A BUY-IN FOR OPEN BOOKS
Dear Friends,

I love this issue of Northwest Crimson & Gray! When people ask me, as they often do, what’s happening at WSU Vancouver, the only possible response is “so much.” This issue of our magazine captures the diversity of activities on campus.

You can read how our faculty are transforming the student experience through new programs, open educational resources and opportunities to participate in research. We feature faculty research that is having an impact in our state and halfway across the world in Uganda. And you’ll meet some of our staff, alumni and partners who are making a difference in our community and in the lives of our students.

All of this work is taking place in the context of our new strategic plan, “Destination 2021.” As we approach the end of our first year of “Destination 2021,” the energy on campus is wonderful. Our commitment to research has never been stronger, and our faculty are leading the way in research that is having a major impact in many fields. Our work to rethink the undergraduate experience to meet the needs of our students today is paying off with record retention rates. And our community partnerships are stronger than ever.

Every day my colleagues at WSU Vancouver work to prepare our students for a world that is increasingly diverse, complex and competitive. I am so proud of the work we do to prepare our students for lives and careers in the 21st century and, through faculty research, to support the health, economy and culture of our community.

As my fifth year as chancellor comes to a close, I want to express my appreciation to my colleagues on campus, our community partners, our donors and, of course, our students for making WSU Vancouver the extraordinary place that it is. A look at this issue of Northwest Crimson & Gray provides the evidence.

Sincerely,

Emile “Mel” Netzhammer
Chancellor
A HEALTHY CHOICE
WSU Vancouver now offers Health Services, and students have a more convenient, affordable option for health care.

TRAINING OUR FUTURE PHYSICIANS
WSU’s Elson S. Floyd College of Medicine will accept a select group of students for its fall 2017 inaugural class, and some of them will come to Vancouver for training.

NEW PROGRAMS
A bachelor’s degree in integrated strategic communication and a master’s degree in electrical engineering are the programs WSU Vancouver will introduce in fall 2017.

RESEARCH EQUIPMENT FOR THE NEXT GENERATION
When John Harkness and Ryan Todd needed research equipment, they decided to build it themselves.

DIGGING INTO THE RESEARCH PROCESS
Librarians are learning how to help visually impaired students who rely on screen readers to complete research.

INTRODUCING THE DIRECTOR OF STUDENT DIVERSITY AND OUTREACH
Anthony Kelley wants to create a more inclusive environment for students.

THE PROBLEM NO ONE WANTS TO TALK ABOUT
Many college students don’t know where their next meal is coming from. The Cougar Food Pantry is here to help.

A BUY-IN FOR OPEN BOOKS
Open educational resources benefit faculty and students alike.

IN SEARCH OF LASTING CHANGE
Anita Hunter helped get a hospital built in Uganda, but she would like to keep people from getting sick in the first place.

MAY THE VICTIMS OF GUN VIOLENCE NOT BE FORGOTTEN
A shocking number of Americans die each year of gun violence. John Barber’s digital installation gives them a voice.

TIME, PLACE AND THE RIVER
WSU Vancouver’s Aquatic Ecology Lab joined with five Washington high schools to teach students about the Columbia River by participating in research.

A PLACE TO PLAY
The Child Development Program has transformed its playground into a natural playscape.

GREG AND SEAN PHILBROOK: GOING PLACES
Brothers and WSU Vancouver alumni found their different interests fulfilled on the same campus.

SUNLIGHT SUPPLY AMPHITHEATER BRIGHTENS SCHOLARSHIP FUND
A generous donation provides more scholarships for WSU Vancouver students.
Cold and flu season hits college campuses hard, spreading quickly and affecting students, faculty and administrators without discrimination.

At WSU Vancouver, classes on some days are a cacophony of coughing, sneezing and blowing noses—if students make it to campus at all. Shared computers, tables and chairs mean shared germs, keeping the many off-campus health centers in the region busy.

But as of March 20, students at WSU Vancouver can find medical help right on campus. They can get flu vaccines, some over-the-counter medications, basic exams and referrals to specialists, all in the Student Wellness Center in the Classroom Building, Room 160.

“This is a very big deal for students on our campus,” said Skye Troy, president of the Associated Students of WSU Vancouver and a senior public affairs major. “Students will have access to affordable health services, and it’s been shown that when students’ health is better, they’re more successful all around.”

WSU Vancouver is contracting with The Vancouver Clinic to bring nurse practitioners to campus two days a week for five hours each day. Their services include:

- Basic exams, including women’s health
- Lab work requests
- Monitoring of stable chronic illnesses, such as asthma
- Referrals
- Treatment or referral for acute illnesses and injuries
- Vaccinations

A COMPREHENSIVE DEFINITION OF WELLNESS

The Student Wellness Center houses counseling, access and health services.

“We wanted the name to reflect that the center is not just about sick care, but also for people who are seeking wellness,” said Patience McGinnis, lead psychologist and manager of the Student Wellness Center. In the future, the hope is to add health education and peer education, as well...
as other programs as need arises, she said.

Appointments are required, but same-day
appointments may be available, McGinnis said.
The facility complies with patient protection
and privacy laws. Patient records are managed
electronically by The Vancouver Clinic.

WSU Vancouver joins the Pullman campus
in offering health care to students on site. WSU
Spokane students have access to off-campus
health care through a partnership with a provider.
There is no student health care offered at WSU
Tri-Cities.

At WSU Pullman, students pay a health fee
with their tuition, which may be what happens
in Vancouver, depending on the site’s popularity,
Vice Chancellor for Student Affairs and Enrollment
Nancy Youlden said. Across the country most
students pay a fee for health services. So far, all
of the expenses for the facility and initial contract
have come out of university funds and Services
and Activities Fees students pay with tuition.

HELP FROM GRADUATE
STUDENTS

Although all students stand to benefit from
health services, graduate students, particularly
those on paid assistantships, have been vital in
the effort to open the center.

As employees, those students are required
to have health care provided by WSU, but
most providers in that plan are in eastern
Washington. With health services at Vancouver,
WSU Vancouver graduate students will be able to
access basic care and referrals at a lower cost.

“The idea is that health services could bridge
the gap between the health care we’re required
to have and the care we can actually access in
Vancouver,” said neuroscience graduate student
Philip Uribe, who also leads the Vancouver
Graduate Student Organization.

If students need more than basic care, they
currently must pay roughly $100 to see a primary
care provider and more to see a specialist, Uribe
said. He said he’s spent 10 percent of his own
income on health care since beginning his Ph.D.
studies at WSU Vancouver. The campus clinic will
not solve all of the problems, but the initial visit
will no longer pose a barrier to care.

“You see the nurse practitioner, get an
in-network referral, then you can get your
prescriptions and tests ordered, and you’re in
network so you’re paying less,” he said. “That is
the biggest advantage.”

College of Nursing and Elson S. Floyd College
of Medicine graduate students might eventually
be able to gain practical experience in the health
center, too.

THE RIGHT TIME

In her 25 years at WSU Vancouver, Youlden said,
health care has arisen repeatedly as a concern.
“The timing hasn’t been right before,” she said.
“It took a confluence of events to get us here.”

Students in the past had the opportunity to
go to Clark College’s health center at a reduced
cost, but the program prioritized Clark students,
many of whom transferred to WSU Vancouver as
upperclass students and suddenly did not have
access to the care they’d come to expect.

In 2014, Youlden formed the Health Services
Task Force, which contracted with the American
College Health Association to conduct a peer
review. “The ACHA submitted a 50-page report
that said we needed someone full time right
now,” Youlden said.

In a request for proposal process, The
Vancouver Clinic was identified as the best
partner. Clinic specialists have been involved since
the beginning, helping to design the new space,
making decisions about what kinds of services to
offer and training staff.

“Students at WSU Vancouver have access to
a high-quality education with excellent faculty,
staff and a growing number of student life
opportunities and support programs,” Youlden
said. “Health Services is a critical addition to that
portfolio of programs and one that will contribute
to student success.”
WSU’s Elson S. Floyd College of Medicine will welcome its inaugural class in fall 2017. The college received preliminary accreditation on Oct. 19, 2016, followed by approval for membership by the American Association of Medical Colleges, which cleared the path to begin recruiting students.

WSU focused on recruiting talented Washington state students from rural and medically underserved communities, first-generation professional students, and those with a passion to serve and lead in medical care. The university received more than 700 applications by the late-November deadline.

