VITERBI SCHOOL OF ENGINEERING

CHAPTER DEVELOPMENT REPORT

The Associated Students of Biomedical Engineering

University of Southern California

2019 – 2020 Academic Year

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The Associated Students of Biomedical Engineering (ASBME) is a student-run organization focused on serving the undergraduate biomedical engineering community at USC by designing a comprehensive calendar including social, academic, outreach, mentoring, and professional events. Our programs allow students to explore the opportunities in the biomedical engineering (BME) field. In addition to maintaining and improving flagship events like the Makeathon, Corporate Dinner, and BIOMED Research Symposium, this year we focused on encouraging more meaningful mentorship relations between upperclassmen and underclassmen, supplementing the BME curriculum with technical skill workshops, and increasing collaborations with other USC student organizations. Our mentorship program accrued the consistent participation of 13 mentor/mentee pairs, which is a significant increase compared to previous years. Furthermore, ASBME held a total of six technical skills workshops throughout the year, including computer-aided design and 3D-printing workshops. ASBME also partnered with USC's Joint Educational Program to maximize our impact on the local community by teaching our Project in a Box lessons once a week at a nearby elementary school. For these improvements, we were recognized by the Viterbi School of Engineering with the Most Outstanding Viterbi Student Organization Award for the 2019-2020 academic year. We strive to continue expanding our agenda of events to meet the diverse needs of our members in coming years.

June 1st, 2020

To the Student Chapter Award Committee Members,

The Associated Students of Biomedical Engineering (ASBME) is the BMES student chapter at the University of Southern California (USC). ASBME strives to provide USC's biomedical engineering (BME) student body with engaging and impactful opportunities in the biomedical field. For our continued efforts to put on a comprehensive calendar of events in the 2019-2020 academic year, ASBME was awarded the Most Outstanding Viterbi Student Organization by the Viterbi School of Engineering. We focused on facilitating meaningful mentorship relations between upperclassmen and underclassmen, providing workshops to increase our members' proficiency in technical skills, and collaborating with other organizations to positively impact our local community.

We recognize the importance of our mentorship program in guiding underclassmen during their transition to college and helping them find their place in the biomedical field. In previous years, we had difficulty finding and retaining mentors for our program. This led to mentors taking on three to four mentees, resulting in limited opportunities for meaningful and long-lasting personal connections. This year, we revamped the program by allocating funds specifically for mentorship pairs to enjoy coffee and meals together. We noticed a significant increase in participation: 13 mentor/mentee pairs met regularly throughout the year. Furthermore, we collaborated with the Graduate Students of Biomedical Engineering (GSBME) so that graduate students could serve as mentors for our upperclassmen. Thus, our program expanded to include multiple tiers of mentorship.

In addition to our mentorship program, we initiated a workshop series for the first time to address the need for technical skills when working in the biomedical industry. We hosted computer-aided design, Arduino, and 3D-printing workshops throughout the year. Our Research Chair also held "office hours" to help students use ASBME's own 3D printer. This printer is available to all members for both academic and personal projects. Furthermore, we invited members of MEDesign, a medical device design team student organization, to contribute to the planning of our annual Makeathon. The Makeathon is a 30-hour medical device design competition where students work together to solve real-world challenges. MEDesign members introduced an innovative method of design-thinking for participants to use during the brainstorming and prototyping stages of the competition. All teams had the opportunity to build, calibrate, and troubleshoot a physical device using Viterbi's brand new BME Innovation Space. Students had access to a diverse set of power tools and more than six 3D printers.

Finally, to enhance our Project-in-a-Box community outreach program, ASBME partnered with USC's Joint Educational Program in the spring to maximize our impact on the local community. This collaboration allowed us to return to the same classroom once a week. These repeated classroom visits with the same students allowed them to gain a comprehensive understanding of biomedical engineering as well as engineering as a whole. The Project in a Box team developed four new lesson plans, including a lesson on circuit-building, sound waves, and the cardiac system. During the COVID-19 pandemic, we also launched a new initiative, called Project on a Screen. We made videos demonstrating simple science experiences that children can do at home to continue their education virtually.

Executing over 40 carefully coordinated events per year, ASBME operates as the chief source of extracurricular opportunities for USC's undergraduate BME students. This upcoming year, we look forward to further improvement by expanding our corporate reach, instituting more professional development workshops, and collaborating with student organizations to promote diversity of thought. Our goal is to provide a community for BME students to turn to for resources, job opportunities, and support in navigating the evolving biomedical field.

Dominie Miyasato
Chapter President

Dr. Kirk Shung
Faculty Advisor

TABLE OF CONTENTS

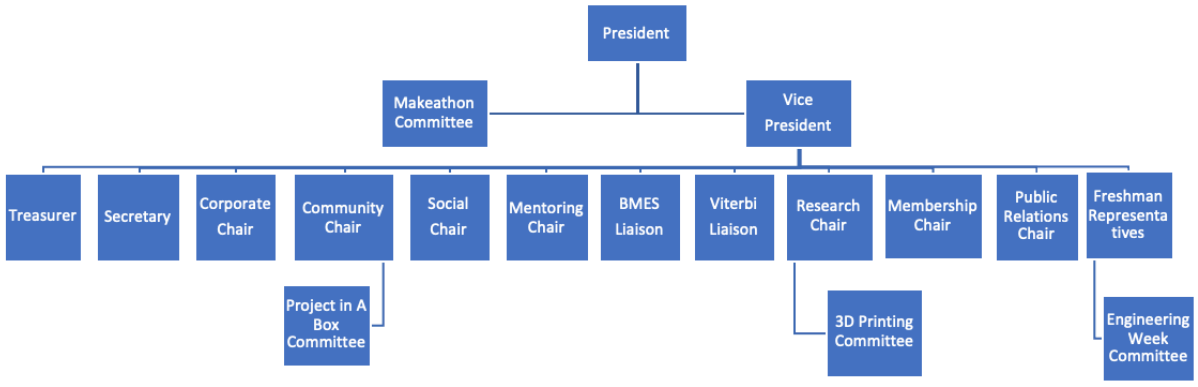
I. Administrative Report

To put on excellent events for our members, the University of Southern California's BMES student chapter must run as efficiently as possible. Responsibilities are divided amongst a 15- member Executive Board. Every Executive Board member is required to plan at least one general meeting in addition to the duties that are associated with his/her given position. To organize our documents, ASBME uses a master Google Drive, containing transition documents from past officers, guidelines specific to each position, a master calendar containing all event dates and deadlines, and other resources such as officer contact information and helpful website links and passwords. Additionally, ASBME holds two Executive Board orientations during which board members are guided through the Google Drive and reminded of their responsibilities. One-on-one meetings are also conducted at the end of the academic year in which the President meets with every board member to review his/her performance.

2018-2019 Officers

Position	Name	Email	Phone
President	Kristie Leung	leungkri@usc.edu	4698312894
Vice President	Dominie Miyasato	dmiyasat@usc.edu	8082687968
Secretary	Christopher Liu	christzl@usc.edu	9169369921
Treasurer	Arjun Aron	arjunaro@usc.edu	2165487871
Historian	Kayley Cheng	kayleych@usc.edu	8184506151
Corporate Chair	Ahmed Mohamed	awmohame@usc.edu	3049517508
Mentoring Chair	Rachel Brockman	rkbrockm@usc.edu	4084208241
Community Chair	Alana Stein	alanaste@usc.edu	8479225294
Social Chair	Kaelyn Takamoto	takamoto@usc.edu	3105133441
Public Relations Chair	Advaita Chandramohan	archandr@usc.edu	8582847770
BMES Liaison	Lilit Krkasharian	lkrkasha@usc.edu	8186440434
Viterbi Liaison	Maddie Walter	mkwalter@usc.edu	7088609630
Research Chair	Kim Larson	larsonk@usc.edu	4253301896
Freshman Representative	Winfield Zhao	wtzhao@usc.edu	7605606718
Freshman Representative	Sabrina Sy	sdsy@usc.edu	3232666228
Freshman Representative	Daniel Hochberg	dhochber@usc.edu	3144789033

