

MULTICULTURAL ENGINEERING PROGRAM: INDUSTRY ADVISORY BOARD MEETING 2021

Friday, May 14th
10 a.m. – 12 p.m.



CAL POLY



CAL POLY

Multicultural Engineering Program
COLLEGE OF ENGINEERING

MEETING EXPECTATIONS & NORMS

THANK YOU FOR HELPING US UTILIZE OUR TWO HOURS TOGETHER EFFICIENTLY.



Audio Settings

Please place yourself on mute when not speaking.



Questions

If you have a question, feel free to type it in the chat feature. We will review these questions and address them after each agenda item. You can also raise your virtual hand during these designated times.



Follow-Up

The meeting is being recorded. The recording will be sent after the meeting, as well as the presentation and other relevant meeting documents.

WELCOME & INTRODUCTIONS

10:00 – 10:15 a.m.



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MEP TEAM

Nadine Spingola-Hutton (she/her/hers),
Retention Advisor



Nadine Spingola-Hutton (ESS Advisor, she/her)



Meghan Schuler-Jones (She/Her - ESS Advisor)



Meghan Schuler-Jones
(she/her/hers), MEP
Coordinator

Candy Janiam
(she/her/hers),
MEP Advisor



Candy Janiam



Kim Marsalek



Kim Marsalek
(she/her/hers),
Engineering Student
Services Director



Katie McGuire



Katie McGuire (she/her/hers), Retention Specialist

IAB & GUEST INTRODUCTIONS

SPECIAL GUEST:

Dr. Michael
Whitt, BMED
Faculty & NSBE
Co-advisor

Gaby Cepeda-Rizo, Chevron

David Galvez, LLNL

Kristen Kopp, Phillips 66

Janet Bachtel, Lockheed
Martin

Robert Peralta, SCE

Oscar Jimenez, Solar
Turbines

Dr. Jane Lehr, Cal Poly
Faculty & Director of
Office of Student
Research

MEP INDUSTRY ADVISORY BOARD MEETING AGENDA

Friday, May 14th, 2021
10 a.m. – 12 p.m.

10:00 – 10:15 a.m. **Welcome & Introductions**

10:15 – 10:45 a.m. **College of Engineering (CENG) Updates**
Dr. Eric Mehiel will provide updates on the college's response to COVID-19, give an overview of CENG demographics and relevant data, and share updates on campus/college-wide Diversity & Inclusion initiatives including two new faculty scholar positions.

