

The SEES Informer

Thirty-two years of promoting student success.



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SEES Award winners: (L-R): Camille Abeyta (Burke award), Jenevieve Segura (Burke award), Summer Blanco (Hiemenz award).

News from the Year in SEES

The 2019-2020 school year saw a lot of firsts in the SEES program. We created the Scholars Program in Research, Education & Science (SPIRES) to fund students to perform research with faculty. This program will be infusing \$1 Million into the program over the next 5-6 years.

We had our first every intramural soccer team. SEES members competed in the evenings against teams and programs from throughout the university campus.

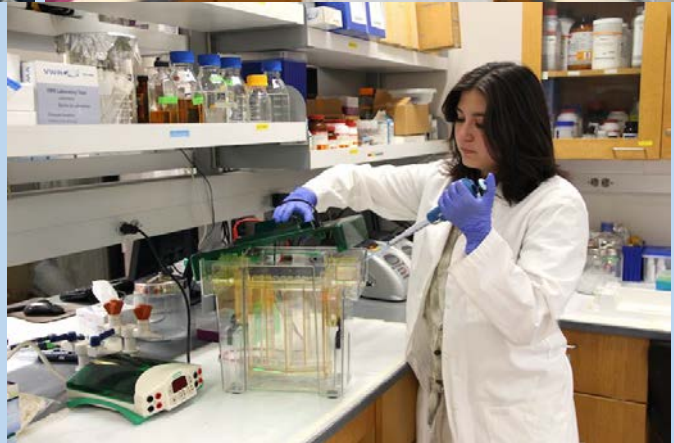
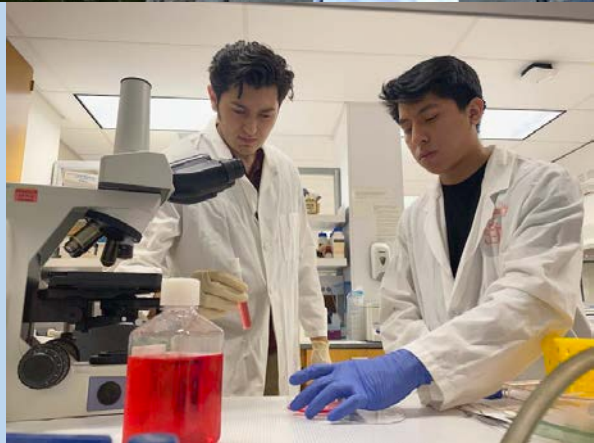
Our Director, Dr. Steve Alas, was awarded by the CSU system with the Faculty Innovation & Leadership Award. This was for establishing the Discovery Camps, SPIRES, BioTiER and the STEMpire, as well as running everything in SEES and LSAMP.

We continued to carry on many traditions in the program, which we highlight in this issue of the SEES Informer.

Scholars Program in Research, Education & Science (SPIRES)



The 2019-2020 school year brought a new fellowship program to Cal Poly Pomona. The SPIRES fellowship recipients are undergraduates in biology, chemistry, computer science, geology, math or physics. The NSF SPIRES Fellowship Program provides project and research opportunities for low-income or traditionally underrepresented students pursuing graduate school in the STEM (Science, Technology, Engineering, and Mathematics) fields. The goals of the programs are to 1) engage students in mentored projects, 2) immerse students into a community of peers, 3) increase preparedness for STEM careers, 4) increase awareness of graduate school requirements, and 5) improve retention and graduation rates. The activities will include, but not limited to performing research projects, workshops, journals, graduate school preparation, presenting research results in public forums, attending conferences, and evaluation activities designed to assess program effectiveness and career progress.



SEES Mentor Picnic

September 2019

The annual mentor picnic is always a fun time to relax with new friends and old friends. Bonelli Park is a beautiful & scenic area with many activities for students to enjoy. There was water boating and paddle boarding available on the water, biking and volleyball on the land. Mentors and mentees enjoyed a delicious meal together and ended the day by cracking open a piñata!



SEES Mentor Picnic

September 2019



Christmas Party

December 2019



The Christmas party is always a great success. Students enjoy getting to take a break from studying for finals to spend time as a SEES family. The Kellogg mansion always decorates so beautifully for the Christmas season. The food was delicious and it was well enjoyed by the faculty, staff & students. Director Steve Alas surprised everyone with a giant Santa costume that made everyone smile! Christmas carols lifted everyone's spirits and ended the night on a happy and joyous note.



Christmas Party

December 2019



Mentors & Mentees Ice Skating

SEES members took to the ice at the Olympic Ice Arena in Ontario. It was cold, the ice was hard, but everyone had a great time.