Officer Responsibilities Management Tree



Membership

Total Members	Local Membership %	National Membership %
116	48.3%	10.3%

General Body Meetings

Date	Event	% Attendance	Event Type
Sept 4, 2019	GM 0: Welcome	33.6%	Outreach
Sept 18, 2019	GM 1: Career Recruitment Workshop	31.9%	Professional
Oct 2, 2019	GM 2: Interview Preparation and Tips	19.8%	Professional
Oct 23, 2019	GM 3: Internship and Co-op Panel	19.8%	Professional
Nov 6, 2019	GM 4: Fusion 360 CAD Workshop	15.5%	Academic
Nov 20, 2019	GM 5: 3D Printing Workshop	17.2%	Academic
Dec 4, 2019	GM 6: Pathway Information Session	10.3%	Academic
Jan 22, 2020	GM 0.2: Welcome Back	19.0%	Outreach
Jan 29, 2020	GM 7: The Princeton Review MCAT Prep	14.7%	Academic
Mar 4, 2020	GM 9: Summer Opportunities	14.7%	Academic
Apr 8, 2020	GM 11: Biotech Start-up	13.8%	Professional

Executive Board Meetings

Executive board meetings are held every Wednesday to ensure we are keeping up with our comprehensive calendar of events. The meetings are generally structured to have the following sections: Attendance, general reminders, old events debrief, upcoming events, officer updates, and additional thoughts/announcements. An example meeting agenda can be found below.

Example Meeting Agenda:

1. Attendance
2. General Reminders
    a. Meeting times and locations, old action items, new action items
3. Old Events Debrief
    a. Feedback, changes for future, Post-Event Forms, reimbursement, Calendar update.
4. Upcoming Events
    a. Schedule, food, speaker confirmation, help needed, advertisement, additional details.
5. Officer Updates
    a. (All Chairs update goal progress, upcoming needs, new ideas)
6. Additional Thoughts/Announcements

II. Treasury Report

ASBME has maintained a budget to sustain and continue to grow a successful and enriching organization. In order to offer a variety of programs and opportunities to our members, our chapter budgets accordingly and regularly applies for grants and funding. We receive funding from a wide range of sources to provide for as many students as possible as listed below. This year was also our first full year of housing the vast majority of our funds within the biomedical engineering department instead of the general engineering school, which has led to quicker reimbursements and more rapid financial transactions overall. Furthermore, we continued to provide corporate sponsors with the ability to choose whether to give to our general funds and/or to our Makeathon account, a change we implemented last year to our corporate sponsorship packet. In the future, we hope to send our sponsorship packets to more companies and obtain an even more diverse range of funding sources.

Financial Summary

ASBME maintains sufficient funding for ongoing activities and overall maintenance of the chapter through various sources. First and foremost, membership dues help to sustain costs associated with general meetings, corporate events, and social events. ASBME's Treasurer prepares an annual budget at the beginning of the academic year in order to allocate funding where necessary and allow the chapter to prepare for events going on throughout the year. Additionally, USC's Viterbi Funding Board allocates the money collected from the Student Activity Fee and supports academic and professional events offered by student organizations. We apply for funding through USC's Undergraduate and Graduate Student Government, both of which require timely applications and presentations in front of a representative student body. We also apply for funding from the Academic Cultural Assembly, a subdivision of USC's Undergraduate Student Government, and the Student Organization Support Fund of the Viterbi School of Engineering. Lastly, this chapter is supported by the Biomedical Engineering Department and the Alfred E. Mann Institute for Biomedical Engineering at USC, both of which help to support programming and ongoing operations.

Balance Sheet

Sources of Funding

Sources	Amount
Membership Dues*	$ 1,930.00
Viterbi Funding Board	$ 1,401.03
BME Department	$ 3,710.00
Graduate Student Government	$ 2,500.00
Academic Culture Assembly	$ 317.46
Student Organization Support	$ 3,000.00
University Student Government	$ 6,416.00
Alfred E. Mann Institute	$ 2,000.00
Edwards Lifesciences	$ 1,000.00
Anonymous Donor	$ 5,000.00
Genentech	$ 8,000.00
BMES	$ 1,000.00

Ignite Campaign	$ 985.00
Total	**$ 37,259.49**

*Membership Dues: $25 for the full year and $15 for the semester

We aim to reach out to a number of university funding boards as well as corporate sponsors in order to obtain a diverse funding portfolio, which enables us to hold events of the highest quality that our members deserve.

Expenses

Type of Expense	**Amount**
Makeathon	$ 9,548.34
Corporate Dinner	$ 8,047.03
BMES Conference	$ 6,742.81
Supplies	$ 2,631.64
BIOMED Symposium	$ 608.19
Thanksgiving Dinner	$ 284.14
General Meetings	$ 1,108.98
Fall Networking Night	$ 797.32
Mentorship Program	$ 903.69
Total	**$ 30,672.14**

Expenses come from our 40+ events, the annual Makeathon, and other logistics and supplies like t-shirts for members, website fees, and recruiting materials. Most expenses are fronted by our executive board members, who are then reimbursed by either the ASBME Credit Union Account or by the biomedical engineering department. Other methods of payment are purchase orders and internal requisitions organized by the Viterbi School of Engineering and the Undergraduate Student Government. A close approximation of our expenses this year is detailed above.

Current Credit Union Balance: $148.01
Current Makeathon Account (Managed by the BME department): $12,095.96
Current General Funds Account (Managed by the BME department): $10,363.71

III. Chapter Activities

The University of Southern California's BMES Chapter puts on a comprehensive calendar of academic, mentoring, social, community outreach, and professional events. We included our most notable events in this Chapter Activities section.

Our Industry and Professional Events provide students with opportunities to network with industry representatives. Our Corporate Dinner that we host in the spring brings together USC faculty, graduate students, undergraduate students, and industry representatives from all over California. Students are able to learn about the various engineering positions in industry and the distinct missions of biomedical companies. We are proud to report that our professional events have directly led to internship and full-time job offers for many students.

ASBME's social events have attracted a large proportion of the biomedical engineering student body because they are a great way for students to meet their classmates outside of the classroom. Our night hike to the Wisdom Tree is always the most popular event of the year. We decided to have more on-campus events this year in order to reduce time commitment and cost. This helped us to increase our attendance and foster a tight-knit community.

We are always looking to engage with the national Biomedical Engineering Society (BMES) community. We organize research presentations by USC faculty and graduate students, including our annual kick-off event, the BIOMED Research Symposium. In addition, ASBME attends the annual BMES Conference, where students network with professionals in academia and attend seminars on recent advancements in the biomedical field. For the past two years, ASBME members have participated in the Makeathon at the University of California, Davis.

The ASBME community is one of inclusion, collaboration, and mentorship. Our mentorship program pairs upperclassmen and underclassmen with similar interests, providing freshman and sophomore engineering majors with someone to help them navigate college and the biomedical field. This year, we increased participation in our mentorship program by providing stipends for mentorship pairs. The mentorship pair with the most engagement also won additional funds.

ASBME also continues to increase our biomedical engineering presence through our Community Outreach Initiatives and Recruiting Events. We participate in on-campus recruiting events such as the Viterbi Get Connected Fair and the USC Involvement Fair to increase our membership. We also have a Project in a Box team that educates local 3rd to 6th grade students on biomedical engineering topics in hopes of sparking an interest in STEM and helping them build problem-solving skills at an early age. The Project on a Box initiative transformed into the Project on a Screen initiative during the COVID-19 pandemic.

The breadth of the biomedical major and industry can be quite intimidating to students, but ASBME is there to support them through their journey in college. If students have a social network to rely on in tough times and a source of job opportunities during the stressful recruiting season, they will be able to reach their full potential and attain their career aspirations!

