Why yes, that is a UWAA membership card on the wall.

If our members seem a little proud, please excuse them. After all, their support makes Columns magazine possible.

There are alumni and there are alumni association members. While all graduates have reasons to be proud, UWAA members have a few more. One of them is the difference they make for Columns magazine. Without member support, Columns would not be what it is today.

The UWAA has published an alumni magazine since 1908, and Columns has been a strong voice through much of the UW’s history. Where else would you find out about the amazing things happening on campus and the UW alumni who are changing our world? Columns magazine takes you inside the UW.

If you’re already a member, thank you for supporting Columns. If you’re not a member, we invite you to join today during our Spring Membership Drive.

Sign up at UWalum.com before April 30, 2011, and get a free gift!

Not sure if you’re a member? Turn to the back cover of this issue and check your mailing label to see your membership status.
We love our Huskies like only an airline called Alaska could.

Introducing Alaska Airlines Arena at Hec Edmundson Pavilion.

alaskaair.com

NORTH of EXPECTED
BROADCAST YOUR CAREER ENTHUSIASM. AMPLIFY YOUR SUCCESS.


To learn more, visit vzwcareers4you.com

Careers For Everything You Are

Rebecca Amos-Stuart is a “Husky” and a VZW Director

“Every day I am energized to lead a team that is passionate about winning the right way: with creativity, integrity and a commitment to delivering an outstanding customer experience. I am proud to be a Husky working for the leader in wireless - Verizon Wireless.”

We are looking for people like you to join our team and help us empower our customers to Rule the Air. Please visit us online at vzwcareers4you.com.
Game On: 
A Special Look at Video Games

24
Play for Pay
Video games are in two-thirds of American households and accounted for $19 billion in sales last year. It’s no coincidence that UW alumni, students and faculty have been major players in the industry.

28
What Games Mean
For the first time ever, research scholars are taking a close look at video games. And the University of Washington is leading the way in answering the question: What does it mean to play a video game?

30
From Pixels to Proteins
Gaming isn’t just a chance for teenagers to blast an enemy to bloody bits. UW faculty, students and alumni are also using computer-game technology to solve some of humankind’s most vexing problems.
Taking Pride in Being A HUSKY

ONE OF THE MOST DISAPPOINTING ASPECTS of the terrible state budget cuts isn’t just that the University of Washington will take a big hit. It’s how easily the state Legislature aimed its budget-cutting axe at the University.

No one questions what an awful job state legislators face, having to decide which services to cut or eliminate. Equally lamentable, however, is the impact these cuts to higher education will have—not just to the UW, but to the state and its economy. Now, more than ever, the major players in the state economy—Boeing, Microsoft, etc.—are lamenting the critical need for more highly educated, highly skilled workers. The sad and scary fact is that those companies will go outside of Washington to find them.

Boeing and Microsoft are just two of the major companies around here who have put their money where their mouth is, donating millions of dollars to the University precisely because they know how valuable the UW is to the state’s economy. It’d be great if state legislators got that, too.

What’s clear is that the University needs to do a better job of cultivating feelings of loyalty and support among alumni and decision makers. The UW has long been a source of pride for the state of Washington. But the way state support has been evaporating, it sure doesn’t seem that way.

Just spouting the facts about the UW’s impact on our state doesn’t seem to work any more. It’s the gut-level feelings of pride that matter—the kind I experience when I walk past the Medal of Honor monument on Memorial Way and into Mary Gates Hall, where I pass the wall featuring the photos of the 35 UW Rhodes Scholars. It’s that feeling of admiration and awe when I pass the facilities where bone-marrow transplantation was invented, or when I remember that I took a painting class in the same room as Chuck Close, or enter the William Foege Building, named for the alum who saved the world from smallpox. That kind of pride.

One great way to show your pride is to become an UW Alumni Association member. You’ve probably heard that it’s our Spring Membership Drive, and membership supports this magazine. To learn more about membership, visit UWalum.com.

Jon Marmor, ’94

MANAGING EDITOR
MENTAL ILLNESS AND THE MEDIA

Kudos to [UW Social Work Professor] Jennifer Stuber and the great work she is doing to change the image of mental illness and those with a mental illness by working with the media.

I am a clinical psychologist with the Human Development Center in Duluth, Minn. As part of my job, I co-host a weekly 30-minute live talk show/call-in show on mental health issues called “Speak Your Mind,” with a different topic each week (depression, addictions, etc.).

This is a collaborative project between my agency and our local public television station, WDSE. Our collective aim is to educate the public to reduce the stigma associated with mental illness and seeking help for psychological and emotional problems.

The show has been well received in this, our first year, and I am hopeful the show will be picked up for a second season. It is nice to see that efforts to educate the media and the public are occurring in many different areas across the country.

Carolyn Phelps, ’81, Ph.D.
Duluth, Minn.

PENGUIN CONDOS

Dr. [Dee] Boersma [Penguin Pad, December 2010], how did you convince the Galapagos government or conservationists to [give you] permission to build the “condos” [for the penguins]?

I would have thought the conservationists’ position would have been that you were interrupting a natural event regarding the evolution of these penguins.

Unless they take the position that climate change comes strictly from human intervention and therefore is not a natural event. Keep building.

SHUN LING
Via uwalum.com/columns

JON RIDER’S LEGACY

It should be noted that (then) Major [Jon] Rider [A Born Leader, December 2010] was the Marine officer instructor of the UW NROTC Program during the early 1970s. Some of us remember a bit of a legend about how some perhaps overly enthused anti-war demonstrators, apparently intent on making mischief in Clark Hall, were met at the top of the stairs by an even more determined Major Rider.

He was among the most memorable of instructors, a warrior of great tenacity and demonstrable courage, who taught us by example to take care of those who would follow us. And perhaps because of and not despite his long career in the military, indeed a gentle soul with a warm manner and quick laugh.

He is missed.

THOMAS J. LEWIS, ’76, ’81
Dripping Springs, Texas
Via uwalum.com/columns

As an NROTC midshipman at the UW, I remember (then) Major Rider well. He was a legend at Clark Hall, as we all knew about his parachuting accident when a midshipman himself at Washington. Midshipman Rider had fallen onto hot power lines after parachuting. He sustained serious burns but managed to finish college and receive his commission as a 2nd Lieutenant in the Marine Corps.

Once, as I was entering Clark Hall, campus protesters (in the fall of 1973) were marching en masse towards the building, yelling and chanting. The protesters carried large signs and were holding bricks. Entering the building, I saw Major Rider walking down the stairs and I yelled, “Prepare to repel boarders, anarchists are coming!”

The major took control of the situation and calmly negotiated with the hippies until they decided to disperse, another victory for the U.S. Marine Corps.

WILLIAM CURTIS
Via uwalum.com/columns

TRIPPIN’ WITH RICK STEVES

This public school teacher first encountered Rick Steves’ work [Rick’s World, December 2010] in 1990 when, just about to wrap up a semester abroad, a friend mailed me dog-eared, highlighted, and underlined pages from Europe Through the Back Door. My travel partner and I protected these pages as our bible as we whisked ourselves across the European continent, and I returned to America infected with the travel bug.

Now I take my students on educational trips to Europe, hoping that they, too, will gain a greater appreciation for the diversity of our world and the people in it. I have found that after people travel and experience other cultures, they cannot help but take the broader view of social issues facing home and abroad.

Keep up the good work and candid messages, Rick!

Shoreline
Via uwalum.com/columns

I like Rick’s notion of speaking out “in an area where others cannot speak out.” This is very far removed from the Hollywood celebrity concept that if you have fans, it follows that people must want you to teach them how to think on political issues.

And what a surprise to learn that he is a classmate!

WILLIAM TOLIN GAY, ’78
Irvine, Calif.
Via uwalum.com/columns

One thing that was not mentioned was the trip that Rick and his camera crew took to Iran in 2008. I made a trip to Iran that same year, and upon my return, I tried to spread the word as widely as possible through writing articles and giving talks about the positive experiences I had there.

My efforts were nothing, however, compared to the audiences reached via the excellent one-hour program that Rick put together after his trip and that has been aired many times on PBS.

I’ve heard Rick’s talks about Iran and recall that he covered the costs of the trip with his own funds. This is an example of his activism at work; putting up his own money to make a program that sheds light on a country that is poorly understood by most Americans—yet one our politicians talk about bombing.

NANCY PENROSE
Seattle
Via uwalum.com/columns

We want to hear from you. Send your letter to columns@uw.edu or comment online at uwalum.com/columns. Letters subject to editing for clarity and length.
TO SAY THAT WE ARE LIVING IN INTERESTING TIMES in higher education is truly an understatement. At the University of Washington, we face a budget challenge the likes of which we have not seen in more than 40 years. As I talk to people currently at the UW, no one can remember a time quite as challenging as this. Yet that’s not to say that our UW community has not seen tough times—on the contrary, we’ve been through many. Founded during the Civil War, our University has seen two world wars, the Great Depression and the Cold War. We’ve weathered all these things and more, and in doing so, we’ve not only survived, but we’ve grown and thrived to become one of the best public research universities in the world.

In good times and bad, our primary mission has always been and will always be to provide the very best learning experience we possibly can for our students, transforming their lives through opportunities in the classroom and outside the classroom, through community and global collaborations, through first-hand research and discovery, and through engagement in the broadest sense. No matter what happens to the way we are funded, we will always stay true to this mission that is so fundamental to being a “public” university. We wholly believe that everyone should have the opportunity to reach their full potential and achieve their dreams. For 150 years, UW students have received that opportunity through the learning experiences they found here.

Elva Arredondo, ’95, is one of those students. Elva moved to Seattle from Mexico as a teenager. The first in her family to go to college, she earned scholarships to help her attend the UW while her mother worked two jobs to provide for her family. When Elva arrived here, her professors saw in her a strong intellectual curiosity and drive, but not a clear sense of how to channel it. An intensive study-abroad trip and close contact with one of our star faculty members made all the difference. When Elva got back to campus, she grabbed every opportunity she could, working with several professors on research projects and pursuing additional study-abroad opportunities.

Eventually, Elva graduated with honors and left the UW for doctoral study at Duke. Today, she is on the faculty at San Diego State University, where she is transforming the lives of countless others through her dedicated work on health disparities and cancer and obesity prevention.

Elva’s is just one among many thousands of stories of students who have come to the UW. Continuing to provide the kinds of life-changing learning experiences that Elva and others have found here means that we must continue to be able to recruit and retain world-class faculty. It also means we must navigate some turbulent times. I’m confident we will not simply weather these times, but will lead the change to ensure that the UW continues to attract fine students.

“I’m confident we will not simply weather these times, but will lead the change to ensure that the UW continues to attract fine students.”

True to Mission

TO SAY THAT WE ARE LIVING IN INTERESTING TIMES in higher education is truly an understatement. At the University of Washington, we face a budget challenge the likes of which we have not seen in more than 40 years. As I talk to people currently at the UW, no one can remember a time quite as challenging as this. Yet that’s not to say that our UW community has not seen tough times—on the contrary, we’ve been through many. Founded during the Civil War, our University has seen two world wars, the Great Depression and the Cold War. We’ve weathered all these things and more, and in doing so, we’ve not only survived, but we’ve grown and thrived to become one of the best public research universities in the world.

In good times and bad, our primary mission has always been and will always be to provide the very best learning experience we possibly can for our students, transforming their lives through opportunities in the classroom and outside the classroom, through community and global collaborations, through first-hand research and discovery, and through engagement in the broadest sense. No matter what happens to the way we are funded, we will always stay true to this mission that is so fundamental to being a “public” university. We wholly believe that everyone should have the opportunity to reach their full potential and achieve their dreams. For 150 years, UW students have received that opportunity through the learning experiences they found here.

Elva Arredondo, ’95, is one of those students. Elva moved to Seattle from Mexico as a teenager. The first in her family to go to college, she earned scholarships to help her attend the UW while her mother worked two jobs to provide for her family. When Elva arrived here, her professors saw in her a strong intellectual curiosity and drive, but not a clear sense of how to channel it. An intensive study-abroad trip and close contact with one of our star faculty members made all the difference. When Elva got back to campus, she grabbed every opportunity she could, working with several professors on research projects and pursuing additional study-abroad opportunities.

