BMES Chapter Development Report

01 June 2019 – 31 May 2020

University of Texas at Austin BMES Student Chapter

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**Executive Summary**
The University of Texas at Austin chapter of Biomedical Engineering Society had another successful year despite the obstacles facing us during the tail-end of the spring semester. Led by a team of six (6) officers, Texas BMES held a variety of events and activities for our members as well as the student population. We held a Case Competition in the fall with the intentions of providing an industry/professional development opportunity for our members as well as other undergraduate students at UT Austin. Furthermore, we had various social activities and outings that encouraged our members to get to know each other better and build better networks among their peers. Some outreach activities included partaking in K-12 STEM educational events while some mentoring activities held included Track Night, both types of activities intending to provide people with a closer look at what biomedical engineers can do. As we look to the future, we intend to focus on increasing membership retention and participation in our events by hosting more events as well as a variety of events that will appeal to different career paths and goals.
Dear BMES:

The University of Texas at Austin Biomedical Engineering Society (Texas BMES) student chapter aims to provide students with professional development, social activities, and career resources to help them achieve their short and long-term goals. With regards to professional development, Texas BMES hosts two competitions: Case Competition and Design Competition. Both competitions are designed to allow students to use the knowledge they acquire in the classroom toward solving problems that biomedical engineers currently face. These competitions allow students to become familiar with idea formation and the translation of that into project and product development. Many social events were held within the organization with hopes of fostering a tight-knit group who share similar experiences from going through similar academic experiences. We see the formation of these bonds as crucial to allow students to find a place where they can feel like they belong. Career resources were offered in the form of bi-weekly meetings in which different speakers from industry, graduate school, and medical school were invited to speak of their journey and experience. These meetings allowed students to peek into what their future as biomedical engineers can be like as well as allow for networking.

Moving forward, we wish to enhance the student experience by offering more career resources in the form of access to individuals who have taken so-called “non-traditional” routes in their engineering career. These include, but are not limited to, individuals who have become entrepreneurs or gone into the business aspect of biomedical engineering and those who have gone on to continue their education in other fields (e.g., patent law, finance, marketing). We wish to work closely with these individuals so they can bring their experience and knowledge to the ears of our members, who might only know the traditional three-pronged path: industry, graduate school, or medical school. In addition to this, we wish to work on the social aspect of our organization to improve member retention. The desire is to provide a way for underclassmen and upperclassmen to interact more – forming a relaxed mentor-mentee relationship in which underclassmen can receive advice from more experienced individuals in their major. For our plan to achieve these goals in light of the current situation (COVID-19), please see the section titled “COVID-19 Response”.

Sincerely,
Texas BMES

Heather Ren
Texas BMES 2020 President

Thomas Yankeelov
Texas BMES Faculty Advisor

Below is the signature of the faculty advisor, Dr. Thomas Yankeelov, endorsing this development report.

X
Dr. Thomas Yankeelov
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I. Administrative Report

The University of Texas at Austin Chapter of BMES is run by an officer team of six (6) members: President, Vice President of Internal Affairs, Vice President of External Affairs, Vice President of Relations, Vice President of Finance, and Vice President of Operations. The responsibilities of each officer are elaborated upon below. Our chapter had 50 members overall, with 10 being nationally registered members. Attendance for our general meetings spiked at the beginning of the fall and spring semester (August and January, respectively) followed by a steep decline in following meetings. Planned meetings toward the end of the spring semester (both administrative and general body) were unable to be held due to COVID-19. The officer team still met remotely through Zoom, and elections were held remotely by allowing the general body to watch videos of candidates and vote through online form.

a. Officers

President
Saumya Lohia

duties of President include planning and running general body meetings, maintaining national chapter standing, coordinating with other UT BME organization presidents, delegating responsibilities, and trying to improve the organization. Any responsibilities that do not fall under the other officers’ responsibilities fall under the president’s jurisdiction.