SEES Intramural Soccer Team

For the first time ever, the SEES program fielded an intramural soccer team. Spearheaded by Summer Blanco, the team incorporated many of SEES' most involved students. The night games were so exciting and team members had a blast.



SEES Intramural Soccer Team



Dining with Broncos

Each year, Alumni Affairs at CPP puts on “Dining with Broncos” where CPP alumni invite students and alumni to their homes and host them for a dinner. As an alumnus, Dr. Alas invited current and former SEES students to enjoy a night of dinner, reminiscing and networking.



SEES Hiemenz & Burke Awardees 2020



Burke Awardee

Camille Abeyta will be graduating in May 2020 with a Bachelors of Science degree in Chemistry. She has been involved in several organizations on campus with various leadership positions. She was science council representative, vice-president, and president of the Chemistry club. She will be on the Science Council for the 2020-2021 school year and will serve as the Secretary of External Affairs. She has been in the SEES program since 2017 and has been a mentor, Discovery summer camp counselor, and summer STEMpire orientation leader. Camille has participated in undergraduate research in the Chemistry and Biochemistry department for 3 years and has received the distinguished LSAMP fellowship and the NSF SPIRES fellowship. After graduating from Cal Poly Pomona, Camille hopes to attend graduate school to study Analytical Chemistry.



Burke Awardee

Jenevieve Segura will be graduating in fall 2020 with a Bachelors of Science degree in Kinesiology. She has been a part of the SEES program since her first year at Cal Poly Pomona. As a student in the program, Jenevieve has participated in the mentoring program for five years. She began as a mentee and then returned to be a mentor to the freshmen for four years. Additionally, she served a STEMpire Orientation Leader where she led the STEMpire competitions during summer. Jen was also a SEES Summer Orientation Assistant for two years. Aside from SEES, Jenevieve also volunteers with elementary children at a local private school, is captain of the CPP Womens Soccer club, and currently a rehabilitation aide at *Select Physical Therapy*. After receiving her bachelors, she plans on applying to a Doctorate of Physical Therapy program.



Hiemenz Awardee

Summer Blanco earned her Bachelor of Science degree in Spring 2020 in Biological Sciences with an option in Botany. She has been active in various organizations on campus including Rose Float, the Center for Excellence in Math and Science Teaching, the Pride Center, Voices of Color, and SEES. As a member of the SEES program, Summer has been a mentor to incoming freshmen in the SEES Peer Mentor program. She did not lose sight of having fun, as she created the first ever SEES Soccer intramural sports team. Since her first year at CPP, she has also been involved in undergraduate research with support from Achieve Scholars, LSAMP, and RISE. After graduation, she will be joining a post-baccalaureate research program at Michigan State University to prepare for graduate studies in Fall of 2021. Her long-term goal is to obtain her Ph.D. in plant biology. The future Dr. Blanco intends to become a university professor.

2019 Faculty Innovation & Leadership Award (FILA)

SEES Director, Dr. Steve Alas, was honored by the CSU System with the FILA for his efforts on addressing academic barriers and closing the achievement gaps of historically underrepresented students in STEM. Through his leadership of SEES, Dr. Alas has supported more than 600 low-income and underrepresented students each year and has helped narrow the graduation gap between historically underrepresented and non-historically underrepresented students at Cal Poly Pomona from 17.6 percent to 3.9 percent. Recognizing the importance of creating meaningful onboarding experiences for first-year students in science and engineering, he significantly expanded the university-wide STEM Success Program, which provides incoming STEM students with resources and support through their first year. Additionally, since 2013, Dr. Alas has led the CSU Louis Stokes Alliance for Minority Participation (CSULSAMP) program at Cal Poly Pomona and recently received a \$1 million NSF S-STEM grant for the Scholars Program in Research, Education & Science (SPIRES). Dr. Alas was honored in Sacramento by the Chancellor of the CSU System and its board of trustees.



SEES Members: Club Presidents

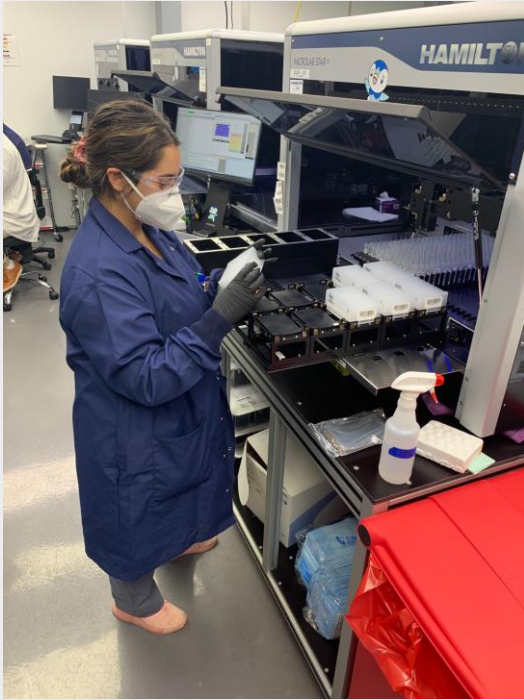
Club Presidents do so much for their clubs. There is so much responsibility that they take on while also being full time students. We appreciate the effort and time that they put into making their science clubs successful. Due to the Covid-19 pandemic, club activities were cut short for the school year, but it has given clubs a chance to be creative with virtual activities for their members.