Eventually, Elva graduated with honors and left the UW for doctoral study at Duke. Today, she is on the faculty at San Diego State University, where she is transforming the lives of countless others through her dedicated work on health disparities and cancer and obesity prevention.

Elva’s is just one among many thousands of stories of students who have come to the UW. Continuing to provide the kinds of life-changing learning experiences that Elva and others have found here means that we must continue to be able to recruit and retain world-class faculty. It also means we must navigate some turbulent times. I’m confident we will not simply weather these times, but will lead the change to ensure that the UW continues to attract fine students who learn and contribute while they’re here and then go out into the world and become leaders. At the same time, we’ll become even better at attracting and retaining the best faculty and staff and at partnering with the community and world around us.

In these uncertain economic times, I am also delighted that the UW Alumni Association has made the exciting decision to engage more actively in advocacy efforts that support higher education and the University of Washington. UW Impact—a civic and political advocacy program launched out of the nonprofit UWAA—is a wonderful resource for Husky alumni and friends who want to learn how to take action for the UW and our students. Through these efforts, we can all help ensure that students like Elva continue to have the opportunity to transform their lives.

Phyllis M. Wise, Interim President
L A U R A  G I L B R E A T H uses her body as an instrument, expressing energy and emotion on the stage of the Pacific Northwest Ballet. In season, she’s rehearsing and performing nearly every hour of the day. So it’s important that she find a primary care physician that’s in tune not just with the unique demands of her art, but with her schedule as well. With one of seven UW Neighborhood Clinics just a short walk away, Laura has found both. Not only can she count on the region’s most highly trained health-care professionals, but should she ever need it, she also has access to the entire UW Medicine health system – and some of the most highly skilled specialists in the country.

You may never use your body quite the way Laura does. But you can get the same world-class care just a few minutes from home, even if you don’t look nearly as graceful getting there.
MADAME PRESIDENT

For the first time in history, the UW has at its helm five female commanders-in-chief. From left to right: Graduate and Professional Student Senate President Sarah Reyneveld; Interim President Phyllis Wise; ASUW President Madeleine McKenna; UWAA President Colleen Fukui-Skechley; and ASUW Bothell President Amira Davis. Photo by John Keatley.
Face Time > Weather Man

On the Radar

BY ERIC LUCAS

Everybody talks about the weather, Mark Twain apocryphally complained, but nobody does anything about it. Cliff Mass, professor of atmospheric sciences, is endeavoring to alter that equation. The second half, that is—the first may be unequivocally true. If you are, say, a particle physicist, you might encounter one person a month who wants to engage in a lively conversation about it. Weather?

“People want to talk about the weather all the time,” Mass observes, sitting in his favorite personal weather station, his 6th-floor professor’s office in the Atmospheric Sciences and Geophysics Building. “The number one reason people watch local news is the weather. It’s like some sort of naturalistic religion—a power greater than ourselves that we see all the time. I love it.”

One might apply that phrase—“see all the time”—to Mass himself. Perhaps the most conspicuous weather guru in the Northwest and heir to former TV weatherman Harry Wappler’s local fame, he is regularly quoted in local news climate stories, is the author of a popular book about our region’s weather, The Weather of the Pacific Northwest, and writes a blog on the weather that receives as many as 600,000 unique visitors a month. That’s nearly the equivalent of the entire population of Seattle, avidly reading what Mass says about weather and climate.

A spare, crinkle-haired professorial type from Long Island, Mass has adored weather since he was a boy, first becoming enthralled with storms, then, by age 8, installing a hobby weather station at his home. Although he was almost equally drawn to astronomy in college (he studied with Carl Sagan at Cornell), a fascination with meteorological events won out in the end.

That’s why he believes his next book could be even more popular than the last. He’s aiming for a national, rather than regional, audience with what is provisionally titled Secrets of Weather Forecasting. “Think people will go for that? Bet I can sell 100,000 copies. Of course, I can guarantee a best-seller if I just write some nonsense denying global warming.”

He is of course jesting about writing a book that would debunk global warming. Like Sagan, Mass accepts the role of scientists as evangelists against climate change. “Global warming is an extraordinarily serious issue, and scientists have a key role to play in communicating what is known and what is not about this critical issue,” Mass says. “It’s imperative that scientists communicate directly with the public, and we now have the tools to do so—such as my blog.”

The new book will describe, in everyman terms, the ultra-high-technology modern forecasters rely on. Three to five days out, Mass avers, regional forecast abilities are
now close to 100 percent accurate. That’s because several large computer clusters, such as one in the Atmospheric Sciences Building, run dozens of massive simulations based on satellite, radar and other data, and continually adjust the results. And, a forthcoming radar station on the Pacific coast near Hoquiam will soon vastly enhance our ability to “see” the atmospheric features far out in the ocean that bring weather our way. Even now Puget Sound radar is so precise that Mass consults radar maps online to see where rain is falling—he doesn’t want to get poured on—before he commutes along the Burke-Gilman Trail to campus on his bike.

Mass himself has devoted his professional life to creating programs that will, in effect, change the way weather forecasters do business.

“Once our computer simulations become good enough, we can be taken out of the loop,” he predicts, somewhat mischievously. Is he, in effect, predicting the demise of forecasters at local weather stations altogether?

It may be the sort of forecast he savors. He himself is not in the business of daily weather forecasting.

“I’m an atmospheric scientist,” he says, when asked if he’s a meteorologist or climatologist. Which may be why he’ll occasionally add a testy note to his weather blog when readers accuse him of failing to warn them about upcoming weather events, such as the pre-Thanksgiving snowstorm that tied Seattle in knots last year. The blog is meant to explain the phenomena behind Northwest weather and climate—not forecast it.

“This is a great area for weather. Our storms are big,” he enthuses. “Once we have all the data we need from out in the Pacific, our forecasts will get even better.”

In his office, Mass sits beneath a picture of a rainbow drawn by one of his boys as a kid. Its end points toward Mass’ pot of gold: the computer stations on which he scans all the information undergirding his career. Although there is a small weather station on the roof of the Atmospheric Sciences Building—with a great view of Lake Union and downtown Seattle—Mass would rather be at his desk, calling up innumerous charts, maps, radar readouts and other depictions of the weather on side-by-side flat screens. To him, it’s like a very high-tech video game.

“This is not really a career. It’s a hobby,” Mass says, admiring a graphic display of predicted Northwest atmospheric pressure gradients on his computer. “I love it. I’m still having fun.”

In addition to this story, writer Eric Lucas has weathered 1969’s Hurricane Camille and a near miss by lightning strike in the Colorado Rockies.

In addition to this story, writer Eric Lucas has weathered 1969’s Hurricane Camille and a near miss by lightning strike in the Colorado Rockies.

What’s Cliff Mass’ favorite kind of weather?

Find out exclusively online in “10 questions for Cliff Mass” at UWalum.com/Columns/FaceTime
Scientists use the public to study and protect the environment

Across campus, and especially within the College of the Environment, researchers are using a new method for collecting old-fashioned data: They are employing real people—citizen scientists—to study changes in the environment.

While foraging Pacific Northwest forests and scouring Pacific Coast beaches collecting plant cuttings or water samples may sound like a fascinating hobby, it’s not all just a bunch of feel-good tasks. The projects are built on a solid framework of scientific inquiry, with genuine rewards for participants and the researchers overseeing them.

Take, for example, Professor of Chemical Oceanography Rick Keil’s use of citizen scientists to demonstrate how human-derived substances arrive in bodies of water. Volunteers in his SoundCitizen project collect water from Puget Sound or surrounding watersheds and help measure the amounts of spice “tracers”, such as cinnamon, vanilla or thyme.

Although the tracers are benign, they follow what Keil calls the “sink-to-Sound” path. That’s the same route taken by many harmful compounds in kitchen cleaners and household products.

“If minute traces of spice can accumulate to measurable amounts in Puget Sound, it makes one wonder what else is being washed down the drain—and what the environmental consequences might be,” says Brittany Forrest, co-founder of SoundCitizen.

Farther down the coast, volunteers for the Coastal Observation and Seabird Survey Team roam beaches, identifying dead birds that wash ashore to study natural and human impacts on Pacific Northwest aquatic ecosystems.

In 1997 Julia Parrish, director of College of the Environment’s Program on the Environment, was observing a colony of common murres, and yearning for a big picture of life on the Washington coastline. So, she established COASST, a multi-state project that generates high-quality data all the way from the Bering Sea to Santa Cruz and, to date, has attracted more than 600 volunteers.

“I’m stunned at the number of people who are jazzed about going out to find dead birds,” says Parrish. Collectively, COASST workers survey about 300 Pacific Coast beaches, filling out data sheets and snapping photos of every bird carcass they find. Parrish pools the data and looks for patterns. An unexpectedly large number of seabird carcasses could signal a seasonal shortage of food fish, a toxic algae bloom, an oil spill at sea, or something entirely new.

“COASST helps people understand their local natural resources and provides a basis for getting involved,” says Parrish.

Further inland, citizen scientists with UW Botanic Gardens Rare Plant Care and Conservation program are turning their eyes to such places as the shrub steppe of Central Washington in search of plants listed as endangered, threatened or sensitive to decline. Statewide, more than 350 native plants fall into these three categories, their fates often tied to disturbances from land development, intensive grazing and recreational vehicle use. Keeping tabs on plants like the endangered Wenatchee Mountains checker-mallow—which grows in just five locations—has become an important part of Rare Care’s mission.

While about one third of Rare Care’s volunteers are doctoral or master’s degree-holders, not all have impressive academic credentials. Some of the best volunteers are gardening hobbyists. And yet, their research matters. By employing citizen scientists and sharing its data, Rare Care has been instrumental to updating Washington Natural Heritage Program’s estimates of rare plant populations throughout the state.

“We’ve heard a number of times that our information has been used by people writing environmental impact statements and other important planning documents,” says Wendy Gibble, ’06, Rare Care’s program manager.

From Sound to mountains, these are just three examples of how citizen-powered research is becoming fundamental in forwarding science and serving the environment. —David Gordon
Diversity in the Future

THE UW HAS LAUNCHED AN INITIATIVE to embed diversity across the campus. The Diversity Blueprint will serve as a piece of the president’s Two Years to Two Decades Initiative and has established six major areas of emphasis: diversity in curriculum and research; leadership and missions on campus; attracting and retaining diverse students, faculty and staff; diversity-rich learning experiences in the classroom; preparing students to be global citizens; and creating an overall welcoming climate for diversity.

Representatives from each academic unit have been asked to assess needs and priorities in departments across campus to determine how the school is positioned in relation to the established goals.

The UW hopes to finalize the diversity plan by 2014.

—Almeera Anwar, ’12

UW in Your Community

Want to find out which Seattle startup was developed at the UW, then transferred to the private sector? Map it at the UW Office of State Relations’ new interactive Web site, washington.edu/staterelations/map.

Visitors to the site can type in an address and find out, for example, how many Husky Promise students live in Yakima’s 14th district (105), which elementary school the Burkemobile stops at in Ellensburg, how many WWAMI clinics the UW serves in Spokane, or which local businesses were awarded joint contracts with the UW and more. The site, created by the Office of External Affairs, was designed to help citizens across the state understand the UW’s impact on the region.

Rites of U-PASS age

Next year it can walk into the bar with students, but this year, the U-PASS celebrates 20 with some huge accomplishments.

$16 million: saved on transit by U-PASS members in 2008 alone

150 million: transit trips taken by U-PASS members

135,000: students who have owned a U-PASS

$20: the quarterly cost of a student pass in 1991

$99: the current quarterly cost of a student pass

ALUMNI VOTE

Did you have a classmate who went on to become famous? Who is it?

Go to UWalum.com/Columns and give us your answer.
You could say Philip N. Howard predicted Egypt and Tunisia’s recent revolts. In his book, The Digital Origins of Dictatorship and Democracy: Information Technology and Political Islam, the UW associate professor of communications examined 75 countries with significant Muslim communities and found a clear relationship between the rates of social media diffusion and democratic outcomes. He also developed a recipe for making modern democracies—having a wired, civil society with a relatively small, well-educated population—and found at least two countries that would be likely candidates for a revolution: Tunisia and Egypt.

That’s because both were ruled by authoritarian dictators, are heavily Muslim, and had large civil societies and lots of Internet users.