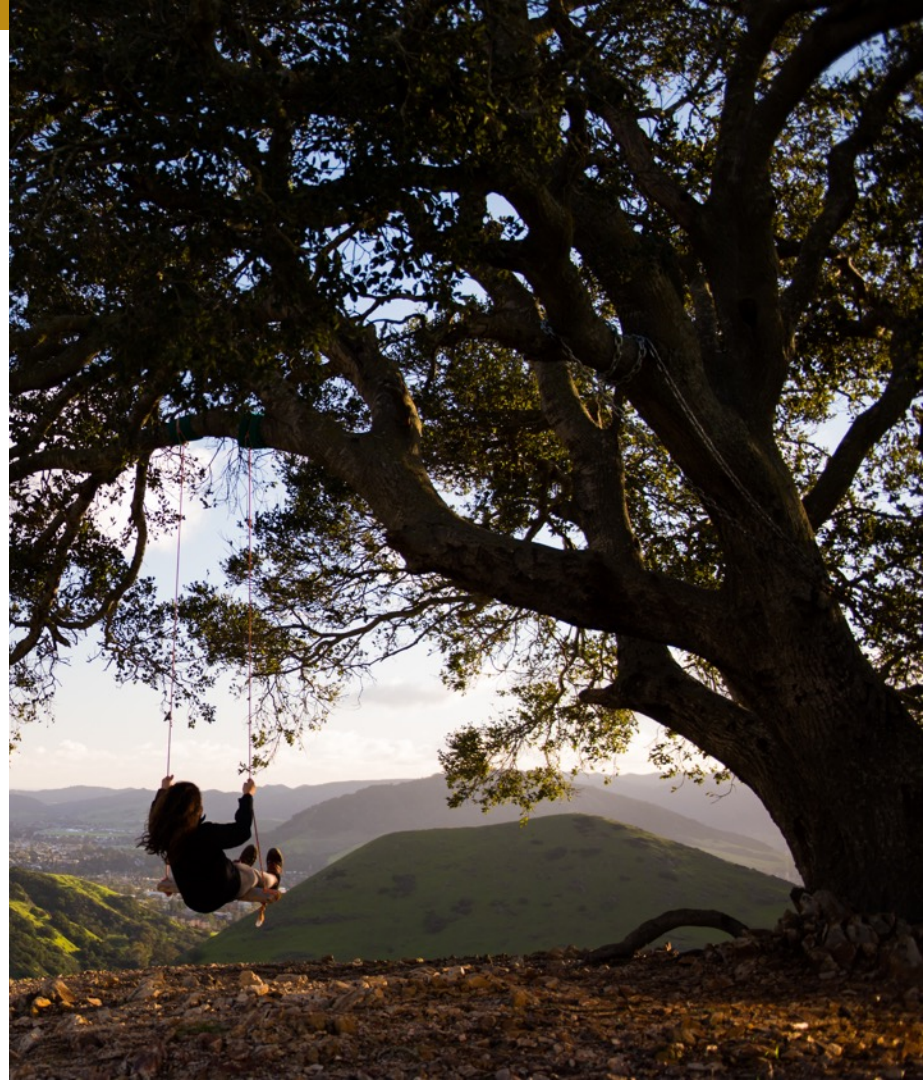
10:45 – 10:50 a.m. **Recharge Break**

10:50 – 11:25 a.m. **MEP Updates**
The MEP Team will explain how we've adjusted our events and services to adapt to COVID-19 this academic year, provide an overview of the year highlighting unique trends we saw, and introduce our program review.

11:25 – 11:45 a.m. **NSBE & SHPE Updates**

11:45 – 11:55 a.m. **MEP Funding Initiatives & Save the Dates for 2021-2022**

11:55 – 12:00 p.m. **Adjourn**



COLLEGE OF ENGINEERING

(CENG) UPDATES

10:15 – 10:45 a.m

Dr. Eric Mehiel, Associate Dean for Diversity and
Student Success



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COVID-19 UPDATE

POSITIVE OUTCOMES

- 10-12% of all course sections have been in-person
 - Labs only, lectures are still virtual
- Cal Poly developed a robust testing program
 - Saliva based testing
 - Monitoring program
 - Testing compliance program
 - Very low positivity rate on campus and those tested
- Priority vaccination for faculty and staff
- Students are also getting vaccinated
- Planning on a return to in person instruction for the fall
 - Modified as appropriate given CDC, state, and local health guidelines
- Continue to support students, faculty, and staff in a virtual environment
- Some form of telecommuting will stay in place moving forward

CHALLENGES

- Incidences and allegations of cheating are down from spring 2020, but up overall

Cheating and plagiarism policies need update/review

Appeal process also need update/review

- Student leave of absence rates are up

Mental Health and “Zoom Fatigue” top reasons

Need to understand impact on most vulnerable students

- Student clubs and IRAs have had very restricted activities

- Everyone, faculty, students, staff, have shown amazing dedication and resilience, but we are all worn out.



JEDI UPDATES

JEDI GOALS AND ACTIONS

Goal 1

Cultivate an inclusive college culture and eliminate all forms of oppression

Goal 2

Strive for a diverse CENG community and exceed national averages for representation in engineering programs

Goal 3

Increase graduation rates and achieve equitable outcomes for all students



COMMUNICATION PLAN

<https://ceng.calpoly.edu/diversity/>

JUSTICE, EQUITY, DIVERSITY AND INCLUSION STRATEGIC GOALS 2021-2026



GOAL 1 – Cultivate an inclusive college culture and eliminate all forms of oppression

A college culture where actions and policies support the success of all community members and the work of inclusion is widely recognized to be the responsibility of the entire CENG community.

Diversity, equity, inclusion, and justice Capacity Building



Integrate diversity, equity, inclusion and justice with CENG Curriculum



Diversity, equity, inclusion, and justice Curriculum Innovation Awards



State of diversity, equity, inclusion, justice in engineering annual workshop



Regular assessment of CENG culture and climate



Review all college policies with an eye on equity. Include DEI perspective in all performance reviews.



