



2 0 2 2 - 2 0 2 3

SOCIETY OF LATINX

ENGINEERS & SCIENTISTS

SPONSORSHIP PACKET





TABLE OF CONTENTS

Executive Board
Membership by the Numbers
> Academic Development 4
> Professional Development 6
Community Outreach
Recruitment and Retention 8
> Financial Projections
> Sponsorship Options 10



https://uclasoles.org/



www.linkedin.com/groups/13937942/



@uclasoles



www.facebook.com/uclasoles/

EXECUTIVE BOARD

Kelly Espino | President

uclasoles.president@gmail.com kespino1@g.ucla.edu

Kamila Kunes | External Vice President

uclasoles.evp@gmail.com kamilakunes@g.ucla.edu

Itzhary Tamayo | Internal Vice President

uclasoles.ivp@gmail.com itzhary@g.ucla.edu

Matthew Ruiz | Professional Development Chair

uclasoles.pdc@gmail.com matruizofficial@gmail.com

Sarah Mauricio | Technical Chair

uclasoles.technicalchair@gmail.com sarahmauricio2019@gmail.com

Angel Reyes | Transfer Representative

uclasoles.transferrep@gmail.com angelcreyes@g.ucla.edu

Jasmine Raya | Academic Chair

uclasoles.academicchair@gmail.com jasmineraya0@gmail.com

Marisa Duran | Treasurer

uclasoles.treasurer@gmail.com mgduran@g.ucla.edu

Emanuel Zavalza | Secretary

uclasoles@gmail.com emanuelzavalza@gmailk.com

Brianna Ceja | Ciencias Director

uclasoles.cienciasdirector@gmail.com briannaelena.c@gmail.com

Jennifer Juarez | LeaderSHPE Jr Director

uclasoles.leadershpejr@gmail.com jenniferjuareze@gmail.com

Andrew Rojas | Events Director

uclasoles.activities@gmail.com andsrojas26@g.ucla.edu

MEMBERSHIP BY THE NUMBERS





82.6% of local members are nationally recognized members



1st Year (Freshman) 23.5%

2nd Year 26.1%

3rd Year 18.3%

4th Year 9.5%

5th Year 9.5%

1st Year (Transfer) 10.4%

Graduate Student 2.6%

Mechanical Engineering 25.2%

Civil Engineering 23.5%

Aerospace Engineering 8.7%

Computer Science 8.7%

Computer Science and Engineering 7.0%

> Computer Engineering 6.1%

Electrical Engineering 5.2%

Bioengineering 4.3%

Chemical Engineering

laterials Engineering 2.6%

Other

4.3%

4.3%

ACADEMIC DEVELOPMENT

Study Nights on the Hill

By offering a weekly study space for our membership to study and collaborate, members are able to form study groups in preparation for difficult homework and exams. "The Hill" refers to the area on campus where most students reside at UCLA. By having these study nights at the university dorm buildings, it allows students to easily attend where they can socialize and meet students in their class. Orchestrating study night themes such as Harry Potter night and providing delicious snacks gives an equally better reason for college students and the membership to participate and attend every week. Also with the help of our growing online test bank, members are able to look at past exams to best prepare them for rigorous tests for a vast number of engineering courses.

Expanding Your Education Initiative



Over the years SOLES has been fortunate enough to partner with our sponsors to host amazing professional-focused workshops which have been quite impactful for our members. While we do great work providing our members professional workshops, we at SOLES recognize the faults in providing resources to members in terms of academic succession. This past year, we decided to give that a change, and began hosting student-led

workshops that focus on bettering the academic development of our members. These workshops include Building Your 4-Year Plan, How to Get a Research Role, Preparation for Graduate School, and Side-Projects to Help Build Your Resume. For the initiative's inaugural year, the workshops were a success among our members, especially for first-years and underclassmen who were able to learn a lot from the more experienced upperclassmen. For this next year on campus, we plan keeping up this uplifting tradidtion.