WSU selected 340 candidates to interview throughout winter and early spring. Sixty admitted students will spend their first two years on the WSU Spokane campus. During their third and fourth years, they will have the opportunity to learn in clinical environments near WSU locations in Everett, Spokane, Tri-Cities and Vancouver.

In fall 2019, about 15 students will come to WSU Vancouver and perform their clinical clerkships in nearby hospitals and clinics, including PeaceHealth Southwest Washington Medical Center and The Vancouver Clinic.

WSU Vancouver is on the cusp of hiring its first associate dean of clinical education, who will oversee the education of medical students placed in Vancouver. The person who assumes this position will be responsible for ensuring the educational experience encountered by each student is of the highest quality possible and complies with accreditation requirements.

Students who train in Vancouver have a higher likelihood of remaining in the community to practice medicine. Soon, impeccably trained Cougars will help fill critical health care gaps in the region and across the state.

To welcome, support and orient medical students, WSU is looking for families and individuals in Vancouver who would be willing to host a student during six clinical intersession weeks from September 2017 through March 2019.

These homestay families will provide a residence during each of the intersessions, and plan engaging activities to help reenergize their assigned students after classes and clinical work, introduce them to members of the community and provide a yearly “care package” as a gesture of kindness and support.

If you are interested in becoming a homestay family, please contact Kyle Holbrook at kyle.holbrook@wsu.edu.
INTRODUCING NEW PROGRAMS FOR FALL 2017

WSU Vancouver’s programs and degrees have a direct impact on the economy and vitality of Southwest Washington. More than 90 percent of WSU Vancouver graduates remain in the area to live and work. In fall 2017, WSU Vancouver will offer two new programs designed to feed hungry industries in the region.

INTEGRATED STRATEGIC COMMUNICATION
WSU Vancouver’s program in integrated strategic communication is based on the philosophy that every organization has a story to share. The coursework for a Bachelor of Arts degree emphasizes principles and skills that are in high demand by companies hiring the next generation of communication professionals. Majors learn to communicate creatively and persuasively to build mutually beneficial long-term relationships between organizations and their stakeholders. Jobs abound in this growing field in public relations, advertising, event promotion and management, social media and corporate communication. Learn more by visiting murrow.vancouver.wsu.edu.

ELECTRICAL ENGINEERING
The Master of Science degree in electrical engineering teaches students to become innovators. Students in this program will expand their technical expertise, acquire advanced skills and get hands-on experience in traditional fields of electrical engineering. The program also has a theme based on Lab-on-a-Chip devices, which are millimeter-size silicon chips that integrate several laboratory functions, such as disposable early cancer detection and other rapid point-of-care tests. Through assignments and projects, the theme will help make connections among the program’s courses. It also seamlessly integrates distinct electrical engineering subfields, such as digital systems, micro/nano electronics, sensors, power systems and applied electromagnetics. Learn more by visiting ecs.vancouver.wsu.edu/electrical-engineering-ms.

These new programs came about as a result of a yearlong academic planning process that concluded in 2015. WSU Vancouver engaged Penson and Associates, Inc., a research and consulting firm that specializes in working with universities. Before recommending new degrees and programs, Penson interviewed faculty, staff and students along with high school students, school counselors, community college students, employers and community leaders. They also looked at regional economic development data and workforce development plans.

Since the plan was finalized, WSU Vancouver has added an entrepreneurship major in the Bachelor of Arts in business administration degree and a Bachelor of Science degree in mathematics.
Postdoctoral fellow John Harkness and scientific assistant Ryan Todd were working in Barbara Sorg’s neuroscience lab on the WSU Vancouver campus when they ran into an expensive equipment problem.

They were investigating sleep deprivation in rodents by examining how structures surrounding neurons, called perineuronal nets, change throughout the day and during periods of limited sleep. They believe perineuronal nets are important for regulating neural plasticity and could be important in storing memories—with potential clues for treating various addictions.

They needed “sleep deprivation boxes,” which prevent mice or rats from sleeping for a period of time. The Sorg lab hypothesizes that neurological changes occur from lack of sleep that makes the brain more susceptible to drug addiction. Once a rat is sleep deprived, the researcher can measure drug-seeking behaviors over time and see how perineuronal nets are involved.

Although these boxes are available commercially, they cost upwards of $3,000 apiece. Multiplied over the number of devices needed for a study (typically 6 to 24), the cost is prohibitive for a small lab’s budget.

“We don’t have that equipment, so Ryan and I started building it,” Harkness said.
INVENTING FROM NECESSITY

Their prototype is “really simple,” Todd added, “but it does what we need, and better than anything else on the market.”

To measure the effects of sleep deprivation in the brain, Sorg wanted the animals to be kept awake but without stressing them. Harkness and Todd’s solution was simply to use the rat’s home cage instead of a specialized sleep deprivation box, and just to add a little wheel in the middle (called an agitator trolley) that runs back and forth so the rat has to keep out of its way. The box is roomy enough for the rat’s food and water. “Nothing in the rat’s environment has changed,” Harkness said.

Todd did the mechanical engineering for the project, and Harkness coded the computer that can control up to eight devices simultaneously. The trolley can be remotely operated from a researcher’s desktop computer, a laptop and even a smartphone. The box is installed on a platform, next to a small computer that controls the agitator trolley.

“It’s easy to repair, adjust and clean,” Todd said. A researcher could easily add monitoring equipment to see what’s happening in the rat’s brain while the device is running.

EMPOWERING THE FUTURE OF SCIENCE

Harkness and Todd worked with WSU’s Office of Commercialization on a preliminary patent. Then, realizing that other researchers could also benefit from using the device, they applied for a Commercialization Gap Fund award. They received $50,000, which will fund the continued development and validation of the device, and help them bring it to market.

In addition, Harkness and Todd founded a company, Rewire Neuroscience, to bring the product to market. “Our vision for this company is that it’s built around the future of neuroscience,” Harkness said. “We want to help early career investigators build their own equipment that’s customizable and cheaper than what’s available now.”

(For more information, see facebook.com/RewireNeuroscience.)

News about their work first appeared on the ResearchNow! website for WSU Vancouver. Rewire Neuroscience has the distinction of being one of very few companies to spin off from research on the WSU Vancouver campus.

“This is a really exciting venture for the investigators, the neuroscience program and WSU Vancouver,” said Christine Portfors, associate vice chancellor of research and graduate education and a professor of neuroscience.

Rewire Neuroscience has also developed an online publication called the Journal of Abstracts (jabstracts.org). Young researchers can upload their science posters—work often done in grad school but seldom recognized beyond—to the Journal of Abstracts and get their work seen before the long process of publication in a traditional journal can take place.

“It’s part of empowering the future of science,” Harkness said. “It’s difficult for students to get their names out there before they have a lot of publications. Graduates and undergraduates present a lot of posters at conferences. Then the posters die in a box, and the data never sees the light of day again.”

“I see this as bridging that gap between the work a lot of people do in labs that might go unseen, and their next job or grad school,” Todd said. “They can now send a link to someone who can look at all of the posters they’ve been on, and potentially collaborate with them.”

Harkness, who earned his doctorate at Oregon Health and Science University, and Todd, who has a master’s degree in whole systems design from Antioch University in Seattle, are a good pair. “We both appreciate the challenge of coming up with these ideas and piecing things together, as opposed to going out and spending a lot of money on something that may or may not meet our needs,” Todd said. “We’d rather design and build something that meets our needs exactly.”

Much of the lab equipment currently available was designed two or three decades ago. “There is a real need for neuroscience equipment that is inexpensive and very user friendly,” Portfors said.

Harkness and Todd hope to reduce the expense of lab equipment by developing products that are simple in design and easy to use. “We also want to modernize lab equipment by using technology typical in everyday devices, such as wireless printers and smartphones,” Todd said.

And while they love the thrill of invention, they also love the research and discovery it enables. “Science is where our passion is,” Harkness said. “We’re just excited to do it better.”

Clockwise from top: Ryan Todd and John Harkness with their sleep deprivation box; the cage and agitator trolley set up to a monitor; an inside look at the computer system that runs the trolley; and the trolley running inside the rodent cage.

PHOTOS: LAURA DUTELLE
Mastering library research is a rite of passage for college students. Librarians know it is part of their job to teach students how to search, access information, analyze it, and understand how each resource database has its own purpose and functions in its own way.

