



Purdue University Biomedical Engineering Society Student Chapter

Purdue BMES Faculty Advisor

Name: Joseph Rispoli, PhD

Email: jrispoli@purdue.edu

Title: Assistant Professor of Biomedical Engineering

Core Student Members

| Name | Email | Position |
|-----------------|--|--------------------------------|
| Max Geisemann | mgeisema@purdue.edu | BMES President |
| Anjali Parmar | parmar5@purdue.edu | BMES Director of Social Media |
| Anisha Rath | rath2@purdue.edu | BMES Secretary |
| Paula Sarmiento | Psarmien@purdue.edu | BMEGSA President |
| Brendan Ball | bbkazu@purdue.edu | BMEGSA outreach chair |
| Tyler Diorio | tdiorio@purdue.edu | Professional Development Chair |
| Luke Brenan | lbrennan@purdue.edu | BMEGSA Member |
| Lucy Tecle | ltecle@purdue.edu | BMEGSA Member |
| Conner Earl | earl10@purdue.edu | BMEGSA Member |
| Luke Schepers | lscheper@purdue.edu | BMEGSA Member |

Student Chapter Website

<https://engineering.purdue.edu/BMES>

One Free Membership Information

Membership type: Renewal

Email: parmar5@purdue.edu

Name: Anjali Parmar

University: Purdue University

Graduation year: 2023

Gender: Female

Ethnicity: South Asian

Purdue University Biomedical Engineering Society

Chapter Development Report

2021 - 2022

Authors:

Undergraduate

Max Geisemann

Undergraduate Chapter President

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Graduate

Paula Sarmiento

Graduate Chapter President

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Undergraduate Secretary

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EXECUTIVE SUMMARY

The Purdue University Biomedical Engineering Society (BMES) Student Chapter has supported the professional development, networking, social connections, mentorship, and community engagement of undergraduate and graduate students of the Weldon School of Biomedical Engineering. Our Chapter offers unique events to engender professional development through events that both improve our members' skills as our coding and coffee sessions and allow them to network and learn about the field as the Midwest Speaker Exchange. We also hold Undergraduate Open forums to listen to feedback from members and create an inclusive environment for faculty and students. We additionally have activities that allow undergraduates and graduate students to interact as the BME Bytes, a professional seminar series, provides opportunities for undergraduate and graduate students to interact and gain insight into the world of academia. These actions highlight the efforts our chapter is engaging in to increase mentoring for our members. Our BMES chapter is actively involved in the greater Lafayette community and working with dog shelters like Natalie's Second Chance. Examples include assisting in hosting educational activities with our local STEM center (Imagination Station). In combination with various social and mentorship events, this year we were able to provide multiple opportunities for students to develop their skills as biomedical engineers and cultivate collaborations with faculty, staff, and peers and reengage as a community after the pandemic restrictions allowed more in-person interaction.

Cover letter (1-page max) - The CDR must contain a one-page cover letter from the chapter president and faculty advisor that gives an overview of the chapter's operations during the previous year. Emphasis should be placed on the goals achieved and outline future goals. Areas in which the chapter was particularly successful should be noted and areas in need of continued growth should be thoughtfully discussed. The cover letter must contain an endorsement from the faculty advisor verifying the contents of the CDR.

To the BMES Student Award Committee Members:

The Purdue University BMES Chapter has been engaging our students for 15 years. Upon joining the department, all undergraduate and graduate students are enrolled as local members of the Purdue BMES organization and Biomedical Engineering Graduate Student Association (BMEGSA), respectively. Together these organizations comprise the Purdue BMES Chapter aimed to develop members' professional skills, promote social comradery, and facilitate community engagement by providing opportunities in professional development, mentorship, community service, and social events. The following report outlines the continuation and development of several highly successful events in the undergraduate and graduate chapters.

This year, the undergraduate chapter focused our efforts on building stronger relationships within our community and opened new doors with the UCSD BMES Chapter. The Spring Undergraduate Open Forum amplified the voices of the students, fostering an inclusive BME community and enhancing the undergraduate curriculum. In collaboration with UCSD BMES and Purdue Medical Innovation Networking and Design club, we successfully hosted two joint alumni panels, several workshops, flew out Purdue's top senior design team to UCSD's Bioengineering Day, and were able to meet at the BMES Annual Meeting. Our chapter aims to continue nurturing this new relationship in the future, along with further developing our network with Purdue's student organizations. One of our major community service events involved raising awareness for the American Cancer Society's Relay for Life initiative event on campus by handing out free ribbons and accepting donations. Our BMES chapter was the leading student organization for funds raised, contributing a total of \$1,176. Finally, our chapter has worked with the school's Diversity, Equity, and Inclusion Committee to advance new initiatives within the community. BMES was able to help recruit local high school students for the Weldon School's summer research internship program.

Similarly, the graduate chapter has created opportunities for professional, social, and individual growth within the BMEGSA. Our events aim to allow our students to improve their skills, network, and explore opportunities in the field, as well as allowing camaraderie between our members. This year, some of our biggest efforts were directed to support students after the pandemic restrictions were lifted, to aid newer students to create a community and to address social issues surrounding our community. Through the BME bytes series, our students are able to improve their public speaking skills and engage with the undergrads to address science and academy questions. And events as the post-doc panel and coding and coffee are aimed for career exploration and skill improvement. Additionally, the BMEGSA engages with the local community by partnering with Imagination Station, to host science education booths and provide prizes for the Lafayette regional science fair. Finally, the BMEGSA also coordinates many diverse social events, including to promote diversity and work-life balance within the chapter.

The chapter continues to work on the professional needs and interests of our students. Covid pandemic has restricted a few of our events, but we will keep working on increasing engagement. The Purdue University BME student chapter would like to thank the National BME Society for their continued support as we aim to strengthen the professional development, social connections, mentorship, and community involvement of our

Purdue University student members.

Sincerely,

Undergraduate

Max Geisemann

Undergraduate Chapter President

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Phone: +1 (949) 324-9949

Graduate

Paula Sarmiento

Graduate Chapter President

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Administration Report

A. OFFICERS

Undergraduate Purdue BMES Chapter

The executive board consists of undergraduate students elected in the spring semester by the previous Purdue Biomedical Engineering student body, through a ballot process. These members begin their term in the Fall 2021 semester. Additionally, two sophomore students are selected through an application process to represent their sophomore class. These members hold weekly meetings to discuss upcoming events and opportunities.

