



## **MISSION**

To foster an inclusive and welcoming community, increase retention and graduation rates, and promote a sustainable culture of academic excellence among all engineering students at UC San Diego.

## VISION

To provide engineering students with academic support and social engagement that enhances values of diversity for a global community.

## **GOALS**

- Increase retention and graduation rates among our diverse engineering student population
- Provide student-centered services that promote academic success
- Foster a supportive and inclusive environment for all engineering students
- Develop engineering leaders who are civic-minded

#### **BREAKFAST WITH THE DEANS**



#### **ENGINEERING OVERNIGHT PROGRAM**



TRITON DAY



# **HIGHLIGHTS 2011-2016**

#### **IDEA SCHOLARS PROGRAM**

Started in 2011 with 22 freshmen from URM (African-Americans, Hispanics and Native American) and 1st generation student populations. Now in 2016, we have 200 students in this program.

#### **CURRENT DATA FOR 2011 FRESHMEN:**

68% of IDEA Scholars graduated from JSOE compared to 63% of non-IDEA Scholars.

60% of URM IDEA Scholars graduated from JSOE compared to 39% of non IDEA URM.

NOTE: average graduation rate of URM students at JSOE by June 2010, just before the IDEA Center was created, was 33.5%

64% of 1st generation IDEA Scholars graduated from JSOE compared to 56% of non-IDEA 1st generation students.

# FRESHMAN SUMMER PRE-ENGINEERING PROGRAM

All IDEA Scholars attended the Freshman Summer Pre-Engineering Program from 2011-2015 to help them transition from high school to college by building awareness of relevant campus programs and resources, foster community and support among IDEA Scholars, and prepare them academically for the rigor of engineering studies.

# TRANSFER SUMMER PRE-ENGINEERING PROGRAM

Started in 2012 to help transfer students from URM and 1st generation populations transition from community college to UCSD by building awareness of relevant campus programs and resources, foster community and support among transfer students, and prepare them academically for the rigor of engineering studies.

#### JACOBS UNDERGRADUATE MENTORING PROGRAM

Started in 2011 with 28 graduate mentors and 117 undergraduate mentees. In 2016, we had 50 graduate mentors and 275 undergraduate mentees. To date, we have served a total of 1,150 undergraduate students, ,who are predominantly from URM and 1st generation student populations.

The goal of JUMP is to pair underclassmen with upperclassmen. Up to 7 undergraduate students are then matched with a graduate student, forming a mentor group, all within the same fields of study. Mentorship and positive role models at multiple levels, helping new students transition to UCSD, are encouraged. Seniors are prepared for graduate school and the workforce by providing networking, professional and career development.

#### **COMMUNITY & STUDENT LEADERSHIP**

The center implemented Engineering Leaders Workshops for NSBE, SHPE, SWE and TESC in Fall 2015. The purpose is to promote cross-collaboration among all student organizations and to provide successful leadership development.

The Professional Evening with Industry (PEI) is an intimate diversity engineering banquet and career fair planned by NSBE, SHPE, and SWE. This annual event continues to grow and improve each year.

The center has launched an oSTEM student chapter at UC San Diego in 2017. Out in Science, Technology, Engineering, and Mathematics (oSTEM) is a national society dedicated to educating and fostering leadership for LGBTQA communities, in the STEM fields.

# **WELCOME WEEK 2016!**

IDEA SCHOLARS BIG/LITTLE MEETING







## **ENGINEERING COMMUNITY WELCOME**







**OPEN HOUSE** 







**ENGINEERS** ON THE **GREEN** 



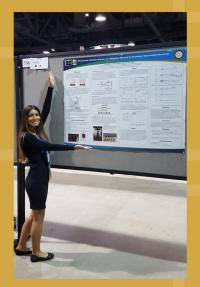






# SACNAS 2016 Long Beach, CA

2016 SACNAS is organized by Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS). For over 40 years SACNAS has been the leading multicultural and multidisciplinary STEM diversity organization in the country. SACNAS 2016 included three days of cutting-edge science, training, mentoring, and cultural activities for students and scientists at all levels.



#### VIVIANA VELA | Structural Engineering | Senior

#### How did you get involved with SACNAS?

I joined the UCSD Chapter this past summer and applied to present my research while I was doing summer research through the McNair program.

#### What does presenting at SACNAS mean to you?

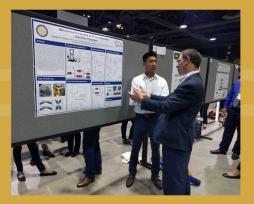
Being selected and given the opportunity to present at SACNAS is something I aspire too. Having the chance to talk to other professionals about the work you are doing on campus is exciting. I believe the opportunity to present research on a national level would help make me a stronger applicant for graduate school and that is why it meant a lot to me to be selected.

