

# Winter STEM Seminars



Efforts to create ecotourism and protect two monkey species in West Africa are the subject of Dr. Robert Schubert's STEM Seminar Series lecture.

Clark College is inviting the public to come back to school for a series of free lunchtime seminars that explore the lighter side of Science, Technology, Engineering and Math (STEM). Begun in 2015, the Clark College STEM Seminar Series launches its 2018 Winter season with yet more fun, informative presentations geared toward anyone with an interest in science—no Ph.D. required!

The winter quarter events in this series include:

- **January 19: The Aka and Bofi Foragers of the Central African Republic** with Dr. Jay Fancher, Clark College anthropology faculty. Join Dr. Fancher as he recounts tales of his doctoral field research with the Aka and Bofi foragers of the Central African Republic. Learn how studying—and sharing—their meals helps researchers better understand archaeological findings from the area.
- **February 16: Human Culture and Primate Conservation** with

Dr. Robert Schubert, Clark College anthropology faculty. When balancing modernization with protecting wild species, creating local control of conservation efforts is crucial to their success. Dr. Schubert shares stories of how local beliefs help preserve two West African primate species and of the challenges posed in developing successful ecotourism initiatives.

- **March 9: It's All About Mud!** with David Kluesner, geologist and Florida Gulf Coast University faculty. When oil and other pollutants spill into water, how can scientists predict where they'll wind up? With more than three decades of experience in the field, this geologist shares his study of pollutants in the mud of a Florida estuary—and what that mud can tell us about how to track and contain future spills.

All events are held on Fridays from noon to 1 p.m. in the STEM Building room 151 on Clark's main campus. All are open to the public. Light snacks will be available and guests are welcome to bring their own lunches with them.

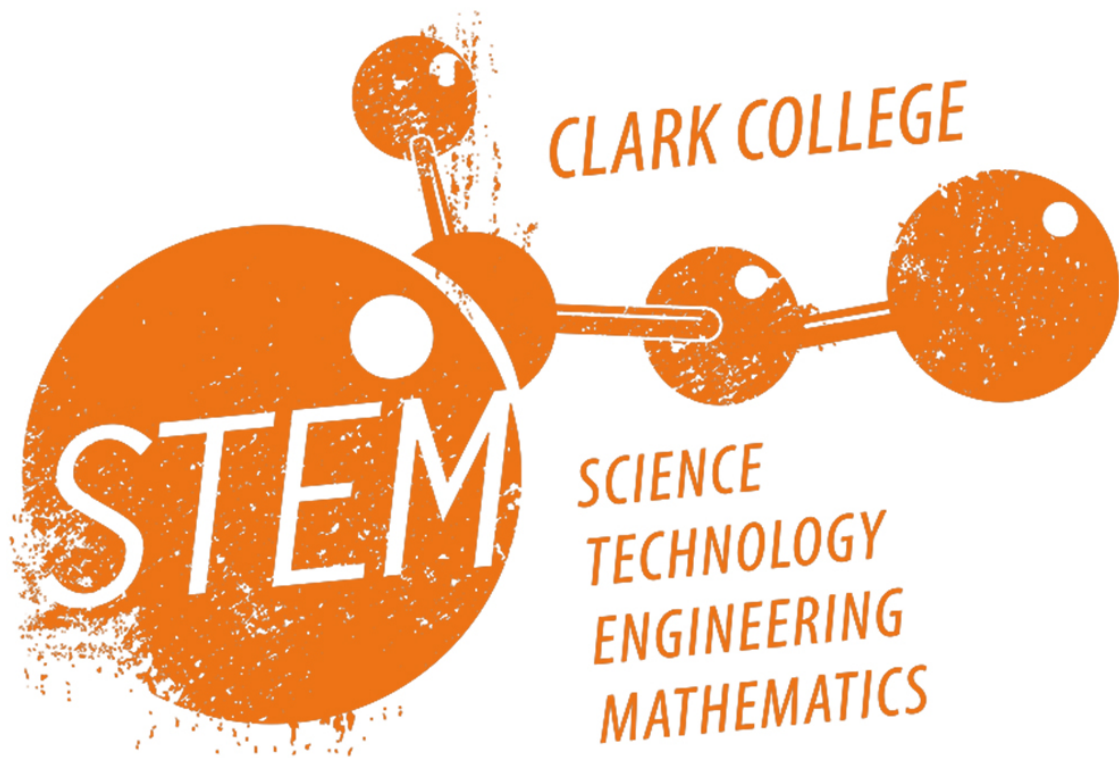
Clark College is located at 1933 Fort Vancouver Way, Vancouver. Driving directions and parking maps are available at [www.clark.edu/maps](http://www.clark.edu/maps). Anyone needing accommodation due to a disability in order to fully participate in this event should contact Clark College's Disability Support Services Office at (360) 992-2314 or (360) 991-0901 (VP), or visit Penguin Union Building room 013, as soon as possible.

