



Sacramento City College **MESA Program**

Annual newsletter 2019 - 2020 edition Distributed May 12, 2020

Contact us at scc.losrios.edu/mesa (c) Follow us on Instagram @saccitymesa

About MESA

MESA (Mathematics, Engineering, Science Achievement) is a statewide program for students historically underrepresented in STEM (science, technology, engineering, and mathematics) industries to successfully earn degrees and pursue STEM careers. The SCC MESA program serves about 140 students each semester, providing services that include a study center, tutoring, academic excellence workshops, counseling, transfer preparation, and connection to industry and STEM careers. MESA was born out of the civil rights movement in 1970 through a partnership between UC Berkeley and Oakland Technical High School to address racial disparities in STEM. Since then, MESA has expanded across California in K-12 education, community colleges, and universities. Los Rios piloted the first community college program in 1989, and we still offer MESA at American River College, Cosumnes River College, and Sacramento City College, providing STEM students with tools and quidance to successfully transfer to a university and earn a bachelor's degree.





Meet our Team!



Manuel Serrano. Program Assistant



Aliyah Penn, Program Assistant



Nathan Hines, Program Assistant



Jose Camacho, Program Assistant



Breanna James, Program Assistant



Ashley Vang, Peer Mentor



Christy Xiong, Peer Mentor



Robert Monroy, Counseling Intern



Congratulations Sac City MESA 2020 Transfer Students!!

Check out our Los Rios Transfer Video: bit.ly/lrccdmesatransfer2020

Mohammad Farid Alemi - UC Davis - Biological Sciences Timothy Arcaya - UC Davis - Civil Engineering Muhammad Arshad - UC Davis - Civil Engineering **Harold Fong** - CSU Sacramento - Mathematics Nathan Hines - UC Davis - Mechanical Engineering Amanda Jones - CSU Monterey Bay - Biology Eddie Kinyon - UC Berkeley Nuclear Engineering Andrea Lee - UC Merced - Chemistry Diego Lopez - CSU Sacramento - Mechanical Engineering Khoan Luong - UC Davis - Civil Engineering Ngan Ngo - UC Berkeley - Applied Mathematics Vanessa Ngo - UC Davis - Global Disease Biology Huong Nguyen - CSU Sacramento - Biology Karina Nolasco - UCLA or UC San Diego - Mathematics Martin Te - UC Davis - Neurobiology, Physiology, & Behavior Alicia Villaseñor - CSU Sacramento - Electrical Engineering Kalia Zamora - UCLA - Cognitive Science



Counselor



Maristella Bacod, Dr. Devoun Stewart **Faculty Sponsor**



Dr. Lorena Jauregui, Program Coordinator

MESA Student Clubs



Diversity in Medicine Club

President: Evelyn Rosas Lopez Vice President: Sophia Harris Treasurer: Maria Morelos

Contact:

scc.diversity.in.medicine@gmail.com

This club for pre-medical and pre-health career students was founded by student President Evelyn Rosas-Lopez, who is also a MESA Scholar. The club strives to connect students with peer mentors, with professionals in the healthcare industry, and with opportunities and activities that enhance their career preparation. Thus far, the club has attended the UC Davis Pre-Health Conference, they've had guest speakers who are physicians and medical students at UC Davis School of Medicine, and they have worked collaboratively to apply to internships, such as the UC Davis Prep Medico summer program. Club meetings are typically twice a month in the MESA Center.

Multicultural Engineering Coalition (MEC)

President: Nathan Hines

SHPE (Society of Hispanic Professional Engineers) President: Angel Vasquez NSBE (National Society of Black Engineers) President: Breanna James SWE (Society of Women Engineers) President: Isabella Campos Contact: sites.google.com/view/multicultural-engineers/mec-home

This club serves students interested in engineering and computer science careers, and was founded in Fall of 2019 by President Nathan Hines and NSBE President Breanna James, who are also both MESA Scholars. MEC strives to connect students with industry professionals, create a student support system to help one another succeed in rigorous classes, and instill confidence and leadership skills that can be carried into their professions. So far, the MEC club has organized a field trip to tour the UC Davis Department of Engineering labs during the fall semester. They also organized a panel of engineering industry professionals during the spring. Club meetings are typically twice a month on Friday afternoons in the Engineering Lab.