GOAL 2 – Strive for a diverse CENG community and exceed national averages for representation in engineering programs

Steady progress in diversifying the faculty, staff and student bodies of CENG with respect to historically minoritized communities. CENG is national leader in awarding degrees to communities historically underserved in engineering.

Establish a CENG Undergraduate Recruitment Committee



Partner with Cal Poly Admissions to develop recruitment strategies



Strengthen Community Colleges partnerships, establish Transfer Champions



Implement inclusive hiring guidelines for all faculty and staff positions



GOAL 3 – Increase graduation rates and achieve equitable outcomes for all students

CENG meets the Cal Poly established goals for graduation rates for all student populations disaggregated by all tracked cohorts.

Equitable Achievement of outcomes through targeted retention advising



Establish a ESS Faculty Advising Scholar Program



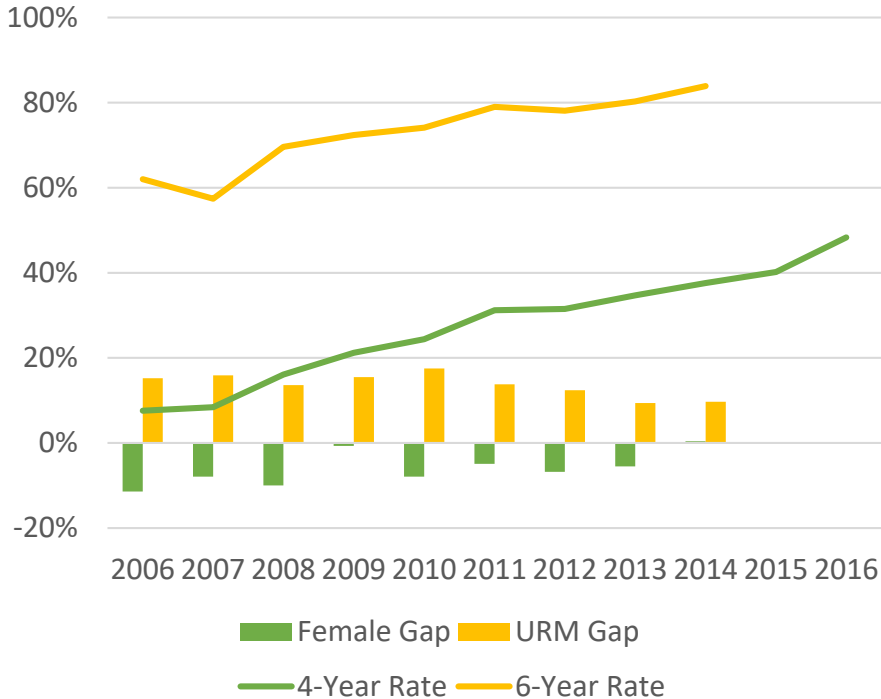
Equitable achievement of outcomes through curriculum design



