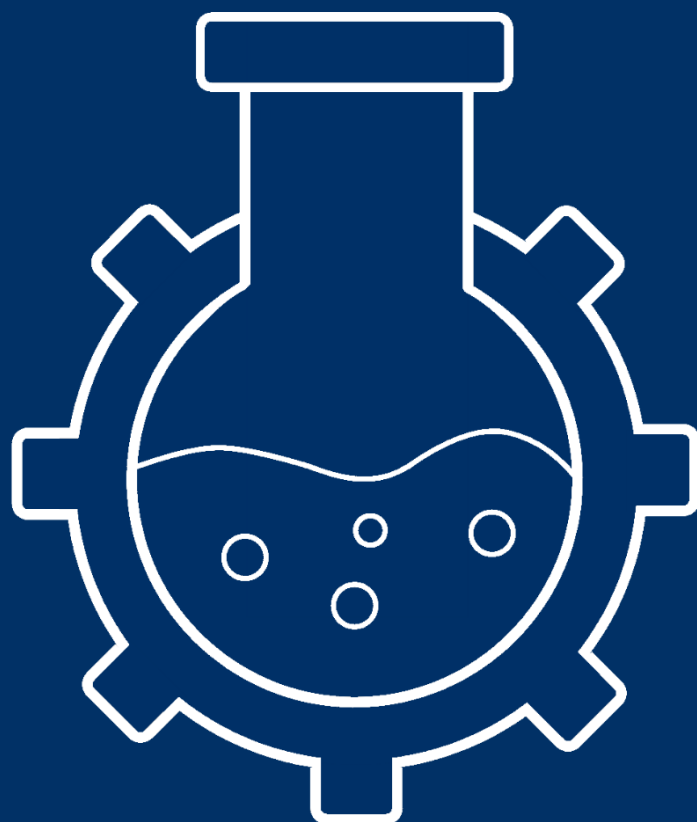

BIOMEDICAL ENGINEERING SOCIETY

STUDENT CHAPTER
UNIVERSITY OF CALIFORNIA, RIVERSIDE



CHAPTER DEVELOPMENT REPORT 2020-2021

PRESIDENT

CHRISTOPHER RICO
CRICO006@UCR.EDU

VICE PRESIDENT

ALEXA ORTIZ
AOTRI046@UCR.EDU

OUR BMES CHAPTER PAVES THE WAY FOR STUDENTS TO GROW ACADEMICALLY, PROFESSIONALLY, AND SOCIALLY THROUGH OUR OUTREACH, GUEST SPEAKER TALKS, TECHNICAL WORKSHOP VIDEOS, AND SOCIAL EVENTS. WE HOPE TO PROVIDE AN ATMOSPHERE OF STUDENTS DEDICATED TO THEIR MUTUAL PERSONAL DEVELOPMENT FOR THE BENEFIT OF THE FIELD OF MEDICINE AS WE STRIVE FOR GREATER PURSUITS.

Dear Award Selection Committee:

The Biomedical Engineering Society (BMES) Student Chapter at UCR is a professional development organization invested in our member's transition into and out of university into a range of pursuits, including but not limited to professional degrees and careers in industry. Bioengineering is a broad field and BMES strives to expose students to the many different paths that bioengineers can pursue. To achieve the goal of helping undergraduates explore their interests as well as gain professional skills along the way, we host guest speakers from companies such as Medtronic and Edwards Lifesciences, which allows students to engage with leading medical device and biotechnology companies and learn from and network with engineering professionals regarding their work and responsibilities. BMES organized discussion panels for students to gain insight from others with research, internship and graduate school experiences. Workshops in collaboration with the UCR Career Center and other professional student organizations are also held to advance undergraduate professional development.

Student development is further advanced by cultivating technical development. We provide students with the opportunity to develop their technical skills by hosting workshops to provide students with the resources necessary to remain competitive in both their coursework and in their future careers. This year, we have revived our YouTube channel with a host of technical workshops including SolidWorks, Arduino, MATLAB, COMSOL, C++, Java and the ongoing bionic arm project. BMES hosts BioHack, an annual healthcare and medically-based hackathon open to everyone. This year's BioHack is a 24-hour hackathon that grants students the opportunity to create solutions for significant medical problems through teamwork and collaboration. BioHack employs substantial faculty and professional involvement to volunteer and direct workshops and to serve as project judges.

BMES boasts numerous outreach and inter-organizational collaborations with other organizations on campus. The Bioengineering Mentorship Program is a collaboration between our organization and the Bioengineering Interdepartmental Graduate Student Association (BIG-GSA) with strong support from the Department of Bioengineering. Since its establishment in 2013, the Bioengineering Mentorship Program works to build a cohesive interdepartmental community within the Department of Bioengineering by connecting undergraduate students with graduate students and undergraduate seniors who serve as mentors. Through the leadership of their mentors, undergraduate students are provided with guidance on academic and professional milestones and opportunities as well as personal advice.

BMES outreach events promote higher education, interest in engineering, and awareness of technology to students at local high schools. One notable outreach event is Bioengineering Day where high school students are normally invited on campus and are presented with interactive demonstrations, compelling lectures, and workshops sessions. This year, Bioengineering Day was held entirely online while still successfully maintaining the goals of outreach through demonstrations, short lectures and workshops.

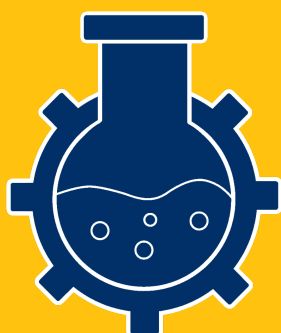
This Chapter Development Report provides a comprehensive look into BMES Student Chapter at UCR's activities throughout the 2020-2021 academic year. Our successes in mentorship, outreach, projects, fundraising and membership recruitment were made possible by the work, time and exemplary resilience of our Executive Board tasked with learning how to transition to an online environment in real time. Please take a look at our organization's professional development, leadership development, club development, outreach and community service events as detailed in the following report. Thank you for your consideration.

Kindest regards,
Christopher Rico
President, 2020-2021



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ADMINISTRATIVE REPORT

Information pertaining to our officers and advisor is provided to ensure that communication between BMES National and our student chapter are up to date.

Club Information:

Address: Winston Chung Hall

Website: <https://bmesucr.weebly.com/>

Email: bmesatucr@gmail.com

Club Advisor:

Hyle Park

Associate Professor of Bioengineering

(951) 827-5188

hylepark@engr.ucr.edu

Membership:

2020-2021 Total Student Members: 120

Graduating Members: 33

Active Members: 110

National members: 12

Funding:

Funding Sources are listed with allocations below:

1. Corporate Sponsor: \$0.00
2. Donations: \$0.00
3. Dean's Innovation Fund (Match Fund): \$1,179.75
4. Associated Students of UCR: \$1,608.00
5. Dean's Office Funding: \$0.00
6. Fundraising: \$1,254.00
7. Membership: \$0.00



CLUB OFFICERS

2020-2021 Academic Year

Position	Name	Major	Grade Level	Email
President	Christopher Rico	Bioengineering	Fourth Year Undergraduate	crico006@ucr.edu
Vice President	Alleza Ortiz	Bioengineering	Fourth Year Undergraduate	aorti046@ucr.edu
Treasurer	Brandon To	Bioengineering	Second Year Undergraduate	bto013@ucr.edu
Secretary	Queenie Xu	Bioengineering	Second Year Undergraduate	qxu047@ucr.edu
Professional Development	Cammy Ngo	Bioengineering	Third Year Undergraduate	cngo022@ucr.edu
Internal Outreach	Omar O'Mari	Bioengineering	Fourth Year Undergraduate	oomar001@ucr.edu
External Outreach	Kylie Alcantar	Bioengineering	Second Year Undergraduate	kalca010@ucr.edu
Social & Fundraising Chair	Brittany Gilbert	Bioengineering	Fourth Year Undergraduate	bgilb001@ucr.edu
Marketing & Recruitment	Julya Mestas	Bioengineering	Third Year Undergraduate	jmest001@ucr.edu
Project Specialist Lead	Himani Thakkar	Bioengineering	Fourth Year Undergraduate	hthak003@ucr.edu
Technical Development	David Villafuerte	Bioengineering	Fourth Year Undergraduate	dvill031@ucr.edu
Webmaster	Rachel Itow	Bioengineering	Second Year Undergraduate	ritow001@ucr.edu



2021-2022 Academic Year

Position	Name	Major	Grade Level	Email
President	Cammy Ngo	Bioengineering	Fourth Year Undergraduate	cngo022@ucr.edu
Vice President	Queenie Xu	Bioengineering	Third Year Undergraduate	qxu047@ucr.edu
Treasurer	Madhumitha Senthilkumar	Bioengineering	Fifth Year Undergraduate	msent001@ucr.edu
Secretary	Rachel Itow	Bioengineering	Third Year Undergraduate	ritow001@ucr.edu
Professional Development	Julya Mestas	Bioengineering	Fourth Year Undergraduate	jmest001@ucr.edu
Internal Outreach	Kylie Alcantar	Bioengineering	Third Year Undergraduate	kalca010@ucr.edu
External Outreach	Juana Arratia	Bioengineering	Fourth Year Undergraduate	jarra005@ucr.edu
Social & Fundraising Chair	Diane Shan	Computer Science	Third Year Undergraduate	dshan017@ucr.edu
Marketing & Recruitment	Kimberly Dao	Computer Science*	Third Year Undergraduate	tdao017@ucr.edu
Project Specialist Lead	Dev Bhatt	Bioengineering	Third Year Undergraduate	dbhat015@ucr.edu
Technical Development	Natasha Brinkley	Bioengineering	Third Year Undergraduate	nbrin004@ucr.edu
Webmaster	Shreeya Prasad	Bioengineering	Fourth Year Undergraduate	spras009@ucr.edu

*Switching to Bioengineering Major



TREASURER'S REPORT

REVENUE	AMOUNT
Award Detail	
Dean's Innovation Fund (Match)	\$1,179.75
ASUCR	\$1,608.00
Subtotal	\$2,785.75
Fundraising	
Venmo Bingo Boards	\$62.00
Mentorship Fundraiser	\$502.00
Subtotal	\$564.00
Membership/Other	
Free Membership for 2020-2021	\$0.00
T-Shirts and Stickers	\$310.00
Stoles	\$385.00
Subtotal	\$690.00
Total Revenue	\$4039.75
EXPENSES	AMOUNT
Leadership Development	
Biweekly Officer Meetings	\$0.00
Subtotal	\$0.00
Academic Development	
BIEN Mentorship Program	\$0.00
Projects Equipment	\$259.17
BioHack 2021	\$0.00
Subtotal	\$259.17
Professional Development	
General Meetings	\$0.00
Guest Speaker Gifts*	\$70.28
Faculty Gift*	\$45.53
Subtotal	\$115.64



Outreach and Community Service	
BIEN Day	\$0.00
BioHack 2021	\$0.00
Subtotal	\$0.00
Additional Expenditures	
BMES Gifts for Guest Speakers*	\$66.46
BMES Polos (for the officers)*	\$261.00
T-Shirt Order: (Reimbursed by ASUCR)	\$900.00
T-Shirt Order (Paid for by BMES)	\$29.81
1 month prepaid phone (To set up Venmo)*	\$35.30
Miscellaneous Supplies*	\$16.16
Stoles	\$337.15
Shipping	\$287.46
Subtotal	\$1,933.34
Total Expenses	\$3033.43
Final Account Balances	AMOUNT
ASUCR (Expires June 2021)	\$708.00
BCOE Account (Dean's Innovation Fund)	\$1,179.75
Total (2020-2021)	\$1,887.75

* Taken from BMES Off-campus Bank Account funds



CHAPTER ACTIVITIES

This year's circumstances were unprecedented with the new online only format, we had to adapt quickly to accommodate this new platform. We hosted multiple events and interacted with our members on various online platforms. Events in multiple categories were held every quarter to ensure that our members had the opportunity to attend and experience what this student chapter has to offer.