Los Rios MESA 2020 Professional Development Program (PDP) Webpage: <u>bit.ly/losriosmesapdp</u>

The Los Rios MESA Professional Development Program (PDP) is a competitive opportunity for MESA students to complete a STEM project with the support of a professional mentor. Students typically display their work at our annual MESA reception during the poster session. Due to the shelter-in-place; the reception has been cancelled and we have developed a webpage (link above). Students have compiled videos showcasing their work. Congratulations to this 2020 MESA PDP Participants for completing their projects during such a challenging year!

A Year in Review

August 16, 2019 MESA Staff Retreat

For the first time, we organized a MESA Staff Retreat to get the team reenergized and prepared for the semester. The retreat involved introductions of new staff, an orientation of MESA, team-building, and preparation for the boot camps.

August 19-21, 2019 Los Rios MESA Boot Camps

SCC MESA hosted a districtwide, 3-day MESA boot camp. The morning sessions focused on mathematics and the afternoon sessions focused on chemistry. These allow MESA students some preparation prior to the start of the semester. The sessions were facilitated by MESA staff, and by Professor Jonathan Segal and Professor Nick Dale who volunteered their time to facilitate the mathematics workshops.

October 18-19, 2019 Master the Mainframe Challenge

The SCC Association for Computing Machinery (ACM) hosted the "Master the Mainframe Challenge" event, which is a collaboration with IBM and the CA Department of Technology. This event allows students from the Sacramento region to learn mainframe computer science skills and to network with other students and industry professionals. We had several MESA students participate in the event, including Danny Quinones, Diana Silva Arias, and Christy Xiong. MESA Peer Mentor, Christy Xiong, also hosted a workshop for MESA students to prepare for the mainframe challenge.

Student Spotlights

Student Spotlight: Christy Xiong Computer Engineering Major NASA L'SPACE



NASA L'SPACE is a competitive, interactive program for students interested in exploring careers with NASA or in space. Christy Xiong, MESA Scholar and Peer Mentor, was selected to participate in the Summer 2019 program. Christy describes the project: "We were given a task to write a Preliminary Design Review to travel onto Saturn's moon, Titan. This included creating a budget plan, developing a machine design, and looking into scientific research. The objective of this mission was to safely enter Titan, land the spacecraft, and conduct research of the atmosphere as efficiently as possible." All meetings were face-to-face on Zoom and allowed students to meet scientists working on projects in NASA. "The overall experience was amazing and if you're considering travelling abroad horizons that we have yet to reach, then participating in programs like the L'SPACE academy will only be more beneficial to you."



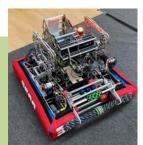
Student Spotlight:
Natalia Ramirez
Mechanical Engineering Major
SEStematic Eliminators Robotics Team

Natalia, SCC MESA Scholar, serves as a mentor for the robotics team at her alma mater, School of Engineering and Sciences. The "SEStematic Eliminators". This spring 2020, the team traveled to Canada to participate in the Canadian Pacific Regional competition that took place in Victoria, BC, Canada. Natalia describes her experience: "During this competition we were awarded with the Quality Award, Safety Award, and the Canadian Pacific Regional Winners Award. We were one of the 7 USA teams to participate and it was such an honor." Natalia plans to continue to serve as a mentor because she wants to have a positive impact on the community and share her love for mechanical engineering.

Los Rios MESA Scholarship 2020 Sac City MESA Student Recipients

Congratulations to this year's Los Rios MESA Scholarship recipients! Below are the awardees from SCC:

- Mohammad Farid Alemi, Biology
- Sophia Hahn, Mechanical Engineering
- Ricardo Martinez, Jr., Environmental Engineering
- Valentino Navarrete, Mechanical Engineering
- Huong Nguyen, Biology
- Ivan Pacheco, Civil Engineering
- Kalia Zamora, Computer Science
- Weihao Zhu, Civil Engineering



A Year in Review cont.

October 19, 2019

UC Davis Pre-Health Conference

The Diversity in Medicine Club and MESA attended the UC Davis Prehealth Conference - a national conference with over 4,000 students in attendance. Our students met with medical school and nursing school representatives, participated in professional development workshops, and even got to try some hands-on activities by suturing a banana. SCC student attendees included Evelyn Rosas, Sophia Harris, Maria Morelos, Ashley Vang, Kariya Logan, Mariel Razo Pacheco, Roman Nesterov, Juliann Balot, Estefany Berrios, Andrea Padilla. Conference registration was sponsored by the Kevin Ramirez donation via the SCC Foundation Office.