IIIA. Industry and Professional Development Activities

ASBME is committed to providing the necessary opportunities and resources to ensure its members' success in the biomedical industry. To accomplish this, we host networking dinners, information sessions, and professional development workshops throughout the year. Our signature annual networking event, the Corporate Dinner, is an opportunity for over 100 undergraduate and graduate students to network with over 20 corporate representatives from 10 biomedical companies as well as USC biomedical engineering faculty who conduct ground-breaking research. During the fall semester, we hold a smaller dinner, Networking Night, that allows 60 students to network with 8 companies from the biomedical field. During the rest of the year, we host events such as company information sessions, interview and resume-building workshops, and career panels. These events are intended to prepare students for the job-recruiting process and a future career in the biomedical industry.

1. **General Meeting 1: Career Recruitment Workshop**
   Historian Kayley Cheng and Corporate Chair Ahmed Mohamed hosted a workshop on how to prepare for the Viterbi Career Fair and land a job, internship, or co-op position. They discussed compelling elevator pitches, the application timeline for prominent companies that recruit at USC, and talking points for networking with corporate representatives. Both Kayley and Ahmed were able to speak from personal experience as they were former interns at Medtronic and Abbott.

   Audience: Students preparing for recruiting season at USC and/or looking for a job/internship.

GM 1: Career Recruitment Workshop	September 18th, 2019 7:00 PM – ZHS 163	37 undergraduate attendees (31.9%)	Cost: $124.83

2. **Fall Networking Night**
   Fall Networking Night is one of our club's two main networking events of the year. At this event, industry representatives from various biomedical companies will attend and speak with biomedical engineering undergraduate students about internship and job opportunities during dinner. The dinner includes rotations of roundtable networking so that the students, as well as the company representatives, will have a chance to speak with a range of people. The goal is to expose students to the companies that are based in or around Los Angeles while introducing recruiters to potential job candidates. This year, it was held prior to the Viterbi Career Fair in order for students to make connections before the recruiting process was in full swing.

   Audience: Students interested in networking with industry professionals for internship and job opportunities.

Fall Networking Night	September 30th, 2019 6:00PM – Parkside Cafe	52 undergraduate attendees (44.8%)	Cost: $797.32

3. **Abbott Information Session and Product Demo**

At this information session, undergraduate students had the opportunity to learn about Abbott's Internship Program. We kicked off the event with an overview of Abbott's goals, philosophy, and professional opportunities. Then, Abbott representatives from their Cardiac Rhythm Management and Vascular division led a hands-on product demo. Students were able to hear the experiences of both full-time employees and former interns.

Audience: Engineering majors interested in career opportunities at Abbott.

Abbott Information Session and Product Demo	September 29th, 2019 2:30 PM– TCC 227	50 undergraduate attendees (43.1%)	Cost: N/A

4. **General Meeting 2: Interview Preparation and Tips**

This event was designed to help students prepare for upcoming interviews for internships and full-time jobs. Students learned from former interns at biomedical companies about typical behavioral interview questions and how to best answer them. The former interns led attendees through an exercise to practice answering questions. Subway was provided for dinner.

Audience: Students who have upcoming interviews for internships and full-time jobs at biomedical companies.

Interview Preparation and Tips	October 9th, 2019 7 PM – ZHS 163	23 undergraduate attendees (19.8%)	Cost: $148.96

5. **General Meeting 3: Internship and Co-op Panel**

ASBME invited four upperclassmen to participate on a panel and talk about their internship and co-op experiences. Each panelist had worked at a different company (Edwards Lifesciences, Medtronic, Abbott, and Illumina), so they offered a diverse range of perspectives. They were prompted to talk about projects they worked on and company culture. Chipotle burritos were provided for dinner.

Audience: Biomedical engineering students who are interested in internships and co-ops.

Internship and Co-op Panel	October 23rd, 2019 7 PM – ZHS 163	23 undergraduate attendees (19.8%)	Cost: $143.72

6. **Consulting Q&A with DeciBio**

ASBME invited Seth Schachter, a recent USC BME alum, to speak about his job as an Associate at the Los Angeles-based consulting firm DeciBio. This virtual event through Zoom allowed students to come together from all over the country to ask their questions and gain insight into the daily responsibilities of a strategy consultant. Topics covered during the event included undergraduate experiences that are applicable to the field, how to prepare for consulting interviews, and the common career trajectories of consultants. It was a great opportunity for students to learn about specific consulting projects related to healthcare and how engineering skills could be useful in carrying out these projects.

Audience: Biomedical engineering students who are interested in consulting.

Consulting Q&A with DeciBio	April 15th, 2020 7 PM – Zoom	15 undergraduate attendees (12.9%)	Cost: N/A

7. ASBME's 24th Annual Corporate Dinner

ASBME's 24th Annual Corporate Dinner, hosted in the grand ballroom of the USC Hotel, provided USC undergraduate and graduate biomedical engineering students with the opportunity to enjoy a catered dinner with USC biomedical engineering faculty and representatives from Abbott, Medtronic, Edwards Lifesciences, MicroVention, Integrated Medical Sensors, KRE Consulting, Boston Scientific, Applied Medical, and Aescula Tech.

The purpose of the event was to connect USC biomedical engineering students with employers or faculty mentors in a setting that would encourage the formation of close, personal relationships. Students were seated at tables each with two corporate representatives and one faculty member for a three-course meal. Keynote Speaker Julie Manalili, Senior Director of Global Quality Operations at Abbott, presented on climbing the corporate ladder, maintaining a work-life balance, and achieving goals as a leader in industry. Students then had the opportunity to network with representatives from all companies.

Audience: Undergraduate and graduate students seeking internships and full-time employment.

24th Annual Corporate Dinner	February 24th, 2020 7:00PM – USC Hotel Grand Ballroom	108 undergraduate attendees (93%)	Cost: $8,047.03

IIIB. Social Activities

Following a very successful year of social activities, ASBME strove to continue this momentum with a repeat of popular, "traditional" events and introduction of new social events. Furthermore, we focused on collaborating with other student organizations to help ASBME members not only make meaningful relationships with fellow biomedical engineering students but also with other engineering students. As an organization, ASBME is dedicated to helping students pursue their interests and passions within BME and beyond. We also consider it a priority to help students develop a social network outside the classroom with engaging events. We gather students together for hikes, picnics, and games. The purpose of these social events is to develop a tight-knit BME community and to help build student relations. By fostering personal connections between its members, ASBME hopes to further expand the BMES chapter at the University of Southern California.

1. **Wisdom Tree Night Hike**

Quickly becoming an iconic LA hiking destination, the Wisdom Tree features stunning views of the downtown LA nightscape as well as the only surviving tree from the 2007 Hollywood Hills fires. ASBME members made the night trek up to the tree, took in the views, and contributed to the famed geocaching box filled with inspirational stories, messages, and quotes left by previous hikers. At the top, we gathered in a circle to introduce everyone and say one thing we were excited about for the year. We were able to develop the camaraderie that a challenging hike brings and enjoy each other's company on a beautiful LA night. We also enjoyed In-N-Out after the hike!

Audience: Biomedical engineering students interested in being active and spending time with fellow classmates.

Wisdom Tree Night Hike	September 6th, 2019 8:00 PM – Hollywood Hills	22 undergraduate attendees (19.0%)	Cost: $290.49

2. **ASBME X GSBME Tailgate**

ASBME joined forces with GSBME to bring together the biomedical engineering community before the Homecoming USC football game. By grilling food, listening to music, playing games, and preparing to fight on with the Trojan football team, the BME population was able to interact in a fun and lively setting.

Audience: Spirited undergraduate and graduate students looking to share their zeal before a game.

ASBME x GSBME Tailgate	November 2nd, 2019 2:00 PM – McCarthy Quad	35 attendees (30.2%)	Cost (to ASBME): $156.00

3. **ASBME X SWE Beach Bonfire**

Members of ASBME and the Society of Women Engineers (SWE) headed down to Dockweiler beach and set up a bonfire. We played games, watched the sunset, and enjoyed some tasty smores. The purpose of this event was to not only have fun and meet people outside of ASBME, but also to maintain good relations with a prominent Viterbi student organization, SWE.