| Undergraduate Purdue BMES Chapter | | | |
|-----------------------------------|------------------|---------------------|---|
| Position | Name | Email | Officer Responsibilities |
| President | Max Geisemann | mgiesema@purdue.edu | <ul style="list-style-type: none"> - Conduct and prepare agendas/slides for executive board and general body meetings - Act as a liaison for the Weldon School administration, faculty, and outside organizations - Responsible for relations with the Graduate student program, BMEGSA, and AEMB - Attend weekly PEPC meetings |
| Vice President | Katherine Kerr | kerr37@purdue.edu | <ul style="list-style-type: none"> - Assist the President in all their duties and assume responsibility in the President's absence - Manage and direct all General Assembly Meetings and Seminars - Organize community service/outreach events |
| Treasurer | Elizabeth Murphy | murph416@purdue.edu | <ul style="list-style-type: none"> - Create an annual budget - Collect and dispense all BMES funds - Write annual grants for events to fund the club |

| | | | |
|--------------------------------------|------------------|---------------------|--|
| | | | - Seek out new grants |
| Secretary | Anisha Rath | rath2@purdue.edu | - Keep minutes of all cabinet meetings - Submit a year-end Chapter Development Report - Promote and keep contact with National Society - Keep inventory for organization |
| Director of Public Relations | Ryleigh Norton | norton18@purdue.edu | - Communicate BMES news/promote events to Weldon School students - Upkeep club website with current events/news - Create and manage a committee to assist in execution of activities, if needed |
| Director of Mentorship | Brianna Shannon | shannob@purdue.edu | - Plan and execute BMES mentorship events - Ensure that the mentoring needs of the underclassmen enrolled in the BME program are being adequately provided for, and to adjust the program accordingly |
| Mentorship Chair | Madeleine Stanik | mstanik@purdue.edu | - Create and manage a committee to assist in execution of activities, if needed |
| Director of Social Media | Anjali Parmar | parmar5@purdue.edu | - Upkeep the chapter's social media accounts - Promote chapter events and activities - Upkeep of the BMES chapter website |
| Director of Professional Development | Lauren Ho | ho171@purdue.edu | - Actively pursue opportunities for industries, graduate students, professors, and entrepreneurs to interface on a personal basis with BMES members |
| Professional Development Chair | Alexa Eby | ebya@purdue.edu | - Organize and host IR Networking Reception - Create and manage a committee to assist in execution of activities, if needed |
| Director of Programming | Chloe Matasovsky | cmataso@purdue.edu | - Direct and support activities put on by BMES - Create and manage a committee to assist in execution of activities, if needed |
| Programming Chair | Maya Alborn | alborn@purdue.edu | - Hold fundraisers as needed |
| Sophomore Representatives | Sarayu Kunduru | skunduru@purdue.edu | - Assist officers with tasks and chapter events |
| | Emily Schwenk | ewalkup@purdue.edu | - Upkeep the chapter's BMES website to promote chapter events and activities |
| | Eyal Pery | epery@purdue.edu | - Communicate chapter events with sophomores |

Graduate Purdue BMEGSA Chapter

| Position | Name | Email | Officer Responsibilities |
|-----------|-----------------|---------------------|--|
| President | Paula Sarmiento | psarmien@purdue.edu | -Preside over and organize both general body meetings and executive board meetings |

| | | | |
|---------------------------------|------------------------|---------------------|--|
| | | | - Represent BME graduate students within the department |
| Vice President | Agudemu Borjigin | aagudemu@purdue.edu | - Responsible for monitoring the progress of all ad hoc committees. |
| Treasurer | Hammad Khan | khan332@purdue.edu | -Create budget, oversee disbursement and procurement of funds -Coordinate grant applications -Update and make changes to budget |
| Secretary | Catherine Weathered | weathe11@purdue.edu | -Taking minutes at all executive board and general BMEGSA meetings -Tracking the attendance at meetings. |
| Webmaster | Brock Beauclair | tbeaucla@purdue.edu | - Disseminate opportunities and events to the biomedical engineering department |
| Social Chair | Edmond Rogers | roger282@purdue.edu | -Organize social events for graduate students and potential students during recruitment and orientation -Upkeep social media sites |
| Professional Development Chairs | Alexis Hoerter | ahoerter@purdue.edu | - Coordinate professional development events like speaker exchanges, and workshops -Network with connections, speakers, and university resources to host events |
| | Tyler Diorio | tdiorio@purdue.edu | |
| Diversity Committee | Claudia Benito | cbenitoa@purude.edu | - Organize events to celebrate the department's diversity -Run mentoring program - Organize events for diversity education |
| | Angel Enriquez | aenrique@purdue.edu | |
| Special Programs Chair | Lexi Petrucciani | apetruc@purdue.edu | -Support college of engineering events -Organize events to aid with covid 19 effects |
| BME Liaison | Cameron Villareal | villarcc@purdue.edu | - Coordinate events between the Purdue undergraduate (BMES) and graduate (BMEGSA) chapters |
| Outreach | Rachel Stingel | rstingel@purdue.edu | - Organize engagement and outreach opportunities with the Greater Lafayette community while encouraging scientific advocacy and education within the community |
| | Brendan Ball | bbkazu@purdue.edu | |
| IUPUI | Tanmaye Chakravarthula | tnallanc@purdue.edu | - Promote integration of the BME department between the Purdue main campus and the IUPUI campus in Indianapolis through the creation of events connecting the two campuses |

| | | | |
|-----------------|-----------------------------|---------------------|--|
| Representatives | Emma Vanderlaan (GSAC) | mcbri33@purdue.edu | - Represent department in the Graduate Student Advisory Council -Relay announcements from GSAC to executive board members |
| | Michael Zimmerman (PGSG) | zimmer94@purdue.edu | - Represent the department in the Purdue Graduate Student Government - Disseminate opportunities and events stemming from PGSG to the biomedical engineering department |

B. MEMBERSHIP

All Purdue BME undergraduates are members of the Purdue BMES undergraduate chapter and all Purdue BME graduate students are members of the BMEGSA chapter. Currently, around 5 members of Purdue BMES and 11 members of BMEGSA are national members of the Biomedical Engineering Society.

Core Student Members

| Name | Email | Position |
|-----------------|---------------------|--------------------------------|
| Max Geisemann | mgeisema@purdue.edu | BMES President |
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| Tyler Diorio | tdiorio@purdue.edu | Professional Development Chair |
| Luke Brenan | lbrennan@purdue.edu | BMEGSA Member |

| | | |
|---------------|---------------------|---------------|
| Lucy Teele | ltecle@purdue.edu | BMEGSA Member |
| Conner Earl | earl10@purdue.edu | BMEGSA Member |
| Luke Schepers | lscheper@purdue.edu | BMEGSA Member |

C. EXECUTIVE AND GENERAL BODY MEETINGS

Undergraduate Purdue BMES Chapter Weekly Meetings

| BMES Fall and Spring Semester Weekly Officer Meetings | |
|---|------------------|
| Fall Semester | Spring Semester |
| Wednesdays, 6-7 pm | Tuesdays, 6-7 pm |

Prior to each meeting, the board would collaboratively create an agenda to discuss upcoming events and opportunities for the Purdue Biomedical Engineering Community. Each executive board member has roles and tasks to complete every week. Additionally, we began to make a table at the beginning of every agenda that would highlight upcoming events. An example of the weekly agenda from March 8th, 2022 is shown below.