*This article was contributed by STEM Outreach Program Coordinator Nadia Kluesner.*

*Photo courtesy of Dr. Robert Schubert.*

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# Free STEM Seminars begin Oct. 20



Clark College is inviting the public to come back to school for a series of free lunchtime seminars that explore the lighter side of Science, Technology, Engineering and Math (STEM). Begun in 2015, the Clark College STEM Seminar Series launches its 2017 Fall season with yet more fun, informative presentations geared toward anyone with an interest in science—no Ph.D. required!

The fall quarter events in this series include:

## **Oct. 20: Terrific Telescopes—Windows to Our Universe with Dr. Duane Ray, Clark College Economic & Community Development instructor**

Join Dr. Ray as he reviews the amazing technology of today's telescopes and how they work. He will then take us on a tour around the world, showing the latest equipment now installed or being installed, including light, infrared, microwave and X-ray telescopes.

## **• Nov. 17: Cave Curiosities with Eddy Cartaya of the U.S. Forest Service**

As a ranger in the Deschutes National Forest, Cartaya has the opportunity to investigate many caves while solving crimes. His work on glacier caves in Mt. Hood has provided valuable information about these fragile and ever-changing ecosystems.

## **• Dec. 1: Telling Science Fact from Fiction with staff from Clark College Libraries**

Information is moving fast and furious these days, and it can be difficult at best to tell what is and isn't high-quality scientific information. Join a team of Clark librarians for some ideas about how best to tell scientific fact in the media from fiction. This promises to be a fast-paced and fun romp through scientific literacy!

All events are held on Fridays from noon to 1 p.m. in the STEM Building room 151 on Clark's main campus. All are open to the public. Light snacks will be available and guests are welcome to bring their own lunches with them.

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## Young scientists unite



Students competing at the 2017 Southwest Washington Regional Science Olympiad.

Burning marshmallows, miniature hovercrafts, robotic arms, and the perennial favorite, bottle rockets, were a just a few of

the 48 activities featured at this year's Southwest Regional Science Olympiad Tournament, which took place at Clark College on Saturday, March 4.



Mid-experiment at the Science Olympiad.

More than 350 young scientists from 20 middle-school and 18 high-school teams competed in the Olympiad, coming from as far north as La Push, Washington, and as far south as Corvallis, Oregon. Winning teams from the regional competition earned spots in the Washington State Science Olympiad, which will take place at Highline College in Des Moines, Washington, on April 15.

Science Olympiad is a national nonprofit organization that encourages a love of science through educational opportunities, hands-on activities, and regional, state, and national tournaments.

STEM Coordinator Erin Harwood, who oversaw the planning and logistics for the tournament, said she was very pleased with the outcome of the event.

"We've had a four-year break from hosting any Science Olympiad event this large, and it's been a very long time since we hosted a regional event, so this was a nice change and a great way to get back to hosting again," she said. "It was really amazing how many students volunteered, and the faculty and staff—even the Dean!—got in on helping out."





Clark students volunteered to help make the Olympiad possible.

More than 130 volunteers—most of them Clark College students, employees, and alumni—helped make the event possible.

At the end of the day, the school teams, event volunteers, and others who participated in the tournament gathered in the O'Connell Sports Complex gymnasium for an awards ceremony filled with energy and enthusiasm. Students from the Quileute Tribal School, whose team had traveled the farthest to participate in the Olympiad, shared a song and words of encouragement with the other attendees before the awards were announced. Eleven teams, five from middle schools and six from high schools, will be continuing on to the state tournament. Camas schools will represent a full five of those eleven teams moving on to the state level.