Nicole Campbell and Sue Phelps, librarians at WSU Vancouver, noticed that some students, although able to use the information they found, were struggling more than others just to find it in the first place. They decided to look into it.

They targeted visually impaired students who relied on screen readers to access information on a computer. Screen readers are software programs that literally read the text on the screen to a user. Visually impaired students rely on them for research, to access and mine the library's databases. With headphones or a speaker, the student listens as the screen reader employs a speech synthesizer to report the contents of the computer page, so that the student can determine its value for a given assignment. Different screen readers work differently and can be complicated to master. Databases vary as well.

**DIVERSITY FACULTY FELLOWSHIP**

In 2015, Campbell and Phelps applied for a research grant from WSU Vancouver’s Diversity Faculty Fellowship program for a small project involving students who use screen readers. “We wanted to understand whether there is something as librarians we need to do better to serve students,” Campbell said. “Is it training in the research process? Is it a technology issue with the databases and screen readers they were using?”

They designed a usability study with 20 students participating. Two from WSU Vancouver and eight from the School for the Blind in Vancouver were visually impaired and used screen readers. The other 10 did not use screen readers. Participants were asked to search for one full-text journal article on a given topic in each of three different databases. They were also asked to think out loud as they worked, voicing their decisions and frustrations.

Those not using screen readers had few problems, and any problems they encountered had limited or no impact on their ability to complete the tasks. On the other hand, those using screen readers encountered many usability problems—from the order in which the screen information was read to them, to problems with PDFs and pop-up boxes that rendered the database virtually unusable. Often they had to start over.

Those using screen readers took an average of nine minutes to complete a task—more than twice as long as those not using screen readers. Campbell and Phelps were impressed at the tremendous perseverance and patience the students showed.

**LESSONS WORTH SHARING**

Campbell and Phelps are eager to share what they learned with other librarians. In an effort to get the word out, they, along with guest speaker Mike Mello from Washington’s Department of Services for the Blind in Seattle, provided a one-day workshop at WSU Vancouver. Area librarians learned about the research and how to do a usability study on their own campuses.

Meanwhile, Campbell and Phelps said, there are several immediate lessons for teachers and librarians. “Just the general awareness of the time barrier and the technology has informed my practice in helping people,” Campbell said. “We can’t assume a research process that’s the norm—that every student with a question is helped the same way.” She noted, for example, that students using screen readers develop their own workarounds—maybe those could be listed and used to help others too.

Faculty may need help when planning a research assignment or syllabus appropriate for a visually impaired student. And when scheduling meetings, “you have to set aside more time,” Phelps said.

Campbell, who is writing an article for publication on the topic, said they plan two more immediate steps: listing the usability issues they discovered, and identifying who might be able to fix that problem. Should libraries make accessibility a top issue when choosing which databases to buy? Could database vendors do something different? “If they were able to fix a few things, it would make the experience better,” she said.

Campbell and Phelps are eager to continue their research, saying that its implications go beyond helping visually impaired people. “Our research focused on low vision and blind people using screen readers, but that is not the only population that would benefit,” Campbell said. “As we all use our phones as information tools, and we’re all getting older, the benefits are much broader.”
In fall 2016, WSU Vancouver established the issue of equity and diversity as one of five goals for its 2016 – 2021 strategic plan. To increase growth and retention of minority students, and to foster a more inclusive environment, the university created a position to lead these initiatives and oversee activities of the Student Diversity Center.

Anthony Kelley, formerly assistant director of diversity outreach and recruitment at the University of Washington Bothell, now holds that position. He joined WSU Vancouver in December as the director of student diversity and outreach within the Office of Student Affairs and Enrollment.

Kelley's story in higher education began with a football scholarship to the University of Washington in 1998. After earning his bachelor’s degree in educational leadership, volunteering abroad at a local nonprofit in South Africa and receiving numerous awards for his academic achievement, campus involvement and service, Kelley put aside his dreams for a professional football career and pursued a master’s degree in higher education. He recently returned from Taiwan, where he taught English to K–12 students, assisted with trips abroad for potential student athletes and facilitated course activities focused on academics, athletics and global citizenship.

He has worked for more than 15 years in the areas of community and outreach project development, motivational speaking, diversity training and athletic coaching.

At WSU Vancouver, Kelley is working to cultivate diverse leadership on campus, address conflicts with equity and access for minority student populations, and create strategic partnerships within the community.

"Diversity has a changing definition. It represents a necessary struggle, and people need to be willing to take on that struggle."
– ANTHONY KELLEY

"Diversity has a changing definition. It represents a necessary struggle, and people need to be willing to take on that struggle,“ Kelley said. “It’s not a formula or something you can do. It depends on the community, the leadership and what we can provide. We need to look critically at what is happening on campus to address the gaps and maximize the student experience.”

The Student Diversity Center was created as an on-campus resource for students of color, first-generation and low-income students, and others from a diverse background. It has grown to be a welcoming space encouraging discussion about social justice, hosting outreach and recruitment events, and providing leadership opportunities related to diversity.

The center is just the first step toward creating a more inclusive environment for all students. “I want students to know where on campus they can talk about their experiences, struggles or issues,” said Kelley. “We are limited in this capacity and need to be honest about how we are going to address this.” He recommends a blended effort by faculty, staff and administrators to find the gaps, assume a “willing and ready” attitude, and strive to ensure the needs of students are met.

Kelley’s mission ties directly into the fourth goal of the strategic plan, which is to “promote an ethical and socially just society through an intentional commitment to inclusion, equity and diversity.” His wish is for WSU Vancouver to set an example for the surrounding community and, ultimately, to embrace diversity and the struggles and triumphs associated with it.
Across the nation, college students share a problem that no one is talking about: They often don’t know where their next meal is coming from. They are facing a problem called food insecurity—the lack of reliable access to enough affordable, nutritious food. Food insecurity has become rampant at colleges and universities across the country, and institutions are racing to fill the gaps to keep their students fed and focused. The number of food pantries on college campuses is growing and the problem of student hunger is coming to light.

It can be hard for a college student to make ends meet when paying for college and living on a tight budget. For many, the struggle means choosing between paying utility bills or buying groceries, getting a textbook or food for dinner. At WSU Vancouver, 80 percent of undergraduates receive some type of financial aid through grants or loans and 60 percent of undergraduate FAFSA filers are Pell Grant eligible. Most Pell Grants are awarded to students whose families make less than $30,000 annually.

When WSU Vancouver staff and student leaders noticed a need among the student population—many of whom struggle to balance the demands of school, work and supporting their families—they decided to form the Cougar Food Pantry. WSU Vancouver’s food pantry recently joined the College and University Food Bank Alliance, an organization of more than 400 campus-based programs focused on alleviating food insecurity, hunger and poverty among college and university students in the United States.

Closer to home, research shows hunger is a real threat to college students. A 2014 study of 354 students at Western Oregon University found that nearly three-fifths are impacted by food insecurity. The same study found that good academic performance is inversely associated with hunger as well, indicating a link between malnutrition and the ability to learn. According to a study in the Journal of Nutrition, food insecurity is also linked to obesity. The study found that participants who were mildly food insecure were also 30 percent more likely to be overweight than those with regular access to food. If given a choice between starvation and consuming junk food, the decision is obvious—but not nutritionally sustainable.

Hunger affects not only performance in the classroom but mental health as well. A study by the Arizona State University School of Nutrition and Health Promotion found that students reporting food insecurity are three times more likely to suffer from anxiety and depression than their food-secure classmates. Nationwide, roughly 58,000 of American college students self-reported as homeless on their FAFSA applications.

**Feeding the Need**

In 2012, the Cougar Food Pantry opened its shelves to current WSU Vancouver students in need of food. Since then, traffic has increased. As the need grows, so do the pantry’s shelves. In 2013, the Cougar Food Pantry outgrew its initial location in the Office of Student Involvement and relocated to its current home in the Cougar Center. It began hosting biannual food drives to keep up with requests and pairing with student clubs as benefactors. The Cougars are here to help.
pantry secured funding in 2014 through Services and Activities Fees—
granted by the students themselves—to provide backup when the shelves
run low.

In an effort to provide fresh, perishable food items while tiding students
over during winter breaks, the pantry began offering holiday meal baskets
in fall 2015. This winter, 21 students and their families received baskets
complete with seasonal fixings for a holiday meal.