As the world saw, it was digital media that so effectively helped topple the two autocratic regimes. As one protestor said, “We used Facebook to schedule the protests, Twitter to coordinate and YouTube to tell the world.”

The revolution was good for Egyptians, but perhaps not for Howard’s research. He recently applied for a National Science Foundation grant to study social media use during Egypt’s 2011 elections. “Egypt has the second largest blogging community in the Middle East, after Iran, and they were supposed to have a rigged election in September,” he says. “I was pretty sure the election would turn ugly; I didn’t think it would happen earlier.”

—Julie H. Case

Taking Video Games Into a New Arena

UW Bothell is taking computer games out of the realm of entertainment and into the arena of helping mankind. Its new Center for Serious Play brings together the region’s finest gaming engineers and firms to work with students and faculty to create an interactive lab to perform research, test-drive new products and translate gaming into educational tools for businesses and classrooms.

The center is also hosting camps for 6th- to 11th-grade girls to encourage their participation in science and technology, provides training to middle- and high-school teachers to bridge the gap between math, science and digital media and has entered into a partnership with University College of Dublin’s SMARTlab Digital Media Institute, which offers a world-renowned doctoral program. Beginning this year, SMARTlab students will have the opportunity to study at the Bothell campus.

UW Bothell is really serious about interactive media. It has proposed to offer a new bachelor’s degree program in Interactive Media beginning in winter 2012, as well as a Game Development Certificate program this coming fall.—Jon Marmor

SOUNDBITE

“I was in the Navy [for] 24 years, and I trained to do nothing but battlefield casualty care. Did it prepare me? I would say of course it did.”

—Peter M. Rhee, ’95, ’96, the trauma surgeon who operated on Rep. Gabrielle Giffords, the Arizona congresswoman who survived an assassination attempt in Tucson, Ariz., on Jan. 8. He is the trauma medical director at University Medical Center in Tucson.
Had cancer. As in past tense.

Every day at Seattle Cancer Care Alliance, our doctors turn cancer patients into cancer survivors. Our world-class treatment center unites doctors from Fred Hutchinson Cancer Research Center, UW Medicine and Seattle Children's with a few simple goals. To make cancer a distant memory. And get people back to the joy of living their lives. For more information and to help us celebrate the lives we've touched over the past ten years, visit SccaNTenYear.org

Seattle Cancer Care Alliance
Fred Hutchinson Cancer Research Center
UW Medicine
Seattle Children's

10
Ten years. Thousands of lives saved.
PEOPLE IN THE NEWS

Bryan Monroe, ’87, has been named editor of CNNPolitics.com. Monroe, former president of the National Association of Black Journalists, had been a visiting professor at Northwestern University’s Medill School of Journalism. He previously was editorial director and vice president of Ebony and Jet magazines. While at Knight-Ridder in 2005, he led the team in Biloxi, Miss., that won the 2006 Pulitzer Prize Gold Medal for its coverage of the aftermath of Hurricane Katrina.

Michelle Williams, professor of epidemiology and global health in the UW School of Public Health, was honored by the White House as one of the nation’s outstanding mentors in science, math and engineering. Williams set up a program to train students from educationally and economically disadvantaged backgrounds for research and leadership careers in public health.

Edwina “Eddie” Uehara, dean of the UW School of Social Work, is the inaugural holder of the Ballmer Endowed Deanship in Social Work, the nation’s first endowed deanship in the field at a public university. The gift, from Connie and Steve Ballmer, supports the work of Uehara, who has been dean since 2006.

Douglas King, ’71, is the new president and CEO of the Museum of Flight in Seattle. Former astronaut Bonnie Dunbar, ’71, ’75, had been president and CEO before stepping down last summer to serve as executive director of Wings Over Washington. That organization is working to bring a retired NASA space shuttle to the Museum of Flight.

Assunta Ng, ’74, ’76, ’79, founder and publisher of the Seattle Chinese Post and Northwest Asian Weekly, has been named the recipient of the University of Washington’s Charles E. Odegaard Award. It is the only University- and community-selected award and is regarded as the highest achievement in diversity at the UW.

More Noteworthy news can be found at www.uwalum.com/columns.

The UW School of Pharmacy received the 2010-11 Transformative Community Service Award from the American Association of Colleges of Pharmacy for having students administer seasonal flu vaccines at two local addiction-treatment centers and for collaborating with the Nisqually Tribal Clinic near Olympia.

Nancy Pearl, who teaches in the UW Information School, was named the 2011 Librarian of the Year by Library Journal. Pearl served as executive director of the Seattle Public Library’s Washington Center for the Book and founded the “If All Seattle Reads the Same Book” program.

UW President Phyllis Wise has been selected by the Asian Pacific Fund as the recipient of the fifth annual Chang-Lin Tien Education Leadership Award, which recognizes the professional accomplishments and leadership of Asian Americans in higher education. The award honors the legacy of Chang-Lin Tien, the first Asian American to head a major American research university. He served as chancellor of the University of California, Berkeley, from 1990 to 1997.

Where you live can change how you live.

Since 1987, our mission has remained clear: the creation of premier residential communities dedicated to exceptionally professional care.

www.uwalum.com
After the Whistle: 
HUSKY STADIUM RENOVATION OK’D

The renovation of Husky Stadium received the green light to proceed when the University of Washington Board of Regents approved the $250 million project in November.

The project—which will not use any public or University funds—is scheduled to get under way just before the end of the 2011 football season. The 2011 Apple Cup game against Washington State will be played at Qwest Field in downtown Seattle, meaning the final home game in Husky Stadium before construction begins will be Nov. 5 against Oregon.

“The approval allows us to take the next steps in a project which is vital to the success of our football program and our department,” Athletic Director Scott Woodward said.

The project includes:
• New lower bowl and south stands
• Suite, loge boxes and club seating
• Removal of the track and lowering the field by 4 feet

A football operations building on the stadium’s west side
The Department of Intercollegiate Athletics will fund the renovation through 30-year bonds. In addition, the UW is seeking major gift donations of $50 million as well as $200 million in new revenue from naming rights, season tickets and premium seating to cover the cost.

The project is scheduled to be completed by the start of the 2013 UW football season. The Huskies will play their 2012 home football season at Qwest Field. The Huskies will open play in renovated Husky Stadium on Sept. 7, 2013, with a game against Boise State.

While Husky Stadium has long been known as one of the premier college football venues in the nation, it requires a number of safety upgrades and other changes.

“An enhanced fan experience, while still embracing the great tradition it holds, will all be part of making our football program more competitive.” —Jon Marmor

NEWS FROM THE DAWGHOUSE

Alaska Airlines has signed a deal to give the University of Washington $700,000 in cash and sponsorship benefits for each of the next five years for the naming rights to Hec Edmundson Pavilion. The facility in January was renamed Alaska Airlines Arena at Hec Edmundson Pavilion.

Senior quarterback Jake Locker ended his Husky career in style by leading Washington to a stunning 19-7 upset of No. 17 Nebraska in the Holiday Bowl. Sophomore running back Chris Polk (177 yards rushing) was named the game’s Offensive Most Valuable Player. Senior linebacker Mason Foster, the game’s Defensive MVP, led a Husky defense that held Nebraska to just 189 yards of total offense, the third lowest total in bowl history.

The Husky women’s soccer team capped one of the best seasons in school history by making it to the Elite Eight of the NCAA Tournament. The Huskies (13-9-2) scored two tournament upsets, eliminating No. 2 Portland and UC Irvine. The Huskies’ run ended with a 2-0 overtime loss to Boston College in the quarterfinals.

The UW women’s volleyball team made it to the Elite Eight of the NCAA Tournament in December before being eliminated by eventual NCAA finalist California. The Huskies (24-9), who upset No. 2 Nebraska in the Sweet 16, finished the season ranked sixth in the nation.

Jamie Clark has been named coach of the UW men’s soccer team. He replaces Dean Wurzberger, who stepped down after 19 years with the Huskies. Clark, a former All-American at Stanford, coached at Creighton last year and at Harvard the two seasons before that.

Huskies radio announcer Bob Rondeau has been named Washington Sportscaster of the Year by the National Sportscasters and Sportswriters Association. It was the eighth such award for Rondeau, who handles play-by-play for Husky football and men’s basketball.

Huskies Celebrating Huskies, an event that gives Husky fans from all over the state of Washington the chance to meet with Husky coaches and athletes, has unveiled its 2011 schedule.

The schedule:
May 9: Bremerton (Kitsap Conference Center)
May 10: Tacoma (UW Tacoma)
May 12: Everett (Everett Event Center at Comcast Arena)
May 16: Spokane (Location TBD)
May 19: Portland (Pure Space, Pearl District)

Sign up at UWAlum.com/cheer.
UNIVERSITY OF WASHINGTON SURGEONS in October performed the world's first surgical procedure to implant a device that could give hope to millions of people suffering from Ménière's disease—an insidious, mysterious disorder that causes vertigo, hearing loss, ringing in the ear and a feeling of pressure in the ear. Named for Prosper Ménière, a French physician who in 1861 published his theory that symptoms of the disease could be traced to inner-ear problems, the affliction has no known cause, and no cure. It affects approximately one out of every 1,000 people, or less than 1 percent of the U.S. population. Without a cure, treatments have been aimed at managing symptoms. Lifestyle and diet modifications—eliminating salt from the diet, avoiding alcohol and caffeine, stopping smoking, limiting stress—have provided some relief. So have medications, middle-ear injections and hearing aids. Surgical procedures were a last resort because they could fix some problems with substantial cost to the patient.
That's why the surgery, performed by a UW team led by Dr. Jay Rubinstein, holds such promise.

The UW device, which was implanted into a Yakima man, is essentially a cochlear implant with new electrodes and software. It is being tested in a 10-person surgical trial.

The device represents more than four years of work by Rubinstein and Dr. James Phillips, both professors of Otolaryngology-Head and Neck Surgery in the UW School of Medicine. They worked with Drs. Steven Bierer, Albert Fuchs, Chris Kaneko, Leo Long and Kaibao Nie, UW specialists in signal processing, brainstem physiology and vestibular neural coding.

“What we're proposing here is a potentially safer and more effective therapy than exists now,” says Rubinstein, who holds a Ph.D. in bioengineering and is director of the UW's Virginia Merrill Bloedel Hearing Research Center.

Ménière's occurs mostly in people between the ages of 30 and 50, but it can strike anyone at any time. Rubinstein has seen it develop in a child of 6 and a man of 86.

The disease is so maddening because it can affect balance and hearing with varying intensity and frequency. Its episodic vertigo—lasting up to 20 minutes per episode—is thought to stem from the rupture of an inner-ear membrane. That can cause endolymphatic fluid to leak out of the vestibular system, causing havoc to the brain's perception of balance.

To stave off nausea, people must lie still for hours while the membrane repairs itself and equilibrium can be restored, says Phillips, director of the UW Dizziness and Balance Center.

Because the attacks come with little warning, a diagnosis of Ménière's can force people to change careers and make other drastic adjustments, such as giving up driving.

Many patients do respond to first-line treatments—medications and changes in diet and activity. But when these therapies fail to reduce the rate of attacks, surgery is often an effective option but is often destructive in nature. In essence, a patient sacrifices function in the affected ear to halt the vertigo—akin to a pilot who shuts down an erratic engine during flight. Forever after, a person's balance, and often, hearing rely on the function of just one ear.

With this new device, Rubinstein and Phillips are aiming to restore a patient's balance during attacks while leaving natural hearing and residual balance function intact.

This is how it works: A patient wears a processor behind the affected ear, and activates it as an attack starts. The processor wirelessly signals the device under the skin, which transmits electrical impulses through three wires inserted into the canals of the inner ear’s bony labyrinth.

“It’s an override,” Phillips says. “It doesn’t change what is happening in the ear, but it may eliminate the symptoms while replacing the function of that ear until it recovers.”

A grant from the National Institutes of Health funded the development of the device and its testing. The U.S. Food and Drug Administration approved the device in June. A grant from the Coulter Foundation is helping cover the costs of the human trials, which could help UW researchers see if the device could help millions of people who are affected with common balance disorders.

By basing their invention on cochlear implants, whose design and surgical implantation were already FDA-approved, Phillips and Rubinstein were able to leapfrog scientists at other institutions who had begun devising prototypes years ago.

“If you started from scratch,” says Rubinstein, “in a circumstance like this, where no one has ever treated a vestibular disorder with a device, it would probably take 10 years to develop such a device.”