Vice President of Internal Affairs
Mayna Nguyen

The Vice President of Internal Affairs (VP Internal) is responsible for any activities and responsibilities that provide to be internal to the organization and department. These include running of our annual Track Night as well as being the liaison to the UT BME Undergraduate Advisory Board (UAB). In addition to these internal responsibilities, VP Internal is also responsible for putting together a committee to run our annual Design Competition as well as coordinating with the Engineering Career Assistance Center (ECAC) to plan the annual Biosciences and Biotechnology Career Fair (BABS).

Vice President of External Affairs
Heather Ren

The Vice President of External Affairs (VP External) is responsible for activities and responsibilities that are external to the organization and department. These include planning and coordinating externships with local companies, Career Night, volunteering opportunities, and coordinating events with the UT BME Graduate-Undergraduate Research Union (GURU). VP External is also responsible for putting together a committee to run our annual Case Competition.
Vice President of Relations
Sreshta Margan
vp.relations.texasbmes@gmail.com

The Vice President of Relations (VP Relations) is responsible for maintaining our corporate relationships with the purpose of networking, gaining sponsorships, and bringing in representatives to speak at general body meetings. VP Relations is also responsible for maintaining and updating our corporate packet each year, which is used to reach out to companies. Furthermore, VP Relations is responsible for maintaining our relationship with the department and the university.

Vice President of Finance
Kayla Wrobel
vp.finance.texasbmes@gmail.com

The Vice President of Finance (VP Finance) is responsible for overseeing all financial transactions within the organization. VP Finance keeps regular contact with Engineering Student Life (ESL) in order to extract the funds we need to host activities like our Case and Design Competition, provide food/refreshments for our general body meetings, and deposit membership fees and other fundraising cash.

Vice President of Operations
Elaine Lee
vp.operations.texasbmes@gmail.com

The Vice President of Operations (VP Operations) is responsible for maintaining our membership database, communicating with the general membership body, keeping our website up to date, and coordinating and planning social events. The Vice President of Operations also serves as the Student Engineering Council (SEC) Representative – responsible for keeping relations with the Student Engineering Council and promoting our open events and fundraisers to other engineering organizations within the university.

b. Membership Breakdown

<table>
<thead>
<tr>
<th>Total Membership</th>
<th>55 Student Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Members</td>
<td>10 Student Members</td>
</tr>
</tbody>
</table>
c. Executive and General Body Meetings

<table>
<thead>
<tr>
<th>Executive Meeting Date</th>
<th>Attendance</th>
<th>General Meeting Date</th>
<th>Agenda</th>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-Aug-2019</td>
<td></td>
<td>04-Sept-2019</td>
<td>Talk with Industry Representatives (Emerson)</td>
<td>50</td>
</tr>
<tr>
<td>08-Sept-2019</td>
<td></td>
<td>18-Sept-2019</td>
<td>LinkedIn/ECAC Workshop</td>
<td>42</td>
</tr>
<tr>
<td>06-Oct-2019</td>
<td>All Officers Present</td>
<td>13-Nov-2019</td>
<td>Talk with Professor (Dr. Daniel Puperi)</td>
<td>6</td>
</tr>
<tr>
<td>13-Oct-2019</td>
<td></td>
<td>29-Jan-2020</td>
<td>Talk with Professor (Dr. Laura Suggs)</td>
<td>31</td>
</tr>
<tr>
<td>20-Oct-2019</td>
<td></td>
<td>26-Feb-2020</td>
<td>E-Week Recap</td>
<td>11</td>
</tr>
<tr>
<td>03-Nov-2019</td>
<td></td>
<td>25-Mar-2020</td>
<td>Career Night *</td>
<td></td>
</tr>
<tr>
<td>10-Nov-2019</td>
<td></td>
<td>01-Apr-2020</td>
<td>TBD</td>
<td>*</td>
</tr>
<tr>
<td>17-Nov-2019</td>
<td></td>
<td>15-Apr-2020</td>
<td>TBD</td>
<td>*</td>
</tr>
<tr>
<td>19-Jan-2020</td>
<td></td>
<td>29-Apr-2020</td>
<td>TBD</td>
<td>*</td>
</tr>
<tr>
<td>26-Jan-2020</td>
<td></td>
<td>06-May-2020</td>
<td>TBD</td>
<td>*</td>
</tr>
<tr>
<td>09-Feb-2020</td>
<td></td>
<td>08-Mar-2020</td>
<td>TBD</td>
<td>*</td>
</tr>
<tr>
<td>01-Apr-2020+</td>
<td></td>
<td>12-Apr-2020+</td>
<td>TBD</td>
<td>*</td>
</tr>
<tr>
<td>19-Apr-2020*</td>
<td></td>
<td>26-Apr-2020*</td>
<td>TBD</td>
<td>*</td>
</tr>
<tr>
<td>03-May-2020*</td>
<td></td>
<td></td>
<td>TBD</td>
<td>*</td>
</tr>
</tbody>
</table>