With the student population growing and the need rising, the pantry
itself needed help. Last year, a Cougar Food Pantry coordinator was hired
to fulfill food requests, restock the pantry as needed, coordinate food
drives and track inventory. Catherine “Cat” Townsel works part time as the
pantry’s coordinator while also attending classes.

“I’ve always been very passionate about helping people, and I felt this
position was perfect for me, and something I could relate to,” Townsel said.
“As a student and a parent, it can be tough trying to manage and sometimes
you come up short. Having this pantry is a great resource for students.”

Townsel hopes to see the pantry grow as the need continues. “My goal
for the year is to continue to raise awareness. I’ve seen a rise in partnerships
among other student organizations on campus, and this has definitely
increased recognition. In the next five years I would love to see the pantry
expand. I believe at the rate we’re going we will definitely need to relocate
to a larger area,” she said, adding that relocating to a central, easy-to-
access area could aid in awareness of the pantry.

HOW IT WORKS
Requesting food from the pantry is simple, free and discreet. Students
can fill out a request form in person at the Cougar Center or anonymously
online. Requests are then fulfilled by the pantry coordinator or a student
services staff member, with shopping bags of food ready for pickup
immediately or within a few hours. To date, more than 500 requests for
food have been fulfilled, with 141 requests in fall 2016 alone.

Students who access the pantry come from all walks of life. Some are
traditional, 18-year-old freshmen; some are first-generation students who
are paying their own way toward a degree; some are veterans with families
to support at home. The majority are working part- or full-time jobs in
addition to taking classes. Beyond food, the pantry also provides students
with referrals to community resources offering other types of aid—from
rent and mortgage assistance to clothing and household goods, veteran
and youth services, and more.

NEIGHBORLY LOVE
May 2016 saw the Cougar Food Pantry’s largest donation to date,
from WSU Vancouver’s neighboring Legacy Salmon Creek Medical Center.
Legacy Health’s systemwide employee food drive raised more than 11,176
pounds of food and $11,214 in donations for local food banks. The Cougar
Food Pantry was one of them, receiving 300 pounds of food and more
than $300 in donations. Student clubs have chipped in to help their fellow
Cougs, collecting goods at various events on behalf of the pantry.

While food drives provide a short-term solution, the shelves become
sparse as the semester goes on. To keep up with the growing demand, the
pantry relies on campus and community food drives and private donations.
Donors can deliver nonperishable food items or monetary gifts to the
Cougar Center Monday through Friday. Groups interested in hosting food
drives to benefit the Cougar Food Pantry can find a “food drive start-up
kit” on the pantry’s website. Learn more about how you can get involved
at vancouver.wsu.edu/fooddrive.
Skye Troy’s debit card was suspended after a trip to the Bookie, WSU Vancouver’s bookstore. Unusual charges, the bank explained.

No, Troy said, nothing unusual: just textbooks. Troy, a senior public affairs major and president of the Associated Students of WSU Vancouver, had spent $475 on textbooks for the semester.

Troy’s friends commented on a Facebook post about the experience, some with shock and others with tips for reducing costs, from buying old versions to making photocopies, or even going without. “Students started telling me that they stopped buying books because they couldn’t afford them and had to take a ‘B’ because they didn’t have access to the materials they needed to be successful,” she said.

According to the College Board, undergraduate books and supplies cost an average of $1,230 to $1,390 annually. In 2015, the Bureau of Labor Statistics reported that textbook prices had increased more than 1,000 percent since 1977, and college students across the nation cited costs as a top concern.

When Vancouver students began to push back, campus leaders listened and looked for solutions. In 2016, while acting as the university president, now-Provost Dan Bernardo created a Course Materials Cost Reduction Task Force. Open Educational Resources quickly emerged as an alternative to textbooks and other traditional media.

OERs can be as broad as YouTube videos or as narrow as PDF “books” specifically created for a class by the teaching faculty. The key, though, is access and expense: While they’re not necessarily free, they are cheaper than traditional textbooks. An open resource might cost $30 instead of $300. New technology also helps students gain access, with PDFs and tablets replacing paper and publishers.

LEADING THE WAY

In fall 2013, the Math 106 class at WSU Vancouver participated in a pilot program using OER in partnership with the Gates Foundation and Lumen Learning. The result was overwhelmingly positive—and the teaching faculty member left WSU to work for Lumen and continue developing materials. The program expanded to a couple of other math classes and the task force estimates it has already saved students about $40,000.

That’s the goal, said Michael Caulfield, the director of blended and networked learning at WSU Vancouver. He is one of the leaders in the effort to make OER part of the new standard in educational materials. Caulfield, along with Karen Diller, library director; and Linda Frederiksen, head of access services, have been telling faculty about grant and funding opportunities to find or create appropriate OERs—books and ancillary resources, such as videos and quizzes—for their courses.

WSU Libraries, and Academic Outreach and Innovation are providing
stipends of up to $5,000 to faculty interested in finding textbook alternatives. Faculty in Vancouver can receive support and stipends of up to one month’s salary to create, adapt or add OER materials to their courses. In 2016, WSU was one of 11 institutions nationwide selected to participate in the Open Educational Resource Institutional Partnership Program, which is operated by Rice University’s OpenStax. The program will provide free consultation and resources for schools wanting to increase the use of OERs and help schools dedicated to lowering the cost of course materials connect with each other. The estimated savings per year with the program is $424,000.

BALANCING COST AND EFFICIENCY

Caulfield and Diller have led the effort on campus to connect Vancouver faculty with the opportunities. Meanwhile, Frederiksen is on sabbatical working on OER development. Creating materials is not a small time commitment, Frederiksen said: To develop a replacement textbook may take up to a year. Ancillary materials can take even longer.

OER materials don’t have to be from new sources. Vancouver instructor Bill Griesar has used openly available materials, including YouTube videos and publicly available research, in his neuroscience courses for about 10 years. He cites student cost as a top reason why he ditched traditional books.

While OER works for some courses, it’s not the ideal solution for others. Willy Cushwa, a biology instructor, used OpenStax to create a textbook for about $50, instead of $150 for a traditional textbook. It was time-consuming, but resulted in a PDF that worked and saved his students money. But the same approach wouldn’t work for another class where the traditional textbook costs only $30 used—less expensive than anything Cushwa could have created and far less time-consuming for him.

“I was a student too, and you hate paying outrageous sums of money for books,” Cushwa said. “My goal is to find a resource to help students learn, and at the most effective and lowest price point.”

The goal for faculty, administration and student government is helping students finish their degrees on time and with as little cost as possible. Sacrificing textbooks to pay bills doesn’t help accomplish that. For Troy, the move toward OER is an obvious one, despite the challenges.

“Affordable textbooks will increase student success, help students be more engaged in the classroom, and when students have access to the materials they need, they will be more successful overall,” Troy said. “It’s going to be a game-changer.”

WHAT ELSE COULD THE MONEY BUY?

According to the College Board, books and supplies cost undergraduates $1,230 – $1,390 annually. What could they buy instead?

- About six weeks of rent for a one-bedroom apartment in Clark County
- 13 months of cell phone bills
- 613 gallons of gasoline
- Five months of groceries for one person
- 30 oil changes
- 618 new pairs of socks
More than 10 years ago, Anita Hunter was invited to Mbarara, Uganda, to build a children’s hospital that would treat children who were dying from preventable diseases. Thanks to many people, the hospital was built and has been operating since 2009.

But Hunter’s interest didn’t stop there. Too many children still had preventable diseases. “Our work has gone beyond building a hospital to cure illnesses. We need to prevent them,” said Hunter, a clinical professor and associate dean of academic affairs and accreditation for WSU’s College of Nursing. She has offices on both the Vancouver and Spokane campuses.

Looking beyond the hospital, Hunter and her science colleagues from the University of San Diego began conducting community assessments, environmental and water quality assessments, and population health assessments to identify how environment and health interacted to affect each other.

Hunter joined WSU Vancouver in 2013, bringing her research along, although most of those working on the project are in San Diego, Calif., and Mbarara.

HARM FROM CONTAMINATED WATER

Some 80 percent of the country in Uganda has no access to clean water. People draw water for drinking and cooking from ground water sources, such as streams, swamps and boreholes. The Ugandan government does supply clean water to 20 percent of the country. Unfortunately, as global warming has led to diminished rainfall, the underground aquifers supplying most Ugandans’ water bubble up through lava, which contaminates the water with arsenic and other trace metals, such as lead, cadmium, fluoride and selenium. These metals contribute to significant health consequences, including cancers, cardiac and severe neurological disease in adults, and developmental and cognitive delays in children.

