STEM scholars

The Mathematics Department is excited to announce the recipients of this year’s Sigma Scholarship

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Computer Science and Electrical Engineering

Engineering and Computer Science students preparing to graduate presented their projects in an expo in the STEM Collaboratorium.

Women in STEM Tea

Clark College welcomes four alumni to speak at annual Women in STEM Tea event.

Rocket Breaks Record

On April 28, the rocket “Little Penguin” traveled 11-miles, and was recovered by the club.

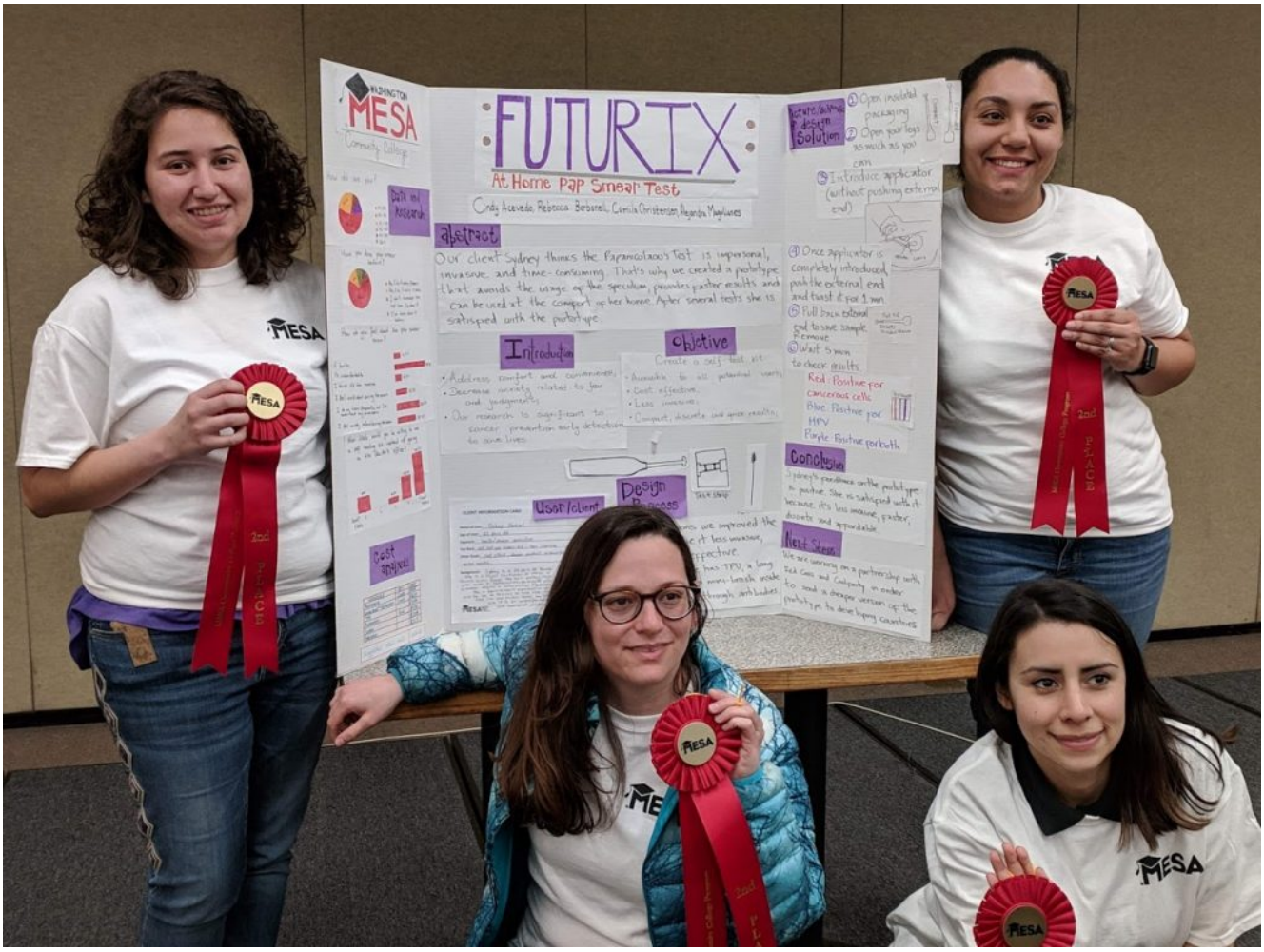
Clark College newly certified by Bee Campus USA

Just in time for Earth Day, Clark College was certified as an affiliate of the Bee Campus USA program on April 20, joining 165 other college campuses and 179 cities across the country united to make their landscape attractive to pollinators.

Meet Warlock Carol Hsu

Clark College Engineering Professor Carol Hsu is an immigrant, a woman of color, and a pioneer of sorts who pursued a mechanical engineering degree at a time when only 10% of engineering students were women.

MESA students engineer possibilities



Clark student Alejandra Magallanes, *far left*, was part of a group that won second place in a competition for human-based engineering solutions at a recent MESA conference.

Clark's MESA program is still in its first year, but already it's providing new opportunities for student success.

MESA (Math, Engineering, Science Achievement) is a national program dedicated to encouraging under-represented populations to succeed in STEM fields. At Clark, this includes a dedicated space for studying and creating community, as well as opportunities for mentorship, assistance with books and fees, and conference participation.

This March, two Clark MESA students attended the MESA Student Leadership Retreat at Warm Beach Camp in Stanwood, Washington, along with students from 15 other MESA community college programs from Washington and California. Mai Lee Xiong and Alejandra Magallanes were able to participate in activities to boost their professional development and leadership skills.

They also participated in a competition for human-centered design solutions, breaking into groups to identify a problem, interview a potential user of their solution, and prepare a poster and oral presentation to explain it to others.

Mai Lee Xiong, *far left*, collaborated on a concept for a medical-translation app at a recent MESA conference.

Xiong's group focused on health care disparities that arise from language barriers between health care providers and patients whose first language is not English. They proposed the development of an app to translate medical information into different languages—one that would include medical terminology not available through tools like Google Translate. The project was a perfect fit for Xiong, who is studying biology and plans to pursue a degree natural medicine after

her bachelor’s degree.

Alejandra Magallanes’s group also decided to tackle an issue related to healthcare: the availability and convenience of Pap smear exams to detect cervical cancer. They proposed a device that could be used at home to collect a sample of cervical cells. It could be used by people who have difficulty attending doctors’ appointments or who may avoid Pap smears because of the uncomfortable nature of the exam—and in doing so, could increase the number of people who receive preventative care. Magallanes’ group won second place in the competition, which includes proposals from more than 20 teams.

As with Xiong, Magallanes’s project aligned well with her interests; like Xiong, she is studying biology and plans to transfer to a university for her bachelor’s degree after graduating from Clark College in 2020.

“This experience really helped show the value of having the MESA program at Clark College,” said MESA director Dr. Ellen Harju. “It was wonderful to see these two students be able to work and succeed with their peers in an environment that allowed them to be their authentic selves. I’m excited to see more of our MESA students get the chance for these experiences.”

Clark’s MESA program is located in the STEM Building rooms 206/208 and is open Monday – Thursday 8:00 a.m. – 6:00 p.m., Friday: 9:00 a.m. – 5:00 p.m., Saturday: 10:00 a.m. – 2:00 p.m. More information about the program is available online at www.clark.edu/cc/mesa.

Photos: Clark College/Ellen Harju

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. 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.

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)

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

C DIVISION (HIGH SCHOOL)

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

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

Article contributed by Nova Gump

Photos: Clark College/Nova Gump