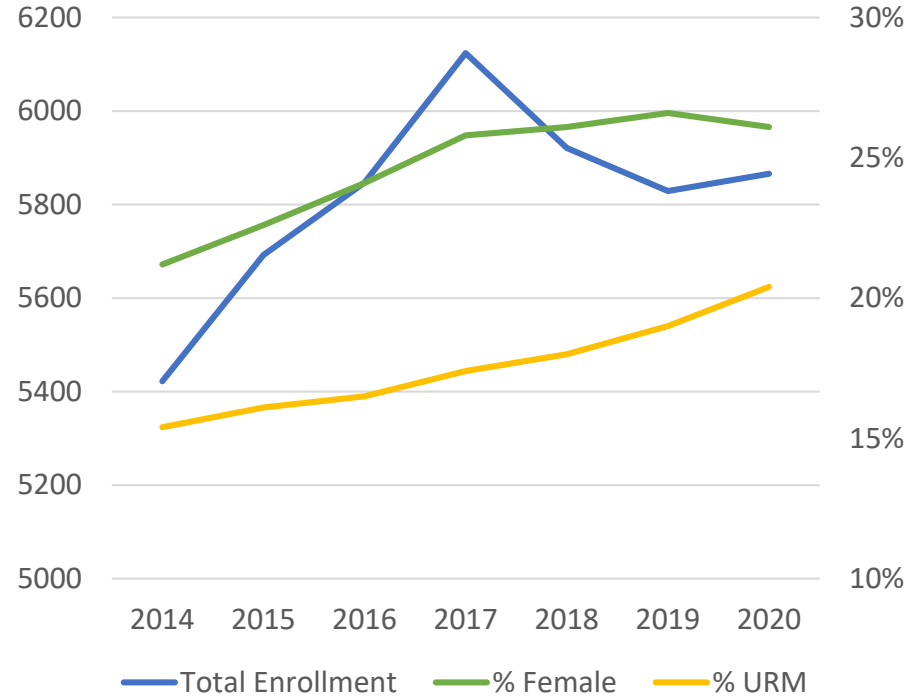
CENG COMMUNITY

OVERALL TRENDS

Graduation Rates

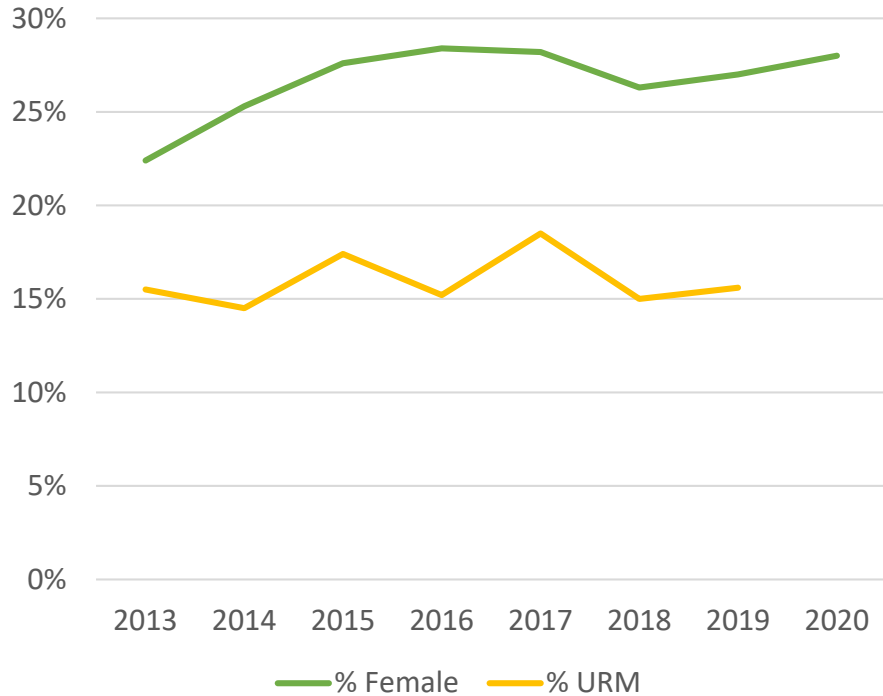


CENG Student Demographics

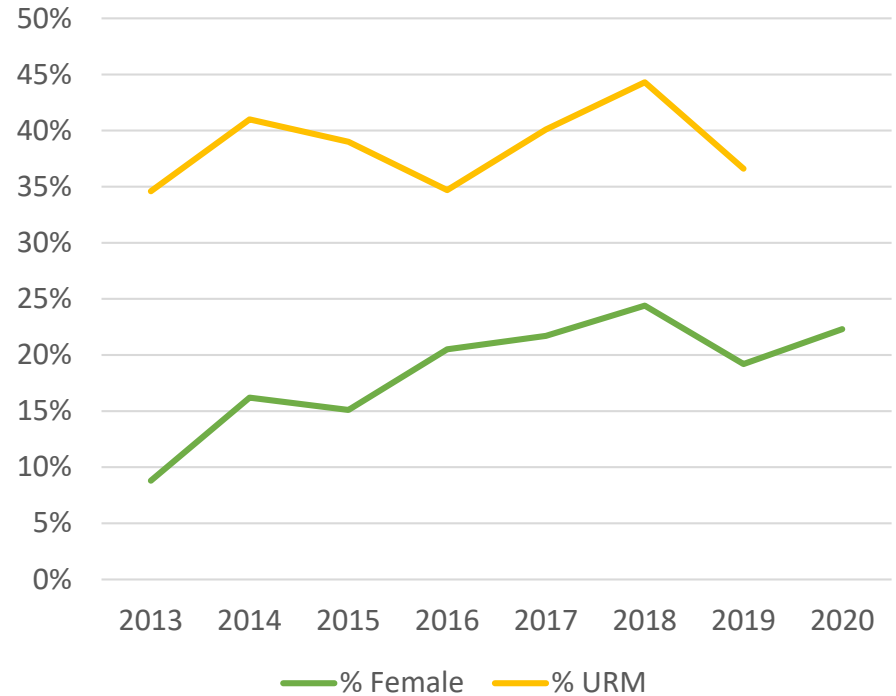


NEW STUDENT TRENDS

First Time First Year



New Transfers



CAPACITY BUILDING

JEDI FACULTY SCHOLAR

Building Capacity and Leadership

- Works with Dean and AD to design, implement, and manage initiatives, action, and programs related to Justice, Equity, Diversity, and Inclusion
- Serve as a leader and mentor to other faculty, and member of the College Council
- Chair the CENG JEDI and Recruitment Committees
- 75% appointment, 1-2 year rotating position
- Funded through the Dean's Corporate Innovation Fund

FACULTY ADVISING SCHOLAR

Building Relationships and Closing Gaps

- Engage in collaborative research projects with the Engineering Student Services (ESS) professional advising staff, increase advising capacity within ESS, and serve as a liaison between the departments and ESS to carry the mission of student success, inclusion and retention forward.
- Faculty proposed projects in consultation with ESS
- Two positions, 33-50% appointment, 1-2 year rotating position
- Funded through the Dean's Corporate Innovation Fund



QUESTIONS?

- Chat questions
- Any other questions



RECHARGE BREAK



MEP UPDATES

10:50 – 11:25 a.m.



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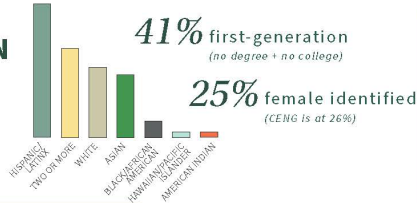
COLLEGE OF ENGINEERING

2020-2021: MEP'S YEAR AT A GLANCE

MEP STUDENT BREAKDOWN

2,206
total MEP students

5,866
total CENG students



DURING 2020-2021...

60% +4% increase
of students interacted with
MEP/ESS virtually*

799
appointments
(2019-2020: 653)



616
drop-ins
(2019-2020: 876)

3,464
emails
(2019-2020: 1,663)



AVERAGE FALL 2020 CPSLO CUMULATIVE GPA: 3.17