*denotes executive meetings held remotely (through Zoom)
*denotes planned meetings unable to be held due to COVID-19

For our plans regarding hosting executive and general body meetings in the coming year, please refer to the section titled “COVID-19 Response”.
II. Treasury Report
Texas BMES saw an increase of 12.44% in our balance during the spring semester of 2020. Most of our money goes toward our industry/professional development activities as well as catering for our bi-weekly general body meetings. We often receive money from the Student Engineering Council for Organization Event Partnerships – they will help fund catering and other necessities for any large events we hold that are open to all engineering students. Members are required to pay a membership fee that goes toward the funding of our organization’s events that are open to members only, such as any general body meetings that take place after the first two introductory meetings. In the coming year, due to COVID-19, we expect to see our balance remain relatively static as most, if not all, of our events will move to virtual events. For more details on our plan of action, please refer to the “COVID-19 Response” section of this report.

a. Balance Sheet

<table>
<thead>
<tr>
<th>Debits</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry/Professional Development Activities</td>
<td>Membership Fees</td>
</tr>
<tr>
<td>Social Activities</td>
<td>Student Engineering Council (SEC) Funding</td>
</tr>
<tr>
<td>Mentoring Activities</td>
<td>Transfer from BME</td>
</tr>
<tr>
<td>General Body Meetings (Catering)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Beginning Balance</td>
</tr>
<tr>
<td></td>
<td>$3,832.90</td>
</tr>
</tbody>
</table>
III. Chapter Activities

As a pre-professional and social organization, Texas BMES hosts a variety of industry/professional development activities and events as well as social events. In addition to these, we perform outreach and mentoring events as well. Our largest events are our industry activities – our Case Competition and Design Competition. These are all-day events that give students an opportunity to solve problems that plague the biomedical engineering world in their own unique approaches. Our social events are intended to be fun and relaxed – providing a way for our members to bond and form friendships. Although we do partake in outreach and mentoring activities, we wish to expand upon these in the coming years. Regarding outreach, we desire to build bridges between local hospitals and get our members volunteering with them. For mentoring activities, we would like to further foster mentor-mentee relationships between upperclassmen and underclassmen throughout the year through various bonding events. For our plan of action regarding hosting our chapter activities, please refer to the section titled “COVID-19 Response.”

a. Industry and Professional Development Activities

One of the primary goals of Texas BMES is to give our members plenty of industry and professional development opportunities to expand their career paths. We provide two competitions: The Case Competition and the Design Competition, to achieve this goal. Through participation in these events, students gain experience in projects and product development and are given opportunities to speak with and learn from professionals. Judges often stay after these events are over to give feedback to teams and speak with them about their own experiences. Our plans for next year regarding the Case Competition and Design Competition will change due to COVID-19. For more details, please see the section titled “COVID-19 Response”.