A successful human trial could lead the implant to becoming the first-choice surgical intervention for Ménière's, Phillips says, and spark collaboration with other researchers studying more widespread balance disorders.

The first patient was Gene Pugnetti, 56, of Yakima. He has unilateral Ménière’s disease and has been a patient of Rubinstein’s for about two years.

Cochlear Ltd. of Lane Cove, Australia, is manufacturing the 10 devices for the surgical trial.—Mary Guiden and Brian Donohue
WE LOVE THE ENCHANTING SONGS of whales, the clicks and squeals from porpoises. And now, a University of Washington oceanographer has brought us more melodies from the deep.

Only this time, the sound is of the shattering of an iceberg located near Antarctica’s Cape Adare.

This iceberg—measuring 76 miles long and 17 miles wide—sped toward an underwater shoal in 2005 when it collided, shattering into several pieces in just five hours.

The strange song was recorded 700 miles away by seismic equipment at the South Pole, surprising scientists about how far the sound of the breakup propagated, said Seelye Martin, UW research professor of oceanography. He was the lead author of a paper about the event that was published last year in the *Journal of Geophysical Research*.

The sound file of the event was compressed by a factor of 200 so the event can be heard in less than two minutes, according to Martin.

The wind-like, whistling sounds are the harmonics created as the iceberg sticks and slips over the shoal. Listen as the cracking sounds build—that’s probably fractures propagating through the iceberg like an ice cube fracturing when put in a glass of water—and then a sharp shot. The eerie moaning sounds are probably from the resulting pieces of ice rubbing against each other.—Sandra Hines

To listen to the iceberg crash, go to http://www.washington.edu/news/articles/iceberg-snaps-produces-strange-song.

IT WAS ONLY NATURAL that a new Kinect would end up in the University of Washington’s Biorobotics Laboratory. Kinect, a new add-on for the Microsoft Xbox 360, ditches the controller by detecting a person’s gestures and interpreting them as commands.

Since it came out in November, Kinect has been a favorite of researchers and hobbyists, who have hacked the system to explore other uses beyond video gaming.

Those in the UW lab came up with an intriguing idea: adding sensory feedback to see if the Kinect could be a training method for students learning to perform surgery.

The Biorobotics Lab’s research in telerobotic surgery aims to make it possible for surgeons to operate at a distance on patients in disaster areas, on battlefields or in other inaccessible places. The lab’s research also hopes to advance existing surgical robots.

“In telerobotic surgery, surgeons are basically unable to feel what they’re suturing or cutting,” says UW Electrical Engineering Professor Howard Chizeck. “We’d like to get that sense of feeling back.”

Experiments using the Kinect are a step toward that goal.

In a video recorded by UW graduate students Fredrik Ryden and Hawkeye King, the Kinect’s infrared camera points at a table where Ryden is seated. The upper right-hand corner shows King operating a stylus that gives force feedback, in the form of a push, when he meets an object in the virtual scene. The red dot shows where the stylus is positioned.

When the red dot moves over an object, the stylus feels the resistance, a field known as haptics. The video shows that King can not only tap solid objects, like the table, but can also feel a new object (in this case, a Styrofoam head placed on the table) and even shake Ryden’s hand in real time.

The UW team will explore the Kinect’s potential to improve surgical robotics by creating off-limits areas that would protect vital organs by building so-called “virtual fixtures” around body parts that should not be touched.—Hannah Hickey
NEW HOPE FOR POLAR BEARS

NEARLY THREE YEARS AGO, polar bears were added to the threatened species list because their icy habitat showed a steady, precipitous decline due to warming climate. Now their outlook doesn’t appear to be quite so bleak. Scientists from several institutions, including the U.S. Geological Survey and the University of Washington, have found that if humans reduce greenhouse gas emissions significantly in the next 10-20 years, enough Arctic ice is likely to remain intact during late summer and early autumn for polar bears to survive.

“What we projected in 2007 was based solely on the business-as-usual greenhouse gas scenario,” says Steven Amstrup, an emeritus researcher with the U.S. Geological Survey and the senior scientist with the Montana-based conservation organization Polar Bears International. “That was a pretty dire outlook but it didn’t consider the possibility of greenhouse gas mitigation.” The new research, published in a recent issue of Nature, is based in part on modeling proposed by Cecilia Bitz, a UW professor of atmospheric sciences. The model indicates there is no “tipping point” that would result in unstoppable loss of summer sea ice when greenhouse-gas-driven warming rose above a certain threshold.

“Our research offers a very promising, hopeful message, but it’s also an incentive for mitigating greenhouse emissions,” Bitz says. Polar bears depend on sea ice for access to ringed and bearded seals, their primary food source. During seasons when they can’t reach sea ice, the bears mostly go without food and can lose about 2 pounds a day.—Vince Stricherz

WORKING WITH SOLDIERS BATTLING SUBSTANCE ABUSE

The University of Washington School of Social Work’s Innovative Programs Research Group (IPRG) met with treatment professionals at the base to explain the group’s unique “check-up” model. Soon afterward, the U.S. Department of Defense awarded a five-year grant to IPRG co-director Denise Walker to develop and test an intervention for this at-risk population.

The check-up model is an empathic and nonjudgmental intervention designed to reach people who may not identify themselves as needing treatment, but realize that their lives are seriously off track because of problems with drugs or alcohol. In confidential telephone counseling sessions, IPRG counselors guide individuals through a conversation that explores the pros and cons of certain behaviors without assigning negative labels.

Walker spent the first year of the project developing a strong relationship with the command structure. This close collaboration with military leadership—a first for a University of Washington research group—promotes a deep understanding of the culture, and ensures the intervention is targeted and that genuine concern for these young warriors translates into measurable and meaningful results.—Jon Marmor

YOUNG MILITARY MEN AND WOMEN who experience multiple deployments, dislocation from family and friends, and combat trauma are at increased risk to abuse alcohol, drugs and prescription medicines. Additionally, soldiers are often reluctant to seek help for these problems because it may jeopardize promotions, security clearances and future employment.

Working with these battle-scarred soldiers is a priority at Washington state’s joint Base Lewis-McChord. But military personnel needed a creative and confidential way to reach soldiers who were experiencing problems but had not sought treatment.
Video games are played in two-thirds of all American households. More money is spent on video games than on cable TV.

The average age of video gamers is 34.

26 percent of all video game players.

Illustration by Miguel Davilla.
If you still think video games are for teens in the rec room, it might be time for a closer look at what’s become the biggest entertainment phenomenon since television.

Like an unstoppable, kaleidoscopic alien invader in an Xbox sci-fi title, video games are multiplying and spreading across the landscape, working their way into phones, televisions, iPads and every digital device. Video games are played in two-thirds of the households in America, where people spent nearly $19 billion last year on games ranging from 99-cent iPhone titles to $400 consoles with ultrapowerful graphics processors and exotic motion-control systems.

It’s not just kids playing, not by a long shot. The average age of gamers is now 34—with 26 percent of players over the age of 50, according to the Entertainment Software Association trade group. Some people may not even realize they’ve become gamers, because the general perception of video games hasn’t caught up with their proliferation and popularity.

“We have the data to prove it,” says Christopher Natsuume, ’07, who co-founded the Singapore-based game company Boomzap in 2005, after getting his M.B.A. from the Foster School of Business. Boomzap makes puzzle games that are played mostly by women aged 50 and above, some of whom are spending 20 or 30 hours a week playing the company’s downloadable puzzle games, such as the 19th century mystery-themed Death at Fairing Point: A Dana Knightstone Novel illustrated with painterly European settings.

“You take a 65-year-old woman living at home, playing our games, and you ask her ‘Are you a video gamer?’ and she’ll tell you no because she doesn’t self-identify as a gamer,” Natsuume explains. “In her mind a gamer is an 18-year-old with an Xbox.”

The reality is that more people than not are playing video games, and they’re spending more on games than they do on movies. People now spend about twice as much on video games as they do on magazines, books and newspapers, not to mention music, sports activities and movie rentals.

“It’s insidious,” Natsuume says. “If you look at the hours people are spending on it, the money they’re spending on it, we’re the largest form of entertainment in the world.”

It’s still growing, despite a few down years during the recession. Total industry sales fell 6 percent last year to $18.58 billion in the U.S., according to the NPD Group, but it may have turned the corner. Sales should grow 10 percent in 2011 and 2012, boosted by new handheld gaming devices from Nintendo and Sony and the growth of games on Google’s Android software for mobile phones and tablet computers, according to a January report by Lazard Capital Markets.

To get your mind around the scale of the game industry, consider its different forms. Insiders divide the industry into categories—casual, core and mobile—based roughly on the type of game, their business model and where they are played. The most attention—and marketing dollars—goes to traditional games that appeal to hardcore players using PCs and consoles such as Microsoft’s Xbox 360 and Sony’s PlayStation 3. Microsoft, Sony and large independent game companies may invest $30 million or more developing blockbuster titles with rich story lines, photorealistic graphics and original music.

These games blend animation, art and music with software programs that interpret and display players’ action on the screen and generate digital opponents whose behavior varies depending on what players do, while rendering a richly detailed, 3D virtual world where branches wave, streams ripple and landmarks explode as the action unfolds.

Most of these games can also be played online, through networks that match players around the world based on their past achievements and enable them to chat—or curse at each other—through headsets as they compete. Meanwhile, game companies are watching for the latest computer science research, looking for ways to make their games faster, more realistic and more fun.

When Redmond’s Gas Powered Games was building the new version of its Supreme Commander battle strategy game released last year, an engineer came across research into modeling the flow of crowds that was published in 2006 by UW Associate Professor Zoran Popović and graduate students Seth Cooper and Adrian Treuille, ’04, ’08. The UW team had figured out a way to efficiently simulate moving through crowds of people, which is a challenge to do realistically because, in real life, “humans constantly adjust their paths to reflect congestion and other dynamic factors.”

Gas Powered drew on the research to build a complex system for directing the movement of huge armies, which players control in the game. Instead of having to generate paths for 100 tanks at a time, the system creates a single flow model that 100
This made the game more realistic—units move seamlessly through each other on the battlefield and change direction on the fly. But it was a gamble—with costly developer time—for the company to pursue the new technology, CEO and Founder Chris Taylor said at the time.

“You have to have this kind of stuff in your back pocket to keep driving the bar up in a space … if you’re going to be in this industry you have to have a technology that is your own, that’s your proprietary trademark,” he said.

It can take 50 to 200 developers several years to build high-end games for consoles, but the payoff is potentially huge. Last year’s biggest seller, the Vietnam-era military shooting game Call of Duty: Black Ops, had sales of $650 million in the first five days it went on sale in November. The game’s publisher, Santa Monica, Calif.-based Activision, boasted that its five-day run was better than any movie or book and showed how mainstream video games have become.

“Two things succeed illustrates the mass appeal of interactive entertainment as millions of consumers are choosing to play Call of Duty: Black Ops at unprecedented levels rather than engage in other forms of media,” Activision Chief Executive Robert Kotick crowed.

Microsoft’s Xbox also has been particularly successful with these hardcore action games, starting with the sci-fi shooting game title Halo, which was created by a Chicago game studio called Bungie that Microsoft acquired and moved to the Seattle area before the first Xbox was released in 2001. Bungie is now independent again and developing games for Activision in Bellevue.

Meanwhile, Microsoft’s trying to extend the appeal of the Xbox to a broader audience, with the introduction of its Kinect motion-control sensor that lets people control games by moving around in front of the sensor. Similar to the Nintendo Wii’s motion-sensitive remote control, this system makes the games more accessible to children and people unfamiliar with the buttons and triggers on traditional console controllers.

Another new category is social games such as Farmville that are played primarily on Facebook and other social networking sites. According to Farmville creator Zynga, a San Francisco company started in 2007, more than 50 million users a day play its games, and the company has reportedly raised more than $500 million from investors.

Even if the frenzy around social games has tempered some, they are still growing along with the overall industry, says David Edery, a former Xbox manager who is now a consultant and executive of a new Seattle-based game studio, Spry Fox.

“Those games are reaching people who didn’t used to play games,” he says. “Some of those people are people who, at best, were playing Solitaire or Minesweeper before, maybe Tetris if they’re really wild and crazy. So there’s no question they’re expanding the market, which is very exciting for everyone in the industry.”