*Interactions include fall, winter, and spring until 4/27/21

**MEP demographic calculations based on 2,054 students

MEP STUDENT SUPPORT during COVID-19

\$45,152
amount awarded through
Cal Poly Cares

Retention outreach to



153

MEP students who are
not enrolled or taking
time off

\$65,950
amount awarded through
MEP and Industry Scholarships

FALL 2020

Virtual Networking Event

Companies

12

Conversations

136



Students in attendance

77

WINTER 2021

Flash Chats

Companies

9

Conversations

82



Students in attendance

55

SPRING 2021

Optimizing Your Summer Series



Students in attendance

30

mep.calpoly.edu | 805-756-1433 | Building 40, Multicultural Engineering Program



2020-2021: MEP EVENTS

FALL 2020: Virtual Networking Event

- **Format:** Industry Panel & Networking Breakout Sessions
- Opportunity for students to hear from companies about job searching during the pandemic and talk to company reps in a smaller environment than the Career Fair

WINTER 2021: MEP Flash Chats Series

- **Format:** Networking in a Flash Workshop + Conversations with Industry
- **Part 1:** Learn about networking tips and informational interviewing from Career Services
- **Part 2:** Opportunity to connect with a supportive industry representative about anything that's related to a student's professional journey
- **Sample Topics:** Internship Search, Grad School, Networking, Professional Life

SPRING 2021: Optimizing your Summer 2021 Series

- **Format:** Next Steps Career Planning with MEP & Career Services + Summer Courses Drop-ins
- **Part 1:** Students met one-on-one with an MEP advisor or Career Counselor to help identify career goals and plans
- **Part 2:** Students discussed summer course plans either at Cal Poly or at a community college



MEP PROGRAM REVIEW

Why now?