Case Competition 23 November 2019

The Case Competition is designed to facilitate thorough concept development and planning/project development skills in students. Teams consisting of two (2) to five (5) students are prompted to create an innovative solution to a current problem facing the world of biomedical engineering. Teams must identify the feasibility, implementation, and cost as well as the political, legal, and social consequences of their solution. Students present their project plan in a formal business presentation to a panel of judges ranging from industry professionals to professors to graduate/post-doctoral students. This event is held annually and is open to all undergraduate students enrolled at the University of Texas at Austin. The number of teams is generally limited to fifteen (15) teams due to time and space constraints.
Design Competition

25 April 2020

The Design Competition is designed to facilitate concept and product development skills in students. Teams consisting of two (2) to five (5) are prompted to solve a biomedical engineering problem or procedure. Teams are given free rein to identify an issue within the biomedical engineering field that they wish to address. They are then to build a prototype that will be presented to a panel of judges in the form of an open gallery – judges will approach each group about their prototype and give them scores. The judges consist of individuals with a variety of backgrounds, from industry professionals to professors to graduate/post-doctoral students.

This event is held annually and is open to all undergraduate students enrolled at the University of Texas at Austin. The number of teams is generally limited to fifteen (15) teams due to time and space constraints.

This event was planned but unable to be held this year due to COVID-19.

Social Activities

In addition to our desire to provide our members with a plethora of pre-professional guidance, we also aim to form bonds between members that will last for years. We host a wide variety of social events in which students can de-stress and spend some time getting to know each other. These events serve as great study breaks for our hard-working BME
students. Members of different years get to know each other and form informal mentor-mentee relationships that are extremely beneficial to our underclassmen. We like to create a fun environment in Texas BMES where all the members know each other and have become like a family. Continuing our social activities will prove to be an obstacle due to the current COVID-19 situation. For how we plan to proceed with creating bonds within our organization, please see the section titled “COVID-19 Response”.

**Barton Springs**

22 September 2019

For our first social event, we took advantage of the warm weather and plethora of outdoor recreation events that Austin hosts by swimming at Barton Springs. Having an event earlier in the year allowed incoming freshmen to both become familiar with the organization and officer team as well as Austin. This event allowed the officer team to get to know new and current members and get them interested and excited for the year to come.

<table>
<thead>
<tr>
<th>Date</th>
<th>Audience</th>
<th>Attendance</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 September 2019</td>
<td>BMES Members</td>
<td>8 Undergraduate Students</td>
<td>$48.93</td>
</tr>
</tbody>
</table>

**E-Week 2020**

14–23 February 2020

Each year the Student Engineering Council (SEC) hosts a week-long competition that the engineering organizations participate in during Engineering Week (E-Week). Organizations get points for winning events, attending events, hosting an event, and completing scavenger hunt items. All the BME organizations at UT (i.e. Texas BMES, Biomedical Outreach and Leadership Team (BOLT), e-NABLE, Women in Biomedical Engineering (WBME)) come together to form the BME Strike Force (BMESF) and work as one to participate in E-Week. This year we received 4th place. Most officers participate and encourage other members to participate – strong friendships form through the performing of these activities.

**Ice Skating**

26 February 2020

A joint event was held with members of UT chapters of BMES, BOLT, American Society of Medical Engineers (ASME), Society of Hispanic Professional Engineers (SHPE), and National Society of Black Engineers (NSBE). The ice-skating rink was rented out for our members use. This event provided a good way for engineers of different majors to meet each other and break the ice.