Natsuume’s Boomzap is in the “casual” category that includes easy-to-learn, PC-based games that are distributed by websites online and also sold packaged in retail stores. The most popular game in the casual category is the version of Solitaire that’s included with Microsoft’s Windows operating system. It was originally included as a way to help people learn to use the computer mouse, but the familiar and addictive title also became a gateway to computer games.

The casual industry blossomed after 2001, when Seattle studio PopCap Games had a breakout success with Bejeweled, a colorful game in which players find matching clusters of gems as they cascade down the screen. PopCap’s winning formula was offering a free online version to hook players, who would then pay to download the full game. More than 50 million people took the bait and paid for the game, and they’re now spending 1.1 billion hours a year playing Bejeweled and other PopCap games.

Over the last decade, Seattle has become the world hub for casual games, with dozens of companies in the business, ranging from tiny studios to large development and publishing companies such as Big Fish Games, founded by RealNetworks veteran Paul Thelen, ’89, in 2002.

Thelen started out writing games himself and asking his mother to test them; now Big Fish employs around 450 in Seattle; Vancover, B.C.; and Cork, Ireland. Last year Big Fish had sales of more than $130 million and Thelen expects growth to continue as the company expands to new platforms such as smartphones and tablet computing devices.

Games have been played on mobile phones for years, but the category took off after the arrival of smartphones such as the iPhone, with large screens and application stores that make it easy to find and download games and other programs.

Last year 10.9 billion mobile “apps” were downloaded by phone users around the world, and that should increase to 76.9 billion app downloads in 2014, when sales will exceed $35 billion, according to research firm IDC.

The most successful mobile game so far is Angry Birds, a cartoonish puzzle game that Finnish game company Rovio released for the iPhone in 2009. Players slingshot birds sideways across the screen to demolish the castles of pigs who stole the birds’ eggs.

It may sound silly, but Rovio’s made serious money with the game, selling more than 12 million copies. The company also makes around $1 million per month from advertising placed on a free version of the game, which has been downloaded more than 30 million times.

Rovio was started by three students at Helsinki University of Technology who won a game development competition in 2003. It grew into a major studio, producing games for companies such as Nokia, Vivendi and RealNetworks before Angry Birds.

Games are the most frequently used apps, but so far only about a fourth of American consumers have started actively using apps, according to a Pew Internet Project survey last year. For game developers, that means there’s a big opportunity to
reach new players as more people acquire smartphones and start using mobile applications.

“I think mobile is still emerging,” Thelen says.

He believes the iPad in particular is an opportunity for the industry to expand. Its screen is large enough to play the same sort of games played on a PC, but the device is portable so players don’t have to be seated in front of a computer. That could lead to an increase in the number of minutes per day people spend gaming. As has been demonstrated firsthand in the Thelen household.

“When I’m sitting with my wife and she’s watching a TV show that I’m not too enthralled with, I break out my iPad,” he says.

Looking ahead, Thelen sees more segmentation in the industry because the market is so huge and new platforms are emerging. That’s giving people more ways and places to play games.

“The marketplace is getting bigger so each need can be satisfied and become a market unto itself,” he says.

Game categories aren’t set in stone and they tend to overlap, with people trying and playing all sorts of games. A February study by Dutch research group Newzoo found casual games are played by 66 percent of the online population in the U.S.—141 million people—and 46 million of them play on all the major casual platforms—social networks, Web sites and mobile phones.

While this evolution continues in the U.S., gaming has attained a higher status abroad. High-profile game developers in Japan and Korea are considered celebrities, and game competitions are televised events. Pacific Rim countries are also aggressively courting game companies with incentives and seeding the industry with grants and educational programs to train game developers.

“These governments proactively spend money on the industry,” says Edery, who has consulted with the state of Victoria in Australia, on nurturing its game industry.

“Not only is it good to have cultural exports like that but this is an industry that attracts engineers to an area, it attracts talented artists … there’s a lot of good reasons to have a game industry.”

To compete with these locations, an economic development group called Washington Interactive Network was formed in 2004. Its most recent study of the region’s competitiveness said the Seattle area “is poised at the forefront of the industry” with more than 150 game companies employing more than 15,000 people generating $4.2 billion a year in sales.

“The problem is everybody wants to be in entertainment,” says Natsuume. “It’s really hard to drive up their salaries or working conditions when there’s a line of people out the door, willing to work for free.”

Edery also says there’s an oversupply of people wanting to get into the industry. But there’s always a shortage of engineers with the technical skills needed to create games.

“Those are the ones who break in most easily and with the highest starting salaries,” he says. “Everyone else ends up like the old saying, stuck in the mailroom—if they’re lucky and can crawl their way into the mailroom.”

Natsuume actually left a job developing games in Germany to get his M.B.A. at the UW, hoping to settle down and find a management position at a software company like Microsoft or Google.

But halfway through the program he was inspired by a guest lecture by James Gwertzman, founder of a casual games company that was acquired by PopCap in 2005.

“I kind of left the lecture thinking wow, I could do that, that sounds like a really cool entrepreneurial opportunity,” says Natsuume, who is now based in Yokohama, Japan.

Working with a partner in Singapore, Natsuume put together a plan that was refined through several UW business plan competitions before he graduated and started running Boomzap full-time in 2005.

They now employ 35 people in the Philippines, Siberia, Malaysia and Indonesia. The company produces multiple games a year, with groups of five or six producing a game about every six months. The games are published by Big Fish and other distributors of PC games, but the company is increasingly turning its attention to games for the iPhone and iPad.

Eventually most every digital device will have games. It’s inevitable when people have time to play and disposable income, Edery says.

“If it’s connected, consumers want to play games on it. There’s evidence everywhere you look—phones are the obvious ones, the Kindle, the back of airplane seats.”

“They want to be entertained,” he says, “wherever they are.” —Seattle Times technology columnist Brier Dudley has a weakness for console action titles such as Halo and anything from Candyland to Super Mario Bros. that he can play on the Wii with his daughters.
$480 million to the state's economy in 2009. The Seattle computer game industry generated $4.2 billion in sales in 2009. Women over the age of 18 represent a significantly greater portion of the gaming market.
The growing suspicion that video games are culturally and artistically relevant is attracting attention from an unlikely source—the academic world.

This past fall, the University of Washington became the first institution in the nation to throw its money and support behind a project that focuses specifically on exploring the value of video games and what they tell us about ourselves.

Video games may seem like a strange subject for scholarly research. But the fact is—from a quick hand of Texas Hold ’em on a mobile device to Scrabble on Facebook—Americans everywhere are playing them. The sheer prevalence of video games—whose sales are rapidly outpacing global cinema and music sales, statistics show—is evidence of their growing importance. But what does it mean to play a video game?

To answer this question, a half-dozen Humanities graduate students from the College of Arts and Sciences formed the Keywords group for Video Games Studies group. But right away, this group realized that the vocabulary used to talk about play, expression and experience doesn’t satisfactorily describe the unique effects of digital media. So, armed with a grant from the UW’s Simpson Center for the Humanities, the research group decided its first action should be to host a series of workshops to measure old words against a new art form. The workshops are taking on six keyword concepts: play, immersion/interactivity, avatar, power/control, pedagogy and gamer.

“There needs to be a more nuanced and critical approach to thinking about games” beyond demonizing them as corrupting youth, says Edmond Chang, founding member of the Keywords group.

As a cultural artifact, video games have an exotic allure: They are not so different than a video-game experience. Video games deal with social constructs. By investigating video games through keyword concepts like ‘play,’ ‘interactive’ and ‘avatar,’ these students are engaging questions that span anthropology, sociology, literature and the arts.”

These are the kinds of questions that attracted the interest of the Simpson Center for the Humanities, which encourages cross-disciplinary research and inquiry among UW faculty and students. Miriam Bartha, the Simpson Center’s associate director, says the Keywords Studies group is examining the way video games deal with social constructs.

“By investigating video games through keyword concepts like ‘play,’ ‘interactive’ and ‘avatar,’ these students are engaging questions about narrative, character, aesthetics and meaning-making that span anthropology, sociology, literature and the arts.”

Interestingly, the study of video games is encountering the most resistance from inside the gaming community—namely students, gamers all, who are participating in the Keywords group’s coursework. They’re only interested in mastering the game, not delving into the implications of blasting an opponent with a shotgun, or wondering why most central characters are often white males.

But the Keywords group wants students to think of video games as maps of American culture—and not just a way to kill time, kill bad guys, and have some fun along the way.

—When not writing, Mark Cooper can be found playing old-school games on his DOS emulator or patrolling the South Pacific in his virtual WWII submarine.
The average age of the most frequent game purchaser is 39 years old. In 2008, game console software sales totaled $8.9 billion.
At first glance, the room looks ordinary. A random scattering of tables and desks surrounded by snaking computer cables. A giant whiteboard covered with scribbles.

Here and there, bespectacled grad students huddle in front of laptops or looming 30-inch monitors, munching chips or Cheerios out of plastic sandwich bags.

But the everyday look of these students and scribbles and pulsating computer screens belies the true nature of this room. Because this is the University of Washington’s Center for Game Science, where a handful of creative thinkers are devising a series of games designed to help solve puzzles that—for years—have tormented everyone from scientists to sixth graders.

“Basically, we’re focusing not just on scientific discovery games but, in general, games as a primary medium for solving really hard problems that our entire society cares about,” says Zoran Popović, associate professor at the UW’s Department of Computer Science and Engineering and director of the Center for Game Science. “Specifically problems that people alone or computers alone cannot solve. But together they might be able to.”

FUN WITH PROTEINS

One such problem is that of protein folding, one of the toughest nuts to crack in the world of molecular biology.

“Everything that needs to be done on a cellular level, an organism level, is done with protein,” says Popović. “From digestion to defending against diseases to anything else you can think of, proteins are doing it. And anybody who understands how to make proteins that do exactly the right thing knows the secret of life.”

Cracking the code to a protein’s fold could lead to new ways of combating disease, creating vaccines or designing new biofuels, says Popović. So far, though, using large-scale distributed computing to predict the three-dimensional structure of various proteins—or determine how proteins fold—has only had limited success.

And that’s where the game Foldit comes in.

Developed two and a half years ago by CSE grad students Seth Cooper and Adrien Treuille, ’04, ’08 (and inspired and advised by Popović and UW biochemistry professor David Baker), Foldit uses the brainpower and 3-D spatial reasoning skills of thousands of computer game players to puzzle out the intricacies of these strange squiggly proteins.

Using models of various proteins such as “HIV protease” and “unsolved monkey virus protein,” Foldit lets players grab, pull, bend and manipulate each protein’s individual components using a host of tools. Each of the more than 600 proteins in the game has its own unique shape, some resembling jungle gyms on steroids; others, lower intestinal tracts bristling with arms (or “sidechains”) shaped like tennis rackets or lightning bolts.

After a player moves the pieces this way and that, the game evaluates the fold (using research done by the UW Baker Lab), then awards the player a score. Scores are then posted on a leader board, which allows for competition between individual players (and teams).

“Computers look at every possibility with equal importance,” says Scott Zaccanelli, a 48-year-old production planner from McKinney, Texas, who plays under the name Boots McGraw. Without reasoning skills, a computer will try each minute iteration of a fold pattern one at a time. “People can look at it and say ‘That doesn’t look right. It looks like this part should be over here and in this shape.’ We can spare the computers millions and billions of computing cycles by not bothering to go into the directions that don’t look right.”

So far, Foldit has attracted more than 100,000 players from around the world, most of whom have no background in biochemistry, and, according to an August 2010 paper published in the journal Nature, has shown that in certain instances—particularly those where intuitive leaps or major shifts in strategy are called for—the game and its group mind actually outperforms the supercomputers.

“Foldit was the first test trial of an idea like this,” says Popović. “Through game play, it allows people to become experts to the point that they’re able to really truly advance science. And now everybody’s jumping on the bandwagon. Every other day, some other scientist is calling me about a particular scientific problem and how to turn it into a game.”

CAMERAS, CASTLES AND CUTE ALIENS

And there are other games in play at the Center. PhotoCity uses crowd-sourced photographs and computer vision technology developed at the UW to create stunning 3-D images of buildings, neighborhoods and cities.