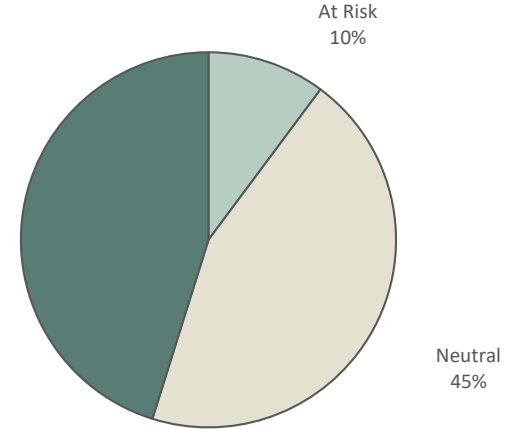
- MEP Team wanted to ensure that our time is being used in the most impactful way.

Program review process

- SWOT Analysis with MEP Team
- Analysis of current population – who is at risk of not graduating?
- Focus group
- MEP-wide survey
- Benchmarking with other campus programs

Hopes for the Program Review Process

- Time is used strategically
- Want ability to serve students that are at risk of not graduating and pair down services available to students that may be overserved currently

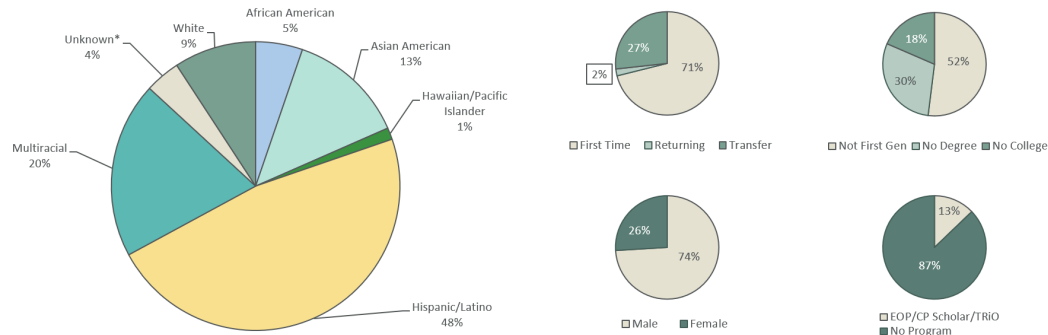


Out of the risk factors identified:

- 118 were at risk
- 517 were neutral
- 523 were seen as successful with a CPSLO GPA of ≥ 3.000

MEP PROGRAM REVIEW - AT RISK ANALYSIS

AT RISK STUDENT DEMOGRAPHICS



Source: Cal Poly Scholars data provided by Cal Poly Scholars office through an Adhoc report ran on 11/18/20; EOP data provided by EOP office on 4.23.21 representing Winter 2021 students

1

Analysis Findings

Majority of at risk students in MEP are URM.

2

87% of our “at risk” students are not currently being served by another similar program at Cal Poly.

QUESTIONS?

- Chat questions
- Any other questions



MEP PROGRAM REVIEW: INDUSTRY MENTORSHIP ACTIVITY

Question: What could industry mentorship with MEP students look like?

1

Click the Padlet link in the chat.

2

Share any ideas that come to mind. No idea is off limits – we truly want this to be a brainstorming opportunity!

3

Let's come together to review common themes.

4

The MEP Team will use these suggestions in the program review process.



QUESTIONS?

- Chat questions
- Any other questions



NSPE & SHPE UPDATES

11:25 – 11:45 a.m.



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NATIONAL SOCIETY OF BLACK ENGINEERS (NSBE)

2021 Vision: “to support present-day Cal Poly students academically and professionally by leveraging our Black alumni of the past, all while cultivating culturally responsible engineers for the future.”



National Society of Black Engineers

Total paid chapter members (paid national members):

31 (24)