The following teams will be advancing to the Washington state competition:

### **B DIVISION (MIDDLE SCHOOL)**

- 1<sup>ST</sup> PLACE: Skyridge (Blue Team)
- 2<sup>ND</sup> PLACE: Liberty (Black Team)
- 3<sup>RD</sup> PLACE: Skyridge (Green Team)
- 4<sup>TH</sup> PLACE: Jason Lee (Red Team)
- 5<sup>TH</sup> PLACE: ExCEL

## C DIVISION (HIGH SCHOOL)

- 1<sup>ST</sup> PLACE: Camas (Black Team)
- 2<sup>ND</sup> PLACE: Camas (Red Team)
- 3<sup>RD</sup> PLACE: Woodinville
- 4<sup>TH</sup> PLACE: Union (Black Team)
- 5<sup>TH</sup> PLACE: Skyline
- 6<sup>TH</sup> PLACE: Washougal (Black Team)

*For more photos of the event, visit our Flickr album.*

*Article contributed by Nova Gump*

*Photos: Clark College/Nova Gump*

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# Building a Better Future





Keeley

McConnell '16

You want to know Keeley McConnell's strategy for success, the thing that's helped her go from remedial math to high-level medical research? It's this: Stay focused on the path in front of you. One foot in front of the other. If you can make that next step, you can keep going.

Four years ago, the next step was: Get the kids in the car. Pack everything else in around them. Get the heck out of Dodge before your ex comes back.

Eighty miles later, McConnell and her three children arrived at a shelter for victims of domestic violence. She'd left her job, her home. She had no idea how she would support her family on the money she earned as a medical assistant. But one thing at a time. Find a place to live, get some stability.

It was only three months later, when McConnell had moved her family into an apartment, that she considered college. "When I was in high school, I never thought about college as an option," she says. "I'd taken one class when I was pregnant with my son, but I tested into the lowest level of math they had and I thought, 'Oh my goodness, this is going to take forever!'"

However, a friend encouraged McConnell to come with her to apply to Clark College. Just as she'd feared, McConnell tested into DVED 21, the lowest-level math course offered at the time. But one thing at a time. Keep your eyes on the path.

McConnell's other strategy has been listening to advice from friends, family, and mentors. When an instructor suggested she enroll in Clark's Math Academy program, McConnell signed up. This yearlong program pairs standard classroom time with dedicated math labs, where students get extra help understanding difficult concepts. McConnell describes it as

“the key to my success in math.”



Keeley McConnell helping a student in Clark College's STEM Tutoring Center.

By the time McConnell finished her last Math Academy class, not only was she prepared to enter college-level math courses—she'd been recommended to become a math tutor herself. The experience helped boost her confidence and gave her the tools she needed to continue pursuing her dream of becoming a physician's assistant.

That goal would require her to spend two more years at Clark to earn an associate degree, plus another two at a four-year institution to complete a bachelor's, followed by at least two years of medical school. *But*. One foot in front of the other. Stay focused on the path in front of you.

McConnell continued to thrive at Clark, finding she enjoyed the intellectual challenge of biology coursework. And once again, a mentor stepped in to change the course of her life. When biology chair Dr. Travis Kibota first approached her about applying to the BUILD EXIT0 Scholar Program, she was skeptical. Run by Portland State University in partnership with Oregon Health Sciences University, and with funding provided by the National Institutes of Health, the program helps undergraduates from diverse backgrounds become successful in health research careers.

“I was hesitant at first, because I wasn’t originally interested in going into research,” McConnell says. “But it’s been the most amazing opportunity.”

Through her participation in BUILD EXIT0, McConnell joined a cohort of students from community colleges in the region who formed a Research Learning Community. Within that RLC, she could learn about careers in research, develop skills, and connect with mentors. She also had a built-in social network to help her make the adjustment to a four-year institution after she graduated from Clark in spring 2016.

“If I had had to do all this without EXIT0, I would have been really overwhelmed,” she says. “I knew everyone at Clark—staff, faculty, students. PSU was huge. But the EXIT0 staff have been there for me—you can go in and ask them anything.”

Now a junior in her second semester at PSU, McConnell is deeply immersed in research in her chosen field of trauma medicine; she’ll even see her name on some upcoming research papers, a big boost to career advancement in the research world. “I work with the Chief of Trauma at OHSU,” she says proudly. “I wear a pager; when a call comes in, I’m there, collecting data and samples.”

McConnell says it was overwhelming when she first walked into OHSU. “I looked up and thought, ‘I’m so close. I’m literally standing in the building I want to have my future in. It’s what I’ve been waiting for my whole life.’”



Keeley McConnell, *left*, celebrates graduation from Clark College in 2016 with a friend.

She still faces challenges. While BUILD EXIT0 students receive a stipend that significantly eases the financial burden of being a college student, McConnell still works 30 hours a week outside of school to support herself and her three children, now ages 8, 9 and 18. And she struggles to find time to be present for her children as a mom.