CLUB GOALS

Goal 1: To efficiently and expeditiously transition all event planning and activities online

The global pandemic galvanized this year's board to be innovative and steadfast in our efforts to continue the vision of promoting and leading the academic and professional development of our members by leading online workshops, discussions, social and professional events uninterrupted by the transition to remote learning.

Goal 2: To promote BMES and bioengineering within the Bourns College of Engineering while increasing our online presence

In order to promote BMES and the department of bioengineering, this year's board focused on increasing participation and collaboration from faculty members and BCOE organizations, respectively. Collaborations with other organizations mutually benefit both clubs and further exposes students to BCOE.

Goal 3: To raise more funds for BMES activities and events

In order to raise more funds for BMES activities and events, the board looked into social media fundraisers, selling merchandise and ardently promoting the Dean's Innovation Fund.



CALENDAR OF EVENTS AND ACTIVITIES

CATEGORY KEY

Professional Development	PD
Leadership Development	LD
Academic Development	AD
Outreach/Community Service	OCS
Club Development	CD

Event	Month	Day	Category
Summer 2020			
BIEN Freshman Peer Mentoring/Advice Session	September	16	AD
BMES Summer Kahoot! Social with Faculty	September	18	CD
BMES Tea Time with Faculty	September	23	CD
Tabling/Recruitment on GatherTown	September	24	CD
Fall 2020			
Skribbl.io Social (Fall first General Meeting)	October	12	CD
BMES Project Vlog 1 - Unboxing Video	October	15	AD
BMES Project Vlog 2 - Unboxing Video	October	18	AD
Alumni Q&A Panel	October	26	PD
Instagram Story Bingo Board Fundraiser / Match Challenge	October		CD
COMSOL Tutorial Introduction (Part 1)	November	7	AD
KGI - AI in Medical Devices	November	9	PD
Mentorship Program Ice Breaker	November	12	CD
BMES Project Video (Part 1)	November	13	AD
BCOE Club Info Session	November	20	AD
BioHack Info Session	November	23	OCS
Instagram Story Bingo Board Fundraiser: Thanksgiving Edition	November		CD
COMSOL Transport of Diluted Species Workshop (Part 1)	December	3	AD
COMSOL Transport of Diluted Species Workshop (Part 2)	December	3	AD
Study Break with BMES: Tea Time with Pandas	December	7	CD
Instagram Story Bingo Board Fundraiser: Holiday Season Edition	December		CD
Winter 2021			
MATLAB Tutorial Workshop	January	4	AD
Intro to Java (Part 1)	January	4	AD
Intro to Java (Part 2)	January	4	AD
HimaniProject2	January	4	AD
Himani Bionic Final	January	10	AD



Medtronic Speaker	January	21	PD
Student Engagement Session (Mentorship Program)	January	22	AD
Resume/Cover Letter Workshop	January	25	PD
Instagram Story Bingo Board Fundraiser: New Year's Edition	January		CD
Instagram Story Bingo Board Fundraiser: Valentine's Edition	February		CD
Edwards Lifesciences Speaker Panel	February	8	PD
Virtual Science Night - Ramona High School	February	10	OCS
BMES Prosthetic Hand Project (Part 1)	February	12	AD
Bioengineering Paths Panel	February	22	PD
BMES T-Shirt Fundraiser (Ongoing)	February	24	CD
Intra-Club Social (Mentorship Program)	February	26	CD
Bioengineering (BIEN) Day	February	27	OCS
Spring 2021			
Chill with Us! (BMES x TBP social collab)	March	5	CD
Winter Fifth General Meeting Kahoot! Social with Faculty	March	8	CD
BMES Sticker Fundraiser (Ongoing)	March	8	CD
Intro to C++	April	1	AD
Project Design Contest	April	9	AD
KGI Graduate and Atara Bio Speaker	April	9	PD
Project Reaction Video	April	14	AD
Backyard.co Social	April	16	CD
Internal Outreach Fundraising Event	April	17	CD
"How to Build: Heart Rate Monitor with BMES @ UCR" Video	April	17	AD
Project Showcase (General Meeting 2)	April	19	AD
CV/Resume Workshop	April	20	PD
SolidWorks: Introduction and Basic Example	April	26	AD
BMES Graduation Stole Sale	April	28	CD
Tea Time Social: Bring your pet and join us for a cup of tea	April	30	CD
Officer Senior Panel	May	3	PD
Receiver Building Final	May	6	AD
Virtual Science Night - John W. North High School	May	11	CD
Kahoot! Social with Faculty	May	14	CD
BioHack 2021	May	15-16	OCS
How to BioHack Workshop @ BioHack 2021	May	15	OCS
Edwards Lifesciences Panel - Different Engineering Positions	May	17	PD



SolidWorks: Basic Example 2	May	18	AD
SolidWorks: Basic Example 3	May	18	AD
"What is college like? In-person vs. Online" Video	May	22	OCS
Study Jam with BMES	May	27	CD
End of the Year Social - Mentorship Program	May	30	CD
Continuous			
Bimonthly Officer Meetings	ALL		LD
Monthly Officer Socials	ALL		LD

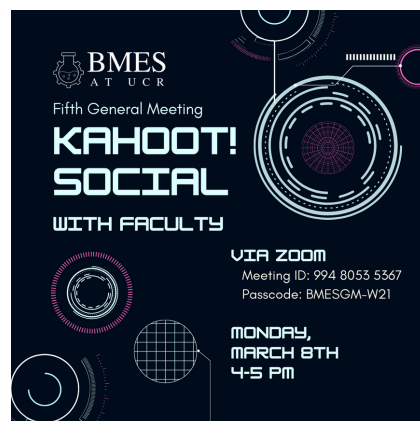


SOCIAL OR OTHER ACTIVITIES

Club development events raise funds for the organization so that we may continue to host a variety of events for our members, as well as improve officer-member relations to create a stronger bond among BMES or between BMES and other BCOE organizations. These events consist of social events, Instagram Story Bingo Board fundraisers and BMES merchandise sales.

SUMMARY OF EVENTS:

1. BMES Summer Kahoot! Social with Faculty	September 18, 2020
2. BMES Tea Time with Faculty	September 23, 2020
3. Tabling/Recruitment on GatherTown	September 24 & 25, 2020
4. Skribbl.io Social (Fall first General Meeting)	October 12, 2020
5. Instagram Story Bingo Board Fundraiser / BCOE Match Challenge	October 2020
6. Mentorship Program Ice Breaker	November 12, 2020
7. Instagram Story Bingo Board Fundraiser: Thanksgiving Edition	November 2020
8. Study Break with BMES: Tea Time with Pandas	December 7, 2020
9. Instagram Story Bingo Board Fundraiser: Holiday Season Edition	December 2020
10. Instagram Story Bingo Board Fundraiser: New Year's Edition	January 2021
11. Instagram Story Bingo Board Fundraiser: Valentine's Day Edition	February 2021
12. BMES T-Shirt Fundraiser (Ongoing)	February 24, 2021
13. Intra-Club Social (Mentorship Program)	February 26, 2021
14. Chill with Us! (BMES x TBP social collab)	March 5, 2021
15. Winter Fifth General Meeting Kahoot! Social with Faculty	March 8, 2021
16. BMES Sticker Fundraiser (Ongoing)	March 8, 2021
17. Backyard.co Social	April 16, 2021
18. Internal Outreach Fundraising Event	April 17 & 24, 2021
19. BMES Graduation Stole Sale	April 28 - May 7, 2021
20. Tea Time Social: Bring your pet and join us for a cup of tea	April 30, 2021
21. Kahoot! Social with Faculty	May 14, 2021
22. Study Jam with BMES	May 27, 2021
23. End of the Year Social - Mentorship Program	May 30, 2021



BMES Summer Kahoot! Social with Faculty

Date of Activity: 9/18/20

Platform: Zoom, Kahoot!

Purpose of Activity: To bring students and faculty together and have a good time while testing their knowledge.

History of Activity: First time using Kahoot! on Zoom

Number of Participants: 21

Cost of Activity: \$0

Description of Activity: A social event where Emily Nudge, Dr. Grover, Dr. Mckee, and students competed against each other for fun to test who knows BMES/BCOE/UCR best.

Evaluation of Activity: The event was pretty successful. Although the Kahoot! game finished up fairly quickly within our set duration of the social event, we ended up spending the rest of the social just socializing and having incoming freshmen ask any questions to the faculty that they may have had.

BMES Tea Time with Faculty

Date of Activity: 9/23/20

Platform: Zoom

Purpose of Activity: To acquaint students with BIEN faculty.

History of Activity: None

Number of Participants: 33

Cost of Activity: \$0

Description of Activity: An informal social event for students to meet faculty (Emily Nudge, Dr. Robert McKee, Dr. Joshua Morgan, Dr. Xiaoping Hu, Dr. Hyle Park, and Dr. Victor Rodgers) before the school year begins.

Evaluation of Activity: This event was successful. Due to the number of students who participated, we used the "raise hand" feature on Zoom.

Tabling/Recruitment on GatherTown

Date of Activity: 9/24/20 & 9/25/20

Platform: GatherTown

Purpose of Activity: To provide incoming freshmen and transfers with information about the club and answer any general questions about the bioengineering major or other topics that may arise.

History of Activity: None. First time having it online through Gather

Number of Participants: 10

Cost of Activity: \$0

Description of Activity: Students are given the chance to "walk around" the online platform to find various BCOE clubs of interest and interact with club officers to learn more about clubs and their offerings.

Evaluation of Activity: The event was mildly successful. Although slow at times, there were a few students who asked about specific offerings of the club and about general matters such as financial aid and holds (for a COVID-19 module) on their account. Since it was slow, music was played to pass the time- which ended up being enjoyable for students and other club officers alike.



Skribbl.io Social (Fall first General Meeting)

Date of Activity: 10/12/20

Platform: Zoom & Skribbl.io

Purpose of Activity: To welcome new students and returning students back to school and give a brief introduction of BMES, while connecting with peers through a game of skribbl.io.

History of Activity: Have used skribbl.io a few times for socials in the past on Zoom

Number of Participants: 42

Cost of Activity: \$0

Description of Activity: BMES gives a brief introductory slide presentation to incoming and returning students, and then participants are placed into breakout rooms where they play a few rounds of skribbl.io to connect, relax, and have fun with their peers.

Evaluation of Activity: Initially, the event was running smoothly, but then minor and major errors happened. For the minor error, the host of a zoom meeting can't join a breakout room. Thus, the host had to call members in a breakout room back to the main room in order to converse with everyone else. The major error was the fact that once a skribbl.io game room is not fully occupied, it becomes a public room to *anyone*. One of the breakout rooms with 3 participants, including a board member, saw inappropriate messages sent by a stranger in the skribbl.io chat, which led to BMES sending out a formal apology via email to those who may have been offended. This will be the last time we use skribbl.io as a social, not only because of the inappropriate messages, but because it was already used for socials a few times in the past.