“The game is designed to get people to go out into the real world...
and take as many photos of a building as possible,” says Cooper, who is now also the creative director of the Center for Game Science. “We then use those photos to make a 3-D computer model of the building.”

Developed by CSE grad student Kathleen Tuite, and leapfrogging off of a Photo Tourism project designed by CSE alum Noah Snively, ‘05, ‘08, *PhotoCity* is currently collecting photos of buildings in Washington, D.C., Tokyo, Barcelona and points beyond. Here at home, the developers have created “seed models” of the Fremont Troll, the Lenin Statue and the Ballard Canal, as well as an ever-expanding 3-D version of the UW campus that, as of this writing, has gleaned more than 50,000 photos.

As with other video games, *PhotoCity* doles out points and virtual conquests to those who perform the best; in this case, the players who take the most photos are awarded flags and castles.

And the strategy works.

“At first, I thought it sounded goofy but then I ended up really getting into it,” says Emma Lynch, a 22-year-old UW computer science major who says she’s now “addicted” to *PhotoCity*. “I went out and took pictures of this one building and then uploaded them and was like ‘Wow, I can see where my pictures made a real difference.’ Plus, I could see where I was beating or losing to my friends. The competition starts to drive you.”

Cooper says the game is much more than just a game, though. “Creating 3-D models is expensive and time-consuming,” he says. “Our end goal is reconstructing a 3-D model of as much of the world as possible—all through people playing this game. Over time, you’d have a record of how a city changes and how the world changes.”

Changing the world of education is what drives yet another game developed by the Center.

*Refraction*, a prototype math game developed by Popović and CSE grad students Erik Andersen and Yun-En Liu, teaches kids the principles behind fractions through snazzy graphics, compelling animation and a storyline involving cute alien babies, animals and laser beams. Players are asked to divvy up laser blasts into thirds, fourths, fifths and redirect them to power spaceships containing animals that have gotten stuck in space.

“Early math education is one area where students in the U.S. aren’t doing as well as they could be,” says Cooper. “And fractions are one of the concepts that students struggle with. By using games, we can hopefully get students involved and interested in math. But we can also learn from the students what kinds of approaches work. We can use that data to learn the optimal way to teach math and even adapt it on a per-student basis.”

**STRATEGIES FOR BETTER BUSINESS … AND BETTER HEALTH**

The Center for Game Science isn’t the only department on campus where educational games are being developed. At the business school, they are taking the idea behind case competitions into a whole new dimension.

Last December, the Center for Leadership & Strategic Thinking at the UW’s Foster School of Business and Redmond-based online game developer Novel, Inc. partnered to create a series of business simulation games.

According to Professor Bruce Avolio, executive director of the Center for Leadership & Strategic Thinking, Novel will build the computer simulation; the Foster School will provide the knowledge as to what leadership and strategic thinking skills need to be incorporated, or what kind of scenarios should be included.

“Initially, there will be avatar-like characters, but downstream it will be more like 3-D virtual simulation, where the character is really in the game themselves,” says Avolio. “It’s not like *Mario Bros*. It’s very sophisticated, not just in terms of looks but in terms of the data you can put in, the number of people that can be involved.”

According to Avolio, these new Sims-style games will help both business students and prospective clients (and their employees) learn how to better interact in a business environment and respond to challenges such as mergers and acquisitions.

“Through their interaction and the way the game is set up, one can determine how aligned they are, how well they work together in terms of transparency or in terms of being goal-directed, how they go about making decisions,” he says. “To some extent, all that can be simulated, especially with leadership.”

Alaska Airlines has already signed up for the new product, offering some of its key strategic challenges as fodder for the game, which will function as a training tool for current and future employees.

“We’re really intrigued by this opportunity,” says Kelley Dobbs, ‘05, vice president of human resources and labor relations for Alaska Airlines. “Having been through the executive M.B.A. program, I know there are fantastic business cases, but they’re static, on paper. You can’t get into the heads of what the leaders were thinking. Or know what the outcome would have been if they’d made a different decision.”

With these new business simulations, however, players will be able
to test different decisions and scenarios in the virtual world in order to see how changes in strategy shake out in the real world.

“This will be another vehicle to add to the instructor’s set of resources,” says Avolio. “It’ll give people an idea of what it’s going to be like in business—and what they can do. Then they can reload and do the simulation again. It will give them an opportunity to practice, to build in efficiencies, before they actually go live in the workplace.”

The business of good health—at least for the country’s ever-increasing number of people with diabetes—is the purpose behind two other games being developed at the UW.

“There have been a lot of people looking at games for kids with diabetes but nothing for adults,” says Wanda Pratt, associate professor at the Information School and the Division of Biomedical and Health Informatics in the UW School of Medicine. “So we were looking at ways to fill that niche.”

Funded by a $200,000 grant from the Robert Wood Johnson Foundation, Pratt and her team (which includes game developer UW grad student Lynne Harris) came up with two “casual-type” games which help people with diabetes understand the carbohydrate content of various foods in order to better manage their blood sugars.

In both games, players are asked to choose between two foods based on their carb value. Players who select the food with fewer carbs (for example, cup of ground beef over ¾ cup of watermelon or 1½ cups of carrots over one large apple) earn points. Enough correct answers unlocks another game where they can play Post-card—a trivia game—or a Sudoku-style game, which Pratt and her colleagues have dubbed “Foodoku.”

Both games have gone through one round of user testing and tweaks; Pratt says the next step will be to put the games—available either on home computer, or as a mobile-phone app—into the hands of people with diabetes.

“Our hope—especially with the mobile-phone games—is that people will play these games in the five minutes they have to kill while waiting for the bus,” she says. “They can do something to help their health and if they do that enough, it will make a difference.”

Whether it’s protein folding or fractions, figuring out the secrets to better health or better business, the UW’s advances in the world of educational games seem to be making some crucial differences—not to mention attracting a keen following.

“As a player, it makes me feel that there’s an actual purpose to it,” says PhotoCity devotee Emma Lynch. “I’m not just playing this to waste my time, there’s something going on here. I like that aspect of it and I like that idea. I’m interested to learn more about what other sorts of problems could be solved by playing games.”

—Despite the temptations of Foldit and PhotoCity, writer Diane Mapes’ favorite game remains Spider Solitaire.
When UW senior Wayne Gerard travels to Uganda this spring with a group of fellow students, he will help test a portable ultrasound system that the students created. Inspired by Assistant Professor of Radiology Rob Nathan’s work to reduce infant mortality in Africa, a team from Engineering, the Information School (iSchool) and Arts & Sciences devised a simplified interface for a portable and inexpensive ultrasound system that easily can be carried into remote locations around the globe — all from off-the-shelf components.

The straightforward user interface enables rural midwives to diagnose several of the most dangerous complications of pregnancy, which take the lives of nearly 1,000 mothers per day in the developing world. The system costs between half and one-third of existing portable ultrasound, and the team is hoping to bring the cost down even more.

Wayne, who is double-majoring in Computer Science & Engineering and Biochemistry, wrote much of the software for the user interface, but considers technology just one piece of the puzzle. “What really interests me is social justice,” says the Mary Gates Research Scholar. “Eventually I’d like to be doing what Dr. Nathan is doing — practicing clinical medicine and also going abroad to do global health projects.”

The College of Engineering’s Capstone Fund for Engineering, which received 240 gifts from donors last year, provided initial project support. A $100,000 Gates Grand Challenges Exploration Grant is making the trip to Uganda possible. “Private support has been critical,” Wayne says. “In the end, these grants are going to save the lives of babies and mothers.”

Making a Difference for Social Justice

When UW senior Wayne Gerard travels to Uganda this spring with a group of fellow students, he will help test a portable ultrasound system that the students created. Inspired by Assistant Professor of Radiology Rob Nathan’s work to reduce infant mortality in Africa, a team from Engineering, the Information School (iSchool) and Arts & Sciences devised a simplified interface for a portable and inexpensive ultrasound system that easily can be carried into remote locations around the globe — all from off-the-shelf components.

The straightforward user interface enables rural midwives to diagnose several of the most dangerous complications of pregnancy, which take the lives of nearly 1,000 mothers per day in the developing world. The system costs between half and one-third of existing portable ultrasound, and the team is hoping to bring the cost down even more.

Wayne, who is double-majoring in Computer Science & Engineering and Biochemistry, wrote much of the software for the user interface, but considers technology just one piece of the puzzle. “What really interests me is social justice,” says the Mary Gates Research Scholar. “Eventually I’d like to be doing what Dr. Nathan is doing — practicing clinical medicine and also going abroad to do global health projects.”

The College of Engineering’s Capstone Fund for Engineering, which received 240 gifts from donors last year, provided initial project support. A $100,000 Gates Grand Challenges Exploration Grant is making the trip to Uganda possible. “Private support has been critical,” Wayne says. “In the end, these grants are going to save the lives of babies and mothers.”

MAKE a DIFFERENCE TODAY
Help students like Wayne reach their dreams. Learn how at giving.uw.edu.
When Giving Up is not an Option

TAKING THE PATH OF LEAST RESISTANCE IS SIMPLY NOT PART OF BETH PATIN’S VALUE SYSTEM, OR HER FAMILY’S. When her grandfather faced death threats in his efforts to have her father become the first black child to attend a segregated Alabama public school, he persevered. And when Hurricane Katrina hit, flooding the New Orleans school where Beth had recently started working as a librarian, her thoughts immediately turned to rebuilding.

“Because there wasn’t physical space for our library,” said Beth, a doctoral student at the iSchool, “I first created a cybrary [cyber-library]. I contacted online book companies, begged for free subscriptions and organized websites.” At night, Beth wrote grants — with stunning success. She raised nearly $500,000, ensuring that the library at Holy Cross School for Boys would come back better than ever.

“I became interested in preserving not only information, but the services libraries provide in the face of disasters, when people need them most,” Beth said. She was able to discuss her growing interest in “Crisis Informatics” with UW iSchool Dean Harry Bruce at an American Library Association conference. His strong encouragement led her to apply to the UW.

“It was scary thinking about moving all the way across the country,” Beth said. “But my Washington Doctoral Initiative Fellowship and the Nancy Gershenfeld Scholarship made it possible. Looking back, it was important for me to lose so much. It helped me understand what’s absolutely essential — my community. That’s exactly what I recognized when I came to the iSchool: a community of scholars.”

BELOW: Beth Patin helped rebuild a school library in New Orleans before moving across the country to pursue her Ph. D. at the iSchool.
Out and About

1. COMING HOME
Former Husky football great Sonny Sixkiller, ‘74, with Eddie Rhone, Jr., ‘01, ‘03, at the Office of Minority Affairs and Diversity’s The Weekend event.

2. CELEBRATING DIVERSITY
Multicultural Alumni Partnership (MAP) volunteers Tracy Hilliard, ‘00, ‘03, ‘10 (L), and Justin Simmons, ‘93 (R), with MAP scholarship recipient and UW junior Joseph Dupris (center) at the MAP Bridging the Gap Breakfast.

3. A MUSICAL CELEBRATION
(L to R) School of Music supporter Cathy Palmer, ‘70, UW senior Isaiah Lin, recipient of the Harvard Palmer Endowed Scholarship in Music, and Cathy’s son, Ned Palmer.

4. VOLUNTEER GATHERING
UW Foundation Board Director Edward Wong, ‘71, ‘98, and his wife Kathy Wong, ‘87, ‘89, at the UW Foundation director orientation and dinner.

5. INSPIRING LEADERSHIP
(L to R) UW Foundation Board Director Michael Malone, ‘68, with Director Marcia Wythes, ‘58, and Board Vice Chair Howard Behar, ‘66.

6. RECOGNIZING DONORS & SCHOLARS

7. HONORING VETERANS
(L to R) Former president, UW Bothell Student Veterans’ Association, Sean Alley, ‘10; SVA Advisor and Veterans’ Services Manager Rosa Lundborg; and “First Gentleman” Mike Gregoire, ‘68, at UW Bothell’s Veterans’ Day Reception.

8. SUPPORTING SCIENTISTS
Achievement Rewards for College Scientists supporter Lisa Losh, ‘76, with ARCS fellow Nemiah Ladd at the ARCS First Year Orientation Breakfast.

9. HERALDING A FRIEND
(L to R) School of Forest Resources supporters Louise Harris, Robert Harris and Shannon Johnson, ‘95, ‘99, at the School of Forest Resources Alumni Association Fall Reception, where Robert received the Honorary Alumnus Award.