“It’s probably my biggest challenge right now,” she says. “But they’re great, they’re my little drivers. I want them to have something better. They need to see that, when you want something and you work really hard at for it, you can get it.”

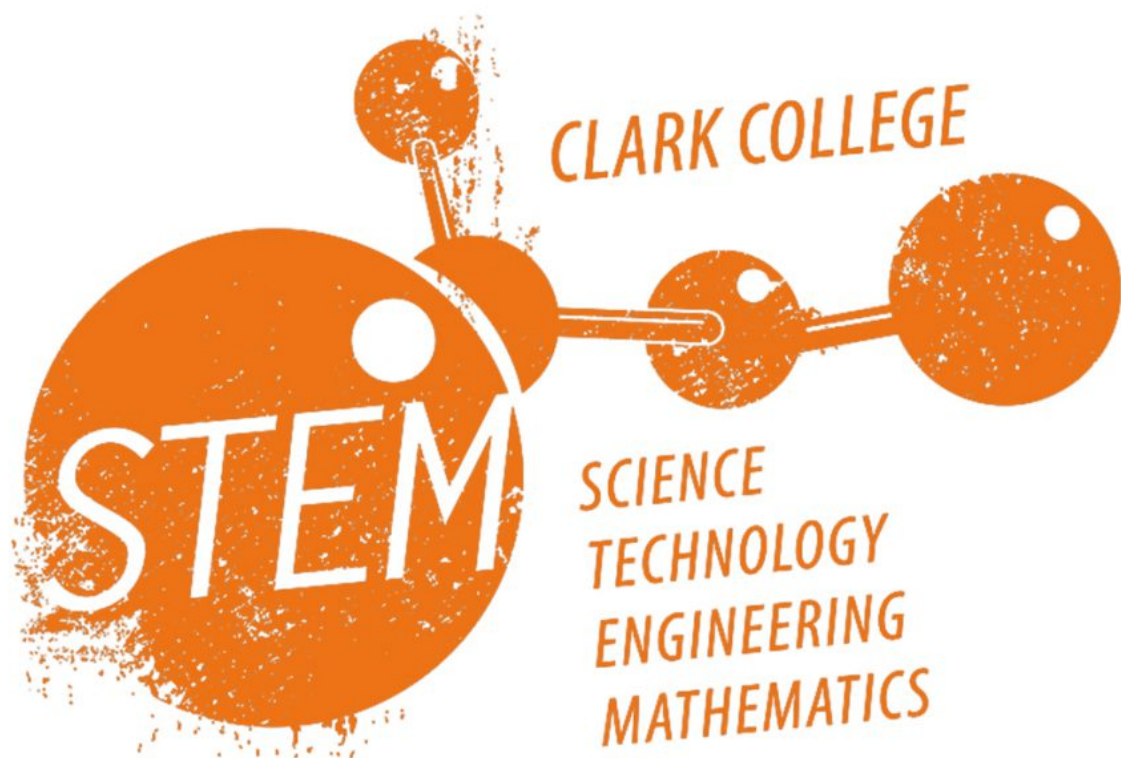
McConnell brought her son with her earlier this year when she was invited to the Washington State Association of College Trustees’ Transforming Lives Awards banquet, where they sat between Clark College President Bob Knight and two state senators. “I wanted him to experience that,” she says. “But once we were there, I realized how big a deal this was for me, too. With me, I get so focused on the road ahead, I don’t spend much time thinking about the big picture. It made me realize, ‘Oh, gosh, I guess I have come a long way.’ And, you know, my kids and I—we’re still moving forward.”

*Are you a student interested in participating in BUILD EXIT0? The application deadline for the 2017-2018 year is February 28, and there is a free application help session on Friday, February 24, 10 a.m. – 11:50 a.m., in SHL 124.*

*Photos: Clark College/Jenny Shadley*

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## **Clark College announces Winter STEM Seminar Series**



Clark College is inviting the public to come back to school

for a series of free lunchtime seminars that explore Science, Technology, Engineering and Math (STEM). Begun in 2015, the Clark College STEM Seminar Series launches its 2017 Winter season on Friday, January 20, at noon in Clark's new STEM Building with "Hair-Raising Volcanic Hazards."

This seminar features Liz Westby of the U.S. Geological Survey sharing information about volcanic hazards and their impacts, along with monitoring efforts on Cascade Range volcanoes. She will also be sharing a series of videos about volcanic hazards.

