blankets and cordage have been found at Basketmaker II sites elsewhere in the region, turkey *meat* doesn't seem to have been a hot commodity among southwestern peoples until the 1200s. In later Pueblo times, a large proportion of the faunal remains in a site are turkeys, says Kemp. "They're eating turkeys *all* the time."

If Kemp and his colleagues are right about Basketmakers keeping turkeys for their feathers, they're still left with the dual mystery of what they did with the meat and why the midden contains so few turkey bones. Monroe says the people almost certainly killed the birds to get the feathers, rather than waiting until the feathers dropped off naturally. By the time feathers are molted, they are beat-up and ragged and not good candidates for use in either rituals or blankets. A crop of fresh, strong feathers would require killing the bird.

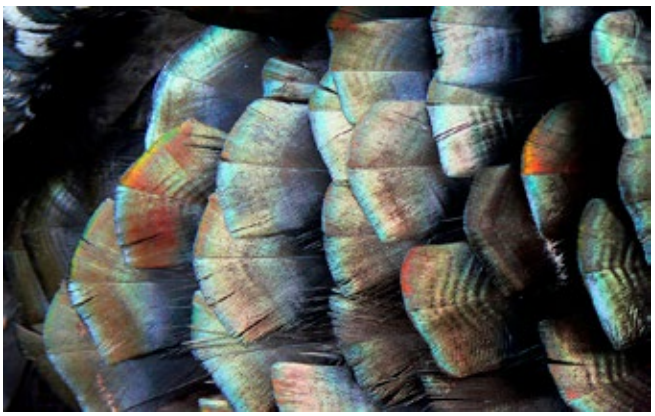
So what happened to the bones?

Even Lipe, who has explored hundreds of sites in his decades as a field archaeologist, is puzzled about the lack of turkey bones in the midden. Then again, he says, a bird leaves just one set of bones during its lifetime, but thousands of droppings. In a climate that preserves poops almost as well as it does bones, which are we more likely to find 1,500 years later?

Monroe thinks the Basketmakers's other domesticated species, their dogs, could be the answer. If the Basketmakers fed the turkey carcasses to their dogs, the bones would have been crunched into small bits that could be all but impossible to identify now. But the midden material does include dog poops, which probably retain the DNA of whatever the dogs ate. Monroe adds analysis of dog poops to the ever-growing list of Turkey Pen projects for the lab to consider.

Those bags of trash Lipe brought out of the midden 37 years ago are providing a magnificent harvest.

"There's decades of research there," says Kemp. "With the genetic tools that we have—and the garbage is such a rich resource of information—there are so many ideas that you could address with just this bag of garbage." ⊗



WILD TURKEY FEATHERS PHOTOS (CLOCKWISE FROM TOP LEFT) BY: ALISON WOODER, KARENA DOAN, VICKI TOWERY, JOE THOMASSEN

{ Getting the goods }

Kemp uses the same procedure with coprolites that he's used with bone and teeth in other studies. He puts each sample into a plastic test tube and floods it with EDTA, a chemical solution that extracts the calcium from hard tissues and helps break up soft tissues. He caps the tube and rests it on a rocker plate that tilts it back and forth, gently mixing the contents. He doesn't grind up the sample, and from the time he seals it in the tube to the time he withdraws the dissolved contents, it remains untouched.

"Some researchers like to take their bones and powder them, which would obviously increase the surface area and probably increase your chance of getting DNA," says Kemp. "My philosophy is, the more manipulation we do to a sample, the higher the chance of introducing contamination."

He holds up a tube that has been rocking for a few hours. The EDTA solution, which started out clear and colorless, is brown and has little flecks of stuff in it. He shakes the tube hard, up and down. The bit of bone inside falls apart. "If we just do this, the bone is broken into many pieces. And in a couple of days, after the EDTA softens things up, these things can turn into complete liquid. And I've done all my mechanical manipulations inside this tube.

"I do things quite different from other researchers. When I tell people I do this, they think, oh, it doesn't work. Well, it sure does."

For links to North American wild turkey range maps, heritage breeds information and more turkey photos go to wsm.wsu.edu.

Rachel Silva-Bischoff '02

Registered Emergency Room Trauma Nurse.

Bachelor of Science in Nursing and Co-Chair of the Washington State Nurses Association.

Alumna of Gamma Alpha Omega Sorority, the first Chicana/Latina Sorority at WSU.

Married to Stephen '02 & '03 and loves raising their son Isaiah Bayani.

Member of the WSU Alumni Association.

"I joined the Alumni Association to make a positive difference for current and future Cougars of color. As a student, I received valuable support and became the first in my family to receive a college degree. I'm very passionate about helping the WSUAA make a college degree a reality for all students of color, just like me."

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BILL WAGNER

Since 1990, Florence Wager has volunteered in support of projects like the Esther Short Park.

Florence Wager '54

Vancouver park activist without par

by Eric Apalategui :: Florence Wager bought a set of golf clubs when she wrapped up her career in arts and education.

"I had this preconceived notion about retirement," says Wager, 81, who earned a bachelor's degrees at WSU in speech in 1950 and education in 1954 and spent most of her career boosting the San Francisco Symphony. "I thought you played golf, played bridge, went to tea parties."