SOLES Lunabotics

SOLES Lunabotics is a unique project originally created for the NASA Robotic Mining Challenge. Although this challenge has been retired as of last year, we will not stop until our rover is completed. The goal of the competition is to create a partially autonomous model lunar mining rover that is capable of exploring and excavating replica lunar surface material. For SOLES, the goal of Lunabotics is to provide its members with a rich hands-on experience where they can develop their technical skills. Our project is still in the prototyping stage and donations for/of workspace materials, hardware, and raw resources is in dire need! The SOLES team is broken up into two subteams being the mechanical and electronics subteam. The mechanical subteam focuses on the design and manufacturing of the physical rover itself allowing team members to gain experience with CAD and machining. The electronics subteam is tasked with the implementation of all electronic components and code for the rover, including all autonomous actions. Our current team is composed of 10 members from varying fields of study and experience levels. We hope to increase the size of the team this year by encouraging SOLES members of all majors and years to join to gain valuable technical experience.

SOLES Break the Ice Challenge

SOLES will be joining Phase 2 of NASA's Break the Ice Challenge where we will be designing a system for excavating and delivering icy regolith. The goal is to demonstrate long term operations and durability of icy excavation and transportation equipment. Excavation will be demonstrated by extracting simulated icy regolith from a test bed and transportation will be demonstrated by hauling excavated icy regolith simulant over a surface which simulates physical characteristics of the lunar surface. We will have to submit a mixture design, certified test report, and a geometry sketch of our icy regolith simulant that will be made of concrete materials. The simulated icy regolith will have to have an unconfined compressive strength of 1.5 to 2.0 MPa, which will be verified using the ASTM C39 Compression Test of 150 mm by 300 mm cylinders. We will create our transportation demonstration area which includes the layout, slope, track surface makeup, mineralogy, and more. As part of the challenge, we will perform a long-term durability test with our working prototype that will last 15 full, 24-hour long, Earth days. We are targeting to excavate and transport 12,000kg of our simulated regolith over the 15 day period, and each load will travel 500m to the delivery location. If we place as one of the top 15 teams for Level 2 of the challenge, we will bring our prototype to a test facility chosen by NASA and simulate our designs on lunar surface and gravity conditions.

PROFESSIONAL DEVELOPMENT

SHPE National Convention

The annual SHPE National Convention--the largest Hispanic engineering conference in the nation--consistently provides our members opportunities to expand their network by interacting with industry and SHPE members from chapters nationwide, encouraging them to step into the corporate world. Thanks to the



generosity of our sponsors, this past year we were able to partially reimburse those that attended the convention last year. This year's National Convention will take place in Charlotte, North Carolina from November 2nd to the 6th. We realize that the price of attendance poses a financial burden to our members, so we are striving to partially sponsor 50 of our members to attend this year's convention.

Convention	Attendance
2019 National Convention	28
2020 National Convention - Virtual	68
2021 - Virtual / Orlando, FL	42
Objective for 2022 - Charlotte, NC	50

Apart from the networking opportunities, the SHPE National Convention promotes professional development through workshops and a career fair, along with social events that connect them with professional SHPE members. With all the National Convention has to offer, our members obtain first-hand insight on how to advance on our mission of increasing Latinx representation in STEM and in corporate America, all while empowering them to achieve high standards in the pursuit of their goals as aspiring engineers-to-be.

Professional Workshops with Industry



Throughout the year, SOLES provides opportunities for its members to network with corporate representatives through industry-partnered meetings and events. Companies partnering with SOLES are invited to host professional workshops and info sessions while having the advantage of directly networking with our membership to offer internships and full-time positions. Partnership is always

welcome, and we are always looking to expand on the number of events we host with industry. Despite the restrictions last year, SOLES continued to host a variety of events with a multitude of sponsors and seeks to continue doing so in this transitional year back to normality. From Info Sessions and Career Panels to Resume and "Rising Through the Ranks" workshops, we strive to continue our relationship with those whom we have built strong connections with in the past, as well as getting in touch with more engineering and computer science companies. For inquiries about setting a meeting up with SOLES, please reach out to the External Vice President. In compliance with UCLA and CDC mandates regarding physical gatherings, SOLES will still be actively setting up meetings with industry partners, whether they are set up as an inperson meeting or on a virtual platform.