Other winter quarter events in this series include:

- **Feb. 3: Amazing Animal Acupuncture** with Dr. Christy Novick, veterinarian at Feline Medical Clinic and owner of Columbia Companion Animal Acupuncture
- **Feb. 24: Historic and Hazardous Hanford** with Ginger Wireman, outreach specialist for the Washington Department of Ecology working at Hanford
- **March 10: Great Gravitational Waves** with Dr. Duane Ray, former instructor for Clark College Economic & Community Development and holder of a doctorate degree in physics

All events are held on Fridays from noon to 1 p.m. in Clark College's new STEM Building on Clark's main campus. All are open to the public. Light snacks will be available and guests are welcome to bring their own lunches with them.

"We already do lots of outreach to encourage interest in STEM among our community's young people through our annual Science Olympiad and other events," said Clark College STEM Coordinator Erin Harwood, who helps organize the seminar series. "This is a way to show adults as well that learning about STEM can be lots of fun. We're hoping people start looking forward to these seminars as a great way to spend their Friday lunch break learning something new."

Clark College is located at 1933 Fort Vancouver Way,



Vancouver. Driving directions and parking maps are available at [www.clark.edu/maps](http://www.clark.edu/maps). Anyone needing accommodation due to a disability in order to fully participate in this event should contact Clark College's Disability Support Services Office at (360) 992-2314 or (360) 991-0901 (VP), or visit Penguin Union Building room 013, as soon as possible.

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## STEM is Silver



Clark College's new STEM Building has a LEED Silver certification. Here are a few environmentally friendly aspects of the building and its construction:

- The building is cooled by water pumped from the local wellfield through a campuswide hydronics (water-based

heating and cooling) system. This same water is used to heat the building with help from high-efficiency gas boilers, then is circulated back to irrigate the campus landscaping. This creates a “closed circuit,” where the water is continually pumped from, and then returned to, the land—a system that eliminates waste and reduces energy costs.

- Bike lockers on the lower level and a shower on the first floor encourage bike commuting.
- Bottle-filling stations on each floor allow students and visitors to eschew single-use bottled beverages in favor of reusable drink containers.
- The windows of south wall are made of double-paned glass filled with Argon gas and coated with a low-E value film to reduce the light and heat load. Additionally, metal sunshades block the higher sun during the hotter days of summer, but allow the lowered sun in winter to strike the glass directly and increase available natural lighting and heat. The sunshades also reflect light up into the corridors to reduce the need for artificial lighting during the day.
- Almost 99 percent of the construction waste was recycled.

*Photo: Clark College/Hannah Erickson*

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## **A look into the future**



The STEM Building opened for classes at the beginning of the 2016 fall quarter. *Photo: Clark College/Wei Zhuang*

Shortly before Clark College's STEM (Science, Technology, Engineering, and Math) Building opened for classes at the beginning of the 2016 fall quarter, Clark College Construction Project Manager Jim Watkins stood on its north plaza and pointed out a few hidden features to a group of visitors.

Watkins pointed to the lines marking the poured concrete that make up the plaza floor. "The smaller squares around the perimeter are in 1-meter increments, while the large squares are 3-by-4 meter and 4-by-4 meter blocks," he said. "That way, if a physics class is doing experiments where they need to measure the flight of a projectile or something, it's easy for them to gauge how far it's traveled."





Structural elements like heating pipes were deliberately left exposed to serve as teaching tools for engineering students. *Photo: Clark College/Wei Zhuang*

Throughout the building's 70,000 square feet, details abound that reflect and strengthen its purpose. Structural elements—including heating equipment, water pipes, and earthquake-proof concrete—have been left visible deliberately to serve as teaching tools for engineering students. Decorative touches, like the “STEM” laser-carved into the metal stair railings and the ceramic-tile periodic table inlaid into the second-story floor, remind visitors what's studied here. And that column of glass that rises from above the front entry doors to the top of the building's airy lobby? It's actually a 44-foot high, 4-foot square drop tower, where dropped objects can be filmed with a high-speed digital camera in experiments by engineering or physics students.

While the building opened to students on September 19 for fall

classes, an official ribbon-cutting ceremony is scheduled for October 3.

“I am so excited to see students enthusiastically learning in the new STEM Building on the first day of the new academic year,” said Dean of STEM Peter Williams regarding the opening. “The STEM Building is a beautiful, technologically advanced educational facility that perfectly supports academic excellence, one of the core themes of Clark College’s strategic plan. It is ideal for students who may not know how exciting and interesting science can be, and hopefully provides a starting point for a career in a STEM field, one of the fastest growing job fields in the country.”