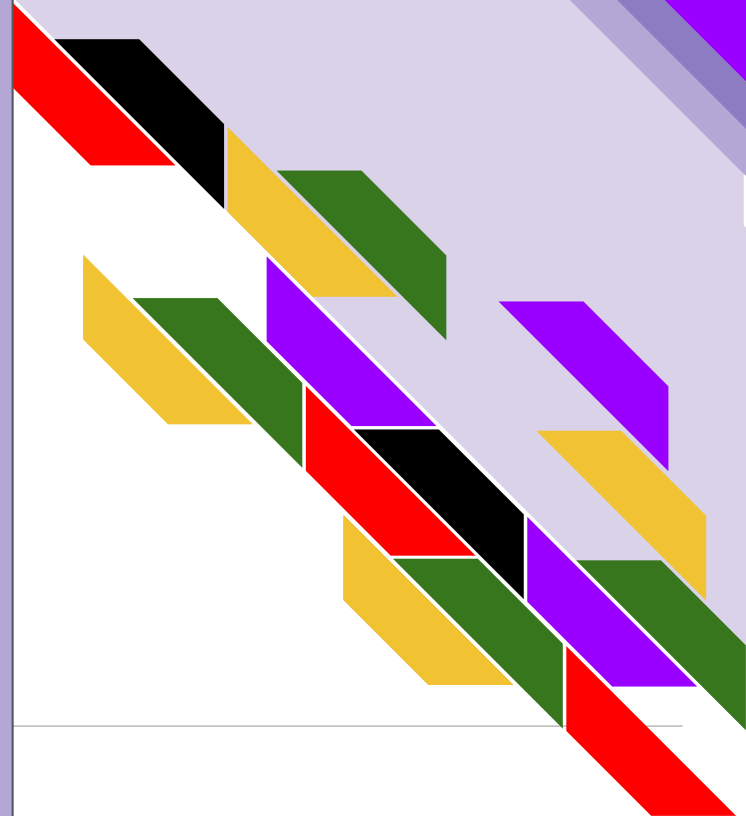
Average attendance of virtual/streamed general body meetings:

12

Dollars distributed to 23 paid members through covid-19 relief grants:

\$6,400

STATS





HONORS

National Society of Black Engineers

Certificate of Recognition

We hereby present

California State University-San Luis Obispo

with this certificate acknowledging your achievement and contribution as the Small National Chapter of the Year for the National Society of Black Engineers (NSBE).

Awarded on April 15, 2021

Jocelyn Jackson
National Chairperson 2019-2021

Tamia Middleton
National Programs Chairperson 2020-2021



NSBE's mission is to increase the number of culturally responsible Black engineers who excel academically, succeed professionally and positively impact the community.

Cal Poly NSBE has also received the Region VI (West Coast) Chapter of the Year Award **three years in a row!!!**