Then, after moving back to her native Vancouver in 1990, she volunteered for the Chinook Trail Association. Then she volunteered for the YWCA. Then the parks and recreation department. Then the Fort Vancouver Regional Library District. She joined boards and commissions and became an activist for her community.

"Once people find out you have a willing pair of hands, your name gets on the circuit," she says.

Now, almost two decades later, it would be difficult to travel far in Clark County without passing a park, trail, or community building that Florence Wager hasn't helped transform.

It also would be hard to find those golf clubs. "I never used them. They're in the garage. That'll be part of my next (charitable) donation."

She adds, "Nothing else would appeal to me more than what I do now, which is work in the community. I fully intend to die with my boots on."

I meet with Wager outside on a day quickly approaching 100 degrees. She stops and cocks her head to listen to the shrieks of laughter as dozens of nearby children splash and scramble through the manmade waterfalls at Esther Short Park.

"I just can't tell you what a joy it is to hear those voices—laughing, jumping, playing," says Wager, who describes herself as "a handmaiden" in a celebrated campaign to take back a park that had once been lost to drug dealers and transients. A smile warm enough to compete with the day springs to Wager's face. "It's just perfect," she says.

CLASS NOTES

1950s

Lloyd Fries ('56 Pharm.) received the 2009 PGM Robert W. Rush Award for Outstanding Dr. of Smiles from the Grottoes of North America Humanitarian Foundation, which provides dental care for children with special needs. Fries has volunteered with the organization for eight years and has helped the program grow from 50 patients to 270 in a year's time. He lives in the Portland, Oregon-area with his wife Marjorie.

Joe P. Zeeben ('58 Mech. Engr., '60 MS) was recognized in August with the WSU Alumni Association Alumni Achievement Award for his accomplishments in aerodynamics engineering. He has had a 34-year-long career with Boeing working with the commercial and military airplane groups. He helped launch the Boeing 757 airplane program, and designed a method for calculating engine emissions. He has also been recognized for his volunteer work with the PTA and the Boy Scouts of America. He lives in western Washington.

1960s

Mike Thorne ('62 Ag.) and his wife Jill x'62 are living in Pendleton, Oregon, where they are helping organize the celebration of the 100th Pendleton Roudup in September 2010.

Grant Thorsett ('62 Sciences) retired after 41 years teaching genetics at Willamette University in Salem, Oregon. He earned his PhD in 1969 from Yale University. As a scientist he focused on molecular techniques in microbial ecology. He chaired the biology department at Willamette U. for 14 years.

Darrell Aune ('66 Comm.) is the voice of Western Oregon University's sportscasting on KLOO AM. He will announce the school's football and men's and women's basketball games. He had been the voice of the Oregon State Beavers from 1970 to 1999, and sports director at KEX radio in Portland. Recently he has announced football and basketball for Linfield College. He lives in Monmouth, Oregon, with his wife Catherine.

Stanley Nelson ('66 Engr. and Arch.) retired from the Southwest Region of the Washington State Department of Transportation after 25 years, on July 1, 2009. He was a region-wide facilities architect for the DOT.

1970s

Jack Nevin ('73 Sociology) is a Pierce County District Court judge as well as a brigadier general in the Army Reserve. He works on behalf of the U.S. Department of Justice teaching lawyers overseas the basics of prosecuting and defending criminal cases. He has also helped write bar examinations, trained judges, helped develop public disclosure laws, and advised on rebuilding legal systems in countries struggling to reestablish their legal systems. When he's not traveling, Nevin lives in University Place with his wife Cheryl French Nevin ('74 Ed.).

Chip Hanauer ('76 Ed.), retired unlimited hydroplane racer, had the fastest lap around Lake Washington during Seafair last July in the Boeing U-787 hydroplane that runs on biofuel. It was just

"Just perfect" might also be how David Judd, the former director of Vancouver-Clark Parks and Recreation, would describe Wager herself. Wager currently co-chairs the departments commission. "Every parks director yearns to have a citizen activist to do things and say things that you cannot," says Judd. "She's a force of nature, let's face it."

Wager's push for parks is unfailingly polite. Yet despite the kindly exterior, when she has a worthy cause, she's unrelenting.

"You don't ever give up. You hang on like a terrier on a pant leg," she says. "Eventually you get there."

Kelly Punteney, a consultant who once worked for parks department and now serves with Wager on its commission, marvels at her ability to remain positive through the toughest battles."There's always the naysayers," he says. "That seems to get her fired up even more."

BILL WAGNER

"If I go into a meeting wearing red, I mean business," says Wager, looking over her red-framed glasses. "I'm not going to come out of there until I get something. That's my power color."

Wager estimates she has helped with 60 to 70 new parks across Clark County. But that's just part of her success. Friends will recall how doggedly she lobbied to win support for the Firstenberg Community Center, which opened in eastern Vancouver in 2005. Others will mention her passionate advocacy for walking and biking trails. Many may cite her hard work on the Steps to a Healthier Clark County campaign, which promoted wellness in ways like discouraging smoking at park playgrounds. The folks at the library district, YWCA, Vancouver Symphony, and Evergreen School District will remember the times she stepped up for them. And one day, perhaps a century from now, her name will come up when the historic Chinook Trail once again connects the people and lands from Vancouver to Biggs, Oregon, on both sides of the Columbia River.