#### What was the experience like for you?

Presenting in SACNAS was one of the most valuable experiences. I had fun and at the same time learned a lot from all the events, workshops, and exhibits they had throughout the conference.

#### What did you learn?

I gained experience and knowledge about presenting research through the poster presentation session. The professional development workshops allowed me to obtain more information about internships, how to apply to graduate school, scholarships, and fellowships. In the recruitment fair I learned about available graduate opportunities as well as specific graduate admissions requirements and programs.



#### **ANDREW CHIANG | Chemical Engineering | Senior**

#### How did you get involved with SACNAS?

I heard about SACNAS through the UC LEADS program, which I am currently a part of.

#### What does presenting at SACNAS mean to you?

Presenting at SACNAS has been a wonderful experience because I had the opportunity to explore future career options through the conversations that I had or the introspection as I presented my research.

#### What was the experience like for you?

Presenting my research at SACNAS for the second time, I have learned a lot more about my research and my passions towards the subject I am interested in. Most of the conversations I had during the conference eventually converged towards my motivation statement and why my specific research study was appealing to me. They challenged me to really consider where my passion lies within and that is the most precious thing that I took out of the conference.

# PROFESSIONAL EVENING WITH INDUSTRY 2016 Presented by the UC San Diego chapters of NSBE, SHPE, and SWE

The UC San Diego chapters of NSBE, SHPE, and SWE hosted their 8th annual Professional Evening with Industry on November 7, 2016. Twenty five engineering companies participated this year to meet and recruit our talented diverse engineering student leaders for potential jobs and internships.





Andrew Chiang Chemical Engineering Senior, IDEA Scholar

# SPOTLIGHT CORNER

"I was able to understand how my knowledge could be applied to the biomedical field and truly evaluate the concept of consilience with personal experiences."

#### **Conference Attended**

Louis Stokes Midwest Conference of Excellence (LSMCE)

#### What was your involvement?

I presented my research on mechanical properties of semiconducting polymers. Primarily discussed my developed method to determine yield point of thin-film polymers more cost effectively, as well as my study on the effect of fatigue on semiconducting polymers.

#### How was your experience?

The experience was amazing. Not only were the poster sessions great, all the other professional networking opportunities were also amazing in helping me make new friends who could be potential colleagues as academic scholars. I won first place for student poster award along with \$500.

#### Conference Attended

Annual Biomedical Research Conference for Minority Students (ABRCMS)

#### What was your involvement?

On top of presenting my research, I attended the exhibit halls to talk to admission officers as well as various graduate students from different graduate programs.

#### How was your experience?

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ABRCMS was special because of its primary focus in presenting various kinds of biomedical research. Although my field is materials science, through conversations with other scholars and self-evaluation, I was able to understand how my knowledge could be applied to the biomedical field and truly evaluate the concept of consilience with personal experiences. I was able to travel around Tampa, Florida, to visit campuses such as University of Tampa as well as University of South Florida. It was a fascinating experience because I have never been to universities in Florida.

# GET CONNECTED! information & knowledge is key!

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We provide all things engineering - from job openings to technical workshops Follow us on our **Facebook** page *ucsdidea* for the latest news and opportunities We're even on Instagram, Twitter, and Tumblr!

Chanel Fraikin, Aerospace Engineering Arielle Yoo, Bioengineering: Bioinformatics Joshua Wang, NanoEngineering

## SPECIAL CONGRATS TO ...

Derek Wong, Bioengineering: Biotechnology

A 2nd year IDEA Scholar who received a 4.0 GPA 3 quarters in a row! Keep it up!

# SHPE National Conference Awards

The UC San Diego chapter of the Society of Hispanic Professional Engineers received three major awards from the 2016 National Conference, which was held in Seattle, Washington. Congratulations SHPE UC San Diego!



#### **Regional Outstanding Chapter**

This award is given to the #1 student chapter of each of the 7 SHPE regions. SHPE UC San Diego won the award for Region 2 (Southern California, Arizona, Nevada, and Hawaii).



#### **Outstanding Professional Development**

This award is given to the chapter that demonstrated the most outstanding professional development nationally.



## Future Leader of SHPE

Jose Ramirez was awarded the "Future Leader of SHPE" award, given to one undergraduate student, who has shown "outstanding leadership and commitment to SHPE. Jose is the current President for SHPE UC San Diego.

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# Be a Leader

Become a Host for the Engineering Overnight Program, April 6-8th, 2017

### Why be a host?

- Serve as an ambassador to the Jacobs School of Engineering
- Gain meaningful leadership experience
- Help mentor future engineering students
- Free food for hosts!

More information at: <a href="http://spaces.ucsd.edu/?page\_id=724">http://spaces.ucsd.edu/?page\_id=724</a>
Applications are due by January 16th, 2017











## UC San Diego JACOBS SCHOOL OF ENGINEERING

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If you would like to give to the IDEA Student Center Excellence Fund

now) visit giveto.ucsd.edu

















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