“That began to give us an explanation for some of the unusual physical symptoms people were demonstrating, particularly neurological symptoms,” Hunter said. “Adults who were 25 or 30 years old were having memory issues, chronic headaches and mobility problems, whereas children were having cognitive and fine motor developmental issues that could not be explained by malnutrition, hospitalizations for illnesses, malaria or prematurity.”

“Our work has gone beyond building a hospital to cure illnesses. We need to prevent them.”

—ANITA HUNTER
To find those who were being harmed by contaminated water, Hunter wanted to conduct a broader study to test the physical and developmental health of mothers and children in the district. In 2015, she received a faculty mini-grant from WSU Vancouver. The grants are awarded as seed money for projects that will lead to requests for external funding. With those funds, she could pay for research materials for two trips to Uganda in January and July 2016.

During those trips, Hunter and her colleagues assessed 498 women and children in six villages—about half with access to clean government water and half without—to determine whether contaminants were making them sick. In two of the villages without access to government filtration, the water drawn from the ground was grossly contaminated with trace metals.

“In those two villages with grossly contaminated water, 100 percent of the population of women and children were spilling trace metals in their urine,” Hunter said. “All were testing positive.” The women, with an average age of 28, were three times likelier than those with clean water to suffer from cardiac problems and irreversible neurological problems, such as memory loss, unsteady gait and chronic headache. They also faced three times greater risk of pregnancy loss, low birthweight, prematurity and neonatal loss or death of their babies within the first two weeks of life.

Children exposed to the same water were suffering too. “Children from birth through age 5 were 10 times more likely to have developmental delays, especially in speech, language and fine motor skills, than the children in villages with access to clean water,” Hunter said.

Those ages 5 to 14 were 30 times more likely to have cognitive delays, functioning one to two age levels below expected cognitive processing.”

And that was just 498 people in six villages. Translate that to the entire Ugandan population, Hunter said, “there is potential for more than 3 million children to be affected and more than 4 million women to have pregnancy health issues.”

OUTREACH AND HOPE

At each stage of the research, the most daunting challenge has been funding. The Holy Innocents Children’s Hospital, which opened in 2009, was built with funds raised largely from members of the Church of San Rafael in San Diego. Other hospitals in the United States and Europe donated modern medical supplies. Members of the research team have often shouldered most of the cost for their trips to Uganda.

For Hunter and her colleagues, the issue is urgent and alarming. What is happening to the people in Uganda with contaminated ground water that is exposed to lava rock layers can be transposed to the United States, where such ground water sources are also prevalent, as in Washington, Oregon, and the Northeast and Southwest regions, she said.

They have submitted their findings for publication, and have presented their work to international and national research conferences for nursing, environmental health and water quality. Recently they have been in conversation with Africom, a United States Africa Command Armed Forces group responsible for U.S. military relations with 53 African nations. Disseminating
information about the environmental contamination in Uganda to other African nations and putting into place affordable and meaningful interventions is the intended outcome of this potential collaboration with Africom. “What we are finding in Uganda extends all along the Eastern African rift from Ethiopia, through Kenya, Uganda, Rwanda and Tanzania. There are also rifts in the southern hemisphere and western hemispheres of Africa,” Hunter said.

PUBLIC HEALTH EDUCATION

Meanwhile, the team is working to educate affected people. “We couldn’t just find these problems and not do something about it,” Hunter said.

Two major interventions are feasible:
1. Communities could build rainwater collection systems, as rainwater has no trace metals.
2. People could change some of their food and cooking practices.

For example, green leafy vegetables, such as spinach, kale and broccoli, as well as eggs can help a person absorb and excrete trace metals. Water can be boiled to remove bacteria and parasitic contamination; orange peels or banana peels can be placed in clean water for 15 minutes and then removed, thus absorbing most of the trace metals in that water and making it fit to drink. It is not perfect, but “there would be significantly less intake of trace metals than if you’d not done any of that,” Hunter said.

Getting people to change their practices is not easy, of course. “It has been scary for the people to hear what we are finding in their water and how it is affecting them,” Hunter said, “and a lot of people say their forefathers have been drinking this water, so how come it is dangerous for us now? Our best response has been that, yes, it’s from the same source, but it’s not the same water.”

A team of four nurses, headed by Stephanie Gardiner, a WSU DNP-FNP student from Vancouver who went with Hunter earlier, and a team of 14 environmental science/chemistry students from University of San Diego, traveled to Uganda in January 2017 to continue the public health education and further test the water sources. Their findings will be important as the projected work with Africom develops and proposals for funding are created.

“When you start doing projects, you must look at their impact on the population,” Hunter said. “Is the outcome going to be positive or negative? If positive, such as the original concept of building a children’s hospital, how do you build upon it and keep it sustainable by the people? If it is potentially negative, such as the water quality assessment that found the toxins, then what revisions need to be made to the original idea so that a more positive outcome is possible? Building rainwater collection systems and the nutrition education were feasible interventions which can be carried forward by the people. Researchers and interventionists will not be there forever, so it is critical to teach the people how to care for themselves.”

“We couldn’t just find these problems and not do something about it.” —ANITA HUNTER
Ten people were shot and killed at Umpqua Community College in Roseburg, Ore., on Oct. 1, 2015. Umpqua is just 190 miles from WSU Vancouver. The proximity and the local media coverage of the shooting got John Barber thinking, “What if this happened on my campus and the people killed were people I knew, or with whom my life intersected?”

Barber, a faculty member in the Creative Media and Digital Culture program at WSU Vancouver, soon realized how many people were dying in school shootings. According to a report in the Huffington Post, the Umpqua shooting was the 45th school shooting of the year and the 142nd since the shootings at Sandy Hook Elementary School in Newtown, Conn., in December 2012.

But school shootings were only part of the problem. A broader look revealed that guns kill an average of 31 Americans every day.

He started thinking about how he could memorialize the victims of gun violence—victims whose names seem to fall out of the media long before the shooters’ names. He wasn’t interested in a stone carving at a place you have to visit. And with 31 new names each day, an alphabetical list printed on a wall seemed impractical.

Barber had many talents to draw on. His scholarship, pedagogy and creative practices focus on:

- Archiving and curating in digital contexts
- Investigating sound as the basis for narrative and storytelling
- Creating radio and sound media art and digital works

So he set about creating something special.

May the victims of gun violence not be forgotten
**A MEMORABLE MEMORIAL**

“Remembering the Dead” is Barber’s multimedia art installation that memorializes victims of gun homicides in the United States by displaying and speaking their names. The intent is to assure the memories of these victims will not fade.

Guests can experience “Remembering the Dead” online anytime (nouspace.net/john/archive/dead/remember-the-dead.html) or visit a kiosk when it’s on display. The physical display involves a wooden cabinet crafted by Jim Boesel, who attended WSU Pullman as a fine arts major, that resembles both a bullet and tombstone. The cabinet houses a computer, a monitor resting on a bed of empty bullet casings, and a speaker. In both viewing experiences, each victim’s name, age, place and date of death is displayed on the monitor while the victim’s name is spoken via text-to-speech technology. After its display, the victim’s name is added to a memorial list in the monitor’s background.

“This process continues eternally,” Barber said. “With each name displayed, the list grows longer. With each name spoken, we are reminded of the human cost of gun violence.”

“Remembering the Dead” debuted at the international conference and festival of the Irish Sound Science and Technology Association in Derry, Northern Ireland, in September 2016. It was next shown at the Paul Watkins Gallery at Winona State University in Winona, Minn. And it was on exhibit at Boomerang Gallery in Vancouver, Wash., in November.

In an editorial in the Dec. 9, 2016, edition of the peer-reviewed publication bleuOrange: Revue de Littérature Hypermédiatique, critic Myriam Watthee-Delmotte wrote that the work evokes respect for those killed by gun violence, and such work is necessary in our contemporary society.

The physical display resides in the MOVE lab on the WSU Vancouver campus and is available for viewing by appointment. Contact John Barber at jfbarber@wsu.edu or 360-546-9645.