Instagram Story Bingo Board Fundraiser / BCOE Match Challenge

Date of Activity: October 2020

Platform: Instagram

Purpose of Activity: To virtually raise money for BMES at UCR in the Match Fund challenge through social media.

History of Activity: BMES has never done Instagram story bingo board fundraisers before since we were able to have physical fundraisers in person

Number of Participants: Unknown amount of participants since there were anonymous people who donated as well.

Cost of Activity: \$0

Money Earned: \$1,179.75

Profit: \$1,179.75

Description of Activity: BMES posts a fundraiser bingo board everyday on our Instagram stories. The board has donation amounts in each panel and the BCOE Match Fund link information is also available on the board. BCOE will match the amount donated up to \$500 with a minimum donation of \$25.

Evaluation of Activity: BMES did not win the BCOE Match challenge, and since there were anonymous donors, it's unclear how many people donated and how much they each donated for BMES. However, a total of \$605 was donated and the total funds available for BMES were \$1,179.75.



Mentorship Program Ice Breaker

Date of Activity: 11/12/20

Platform: Zoom, Kahoot!, Among Us

Purpose of Activity: Mentor and Mentee initial interaction in a safe environment

History of Activity: Annual event

Number of Participants: 23

Cost of Activity: \$0

Description of Activity: Played Kahoot! and Among Us in breakout rooms

Evaluation of Activity: The event went well. There were no technical issues. We played Kahoot! and Among Us. Everyone enjoyed the event so there can be another social like this in the future.

Instagram Story Bingo Board Fundraiser: Thanksgiving Edition

Date of Activity: November 2020

Platform: Instagram

Purpose of Activity: To virtually raise money for BMES at UCR in the Match Fund challenge through social media.

History of Activity: This is BMES's second virtual bingo board fundraiser.

Number of Participants: 6

Cost of Activity: \$0

Money Earned: \$30

Profit: \$30

Description of Activity: BMES posts a fundraiser bingo board everyday on our Instagram stories. The board has donation amounts in each panel and the BMES Venmo account information is also available on the board. Those who donate have the choice of submitting challenge submissions for the entire BMES board or specific officers to complete.

Evaluation of Activity: The bingo board did bring some money in for BMES, so it was pretty successful. However, not much money was brought in for the club.

Study Break with BMES: Tea Time with Pandas

Date of Activity: 12/7/20

Platform: Zoom, Youtube

Purpose of Activity: To give students a study break before finals and just have fun while socializing with each other and watching cute panda videos.

History of Activity: We have never watched iPanda channel on Youtube as a social before

Number of Participants: 18

Cost of Activity: \$0

Description of Activity: BMES shows a series of panda videos through screen sharing from iPanda on YouTube. It's set as a relaxing environment for students to kick back and take a break from studying for final exams.

Evaluation of Activity: The event went well. There were no technical issues that arose, which is good because there were worries prior to the event of what we would do if the video feed lagged. We moved our slide presentation to the end of the meeting since there was really only one slide that required announcements. Overall, both the board and general members enjoyed the event so there can be another social like this in the future.





Instagram Story Bingo Board Fundraiser: Holiday Season Edition

Date of Activity: December 2020

Platform: Instagram

Purpose of Activity: To virtually raise money for BMES at UCR in the Match Fund challenge through social media.

History of Activity: This is BMES's third virtual bingo board fundraiser.

Number of Participants: 2

Cost of Activity: \$0

Money Earned: \$12

Profit: \$12

Description of Activity: BMES posts a fundraiser bingo board everyday on our Instagram stories. The board has donation amounts in each panel and the BMES Venmo account information is also available on the board. Those who donate have the choice of submitting challenge submissions for the entire BMES board or specific officers to complete.

Evaluation of Activity: The bingo board did bring some money in for BMES, so it was pretty successful. However, not much money was brought in for the club.

Instagram Story Bingo Board Fundraiser: New Year's Edition

Date of Activity: January 2021

Platform: Instagram

Purpose of Activity: To virtually raise money for BMES at UCR in the Match Fund challenge through social media.

History of Activity: This is BMES's fourth virtual bingo board fundraiser.

Number of Participants: 0

Cost of Activity: \$0

Money Earned: \$0

Profit: \$0

Description of Activity: BMES posts a fundraiser bingo board everyday on our Instagram stories. The board has donation amounts in each panel and the BMES Venmo account information is also available on the board. Those who donate have the choice of submitting challenge submissions for the entire BMES board or specific officers to complete.

Evaluation of Activity: This bingo board did not bring money in for BMES, so it was not successful.



Instagram Story Bingo Board Fundraiser: Valentine's Day Edition

Date of Activity: February 2021

Platform: Instagram

Purpose of Activity: To virtually raise money for BMES at UCR in the Match Fund challenge through social media.

History of Activity: This is BMES's fourth virtual bingo board fundraiser.

Number of Participants: 2

Cost of Activity: \$0

Money Earned: \$20

Profit: \$20

Description of Activity: BMES posts a fundraiser bingo board everyday on our Instagram stories. The board has donation amounts in each panel and the BMES Venmo account information is also available on the board. Those who donate have the choice of submitting challenge submissions for the entire BMES board or specific officers to complete.

Evaluation of Activity: The bingo board did bring some money in for BMES, so it was pretty successful. However, not much money was brought in for the club.

BMES T-Shirt Fundraiser (ongoing)

Date of Activity: 2/24/21 - Present

Platform: Google Forms

Purpose of Activity: For members to represent and support BMES through purchasing our student-designed shirt!

History of Activity: We have done T-Shirt sales in the past as part of our membership into the club, but due to COVID membership was free so members have the option to purchase a T-shirt if they would like for \$20.

Number of Participants: 12 participants, 15 shirts sold

Cost of Activity: \$929 (\$900 reimbursed by ASUCR)

Money Earned: \$300

Profit: \$271

Description of Activity: Selling 2020-2021 BMES T-shirts that were designed by Brianna Beltran in support of BMES. Purchasers need to fill out a Google Form.

Evaluation of Activity: T-shirt sales went well, and we planned to have our sale end on February 28th 11:59 PM. However, since not many people bought them before the end sale, we still have leftover shirts. We're planning to continue the sale of the extra shirts we still have.



Intra- Club Social (Mentorship Program)

Date of Activity: 2/26/21

Platform: Zoom

Purpose of Activity: To socialize / get to know the other clubs

History of Activity: Have used skribbl.io a few times for socials in the past on Zoom

Number of Participants: 19

Cost of Activity: \$0

Description of Activity: We played a kahoot and then broke apart into multiple groups and played scribble and pictionary.

Evaluation of Activity: The event went well. There were no technical issues. Other clubs took turns being in charge. I think we have a solid relationship with URC, As, ASME and we are starting to build a relationship with Flying Samaritans at UCR, they sent us an email after the event to collaborate with them some more.

Chill with Us! (BMES x TBP social collab)

Date of Activity: 3/5/21

Platform: Zoom, Backyard.co

Purpose of Activity: To give students a study break before finals and just have fun while socializing with each other and playing online games.

History of Activity: First collab with TBP playing backyard.co

Number of Participants: 14

Cost of Activity: \$0

Description of Activity: BMES and TBP play games with students on backyard.co. It's set as a relaxing environment for students to kick back and take a break from studying for final exams.

Evaluation of Activity: First of all, not many students showed up to the social, and I believe only two people from TBP showed up. We didn't start the social until about 15 minutes later. The social itself was fine, and it went overtime, just not many people showed up and members from TBP left the social a bit early. Mostly BMES officers were there. After this social, I'm a bit hesitant to do another social with TBP. I honestly think there needed to be more advertisement.

Winter Fifth General Meeting Kahoot! Social with Faculty

Date of Activity: 3/8/21

Platform: Zoom, Kahoot!

Purpose of Activity: To give students a study break before finals and just have fun while socializing with each other and bioengineering faculty.

History of Activity: Over the summer we have played Kahoot! with Faculty and it went well.

Number of Participants: 20

Cost of Activity: \$0

Description of Activity: BMES hosts a Kahoot! game night of friendly competition between BIEN faculty and students to see who knows their bioengineering knowledge best. It took place during week 10 of winter quarter so it provided a relaxing environment for students to kick back and take a break from studying for final exams.

Evaluation of Activity: The social was a blast. Dr. Freedman, Dr. Grover, Dr. Hu, and Emily Nudge attended the social and both faculty and students had so much fun. Cammy beat Dr. Grover yet again in Kahoot!. The social went overtime as we played another Kahoot! that had multiplication tables in it at the request of Emily's children. They honestly made the social great and we should have more socials with them in the future.



BMES Sticker Fundraiser (ongoing)

Date of Activity: 3/8/21 – Present

Platform: Google Forms

Purpose of Activity: For members to represent and support BMES through purchasing our BMES stickers!

History of Activity: Stickers were given away at recruitment events and general meetings in the past

Number of Participants: 2 participants, 4 stickers sold

Cost of Activity: \$0 (Stickers were printed years ago)

Money Earned: \$10

Profit: \$10

Description of Activity: Selling BMES stickers in support of BMES. Purchasers need to fill out a Google Form. 1 sticker for \$3 and 2 stickers for \$5.

Evaluation of Activity: Sticker sales are off to a slow start with only 4 stickers sold. However, since this is an open-ended fundraiser, we will start advertising stickers more in spring quarter in hopes of raising the amount of sales.

Backyard.co Social

Date of Activity: 4/16/21

Platform: Zoom, Backyard.co

Purpose of Activity: To provide a relaxing space for students to have fun and play games with each other as midterm season approaches.

History of Activity: We have played backyard.co once with TBP during a social collab, but this was the first time doing it just ourselves.

Number of Participants: 11

Cost of Activity: \$0

Description of Activity: BMES plays games with students on backyard.co to start off midterm season with a relaxing environment to have fun and play games together.

Evaluation of Activity: The social ended successfully as everyone had fun playing a bunch of mini games with each other. Emily Nudge's son also had a blast playing the game Land Grab with our president Chris.

Internal Outreach Fundraising Event

Date of Activity: 4/17-4/18/21

Platform: In person

Purpose of Activity: Fundraising in support of diversity within BMES

History of Activity: None

Number of Participants: 6

Cost of Activity: \$0 (Stickers were printed years ago)

Money Earned: \$502

Profit: \$502

Description of Activity: Get together, in a safe, and regulated manner where social distancing guidelines were followed and all participants wore protective equipment and were completely vaccinated, to discuss diversity in our community and support BMES chapter at UCR.

Evaluation of Activity: The event was safe and all participants contributed to BMES.



BMES Graduation Stole Sale

Date of Activity: 4/28-5/7/21

Platform: Google forms

Purpose of Activity: To sell BMES branded stoles to graduating seniors to commemorate their involvement in BMES

History of Activity: Annual

Number of Participants: 11

Cost of Activity: \$540

Money Earned: \$385

Profit: - \$155

Description of Activity: BMES posted a google form and flyer to sell stoles to the seniors. The stoles are branded with the BMES logo and our organization name and will be blue with gold trim. An interest form was sent out before to evaluate how much people were willing to spend. Blank stoles were bought from amazon and sent to Joy's Embroidery to embroider.