Thank you Presidents!



(L-R) Mora Labisi (sheCodes), Khadija Shafiq (Science Council), Camille Abeyta (Student Members of the American Chemical Society), Miguel A. Saldana Riquelme (Pre-Pharmacy Society)

Summer Research Experience



My name is Camille Abeyta and this summer I worked at a Covid-19 detection laboratory. The coronavirus pandemic has affected each and every one of our lives in one way or another. During this time of uncertainty, people are comforted with knowing their viral status.

There are several departments in the laboratory and I work in the Plating department. I plate patient samples which are then analyzed by PCR (Polymerase chain reaction). Last month I helped test over 12,000 patients. I was also given the privilege of operating a Hamilton instrument which is an auto sampler and it plates at 3x the regular plating speed.

At Curative, we test over 10,000 patients per day for covid-19. We have testing sites all over Los Angeles with one being at the Dodgers Stadium. We recently opened a lab in Washington D.C., and will be opening a new one in Texas in the upcoming months. Curative is a family, and we all are banding together to finish the fight against Covid-19.



CURATIVE
COVID-19 DETECTION

Student Accomplishments

Acceptances into Graduate/Professional Schools

Denislav Nikolov - accepted to PhD degree programs at the University of Michigan, Cornell University, Boise State University and the University of California, Santa Cruz (attending University of Michigan in the fall).

Mary Frances Gabito - accepted to University of Arizona's MS in Atmospheric Sciences program, with full funding.

Ho Lun Chan – accepted to PhD degree programs in Materials Science and Engineering at the University of Virginia (Committed), Northwestern University, and Pennsylvania State University; also accepted to M.S. program in Materials Engineering at Cal Poly Pomona.

Stephanie Ferreyra - accepted to MS program in Biology for Stem Cells at CSU Sacramento. Also accepted into masters programs at UCI, CSULA, and USF.

Vanessa Gonzalez - accepted to MS degree program at University of Southern California.

Yara Maayah – accepted to MS programs in Medical Physics at San Diego State University (committed), East Carolina University, and the University at Buffalo.

Philip C. Lacey - accepted to Bioanalytical Chemistry PhD program at Ohio State University

Khadija Shafiq - accepted to PhD program at University of Michigan; also University of Texas MD Anderson Cancer Center, UCI, and UCR.

Summer Blanco - accepted to Success in Graduate Education (SiGuE) Post-Baccalaureate at Michigan State University.

Andrea Garay - accepted to the Doctor of Chiropractic program at Southern California University of Health Sciences, starting summer 2020.

Jose Moran - accepted to PhD programs at UCI (Cellular and Molecular Biosciences; committed), UCR (Biomedical Sciences), and University of Rochester (Immunology, Microbiology, and Virology).

Joaquina Hernandez - accepted to Master's Degree program in Environmental Management at San Francisco State University.

Bashirah Arogundade - accepted to the Master's Medical Laboratory Science program at the University of Vermont and at Emory Healthcare (committed).

Stephenie Martinez - accepted to 6 medical schools: USC, Tuft's, Drexel, UCR, Medical College of Wisconsin, and the David Geffen School of Medicine at UCLA (committed).

Acceptances into summer programs

Anthony Tran Phan – accepted to the NSF REU Site in Big Data Security and Privacy at Cal Poly Pomona over summer.

Stephanie Ferreyra - accepted to Keck Graduate Institute's B.S.U.I.T.E.

Zijie Zhang - accepted to the Summer Undergraduate Research Fellowship (SURF) Program at the University of Kansas Medical Center Department of Pharmacology, Toxicology, and Therapeutics.

Cristian Jimenez - accepted to Western University's Summer Health Professions Education Program (AMA SHPEP).

Karena Almanza - accepted into a summer internship program with Food Net Safety Services.

Marianne Dogoldogol - accepted into the BSUITE and SURE summer internship programs at KGI

Vanessa Morales – accepted into the BSUITE summer internship program at KGI

Although some of these programs may have happened due to the Covid-19 pandemic, we are very proud of our SEES students for achieving great things!