<table>
<thead>
<tr>
<th>Date</th>
<th>Audience</th>
<th>Attendance</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 February 2020</td>
<td>BMES, BOLT, ASME, SHPE, NSBE Members</td>
<td>30 Undergraduate Students</td>
<td>$121.33</td>
</tr>
</tbody>
</table>
c. **Inter-Chapter Activities**
   Texas BMES does not currently participate in any inter-chapter activities.

d. **Outreach Activities**
   Many of our outreach activities are related to STEM education opportunities for Austin area K-12 students. As biomedical engineering students, we feel strongly about the breadth of our major and how the things we create and put our minds can change the world. In the future, we aim to get involved in more outreach activities, especially those that involve our members volunteering in local hospitals. *Many of our outreach activities that we performed in the past year will be unable to be held this coming year due to COVID-19. For our plans regarding outreach next year, please refer to the section titled “COVID-19 Response”.*

**Engineering Day of Service**

15 February 2020

Each year we encourage our members to participate in the Cockrell Day of Service (or Engineering Day of Service) hosted by SEC. Students are split into groups and sent to different non-profit organizations across Austin. Students provide manpower that these organizations do not usually have, and help these organizations perform their activities.

**Introduce a Girl to Engineering Day and Girl Day STEM Festival**

22 February 2020

*Girl Day at UT is an annual event that teaches K-8 students about the different areas of engineering and STEM through fun activities and presentations. Activities are hosted by volunteers from the community as well as student organizations. UT BMES participated by hosting two games: a medical trivia game of tic-tac-toe as well as a medical device rendition of Operation. Both aim to educate students about the medical background biomedical engineers need as well as the devices that biomedical engineers have created and are still in use.*

<table>
<thead>
<tr>
<th>Date</th>
<th>Audience</th>
<th>Attendance</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 February 2020</td>
<td>K-8 Students</td>
<td>5 Undergraduate</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Explore UT**

07 March 2020

*Explore UT is a university wide event that happens each year, aiming to teach K-12 students about the importance of higher education and having a public research institution in the state of Texas. Explore UT aims to motivate students through hands-on activities and demonstrations. This year, UT BMES hosted a medical trivia tic-tac-toe game as well as a medical device rendition of Operation.*

*This event was planned but unable to be held this year due to COVID-19.*
e. Mentoring Activities
Texas BMES holds two major mentoring events: Track Night and Career Night. The intended audience of both events is underclassmen. In these events, upperclassmen provide underclassmen with advice on how they have navigated their way through the UT BME program as well as what their career plans are for the future. The BME program at UT Austin is relatively small and students take similar if not the same courses throughout their life as an undergraduate student – these activities allow older students to share their knowledge with those who have just begun their undergraduate career. Mentoring activities that have been held in the past up until this previous year have all been group gatherings in person. These will most likely be unable to be held in person this coming year and will move to become virtual events. For our plans regarding COVID-19, please see our section titled “COVID-19 Response”.

Track Night

Track Night is hosted by Texas BMES annually in the Fall Semester. This event is geared toward undergraduate Biomedical Engineering students at the University of Texas at Austin. Panels are formed by upperclassmen of each technical area (colloquially known as “track”) within the UT BME program:

1. Biomedical Imaging and Instrumentation
2. Cellular and Biomolecular Engineering
3. Computational Biomedical Engineering
4. Biomechanics

Students who attend Track Night can walk up to any panel and ask upperclassmen for advice about pursuing a specific technical area or for more information on what the directions they can go within a technical area. Many students do not even know what the technical areas are upon entering into the Biomedical Engineering program – this event provides insight onto what these technical areas are and what some students are doing with them. This event is geared toward underclassmen as technical areas must be selected by junior year.

<table>
<thead>
<tr>
<th>Date</th>
<th>Audience</th>
<th>Attendance</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>02 October 2019</td>
<td>UT Biomedical Engineering Majors</td>
<td>25 Undergraduate Students</td>
<td>$33.46</td>
</tr>
</tbody>
</table>

Career Night

Career Night is hosted by UT BMES annually in the Spring Semester. This event is geared toward undergraduate Biomedical Engineering students at the University of Texas at Austin. Panels are formed by upperclassmen and alumni of the major career pathways that Biomedical Engineers commonly pursue:

1. Industry
2. Graduate School
3. Medical School
Students who attend Career Night can walk up to any panel and ask for advice about pursuing a specific career path and what steps they can take to be successful in the future. This event is geared toward both upperclassmen and underclassmen as both can benefit from the material covered.
This event was planned but unable to be held this year due to COVID-19.