Wager's childhood memories are spiced with images of roaming across a much more rural Clark County as a schoolgirl, before she headed off to Pullman. She loved her own childhood and loves children, though she never had any. "Other people have loaned me theirs for a while," she says.

She taught drama in Spokane for three years and English in Vancouver for one more between WSU degrees. But she yearned to be involved in the arts, so she went to California and bounced through a few jobs before landing with the San Francisco Symphony, which she promoted through fund-raisers and membership activities for nearly thirty years.

She finally felt a pull home where she could be closer to her mother and help care for an ailing sister, but she found a calling in volunteer work, which she treats like a full-time job.

This spring Judd and local attorney Scott Horenstein nominated her for Clark County's 2009 First Citizen award, presented through a partnership of *The Columbian* newspaper and The Community Foundation.

"It was very hard for me to accept this award," says Wager, who also was one of just seven people the U.S. Centers for Disease Control named "community heroes" two years earlier. "You want the work to be done but you want to stay in the wings."

But she jokes that she will use attention that comes with being a First Citizen to pry loose donations for more civic projects. She already directed the $1,000 that *The Columbian* donates to the winner's cause of choice into reviving a tradition called the Fun Wagon, which carried summertime activities into the area's needier neighborhoods.

"Sometimes I think we talk ourselves into old age," says Wager. "I hang out with young people, by which I mean anyone younger than 80."

She practices the healthy lifestyle she preaches. She gardens, cans her own food, does water aerobics three times a week, rides her bicycle on the Burnt Bridge Creek Trail and walks twice daily with her Jack Russell terrier, Natuzzi.

"The thing is to stay healthy, eat properly, stay active—and do something for your community. The rewards (of volunteerism) are far greater than any amount of pay they could give you."

a test lap since Hanauer, who is a special education teacher, has no plans to get back into racing.

Kelvin Soldat ('77 MS Env. Engr.) retired from the environmental sector at Pacific Northwest National Laboratory after 32 years with the organization. He and his wife Meg Lujan Soldat ('80 Office Admin.) live in Richland.

1980s

Robert J. Palmquist ('80 Crim. J., '82 MA), a warden at the Federal Bureau of Prisons Federal Detention Center in Seattle, was recognized in September with the WSU Alumni Association Alumni Achievement Award. After graduating from WSU, Palmquist went to work as a correctional officer in California, and later moved to Oregon, Arizona, and New York. He then became chief of the Federal Bureau of Prison's Office of Security and Technology in Washington, D.C. He moved to his post in Seattle in 2003. He is a youth minister and music minister at his Catholic church in Federal Way, and has volunteered with the Boy Scouts of America, the Rotary Club, and the Sheridan City Planning Committee. He lives with his family in Des Moines.

Peter Snell ('82 PhD Ed.) was recently knighted by the New Zealand governor, not long after being named New Zealand's sportsman of the 20th century. Snell, who competed for his native New Zealand, won an Olympic gold medal for the 800 meters in Rome in 1960, and two more in the 1964 Olympics in Tokyo. He lives in Dallas, Texas, where he is on faculty at Southwestern Medical Center.

Francis Dodoo ('83 Econ., '86 MA) is head of the Ghana Olympic Committee. He was a track and field athlete at WSU and went on to compete in the long jump and triple jump. The four-time Olympian is a sociologist at Pennsylvania State University and chairman of the Ghana Athletics Association.

Jim Browitt ('87 Comm.) has been the sports editor of the *Lewiston Tribune* since 2002 and has worked at the newspaper for 17 years. He recently decided to leave newspapers for law school.

1990s

Kerri (Lufkin) Schwab ('90 Ed.) was hired at Everett Community College as a tenure-track faculty member in developmental education. She lives in Everett with her family.

Tyler Jones ('92 Hotel and Rest. Admin.) is the new general manager at the Palouse Ridge Golf Club in Pullman. He has been working as general manager of the Poppy Hills Golf Course in Pebble Beach for the past five years. In 2007, the *Monterey Herald* named him one of the five most influential people in golf on the Monterey Peninsula.

2000s

Jeremy Thielbahr ('01 Soc. Studies, '07 MIT) is coaching running backs and special teams for the football team at the University of Idaho. After graduating from WSU in 2001, Thielbahr worked as a grad assistant for the Cougars. Then in 2004, he joined Montana State where he worked with tight ends and the defensive line. He returned to the Palouse in 2006.

Evelyn Hirt ('02 Engr. Mgmt.) is the 2010 president of the Institute of Electrical and Electronic Engineers. She was also awarded the Robert S. Walleigh Distinguished Contributions to Engineering Professionalism Award for her leadership and contributions to the professional society. Hirt is an expert in systems and controls for Battelle Memorial Institute at the Pacific Northwest National Laboratory in Richland.

Paul Case ('03 Bus.) and **Erinn Rogers** ('06 Nursing) were married July 18, 2009, in Spokane. Case is a naval aviator flying the EA-6B Prowler out of NAS Whidbey Island and Rogers is a registered nurse at Harborview Medical Center in Seattle.

Josh ('03) and **Shawna (Geier) Labberton** ('03 Psych.) welcomed their daughter Kira Cosette on September 1, 2009.