Internship Pipeline

This Fall SOLES is initiating the Internship Pipeline, a new student-led program aimed to expose freshmen and new transfers to the ins-and-outs of the internship recruiting season, with the goal of getting our members internship offers. The program will consist of three foundational workshops: one to outline the recruiting cycle, another on resume building, and lastly one to guide students in applying to fitting job applications. The program will also feature our quarterly Internship Bank, a list of job openings that ask for 0 experience, suitable for new students. Moreover, participants of the program will be kept in loop with SOLES, Tri-org and other on-campus recruiting events. This program will carry over to SHPE conferences as well, where we will highly encourage participants to attend these events to network and help them succeed in potential interviews. Most importantly, a large emphasis will be placed on upperclassmen mentorship, where each new student will be paired with an upperclassmen with internship experience who can help guide them in resume, application, and overall professional advice. We aim to help 10-15 freshmen and transfer land internship offers.

COMMUNITY OUTREACH

LeaderSHPE Jr. Retreat

This upcoming school year will mark SOLES' 5th annual LeaderSHPE Jr. Retreat. While encouraging young SHPE members to pursue higher-education, this retreat provides a sense of community and empowerment for the high schoolers to become the future leaders of their communities. This event is the most critical for Region 2's SHPE Jr. chapters in professional, personal, and technical development.



The retreat is free for SHPE Jr. students and provides networking opportunities with SHPE members at the high school, collegiate, and professional level. With the conference experience being fully accessible, all students have the opportunity to learn from professional speakers, leadership workshops, interactive competitions, and hands-on engineering activities.

Regardless of the virtual platform this past year, the LeaderSHPE Jr. Retreat continues to improve and provide a unique experience to SHPE high schoolers. With last year's theme being "Build Your Future" activities like building a hydraulic bridge and a secret networking workshop had students engaged with experience and advice from current college students and professionals alike. Not only is the event meaningful for the high school students, but it also serves as a learning experience for the committee members and professionals. As volunteers, our chapter's members are able to improve their public speaking skills and leadership skills while giving back to the community. The LeaderSHPE Jr. Retreat allows students to meet individuals from similar backgrounds, creating a sense of community that gives them the empowerment to be proud of who they are, where they come from, and to realize that their dreams and successes are within reach.

Noche y Dia de Ciencias



Noche de Ciencias is one of the most anticipated events of the year. We look forward to hosting an event that inspires young high school students that come from an underrepresented community to pursue a degreee and career STEM. This past year, we welcomed a return to an in-person, face-to-face event and reached out to over 50 high school students.

As most of us are first-generation Latinx students, we personally know how difficult the college process in general may be, not just for the students, but for the parents as well. For this reason, we hold parent workshops where anything and everything college related is discussed such as: applications, majors, choosing a school, tuition, housing, curriculums, dining halls, books, roommates, and anything else that comes with the college experience.

Dia de Ciencias is a heavily anticipated event. As guidelines are becoming more lenient and restrictions are being lifted, we plan to hold a day to spend time with and educate elementary/middle school students about STEM. This event has more freedom than Noche de Ciencias, with opportunities like field trips at company buildings or museums that can give them a better understanding of STEM and help spark interest.

Tutoring Initiatives

Tutoring is an integral part of SOLES' mission to give back to the community. Through tutoring, SOLES supports local students by providing academic help. We encourage students to excel in their classes and improve their study skills. SOLES partners with the MESA tutoring program run by UCLA, which supports students in mathematics, engineering, and science achievement. This program also provides students the opportunity to compete in engineering challenges, and SOLES provides volunteers to judge and run competitions. For the 2022-2023 school year, we hope to transition back to in-person events in order to provide even more valuable tutoring experiences for the students we support.

Engineers in Training Day



Engineers-in-Training (EIT) Day is the largest outreach event run by SOLES. Our goal is to engage and expose underrepresented middle and high school students from the surrounding communities to the STEM fields, with an emphasis on engineering, through various workshops and panels. This past year we returned to an in-person event and hosted roughly 200 students. To manage such a large number

of people, we require many volunteers, and enlist UCLA STEM technical clubs such as AIAA, ASME, ASCE, SWE, and Bearospace to provide additional breadth to the event.