Audience: ASBME and SWE members looking for a fun way to destress from school!

SWE X ASBME Beach Bonfire	September 27th, 2019 7:00 PM- Dockweiler Beach	11 undergraduate attendees (9.5%)	Cost (to ASBME): $49.10

4. **Game Night**

With ASBME E-board elections coming up, we hosted a game night on campus so that students both in and outside of the current E-board could get to know each other, especially all those interested in applying for next year's E-board. We engaged in team play with games like Scattergories and Charades before breaking off into smaller groups to play cards and Code Names. Teams comprised of students who did not know each other well, so they had the chance to mingle and bond over some friendly competition. We ended the night with a lovely cheeseboard, and students stayed around to continue to chat and have fun.

Audience: ASBME members interested in applying for next year's eboard.

Game Night	March 6th, 2020 7:00 PM- GFS 105	20 undergraduate attendees (17.2%)	Cost: $41.16

5. **Bowling with Biomedical Engineers**

With finals season approaching quickly, it is essential that students have an opportunity to blow off steam before hitting the books. Students carpooled to Shatto Lanes in Koreatown and bowled and bonded over a few games. Then, they visited various dessert establishments to close the night. This event not only prepared students for the upcoming finals season, but also promoted interaction with members across classes.

Audience: All undergraduate students interested in bowling and food!

Bowling with Biomedical Engineers	November 9th, 2019 7:00 PM – Shatto Lanes	15 undergraduate attendees (12.9%)	Cost: N/A

IIIC. Inter-Chapter Activities

Collaboration is paramount in the field of engineering, and as such, retaining good relationships with fellow student chapters is very important. In the future, ASBME plans to hold social and academic events with other local universities in Southern California, and we hope to work together to attend national and regional conferences as a coalition. We are already in communication with the BMES chapter at the University of California, Los Angeles. Creating and maintaining relationships with fellow biomedical engineers is essential to entering the field post-graduation, and ASBME wants to give its members opportunities to network with students from other universities. In the coming school year, we hope to increase the number of participants from other universities at our annual Makeathon.

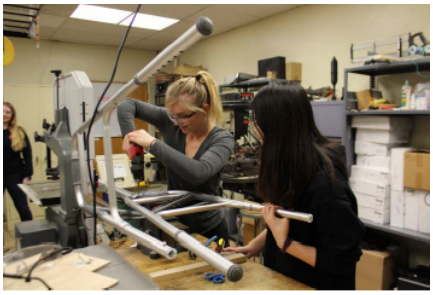
1. 6th Annual UC Davis Make-a-thon

ASBME sent a team of five undergraduate students to participate in the 6th Annual UC Davis Make-a-thon medical device design competition. The team worked alongside other teams for over 30 hours to design and fabricate a medical device for opening "push and twist" medicine bottles. They used technical skills such as computer aided design and gave a final presentation to a judge panel of industry professionals and UC Davis faculty. This event was an incredible opportunity for students to observe firsthand what the design process is like, how to work as a team under pressure, and make connections with BMES chapter members from another school.

Audience: USC BME students looking for a hands-on prototyping experience.

6th Annual Make-a-thon at UC Davis	January 17-19th, 2020 5:00 PM – UC Davis	5 undergraduate attendees (4.3%)	Cost (to ASBME): N/A

2. USC ASBME 5th Annual Makeathon Competition



For the past five years, ASBME has hosted the Makeathon: the only undergraduate medical device design competition within the Southern California region. We were excited to host students from UC Riverside this year. At the event, students are presented with a real-world challenge, this year's being to develop a rehabilitation device that promotes and enhances physical therapy activity for survivors of stroke who exhibit hand and/or wrist impairments. 10 teams of five students are tasked with brainstorming, 3D modeling, and prototyping a device to solve the challenge within 30 hours. More can be found about the Makeathon in the Other Initiatives and Activities section of this report.

Audience: BME students looking for hands-on prototyping experience.

USC ASBME 5th Annual Makeathon Competition	February 5-7th, 2020 5:00 PM – USC TCC	50 undergraduate attendees (43.1%)	Cost: $9,548.34

3. **USC X UCLA Beach Volleyball Tournament**

ASBME and UCLA BMES members had a great day playing volleyball at the beach and enjoying the SoCal sun! Members from both chapters met at Venice Beach and played a few friendly games of volleyball, then enjoyed lunch at Urth Caffe. These inter-chapter events are significant because they provide opportunities for our members to form personal, and potentially future professional relationships with peers in their field.

Audience: BME students who are interested in meeting the UCLA chapter!

USC X UCLA Beach Volleyball Tournament	April 6th, 2019 11:00 AM – Venice Beach	5 students (4.3%)	Cost: $46.71

IIID. Outreach Activities

ASBME actively recruits new members throughout the academic year. The resources that ASBME is able to offer its members is unparalleled by any other organization at the University of Southern California for BME students. ASBME ensures that every student has access to avenues for growth in professional and academic spheres. We extend this philosophy to our surrounding community, too, as demonstrated by our Project in a Box initiative. A team of ASBME members visits elementary school classrooms on a weekly basis to expose young students to biomedical engineering and encourage them to pursue STEM fields. For the first time, we worked with USC's Joint Educational Program to form a more robust lesson plan that extends into several engineering disciplines. We also started a new project called Project on a Screen to help educate young students virtually during the COVID-19 pandemic.

1. **Project in a Box in Fall 2019**

Launched in 2016, Project in a Box (PiaB) is our outreach program that involves visiting local 3rd to 6th grade classrooms to inspire an interest in STEM fields and help develop problem-solving skills at the early academic stages. PiaB presents interactive projects and scenarios that prompt students to consider the engineering design process as it applies to the human body. We offered interested teachers our main lesson plans, the Prosthetic Hand Project and DNA Exploration Project. Students are given some time to learn general background information for a topic; however, they spend the majority of the lesson working with physical materials and setting specific design requirements, as typical engineers do today. These one-time lessons last between 50 to 60 minutes, a timeframe that allows students to dive deep into the project but also not distract them from their teacher's lesson plans for the day.

Audience: BME students looking to serve their neighboring community.

Project in a Box	October 4th, 2019	Vermont Ave Elementary	7 – 9 per classroom visit
	October 25th, 2019	USC Performing Arts Magnet	
	November 8th, 2019	USC Performing Arts Magnet	
	December 6th , 2019	Vermont Ave Elementary	

2. **Project in a Box Partnership with USC's Joint Educational Program**

For the first time, PiaB partnered with USC's Joint Educational Program (JEP) to maximize our impact on our local community. This collaboration with JEP allowed us to return to the same classroom once a week until the onset of the COVID-19 pandemic. These repeated classroom visits with the same students allowed them to gain a comprehensive understanding of biomedical engineering as well as engineering as a whole. Because of this new collaboration with JEP, the Project in a Box team developed four new lesson plans for the students. These included a lesson on electronics where the students built circuits using SnapCircuits. Another lesson was based on sound using the classic cup and string model. Moreover,

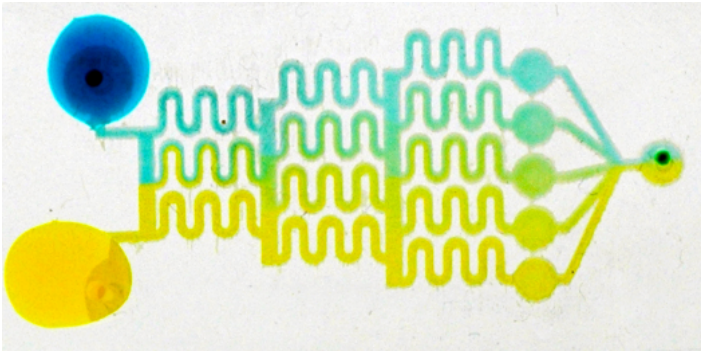
we planned on doing a lesson on the cardiac system which included building the heart from a model kit and designing a one way valve. If the pandemic had not interrupted our schedule, we would have done a "Makeathon style" two-week lesson consisting of an egg drop competition that simulates designing helmets to protect the brain.