Richard Meyer ('03 Bus.) married Stacie Boness on July 18, 2009. The couple lives in western Washington.

Jeff Olson ('03 Construction Mgmt.) married **Samantha Stafford** ('03 Social Sci.) on August 8, 2009, in Silverdale, Washington.

Kim Carlson ('04 Comm.) has joined the Coeur d'Alene Resort sales team, working from King County. She had previously worked at the Salish Lodge and Spa as well as the Edgewater Hotel. She volunteers with Seattle Children's Hospital and lives in the Seattle area.

Yolandé McVey '07

Taking life back

by Richard H. Miller :: The heroine of *Love's Secrets* puts on perfume, goes to a barbecue, and meets Rod: caramel skin, wavy hair, muscles, and commitment issues.

The author of *Love's Secrets* can never do two of those three things. Exposure to perfume or barbecue smoke could kill Yolandé McVey '07, who suffers from severe asthma and allergies. "I'm so allergic to everything that when I was given an allergy test, I went into shock," she said. "They had to call an ambulance to take me to a hospital."

McVey began to lose ground in her lifelong battle with respiratory problems in 1997. She had just moved to Arizona to help her oldest son get over his asthma.

"His health improved while mine declined dramatically," she says. She returned to the Chicago area and retreated to the filtered air of her home. "I believed the four walls of my bedroom would be my prison," she says, "and that I would never live a fulfilling life." Adding to her sense of defeat, her medications made her gain more than 100 pounds in less than a year.

COURTESY YOLANDÉ MCVEY

"When you're disabled and you're homebound and you're bed-bound, your life is bound up in one room," she says. "My whole world was four walls and a laptop."

But McVey wasn't ready to give up. After all, this is someone who made a triple grade

Tim Chappell ('04 Theater Arts) and **Aleisha (Allen) Chappell** ('02 Engl.) welcomed Abileen Florence Chappell on July 29, 2009.

Anna (Hewitt) Unruh ('04) and husband Ryan welcomed their daughter, Lillie Anna Unruh, on February 7, 2009.

Wesley McMahon ('05 Psych.) received his juris doctor degree from New England Law/Boston last spring. He is hoping to practice in New York.

Jay Tust ('06 Comm.) is sports director at Lewiston's KLEW TV. He had been working at Fox Sports Northwest as an associate producer.

Alison (Lawrence) Foliart ('07 Lib. Arts) is the new executive director with the nonprofit agency Perinatal Treatment Services. The organization, which has sites in Seattle and Tacoma, is a chemical dependency treatment program for pregnant women and mothers with children under age six.

IN MEMORIAM

1930s

Floyd Cook ('30 Math) 104, June 29, 2009, Lamont.

Dorothy Gwen Carlson ('31 Office Admin.) 98, November 21, 2008, Marysville.

Phyllis Edna Oaks Attebery ('32 French) 97, March 17, 2009, Bremerton.

DeLora D. Gies ('32 Hist.) 98, June 23, 2009, Spokane.

Margaret Davison Hackedorn (x'35) 95, August 27, 2009, Mercer Island.

1940s

Robert Chisholm ('40 Ed.) 90, January 1, 2009, Coeur d'Alene.

Philip J. Pfarr ('40 DVM) 92, September 16, 2009, Spokane.

Charles Hofer ('41 Ed.) 89, July 4, 2009, Colfax.

Kenneth Layman ('41 Bus. Admin.) 90, May 21, 2009, Oregon.

Gilbert Leverich Oswald ('41 Mech. Engr.) 89, August 23, 2009, Bellevue.

William Edward Brandt ('42 Chem.) 89, May 23, 2009, Pullman.

Wayne Francis Dingee ('42 Animal Sci.) 91, February 25, 2009.

Nels Konnerup ('42 DVM) 92, July 21, 2009, Camano Island.

Laura Belle Kunz ('42 Gen. Studies) 88, June 22, 2009, Wilbur.

Glenn Charles Lorang ('42 Journalism) 88, May 23, 2009, Spokane.

Mary Louise Esvelt ('44 Speech and Hear. Sci.) 88, July 11, 2009, Spokane.

Warren H. Westerman ('44 Pharm.) 87, June 6, 2009, Spokane.

Ruth Gibb ('45 Home Ec.) 84, September 12, 2009, Bellingham.

Theda Dorothy Mayer ('45 Home Ec.) 88, 2009, Puyallup.

M. Lovell Fogelquist (x'46) 82, July 7, 2009, Spokane.

Lucile (Lee) Lill ('46 MS Phys. Ed.) 87, June 23, 2009, Spokane.

C. Stanley Locke ('46 Music) 86, May 15, 2009, La Crescenta, California.

Rollin Charles Miller ('46 Ag. '47 Ed.) 88, June 3, 2009, Ritzville.

Ronald G. Barbee ('47 Zoo., '49 Ed.) 90, June 4, 2009, Spokane.

N. Karle Mottet ('47 Pre Med.) 85, April 24, 2009, Puyallup.

William F. Crouse ('48 Ag.) 78, January 21, 2009, Cathlamet.

Jean Baumgarten LeGros ('48 Comm.) 82, July 28, 2009, Seattle.