Evaluation of Activity: BMES was able to sell 11 stoles, which is a better number than last year, likely because there is in-person commencement. The number was lower than the interest form, however, which may be due to the price. The stoles were better this year because they included our newly created logo instead of just the letters "BMES." BMES ended up losing money from this sale due to the high cost of embroidery and low interest; BMES also took some of the cost since the stoles were originally about \$50 each so that more people would be able to afford to buy them for \$35 per stole. Next year, we will look for cheaper options earlier in the year.

Tea Time Social: Bring your pet and join us for a cup of tea

Date of Activity: 4/30/21

Platform: Zoom

Purpose of Activity: To give students a study break during midterm season and just have fun while socializing with each other and having our pets with us.

History of Activity: We have done tea time socials in the past, but I'm not sure if we have done one with pets before.

Number of Participants: 13

Cost of Activity: \$0

Description of Activity: BMES invites participants to bring their pets to a social tea time event hosted on Zoom. It's set as a relaxing environment for students to kick back and take a break from studying for midterms.

Evaluation of Activity: It was a slow start as people started showing up around 3:05-3:15 and a few showed up around 3:45, but overall it was a nice social. Dr. Grover brought his dog Alfie and his kids were also there and they were so lively. It was nice to hear everyone talk about their pets too and take a nice break from studying for midterms and surviving week 5. Also only 9 people signed into the sign-in sheet but 13 people showed up.



Kahoot! Social with Faculty

Date of Activity: 5/14/21

Platform: Zoom, Kahoot!

Purpose of Activity: To give students a study break before finals and just have fun while socializing with each other and bioengineering faculty.

History of Activity: Over the summer we have played Kahoot! with Faculty and it went well. We have also hosted one Kahoot! per quarter this school year.

Number of Participants: 15

Cost of Activity: \$0

Description of Activity: BMES hosts a Kahoot! game night of friendly competition between BIEN faculty and students to test their knowledge on past Kahoot! Questions and other random questions. It took place during week 7 of spring quarter so it provided a relaxing environment for students to kick back and take a break from studying for final exams.

Evaluation of Activity: The last Kahoot! social of the school year went really well. Cammy won again (surprise!). Dr. McKee and Dr. Hu were the only faculty members to show up, and Himani volunteered to be an honorary faculty member (who taught wound repair as designated by Dr. McKee). Everyone had a blast, and Dr. McKee was pretty determined to try to beat Cammy, but alas she still won.

Study Jam with BMES

Date of Activity: 5/27/21

Platform: Discord

Purpose of Activity: To give students a study break before finals and just have fun while socializing or studying with each other.

History of Activity: We have not done a study jam on Discord before, but we have done study breaks / tea times on Zoom before that are pretty similar.

Cost of Activity: \$0

Description of Activity: BMES invites participants to bring their pets to a social tea time event hosted on Zoom. It's set as a relaxing environment for students to kick back and take a break from studying for midterms.

Event Name: End of the year social for the Mentorship Program

Date of Activity: 5/30/21

Platform: Zoom

Purpose of Activity: To appreciate the participants who joined the Mentorship Program

History of Activity: We have previously held end of year socials and raffles for the Mentorship Program

Cost of Activity: \$60 - \$100 for mentor gifts and prizes

Description of Activity: This activity will honor Mentors and Mentees participating within the Mentorship Program. The Event will be hosted over Zoom. Kahoot game and or a game will be hosted which after we will introduce the winners of the Mentorship contest.



LEADERSHIP DEVELOPMENT ACTIVITIES

Leadership development events primarily involve planning for upcoming events to ensure that the organization runs smoothly. These activities include team building as well as event planning to improve the relationship between officers.

SUMMARY OF EVENTS:

1. Officer Meetings	Biweekly
2. Officer Socials	Monthly

Officer Meetings

Date of Activity: Biweekly

Platform: Zoom

Purpose of Activity: These meetings are used to discuss and determine details for upcoming meetings, fundraisers, outreach, and mentorship events.

History of Activity: Officer meetings have typically been held every other week throughout the academic year

Number of Participants: 12

Cost of Activity: \$0

Description of Activity: Officer meetings are planned to run for an hour. Officers fill out the agenda beforehand and discuss and update during the meeting while the Secretary fills out notes on the details and discussion. Each officer makes announcements about upcoming events and discuss plans and problems with the rest of the board. We also discuss dates for events and advertising for it.

Evaluation of Activity: By discussing issues at the officer meeting, officers planning specific events receive input from their peers and may weigh these opinions to figure out how they will proceed. This is crucial to the continued improvement and running of the organization.

Officer Socials

Date of Activity: Monthly

Platform: Zoom

Purpose of Activity: To build bonds and strengthen relationships within board.

History of Activity: Normally, there is a summer Big Bear retreat as a start to bonding.

Number of Participants: 12

Cost of Activity: \$0

Description of Activity: Officers plan to meet on a weekend for one to two hours to play games on backyard.co or talk to each other socially. These usually last longer than planned.

Evaluation of Activity: People seem to have fun and it is a good bonding experience for the board members. Board gets to know each other and becomes more comfortable with each other. This has been crucial to building relationships during the pandemic.



ACADEMIC DEVELOPMENT ACTIVITIES

BMES Academic development activities serve to enhance student success in their academic career. BMES hosts a series of workshops via Youtube for software and tools that bioengineering students use in their coursework and career. The workshops aim to help students learn how to use these programs in conjunction with their related classes to help them succeed academically and develop their skills for their future. Additionally, for the first time this year, BMES built its very own original project, a Bionic/Prosthetic Hand, and created a Youtube video series on this. Other Academic Development events include BIEN Mentorship events and events to introduce students to Academic resources or other organizations on campus.

SUMMARY OF EVENTS:

1. BMES Project Vlog 1 - Unboxing Video	October 15, 2020
2. BMES Project Vlog 2 - Unboxing Video	October 18, 2020
3. COMSOL Tutorial Introduction (Part 1)	November 7, 2020
4. BMES Project Video (Part 1)	November 13, 2020
5. BCOE Club Info Session	November 20, 2020
6. COMSOL Transport of Diluted Species Workshop (Part 1)	December 3, 2020
7. COMSOL Transport of Diluted Species Workshop (Part 2)	December 3, 2020
8. MATLAB Tutorial Workshop	January 4, 2021
9. Intro to Java (Part 1)	January 4, 2021
10. Intro to Java (Part 2)	January 4, 2021
11. HimaniProject2	January 4, 2021
12. Himani Bionic Final	January 10, 2021
13. BMES Prosthetic Hand Project (Part 1)	February 12, 2021
14. Intro to C++	April 1, 2021
15. Project Design Contest	April 9, 2021
16. Project Reaction Video	April 14, 2021
17. "How to Build: Heart Rate Monitor with BMES @ UCR" Video	April 17, 2021
18. Project Showcase Meeting	April 19, 2021
19. SolidWorks: Introduction and Basic Example	April 26, 2021
20. Receiver Building Final	May 6, 2021
21. SolidWorks: Basic Example 2	May 18, 2021
22. SolidWorks: Basic Example 3	May 18, 2021



BMES Projects Vlog 1 - Unboxing Video

Date of Activity: 10/15/20

Platform: Youtube

Purpose of Activity: The purpose of this activity was to introduce a new innovative project for BMES at UC Riverside and expose members to simple bioengineering projects that can be done.

History of Activity: This will be the first time that the BMES Project Leads will lead an innovative project in bioengineering.

Number of Participants: 181 Youtube views

Cost of Activity: \$314.60 (with shipping) \$258.34 (without shipping)

Description of Activity: The bionic hand project was built using Arduino components. There are two parts of this project: the glove controller and the remote hand. The glove controller is a single glove attached to a flex sensor and connected to an Arduino. When the glove is used, the remote hand can easily mimic the glove controller by its motion of the fingers of the gloves.

Evaluation of Activity: During the fall quarter, the bionic hand purchase was a hassle due to the inconvenience of Amazon's delivery services. However, it was eventually delivered. As the project progressed, we also noticed that the bionic hand was missing a few parts that were extremely necessary for the project to function properly.

BMES Projects Vlog 2 - Unboxing Video

Date of Activity: 10/18/20

Platform: Youtube

Purpose of Activity: The purpose of this activity was to introduce a new innovative project for BMES at UC Riverside and expose members to simple bioengineering projects that can be done.

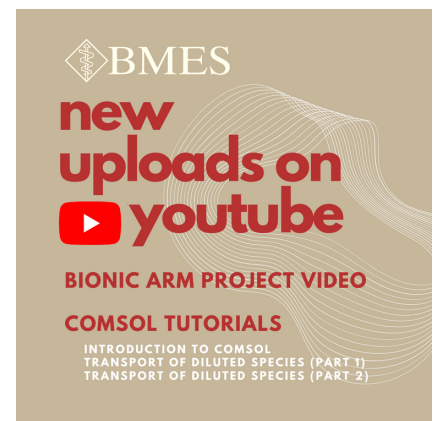
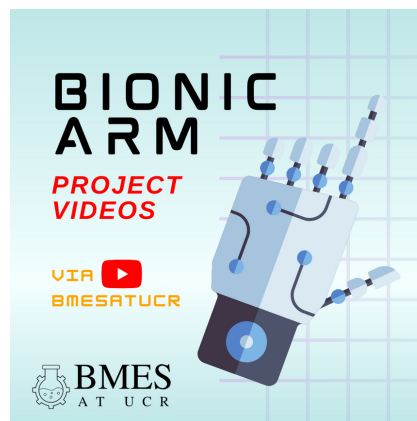
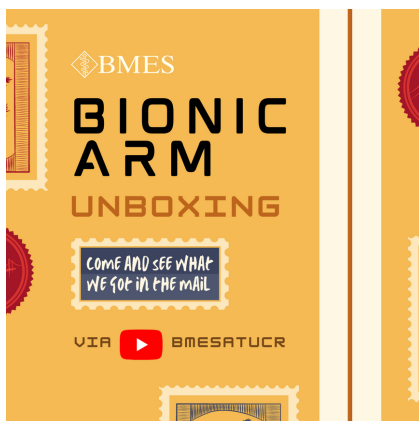
History of Activity: This will be the first time that the BMES Project Leads will lead an innovative project in bioengineering.

Number of Participants: 95 Youtube views

Cost of Activity: \$314.60 (with shipping) \$258.34 (without shipping)

Description of Activity: The bionic hand project was built using Arduino components. There are two parts of this project: the glove controller and the remote hand. The glove controller is a single glove attached to a flex sensor and connected to an arduino. When the glove is used, the remote hand can easily mimic the glove controller by its motion of the fingers of the gloves.

Evaluation of Activity: During the fall quarter, the bionic hand purchase was a hassle due to the inconvenience of Amazon's delivery services. However, it was eventually delivered. As the project progressed, we also noticed that the bionic hand was missing a few parts that were extremely necessary for the project to function properly.



COMSOL Tutorial Introduction (Part 1)

Date of Activity: 11/7/20

Platform: Youtube

Purpose of Activity: The purpose of this activity is to host COMSOL workshop tutorials for undergraduate students that will help them in creating their own COMSOL simulations and provide additional supplementary resource for classes that are focused mainly on COMSOL simulations such as biomechanics and circulation physiology.