Audience: BME students looking to serve and teach their neighboring community.

Project in a Box	February 20th, 2020	Foshay Middle School	7 – 9 per classroom visit
	February 21st, 2020	Birdilee V. Bright Elementary	
	February 27th, 2020	Foshay Middle School	
	February 28th, 2020	Birdilee V. Bright Elementary	
	March 5th, 2020	Foshay Middle School	
	Mid March – May	Cancelled due to COVID-19	

Total Project in a Box Costs: $235.37

3. **McCain Microfluidics Outreach**



This collaboration with the McCain lab in the USC Biomedical Engineering Department taught students at Orthopedic Medical Magnet High School about cutting edge developments in personalized medicine. In this back-to-back school visit, Professor Megan McCain introduced the current drug development process and how precision medicine can be integrated to develop more effective drugs. Students then designed and fabricated a microfluidic device designed to generate five different concentrations of food coloring, which represent five concentrations of cancer drug tested on heart cells from a patient. After students built and tested their device on a "patient", they analyzed their results and determined which patient profiles lead to changes in drug sensitivities. The audience was high school introductory students, so this was a unique opportunity to go more in-depth in the science principles behind the experiments compared to regular Project in a Box meetings. We hope to continue working with the McCain lab in the future and establish more regular Microfluidics Classroom visits.

Audience: BME students who love to positively impact their local community.

McCain Microfluidics Outreach	April 9th & 10th , 2019 Orthopedic Medical Magnet High School	9 undergraduate attendees (7.8%)	Cost (to ASBME): N/A

4. **Project on a Screen**

During the COVID-19 pandemic, ASBME started a new community outreach initiative to help young students continue their education virtually. The Project in a Box team made videos on YouTube demonstrating simple science experiments that children could do at home with common household items. They showed how to make Lava Lamps, Elephant Toothpaste, and Colorful Milk while explaining the science behind each chemical reaction. ASBME has recognized that many

children will have to stay home for the summer, and we are planning to continue creating educational content for the rest of the year. Our YouTube page can be found here: https://www.youtube.com/channel/UCQYEiscy_JqsGAV-7m99RuA.

Audience: ASBME students who want to help educate children during the COVID-19 pandemic.

Project on a Screen	March – May 2020 YouTube	5 ASBME members	Cost (to ASBME): N/A

5. **Various Involvement Fairs**
ASBME has held a booth at all the following fairs to reach out to possible new members, help prospective students get an idea of what the biomedical engineering program is like in the Viterbi School of Engineering, and demonstrate what our organization does for its members. At each of these events we bring past membership t-shirts, our annual reports documenting our programs, all our awards, and various ASBME stickers and promotional items. We also set up our banner for advertisement and set up laptops so that interested students can sign up for our mailing list.

Audience: Students who want to get more involved in biomedical engineering community.

USC Fall Involvement Fair	August 28th, 2019 – Trousdale	26 undergraduate students
Fall Viterbi Get Connected Fair	August 22nd, 2019 – Equad	56 undergraduate students
Viterbi Expo	November 16th, 2019 – Equad	32 prospective students
USC Spring Involvement Fair	January 15th, 2020 – Trousdale	30 undergraduate students
Spring Viterbi Get Connected Fair	January 16th, 2020 – Michelson	30 undergraduate students

IIIE. Mentoring Activities

The purpose of ASBME's Mentoring Program is to facilitate interaction between underclassmen and upperclassmen biomedical engineering students. Mentors are able to help mentees with their transition to college and navigating the biomedical engineering major and industry. In previous years, our mentoring program was small due to limited student participation and engagement. However, this year, we allocated a significant portion of our funds to our mentor/mentee pairs in the form of stipends. This incentivized the pairs to share meals together on a more regular basis and allowed for more personal connections to be made. We also put on events that brought all mentorship pairs together to mingle and expand their social network. This year, we had a new record of 13 mentorship pairs, and feedback from participants showed that this year's mentorship program was impactful for both mentors and mentees.

1. **Mentoring Kick-Off**

   This event was intended to allow those interested in the mentorship program to meet potential mentors and mentees. Mentors and mentees were able to get to know each other's interests and involvements so that they could submit preferences for who they wanted to be paired with. Activities included ice breakers, a game of Scattergories, and an egg drop. Teams were formed for Scattergories and the egg drop that consisted of at least one mentee and one upperclassman. After the official events, mentors and mentees socialized over some snacks.

   Audience: All ASBME students interested in being a mentor or mentee.

Mentoring Kick-Off	September 14th, 2019 11:00 AM – Viterbi E-Quad	15 undergraduate attendees (12.9%)	Cost: $15.00

2. **Mentoring Boba Socials**

   These events provided another opportunity for those interested in the mentorship program to meet potential mentors and mentees. We met in the USC Village and then walked over to Pot of Cha to get boba. Mentors and mentees were able to socialize during the walk over and while waiting to get their drinks. After the socials, we all headed over to ASBME's general meeting!

   Audience: ASBME mentors and mentees.

Mentoring Boba Socials	September 18th, 2019 and January 29th, 2020 6:00 PM – Pot of Cha	23 undergraduate attendees (19.8%)	Cost: $46.00

3. **Mentoring Baked Bear Social**

Mentors and mentees were invited to come to Baked Bear to get ice cream and socialize. ASBME partially subsidized everyone's ice cream to encourage attendance. Students had the opportunity to talk about their classes and destress from midterms. It was a great bonding opportunity!

Audience: ASBME mentors and mentees.

Mentoring Baked Bear Social	October 23rd, 2019 6:00 PM – Baked Bear	10 undergraduate attendees (8.6%)	Cost: $29.97

4. **ASBME X AICHE Thanksgiving Dinner**

Thanksgiving Dinner was a social event to bring together engineering clubs over delicious thanksgiving food catered from Boston Market. The event was a great way for the ASBME Freshmen representatives to gain leadership experience by planning their first event and meeting members of the American Institute of Chemical Engineers executive board. Those in attendance were able to eat turkey, stuffing, and pumpkin pie, while also taking pictures at the photo booth and playing "Cards against Humanity" with their new friends. Mentors and mentees also had the chance to catch up!

Audience: ASBME and AICHE members and those interested in meeting new people in the engineering community.

ASBME x AICHE Thanksgiving Dinner	November 22nd, 2019 6:00 PM- VKC 101	35 attendees (30.2%)	Cost (to ASBME): $284.14

5. **Mentorship End of Semester Dinner**

To celebrate the end of the semester and a successful start to the year of mentorship, mentors and mentees went to Thai by Trio. Mentors and mentees had the opportunity to check in one last time winter break and were also able to mingle with other mentorship pairs. Everyone ate some good food and had great conversations!

Audience: ASBME members of mentorship program.

Mentorship End of Semester Dinner	December 2nd, 2019 7:00 PM – Thai by Trio	15 attendees (12.9%)	Cost (to ASBME): $150.00

6. **Spread the Love and the Jam Picnic**

We hosted a fun picnic at the McCarthy field in the Village. We got some orange juice, chips and salsa, cookies, peanut butter and jelly sandwiches. It was a very relaxing time for mentors and mentees to come for just an hour or two. It helped that it was on campus so that students did not have to travel by car. The weather was great and conducive for just hanging out and talking.

Audience: ASBME members.

Spread the Love and the Jam Picnic	February 16th, 2020 10:00 AM – McCarthy Field	8 attendees (6.9%)	Cost: $26.63

IIIF. Other Initiatives and Activities

Besides the aforementioned events, ASBME hosts two other large annual events. The BIOMED Research symposium gives our members a chance to learn about the cutting-edge research going on at USC, and the Makeathon (medical device design competition) is a unique opportunity for students to apply what they learn in class to solve a real-world challenge. In addition, ASBME put on a series of technical workshops so that biomedical engineering students could gain valuable technical skills to prepare them for their courses and the biomedical industry.