Raymond Nordstrom ('49 Bus. Admin) 84, July 4, 2009, Alamo, California.

1950s

Larry Kissler ('50 Bus. Admin, '56 MA Econ.) 82, September 25, 2009, Boise, Idaho.

Richard S. Cook Jr. ('51 Mech. Engr.) January 13, 2009, Livermore, California.

Ruth Frick ('51 Home Ec., '54 Ed.) 90, July 8, 2009, Coeur d'Alene, Idaho.

Arnold Green ('51 Gen. Studies) July 20, 2009, Arizona.

William Scott Kelley ('51 Mech. Engr.) 83, July 14, 2009, Richland.

Hilmer A. Frank ('52 MS, '54 PhD Hort.) 84, August 28, 2008, Sugar Land, Texas.

Harold Coder (x'53) May 20, 2009, Lewiston, Idaho.

Bonnie Bea Staggs ('53 Phys. Ed.) 78, August 7, 2009, San Diego, California.

Rosalee Dell Komp ('59 Bus. Admin.) 72, June 22, 2009, Seattle.

1960s

Calvin C. Malmquist ('60 Ind. Tech.) 76, July 16, 2009, Vancouver.

Jerry L. Cutshall ('65 Civ. Engr.) 67, June 30, 2009, Mount Vernon.

Roger Stephen Henning ('66 Elec. Engr.) 67, May 24, 2009, Thornton.

Susan Kaye Thomas ('66 Sociology) May 18, 2009, Tumwater.

Delbert Wayne Konschu ('67 Wildland Rec.) 64, January 21, 2009, Oregon.

Alfred Ross Roesler ('67 DVM) 66, July 17, 2009, Port Ludlow.

jump in elementary school. Who graduated high school at 16 in the top 5 percent of her class. Who raised three foster children in addition to two of her own.

"One day," she says, "I got very tired of being very tired and decided to take my life back." First on her list was completing college, which she'd put off in 1985 to get married. She enrolled in Washington State University's Distance Degree Program.

"It did a lot to make me feel empowered," McVey says. She graduated from the online program in 2007 with a bachelor's degree in social sciences. "Washington State opened the doors to my life," she says from her home in Hammond, Indiana. "It gave me hope. I met people from all over the country, shared experiences, and interacted with professors who inspired me to learn more, to push the envelope."

McVey pushed it hard. She finished her first book *Love's Secrets*, which was published by Genesis Press in July 2008 to positive reviews. The book is billed as a romance novel, but it focuses on the love between sisters, mothers, and daughters. The family's last name is Foster, and they do foster one another, amid the blistering insults: "I hate you" is how sisters Veronica and Darlene say, "I love you."

McVey is now earning a master's degree in counseling and human services at National-Louis University. With the help of medication, she is able to attend classes once a week.

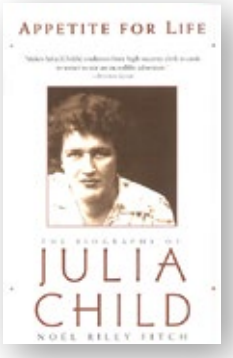
She carries a 4.0 grade point average, which she credits to the writing skills and self-discipline that she developed during her WSU studies. "The regimen I learned there has done me very well at National-Louis," she says. After graduation, she'd like to create a support group for parents of bipolar teens.

Along with her grad school work, McVey has written a couple of plays and is "toying with" a mystery novel and a vampire series. She missed her calling as a chef, she said, so instead treats family and friends to "grand feasts with specially crafted sauces and desserts fit for royalty." One favorite: Granny Smith apple pie cheesecake with a rich brandy sauce on a vanilla wafer and oatmeal crust.

"Good food is like real love," she said. "Who ever really gets enough of either?"

Noël Riley Fitch '65, '69

At Julia's table



by Hannelore Sudermann :: As a graduate student at Washington State University in the late 1960s, Noël Riley Fitch found her calling in an issue of *Ladies' Home Journal*. A two-page story about Sylvia Beach and her little bookshop called Shakespeare and Company in Paris in the 1920s sparked her interest.

Her professor, John Elwood, encouraged her to pursue Beach as a subject for her master's thesis. Elwood had long had a love for French café society. When he was in the armed services in World War II, he met writer and critic Gertrude Stein in Paris. He loved that period of literary history, says Riley Fitch.

She enjoyed researching Beach, who was the first to publish James Joyce's *Ulysses* and was a great influence and resource for the American writers and artists who were living in Paris. But she was disappointed to find only general information.

It took discovering a cache of Beach's personal papers in the library at Princeton University to finish her thesis. The work provided Riley Fitch a foundation of understanding Franco-American Paris and opened the way to more projects about subjects from that time and place. She has since written about Anaïs Nin, Paris café society, and Ernest Hemingway.

But it was at dinner one night in Paris with two French culinary historians that Fitch was served up what would become her most popular project—Julia Child. She demurred, saying she was in the middle of a biography of Nin. She also didn't know much about Child. "My first reaction was—that old lady on television?" she says.