Example Agenda:

BMES Agenda: 03/08/2022

Location: MJIS 1083 @ 6 PM

Excused absence: Lauren, Liz, Madeline

Zoom: <https://purdue-edu.zoom.us/j/98361134227>

Upcoming Events:

| Event | Date |
|------------------------|---------------------------------------|
| PESC Spring Merit Fund | Friday, 3/25/22, 11:59pm |
| DEI journal club | 3rd Friday of month, 1pm |
| BME Bytes | Wednesday, 3/9/22, 1:30pm |
| Book Club Meeting #2 | Monday, 3/21/22, 5:30pm in MJIS 1083 |
| March Mentorship | Tuesday, 3/22/22, 6:30pm in MJIS 1001 |

| | |
|-------------|---------------------------------------|
| Movie Night | Tuesday, 3/22/22, 7:30pm in MJIS 1001 |
| PEPC Week | April 4th-8th, 2022 |

President - Max

- PESC Spring Merit Fund
 - <https://forms.gle/9Kk82QWzJSnA3S448>
 - This semester, the application will be open until **Friday, March 25 at 11:59 PM**. We encourage all organizations in need of funds to apply, whether it be for a recurring project or a new event proposal. Organizations that are selected for interviews on April 9-10 will be announced shortly thereafter.
- BMEGSA Meeting
 - **DEI journal club will be hosted monthly 3rd Friday of month @ 1pm**
 - A paper/article will be sent out before the meeting and students can meet up to have discussions on it or about the community in BME in general. Coffee and pastries will be provided.
 - **Connect anjali and ryleigh with Claudia to send out fliers**
 - If there are any club concerns with BOSO, let me know so I can bring it forward to PEPC since they are addressing some student org concerns
 - Potential funding from PEPC for E-week, will be reviewed after event submission
 - They already have the lego kits, trivia, spikeball, cornhole, scavenger hunts, pie a president, club fair around engineering fountain, shirt design, arduino light show
 - **PEPC E-Week (April 4-8th, 2022)**
 - **Brainstorm ideas and select the ones to submit to PEPC**
 - Pie-a-professor
 - Kona ice, lego kit, make-a-thon (with prize), tug of war, **dog walking or pet a puppy club**, dunk-a-professor, obstacle course, inflatable games, 3D skull raffle (ask Asem to 3D print), some sort of crafts (biomedical related)

Madeleine and Brianna - Crafts

- All options would need a table
- Time: Either Tuesday anytime before 4:30 or Thursday between 11-4:30

E-Week Crafts Event Descriptions:

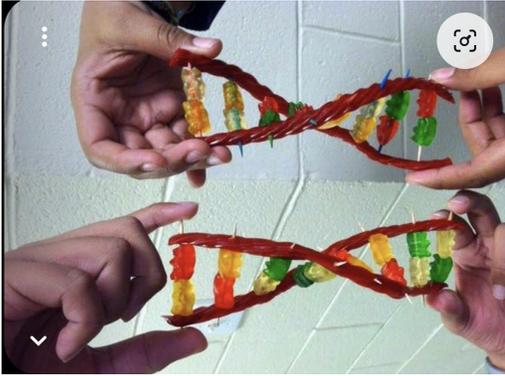
Modeled after these past event descriptions:

<https://engineering.purdue.edu/Engr/Academics/Undergraduate/PEPC/PEPC/eweek>

Option 1: Twizzler and Gummy Bear DNA

Twizzler and Gummy Bear DNA Molecule

Come to the BME building and make a DNA molecule out of twizzlers and gummy bears! You'll get to chat with others, make new friends, and eat some of the provided candy.



- Con: Not allergen friendly (wheat, soy)

Option 2: Construction Paper Hand Prosthetic

Come to the BME building and make your own paper prosthetic hand! You'll get to chat with others, make new friends, and learn how to make your very own prosthesis.



https://drive.google.com/file/d/1c1nprXtvBq_087IQIe4IhE2WH6jIB678/view?usp=sharing

Combined Description - if we do both activities

Come to the BME building and make your own paper prosthetic hand or DNA molecule out of twizzlers and gummy bears! You'll learn how to make your very own prosthesis, eat some of the provided candy, and make new friends.

Programming - 3D Skull raffle

- Asem hasn't gotten back on the price but will send over the CAD to print or he can even print.
- We will have three trivia questions about bme to fill out and if the student gets them all correct then they can enter in a raffle for the skull.
- *Set up a table in front of engineering fountain?*

Submission link:

<https://docs.google.com/forms/d/e/1FAIpQLSdnm84n1oocJ2sCFE05Bf5bsWYbFY41iDDo8ZxAO48DxIm5tw/viewform>

- DEI Committee
 - Support for Mentorship program
 - **Spring Undergraduate Open Forum**
- Hotseat**
- Potentially MJIS 1097
 - Coordinating with Dr. Linnes for room reservation (1083), also checking for food, and how hosting will play out
 - Conflict Resolution Form for undergraduates? There is one currently, but only targeted for graduate students
 - <https://engineering.purdue.edu/BME/AboutUs/DiversityEquityInclusion/grad-conflict-resolution>
 - **Minority Engineering Program (MEP)**
 - **Potential training/workshop offered to BME undergrads. Ideas?**
 - **Set up for the month of March**
- UCSD Collab Events:
- Purdue Day of Giving (04/27/2022)

Fill out event overviews!

| Action Items | | |
|---|--|---|
| Description | Deadline | Status |
| Fill out APF for UCSD event | 02/23, tomorrow during advisor meeting ask Rispoli about update | Need response from Ben Overly |
| Update on DEI funding for Mentorship | | |
| Send rispoli email about funding from Dr. Rispoli | | |
| Prep for DEI committee meeting | | <ul style="list-style-type: none"> - Contact MEP for DEI training for future exec board (after transition) - Contact NSBE and BCC for potential collab - Spring undergraduate open |

| | | |
|--|--|---|
| | | <p>forum</p> <ul style="list-style-type: none"> - Dates - Talking points - Support for BMES mentorship program <ul style="list-style-type: none"> - Check engagement |
| Message PEPC and run event ideas by them and ask about funding and filling out the APF. message Maya | | <p>Completed</p> <p>-> send PEPC response to Maya once recieved</p> |
| Talk to Rispoli about CDR and about BMES Mentorship program award, any other BMES forms/updates https://www.bmes.org/studentawards | | <p>Completed</p> <p>-> Check emails for details</p> |
| Ask PEPC about ideas for dead week | | |
| Talk to rispoli about pie-a-professor and then discuss with Liz before sending over to programming to organize | | <p>Meeting ended before discussion</p> <p>-> Email Rispoli about idea</p> |
| Fill out link to decide time for spring undergrad open forum | | <p>completed</p> |
| Connect anjali and ryleigh with Claudia to send out fliers, DEI Journal Club | | |

Vice President - Kat

- UCSD Collab - Social event
 - Meeting tonight to go over this
- Spring Undergraduate Open Forum - *Room 1083, goal 03/28, try to move this time to later (5:00-6:00pm?), since we have a couple weeks we could send out a survey to find a time for undergrads? Lots of power hours end at 5:30pm on Mondays*
 - Met with Drs. Linnes and Linnes this morning
 - Department can likely provide money for pizza
 - Emailing Corey & other faculty tonight to ask about attendance
 - Making Qualtrics to send out to undergrads
- BMES Bytes