---

**GUN VIOLENCE IN THE U.S.**

2 out of 5
guns are sold without a background check

Guns kill
33,000
Americans and injure
80,000
every year

58,131
incidents of gun violence were recorded in 2016

ON AN AVERAGE DAY IN THE U.S.

93
Americans are killed with guns, 31 of them victims of murder

151
people are treated for a gun assault in an emergency room

Gun crime is more prevalent in the U.S. than in other rich countries, with 29.7 homicides by firearms per million people

The U.S. has the most firearms per capita in the world

Sources: The Brady Campaign; United Nations Office on Drugs and Crime; Gun Violence Archive

---

John Barber’s most recent sound installation, “A Mighty Span,” celebrates the 100th anniversary of the opening of the Interstate Bridge over the Columbia River. The project imagines a Feb. 14, 1917, live radio broadcast complete with the dignitaries of the day. Seagulls, marching bands, Model T automobiles and ferry whistles can be heard with live reports from both the Oregon and Washington ends of the bridge. “Of course, there was no radio broadcast in 1917, which made this imagined one even more fun,” said Barber. Listen at nouspace.net/john/archive/mightyspan/mighty-span.html.
A growing number of people live in the Columbia River watershed. They are rural, urban and suburban; they are building houses and roads, drawing water for energy and industrial use, farming, fishing and much more. Their activities affect the river upstream and down. Given the river’s importance to the region’s economy, understanding what is happening and why is essential to maintaining a healthy river, and growing sustainable communities and economies for future generations.

A research project led by scientists at WSU Vancouver is addressing this important need. Called CRESCENDO (Columbia River Scientific Education and Outreach), it is a partnership between five Washington high schools along the river and WSU Vancouver that integrates scientific and educational research. CRESCENDO has received $213,496 for this two-year project from Washington Sea Grant, a state entity set up to manage funds from the federal National Oceanic and Atmospheric Administration.

Each month, the high school science students collect water samples from docks near their hometowns, located along a geographic and ecological gradient of the river, from entirely freshwater (Washougal, just east of Vancouver) to coastal (Ilwaco on the Pacific Ocean). Bringing these river water samples back to their labs for analysis, the students are measuring how nutrients, harmful algae and invasive zooplankton species in their part of the river vary over time.

Their work complements longstanding research by WSU Vancouver’s Aquatic Ecology Lab, which compiles and analyzes these and other samples in greater detail to identify how nutrients, plankton and invasive species vary from upstream to downstream and over time (years to decades). The results will help scientists understand what is contributing to these variations in different locations.
“This research extends what our lab has done for some time and enables us to advance what we’re doing,” said the project’s principal investigator, Gretchen Rollwagen-Bollens, who, along with Steve Bollens, co-directs the Aquatic Ecology Lab. She is a clinical professor and he is a professor in the School of the Environment and School of Biological Sciences. Bollens is one of two co-principal investigators for CRESCENDO.

The research also helps integrate Next Generation Science Standards, a national effort to improve math and science education, into the curriculum. “We want kids to be doing science, not just reading about it or replicating it,” said Tamara Holmlund Nelson, professor of science education at WSU Vancouver and the other co-principal investigator. “They will be getting authentic data and making sense of it.”

IN THE BEGINNING

The schools involved in CRESCENDO are strategically located along the river. All offer students opportunities to study STEM-related concepts (Science, Technology, Engineering and Mathematics), and some have previously collaborated with WSU Vancouver. “All the teachers involved already do some sort of natural science class and pay attention to the local environment,” Holmlund Nelson said.

The project leaders first contacted school administrators to make sure they would be onboard. One of them was Christina Iremonger, who until recently was principal at Vancouver iTech Preparatory School. “Students gain from hands-on learning and reporting their research out to an audience,” she said. “This is what our STEM-based learning is all about. CRESCENDO fits beautifully. They couldn’t have handed me something better.”

Iremonger enlisted science teacher Tom Wolverton. Thirty-four students in his two chemistry classes participate. “I’m trying to get my students to look at the river as a whole system,” Wolverton said. “I’m trying to get them to develop research questions and use data to answer them. It’s getting my students to think like scientists.”

The project got off the ground in the summer of 2016 with a workshop at WSU Vancouver for the five high school teachers. They learned how to use sampling and analytical equipment, and the software to create models predicting various effects on the river.

Field sampling will continue for 24 months, through summer 2018. High school students and teachers take most of the samples; WSU Vancouver graduate students cover the summer months.
**SHARING THE WORK**

The students use standard scientific and statistical techniques to describe variability in nutrient concentrations and plankton distributions found in different seasons and different places. WSU Vancouver scientists then use multivariate techniques to identify and quantify relationships between local and upstream conditions and variability in nutrients, phytoplankton and zooplankton communities.

These results are shared with high school teachers and students for further discussion and interpretation. Simulation and modeling software is used to visualize and predict potential relationships among variables. This information might be used, for example, by fisheries agencies to determine what level of salmon harvesting is sustainable.

“We have been collecting water samples in the Columbia River for 12 years. To have students measuring and collecting this information at five locations more or less simultaneously over the course of a couple of years is a substantial and important increase in our efforts,” Bollens said.

Students will also help develop research questions about what the data means. “We have a set of explicit hypotheses in our proposal,” Bollens said, “but as with any good science project, that will evolve into a fuller, additional set of questions, and we hope the students will be front and center in doing this.”

The research is broadening students’ perspective, said Jeff Rooklidge, science teacher at Wahkiakum High School in Cathlamet, Wash. “Students are looking at patterns and trends in the monthly data in order to better understand the complex Columbia River ecosystem,” he said.

The benefits will extend beyond the current class of students. “I have already learned a lot about current research going on in the Columbia River ecosystem,” Rooklidge said. “I have received a lot of valuable equipment that enables me to improve my students’ science education by giving them access to some of the tools that scientists use in real-world research. I have been exposed to new ideas in how scientists are using biological modeling to study and make predictions about how best to protect our planet’s ecosystems.”

---

**CRESCENDO PARTNERS**

Ilwaco High School,
Ilwaco, Wash.

ITech Preparatory High School,
Vancouver, Wash.

Kelso High School,
Kelso, Wash.

Wahkiakum High School,
Cathlamet, Wash.

Washougal High School,
Washougal, Wash.

School of the Environment, School of Biological Sciences and College of Education, WSU Vancouver
One goal of CRESCENDO is to help students imagine themselves as scientists, whether as professionals or as good community stewards. “Research into STEM education shows that you start losing kids, especially girls and students of color, in science and math by middle school because they don’t see themselves in science,” Holmlund Nelson said. “It isn’t connecting to their lives.” CRESCENDO aims to help change this.

“Several studies have illustrated that when students are engaged in projects right from the beginning, especially when a project is connected with their local environment, their persistence in science is greater,” Rollwagen-Bollens said. “In this way, you really do achieve what we hope to achieve—increase participation of students who may have been left out of the system.”

CRESCENDO itself serves as an example of promoting diversity in STEM. Of the six key people involved—three investigators, two graduate students and a technician—four are women.

CRESCENDO RISING

By enabling students to contribute to high-quality research that is vital to the interests of their communities and state, the project aims not only to increase their understanding of scientific and ecological practices, but also to learn whether they become better stewards of the river as a result of their engagement.

Tests, questionnaires and classroom observations will seek to discover students’ attitudes toward science and environmental awareness before and after the project. Case studies of two students will probe more fully how they feel about the environment, their stewardship, and the value of science to them and their communities.

“We hope they will share what they’ve learned with their communities,” Rollwagen-Bollens said. “They might prepare posters or flyers, attend public meetings, and communicate what they know and what they think about it in their local communities.”

At the end of the year, the teachers, WSU Vancouver faculty and graduate students, and representative high school students will come together in a symposium at the university to discuss data collected so far and develop preliminary interpretations to guide the next months of water sampling.

Beyond the two-year grant period, the investigators hope their work might help develop a model for partnerships between scientists and K–12 schools, one based on mentorships guiding students and teachers as citizen scientists collecting data with broad impact. Holmlund Nelson hopes that teachers, in particular, will find benefits for their students, lessons for community outreach and strategies on connecting with partners in higher education.

“Partnerships between higher education and K–12 schools can strengthen both sides,” she said.
Remember monkey bars? Steel frames built over a bed of cedar shavings are no longer standard playground equipment. Today’s forward-thinking designers are creating play environments that look a lot more like nature.