"They proceeded to give me a lecture on how important she was in changing the way Americans think and eat," says Riley Fitch. So she was primed when she met the doyenne herself at a 1990 conference on food and wine. "She had read my books. I knew she was interested in the period I was writing about. I figured I had an advantage," she says. Riley Fitch mentioned she was finishing the biography of Nin, and Child, who had met Nin, was intrigued. "Her exact words were, 'Oh that should be juicy,'" says Riley Fitch.

Child had met Sylvia Beach in Paris and knew Riley Fitch's biography was an accurate, well-researched portrayal. "I told her I would like to do her story in the same way I did Sylvia Beach's story, in the context of a whole setting of international influence," she says. Child was too busy to help with a biography and had little interest in seeing one of herself. Riley Fitch replied that she didn't need much help, but would love to pursue the project with her approval.

Thus began a courtship that would lead to Child's granting Riley Fitch access to her stories and papers. The historian made a point of her love of cooking and their common backgrounds—both had grown up in California and both had ties to New England. Both loved food and France.

"When I realized that I lived in the same sort of metropolitan area (where Child grew up), I was delighted. I could drive over to the Pasadena historical society or city library," says Riley Fitch. "I could find the house she grew up in, the hospital where she was born, the school she went to. I found her grade school friends."

Riley Fitch was able to create a portrait of a spirited, adventurous girl. Child was part of a neighborhood "gang" of children tearing round on bicycles. Even at an early age, when Child was ecstatic, "her voice might chortle, guffaw, crack, or have yodel," Riley Fitch reported in her book.

"I'm always more interested in the early person—before they became part of our national consciousness," she says. "I was less interested in the famous Julia, and more interested in who she was before. I realized she had a full life before she ever, ever started cooking. Before she became this cook on TV."

There was the Julia who, once the war started, was drawn to Washington, D.C. She tried to join the U.S. Navy WAVES, but was rejected because of her height—two inches over six feet. She landed in the Office of Strategic Services (OSS), the precursor of the CIA. She worked for a time as a senior clerk in director William Donovan's office and later jumped at the chance to be posted overseas. At 31 she went to India. By 33 she was in China, where she met her husband-to-be, Paul Child.

To fill out this part of Child's life, Riley Fitch had access to Paul Child's daily letters to

1970s

Donna Salgado ('73 Engl.) 58, May 26, 2009, Spokane.

1980s

Harold Elliott Helton ('84 PhD History) 2009, Bellingham.

Donn Steven Paulson ('85 DVM) 57, June 18, 2009, Spokane.

1990s

Krista Krebs ('90 Crim. J.) 47, June 26, 2009, Gresham, Oregon.

Greg Long ('91 Chem.) 43, July 24, 2009, New Mexico

Katie McEachran ('97 Zoo.) 34, May 21, 2009, Spokane.

Faculty & Staff

Mary Anthon, retired staff, August 24, 2009, Farmington, Utah.

Joan Berney, 55, business services employee, May 31, 2009, Moscow, Idaho.

Dona J. Cooper, 72, retired from Zoology, July 2, 2009, Blaine.

Oscar Gildemann, 87, retired staff, July 16, 2009, Spokane.

Edith Hecht, 90, retired staff, July 2009, Seattle.

Richard Jacobsen, 47, staff, June 20, 2009, Moscow, Idaho.

Lance LeLoup, 59, retired faculty, July 23, 2009, Whidbey Island.

Leon D. Luck, 88, retired faculty, September 27, 2009, Spokane.

Richard Maxwell, 80, retired faculty, May 23, 2009, Coupeville.

Margaret Muzik, 87, retired staff, August 7, 2009, Othello.

Daniel R. Peterson, 89, retired dairy staff, July 28, 2009, Pullman.

Dorothy Price, 72, retired human development faculty, August 4, 2009, Pullman.

Michael Allen Pritiken, 51, former Bookie employee, July 13, 2009, Worley, Idaho.

Kathleen Elizabeth Sain, 58, library technician, August 4, 2009, Pullman.

Larry Simonsmeier, 64, retired former College of Pharmacy dean, July 17, 2009, Portland, Oregon.

Richard Leigh Thiessen, 54, former geology faculty, July 18, 2009, Everett.

David Ward, 65, former sociology faculty, December 6, 2008, South Carolina.

his twin brother. "Once she met Paul Child, I had a daily record of her life," she says. Riley Fitch also met people who knew Julia from the OSS, and she tracked down the family who rented the Childs an apartment in Paris. "I had great fun finding all these people," says Riley Fitch. Many of them provided color and details that surprised even Child.

Though Child was reluctant about the project at first, once Riley Fitch started her research, she opened her home in Cambridge, Massachusetts to her. On one of the early visits, she met Riley Fitch at the door and said, "My secretary will show you where all my files, and my desk, and my cupboards, and my drawers are, and you are to look at everything. I have nothing to hide," says the writer. Everything was there, even things she didn't remember she had. Riley Fitch discovered filing cabinets in the basement filled with diaries and government papers.

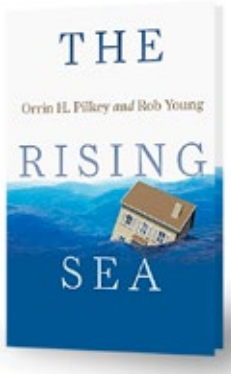
Noël Riley Fitch with Julia Child. *Courtesy Noël Riley Fitch.*

When it did come time to ask questions, Riley Fitch found her way to the place where Child felt most relaxed. "It was usually at the kitchen table while she was cooking. She would clang and bang," says the author, who tape recorded the interviews and later enjoyed hearing the sounds of Child simultaneously working and talking.