The new, LEED Silver-certified building—the largest ever built on Clark’s main campus—holds nine classrooms, twelve labs (including some spaces that serve as both), two conference rooms, 16 student areas of various sizes, and 41 offices. It will house much of Clark’s engineering, chemistry, biology, and physics departments. The first new instructional building to be built on the main campus since 1994, it was paid for primarily through Washington State capital funding, supplemented with generous donations to the Clark College Foundation to make up for a budget gap in the project’s \$40 million cost created when the state reduced its contribution due to the economic recession.



Learning extends outside the STEM Building, with multiple

outdoor classroom/study areas set along the south wall. *Photo: Clark College/Hannah Erickson*

The building offers many new opportunities for Clark students. A six-table cadaver lab includes operating-room LED lighting and a high-definition camera that allows even those students who aren't at the dissection table to see anatomy and procedures clearly on two large plasma screens. Clark College is one of only four community colleges in Washington to have a cadaver lab, and this new lab greatly expands the number of students able to take the perpetually waitlisted Anatomy and Physiology classes that are required for a number of health-related degrees.

Additionally, a Collaboratorium sits at the heart of the building's main floor. This high-tech "makerspace" is filled with tools and machinery to allow students—and possibly community members, in the future—to create their own designs. Watkins showed visitors the large double doors facing out to the north plaza. "We designed this so you could bring a truck-size project through here if you wanted to," he said. "We didn't want our engineering students to feel limited as to the projects they could take on."

According to the Washington Student Achievement Council, Washington State has the third-highest concentration of STEM-related jobs in the United States—but up to 40,000 of those jobs may go unfilled by 2017, in large part due to a lack of qualified applicants with the appropriate training.

"I am so impressed and excited by the possibilities this new building brings to the college," said Clark College President Bob Knight. "Clearly, STEM is going to be very important to this region's economy, and we are proud to be able to offer state-of-the-art training and education in this field, continuing a legacy of excellence that stretches more than 80



years.”

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# Clark College goes to the Fair



Oswald greets visitors to the 2016 Clark County Fair.

In keeping with this year's Clark County Fair Theme of "Science Fun," Clark College is offering a host of family-friendly, hands-on activities promoting Science, Technology, Engineering, and Math (STEM).

Clark students, staff, and faculty will lead demonstrations

every day of the fair, which runs from August 5-14. Clark College was invited to participate in this year's theme to highlight the college's highly regarded STEM programs, as well as the opening of its new STEM building this fall.

All activities take place in the college's exhibit area in South Hall 1 and are free with fair admission. Scheduled events include:

### **Teeth and Technology**

The Clark College Dental Hygiene program demonstrates modern ultrasonic methods of removing tartar or calculus from teeth. *Fri, Aug. 5: 10:30 a.m. – 11:00 a.m., 11:30 a.m. – noon, 1:30 p.m. – 2:00 p.m.*

### **Science Fun with the N.E.R.D. Girls**

Clark College's N.E.R.D. (Not Even Remotely Dorky) Girls, a student club focused on getting younger students interested in engineering, lead hands-on activities like building balloon-powered pinwheels and demonstrating Newton's third law of motion. *Sat, Aug. 6: 11:30 – noon, 1:30 p.m. – 2:00 p.m.*

### **Pharmacy Innovations**

Learn about new, high-tech ways of compounding pharmaceuticals from Clark College Pharmacy Technician faculty. *Sun, Aug. 7: 11:30 – noon, 1:30 p.m. – 2:00 p.m., 2:30 p.m. – 3:00 p.m. Fri, Aug. 12: 11:30 a.m. – noon.*

### **The Science of Sourdough**

Learn all about fermentation when Clark College baking instructor Alison Dolder explains how sourdough is made. Try some delicious sourdough pancakes and take home a little sourdough starter of your own. *Mon, Aug. 8: 10:30 a.m. – 11:00 a.m., 1:30 p.m. – 2:00 p.m. Sat, Aug. 13: 11:30 – noon, 1:30 p.m. – 2:00 p.m.*

### **POKE-A-MAN!**

Faculty from the Clark College Phlebotomy program will

demonstrate how to draw blood from a model arm. Participants can use a centrifuge to make their own aliquots from imitation blood and plasma. *Tues, Aug. 9: 11:30 a.m. – noon, 1:30 p.m. – 2:00 p.m., 2:30 p.m. – 3:00 p.m.*