f. Other Initiatives and Activities
Every year, Texas BMES partners with out Engineering Career and Assistance Center (ECAC) to host a career fair. Many of the companies and programs that attend are very interested in having biomedical engineers join them in the future. We wish to continue having this close relationship with ECAC and continue helping in hosting this event as we see a lot of success from biomedical engineers who attend. There is a high chance that we will be unable to host the Biosciences and Biotechnology Career Fair in person in the coming year due to COVID-19 and social distancing guidelines. For our plan of action, please see the section titled “COVID-19 Response”.

Biosciences and Biotechnology Career Fair (BABS)
23 October 2019
Texas BMES works together with the Engineering Career and Assistance Center (ECAC) to host this event. The Biosciences and Biotechnology Career Fair (BABS) is a career fair designed specifically around Biomedical Engineering and the Natural Sciences. Industry representative from companies, graduate programs, and medical school are all present at this event.

IV. National BMES Meeting
Attendance and participation at the 2019 National BMES Meeting were not tracked. In the future, we hope to keep track of this information.

V. Future Direction
This year, Texas BMES was able to continue our legacy of hosting one of our biggest competitions – the Case Competition. We had good turn out both from the number of teams and the number of judges we were able to recruit to participate in this event. Additionally, we hosted a plethora of social activities that brought our members closer together. We did a great job with recruiting professors and industry representatives to come speak at our meetings, and our members gained good insight onto what these individuals do. Most of our membership population consists of underclassmen, particularly freshmen. By starting the semester off strong with industry representatives coming to talk about their career path and what they do every day as well as providing a mentorship activity early on, we feel that we were able to get good information out to our younger members and help prepare them for
future years. In the future, we do wish to see more participation/involvement from upperclassmen in our organization.

a. Goals

1. Increase member retention and participation

   A major issue that we face, as can be seen by the dropping attendance in general body meetings, is member retention. We have a good turnout to our events early in the year, however, this usually dies down as the year progresses. We think this issue stems from a lack of initiative from the officer team – we do not do enough to advertise our meetings and how they can be beneficial to students. Attendance tends to have an inverse relationship with the number of mid-terms and finals approaching, so we intend to approach this issue by appropriately timing the subject of our meetings and activities. We intend to host our career-oriented meetings early on the semester as this is when students are gearing up to interview for internships, co-ops, and jobs. As the semester goes on and mid-terms and finals approach, we want to foster that social aspect of our organization by hosting study halls and study sessions where BME students can benefit from studying together and learning the material together as students within the same year usually share many (if not all) of the same classes.

2. Bring in representatives who can speak of career paths in Biomedical Engineering that are not usually spoken about

   Another approach we want to take is to introduce students to career paths that are not the big three: industry, medical school, and graduate school. We want students to know that there are other options if these three do not particularly interest them. A lot of students are interested in entrepreneurship, for example. Forming relationships and bringing in individuals/alumni with this experience would be a great introduction to other career paths for our members.

3. Keep better internal records

   A barrier we constantly face in our chapter of BMES is that we do not keep organized internal records. Things are very scattered, and you must look in multiple places with the hopes that you will find the information you are looking for. For example, when writing this report, I had to open meeting sign-up sheets for every single meeting we held in order to check attendance instead of opening one spreadsheet that already has the total members we have along with how many members attended each meeting. Consolidating internal records like this into one excel sheet will prove helpful in the future. Being organized within/on the administrative side will show externally and help push us to be a better organization.