She also visited with Child in France, first meeting her as she was leaving her home in the country for the last time, and later catching up with her in Paris for a special dinner (one of Child's final meals in France) at one of her favorite restaurants—Chez Josephine. "It was one of those foie gras and duck confit kind of places," says Riley Fitch.

In the end Julia Child was pleased with what she called "The Book," says Riley Fitch. Though *Appetite for Life* may not have turned out to be what many fans of Child were craving. "I think when it came out, people expected it would be a food book. They'd ask me, 'Are you going to put recipes in it?' I didn't."

"It's really a cultural literary biography," says Riley Fitch. She describes the time, people, and places. She explores how world events helped shape the woman who became the celebrated Julia Child, and how Child helped shape our nation's notions of food. "Julia got the whole country interested in food," she says. "She changed our attitude, even if we don't cook her recipes." «



The Rising Sea *by Orrin H. Pilkey '57 and Rob Young* ISLAND PRESS, WASHINGTON D.C., 2009 :: *Reviewed by Larry Clark* :: The island nations of Tuvalu and the Maldives, the Inupiat Eskimo village of Shishmaref, and Soldado Island off the Colombian coast might be tough to find on a geography quiz. But all of these locations foretell a future of oceans overwhelming coastlines. In each of these remote places, residents are either moving or preparing to move to higher ground before their homes get swallowed by the sea. Far more famous Venice also feels the threat of rising waters, along with sinking land. Iconic St. Mark's Square was flooded seven times in 1900; today, the square is underwater about a third of the time.

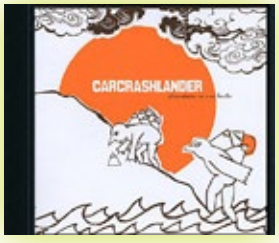
Using examples like these from around the globe, Orrin H. Pilkey ('57 Geology) and Rob Young lay out the facts about increasing sea levels, the probable causes, and the consequences of inaction. Their stance—that the oceans are rising and will inevitably continue to—is bolstered by scientific field data, while acknowledging the unpredictability and limitations in current understanding of sea levels. They don't rely on mathematical modeling or generalities. In *The Rising Sea* the authors strongly insist that the many varieties of coastline will be impacted differently by rising waterlines. However, most coasts will be impacted, and severely. Pilkey and Young have harsh words for deniers of climate change and sea level rise who claim the increase will either not occur or happen in tiny increments. The rapidly melting ice sheets in Greenland and Antarctica, write the authors, "are truly the 800-pound gorillas in the room of global climate change." With the ice sheets' contributions, they claim sea levels could realistically rise seven feet by 2100—three feet in the best case scenario.

Such a catastrophic rise in the sea level would displace millions of people, destroy billions of dollars in property, and require massive evacuations. Outside of the human cost, vital ecosystems around the world, from mangrove forests to salt marshes and coral reefs, would face massive erosion.

Pilkey and Young's primary solution is simple: move on back. They feel like the engineering solutions of levees, expanded beaches, even restoring wetlands in some areas, will not stave off the oceans creeping inland. As an example, Katrina's devastation of New Orleans showed the failure of levees.

Instead, the authors call for governments to restrict oceanfront development where rising sea levels could threaten homes and infrastructure and to plan a strategic retreat where necessary. Without an orderly plan and stronger public policy, the amount of money and trouble will rise along with the level of the ocean. ⊗

Mountains On Our Backs *by Carcrashlander: Cory Gray, Brian Wright '02, Alexis Gideon, Cliff Hayes, and Jessica Wright '02* JEALOUS BUTCHER RECORDS, 2008 :: *Reviewed by Marisa Sandoval '10* :: Nestled in the generally indescribable genre of indie music, Carcrashlander challenges the listener by continuing to venture into experimental music. In their most recent album, *Mountains On Our Backs*, the group combines basal vocals and keyboards with wildly discordant guitar riffs and deep percussion.



The band began as a project by vocalist Cory Gray. With the addition of drummer Brian Wright, guitarist Alexis Gideon, bass guitarist Cliff Hayes, and flutist Jessica Wright, who doubles as band manager, a sound was born. The group has released four albums including *Mountains On Our Backs*. Influenced by the former Desert City Soundtrack and current indie music group The Decemberists, as well as vocal legends like Bob Dylan and John Lennon, Carcrashlander's sound has its own niche.

Although they now live in Portland, Oregon, two members attended Washington State University. Jessica (Mardis) Wright '02 and Brian Wright '02 played in the WSU Jazz Band as music students. Jessica specialized in the tenor and baritone saxophones for the band, as well as studied jazz flute. Brian focused primarily on the drumset. Both were twice honored as Outstanding College Soloists at the Lionel Hampton Jazz Festival.

Following graduation, Jessica and Brian moved to Los Angeles where Brian completed his MFA in jazz drums at the California Institute of the Arts. They were married in 2003 and relocated to Portland where Jessica is now in her final semester at the University of Portland

finishing her MA in music with an emphasis in composition. Brian has recorded more than thirty records and soundtracks, including three with Carcrashlander.