► GO GREEN with the UW
Sustain the environment, reduce waste and minimize printing costs. Click Going Green at giving.uw.edu.
Join the Celebration!

Proudly wear the iconic marks from 150 years of UW excellence.

Place your order for the 150th Anniversary Collection. You’ll receive five Original Retro Brand t-shirts featuring authentic marks, styles and colors — each shipped separately during the anniversary year.

www.uwcollection.com
On Dec. 22, the UW Alumni Association’s board of trustees met with local reporters and television outlets. The purpose was to launch UW Impact and start a conversation about the future of the UW and higher education.

The state’s legislative session is in mid-swing, and the UW is once again fighting to preserve its core funding. But this year the University isn’t alone in Olympia. Members of the UW Alumni Association are there, too. Through UW Impact, the association’s independent advocacy group, a powerful voice is changing the way alumni engage with their legislators.

And with your help, it’s working.

UW Impact is not about politics. It’s about civic engagement and gathering people in our community to discuss the things we care about most. Higher education in our state and the University of Washington in particular are worth standing up for. That’s what alumni do now. Whether it is football or philanthropy, supporting your university is part of the alumni experience.

This is why you became a member, why you gave a gift—to support the UW you love and to ensure it is strong and healthy for generations to come. UW Impact provides another way to engage.

Imagine the strength of our 50,000-person member community speaking up in support of the University of Washington. Through UW Impact, we are making it easy for alumni and friends to get involved in the future of the UW. Learn more at UWimpact.org.

I am proud to endorse UW Impact because it is a movement I truly believe in. I got involved with the UW Alumni Association five years ago for opportunities just like this. It’s one way I can give back to the university that has given so much to me and my family.

This is an exciting time for the UW but a difficult time for the state. Help us make sure the University of Washington’s future is sustainable. Join us in sharing your support for the impact of higher education on our families, our economy and our shared future.

Sincerely,

Colleen Fukui-Sketchley, ‘94
President, UW Alumni Association
I love the UW.

I love that it’s still a part of my life today. I love that the UW changes lives and provides jobs and opportunities for people in our region. I love that current students are stepping up to face today’s challenges, and I love that my UW Alumni Association membership keeps me connected to all of this. It’s my university and this is my community.
Paws-on Science

Join us for the 2nd annual *Paws-on Science: Husky Weekend at the Pacific Science Center*. There will be exhibits and activities from more than 40 UW research programs, as well as a special Star Wars exhibit, and the Husky Marching Band and Cheer Squad will perform on Saturday, April 9. UWAA members and UW faculty/staff enjoy discounts on admission.

Dates: Friday, April 8–Sunday, April 10, 2011
Hours: 10 a.m.–5 p.m.
Location: Pacific Science Center


ON CAMPUS

The world is your campus now... See us for your class schedule.

- Diversity Networking Reception, April 5
- Neil deGrasse Tyson: Adventures of an Astrophysicist, May 5
- Phyllis Wise: The University and the City, May 27

Discover what’s next at [UWalum.com/learn](http://UWalum.com/learn).

OUTSIDE SEATTLE

Connect with fellow Huskies in your area.

- Dawg Days in the Desert, Palm Desert, March 14–15
- Husky Night with Brandon Roy and the Portland Trail Blazers, April 1
- San Diego Crew Classic, April 2
- Portland Lunch and Learn, April 6
- Dawgs on Wall Street, May 10

See more at [UWalum.com/community](http://UWalum.com/community).

CLASS OF 1961 50-YEAR REUNION

Save the date! The “Centennial Class” will celebrate its 50-year reunion on Friday, Oct. 28, 2011. They’ll add a special touch by creating a historical recognition wall honoring class gifts in the new HUB (opening 2013) and a scholarship to support students who have served in the armed forces. Make a donation to the class gift at [www.giving.uw.edu](http://www.giving.uw.edu).

TRAVEL

See the world with fellow Huskies and UW professors.

- Chianti & Italian Riviera, Oct. 4–13, 2011
- St. Petersburg, Oct. 13–21, 2011
- Libya Revealed with UW Professor Jere Bacharach, Nov. 1–13, 2011

Find tour listings at [UWalum.com/tours](http://UWalum.com/tours).

UNIVERSITY OF WASHINGTON ALUMNI ASSOCIATION* DIRECTORY

**OFFICERS**

COLLEEN FUKUI-SKETCHLEY, ’94, President
EDDIE PASATIEMPO, ’77, Past President
SUE WILLIAMS, ’73, President-Elect
PATRICK CRUMB, ’88, Vice President
CLYDE WALKER, ’77, Treasurer
MIKE EGAN, ’90, Secretary
JEFF ROCHON, ’99, Assistant Secretary

**UNIVERSITY REPRESENTATIVE TRUSTEES**

CALVIN KAWALSKI, ’97, ’03, UW Bothell
MICHAEL PAINTER, ’95, UW Tacoma
MADELEINE MCKENNA, ASUW President
SARAH REYNVELD, GPSS President

**AT-LARGE TRUSTEES**

DAVE GANDARA, ’90
TISHA PAGALILAUN, ’95, ’98
MELINDA PARTIN, ’90
LAURIE SCHUCHART, ’75
DUANE COVEY, ’76
ROY DIAZ, ’94, ’96, ’02
TYRONE NOLFE TOWNSEND, ’75
SCOTT STUART, ’92, ’01
JANN BLACKBOURN, ’74
VALERIE FORD, ’75
PATRICIA LOERA, ’93
GAVI LUNA, ’94, ’97

**GEOGRAPHIC/CLUB COUNCIL TRUSTEES**

TODD DANKERS, ’86, Out-of-State
DAN JOHNSON, ’87, In-State

**EX-OFFICIO (NON-VOTING) MEMBERS**

PAUL RUCKER, ’95, ’92, UWAA Executive Director
CONNIE KREAVOS, VP, University Advancement
ERIC GODFREY, VP and Vice Provost, Student Life
O.D. V INCENT, ’91, ICA Representative
MARC GALVAGNO, ’93, Partner Representative
BRYAN PEARCE, Partner Representative

* A private, nonprofit corporation registered in the state of Washington.
Jenica Nixon is one busy undergrad. The long days filled with volunteering, working, studying and taking classes are worth it to the UW senior because they bring her that much closer to her goal of becoming a teacher.

Yet despite her best efforts, the South Whidbey High School grad recently found herself falling just short when it came time to pay tuition. Then her phone rang. She had been awarded the Frank “Muxie” Robinson Scholarship. “It’s an amazing vote of confidence,” Jenica says. “This scholarship truly made all the difference.” Instead of worrying about her next tuition payment, Jenica can now focus on getting her degree.

- To help students like Jenica stay on course, make your gift today at giving.uw.edu.
Tracie Stevens, ’06, never meant to be a trailblazer. But that sure didn’t stop her from being one.

She was the first member of her immediate family to graduate from high school and the first to graduate from college. Today, she is the first woman to chair the National Indian Gaming Commission, the agency that regulates the $27 billion Indian gaming industry.

President Obama selected Stevens, an enrolled member of the Tulalip Tribes, because of her experience working on tribal issues at the local, regional and national levels. But holding a national position was never her goal.

“I always wanted to work for my people,” she said recently while in Seattle. “It’s an honor and a privilege to serve on the federal level. Shaping and affecting policy on Indian people is my passion.”

That’s been the case since 1995, when the Los Angeles native first went to work for the Tulalip Tribes 35 miles north of Seattle. She worked in a variety of roles in casino operations and tribal government before she was appointed senior adviser to the assistant secretary for Indian Affairs in the Department of the Interior in 2009.

Besides running the three-person commission that oversees the multibillion-dollar industry serving tribes nationwide, Stevens wants to use her position to help tribal communities in another way: to be a role model for Native Americans who face the same struggles she did.

“I didn’t take a traditional path in education,” recalls Stevens, who attended community college and the University of Washington part time, often at night, and while working, to earn her B.A. in social sciences in 2006 through the evening degree program, two decades after graduating from high school.

“I want to show [Native Americans] that we don’t have to fall prey to socioeconomic problems, that we can rise above them to get our education.”

Stevens’ sister married and had a child at 17. An older brother left school to go to work. And her oldest brother died in a car accident at age 17, when she was 13. Stevens was determined nothing would keep her from a college education.

“The number of Native Americans who graduate from high school and go to college is about one in 200,” Stevens explains. “I want to be an example to my daughter [Cierra, 11], my nieces and my nephews.”

While Stevens is enjoying her work on the federal level, she looks forward to blazing a different kind of trail—one that will take her back home to Washington so she can once again work for the Tulalip Tribes.

“I have a built-in homing device,” she says. “I will be back.” —Jon Marmor

Christine Renhard Stenstrom, ’69, reports that her book, Cherry Blossom Trees Literary Writings and Artworks, is a finalist in three categories for the USA Book News “Best Books 2010” Awards: Art-General, Gift & Specialty.

Carol Anita Ryan, ’70, had her book, Right Now Is Perfect: A Romance, An Adventure, The Unexpected Thereafter published recently.

Craig Andersen, ’71, writes that his daughter, Laura Andersen, ’99, also the daughter of Christine M. Andersen, was admitted to the doctoral program in materials engineering at the University of California, San Diego. She received a scholarship that will provide for all tuition expenses and $2,000 per month for five years. Laura earned her B.S. in materials engineering at the UW.

William R. Phillips, ’71, ’75, has been appointed to the Theodore J. Phillips Endowed Professorship in Family Medicine at the UW School of Medicine. He also is a clinical professor of health services in the UW School of Public Health and senior associate editor of the primary-care research journal Annals of Family Medicine.

Janet Sears, ’72, has been elected to the board of Seattle Dance Project.


Eleanor Valentin, ’75, received the 2010 Women of Color Technologist of the Year Award. She is a rear admiral in the U.S. Navy, commander of the Jacksonville, Fla.-based Navy Medicine Support Command and director of the Navy’s Medical Service Corps.

Edmund Joyce, ’77, has been elected to the board of the San Diego Press Club, Joyce, environmental reporter for KPBS radio in San Diego, earned six press club awards for his work in 2010.

Greg Fellman, ’79, was named the 2010 Business Person of the Year for Service/Retail in the 11th annual Idaho State Journal Business Awards. He is manager of J.C. Penney at the Pine Ridge Mall in Pocatello, Idaho.

Dean Jamieon, ’79, was re-elected and installed as the Region 8/Pacific Northwest Councillor of the American Guild of Organists at its 2010 national convention in Washington, D.C.

Paul J. Hoffman, ’83, recently retired from active duty after more than 37 years in the U.S. Navy. He now works as an Air Force civilian contingency planner at the U.S. Strategic Command’s Joint Functional Component Command—Global Strike in Omaha, Neb.

Lynn Borland, ’66

Dobie Defender

Most Husky fans know “Bow Down to Washington” by heart. But they probably don’t know that when written in 1915, the chorus contained the line “Dobie, Dobie, pride of Washington.” That’s a reference to Gilmour Dobie, the Huskies head football coach from 1908 to 1916.

Under Dobie, Washington never lost going 59-0-3. Many traditions began in his era, such as the Guy Flaherty Inspirational Award and the siren at football games. But despite his success, Dobie has been overlooked, because myth has replaced history.

Husky fan Lynn Borland, ’66, aims to set the record straight with the publication of Pursuit of Perfection, a biography that, for the first time, paints a complete picture of the UW’s most successful coach.

Among his many discoveries, Borland reveals that Dobie was an orphan (his grandchildren didn’t know) and that stories of Dobie as a mean-spirited taskmaster were wrong.

“History got it wrong with Gil Dobie,” Borland says. “He was beloved by his fans and players and his record is proof that he was a great coach.”

—Jon Marmor
FIGHTING CANCER WITH COMPASSION

ROGER E. MOE
1930-2010

Roger Moe, '52, '59, '68, who as a University of Washington professor of surgery used his personal experience as a cancer patient to shape how he cared for breast-cancer patients he treated, died Nov. 26. He was 80.

Moe was told he didn’t have long to live after he was diagnosed with prostate cancer in 1986. He spoke to UW medical students about his feelings of having a terminal prognosis, and it was after that when he pioneered the idea that breast-cancer patients needed more than clinical treatment.