### **Simulation Technology and Nursing Education**

Meet the “Sims,” the lifelike automatons used by Clark College nursing students in the college’s state-of-the-art simulation lab to practice procedures ranging from tracheotomy to childbirth. *Wed, Aug. 10: 10:30 a.m. – 11:00 a.m., 11:30 a.m. – noon, 1:30 p.m. – 2:00 p.m. Sun, Aug. 14: 11:30 a.m. – noon.*

Additionally, visitors can test their dexterity at the college’s Automotive Technology installation and view STEM-related student projects, including an aluminum boat created by some of the college’s welding students. The college also will have staff available during the fair to answer questions about available programs, GED courses, Running Start, financial aid, and more. Staff also will be available to assist current students with registering for fall classes, looking up records, and other student support needs—and Clark’s lovable mascot, Oswald the Penguin, will be present many afternoons and evenings for photos with children.

For those interested in attending Clark, the \$25.00 application fee will be waived for the first 50 applicants each day who apply at the fair. Current students and alumni and students will be able to stop by the booth for special giveaways and drawings for prizes.

For more information, visit [www.clark.edu/cc/fair](http://www.clark.edu/cc/fair) and follow Clark College on social media.

*Photo: Clark College/Jenny Shadley*

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# Battling stereotypes, they found success



Qi Wu and Tammy Senior are Clark College's representatives to the 2016 All-Washington Academic Team.

Two outstanding Clark College students were selected to attend the 2016 All-Washington Academic Team Recognition Ceremony, held on March 24 at South Puget Sound Community College in Olympia, Washington. Tammy Senior and Qi Wu are two of just 66 students from community and technical colleges across the state to receive this honor, which recognizes students for their academic excellence and service to the community.

At first glance, Senior and Wu don't seem terribly similar.

One is young even by the standards of Running Start, a program that allows high schoolers to take college courses; the other is coming back to college after serving four years in the military. One has spent her whole life in Vancouver; the other has lived in more countries than she can count on one hand.

But on closer inspection, certain parallels become clear between the two young women: They're both fascinated by science and technology. They both are driven students who make time in their busy schedules to serve their communities. Both have had to challenge others' assumptions and figuring out creative ways to get around obstacles in their educational journeys. And so far, both are succeeding impressively.



Clark student Qi Wu stands before the college's new STEM Building, slated to open in fall 2016.

Wu's obstacles began surfacing when she and her mother emigrated from China to the United States. Wu, then a sophomore in high school, struggled to maintain her grades while learning a new language in a new culture. She also found herself confronting gender stereotypes, as classmates and teachers assumed she would be more interested in subjects like art and the humanities instead of math and science.

"When I was growing up, I was always better in physics and chemistry," she said. "I like numbers, I like logic. When I

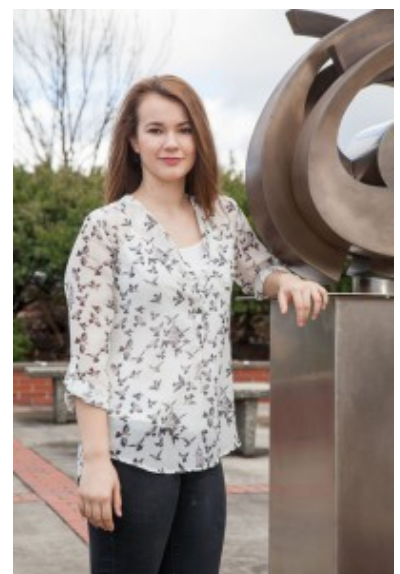


came to Clark and took my first engineering course, it was like, 'Wow, this is where I belong!'"

However, soon a new hurdle appeared. Wu, whose mother had remarried and had another child, realized her family could not afford to pay for her college education. Hoping to support herself, she enlisted in the U.S. Navy in 2010 as an aviation mechanic, and took every opportunity to earn educational credits and develop new skills—despite the doubts some had of the petite young woman's abilities.

"When I got transferred to Japan, my supervisor told me, 'Well, you can do the desk job here, because you're a girl,'" Wu recalled. "And I said, 'No. I want to do the job I trained for.'"

Wu said that overall, she's grateful for the opportunities the military provided her to travel and learn skills that will help in her electrical engineering career. She's currently receiving scholarships from Clark, which allows her to save her military education benefits for the more-expensive, four-year institutions she hopes to attend one day to earn her master's degree. She also works in Clark's scholarship office herself, and spends weekends training as a Naval Reservist.