4. Increase volunteering opportunities

   In the coming years, we wish to increase our outreach/volunteering activities and give our members more opportunities to get involved in the community. A lot of our members, especially those that are on the pre-medical track, have a strong desire to volunteer in
local hospitals or shadow doctors. We want to be able to help these members build up a strong resume and application for these positions. In the past, we have had many UT BMES members be able to volunteer in the Dell Seton hospital system, we wish to be able to help our members now do this as well.

b. COVID-19 Response
The University of Texas at Austin has yet to announce their plans for returning to campus for the coming fall semester due to the current COVID-19 pandemic. However, the officer team anticipates being unable to host general body meetings, as these can easily exceed the allowed number of individuals in a room. Social distancing will be difficult to achieve in this setting. We plan on moving most, if not all, of our officer meetings, general body meetings, and activities online. Texas BMES plans to operate as an open organization, waving our membership fee and giving all UT/BME students access to our resources. It is crucial that we do our best to keep in contact with the student body and keep our members engaged, something that will be hard to do when we can no longer meet in person. A Canvas class/organization page for BMES, our website, or a Facebook page all are great options to keep in contact with members. Below we have outlined how we plan to carry out our chapter activities in the coming semester (and possibly year).

1. Industry and Professional Development Activities
It will be difficult to put on our Case Competition and Design Competition while following strict social distancing guidelines. Our Case Competition takes place in the fall, and we anticipate making it remote to where teams can present their ideas to a judge panel through Zoom. This will take a great deal of coordination from all individuals involved – the committee, the judges, and participating teams. Zoom meeting times will be set up in advance and teams and judges can join a meeting at a certain time. This meeting time will be the participating team’s time to present their ideas to the judges. We believe that the Case Competition can be held in this manner, and we will do all we can to see to it that students still be able to have this great professional development and networking opportunity. The Design Competition, on the other hand, due to its requirement to build a prototype, requires creation of the prototype and judging to take place in person. Thus, there is a high chance that the Design Competition will be unable to be carried out. However, our annual Design Competition takes place in the spring, so we will have to wait and see what the status of the COVID-19 pandemic is at the time before we can make concrete decisions.

A lot of our general body meetings are geared toward having industry representatives, professors, and physicians give lectures about their career path and what they do every day. We have two options set up to allow us to continue giving members this opportunity – we can either set up Zoom meetings in which everybody joins a meeting for these lectures or we can ask the speaker to record a lecture and we will upload it onto a general page that the student body can access. The first option provides accountability on behalf of the student body and gives them a set date and time in which they have to log on
to watch – meaning they will have to actually watch the lecture at the set time if they want to benefit from the information being given. The second option provides more leniency if students would like to watch the presentation on their own time. Both are viable options that we plan to explore.

2. **Social Activities**

Social gatherings will most likely be capped at a certain number of individuals, and it is highly likely that Texas BMES social activities will run the risk of reaching that limit if we were to try to hold them in person. For the fall semester, we plan to create a “family system” in which smaller breakout groups are formed that can have group chats, Zoom video calls, Netflix Party nights, and more together. This will help provide students with social interaction that some might be lacking due to working remotely. Furthermore, as an organization, we plan to host social activities over Zoom or Netflix Party where our members can come chat or watch a movie together. By implementing these activities, we can bring our members closer together despite some of us being miles apart.

3. **Outreach Activities**

For our outreach activities, big activities like Girl Day and Explore UT will most likely not be able to be held, meaning we will not be able to participate in them. As a result, we will be unable to perform our usual outreach activities that we perform every year. However, something we can implement that is new to our organization would be to get in contact with local elementary schools and try to arrange a mentorship program in which an elementary school student will be paired with a BMES member. They can have Zoom meetings together and BMES members can help introduce these elementary school students to the amazing things that engineers do, sparking their interest in the STEM field. They can play games together that are similar to the medical trivia and medical device Operation that we usually host at Girl Day and Explore UT.

Furthermore, with the rise of COVID-19 has come the rise of volunteering (in a safe, social distancing manner). Our BMES members can help out by sewing and donating masks, helping the food banks distribute food and supplies, help seniors by helping them get groceries and prescriptions so they don’t have to, and more. Texas BMES will be exploring ways that our members can help out in whatever way possible during these times.