- Have people been attending?
- *Undergraduates are busy during that time, resulting in low attendance*
- *Check in with BMEGSA and Graduate TAs to further publicize event*

| Action Items | | |
|---|----------|-----------------------|
| Description | Deadline | Status |
| Work on UCSD event booking and coordination | 3/8 | Scheduled for tonight |
| Make qualtrics | 3/8 | Doing tonight |
| Email professors/Corey | 3/8 | Doing tonight |

Mentorship - Brianna & Madeleine

- Planning on using all of DEI money for dinner (e.g., pizza + dietary restriction friendly options) of April Meeting, will confirm the plan with Liz next week
- From Carl: “Caduceus club is offering clubs to have access to a test prep library. We are just asking for some type of tangible contribution. A different club gave a couple of MCAT books and a flashcard set. Here is a picture of the library so far:”
 - *Look into confirming if we have anything for the library*
 - *Ask Juniors/Seniors/ friends who are premed for “donations”*
 - *If we are able to contribute, BMES members have access to library*



| Action Items | | |
|--------------|----------|--------|
| Description | Deadline | Status |

| | | |
|---------------------------------------|-------|--|
| Order Buttons | TBD | |
| Schedule April Meeting | 03/18 | |
| Schedule April Book Club Meeting | 03/18 | |
| Meet with Liz & Follow-Up on DEI \$\$ | 03/18 | |

Treasurer - Elizabeth

- Canva pro
 - Might just be doing 30 days free due to the budget issues
- E-week activity idea
 - Paint by numbers/something painting related to de-stress with snacks
 - Materials: painting supplies (canvas, paint, paintbrushes) and snacks if desired

Thanks for the ideas, we're moving ahead with the gummy bear DNA and skull raffle. I'll update you, but this will mostly be in the hands of PEPC.

- Day of giving- anything needed from me to help with that?

Check notes below

| Action Items | | |
|---------------------------|-------------------------|---------------------|
| Description | Deadline | Status |
| PEPC Funding Application | 10/22/2021 | Complete |
| Reimbursements | 11/19/2021 | In progress |
| List of Events and Budget | Week after Thanksgiving | In progress/ongoing |
| SFAB Funding Meeting | 12/1/2021 | Scheduled |
| SFAB Funding Application | 2/1/2022 | In Progress |

Secretary - Anisha

- Send me a slack message if there are any updates for the website!
- Looking into updating pictures on the website, upload any new pictures from event
- Inventory
 - About halfway done, aiming to be done by the end of March
- Pigeonhole forum responses- planning to work on creating document closer to date
 - *Talk with Kat about either using Pigeonhole/ Hotseat*
 - *Pigeonhole isn't free :(*
 - *Decide based on which one is easier to navigate?*
- Received 4 winning senior design teams information
 - 2 left

- Meeting Minutes
 - For those who are absent, they can review the notes taken from the meeting
 - Planning to start next week's agenda immediately after meeting
- Please let me know what you guys think about the agenda
 - Any preference?
 - What do you guys think about the current setup from the agenda
 -
- Reminder: please let me know ahead of time if you are not able to make the meeting. If you do not, you are marked as an unexcused absence on boilerlink

| Action Items | | |
|-----------------------------|----------------------------------|--|
| Description | Deadline | Status |
| BoilerLink | 10/22/21 | Completed |
| Website | 10/29/21 | completed |
| Storage Closet | 2/1/2021(not sure of exact date) | Completed |
| Meeting with Corey | Schedule on Boilerlink | Completed |
| T-shirt | 11/12/2021 | Completed |
| Student concerns | End of year | Completed |
| Updating Website | 1/20/2022 | -Need remaining senior design awards -upload pictures |
| Inventory | End of year | Plan to be done by the end of March |
| Pigeon hold forum responses | TBD | In progress |

Director of Programming - Sarayu & Maya

- Movie Night
 - Bleeding Edge
 - March 22nd after mentor mentee
 - Snacks
- field trip event
 - Mini golfing (monster mini golf)
 - \$7 per person
 - About a 15 minute car ride away from MJIS
 - Rugged Xscape (\$26 per person)
 - Might be too expensive
 - About a 5 minute car ride away from MJIS
 - *Outdoor mini golfing (if weather permits)*

- <https://www.holeinonefamilyfun.com/shop/3>
- \$6 per person for groups over 10

| Action Items | | |
|--|----------|------------|
| Description | Deadline | Status |
| Movie night apf | 2/24 | complete |
| Event overviews for fall semester events | 3/1 | incomplete |
| IM teams interest forms | 2/17 | complete |

Director of Professional Development - Lauren & Alexa

- Navigating the workplace workshop - Dr. Brightman talking about public info to assess workplace culture and navigate disability requirements (Brianna's idea!), will coordinate with Dr. Brightman
- Professional Headshots- Today!
- Cook medical tour - ask our contact from Cookbiotech if he can refer us to someone at Cook Medical to schedule tour for students
- Still working on Fusion360 workshop
- Waiting for the specific date for CookMedical
- Joint networking events with GEARE
 - Networking events
 - Career fair hosted by GEARE for abroad opportunities
 - Alumni panels
 - Will be sent a list of company contacts next week
 - Company panels (see what company contacts they have)

| Action Items | | |
|---|--------------|----------------------------|
| Description | Deadline | Status |
| Professional Headshots APF form | 2/15 | Complete |
| Speaking with Cook Research about setting up an event | End February | In progress |
| Fusion360 workshop | | Working with Asem on this! |

Director of Public Relations - Ryleigh

BMES Weekly Newsletter will be sent out at 11am on Mondays! Please send me any flyers/event details prior.

- BMEGSA flyers (BME Bytes)
- March Mentorship
- Movie night

Alumni Newsletter

- Send to Emily Blue by March 25

Draft:

BMES holds events for students to meet peers and faculty. Social events this past fall included pumpkin painting, Exploration Acres field trip, and movie nights! We also plan and host professional development events to enhance career readiness. Professional events included company tours, networking receptions, industry panels, and a headshot event. BME even has our own intramural volleyball and bowling teams now! In the 2022-2023 school year we plan on hosting even more exciting and interactive events to help our students grow.

BMES Website: <https://engineering.purdue.edu/BMES>

Giving Link: ?

Last newsletter for an example:

<https://mailimages.purdue.edu/vo/?FileID=a6409dc3-22b5-4060-8cc5-c9afa8ed8a11&m=ac6d83de-77d8-4971-944a-d204ea38a66a&MailID=42380137&listid=1004275&RecipientID=2103945774>
9



BME Intramural Volleyball Team



Company Tour at Cook Biotech

Movie Night Picture?