Natural playscapes are equipment-free and designed with the intent of bringing children back to nature. They feature native landscaping, hills, rocks, logs and other natural elements that encourage children to play, interact and use their imaginations.

In October, WSU Vancouver’s Child Development Program opened phase one of its natural playscape. A ribbon-cutting celebrated The Vancouver Clinic’s $15,000 gift to begin the transformation of the CDP playground into an entirely natural playscape.

“Regular physical activity and spending time outdoors are critical to children’s development into healthy adults. Our goal as doctors, parents and child care providers should be to give children the tools they need to become healthy adults, and I believe that this playground will go a long way toward accomplishing that goal,” said Dr. Duy Tran, family medicine practitioner at The Vancouver Clinic.

CDP Early Learning Program Coordinator Cheryl Johnson said the first phase of moving toward a more natural play setting has definitely had a positive impact.

“We have already seen the children’s observational skills and creativity reflected in their play as well as more advanced motor fitness, including coordination, balance and agility as they walk around on the logs, pathways and rocks,” Johnson said. “But the one area that has been noted by several teachers is the way the children are cooperating and playing together so nicely. The natural elements help the children have a sense of well-being and handle social interactions in a more positive way.”

Photos: LAURA DUTELLE

Kindergarteners in the Child Development Program play on the new natural playscape.

PHOTOS: LAURA DUTELLE
Although their interests are vastly different, brothers Greg, ’13 and Sean, ’16 Philbrook each got what they wanted—and more—from their WSU Vancouver experiences.

After earning his bachelor’s degree in digital technology and culture, Greg landed a full-time job providing instruction and technical support for the Creative Media and Digital Culture program on campus. In fact, he was doing more or less the same job on a part-time basis as a student.

Sean, who assisted in the Chancellor’s office and with the Initiative for Public Deliberation as a student, continued working on campus for a few months after graduating as a public affairs major last May. In September, he became program manager for Identity Clark County, a business leadership organization in downtown Vancouver.

“We’re wired in very different ways,” said Sean. “But you really do find your niche on campus. We both found opportunities that led to our careers.”

SAME CAMPUS, DIFFERENT INTERESTS

The Philbrook brothers grew up in the Brush Prairie, Wash., area and graduated from Hockinson High School. Their parents are Randy and Jeanette Philbrook, and they have an older brother, Ryan.

Greg attended Clark College for two years, then transferred to WSU Pullman as a computer science major. When he met Dene Grigar, director of the CMDC program, and some of her students at an event in Pullman, the Showcase for Undergraduate Research and Creative Activities, he decided to change his major. “I thought what they were doing was so cool,” he said. “That’s what I wanted to do. I realized I didn’t want to make the tools; I wanted to use the tools that are out there.”

He transferred to WSU Vancouver and spent two years on campus, completing the new major he had chosen and working part-time.

Meanwhile, Sean was ready to start college. Whereas Greg found a passion for digital technology through WSU Vancouver, Sean thought he wanted a more global experience.

He enrolled at WSU Vancouver as a freshman in 2012. With Advanced Placement credits from high school, he was able to take sophomore- and junior-level classes right away. He was challenged and inspired to stay all four years.

“I realized I could do so much more on the local level,” Sean said. “So I got more involved in public affairs and public administration. I was also able to work closely with a number of professors on campus, including Carolyn Long.” An associate professor in the School of Politics, Philosophy and Public Affairs, Long founded the Initiative for Public Deliberation.

“I loved all my courses,” Sean said, “but my jobs on campus really set me on my career path.”

Their advice for current students? “Take every opportunity you can,” Greg said. “Be a go-getter. It’s insane how many projects and jobs you can get by saying, ‘Hey, I’m here.’”

Sean agreed, adding, “Some of the best advice given to me was that it’s not who you know, it’s who knows you”—and what you can do—“so they think of you when a position is open. Don’t feel comfortable—ever!”

Whatever lies ahead for Sean and Greg, both feel well prepared, confident and happy in their chosen work. “The best is yet to come,” Sean said.
Dan Braun is a junior at WSU Vancouver, although you won’t find him on campus. He has accumulated the credits mostly online over many years. Braun, who travels more than 300,000 miles a year for his job running Sunlight Supply Amphitheater, could not afford to go to college when he was young, so he takes classes as he can.

“I had to work to eat,” he said of that earlier time. “But it’s a goal that I will finish sometime.”

So that other students won’t have to postpone their educations, Sunlight Supply Amphitheater has contributed $100,000 for scholarships to WSU Vancouver. The contribution will support students from Clark and Multnomah counties who have financial barriers and cannot afford to pay for college.

“We wanted to make a lasting gift,” said Braun. “If we help some people become educated, we’re changing people’s lives, and giving them an opportunity to go out and contribute to the world. We think it’s a gift that keeps on giving.”

WHY SUPPORT EDUCATION

The amphitheater has been hosting concerts and special events since it opened in 2003. WSU Vancouver has held its commencement ceremonies at the amphitheater (which has had different names over the years) since 2004. From the beginning, the business was committed to building a charity fund to benefit the local community. Education has always been its focus. The company has provided funding for new musical instruments for the local school systems and countless ticket and VIP packages to local organizations for auctions at various fundraising events.

The amphitheater has supported student scholarships at WSU Vancouver since 2010. With this gift, the amphitheater has become a new benefactor to WSU. Benefactors are donors who have contributed more than $100,000 to the university.

Besides supporting needy students, the company wanted its gift to honor WSU Vancouver, which Braun sees as a kindred spirit to the amphitheater.

“I’m a big believer that WSU Vancouver is one of the great unsung jewels in Clark County—in addition to the amphitheater,” Braun said. “So we have some kinship.”

“Dan Braun and the amphitheater employees have been wonderful supporters of WSU Vancouver,” said Jennifer Miltenberger, director of development and alumni relations at WSU Vancouver. “Dan and his team are committed to our community and ensuring that our community members have available scholarships to fulfill a dream of a college education. These scholarships will make the difference to students struggling to make ends meet.”

Scholarships remain WSU Vancouver’s number-one fundraising priority, given that 82 percent of the students need financial assistance. For more information on how to join scholarship donors in helping students, visit vancouver.wsu.edu/gocougts.

SUNLIGHT SUPPLY AMPHITHEATER BRIGHTENS SCHOLARSHIP FUND

Happy half-birthday!
Are you 70½?
Do you know someone who is?

A gift to the Washington State University Foundation directly from your IRA is a tax-smart way to support your favorite WSU program and is excludable from your gross income (a TAX-FREE gift!). Of course, everyone is unique. We are happy to chat about any additional tax benefits or criteria that might apply to your situation.

Call the WSU Foundation Gift Planning Office at 800-448-2978 or visit foundation.wsu.edu/giftplanning to create your legacy today.
So far, the Vancouver Academic Achievement Award—a $3,000-per-year scholarship—has been given to more than 70 students who will attend WSU Vancouver this fall. Recipients can receive the award for up to four years. Visit the Student Financial Services website and click on the Vancouver Academic Achievement Award page to see the list of recipients.

WSU Vancouver was honored with 2016 Tree Campus USA recognition by the Arbor Day Foundation for its commitment to effective urban forest management. The campus achieved the title by meeting Tree Campus USA’s five standards, which include maintaining a tree advisory committee, a campus tree-care plan, dedicated annual expenditures for its campus tree program, an Arbor Day observance and student service-learning project.

Michael Caulfield, director of blended and networked learning, will lead American Association of State Colleges and Universities’ American Democracy Project Digital Polarization Initiative, “DigiPo.” The initiative is an attempt to build student web literacy—the ability to identify “fake news.” Students participate in a broad, cross-institutional project to fact-check, annotate and provide context to the different news stories that show up in our Twitter and Facebook feeds.

On Feb. 6 at its 2017 Deans Conference, Association to Advance Collegiate Schools of Business International, the world’s largest global education network, unveiled 35 innovations that represent critical work being done by business schools to better their communities and society at large. The Business Growth Mentor & Analysis Program in the Carson College of Business was one of them.

**AWARDS AND HONORS**

Associated Students of WSU Vancouver President Skye Troy received the Emerging Leader Alumnae Award at Portland State University’s Hatfield School of Government Center for Women’s Leadership 10th Annual Power Lunch on Oct. 6. The award recognizes Troy’s work in women’s leadership development, mentorship and civic engagement.