1. **General Meeting 4: Fusion 360 CAD Workshop & General Meeting 5: 3D Printing Workshop**

In these two technical workshops, members learned how to model objects using computer aided design software and fabricate objects using a 3D printer. In GM 4, Professor Raymond Kim from USC's Information Technology Program led members through a workshop on how to use Fusion 360. He outlined the steps of how to create a sketch, and then extrude it into an object. At GM 5, Community Chair Alana Stein walked members through how to use ASBME's 3D-Printer. She explained the basic controls on the Prusa 3D printer and common troubleshooting tactics. Once trained on the printer, ASBME members have access to it for their own academic or personal projects throughout the year. This series of technical workshops helped to supplement the BME curriculum and prepare students for our annual Makeathon competition.

Audience: BME students interested in improving their technical skills.

GM 4: Fusion 360 CAD Workshop	November 6th, 2019 7 PM – ZHS 163	18 undergraduate attendees (15.5%)	Cost: $132.97
GM 5: 3D Printing Workshop	November 20th, 2019 7 PM – ZHS 163	20 undergraduate attendees (17.2%)	Cost: $103.39

2. **BIOMED Research Symposium**

The BIOMED Research Symposium is an annual, beginning-of-the-year dinner that aims to introduce undergraduate students to pressing medical issues that face the world today. ASBME invites faculty and graduate students from the biomedical engineering department to present and discuss their research. BIOMED provides a great opportunity for students to make connections with their BME peers and faculty. Our hope is that BIOMED inspires students to take part in the exciting biomedical research going on at USC during their time as undergraduate students and beyond. We were honored to welcome the Chair of the Viterbi BME department, Dr. Kirk Shung, as our keynote speaker and our three distinguished speakers Dr. Jennifer Treweek, Dr. Gerald Loeb, and Dr. Maral Mousavi.

Audience: BME undergraduate students interested in getting more involved in research.

BIOMED Research Symposium	September 13th, 2019 6:00 PM – TCC 350/351	50 undergraduate attendees (43.1%)	Cost: $608.19

3. ASBME 5th Annual Makeathon Competition

Prior to Makeathon, there were limited opportunities outside of the classroom for USC students to do real-life, application-based projects related to the biomedical field. ASBME recognized this need and began hosting the Makeathon for the first time in February of 2016. Makeathon is, in essence, a hackathon for designers instead of coders. In 30 hours, 10 teams of five people brainstorm, prototype, and fabricate a device under material and functional constraints. In previous years, teams presented preliminary designs to a panel of mentors who selected five teams to move on to device fabrication. This year, all teams had the opportunity to fabricate their device after informally presenting their device to and receiving advice from a panel of graduate student mentors. Thus, all participants had the experience of building and troubleshooting a physical device.

The teams utilized USC's Fabrication Lab and brand new BME Innovation Space to construct their designs from a variety of materials and methods, as well as 3D printers provided by a collaborating student organization, 3D4E. Furthermore, participants had the opportunity to attend Fusion 360, 3D Printing, and Arduino workshops led by ITP Professor Raymond Kim, 3D4E, and USC Makers. All teams then prepared a final presentation to be delivered to a second panel of judges who determined the winners. Presentations covered design motivations, device functionality, and impact on the field or on client needs. First, second, and third place awards were given, as well as an honorable mention. ASBME provided food throughout the event.

This year, teams were challenged with developing a rehabilitation device that promotes and enhances physical therapy activity in non-clinical settings for survivors of stroke who exhibit hand and/or wrist impairments. Our challenge provider, Viterbi Professor Dr. Valero-Cuevas, presented the challenge to our participants at the Makeathon Kick-off and came by the competition during the brainstorming stages to answer any questions. Dr. Paul Yock, professor and founder of the Biodesign program at Stanford, delivered the keynote talk at this Kick-off event, emphasizing the importance of needs-based design. Furthermore, the USC Chan Division of Occupational Science and Occupational Therapy contributed greatly, with OT graduate students serving as mentors throughout the competition along with the Viterbi engineering graduate students. The mentors helped students flesh out their initial ideas and address the critical needs of the patient.

Our judge panel included USC Faculty, Dr. Maral Mousavi and Dr. Jean-Michel Maarek, and Trey Bobo, Senior Manager of Research and Development at Edwards Lifesciences. From the OT department, Dr. Kelsey Peterson and Dr. Stacey Schepens-Niemiec joined the panel. Also, Dr. Matthew Niemiec offered a physical therapist's perspective on the panel. This diverse panel evaluated many unique designs, including a box that simulated everyday tasks such as opening a door and an interactive web page for interactive rehabilitation exercises. The first-place team, "All Hands on Deck", developed a glove that a post-stroke patient would wear over the affected hand. The glove detects the position of each finger and determines the different grip types based on combined feedback of all 5 fingers. The physical component consisted of a board game that patients could play with people in their support community.

Audience: Though biomedical engineering students are the target demographic, undergraduates from other fields are encouraged to participate.

ASBME 5th Annual Makeathon	February 5th-7th , 2020 5:00 PM – TCC 433, 227, Forum	50 undergraduate attendees (51.7%)	Cost: $9,548.34

IV. BMES Conference

The 2019 Biomedical Engineering Society (BMES) conference provided an opportunity for students, professors, researchers, and industry professionals to come together and communicate recent advancements in the biomedical field. ASBME members attended plenary sessions, poster sessions, the career fair, seminars, and professional development workshops. The BMES conference was a fantastic opportunity for undergraduates to learn about the career paths of a biomedical engineer. It was also a chance to connect with leaders of BMES chapters at other universities. We were able to show them our Project in a Box community outreach program at our booth and hopefully inspire them to put on a similar initiative in their local communities.

The attendees to the 2019 annual meeting are listed below:

BMES Conference Attendance

Name	BMES member ID
Kristie Leung	4018728
Dominie Miyasato	4019017
Kim Larson	4019473
Alana Stein	4018677
Ahmed Mohamed	4019807
Maddie Walter	4018853
Lilit Krkasharian	4019645
Brian Ahn	4018864
Helen Salinas	4018854
Kristen Nemes	4018632
Zhelan Chen	4018626
Zhangjingyi Jiang	4019598