Book Club Picture?

| Action Items | | |
|---------------------------------|----------|-------------|
| Description | Deadline | Status |
| BMES Weekly Email | 3/21 | In progress |
| Alumni Newsletter to Emily Blue | 3/25 | In progress |

Director of Social Media - Anjali

| Action Items | | |
|----------------------------|----------|-------------|
| Description | Deadline | Status |
| Senior Projects/Spotlight? | ongoing | In progress |
| Spring Undergraduate Forum | 2/22 | Done |

Graduate BMEGSA Chapter

BMEGSA executive board members meet once per month or additionally when necessary. Because of covid, we decreased the general body meetings to one per semester. This year's General Body Meetings were as follows:

9/4/21 – General Body Meeting

Agenda: Introductions, Events planned and overview by committee, Updates from the Graduate Committee, Purdue Organization Constitution Revision

4/4/22 – General Body Meeting

Agenda: Events planned and updates by committee, Updates from the Graduate Committee, Elections, Open House for communication with the Department

For our executive meetings, we still met once a month. The agenda includes an update from all committees on their performance of the past month, their plans for next month, any changes in the budget, and any other important point that need to be evaluated by the team. The dates for this years meetings were: 7/23/1, 9/2/21, 10/7/21, 11/4/21, 1/25/22, 3/8/22 and 4/28/22. Additionally, we had a meeting on 9/16/21 in order to instruct the team on the Purdue Student Organization event system.

Treasury Report

Undergraduate Purdue BMES Chapter

The treasury report shown below details the funding state of the undergraduate BMES chapter. This year, the chapter had a total of \$325.93 in surplus revenue for the semester and in total brought in total revenue of \$1514.04. The majority of the revenue came from SOGA Grants, PESC Merit Funds, and Relay for Life fundraising. The majority of the expenses this semester supported the mentorship meetings, and professional development events, as well as the majority of other events, had minimal expenses to the chapter associated with them.

Balance Sheet

| Purdue University BMES 2021-2022 School Year | |
|---|------------------|
| Beginning Balance | \$325.93 |
| Withdrawals | -\$363.12 |
| Deposits | \$1551.00 |
| Current Balance | \$1514.04 |

| Date | Source | Revenue/Expenses |
|-------------|-------------------------------------|-------------------------|
| 6/22/2021 | Starting Balance as of 6/22/2021 | \$325.93 |
| 6/30/2021 | Sales Tax Expense | -\$0.46 |
| 6/30/2021 | Financial Service Fee Expense | -\$18.45 |
| 8/22/2021 | B-involved Fair | -\$25.00 |
| 9/6/2021 | SOGA Grant for IM teams | \$225.00 |
| 9/25/2021 | IM Teams Preregistration (3 teams) | -\$165.00 |
| 10/13/2021 | Movie Night | -\$33.71 |
| 11/12/2021 | Thanksgiving Turkey with Handprints | -\$20.00 |
| 12/1/2021 | Hot Cocoa and Gingerbread | -\$73.00 |
| 3/30/22 | BMES Buttons | -\$27.50 |
| 4/5/22 | PESC Fund | \$150.00 |
| 4/14/2022 | Purdue Relay for Life | \$1176.00 |
| 4/27/2022 | Purdue Day of Giving | ****\$1.00 |

Graduate Purdue BMEGSA Chapter

For the 2021-2022 academic year, the BMEGSA's budget was discussed with members of the executive board. We received \$1500 from the Office of Graduate Education in committee funding and to address the CoE theme of Helping Graduate Students Reengage (After the Pandemic). We applied for and received an additional grant to supplement our departmental funding; from the Purdue Student Service Learning Grant, we added \$1,500 to our budget for outreach and community engagement. We hope to leverage the industrial and departmental contacts we made this year to financially support and collaborate with our organization and events next year.

Balance Sheet

Purdue University BMEGSA 2021-2022 School Year

| | |
|------------------------|--------------|
| Beginning Balance | \$4565.56 |
| Withdrawals | -\$5146.00 |
| Deposits | \$3000.00 |
| Current Balance | \$241 |

Chapter Activities

Industry and Professional Development Activities

Undergraduate

- Industrial Roundtable (IR) Networking Reception
- Art of Research Exhibit
- Cook Biotech Industry Tour
- Professional Headshots
- Fusion 360 Workshop with MIND

Graduate

- BME Bytes (in collaboration with BMES)
- Post-doc panel
- Open Science and reproducibility discussion
- Science on tap
- Coding and Coffee

Social Activities

Undergraduate

- BME Welcome Back Event Ice Cream Social
- BME Intramural Teams
- Movie Night
- Exploration Acres
- November Thankfulness Arts-n-Crafts
- Pumpkin Painting
- Hot Chocolate and Gingerbread Event
- Valentine's Treats and Hearts Display

Graduate

- Trivia Socials
- Outings Socials
- March Madness viewing Party
- Lunch Socials

Inter-chapter Activities

Undergraduate

- UCSD Collaboration
 - Purdue-UCSD Alumni Panel
 - Purdue-UCSD Academia Panel
 - Purdue-UCSD Resume Review Workshop
 - Purdue-UCSD-MIND Personal Branding Workshop (february 26th)
 - Purdue- UCSD Game Night
 - Bioengineering Day at UCSD

Graduate

- Midwestern Speaker Exchange

Outreach Activities

Undergraduate

- Natalie's Second Chance
- Collaboration with high school BME chapter
- B-involved Fair
- Boiler Bash with PESC
- Undergraduate Open Forum (Fall and Spring)

Graduate

- Imagination Station Spooky Halloween
- Imagination Station Holliday
- Judging for the 2022 Lafayette Regional Science and Engineering Fair

Mentoring Activities

Undergraduate

- Mentorship Program

Graduate

- Mentoring Program (ongoing)
- Qualifying Exam Mentoring

Other Initiatives and Activities

Undergraduate

- BME Book Club
- Course Event Overview

- PEPC E-Week
- Relay for Life Fundraising
- Purdue Day of Giving
- Day of the Dead (dia de los muertos)

Graduate

- IUPUI Connectivity
 - Coffee Break
- Diversity and Inclusion
 - Dia de los muertos
 - Slavik Winters End Celebration
 - Lunar new years
 - DEI Journal Club
 - DEI Library
- GSAC
 - Beyond Coffee
- Outstanding Mentor Lunch

EVENT BREAKDOWN

Undergraduate

Industry and Professional Development Activities

Industrial Roundtable (IR) Networking Reception

Date : September 13th, 2021

Time: 6:30-8:30 PM EST

Attendees:24

The Industrial Roundtable (IR) is a large campus-wide recruitment event at Purdue University where industry representatives come to speak with undergraduates about employment opportunities at their respective companies. The Annual BME Industrial Roundtable is an opportunity for students to have dinner with recruiters attending IR in a convenient and more personal networking setting. The benefit of this event is that networking occurs in a professional but significantly more relaxed environment compared to the job fair, and allows for small groups of students to directly interact with hiring representatives for extended periods of time.