Dene Grigar, director of the Creative Media and Digital Culture program in the College of Arts and Sciences, has received a Lifetime Achievement Award from the International Digital Media Association. She was honored for her accomplishments in the digital media industry and education at the 2016 iDMA conference held in October at Winona State University in Winona, Minn.

Gay Selby, faculty member in the College of Education, was recently recognized with the Faculty/Staff Outstanding Volunteer Service Award from the WSU Foundation. This award recognizes extraordinary sustained volunteer service on behalf of the WSU Foundation and WSU. Selby received the award for her diehard Cougar spirit and the countless hours she volunteers to further the university.
Elena Mahrt, a Ph.D. student in the School of Biological Sciences, has co-authored a paper that appeared in the Oct. 10 edition of Current Biology. The paper, “Mice produce ultrasonic vocalizations by intra-laryngeal planar impinging jets,” shows that mice make unique, high-frequency sounds using a mechanism that has previously been observed only in supersonic jet engines. This discovery may lead to more effective animal models for studying human speech disorders.

Tamara Holmlund Nelson, professor in the College of Education, is part of a $3 million National Science Foundation grant distributed among seven state partners—Western Washington University, Central Washington University, Eastern Washington University, Seattle Pacific University, WSU Vancouver, University of Washington Tacoma and the Pacific Northwest National Laboratory in Richland—to help create the next generation of STEM teacher-preparation programs in Washington. WSU Vancouver’s portion of the total award is $296,234.

WSU has won a five-year, $2.2 million grant from the U.S. Department of Education to increase the number of certified K–8 teachers with bilingual and English learners (EL) endorsements and to provide professional development to improve EL instruction. Gisela Ernst-Slavit, professor in the College of Education, will work on the grant project with WSU colleagues from Tri-Cities and Pullman.

The U.S. Environmental Protection Agency has awarded a Science To Achieve Results fellowship to Eric Dexter, a Ph.D. student studying environmental and natural resource sciences. Dexter’s research investigates invasive species in Pacific Northwest Coastal waters. His research examines underlying invasion mechanisms, including competition between species and transportation between bodies of water. Dexter was awarded $132,000 to support his research.

What’s Next
Stay in Touch
Calling all Cougs—tell us what you’re up to! Do you have a story worth sharing? Send submissions to van.news@wsu.edu.

Follow Us on Social Media
Facebook.com/wsuvancouver
Twitter: @wsuvancouver
Instagram: @wsuvancouver
YouTube: wsuvancouver

Do You Know Any WSU Vancouver Alumni Living Remarkable Lives?
Nominate Them for the 2017 Notable Alumni Award.

The WSU Vancouver Notable Alumni Award honors alumni who have made significant contributions to society, and whose accomplishments, affiliations, careers and/or community service reflect WSU Vancouver’s legacy of excellence.

Submissions accepted March 20 – May 31.

Fill out your nomination online at admin.vancouver.wsu.edu/naa.

Sponsored by Opalh | Dawson Certified Public Accountants
upcoming events

For details and up-to-date listings, check out WSU Vancouver’s events calendar, events.vancouver.wsu.edu. A variety of happenings—from author talks to career workshops—take place throughout the year.

M A R C H
13 WSU SPRING BREAK (Through March 17)
15 BUSINESS GROWTH MENTOR & ANALYSIS PROGRAM ALLIANCE FORUM
8:30 - 10 a.m., Pacific Continental Bank Community Room, downtown Vancouver
22 SPORTS AND CAMP PHYSICAL EXAM CLINIC
Students grades 5 – 12
3 – 6 p.m., Cascade Middle School Gym
23 PROFESSIONAL WRITERS SERIES:
Kathy Jetnil-Kijiner, “Activist Poetry”
7 p.m.
28 COUGS IN THE COMMUNITY:
Northwest Children’s Outreach
5:30 – 7:30 p.m.,
6615 E. Mill Plain, Vancouver
29 DAVID WILEY, “OPEN EDUCATION: OUTCOMES, EQUITY AND FACULTY EMPOWERMENT”
1:30 - 3 p.m.
30 WOMEN OF DISTINCTION
6 p.m.
31 RESUME AND COVER LETTERS WORKSHOP
10:10 – 11 a.m.

A P R I L
1 PREVIEW DAY
1 p.m.
5 JOB- AND INTERNSHIP-SEEKING STRATEGIES
3:10 - 4 p.m.
6 PREPARING FOR “THE BIG ONE”: CASCADIA SUBDUCTION ZONE EARTHQUAKE
Two presentations: 3 and 6:30 p.m.
9 PROFESSIONAL WRITERS SERIES:
Margaret Malone, “One Writer’s Path”
7 p.m.
11 INTERVIEWING SKILLS WORKSHOP
1:30 – 2:20 p.m.
12 LINKEDIN LAB
1:10 – 2 p.m.
13 RESEARCH SHOWCASE
10 a.m. – 3:30 p.m.

M A Y
1 COUGS IN THE COMMUNITY
May Day Flowers
1 – 5 p.m.
6 COMMENCEMENT
1 p.m., Sunlight Supply Amphitheater
13 PREVIEW DAY
1 p.m.
17 BUSINESS GROWTH MENTOR & ANALYSIS PROGRAM ALLIANCE FORUM
8:30 – 10 a.m., Pacific Continental Bank Community Room, downtown Vancouver

J U N E
21 BUSINESS GROWTH MENTOR & ANALYSIS PROGRAM ALLIANCE FORUM
8:30 – 10 a.m., Pacific Continental Bank Community Room, downtown Vancouver

J U L Y
19 BUSINESS GROWTH MENTOR & ANALYSIS PROGRAM ALLIANCE FORUM
8:30 – 10 a.m., Pacific Continental Bank Community Room, downtown Vancouver

A U G U S T
21 FIRST DAY OF FALL SEMESTER
ECLIPSE 2017!

S E P T E M B E R
4 LABOR DAY – CAMPUS CLOSED

J U L Y
19 BUSINESS GROWTH MENTOR & ANALYSIS PROGRAM ALLIANCE FORUM
8:30 – 10 a.m., Pacific Continental Bank Community Room, downtown Vancouver

A U G U S T
21 FIRST DAY OF FALL SEMESTER
ECLIPSE 2017!

S E P T E M B E R
4 LABOR DAY – CAMPUS CLOSED
PREVIEW DAYS

1 P.M. SATURDAY
APRIL 1
MAY 13
WSU VANCOUVER CAMPUS

Find agenda, directions and RSVP today! vancouver.wsu.edu/preview
Questions? Call 360-546-9779 or email van.admissions@wsu.edu

what’s happening at WASHINGTON STATE UNIVERSITY vancouver

PREPARING FOR “THE BIG ONE”:
CASCADIA SUBDUCTION ZONE EARTHQUAKE

APRIL 6

TWO PRESENTATIONS
3 and 6:30 p.m.
Dengerink Administration Building, Room 110

Talk to Resource Experts
2 - 7 p.m.
Dengerink Administration Building, Rooms 129/130

Learn how to prepare for the aftershocks of a major earthquake.

Featuring Scott Johnson, CRESA
Raffle prizes and more!

Sponsored by THE ASSOCIATED STUDENTS OF WSU VANCOUVER AND WSU VANCOUVER PUBLIC SAFETY

Join faculty, staff, family and friends as we celebrate

COMMENCEMENT
1 p.m. Saturday, May 6
SUNLIGHT SUPPLY AMPHITHEATER, RIDGEFIELD, WA

LEARN MORE AT VANCOUVER.WSU.EDU/COMMENCEMENT
“The affordability of the university and its topnotch educational programs—plus the fact that it’s close to home—were too good to pass up. Becoming a Coug at WSU Vancouver has allowed me to meet amazing students and faculty, and the campus gives students the opportunity to innovate new events and ideas.”

—Dexter Hamilton
business administration major
DO YOU KNOW ANY WSU VANCOUVER ALUMNI LIVING REMARKABLE LIVES?
NOMINATE THEM FOR THE 2017 NOTABLE ALUMNI AWARD.

The WSU Vancouver Notable Alumni Award honors alumni who have made significant contributions to society, and whose accomplishments, affiliations, careers and/or community service reflect WSU Vancouver’s legacy of excellence.

Submissions accepted March 20 – May 31.

Fill out your nomination online at admin.vancouver.wsu.edu/naa.