In *Mountains On Our Backs* echoing voices and eerie guitars dominate the eight-minute title track. The discordant guitars and deep, harmonized vocals might convince a new listener to skip the track, impatient to hear a cleaner recording. With subsequent tracks, Carcrashlander shifts from a chaotic adventure to a thoughtful, haunting sound. Deep lyrics and rich piano chords blend together to form an intriguing album. Brian's drums are especially noticeable, and appreciated, in "Capillary Webs" and "Bone Noose" where the percussion ties all the other musical elements together, while itself resisting the limelight.

Mountains On Our Backs balances upbeat, overexcited tracks with quiet, thoughtful moments of musical poetry. While Cory performs as the lead vocalist, the emphasis on percussion and seemingly personalized guitar riffs balance the album between each member to create a cohesive record. ⊗

Olive the Little Woolly Bugger :: Olive and the Big Stream :: Olive Goes for a Wild Ride *by Kirk Werner '85* :: JOHNSON BOOKS; BOULDER, CO, 2007, 2009 :: *Reviewed by Larry Clark* :: Flyfishing—a sport and an art practiced for centuries—fascinates me with its smooth casts and rhythm, but I had never connected flyfishing with kids. At least not until *Olive the Woolly Bugger*, a cartoon "streamer" fly starring in a series of three books that introduce flyfishing to children.

Playing off goofy fly names—like zonker, yellow sally, and gold-ribbed hare's ear—author and angler Kirk Werner ('85 Comm.) creates a world of flies-in-training whose only goal is to catch fish. The bright illustrations and lively adventures appeal to young readers, while they learn about the tricks and techniques of flyfishing.

In the first adventure, Olive's off to Camp Tightloops, where she meets a tackle box full of colorful dry flies. She feels insecure, since as a streamer she doesn't float above the water. Eventually she fits in and learns to zip and weave for fish appeal.

Olive and the Big Stream sees Olive and her new friends trying their skills at landing a trout. In *Olive Goes for a Wild Ride*, Olive meets Clark the small steelhead, and together they explore a racing river.

The last two books especially catch the frustration and excitement of fishing, a definite hook for kids who read these entertaining tales. ⊗

new & noteworthy

War Dances *by Sherman Alexie '94* GROVE PRESS, 2009 :: On the heels of his National Book Award winning young adult novel *The Absolutely True Diary of a Part-Time Indian*, Alexie offers a collection of short stories and poems. The title piece "War Dances" ran in the *New Yorker* in August 2009. The first person account deals with the narrator's sudden loss of hearing and sense of mortality that takes place when his wife is away. The piece ties in with the illness (from alcoholism and diabetes) and death of the narrator's father. A brief summary here won't capture the layers and nuance of the title piece and others in the book. Alexie, again, has produced something different and provocative. ⊗

Environmentalism in Popular Culture *by Noël Sturgeon, WSU Faculty* UNIVERSITY OF ARIZONA PRESS, 2009 :: The author looks at how American popular culture shapes ideas about the environment and what is "natural" and how that reinforces social inequities based on race, gender, and sexuality. ⊗

My 70s Book *by Darryll Sherman '88* DOG EAR PUBLISHING, 2008 :: A reminiscence of a suburban childhood in a time of banana bicycle seats, Etch a Sketch, and disco. ⊗

Making the Grade/ Plucky Schoolmarms of Kittitas Country *by Barb Owen* WASHINGTON STATE UNIVERSITY PRESS, 2009 :: A collection of first-hand accounts of women who taught in Kittitas County's rural schools between 1914 and 1942. ⊗

Grover Krantz (1931–2002) and Clyde

LINDA DAVIDSON/THE WASHINGTON POST

by Tim Steury :: "I've been a teacher all my life, and I think I might as well be a teacher after I'm dead," Grover Krantz told the Smithsonian's anthropology collections manager David Hunt as they negotiated Krantz's proposed donation of his skeleton to the Smithsonian's natural history museum. As a physical anthropologist specializing in hominoid evolution, Krantz gleaned his understanding and ideas by studying the bones of apes and humans. Following his death, his own bones would become available for study.

Odds were, however, that his bones would remain in a drawer, alongside the bones of his three Irish wolfhounds, which he had already donated, waiting for whatever forensic or osteological questions might be answered through their examination.

But along came a proposal for a major exhibit, "Written in Bone," based on work by forensic anthropologist Doug Owsley and focusing on a study of Colonial-era grave sites in the Chesapeake region. Owsley proposed including Krantz, and Clyde, his favorite wolfhound, as a finale to the exhibit. Museum taxidermist Paul Rhymer agreed to try and put Krantz's and Clyde's skeletons together, modeling them after a photograph of Krantz and his dog.

COURTESY KRANTZ FAMILY

The effectiveness of Rhymer's effort, which captures the warmth of the scientist and dog's relationship in life, can be seen in the young faces in the photograph.

Krantz arrived at Washington State University in 1968 and retired in 1998. He was widely regarded for his work in human evolution and, more controversially, for his study of Sasquatch.

Visit the Smithsonian's Web site "Written in Bone": anthropology.si.edu/writteninbone.

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