Art of Research Exhibit

Date: September 24th, 2021

Time: 4:30- 5:30 PM EST

Attendees: 30

Weldon School graduate students submitted images that depicted their research, along with a caption (description) that discussed how the image was created and the importance of it in its specific area of

research. Faculty voted on the top image in six categories. Many BMES, as well as BMEGSA members presented, and BMES as an organization showed up to support, learn, and network with our peers.

Cook Biotech Industry Tour

Date: November 18th, 2021 Time: 2:30 PM EST Attendees: 15

Students traveled to Cook Biotech (CBI) to tour facilities, get an overview of the company, and learn about internship, co-op, and full time opportunities. Students also got to network and discuss roles, daily routines, and career paths with current biomedical engineers in the development department at CBI.

Professional Headshots

Date: March 3rd, 2022 Time: 11AM-1 PM EST Attendees: 25

This professional development event offered an opportunity for BME students to take free professional photos with BMES. These photos may be used to update LinkedIn profiles and other social media accounts.

Fusion 360 Workshop with MIND

Date: April 19th, 2022 Time: 7-8 PM EST Attendees: 5

This workshop focused on creating skills with Fusion 360 for 3D modeling. This was in collaboration with the Purdue Medical Innovation, Networking, and Design Organization (MIND). It was led by a student who was experienced with Fusion, and attendees who signed up were guided through a design to allow them to learn the fundamentals.

Social Activities

BME Welcome Back Event Ice Cream Social

Date: August 27th, 2021 Time: 1:30-3:30 PM EST Attendees: 30

Students and Faculty at the Weldon School of Biomedical Engineering celebrated the start of the year with an ice cream social. It was one of our first outdoor events that we were allowed to help host as we came out of the pandemic and had more in-person classes.

BME Intermural Teams

Date/Time : Fall (October) and Spring (February) Total Attendees: 24

Students came together from BME to create teams to compete against other student groups in mens volleyball, women's volleyball, and women's bowling. We made it to semifinals for women's volleyball, and were were the intramural womens' bowling champions!

Movie Night(s)

Dates: September 29th, 2021 Time: 7-9:15 PM EST Attendees: 9
March 22nd, 2022 Time: 7-9:30 PM EST Attendees: 5

BMES hosted a movie night to give students a chance to relax and enjoy watching a movie and eating snacks. For the first movie night in the fall, we watched the HBO documentary *The Inventor: Out for Blood in Silicon Valley*. For the second movie night, we watched *The Bleeding Edge*.

Exploration Acres

Date: October 22nd, 2021 Time: 7-10 PM EST Attendees: 15

BMES hosted a Field Trip event at Exploration Acres for a night of pumpkin patch picking and corn maze exploring! BMES attendees met up at the event location and paid for entrance to public attraction individually.

November Thankfulness Arts-n-Crafts

Date: November 20th, 2021

Time: 2-4 PM EST

Attendees: 30

BMES students and faculty were able to write little messages on construction paper hand turkeys that talked about something that they were grateful for. It created a spirited environment as break approached, and everyone seemed to greatly enjoy the event.

Pumpkin Painting

Date: October 29th, 2021

Time: 12-1 PM EST

Attendees: 20

To celebrate the fall season, and with Halloween coming up, BMES has a pumpkin painting event. Students were able to paint pumpkins in between lectures and enjoy some apple cider and treats. It was one of the organization's favorite events to work on.

Hot Chocolate and Gingerbread Event

Dates: December 6th, 2021

Time: 1:30-2:30 PM EST

Attendees:41

January 27th, 2022

Time: 11:30-2:30 PM EST

Attendees: 15

To help spread holiday joy and give warm beverages during our snowy winter, we held this event for students to come and enjoy. Hot chocolate ran out very fast, but we often had many people pass by and had good turnout.

Valentine's Treats and Hearts Display

Date: February 10th, 2022

Time: 2:30-4:30 PM EST

Attended: 35

To show appreciation, BMES held a crafts social that allowed students and faculty write about what they appreciated on construction paper hearts that were then posted on a window of the BME building. Additionally, we gave out lollipops and crowds often gathered in between classes to read the display

Inter-Chapter Activities

UCSD Collaboration

In partnership with UCSD, Purdue created a series of panels, events, and workshops virtually to build stronger partnerships with our universities and allow students to network with different alumni and students from both large research universities.

Purdue-UCSD Alumni Panel

Date: October 16th, 2021

Time: 2:30- 4:00PM EST

Attendees: 24

Event was organized for a collaboration between UC San Diego BMES, Purdue BMES, and Purdue Medical Innovations, Networking, and Design (MIND). We received an email from Dr. Wodicka about funding from the Weldon school to facilitate a collaboration with UCSD, so we were connected with the UCSD BMES chapter. Following initial contact, we decided to also involve another organization on the Purdue campus, which was MIND.

Purdue-UCSD Academia Panel**Date: November 20th, 2021 Time: 2:30- 4:00PM EST Attendees: 20**

Event was organized for a collaboration between UC San Diego BMES, Purdue BMES, and Purdue Medical Innovations, Networking, and Design (MIND). The Academia Panel invited professors from UCSD and Purdue to talk about their experience in academia and their journey of building their professional career. Following their introductions, a Q & A was conducted for students who were curious about learning more.

Purdue-UCSD Resume Review Workshop**Date: January 29th, 2022 Time: 2:30- 4:00PM EST Attendees: 19**

Event was organized for a collaboration between UC San Diego BMES, Purdue BMES, and Purdue Medical Innovations, Networking, and Design (MIND). This was an opportunity for students to have resumes reviewed by peers who had been successful in applying for internships.

Purdue-UCSD-MIND Personal Branding Workshop**Date: February 26th, 2022 Time: 2:30- 4:00PM EST Attendees: 18**

Event was organized for a collaboration between UC San Diego BMES, Purdue BMES, and Purdue Medical Innovations, Networking, and Design (MIND). This workshop focused on creating an organized platform through social media to market yourself on platforms like LinkedIn, personal website, and features led by executive board member of MIND, Claire Poukey.

Purdue- UCSD Game Night**Date: March 29th, 2022 Time: 6:30-8PM EST Attendees: 10**

Event was organized for a collaboration between UC San Diego BMES, Purdue BMES, and Purdue Medical Innovations, Networking, and Design (MIND). This was a game night hosted for students to destress before finals rolled around.

Bioengineering Day at UCSD**Date: April 22nd, 2022 Time: all day (at UCSD) Attendees: 4**

In collaboration with UCSD, the winning senior design team from Purdue flew out to San Diego and presented at UCSD's Bioengineering Day

Outreach Activities***Natalie's Second Chance*****Dates: December 12th, 2022 Time: 1 PM-3PM Attendees: 4**

Natalie's Second Chance is an animal shelter whereby volunteers can assist and put efforts into lessening the workload, to improve efficiency for the shelter. Additionally, volunteering students can gain a rewarding experience, through supporting and learning about an organization dedicated to the Lafayette community.

Collaboration with high school BME chapter**Dates: December 12th, 2022 Time: 1 PM-3PM Attendees: 15**

A local West Lafayette high school reached out to us to see if we able to speak to seniors about our experience as undergraduates in Purdue's BME Program. We went ahead and had Carl Russell III, a junior in Purdue BME talk about how he became more involved with the program, and his plan for the future for his professional career.