October 25-26, 2019 MESA Student Leadership Conference

Sacramento City College MESA students participated in this statewide event at the Sacramento Sheraton Grand Hotel. The conference focused on the tech industry and students were grouped to participate in a video project competition. The winning group with the most votes shared a prize of \$1,000 worth of Lyft credits. Selected Sac City College MESA student participants included Christy Xiong, Breanna James, Ivan Pacheco, Carlo Toso Lopez, and Monte Gavia, Jr.

November 1, 2019 UC Davis Engineering Tour

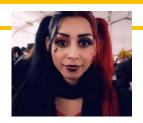
The SCC Multicultural Engineering Coalition and MESA organized a trip to tour the UC Davis Engineering programs, including various labs. The labs included the civil engineering centrifuge, the chemical engineering coffee lab, and various 3D printing stations, similar to what we have in MakerSpace. Club President, Nathan Hines, organized the trip, and attendees included Breanna James, Ivan Pacheco, Jason Park, Alicia Palenyy, Isabella Campos, Emmanuel Sanchez, and Andrew Glaros. Expenses were sponsored by the Kevin Ramirez donation via the SCC Foundation Office and the MESA Program.

Student Spotlight: Martin Te Neurobiology, Physiology, & Behavior Major Sutter Medical Center Volunteer

Martin is a MESA Scholar and also a MESA intern, facilitating Academic Excellence Workshops in Animal Biology. He is a premedical student and serves as a volunteer at Sutter Medical Center in the Orthopedics department. Martin describes his internship duties: "I set up rooms for patients coming out of surgery. It is mainly making beds and putting stuff on a table such as some medical equipment, water, and dental supplies. Discharges happen occasionally and the volunteers get to push the patient in a wheelchair to where they will be picked up." Martin describes that although his tasks are not directly involved with the medical processes, he gains lots of experience and exposure in a clinical setting. He looks forward to one day becoming a physician and continuing to serve patients in a meaningful manner.







Student Spotlight:
Karina Nolasco
Mathematics Major
UCLA STEM SITE

Karina, SCC MESA Scholar, participated in UCLA's STEM SITE during summer 2019. This is a summer transfer program with an emphasis on STEM resources. Karina describes her experience:

"While participating in the program, I networked and connected with students across the state, learned from faculty from STEM disciplines, and learned more about research opportunities. I also completed Classic SITE, which is similar, with less focus on STEM." Karina had the opportunity to stay in the dorms at UCLA and eat in the dining commons, which was a unique and rewarding experience for her. She recommends the program to any student who is considering transferring to UCLA.

~ THANK YOU ~

SCC MESA is successful thanks to college, statewide, & community contributions:

Gift from Christopher Horsting, 2004 SCC MESA alumnus

Gifts in memory of Dr. Kevin Ramirez, Former SCC Dean and Sierra College President

SCC Office of Philanthropy

CA Community College Chancellor's Office MESA Grant

UC Office of the President MESA Statewide Team





A Year in Review cont.

January 8, 2020 Staff Equity Training

For the first time ever, SCC MESA hosted a staff equity training to further develop skills in serving students with a meaningful lens of inclusion and understanding diversity. The training was facilitated by Jesus Limon and Dawna DiMartini, campus Equity Coordinators. MESA staff members already come to the table with an equity lens, but this was an opportunity to strengthen that lens and think more strategically to effectively serve MESA students. We also spent the afternoon decorating the MESA center to make it more welcoming and inclusive for our diverse student population.

January 13-15, 2020 Los Rios MESA Boot Camps

We hosted our traditional mathematics & chemistry boot camps. Professor Jonathan Segal volunteers his time to facilitate the mathematics workshops, and our MESA staff facilitated the chemistry workshops.

February 4 & 7, 2020 Summer Research App Jam

Our Research leads (Robert, Counseling Intern, and Aliyah, MESA Program Assistant) hosted two 3-hour sessions for students to drop by and get help applying for summer research programs. February and March are the months when most applications are due. Students can get help applying for a research program, scholarship, internship, job, etc. Just to give them that kick start and familiarity to these processes.

April & May, 2020 MESA Remote Services

The MESA team has worked hard to keep students engaged and supported since transitioning to remote services on March 13, 2020. Staff have reached out individually to their assigned MESA students; each team member has about 25 students they serve directly. MESA continues to offer tutoring and transfer support remotely. Students have worked hard to navigate the transition, as well.