History of Activity: COMSOL workshops are usually hosted annually during the Fall quarter of each academic year. However, this year was held online due to the COVID-19 pandemic through Youtube and were recorded using Zoom.

Number of Participants: 99 Youtube views

Cost of Activity: \$0

Description of Activity: Our COMSOL workshops are uploaded on BMES's Youtube channel for undergraduate students to see and learn from. These COMSOL workshops mainly focus on the basic skills needed for undergraduate bioengineering students to simulate two-dimensional models such as microfluidic devices with features of single-phase flow and transport of diluted species. Three COMSOL workshop videos were uploaded. Once these videos were uploaded and published, they were advertised to BMES members.

Evaluation of Activity: The three videos about the COMSOL workshop tutorials were able to gain 123 views in the span of the entire Fall 2020 quarter. The video about the transport of diluted species was the most viewed video out of the three.

BMES Project Video (Part 1)

Date of Activity: 11/13/20

Platform: Youtube

Purpose of Activity: The purpose of this activity was to introduce a new innovative project for BMES at UC Riverside and expose members to simple bioengineering projects that can be done.

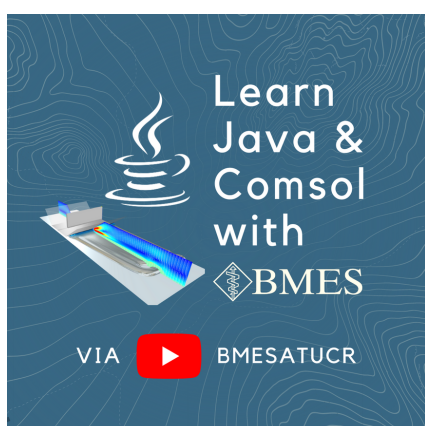
History of Activity: This will be the first time that the BMES Project Leads will lead an innovative project in bioengineering.

Number of Participants: 36 Youtube views

Cost of Activity: \$314.60 (with shipping) \$258.34 (without shipping)

Description of Activity: The bionic hand project was built using Arduino components. There are two parts of this project: the glove controller and the remote hand. The glove controller is a single glove attached to a flex sensor and connected to an arduino. When the glove is used, the remote hand can easily mimic the glove controller by its motion of the fingers of the gloves.

Evaluation of Activity: During the fall quarter, the bionic hand purchase was a hassle due to the inconvenience of Amazon's delivery services. However, it was eventually delivered. As the project progressed, we also noticed that the bionic hand was missing a few parts that were extremely necessary for the project to function properly.



BCOE Club Info Session

Date of Activity: 11/20/20

Platform: Zoom

Purpose of Activity: Academic development and Project Overview for ASME,AS,ACM,SWE,URC,BMES

History of Activity: None

Number of Participants: 56

Cost of Activity: \$0

Description of Activity: Student engagement spoke at the event about undergraduate research, Dr. McKee spoke about senior design, Dr. Sundar spoke about internships and BCOE clubs spoke about their clubs activities and projects

Evaluation of Activity: The event went well. There were no technical issues although we were booked from minute one till the very end. The event lasted 2:15 hours. The event was very informative so we can have a similar event in the future.

COMSOL Transport of Diluted Species Workshop (Part 1)

Date of Activity: 12/3/20

Platform: Youtube

Purpose of Activity: The purpose of this activity is to host COMSOL workshop tutorials for undergraduate students that will help them in creating their own COMSOL simulations and provide additional supplementary resource for classes that are focused mainly on COMSOL simulations such as biomechanics and circulation physiology.

History of Activity: COMSOL workshops are usually hosted annually during the Fall quarter of each academic year. However, this year was held online due to the COVID-19 pandemic through Youtube and were recorded using Zoom.

Number of Participants: 552 Youtube views

Cost of Activity: \$0

Description of Activity: Our COMSOL workshops are uploaded on BMES's Youtube channel for undergraduate students to see and learn from. These COMSOL workshops mainly focus on the basic skills needed for undergraduate bioengineering students to simulate two-dimensional models such as microfluidic devices with features of single-phase flow and transport of diluted species. Three COMSOL workshop videos were uploaded. Once these videos were uploaded and published, they were advertised to BMES members.

Evaluation of Activity: The three videos about the COMSOL workshop tutorials were able to gain 123 views in the span of the entire Fall 2020 quarter. The video about the transport of diluted species was the most viewed video out of the three.



COMSOL Transport of Diluted Species Workshop (Part 2)

Date of Activity: 12/3/20

Platform: Youtube

Purpose of Activity: The purpose of this activity is to host COMSOL workshop tutorials for undergraduate students that will help them in creating their own COMSOL simulations and provide additional supplementary resource for classes that are focused mainly on COMSOL simulations such as biomechanics and circulation physiology.

History of Activity: COMSOL workshops are usually hosted annually during the Fall quarter of each academic year. However, this year was held online due to the COVID-19 pandemic through Youtube and were recorded using Zoom.

Number of Participants: 458 Youtube views

Cost of Activity: \$0

Description of Activity: Our COMSOL workshops are uploaded on BMES's Youtube channel for undergraduate students to see and learn from. These COMSOL workshops mainly focus on the basic skills needed for undergraduate bioengineering students to simulate two-dimensional models such as microfluidic devices with features of single-phase flow and transport of diluted species. Three COMSOL workshop videos were uploaded. Once these videos were uploaded and published, they were advertised to BMES members.

Evaluation of Activity: The three videos about the COMSOL workshop tutorials were able to gain 123 views in the span of the entire Fall 2020 quarter. The video about the transport of diluted species was the most viewed video out of the three.

MATLAB Tutorial Workshop

Date of Activity: 1/4/21

Platform: Youtube

Purpose of Activity: The purpose of this MATLAB Tutorial workshop was to implement an online video format workshop for learning MATLAB basics.

History of Activity: Due to the COVID-19 pandemic, our organization decided to put the MATLAB workshop online.

Number of Participants: 23 Youtube views

Cost of Activity: \$0

Description of Activity: This video featured the usage and functionality of the MATLAB scripts, command window, and workspace. MATLAB features operations and syntax such as basic mathematical operations in arithmetic and various control structures. Additional examples that were used were labelling graphs, plotting out graphs, and declaring variables.

Evaluation of Activity: There were less views for the MATLAB videos this quarter compared to the COMSOL videos from last quarter. The MATLAB workshop was less popular in the Youtube environment compared to COMSOL since COMSOL is a more dominantly known mathematical modeling software and has more hits on Youtube. MATLAB is also a less known software application than COMSOL.



Intro to Java (Part 1)

Date of Activity: 1/4/21

Platform: Youtube

Purpose of Activity: The purpose of this activity is to give out a basic Java tutorial to BMES members to whoever wants to be more familiar with Java. This gives more opportunities for bioengineering students to learn Java since Java classes are not part of the bioengineering curriculum.

History of Activity: BMES held Java workshops before a few times although not in most years. This is also the first time we are doing an online format for Java.

Number of Participants: 19 Youtube views

Cost of Activity: \$0

Description of Activity: Our videos about the various features of Java such as introducing the most simple programming examples called Hello World which is a prime example in most programming languages. In another tab, we discussed declaring variables, arithmetic operations, and using operators within variables. The second video introduces the use of if statements, while loops, and for loops.

Evaluation of Activity: There was less demand for the Java programming video because it is less used in the UCR Bioengineering curriculum. All of the basics were covered successfully and explained very well.

Intro to Java (Part 2)

Date of Activity: 1/4/21

Platform: Youtube

Purpose of Activity: The purpose of this activity is to give out a basic Java tutorial to BMES members to whoever wants to be more familiar with Java. This gives more opportunities for bioengineering students to learn Java since Java classes are not part of the bioengineering curriculum.

History of Activity: BMES held Java workshops before a few times although not in most years. This is also the first time we are doing an online format for Java.

Number of Participants: 8 Youtube views

Cost of Activity: \$0

Description of Activity: Our videos about the various features of Java such as introducing the most simple programming examples called Hello World which is a prime example in most programming languages. In another tab, we discussed declaring variables, arithmetic operations, and using operators within variables. The second video introduces the use of if statements, while loops, and for loops.

Evaluation of Activity: There was less demand for the Java programming video because it is less used in the UCR Bioengineering curriculum. All of the basics were covered successfully and explained very well.



HimaniProject2

Date of Activity: 1/4/21

Platform: Youtube

Purpose of Activity: The purpose of this activity was to introduce a new innovative project for BMES at UC Riverside and expose members to simple bioengineering projects that can be done.

History of Activity: This will be the first time that the BMES Project Leads will lead an innovative project in bioengineering.

Number of Participants: 22 Youtube views

Cost of Activity: \$314.60 (with shipping) \$258.34 (without shipping)

Description of Activity: The bionic hand project was built using Arduino components. There are two parts of this project: the glove controller and the remote hand. The glove controller is a single glove attached to a flex sensor and connected to an arduino. When the glove is used, the remote hand can easily mimic the glove controller by its motion of the fingers of the gloves.

Evaluation of Activity: During the fall quarter, the bionic hand purchase was a hassle due to the inconvenience of Amazon's delivery services. However, it was eventually delivered. As the project progressed, we also noticed that the bionic hand was missing a few parts that were extremely necessary for the project to function properly.

Himani Bionic Final

Date of Activity: 1/10/21

Platform: Youtube

Purpose of Activity: The purpose of this activity was to introduce a new innovative project for BMES at UC Riverside and expose members to simple bioengineering projects that can be done.

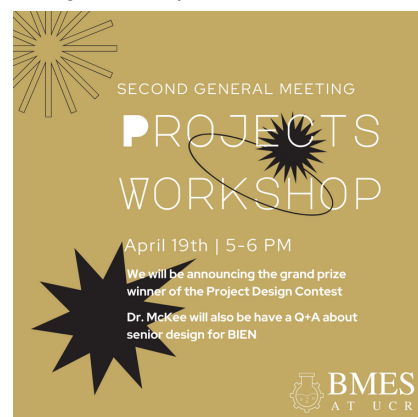
History of Activity: This will be the first time that the BMES Project Leads will lead an innovative project in bioengineering.

Number of Participants: 22 Youtube views

Cost of Activity: \$314.60 (with shipping) \$258.34 (without shipping)

Description of Activity: The bionic hand project was built using Arduino components. There are two parts of this project: the glove controller and the remote hand. The glove controller is a single glove attached to a flex sensor and connected to an arduino. When the glove is used, the remote hand can easily mimic the glove controller by its motion of the fingers of the gloves.

Evaluation of Activity: During the fall quarter, the bionic hand purchase was a hassle due to the inconvenience of Amazon's delivery services. However, it was eventually delivered. As the project progressed, we also noticed that the bionic hand was missing a few parts that were extremely necessary for the project to function properly.



BMES Prosthetic Hand Project (Part 1)

Date of Activity: 2/13/21

Platform: Youtube

Purpose of Activity: The purpose of this activity was to introduce a new innovative project for BMES at UC Riverside and expose members to simple bioengineering projects that can be done.

History of Activity: This will be the first time that the BMES Project Leads will lead an innovative project in bioengineering.