4. **Mentoring Activities**

Our main mentoring activities, Track Night and Career Night, are designed to be held in person. However, these events can easily be translated into virtual events. Texas BMES plans to recruit upperclassmen and alumni to send in video recordings of themselves giving advice on specific technical areas or career paths. We also plan to upload documents with information that underclassmen can find useful. We want to be able to provide members with the same amount of information that we usually do with these activities. By uploading these things online, members can review the information in their
own time. This breaks down the barrier of a member not being able to participate in a mentorship event due to schedule conflicts.

5. Other Initiatives and Activities
   The Biosciences and Biotechnology Career Fair is something that can be made virtual, as many job fairs have been doing so far. We will keep in close contact with the Engineering Career and Assistance Center (ECAC) to monitor the situation and what our options are regarding hosting our annual career fair.

c. Officer Roles
   In addition to responsibilities already outlined in the ‘Administrative Report’ section of this report, we are determined to have each officer work on one of the areas we aim to improve upon (listed in the ‘Goals’ section):

   **President**
   The president this year will dedicate time to flushing out the details of what is to be achieved by the officer team as well as assigning roles and tasks as necessary to achieve our goals. The president will implement a feedback system with Texas BMES general body members that will allow the officer team to put on activities that members desire to see and take part in.

   In response to COVID-19, the fall semester plans of the University of Texas at Austin are still to be released. If the decision is to remain completely remote or limited to where groups cannot congregate, Texas BMES will no longer be able to host in person meetings. In this case, Texas BMES will operate as an open organization, in which any UT/BME student will have access to our resources, waiving our membership fee. We will work to provide students with access to video recordings of industry, graduate school, and medical school professionals giving lectures/advice. We will also work to bridge the gap between students as we would no longer be all located in one place and be able to see each other daily. We will most likely achieve this by a matching program that matches groups of students with similar interests and puts them in contact with each other – they can form study groups, mentor-mentee relationships, or partake in remote fun social events.

   The president will be in charge of deeming what is the best plan of action regarding the status of re-opening of the University and how that will affect organization operations.

   **Vice President of Internal Affairs**
   The Vice President of Internal Affairs will work toward creating a more concrete mentor-mentee relationship between members of the organization. We foresee this coming together as a “family system” in which two upperclassmen (possibly officers) are the “parents” and they are assigned a group of members to form their “family”. Families will partake in social excursions together. By forming these smaller groups within the organization, members can feel more at ease and become friends with a smaller group of people than the daunting feeling of not knowing anyone in a room of fifty people and having to make friends on their own.
Vice President of External Affairs
The Vice President of External Affairs will work to secure more outreach and volunteering opportunities. A Pre-Med Coordinator officer position is going to be created and the individual filling this role with work with VP External to help members who are interested get volunteering and shadowing experience.

Vice President of Relations
The Vice President of Relations will work to reach out to more companies, graduate students, professors, medical students, doctors, and more to get their advice and possibly bring them in to speak with members. We, unfortunately, were unable to get a company sponsorship for our Case Competition in this past year. For this coming year, reaching out and maintaining communication lines with industry representatives to bridge the communication gap between industry representatives and biomedical engineering students is one of the goals of this officer.

Vice President of Finance
The Vice President of Finance will continue performing their duties of keeping in touch with Engineering Student Life and managing operational costs of the organization. The responsibility of keeping everything organized and up to date with regards to our finances is incredibly crucial, and the officer filling this role will keep track of every transaction made by Texas BMES in an organized fashion. This will allow for proper documentation, so things do not fall into the cracks.

Vice President of Operations
One of the main goals for VP Operations in this coming year will be to figure out a way to advertise our organization in a more effective manner. We would like to bring more members into the organization as well as improve member retention, and VP Operations will play a huge role in doing this. VP Operations will oversee advertising general body meetings, keeping the website updated, and using our social media platforms (Twitter, Instagram) more often and more effectively than in the past. Additionally, VP Operations will work toward having more social events open to the entire organization.