Clark student Tammy



Senior says she's been impressed by how welcoming the college was to her, even when she took her first class at age 14.

Like Wu, Senior's challenges also began in high school, but they were of a different nature: She felt stifled. "I wasn't being challenged enough," she recalls. "I took a class at Clark and found it so much better."

Senior's family couldn't afford to pay for a full load of college classes out of pocket, and when the 14-year-old visited Clark's scholarship office, she discovered she was too young to qualify for financial aid or scholarship opportunities. Then, the scholarship staff offered a new possibility: Perhaps Senior could enroll in Running Start, the Washington State program that allows eligible high school juniors and seniors to take college classes tuition-free. The only problem was that Senior was still a freshman. She wound up skipping the 10th grade in order to qualify, enrolling at Clark as a full-time student at age 15.

"It was definitely interesting," Senior, now 16 and set to graduate in the spring, said with a grin. "But Clark's pretty welcoming, and I really thrived in the community here."

Senior has maintained a 4.0 GPA while taking classes in Clark's challenging Honors Program, volunteering with her church, teaching private music lessons, and serving as the vice president of leadership for Clark's chapter of Phi Theta Kappa, the international honor society for two-year colleges. She'll be 17 when she enters a university—potentially with junior standing, depending on where she attends.

"People ask me, 'Why don't you enjoy your high school years?'"

Senior said. "But I'm a planner. I think ahead. My mother wasn't able to finish school because she started a family. I know I have a lot of school ahead of me, and this is a way to speed things up."

Senior hopes to become a neurologist, a goal developed when her beloved grandmother suffered a series of debilitating strokes in 2014. Like Wu, Senior faced some skepticism about her ambitions.

"When I tell people I want to pursue a career in neurology, sometimes they look at me strangely and say, 'Oh, why don't you go into nursing, so you have time for a family?'" she said. "But I know I can do it. I can have a family. I can have the career of my choice. I just have to work hard. And you know, they would never tell a male student that."

Both students say they appreciate the support they've found at Clark. "I like the diversity here," says Wu, a first-generation college student. "Engineering professor Izad [Khormae] is from Iran. My physics teacher is from Russia. I think half the STEM faculty are women. And then in my classes I've met a few other veterans. You get so many different experiences here, different cultures."

Wu and Senior were honored for their achievements at the All-Washington Academic Team induction ceremony on March 24, 2016, in Olympia, where Gov. Jay Inslee was the keynote speaker. The All-Washington Academic Team is a program of Phi Theta Kappa, the international honor society of two-year colleges. Team members are eligible for numerous scholarships, including transfer scholarships at most four-year universities in the state.

"It is such an honor," said Senior, sitting with Wu during a break between classes.

"It's nice for your hard work to be recognized," adds Wu.

“Yes, you feel like your hard work is finally paying off,” said Senior.

*Photos: Clark College/Jenny Shadley*

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# Turning students into scientists



Clark College is providing an unprecedented opportunity for eligible students to start their research careers while still in community college—getting hands-on research opportunities, paid internships, and special educational

support to help them succeed in the exciting career of scientific researcher.

This opportunity comes through a recently developed program called BUILD-EXIT0. Introduced in 2015, BUILD-EXIT0 is a program designed to support undergraduate students who are interested in pursuing research careers in the biomedical, behavioral, clinical, health, and social sciences. Scholars receive a broad range of support and opportunities. Over the course of their three years in the program (one here at Clark, the other two at Portland State University, the University of Hawaii at Mānoa, the University of Alaska in Anchorage, or the University of Guam), scholars will enroll in specific courses and will participate in workshops designed to enhance their skills and knowledge in science and research. In addition to summer research training, scholars will be placed in research labs and will receive paid research internships, as well as some tuition benefits. And scholars will have access to dedicated advisors and mentors to help them navigate their educational pathway.

This a great opportunity for students interested in solving pressing medical problems, discovering new scientific breakthroughs, or simply satisfying their curiosity about the world around them. Interested students can visit [The first step to applying is to visit the BUILD-EXIT0 website](#)—but they should do so quickly, as the application deadline before noon on Friday, March 4.

Clark students interested in participating in the program may direct questions to Professor Travis Kibota ([tkibota@clark.edu](mailto:tkibota@clark.edu), 992-2282). Dr. Kibota can put interested students in contact with one of Clark's current 2015 BUILD-EXIT0 scholars to get some first-hand information about the program.

*This article was contributed by Prof. Roberto Anitori*