Number of Participants: 17 Youtube views

Cost of Activity: \$314.60 (with shipping) \$258.34 (without shipping)

Description of Activity: The bionic hand project was built using Arduino components. There are two parts of this project: the glove controller and the remote hand. The glove controller is a single glove attached to a flex sensor and connected to an arduino. When the glove is used, the remote hand can easily mimic the glove controller by its motion of the fingers of the gloves.

Evaluation of Activity: During the fall quarter, the bionic hand purchase was a hassle due to the inconvenience of Amazon's delivery services. However, it was eventually delivered. As the project progressed, we also noticed that the bionic hand was missing a few parts that were extremely necessary for the project to function properly.

Intro to C++

Date of Activity: 4/1/21

Platform: Youtube

Purpose of Activity: To teach C++

History of Activity: None

Number of Participants: 15 Youtube views

Cost of Activity: \$0

Description of Activity: Learn to install Visual Studio Code and how to do a few basic examples in C++

Evaluation of Activity: It went well. Next time we can build off the basics learned in this video and show the audience how to apply C++ knowledge to learn other languages by finding similarities between them - for example. Arduino code is based on C++ code. We can also make more complex videos in C++ and show how to write entire programs, etc.

Project Design Contest

Date of Activity: 4/9/21

Platform: Virtual Submissions over Gmail

Purpose of Activity: To encourage creativity amongst members

History of Activity: None

Number of Participants: 19

Cost of Activity: \$8

Description of Activity: Students submitted projects to the BMES email and Project Specialist Lead Himani evaluated the submissions to determine the top winner for the grand prize. This year's grand prize was mentoring from BlackStone LaunchPad

Evaluation of Activity: It went well. Dev Bhatt won the contest with a bioreactor, and BlackStone LaunchPad may be interested in collabing on this contest again next year. Maybe a better incentive would encourage more submissions.



Project Reaction Video

Date of Activity: 4/14/21

Platform: Youtube

Purpose of Activity: To showcase our project submissions

History of Activity: None

Number of Participants: 20 Youtube views

Cost of Activity: \$0

Description of Activity: Himani gives genuine reactions to the project submissions she received for her project design contest.

Evaluation of Activity: It was well received and a humorous video. This would be great to do in the future should the contest happen again. We should work more on getting the word out about the contest so that there can be more participants.

“How to Build: Heart Rate Monitor with BMES @ UCR” Video

Date of Activity: 4/17/21

Platform: Youtube

Purpose of Activity: To teach students that they can make cool projects with a limited amount of parts.

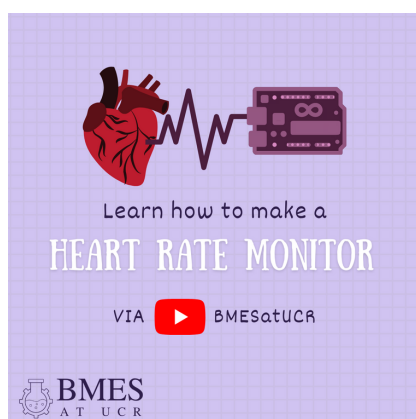
History of Activity: At the local high schools, we usually host an interactive demonstration where students can play with the Arduino and its capabilities, including finding their heart rate. Because of the COVID-19 pandemic, we were unable to demonstrate this and opted to teach them how to do so using an Arduino at home.

Number of Participants: 20 Youtube views

Cost of Activity: \$0

Description of Activity: This video covers how to build this simple heart rate monitor from pieces to math. Using a photoresistor and white LED, I was able to replicate the process of many common heart rate monitors. In the video we cover how to build the circuitry, how the system works, and walk through the math to solve.

Evaluation of Activity: This video performed as well as many of our other videos on the channel. Teaching people how to create things with the opportunities we are provided as engineering students helps them realize how much they can do on their own at home. The video is meant to inspire others to try building their own projects at home so it has done its job well and can do so even further in the future



Project Showcase Meeting

Date of Activity: 4/19/21

Platform: Zoom

Purpose of Activity: To showcase the project submissions to everyone, declare the grand prize winner (Dev), and have Dr. McKee do a Q+A for senior design project next year

History of Activity: None

Number of Participants: 32

Cost of Activity: \$0

Description of Activity: Students submitted projects to the BMES email and Project Specialist Lead Himani evaluated the submissions to determine the top winner for the grand prize. During the first half of the meeting she described all the submissions and declared the winner. During the second half, Dr. McKee gave a brief talk about senior design and then did a Q+A

Evaluation of Activity: It went well. Dev won the contest with this bioreactor, and BlackStone LaunchPad may be interested in collaborating on this contest again next year. There were some awkward moments in the Q&A portion due to silence.

SolidWorks: Introduction and Basic Example

Date of Activity: 4/26/21

Platform: Youtube

Purpose of Activity: To teach SolidWorks

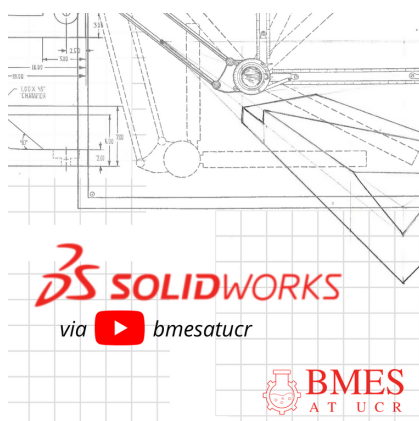
History of Activity: Taught live in front of a very stiff audience over the course of 3 workshops last year. This is why all our content this year is on YouTube.

Number of Participants: 6 Youtube views

Cost of Activity: \$0

Description of Activity: The video teaches the fundamentals of using SolidWorks in a non-classroom setting where bioengineering students can help familiarize themselves with a simple example. In this case, the video uses features such as parts, assembly, visual orientations, smart dimensions, extruded boss/base, and many more.

Evaluation of Activity: So far, the video portrays the fundamentals on how to create a three dimensional box with a lid. This is a simple video example in creating a model that will help students further familiarize the features in SolidWorks to create more complex structures. During the week of the video upload, there were a few additional subscribers to the channel which is significant in the online learning environment. The six views within the past two weeks is actually a good sign considering it was uploaded in the middle of midterm season.



Receiver Building Final

Date of Activity: 5/6/21

Platform: Youtube

Purpose of Activity: The purpose of this activity was to introduce a new innovative project for BMES at UC Riverside and expose members to simple bioengineering projects that can be done.

History of Activity: This will be the first time that the BMES Project Leads will lead an innovative project in bioengineering.

Number of Participants: 13 Youtube Views

Cost of Activity: \$314.60 (with shipping) \$258.34 (without shipping)

Description of Activity: The bionic hand project was built using Arduino components. There are two parts of this project: the glove controller and the remote hand. The glove controller is a single glove attached to a flex sensor and connected to an Arduino. When the glove is used, the remote hand can easily mimic the glove controller by its motion of the fingers of the gloves.

Evaluation of Activity: During the fall quarter, the bionic hand purchase was a hassle due to the inconvenience of Amazon's delivery services. However, it was eventually delivered. As the project progressed, we also noticed that the bionic hand was missing a few parts that were extremely necessary for the project to function properly.

SolidWorks: Basic Example 2

Date of Activity: 5/18/21

Platform: Youtube

Purpose of Activity: To teach SolidWorks

History of Activity: Taught live in front of a very stiff audience over the course of 3 workshops last year. This is why all our content this year is on YouTube.

Cost of Activity: \$0

Description of Activity: The video teaches the fundamentals of using SolidWorks in a non-classroom setting where bioengineering students can help familiarize themselves with a simple example. In this case, the video uses features such as parts, assembly, visual orientations, smart dimensions, extruded boss/base, and many more.

SolidWorks: Basic Example 3

Date of Activity: 5/18/21

Platform: Youtube

Purpose of Activity: To teach SolidWorks

History of Activity: Taught live in front of a very stiff audience over the course of 3 workshops last year. This is why all our content this year is on YouTube.

Cost of Activity: \$0

Description of Activity: The video teaches the fundamentals of using SolidWorks in a non-classroom setting where bioengineering students can help familiarize themselves with a simple example. In this case, the video uses features such as parts, assembly, visual orientations, smart dimensions, extruded boss/base, and many more.



INDUSTRY AND PROFESSIONAL DEVELOPMENT ACTIVITIES

BMES hosts professional development workshops for students to build vital skills in the professional world and invites speakers from a variety of backgrounds to share their experiences. Students are given the opportunity to gain exposure and learn more about the broad field of bioengineering, as well network with professionals and peers in the field. These events aim to expose students to the many paths of bioengineering and develop their professional skills so that the students can feel confident when taking the next steps in their career.

SUMMARY OF EVENTS:

1. Alumni Q&A Panel	October 26, 2020
2. KGI - AI in Medical Devices	November 9, 2020
3. Medtronic Speaker	January 21, 2021
4. Resume/Cover Letter Workshop	January 25, 2021
5. Edwards Lifesciences Speaker Panel	February 8, 2021
6. Bioengineering Paths Panel	February 22, 2021
7. KGI Graduate and Atara Bio Speaker	April 9, 2021
8. CV/Resume Workshop	April 20, 2021
9. Officer Senior Panel	May 3, 2021
10. Edwards Lifesciences Panel - Different Engineering Positions	May 17, 2021

Alumni Q&A Panel

Date of Activity: 10/26/20

Platform: Zoom

Purpose of Activity: To learn from alumni about their experiences with networking and industry.

History of Activity: BMES has previously invited alumni to speak on their experiences.

Number of Participants: 41

Cost of Activity: \$0

Description of Activity: Dr. McKee gave a quick presentation on the FLEAP study abroad program in Paris. Alumni gave a brief introduction about themselves. The remainder of the time was used for the panel to answer questions asked by students. Talked about topics that ranged from life after college and the path to get there.

Evaluation of Activity: Students were polite and asked questions through zoom chat. Many people participated as questions took up the entire time. Alumni were able to successfully answer all questions within the allotted time.



KGI - AI in Medical Devices

Date of Activity: 11/9/20

Platform: Zoom

Purpose of Activity: Introduce students to AI in Medical Devices

History of Activity: The Keck Graduate Institute has been a speaker for BMES since 2018.

Number of Participants: 32

Cost of Activity: \$0

Description of Activity: Dr. Anna Hickerson had a presentation on AI in Medical devices

Evaluation of Activity: For the meeting topic, we polled club members on Instagram to see what they wanted to hear about and AI won, which turned out to be a success for meeting attendee numbers. The meeting was very interactive. The speaker used breakout rooms to allow students to discuss topics/exercises.