Each year, we create new workshops through our SOLES outreach committees that enable students to experience STEM in ways that are uniquely different from school curriculum. We also want students to learn about college-related information such as financial aid, college applications, and college life, so we develop several panels for the event to discuss these topics. Finally, we partner with UCLA's Engineering Ambassadors to give condensed tours of the campus while the students are on site.

Community College Outreach Workshops

Community College Workshops are brand-new outreach initiative. We wish to expose UCLA and SOLES to local community college students and propose the idea of transferring. These workshops will be done in collaboration with the Engineering Transfer Center and community outreach chairs from other student organizations.

We plan to host 4 to 5 workshops throughout the academic year, targeting local community colleges around the LA area. Workshops will include topics such as:

- A Day in the Life of a UCLA Engineer
- Demonstrations of Student Projects and Do-it-Yourself Projects
- Technical skill workshops
- Professional development workshops

RECRUITMENT AND RETENTION

MentorSHPE

Navigating college life is difficult, and SOLES is here to help. We strive to uplift each other academically, professionally, and socially though our MentorSHPE program. At the beginning of the year, underclassmen are paired with upperclassmen in "familias". Here, upperclassmen help their younger peers by assisting in choosing class schedules, tutoring them in difficult courses, and offering support in achieving academic/social balance. This also allows the upperclassmen to grow into the leaders the professional community needs. This year, we are also introducing the MentorSHPE ChampionSHPE, which will be a year-long competition between the familias. The competition and MentorSHPE program increases retention rates for both under and upperclassmen while building a sense of community.

SOLES Socials



Socials are the lifeblood of any organization. With such a large familia (115 local members), it's essential that we take every opportunity possible to not only maintain, but strengthen our bond. This will be especially true this upcoming year while we continue our transition to normality. After all the limitations imposed by COVID restrictions, it is now time to rejoice and enjoy each other's company.

This year we will focus on running events that engage our community while still following social distancing guidelines as delineated by the CDC. These events include beach bonfires, intramural sports, football tailgates, easter egg hunts, and many more! As guidelines change, we will adapt and begin to host more indoor events.

FINANCIAL REPORT

Category	Events	Event Expenses	Category Total
Academic Development	Study Nights	\$300	
	- Snacks - Supplies		
	Lunabotics	\$5,000	
	- Materials - Competition Registration - Lodging & Transportation		
	Future Technical Projects	\$500	
	- Materials		
	SHPE Nationals	\$25,375	
Professional	- Registration (\$225 per) - Lodging & Transportation		\$27,875
Development	RLDC	\$2,500	
	- Registration (\$100 per) - Transportation		
	LeaderSHPE Jr. Retreat	\$7,500	\$25,200 **Note: All Community Outreach efforts are funded through UCLA Grants
Community Outreach	- Food & Transportation - Shirts		
	Noche y Dia de Ciencias	\$7,500	
	- Food & Transportation - Shirts		
	Engineers in Training (EIT)	\$9,000	
	- Food & Transportation - Room Reservation - Shirts		
	Tutoring	\$1,200	
	- Transportation - Supplies		
Recruitment and Retention	Transition Retreat	\$1,500	\$8,350
	- Food & Lodging - Transportation		
	General Meetings	\$1,600	
	- Raffles - Food		
	Socials	\$1,500	
	- Food & Materials		
	MentorSHPE Events	\$750	
	SOLES Swag	\$3,000	
	- Membership Gear - Executive Board Polos		
Yearly Projecti (Excluding already covered of			\$42,025

SPONSORHIP OPTIONS

By sponsoring SOLES, you have the freedom of choosing which options will benefit your company the most. Treat the suns like the currency to put together your own personalized package!



Individual suns are available for \$300 each

Workshop	
Access to Resume Bank	
Info/Recruitment Session	
Job Postings on Newsletter	
Scholarship	
Networking Night	
Logo on Shirts and Club Board	
Host a General Meeting	

SOLES thanks you for your contribution!