B-involved Fair**Dates: August 21st, 2022 Time: 12PM-5PM Attendees: 77**

Annual club fair taking place during the week of BGR (Boiler Gold Rush), a freshman orientation event, to advertise clubs and organizations to Freshman students. We had a prepared poster, tablecloth, stickers, merch, and a list of planned events for the fall semester.

Boiler Bash with PESC**Dates: August 27th, 2022 Time: 12PM-5PM Attendees: 50**

We received a table near the Engineering Fountain and an allocated budget to spend on food or promotional items. We were able to showcase projects and events that we have done in the past, and attracted more attention for the organization.

Undergraduate Open Forum (Fall and Spring)**Dates: October 2021 Time: 1:30-2:30 PM Attendees: 10**
March 30th, 2022 Time: 6:30-8:30 PM Attendees: 15

The March 30, 2022 Spring Undergraduate Open Forum addressed the associated BMES Qualtrics survey which received a total of 221 responses from members of the Weldon School undergraduate community. Approximately 15 people attended the forum, both virtually and in-person. We were lucky enough to have Dr. David Umulis open up the discussion, speaking on the strides made this past year to bring our BME community closer together.

The Spring Undergraduate Open Forum was hosted with the goal of discussion and conversation between faculty and undergraduate students. The Open Forum allowed participants to discuss sophomore and junior-specific course feedback, use of BME resources (resource room, computer lab, and BME-specific programming), and general comments and concerns within our community. An outline of the conversation was documented at the time and the notes can be seen below.

The fall undergraduate open forum addressed similar matters, and the spring undergraduate open forum built on ideas initially addressed in the fall

Mentorship Activities***Undergraduate Mentorship Program***

| | | |
|-----------------------------------|---------------------------|----------------------|
| Dates: September 2nd, 2021 | Time: 7:30-8:30 PM | Attendees: 40 |
| October 25th, 2021 | Time: 6-7 PM | Attendees: 30 |
| November 30th, 2021 | Time: 6-7PM | Attendees: 30 |
| January 18th, 2022 | Time: 6:30-7:30 PM | Attendees: 30 |
| February 7th, 2022 | Time: 6:15-7:15PM | Attendees: 30 |
| March 22nd, 2022 | Time: 6:15-7:15 PM | Attendees: 30 |
| April 14th, 2022 | Time: 6:15-7:15 PM | Attendees: 30 |

The mentorship program is used to benefit the sophomore class and provide them with resources for various future career paths. Some topics we explore are Research, Medical and Graduate School, and Industry. Additionally, the Mentorship Program provides undergraduates with a network amongst

themselves. It is expected that all participants follow the Protect Purdue Pledge, which includes adhering to all mask guidelines.

Other Initiatives and Activities

BME Book Club

Date: throughout the semester

Attendees: 5

This was an initiative for BME Students to come together to read pop culture and medical nonfiction books throughout the semester. While we did plan a monthly meeting, we were not able to keep it up as attendance was extremely low.

Course Event Overview

Date: November 8th, 2021

Time: 6-7 PM EST

Attendees: 20

This event served as a guide for all spring BME classes and a fair with student reps to talk about each course. The goal is to better prepare students for registration and the upcoming semester with study tips.

PEPC E-Week

Date: April 4th - 8th, 2022

Time: All week

Attendees: 22

BMES used this opportunity to network with other engineering organizations on campus as well as hold an arts and crafts event to create candy DNA and decorate 3D printed skulls. It was a fun event and we look forward to implementing it in the future

Relay for Life Fundraising

Date: April 10th- 14th, 2022

Time: all week

Attendees: N/A

With this event, BMES raised awareness for cancer and was able to fundraise \$1176 for our organization to use in the future. Many donors came and talked about their experience about knowing someone who struggled with cancer, and it was an experience that really was appreciated by the BMES board.

Purdue Day of Giving

Date April 27th

Time: All-Day

Attendees: N/A

This is part of a campus wide event that fundraises Monday for various organizations with competitions and prizes showcasing school pride. This event was not as successful as we had hoped due to focusing on other events, but we plan to improve advertising this event by raising awareness about it a month before.

Graduate

Industry and Professional Development Activities

BME Bytes (11/19/21, 12/3/21, 2/9/22, 2/16/22, 2/23/22, 3/9/22, 3/23/22, 3/30/22, 4/6/22, 4/20/22)

BME Bytes seminar - presentations will be given by graduate students to give a graduate and undergraduate audience. Intended to be a low-pressure situation for both audience and presenter.

this was an opportunity for graduate students to develop their professional portfolio by giving invited talks and practice presenting in front of an audience. For undergraduate students is an opportunity to

listen to current research happening in the department and ask questions to graduate students about their research. Average attendance per event was 20 people.

Post-doc Panel (12/01/21)

Three post docs in BME answered various questions about post-doc positions such as how to find post-docs, what do you look for in a post-doc positions, how does funding work, did your project start from ground zero, did you negotiate for travel/relocation expenses, when should you start looking for a post-doc, etc. For graduate students this was an opportunity to learn about what entails a post-doc position. Attendance for the event was 9 people.

Open Science and reproducibility discussion (12/9/21)

Open science and reproducibility discussion. Discussion topic was “science as a collaboration”. Matt Thompson shared an outline of the paper he made and led the discussion. Some discussion topics: we know we want to improve DEI, so how does a competitive research environment affect that? Do we agree with the premise that competitive incentives incur unacceptable costs? Do we feel like our own experiences reflect the type of environments and their implications discussed in the paper? Attendance for the event was 12 people.

Science on tap (02/24/22)

Science on tap was an opportunity for our graduate students and a professor to join the greater Lafayette community and discuss science in an informal setting. A talk was given by Dr. Krishna Jayant about his laboratory work and then the community was invited to engage in conversation. The attendance for the event was approximately 50 people.

Coding and coffee (1/20/22, 3/17/22, 4/28/22)

This is a series of workshops where our students can come to work on an specific location where we provide snacks, and they can count with peer accountability and help on coding topics. Each date, a different topic was highlighted. Some examples of the themes were Version control and Code annotation. The average attendance to these events was 10 people.

Social Activities

Trivia Socials (8/17/21, 4/7/22)

Trivia socials are designed so students have the ability to do social activities without the need of going to a different location. Additionally, they are great for socializing and team building. The

average attendance to these events is 17 people.

Outing Socials (8/19/21, 8/20/21, 2/25/22, 3/17/22)

These social events are outside of Purdue university. The students meet in an agreed place (e.g. restaurant, members home) and socialize while the organization provides appetizers for the attendees. Most of these events, additionally serve to allow both first years and visiting prospective students to connect with our students, as well as familiarize with the city. Average attendance to these events is 30 people approximately.