Medtronic Speaker

Date of Activity: 1/21/21

Platform: Zoom

Purpose of Activity: To provide students with information about Medtronic and the path UCR took to get there

History of Activity: Medtronic employees/alumni have spoken to BMES before

Number of Participants: 33

Cost of Activity: \$0

Description of Activity: Speaker Brenda Peña had a presentation prepared for her talk

Evaluation of Activity: Very engaging and insightful. Since Brenda is an alumni that used to be very active in student orgs during her time at UCR, she was open about her experiences and gave advice that was easily related back to student experiences at UCR

Resume/Cover Letter Workshop

Date of Activity: 1/25/21

Platform: Zoom

Purpose of Activity: workshop to guide students on how to write a meaningful cover letter and resume

History of Activity: BMES has worked with the career center before

Number of Participants: 15

Cost of Activity: \$0

Description of Activity: Career center employees came to talk about the best way to prepare your resume and cover letter. They gave many resources which can be found on the UCR career center website

Evaluation of Activity: Attendance was lower than usual due to a change in meeting time. Overall very insightful with attendees asking questions about their resumes

BMES
third general meeting
AI IN MEDICAL DEVICES FEATURING **KGI**
Meeting ID: 950 2211 8279
Passcode: BMESGM
Monday, November 9th | 5-6 pm

first general meeting
featuring **Medtronic**
Tuesday, January 12th
5-6 PM
Meeting ID: 994 8053 5367
Passcode: BMESGM-W21
BMES

Advice from Brenda Peña
medtronic engineer

1st start going to events talk with upperclassmen and other 1 st years look into research and internship opportunities	2nd look into leadership roles to build up your skillset internship hunting / participate in research
3rd keep up the grades internships / research / network with professionals projects!	4th conferences / networking ask questions about certain positions at companies apply!

BMES

BMES
second general meeting
resume/cover letter workshop
with career center
Meeting ID: 994 8053 5367
Passcode: BMESGM-W21
Tuesday, January 26th
4-5pm



Edwards Lifesciences Speaker Panel

Date of Activity: 2/8/21

Platform: Zoom

Purpose of Activity: To provide insight into how ucr and bmes alum got to Edwards

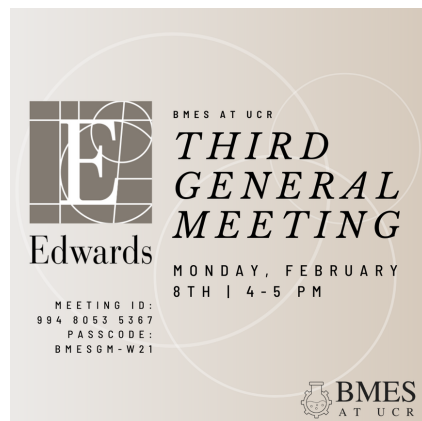
History of Activity: We have had alumni speakers before and have been on Edwards Company tours to learn about the company.

Number of Participants: 31

Cost of Activity: 3 mugs

Description of Activity: Edwards panel consisted of 3 UCR BMES alumni. Students had the chance to ask them questions ranging from work to advice to get into industry.

Evaluation of Activity: The event was very informative and all student questions were answered. They provided information on Edwards and why they like the working environment there. They also explained that the path to becoming a full time engineer might not be as simple as getting hired right out of college. Aaron talked about his grad school path while Louis talked about being a technician before being hired full time.



Bioengineering Paths Panel

Date of Activity: 2/22/21

Platform: Zoom

Purpose of Activity: To expose students to the many career paths available within bioengineering

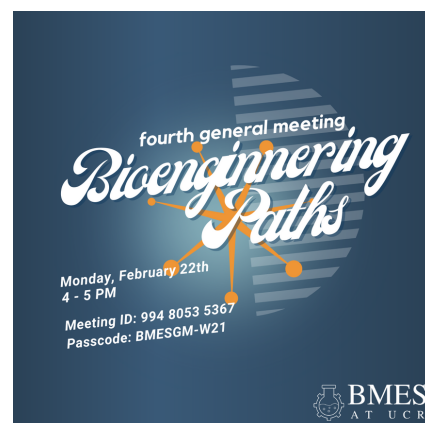
History of Activity: We have not had an event like this before to acknowledge all the different paths bioengineers could take in the same meeting.

Number of Participants: 33

Cost of Activity: 3 mugs

Description of Activity: 5 UCR BIEN alumni introduced themselves and their current student/job positions to BMES members. They answered questions written by the meeting host as well as questions members had regarding their chosen career path.

Evaluation of Activity: The event was extremely informative. Current BCOE students were able to receive advice from the panelists and learned about some of the job/education opportunities out there.



KGI Graduate and Atara Bio Speaker

Date of Activity: 4/8/21

Platform: Zoom

Purpose of Activity: To give BIEN students the opportunity to talk with someone with experience in KGI grad school and industry.

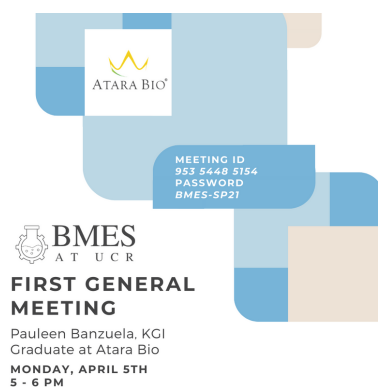
History of Activity: None, Atara Bio is a recent startup

Number of Participants: 33

Cost of Activity: 1 mug

Description of Activity: Pauleen prepared a presentation about her job and the job rotation program Atara Bio has. Students had the opportunity to chat with her after her presentation.

Evaluation of Activity: Pauleen Banzuela gave a presentation on Atara Bio and the work they do. She went into detail about the career path she is on and the rotation program at Atara. She also provided advice to students who seeked how to find a path after graduation.



CV / Resume Workshop

Date of Activity: 4/20/21

Platform: Zoom

Purpose of Activity: Introduce the Mentees to CV and Resume, their differences and how to compose each. Give examples and trends, what to and not to include in each.

History of Activity: New activity part of professional development.

History of Activity: BMES has hosted cv/resume workshops in the past years

Number of Participants: 18

Cost of Activity: \$0

Description of Activity: Dr. McKee agreed to host a joint event with the Mentorship program to host the bioengineering-program mentees and the senior class of 2021 to cover professional development on how to write a CV and Resume.

Evaluation of Activity: Dr. McKee gave a great lecture, the event lasted an hour and 40 minutes where 30 minutes was pure discussion. The participants were lively and the event was a success.

Officer Senior Panel

Date of Activity: 5/3/21

Platform: Zoom

Purpose of Activity: Allow students to talk to BIEN seniors and gain insight to what the future entails

History of Activity: None

Number of Participants: 22

Cost of Activity: \$0

Description of Activity: Seniors introduced themselves and members had the opportunity to ask questions and chat about various topics

Evaluation of Activity: The seniors were very warm and inviting, members weren't very active in the conversation. Officers helped move the conversation along.



Interview tips form Senior Ops R&D Jonathan Bui

Date of Activity: 5/17/21

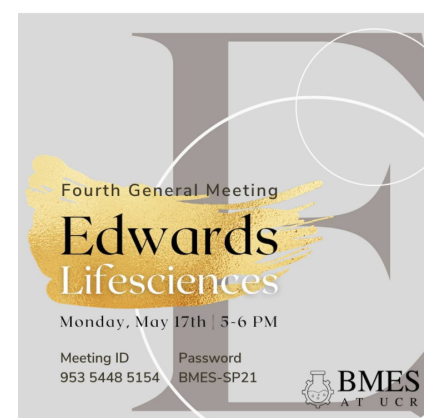
Platform: Zoom

Purpose of Activity: To allow students to talk to a recruiter to gain insight into the job application process

History of Activity: We've previously hosted Edwards Lifesciences guest speakers

Cost of Activity: \$0

Description of Activity: Jonathan Bui and a coworker will talk about the ways students can make themselves more competitive during job searches.



OUTREACH/COMMUNITY SERVICE ACTIVITIES

Through outreach and community service activities, BMES seeks to give back to the community, specifically by sharing experiences with local students. Our goal for these activities is to inform students about bioengineering and to encourage them to pursue bioengineering related interests.

SUMMARY OF EVENTS:

1. BioHack Info Session	November 23, 2020
2. Virtual Science Night - Ramona High School	February 10, 2021
3. Bioengineering (BIEN) Day 2021	February 27, 2021
4. Virtual Science Night - John W. North High School	May 11, 2021
5. BioHack 2021	May 15-16, 2021
6. BMES "How to Biohack" Workshop @ BioHack 2021	May 15, 2021
7. "What is college like? In-person vs. Online" Video	May 22, 2021

BioHack Info Session

Date of Activity: 11/23/20

Platform: Zoom

Purpose of Activity: To introduce BioHack, encourage students to join committees

History of Activity: We have introduced BioHack at BMES meetings before since we are the hosting organization.

Number of Participants: 33

Cost of Activity: \$0

Description of Activity: BioHack directors gave presentation on what the leads and committees do and answered any questions students had about BioHack

Evaluation of Activity: The presentation was a bit short, lasting no more than 20 min but the questions took up the rest of the time. Ended the meeting 15 min early. BioHack should have a longer presentation next time or we should plan for something after the BioHack presentation and not give them the entire general meeting.



Virtual Science Night - Ramona High School

Date of Activity: 2/10/21

Platform: Zoom

Purpose of Activity: To host our own demonstration to inspire high school students to pursue a STEM field.

History of Activity: First time doing an event like this online.

Number of Participants: 50-100

Cost of Activity: \$0

Description of Activity: Collaborated with the Astro Club and a few other CNAS and BCOE clubs to inspire high school students to pursue or have an interest in various STEM fields. BMES hosted a small hand-demonstration with common household materials. We answered questions students had about high school, college, and bioengineering. Students were allowed to wander among different breakout rooms and participate in various demos.

Evaluation of Activity: The event was successful! The students enjoyed the arts and crafts as well as the personal experiences shared amongst the group. It was a casual event where students could tour different clubs and majors, so we had many different students come by with interest in BMES, STEM, and college in general. We had feedback from the students and teachers that they wished we participated in more events like that at their school.

Bioengineering (BIEN) Day 2021

Date of Activity: 2/27/21

Platform: Zoom

Purpose of Activity: To foster interest and spread awareness about the underappreciated field of pet prosthetics.

History of Activity: Bioengineering Day 2020 and 2019 were both cancelled, so this was the first successful Bioengineering Day in some time. BIEN Day 2020 was cancelled due to COVID-19, and BIEN Day 2019 was cancelled due to transportation issues.

Number of Participants: 20

Cost of Activity: \$0

Description of Activity: We had a veterinary specialist join us to share her process of fitting animals with their prosthetics and rehabilitation. The event started with an introduction to UCR, BMES, and our college experience as bioengineers. After the college presentation, our speaker shared her slides consisting of the selection process for animals to receive a prosthetic. When animals meet the selection criteria, they move onto the prosthetics' ordering, making, and fitting processes. After the speaker presentation, we took a break and went into the activity segment of the day. We did a scavenger hunt followed by a show-and-tell of our activity items and pets. We took a lunch break and then proceeded to perform a hand demo project. The demo asks students to tape straws onto a hand-cut out. When a string is threaded through the straw, the hand-cut out resembles the movement of a hand. This demo is easiest to do at home since most of the materials are everyday household items. We explained to students that understanding the way parts move is essential to engineering and prosthetics, animals or not.

Evaluation of Activity: For online standards, the event was successful. The average online event has lower attendance than in-person events, so the goal was at least 20 people, and we achieved that goal easily. We also had an experienced speaker, who suggested a few bioengineering ideas to work on in the future.



Virtual Science Night - John W. North High School

Date of Activity: 5/11/21

Platform: Zoom

Purpose of Activity: To host our own demonstration to inspire high school students to pursue a STEM field.