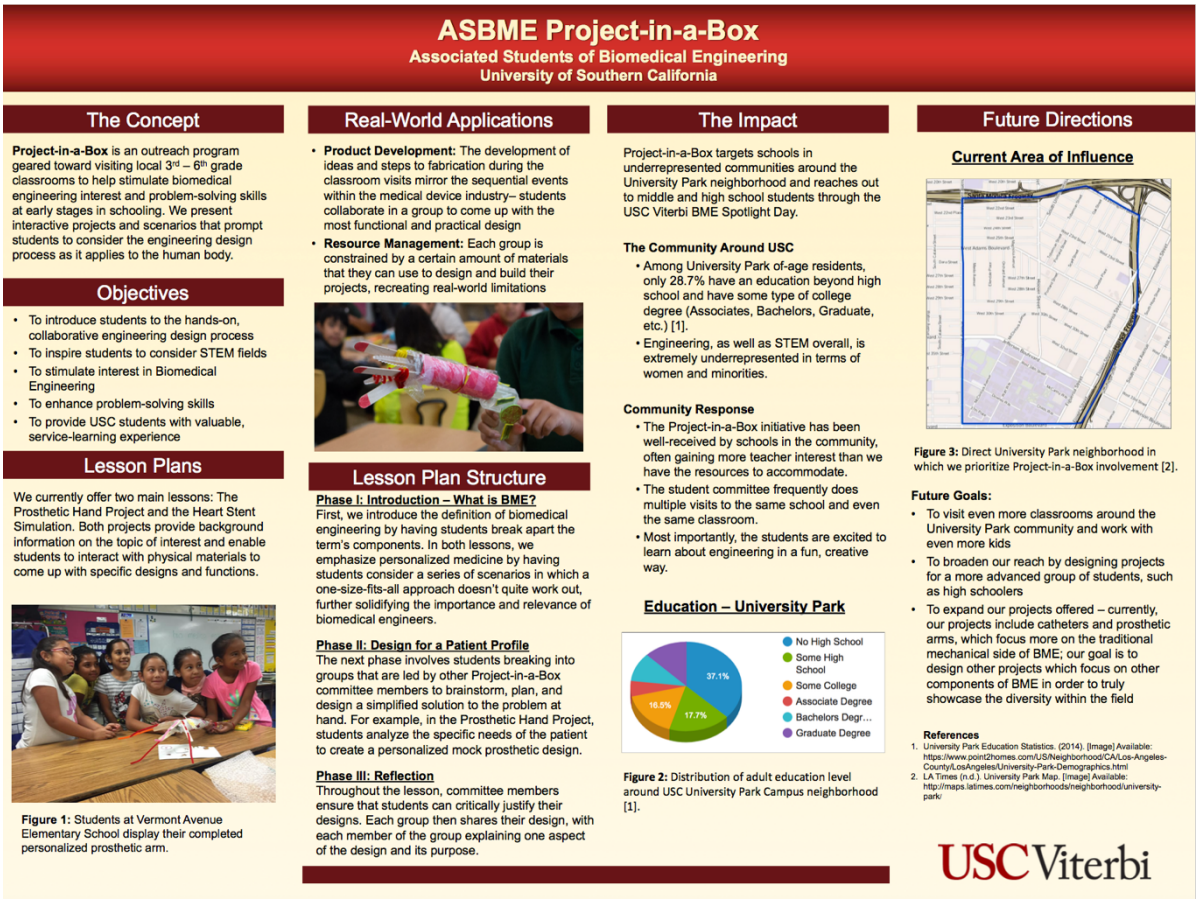
Participation

ASBME members were an engaged audience in nearly all the sessions offered at the conference. We are proud of our ASBME member, Helen Salinas, who presented her research in a poster format. Many students also attended the graduate degree program dinners and final BMES Dessert Bash. At least 10 students are planning on representing ASBME at the conference next year and applying to hold a student chapter booth as explained in the next section.

Student Chapter Booth

Each year, we aim to showcase our ever-growing Project in a Box outreach program. As in previous years, we have brought physical materials to the conference to demonstrate the lesson plans' aims and purpose. We also supplemented these key presentation elements with a poster specifically printed for and tailored to the BMES conference table. As can be seen below, the poster includes not only information about the program lesson plans but also demographic statistics about the local community in which we perform the majority of our program. The poster proved to attract attention and garner the interest of passing conference attendees.

BMES Project in a Box poster *specifically printed as a supplement to the conference booth*



V. Future Directions

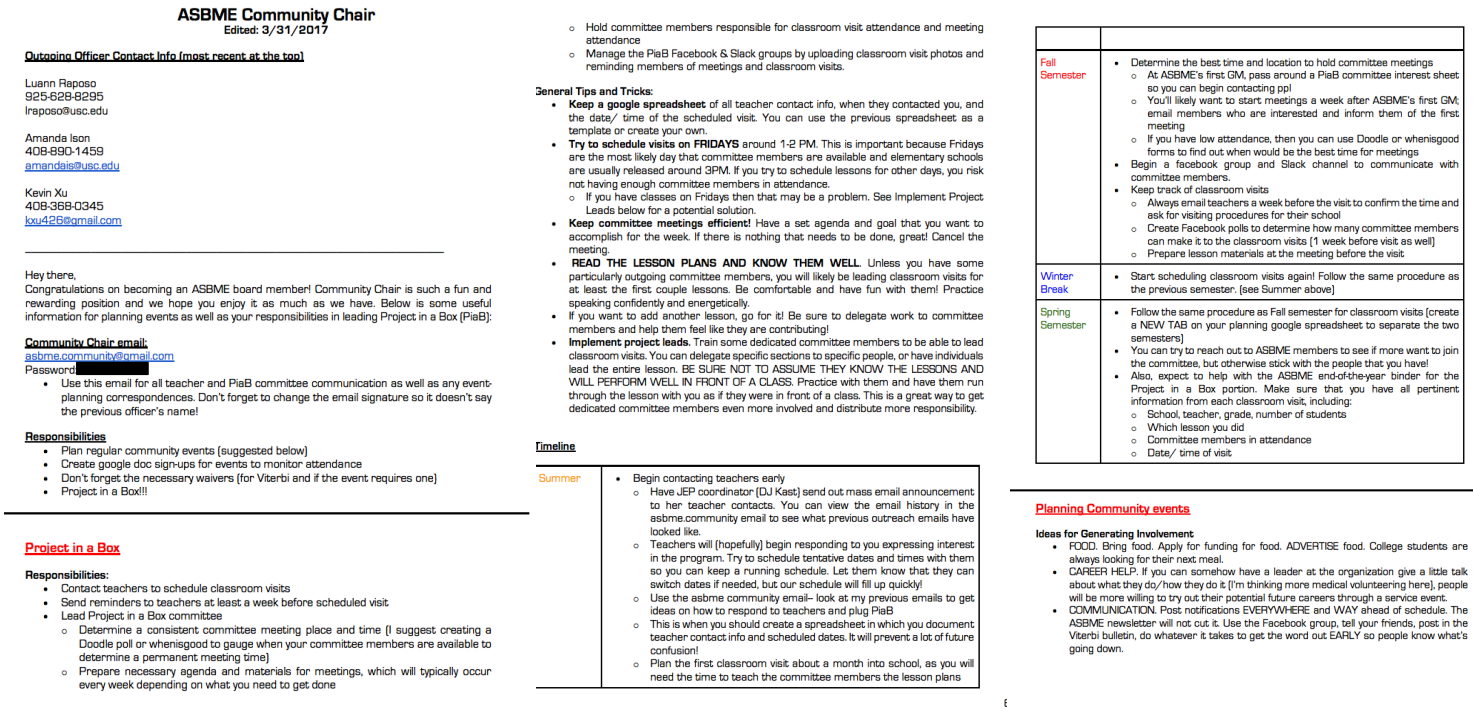
Transition Plan

In order for a large and well-established student-run organization to continue its success despite having to change leadership in such a short amount of time, a well-defined and thorough transition plan must be made. ASBME continues its effective transition plan founded in 1985 to continue its success and progress. The transition plan is as follows:

1. Elections: ASBME elections occur near the end of the Spring semester. The President and the Vice President are elected through a direct democratic vote by the club's current members. The remaining positions are also be voted upon and the top two nominees are interviewed and chosen by the newly elected President and Vice President.

2. Transition Meetings: Soon after the elections, the President and Vice President ensure that each of the transition meetings occur promptly. In the transition meetings, the previous executive board member meets with the newly elected executive board member in the presence of either the President or Vice President to discuss the responsibilities of the Executive Board position as well as to review the transition document.

   Transition documents are passed on throughout the years and constantly updated by the new board members. This document is extremely important in the transition between board members because it includes duties, timelines, reflections, and tips specific for each new executive board member. An example of a past transition document is attached below.



ASBME Community Chair
Edited: 3/31/2017

Outgoing Officer Contact Info (most recent at the top)

Luann Raposo
925-628-8295
lraposo@usc.edu

Amanda Ison
408-890-1459
amandais@usc.edu

Kevin Xu
408-368-0345
kxu426@gmail.com

Hey there,
Congratulations on becoming an ASBME board member! Community Chair is such a fun and rewarding position and we hope you enjoy it as much as we have. Below is some useful information for planning events as well as your responsibilities in leading Project in a Box (PiaB):

Community Chair email:
asbme.community@gmail.com
Password: [redacted]
- Use this email for all teacher and PiaB committee communication as well as any event-planning correspondences. Don't forget to change the email signature so it doesn't say the previous officer's name!