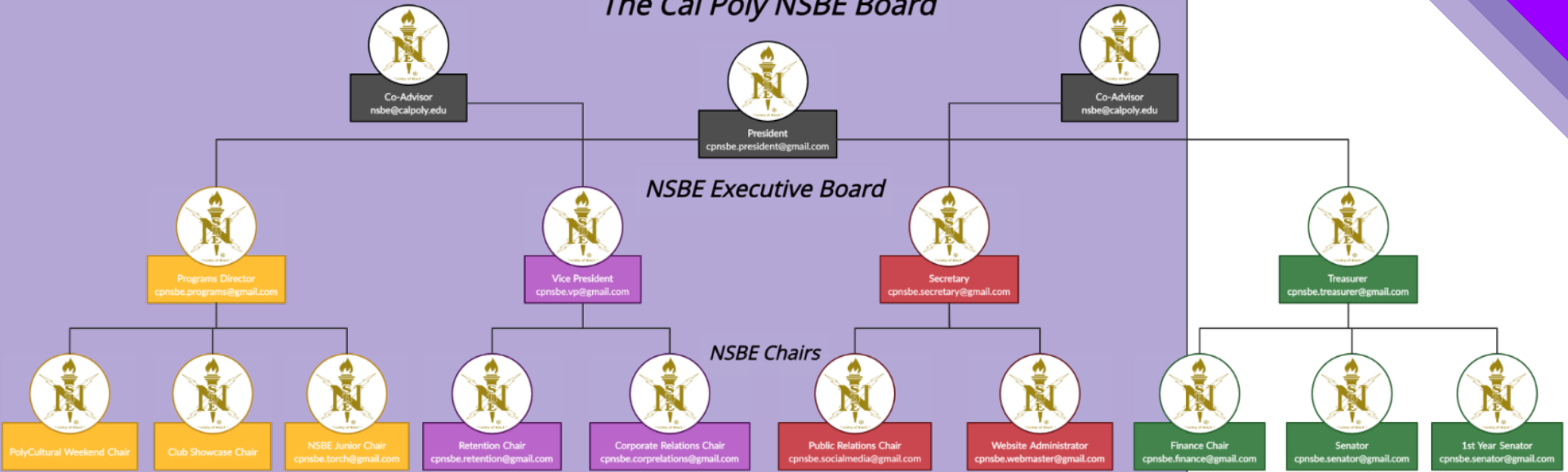
2020-21 GOALS & RESULTS

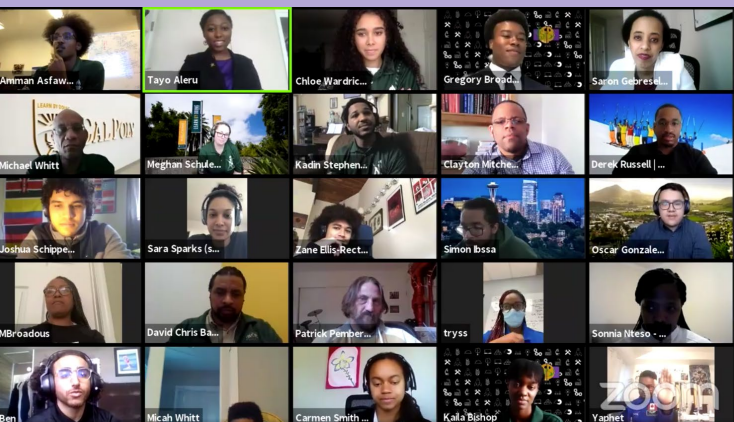


- Goal: Win National Chapter of the Year
 - **Result: Recognized as Small National Chapter of the Year**
- Goal: Maintain average chapter GPA of 3.0
 - **Result: 2.99 GPA (fall & winter)**
- Goal: Live broadcast all chapter meetings
 - **Result: All meetings live streamed & archived on Facebook**
- Goal: Recruit 10 new paid chapter members
 - **Result: Recruited 5 new paid chapter members**
- Goal: Implement new scholarships
 - **Result: Established a NSBE Jr. cash scholarship for local Black youth**
- Goal: Charter a NSBE Jr. Chapter in SLO County
 - **Result: Established relationships with local youth; no charter yet**
- Goal: Host at least one Cal Poly NSBE alumni event
 - **Result: Hosted 10 alumni guest speakers, including historic event with orbiting astronaut, Victor Glover**



The Cal Poly NSBE Board





QUESTIONS?

- Chat questions
- Any other questions



CAL POLY SHPE: 2020-2021 HIGHLIGHTS



88 paid SHPE members

13 professional development events with industry

Regional Leadership Development Conference (25 members)

- Received Blue Chip Award

National Convention (43 members)

- Member won SHPE National Convention Science Symposium award for their research
- 60% received an interview
- 2 members received scholarships



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CAL POLY SHPE: 2021-2022 GOALS

Send members to RLDC (30+) and National Convention (45+)

Continue collaborating with industry members and sponsors

Develop strong committees for leadership opportunities and new events

Re-establish outreach programs and SHPE Jr. membership

Focus on academics and raise overall GPA



CAL POLY SHPE: INDUSTRY

Huge thank you to all our sponsors and the companies that support us this past year!

Below are some ways you can continue to support us:

- Attend general meetings, workshops, mock interviews, and information sessions
- Host company tours
- Join and help out with our outreach events
- Sponsor scholarships and design competitions
- Monetary donations
- Attend our end-of-year banquet



QUESTIONS?

- Chat questions
- Any other questions



FUNDING INITIATIVES & SAVE THE DATES FOR 2021-2022

11:45 – 11:55 a.m.



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2021 - 2022 EVENT SAVE THE DATES: TBD!

We are still waiting on guidance from Cal Poly regarding large events. We are planning on hosting our MEP Networking BBQ in person or virtually – details and date are TBD!



MEP FUNDING INITIATIVES: 2021-2022

Our team could not provide the services and programs that we do without generous contributions from industry. We really appreciate the support!



QUESTIONS?

- Chat questions
- Any other questions



THANK YOU!

- Meghan Schuler-Jones – mcschule@calpoly.edu
- Candy Janiam – gjaniam@calpoly.edu
- Kim Marsalek – kmarsale@calpoly.edu
- Katie McGuire – kmmcguir@calpoly.edu
- Nadine Spingola-Hutton – nspingol@calpoly.edu