History of Activity: We did a similar event during Winter Quarter

Number of Participants: 50-100

Cost of Activity: \$0

Description of Activity: Collaborated with Astronomy Club, Aerospace Systems, Society of Physics Students, Pre-SOMA, and Photonics Society, to inspire high school students to pursue various STEM fields. BMES hosted a short presentation followed by a cup-phone demonstration to connect the concepts covered in the presentation. During the first hour of the event, a volunteer participated in a Q&A regarding college and future career choices. We also offered a spanish available session where a volunteer asked students if they preferred spanish.

Evaluation of Activity: The event went smoothly. Many students were curious about college and the pathways that led us to this major. The students asked questions about financial aid, choosing UCR, and how to apply to college. Overall, the event was successful.

BioHack 2021

Date of Activity: 5/15 - 5/16/21

Platform: Discord and Hopin

Purpose of Activity: To introduce beginner hackers to hackathons and promote biotechnology. BioHack is a 24-hour multidisciplinary hackathon competition with the goal of bringing together student minds to invent and build innovative health and medical related devices and programs. Healthcare and Medicine themed, Bioengineering focused hackathon.

History of Activity: Annual event since 2018, cancelled in 2020 due to COVID-19 pandemic, and first time being held online and 24-hours long.

Cost of Activity: \$0 from BMES

Number of Participants: 250-300

Description of Activity: Student participants will gather virtually on Discord and Hopin and have 24 hours to create a health and medical related device. We will be hosting various workshops during the event for students to be inspired and learn tools and skills they can apply to their project. There will be many sponsor companies coming out to the event to speak and lots of opportunities to network with professionals in the field. At the end of the event, students will get their projects evaluated by judges and be voted on for prizes. BioHack gives students the opportunity to contribute to the health industry by utilizing their skills and creativity to create new and innovative products.



BMES "How to BioHack" Workshop @ BioHack 2021

Date of Activity: 5/15/21

Platform: Hopin

Purpose of Activity: To introduce beginner hackers to the range of projects they can work on and provide resources to speed up their project development during the hacking period.

History of Activity: This is the first year that BMES is providing this workshop at Biohack; a workshop of the same name, but different goal, was previously done in 2019 before BioHack started

Cost of Activity: \$0

Description of Activity: We will run through a presentation that includes becoming familiar with Devpost and Github, current needs in the medical field, and the associated software and hardware resources to develop solutions for those needs.

"What is college like? In-person vs. Online" Video

Date of Activity: 5/22/21

Platform: Youtube

Purpose of Activity: To share my college experience with people who haven't had the opportunity to be in-person

History of Activity: None

Cost of Activity: \$0

Description of Activity: After surveying our general members on what they miss about college or wish they knew before online school, I recorded my own experience participating in clubs and classrooms on campus. This video shares the experience of one individual who joined BMES early into their freshman year and was able to experience most of what the club had to offer. While online provided a new experience, we reflect on the good that came from being home for some of our college experience.



MENTORING ACTIVITIES

Mentoring is a significant component of our academic and professional development. Future Biomedical Engineers realize positive effects from their mentoring achievements. At BMES at UCR, we have developed a mentoring program to assimilate different mentoring principles, provide faculty development for mentors, and provide leadership to mentees. Our program is designed to be administered in an interactive format; we have developed workshops and seminars with collaborative learning strategies and think-pair-share opportunities. Initially, the program opens by defining mentorship and embracing the welfare and components of an effective mentoring relationship. Next, we discuss the critical role mentors and mentees have in building and maintaining effective mentoring relationships (i.e., mentor-led and mentee-driven mentoring). We then introduce a hands-on mentoring activity designed to help mentees explore their professional network and consider how they can expand it to meet the spectrum of their mentoring needs. We then present guidelines for implementing our mentoring design, such as traditional dyadic mentoring, peer mentoring, meet the faculty mentoring, non-dyadic mentoring, and career support - career guidance mentoring. We then provide tools that facilitate effective mentoring development. Our program has been a successful self-guidance tool for many years and has received positive feedback from mentors and mentees.

SUMMARY OF EVENTS:

- | | |
|--|--------------------|
| 1. BIEN Freshman Peer Mentoring/Advice Session | September 16, 2020 |
| 2. Student Engagement Session (Mentorship Program) | January 22, 2021 |
-

BIEN Freshmen Peer Mentoring/Advice Session

Date of Activity: 9/16/20

Platform: Zoom

Purpose of Activity: Provide incoming freshmen with study strategies.

History of Activity: No prior history. First collaborative event via Zoom.

Number of Participants: 66

Cost of Activity: \$0

Description of Activity: Collaboration with Emily Nudge and Dr. William Grover.

Evaluation of Activity: The event was a great welcoming experience for incoming students, especially freshmen. BMES board members shared their experiences and provided freshmen with the tools and resources they found helpful when they began their college education. Everyone was welcome to participate and ask questions.

Student Engagement Session (Mentorship Program)

Date of Activity: 1/22/21

Platform: Zoom

Purpose of Activity: Partnering the Mentorship program with professional development programs offered on campus.

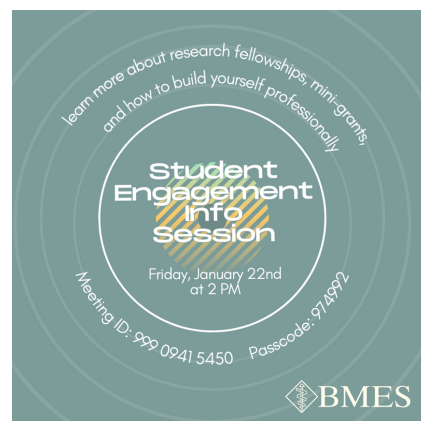
History of Activity: None

Number of Participants: 30

Cost of Activity: \$0

Description of Activity: Introduction for the Mentees participating in the Mentorship Program and the general public to the variety of workshops offered by Student Engagement.

Evaluation of Activity: The event went well. There were no technical issues. We were introduced to the different workshops available at UCR. Everyone enjoyed the event so there can be another social like this in the future.



ASSESSMENT OF GOALS

Goal 1: To efficiently and expeditiously transition all event planning and activities online

This year's board exceeded the goal of transitioning online without detracting from the mission of BMES and the quality at which we deliver the mission through our events, discussions, and opportunities. We were awarded Organization of the Quarter for our ability to adapt and thrive in the online environment by utilizing new techniques, virtual platforms and software-based systems to ensure the optimal success of our organization. Much of the video content that we produced was used in our entry for org of the quarter last year.

Goal 2: To promote BMES and bioengineering within the Bourns College of Engineering while increasing our online presence

In order to promote BMES and bioengineering at UCR, this year's board collaborated with numerous BCOE organizations such as SWE, NSBE, TBP, URC, BIG-GSA and ACM to host outreach events, project showcases, socials, and professional development workshops. BMES also did extensive advertising of our professional organization through social media platforms such as Facebook, Instagram, LinkedIn, Twitter and discord by posting upcoming events, videos, and opportunities to our social media followers. We received a generous amount of help from professors of the Bourns College of Engineering to attend and participate in numerous events and socials and to inform students about our general meetings and other high-scale events in the form of classroom announcements. We also utilized Zoom to welcome guest speakers located throughout the United States including returning speakers from large companies such as Keck Graduate Institute and Abbott along with new speakers from companies such as GSK and Think Surgical.

Goal 3: To raise more funds for BMES activities and events

We were successful in raising funds for BMES activities through the Dean's innovation fund, merchandising our organization, and through social media fundraising campaigns. We were able to sell stickers and t-shirts to students by mailing said merchandise directly to them. This year was BMES' first year participating in the Dean's Innovation fund and we were successful in raising \$1,179.75. The social media fundraisers had modest success. The necessity to ship merchandise and gifts to students, speakers and volunteers was the greatest expense that we faced due to the COVID-19 pandemic yet the organization was still able to turn a small profit. This funding adds up to the BMES revenue and will be used for further improvement of our future club projects, activities, and events.



NATIONAL BMES MEETING

In past years, this student chapter has been unable to go to the national meeting as a whole. There was no funding and lack of student interests in attending the meeting. The goal for student chapter regarding the national meeting is to increase member interests and to increase funding to aid students that are interested in attending. We also hope to send our project team on behalf of this student chapter.

FUTURE DIRECTION

BMES at UC Riverside had a wonderful 2020-2021 academic year. Despite the struggle to shift over to an all-online format, we celebrate the accomplishments that we have made this school year. Overall, we have had a total of 60 events, activities, and videos hosted and produced by our organization. Thanks to the efforts of the BMES board members, supporting faculty and advisors, we were able to not only keep our club active and functioning during this time, but also to thrive online introducing new activities and events for the benefit of our members.

Aside from the aforementioned persons, there were numerous company representatives that joined us as new BMES guest speakers this year. From quality engineers in medical companies to patent lawyers, we have heard a great positive response from our guest speakers: that they would like to continue speaking for BMES at UC Riverside at our meetings! We are always excited to hear that our guest speakers have an excellent experience with our organization, and aim to continue our streak of positive guest speaker interactions. We know that having a strong connection with alumni allows us to offer the best current advice, information, and resources to our general members.

Our general members are our reason for advancing onward. Their desire to learn and grow reminds us of why we continually strive to offer the best for these students who will go on to be future researchers, medical device designers, entrepreneurs and so much more. To increase accessibility for all our offerings this year (and also due to the lack of a food incentive), we made membership free the entire academic year. Furthermore, to bridge the disconnect between new students and professors we held faculty socials throughout the year, starting in the summer before this school year officially started. We are heartened with the astounding show of support from many of our faculty members to attend and participate fully with us during these times. Finally, we gave students the opportunity to develop and present their own projects by hosting a project challenge contest and showcase meeting. During this marvelous technical-based event, the contest winner was announced, and a professor gave an overview of the Bioengineering senior design project. We see this as a great learning experience for bioengineering undergraduates to get a glimpse of what senior design is like and to practice building interesting, novel, and pragmatic devices or online models. Combined with tutorials on our YouTube channel, professional development events, and mentorship program, we hope that all BMES members were able to find something to incite their passion in the biomedical sciences and their future careers.



A few of the challenges we were faced with this year were recruitment, fundraising, and finding contacts for our outreach endeavors. We expect that all clubs experienced similar issues, and went to the furthest extent to adapt to and seek out additional help where possible. Setting up a year-long project online was also a challenge because we initially planned to start it up in person for its first year but the pandemic and remote learning halted that plan. We decided to change course by adjusting the first of the project into an online vlog and move forward with it despite the difficulties that arose. To keep all our operations running smoothly, we advertised more vigorously to become comfortable with hosting online events.

This upcoming academic year we hope to incorporate our new found experience with the online platform to bring more events and resources to our members. We hope to build this student chapter's connection with the national chapter and to utilize the opportunities it provides. When in person events pick up again, we aim to have a smooth transition back to pre-pandemic activities. However, we intend to still incorporate all that we learned during the pandemic to ensure that our members obtain the most from this organization.

We are very grateful to have had a team that worked hard to expand our presence within BCOE and online. Aside from strengthening our social media advertising, we also took part in many collaborations to grow our presence and encourage more students to become involved. The BMES officers were absolutely committed to working hard this year in order to grow the club in the face of the initial obstacles that lay before them. 6 of the 12 officers are graduating this year and are passing the torch to the new BMES board that we believe is capable of continuing the hard work and service to our members and to BCOE while achieving higher goals in the upcoming academic year 2021-2022. We cannot wait to see what the future holds for BMES student chapter at UCR!