Responsibilities
- Plan regular community events (suggested below)
- Create google doc sign-ups for events to monitor attendance
- Don't forget the necessary waivers (for Viterbi and if the event requires one)
- Project in a Box!!!

Project in a Box

Responsibilities:
- Contact teachers to schedule classroom visits
- Send reminders to teachers at least a week before scheduled visit
- Lead Project in a Box committee
  - Determine a consistent committee meeting place and time (I suggest creating a Doodle poll or whenisgood to gauge when your committee members are available to determine a permanent meeting time)
  - Prepare necessary agenda and materials for meetings, which will typically occur every week depending on what you need to get done
  - Hold committee members responsible for classroom visit attendance and meeting attendance
  - Manage the PiaB Facebook & Slack groups by uploading classroom visit photos and reminding members of meetings and classroom visits.

General Tips and Tricks:
- **Keep a google spreadsheet** of all teacher contact info, when they contacted you, and the date/ time of the scheduled visit. You can use the previous spreadsheet as a template or create your own.
- **Try to schedule visits on FRIDAYS** around 1-2 PM. This is important because Fridays are the most likely day that committee members are available and elementary schools are usually released around 3PM. If you try to schedule lessons for other days, you risk not having enough committee members in attendance.
  - If you have classes on Fridays then that may be a problem. See Implement Project Leads below for a potential solution.
- **Keep committee meetings efficient!** Have a set agenda and goal that you want to accomplish for the week. If there is nothing that needs to be done, great! Cancel the meeting.
- **READ THE LESSON PLANS AND KNOW THEM WELL.** Unless you have some particularly outgoing committee members, you will likely be leading classroom visits for at least the first couple lessons. Be comfortable and have fun with them! Practice speaking confidently and energetically.
- If you want to add another lesson, go for it! Be sure to delegate work to committee members and help them feel like they are contributing!
- **Implement project leads.** Train some dedicated committee members to be able to lead classroom visits. You can delegate specific sections to specific people, or have individuals lead the entire lesson. BE SURE NOT TO ASSUME THEY KNOW THE LESSONS AND WILL PERFORM WELL IN FRONT OF A CLASS. Practice with them and have them run through the lesson with you as if they were in front of a class. This is a great way to get dedicated committee members even more involved and distribute more responsibility.

Timeline

Summer	• Begin contacting teachers early
	  ○ Have JEP coordinator (DJ Kast) send out mass email announcement to her teacher contacts. You can view the email history in the asbme.community email to see what previous outreach emails have looked like.
	  ○ Teachers will (hopefully) begin responding to you expressing interest in the program. Try to schedule tentative dates and times with them so you can keep a running schedule. Let them know that they can switch dates if needed, but our schedule will fill up quickly!
	  ○ Use the asbme community email- look at my previous emails to get ideas on how to respond to teachers and plug PiaB
	  ○ This is when you should create a spreadsheet in which you document teacher contact info and scheduled dates. It will prevent a lot of future confusion!
	  ○ Plan the first classroom visit about a month into school, as you will need the time to teach the committee members the lesson plans

Fall Semester	• Determine the best time and location to hold committee meetings
	  ○ At ASBME's first GM, pass around a PiaB committee interest sheet so you can begin contacting ppl
	  ○ You'll likely want to start meetings a week after ASBME's first GM; email members who are interested and inform them of the first meeting
	  ○ If you have low attendance, then you can use Doodle or whenisgood forms to find out when would be the best time for meetings
	• Begin a facebook group and Slack channel to communicate with committee members.
	• Keep track of classroom visits
	  ○ Always email teachers a week before the visit to confirm the time and ask for visiting procedures for their school
	  ○ Create Facebook polls to determine how many committee members can make it to the classroom visits (1 week before visit as well)
	  ○ Prepare lesson materials at the meeting before the visit

Winter Break	• Start scheduling classroom visits again! Follow the same procedure as the previous semester. (see Summer above)

Spring Semester	• Follow the same procedure as Fall semester for classroom visits (create a NEW TAB on your planning google spreadsheet to separate the two semesters)
	• You can try to reach out to ASBME members to see if more want to join the committee, but otherwise stick with the people that you have!
	• Also, expect to help with the ASBME end-of-the-year binder for the Project in a Box portion. Make sure that you have all pertinent information from each classroom visit, including:
	  ○ School, teacher, grade, number of students
	  ○ Which lesson you did
	  ○ Committee members in attendance
	  ○ Date/ time of visit

Planning Community events

Ideas for Generating Involvement
- FOOD. Bring food. Apply for funding for food. ADVERTISE food. College students are always looking for their next meal.
- CAREER HELP. If you can somehow have a leader at the organization give a little talk about what they do/how they do it (I'm thinking more medical volunteering here), people will be more willing to try out their potential future careers through a service event.
- COMMUNICATION. Post notifications EVERYWHERE and WAY ahead of schedule. The ASBME newsletter will not cut it. Use the Facebook group, tell your friends, post in the Viterbi bulletin, do whatever it takes to get the word out EARLY so people know what's going down.

3. Spring Retreat: Following the elections and transition meetings, the Spring Retreat is a chance for the new executive board to meet and socialize through a variety of ice-breakers and discussion. After a light opening, the new board discusses the future of ASBME, its goals, and its main mode of organization: the ASBME Google Drive.

The ASBME Google Drive is the backbone of communication and information storage for the ASBME executive board. It includes a master calendar that contains all events for the coming year, transition documents, account passwords, pre- and post-event forms, position-specific information, as well as general documents for the board as a whole. It ensures the seamless transfer of information from year to year.

4. Executive Board Summer Check-Ins: Throughout the summer, the President individually contacts the new board members to ensure they understand their responsibilities. As ASBME aims to start each year strong, the President maintains direct communication with each board member so that any questions are answered in a timely manner and everyone is prepared for the coming year.

Goals and New Initiatives

Confirmed by student and faculty feedback as well as the Most Outstanding Viterbi Student Organization Award, ASBME is proud to have accomplished its past goals of building an engaging mentorship program, supplementing the BME curriculum with technical skill workshops, and initiating meaningful partnerships with other organizations. For this upcoming school year, we have determined three major areas in which we would like to improve: **expand and diversify our corporate reach, institute professional development workshops to prepare students for job opportunities, and collaborate with other student organizations to increase diversity of thought.**

In previous years, we have established strong connections with three large biomedical companies that recruit at USC. Other smaller companies have an inconsistent presence at our events. We have recognized that students who do not receive job offers from the three large companies must scramble to find a job later in the academic year. This year, **we plan to reach out to more biomedical companies within the greater Los Angeles area**, particularly start-ups that are looking to hire students. We would like to host **information sessions** with these companies throughout the year, potentially collaborating with other student organizations to tap into their corporate connections. Our goal is for all BME students at USC to have ample resources and opportunities to find a company that is best suited to their interests and skillsets.

Furthermore, we typically host a few workshops at the beginning of the school year to help students prepare specifically for the Viterbi Career Fair. Next year, we would like to put on an expanded program of **workshops targeted at professional development** such as resume review, mock interviews, and professional etiquette discussions. There are experienced upperclassmen who could share valuable insight into the job-recruiting process. We also plan to invite corporate representatives to speak about **leadership in industry** and best practices on participating in meetings and working cross-functionally in teams.

Beyond our corporate initiatives, we believe it is important to create an inclusive space and promote diversity of thought. We hope to collaborate with student organizations like the **Society of Hispanic Professional Engineers, National Society of Black Engineers, and Society of Women Engineers** to bring awareness to disparities in the workplace and the importance of interdisciplinary work. In addition to these collaborations, we would like work with other student leaders to **diversify our attendance at our annual Makeathon**. We want computer science majors, mechanical engineering majors, and electrical engineering majors (to name a few) to work with biomedical engineering majors at the event to solve our most pressing health challenges.

ASBME is very excited to implement these new changes as we maintain our commitment to serving the undergraduate BME student body to the best of our ability. We hope to help students find their place in the biomedical field and provide a positive and supportive community for all BME students during their time at USC.