He put together a team of health-care professionals to treat his patients and show them that their doctors cared about them as people.

Moe, who was born Sept. 12, 1930, was inspired to pursue a career in medicine and cancer research after his sister died from Hodgkin’s disease. He completed his college education at the UW, earning bachelor’s degrees in chemistry and psychology in 1952, his medical degree in 1959 and his residency in 1968.

He is survived by his wife of 57 years, Emily Moe of Seattle; his son, Kris; a niece, Mary Fitz; two grandchildren and a large extended family. Donations may be made to the UW Foundation, in support of the Roger E. Moe Fellowship in Interdisciplinary Breast Cancer Care. Gifts may be mailed to UW Medicine Advancement, Attention Olena Nyzhnykevych, Box 358045, Seattle, WA 98109.

—Jon Marmor
Faculty & Friends

RALPH D. ANDERSON, ’51, a Seattle architect who was considered one of the founding fathers of the Northwest Style of architecture, died Oct. 24. He also played a key role in the preservation of Pioneer Square. He was 86. • BAIRD M. BARDARSON, ’55, a graduate of the then-young UW School of Medicine who was the first chief of staff at Valley Medical Center in Renton, died Oct. 28. He was 84. • JAMES M. BEALE, founding director of the UW law school’s Graduate Tax Program and professor emeritus of law, died Oct. 8. He also was an assistant to the commissioner of the U.S. Internal Revenue Service. He was 79. • ALEX FEFER, ’69, retired UW professor of medicine and medical oncology, and an original member of the Fred Hutchinson Cancer Research Center, died Oct. 3. He was a member of the pioneering Seattle bone-marrow transplant team that developed transplantation as a therapy for leukemia, lymphoma and other blood cancers. He was 72. • MELVIN FIGLEY, who helped build the UW Department of Radiology, died June 7. Figley was recruited to the UW in 1958 to found the department in the then-new UW School of Medicine. In honor of his service, the Department of Radiology established an endowed professorship in his name and dedicated the Melvin M. Figley, M.D., Cancer Research Chair at the UW Department of Radiation Oncology.

was also a composer and a graduate of Yale University and Harvard College, where he studied under Aaron Copland and Irving Fine. He was 86. • MARTIN NICHOLS CHAMBERLAIN, ’36, who worked for the UW’s Continuing Education Division for 17 years and also served as division director, died Nov. 7. He later was director of the Peace Corps’ East Africa division and dean of University Extension at the University of California, San Diego. He was 96. • JAY GREGORY DASH, former professor of physics, died Nov. 28. Before joining the UW, he worked at Los Alamos National Laboratory. After retiring from the UW, he continued to teach physics in the UW’s Early Entrance Program. He was 87. • GEORGE MEADE EMORY, founding director of the UW law school’s Graduate Tax Program and professor emeritus of law, died Oct. 8. He also was an assistant to the commissioner of the U.S. Internal Revenue Service. He was 79. • ALEX FEFER, ’69, retired UW professor of medicine and medical oncology, and an original member of the Fred Hutchinson Cancer Research Center, died Oct. 3. He was a member of the pioneering Seattle bone-marrow transplant team that developed transplantation as a therapy for leukemia, lymphoma and other blood cancers. He was 72. • MELVIN FIGLEY, who helped build the UW Department of Radiology, died June 7. Figley was recruited to the UW in 1958 to found the department in the then-new UW School of Medicine. In honor of his service, the Department of Radiology established an endowed professorship in his name and dedicated the Melvin M. Figley, M.D., Cancer Research Chair at the UW Department of Radiation Oncology.

was also a composer and a graduate of Yale University and Harvard College, where he studied under Aaron Copland and Irving Fine. He was 86. • MARTIN NICHOLS CHAMBERLAIN, ’36, who worked for the UW’s Continuing Education Division for 17 years and also served as division director, died Nov. 7. He later was director of the Peace Corps’ East Africa division and dean of University Extension at the University of California, San Diego. He was 96. • JAY GREGORY DASH, former professor of physics, died Nov. 28. Before joining the UW, he worked at Los Alamos National Laboratory. After retiring from the UW, he continued to teach physics in the UW’s Early Entrance Program. He was 87. • GEORGE MEADE EMORY, founding director of the UW law school’s Graduate Tax Program and professor emeritus of law, died Oct. 8. He also was an assistant to the commissioner of the U.S. Internal Revenue Service. He was 79. • ALEX FEFER, ’69, a retired UW professor of medicine and medical oncology, and an original member of the Fred Hutchinson Cancer Research Center, died Oct. 3. He was a member of the pioneering Seattle bone-marrow transplant team that developed transplantation as a therapy for leukemia, lymphoma and other blood cancers. He was 72. • MELVIN FIGLEY, who helped build the UW Department of Radiology, died June 7. Figley was recruited to the UW in 1958 to found the department in the then-new UW School of Medicine. In honor of his service, the Department of Radiology established an endowed professorship in his name and dedicated the Melvin M. Figley, M.D., Cancer Research Chair at the UW Department of Radiation Oncology.

was also a composer and a graduate of Yale University and Harvard College, where he studied under Aaron Copland and Irving Fine. He was 86. • MARTIN NICHOLS CHAMBERLAIN, ’36, who worked for the UW’s Continuing Education Division for 17 years and also served as division director, died Nov. 7. He later was director of the Peace Corps’ East Africa division and dean of University Extension at the University of California, San Diego. He was 96. • JAY GREGORY DASH, former professor of physics, died Nov. 28. Before joining the UW, he worked at Los Alamos National Laboratory. After retiring from the UW, he continued to teach physics in the UW’s Early Entrance Program. He was 87. • GEORGE MEADE EMORY, founding director of the UW law school’s Graduate Tax Program and professor emeritus of law, died Oct. 8. He also was an assistant to the commissioner of the U.S. Internal Revenue Service. He was 79. • ALEX FEFER, ’69, a retired UW professor of medicine and medical oncology, and an original member of the Fred Hutchinson Cancer Research Center, died Oct. 3. He was a member of the pioneering Seattle bone-marrow transplant team that developed transplantation as a therapy for leukemia, lymphoma and other blood cancers. He was 72. • MELVIN FIGLEY, who helped build the UW Department of Radiology, died June 7. Figley was recruited to the UW in 1958 to found the department in the then-new UW School of Medicine. In honor of his service, the Department of Radiology established an endowed professorship in his name and dedicated the Melvin M. Figley, M.D., Cancer Research Chair at the UW Department of Radiation Oncology.

was also a composer and a graduate of Yale University and Harvard College, where he studied under Aaron Copland and Irving Fine. He was 86. • MARTIN NICHOLS CHAMBERLAIN, ’36, who worked for the UW’s Continuing Education Division for 17 years and also served as division director, died Nov. 7. He later was director of the Peace Corps’ East Africa division and dean of University Extension at the University of California, San Diego. He was 96. • JAY GREGORY DASH, former professor of physics, died Nov. 28. Before joining the UW, he worked at Los Alamos National Laboratory. After retiring from the UW, he continued to teach physics in the UW’s Early Entrance Program. He was 87. • GEORGE MEADE EMORY, founding director of the UW law school’s Graduate Tax Program and professor emeritus of law, died Oct. 8. He also was an assistant to the commissioner of the U.S. Internal Revenue Service. He was 79. • ALEX FEFER, ’69, a retired UW professor of medicine and medical oncology, and an original member of the Fred Hutchinson Cancer Research Center, died Oct. 3. He was a member of the pioneering Seattle bone-marrow transplant team that developed transplantation as a therapy for leukemia, lymphoma and other blood cancers. He was 72. • MELVIN FIGLEY, who helped build the UW Department of Radiology, died June 7. Figley was recruited to the UW in 1958 to found the department in the then-new UW School of Medicine. In honor of his service, the Department of Radiology established an endowed professorship in his name and dedicated the Melvin M. Figley, M.D., Cancer Research Chair at the UW Department of Radiation Oncology.
died Nov. 28. He earned his Ph.D. at Harvard and taught at the University of Indiana before joining the UW. He was 89. •

**KERMIT L. GARLID**, who spent 40 years on the faculty of the Department of Chemical Engineering, died Sept. 22. He helped build the UW Department of Nuclear Engineering and became its chairman in 1986. He also was associate dean of the College of Engineering and vice provost. He was 81. •

**HARRISON L. GRATHWOHL**, who taught marketing at the Foster School of Business from 1958 to 1983, died Oct. 9. He was 81. •

**GEORGE HOOD**, '47, the Secretary of Education’s regional representative under President Reagan, died April 2. After serving in the Army during World War II, he worked in management for Pacific NW Bell for more than 35 years before he was appointed to the government position. His uncle, William Goodwin, coached the first UW football and crew teams. His grandfather, Marion Hay, was governor of Washington from 1909-13. He was 89. •

**CHARLES JACOB KIPPENHAN**, who taught mechanical engineering and chaired the Department of Mechanical Engineering, died Sept. 23. He was 90. •

**KEN LEHMAN**, UW baseball coach from 1964 to 1971, died Dec. 4. The Seattle native turned down an offer to play for the Huskies to sign a contract with the Brooklyn Dodgers in 1946. After his playing career, he joined the UW in 1964 and compiled a record of 96-177 with the Huskies. He was 82. •

**LOUIS G. MARSH**, '49, who established the Marsh Family Foundation and was a major philanthropist to the UW, died Nov. 30. He was also a big supporter of the Seattle Symphony, the Seattle Opera and Pacific Northwest Ballet. He was 87. •

**BURDETTE CRAIG MCCLELLAND**, who with her husband, John A. McClelland Jr., supported ARCS (Achievement Rewards for College Scientists), which aids UW science majors, died Oct. 4. She also was a major supporter of the Henry Art Gallery. She was 91. •

**ERNEST EUGENE MILLS**, who spent 34 years as a broadcast engineer at the UW, died Dec. 6. He was 69. •

**JOE PURYEAR**, '96, one of America’s elite alpinists, died Oct. 27 while attempting to make the second ascent of 24,170-foot Labuche Kang in Tibet. In addition to being a mountain climber, he was a guidebook writer and photographer. He also worked as a climbing ranger at Mount Rainier National Park and had climbed in the Andes, Patagonia, the Himalayas, the Alps and Alaska. He was 37. •

**STEPHEN A. REYNOLDS**, '82, a research scientist for the Ocean Physics Group at the UW’s Applied Physics Laboratory, died Nov. 2. He helped establish a foundation to support teachers at Seattle’s Nathan Hale High School, where he was a volunteer. He was 59. •

**LAWRENCE WILETS**, who spent 37 years as a professor of physics at the UW, died recently. He joined the UW in 1958 and taught until his retirement in 1995. He published two books and more than 180 papers on atomic, nuclear and particle physics.

**To report an obituary, send it to columns@uw.edu.**
Fans attending Husky men’s basketball games at Alaska Airlines Arena sure get their money’s worth, both from the exciting play on the court—and the show put on by the Dawg Pack. For the past eight years, this section of 500 jumping, yelling, pointing, purple-shirted pupils has cheered the Huskies, mocked opponents, poked fun at the officials and given the Huskies a tremendous home-court advantage. “We can’t thank them enough,” says Huskies coach Lorenzo Romar. The group of good-humored hecklers—who started up when the Huskies got good again—even won an award for sportsmanship in 2006 from the NCAA Division IA Athletic Directors’ Association.—Jon Marmor

TRADITIONS: UP IN ARMS

Want to know the top 10 things the Dawg Pack is famous for? Go to uwalum.com/columns.
In a changing world...

the decisions we make have never been as important as they are today.

"I had a big house and lots to take care of, which got more difficult as I got older. It is sure nice now to be able to call in a work order for a light bulb!"

— Marty

Resident, Aljoya (Mercer Island)

"Timing for retirement living is hard. I didn’t want to wait until I had to move. This is a gift for your children too."

— Kinuko

Resident, Aljoya (Mercer Island)

ALJOYA

Prestigious retirement living for those who’ve reached the age of sixty-two.

Call today to schedule your personal visit and ask about our wealth preservation benefit.

Mercer Island
2430 76th Avenue SE
Mercer Island, WA 98040
(800) 821-1976

Thornton Place – Northgate
450 NE 100th Street
Seattle, WA 98125
(800) 786-4965

eraliving.com