March Madness viewing Party (3/19/22)

The students met at an officers house to watch the March Madness game of the Yale Bulldogs vs the Purdue Boilermakers. The organization provided food. This event aimed to capture a diverse group of students to join the event and socialize if they normally don't attend other types of socials. The attendance for the event was 7 people.

Lunch Socials (Once a week)

In order to aid students have an easy-to-attend socialization space, the organization provided a space and soft drinks so that students could have lunch at noon one day a week. (Fridays for Fall and Thursdays for Spring). We additionally provided group activities for the attendees. The average attendance for this event was 15 people.

Inter-chapter Activities

Midwest Speaker Exchange (4/11/22)

We hosted Sara Harper, 4th year PhD student from the University of Wisconsin Madison, (BME Department) to give a 1-hour seminar (45 minute presentation with 15 minutes of questions). After the Big Ten Midwest Speaker Exchange seminar BME graduate students had lunch with our invited speaker. The attendance of the event was 24 people. Similarly, one of our students was hosted at University of Wisconsin Madison where he was able to give a seminar on his research.

Outreach Activities

Imagination Station Spooky Halloween (10/16/21)

In conjunction with Imagination Station, we helped plan and assist a Halloween-themed science day. During this event, members from BMEGSA manned booths and assisted kids with quick, “spooky” science-based projects. This was an event to introduce science to children from K-12 backgrounds. The graduate students had the opportunity to run stations that emphasized specific scientific topics, making these topics more accessible to students who would otherwise have limited exposure to them. Estimated attendance for the event was 200 people.

Imagination Station Holiday (02/24/21)

In conjunction with Imagination Station, we helped plan and assist a Winter-themed science day. During this event, members from BMEGSA manned booths and assisted kids with quick, winter themed science projects. This was an event to introduce science to children from K-12 backgrounds. The graduate students had the opportunity to run stations that emphasized specific scientific topics, making these topics more accessible to students who would otherwise have limited exposure to them. Estimated attendance for the event was 150 people.

Judging for the 2022 Lafayette Regional Science and Engineering Fair (3/25/22)

Our students volunteered to serve as judges for the 2022 Lafayette Regional Science and Engineering Fair. Besides helping judge the fair categories, the organization sponsored an award for Biomedical Engineering projects for three grade categories (5-6, 7-9,10-12). For judging our award we had 8 volunteers.

Mentoring Activities

Mentoring Program (Once a month)

The mentoring program started this year. Volunteer mentors were paired with junior students in order to provide mentoring to those who enrolled in the program. Mentoring was not restricted to any topics, but every month some topic were suggested. Mentors and mentees were encouraged to contact each other as needed, but monthly check ins were programmed by the diversity chairs. Attendance to these events in average was 50 people.

Qualifying Exam Mentoring (4/4/22)

A panel of graduate students who have already passed their Qualifying Literature Assessment (QLA) with no, minor, or major revisions gave advice on how to write the QLA to 1st year students about to undergo the process. It was an opportunity for the 1st years to ask questions and learn from current graduate students on how to “thrive not just survive” the QLA process. Attendance for the event was 15 people.

Other Initiatives and Activities

IUPUI Connectivity

IUPUI hosted two coffee and chat events (one during fall and one during spring) for the students of the program in the IUPUI campus. Since Indiana University (the partnering home university for these students) opened its on Biomedical Engineering program, our events were not very well attended with only 3 people attending each event.

Diversity – DEI Journal Club (07/16/21 11/11/21, 10/01/21)

We hosted a journal club with articles as ‘Making academia more accessible’ and “Increasing the visibility of LGBTQ+ researchers in STEM” in honor of LGBTQ History month. These events are design to engage our community revise objective data about diversity in science and brainstorm on steps we could take in order to be a more inclusive community. Average attendance was 15 people including faculty.

Diversity – Day of the Dead (11/01/21)

We hosted a Day of the Dead event sharing a bit about what the Day of the Dead entails as well as some guidance on/ setting oneself up for graduate school from our current BME graduate students.

This was an opportunity to learn about the Day of the Dead, eat some traditional sugar skulls and pan muerto, and for graduate students to help usher the next generation of scholars. Attendance for the event was 21 people.

Diversity – Slavic Winters End Celebration (3/9/22)

This event was aimed to educate our students in other cultures, as well as appreciate them and destroy stereotypes. The event centered on the celebration of Maslenitsa, a celebration of the end of winter. The students made the food commonly enjoyed during this celebration and viewed a small presentation on the culture behind the event. The event was attended by 11 people.

Diversity – Lunar new years (02/01/22)

This event was aimed to educate our students in other cultures, as well as appreciate them and destroy stereotypes. The event centered on the celebration of lunar new year celebrated by a large amount of Asian culture. The students ate food commonly enjoyed during this celebration and viewed a small presentation on the culture behind the event. Finally, the students were invited to craft decorations to

celebrate. The event was attended by 40 people.

Diversity – DEI Library (10/04/21)

The organization opened a library with DEI reads. The books selected for the library include topics like racism, sexuality, gender, religion, nationality, etc. The books aim to give the reader the perspective of a minority so that it is easier to understand the struggles of minorities and the small changes that can lead to a better community. Since the library was opened 20 books have been borrowed.

GSAC – Beyond Coffee (10/13/21)

Representatives from BMEGSA and ECEGSA worked with administrators in the CoE to host a Beyond Coffee Event on October 13. Food (pastries, cookies, etc.) and drinks (coffee, apple cider) were provided for the students. The purpose of the event was to encourage graduate students from different departments to get to know each other.

Outstanding Mentor Lunch

The College of Engineering annually awards a Faculty Outstanding Mentor. It was a tradition to celebrate the awardee but due to covid we had to pause. This year, we celebrated the recipients of the award from 2020 to 2022 and opened a space to discuss student-PI relationships and tools. This event was open for all the BME community including faculty and staff. Approximately 30 people attended this event.

NATIONAL BMES MEETING

This year, BMES and BMEGSA were not able to attend the National BMES Meeting. We will look into seeing if attending this event is a possibility in the upcoming 2022-2023 year.

FUTURE DIRECTIONS

Continuation of Current Initiatives

Purdue BMES has continuously grown in areas of outreach, mentorship, and professional development. We would like to continue to uphold current initiatives in each of these areas, but there

is room for improvement. We would like to continue our outreach events, but expand our involvement. We would like to continually help our local community in any way possible, and continue to learn about organizations (such as Natalie's Second Chance) that are dedicated to it as well. Our mentorship program has grown tremendously this current year, and the ideas implemented have been very successful. Based on feedback, unifying our professional development sector within the mentorship program will improve upon it even further. This had already been taken into initiative this year with the graduate student panel; however, was unable to be carried out due to the circumstances. Finally, our professional development program has continually been successful. We would like to expand on lab tours, industry tours and establish connections with more companies to develop a greater experience for students.

Implementation of New Initiatives

In addition to current initiatives, we would like to expand our club in multiple ways. We would like to expand our professional development initiatives by including more company involvement, as mentioned before. Especially when it comes to Industrial Roundtable (IR), we would like to utilize this event to develop connections with companies so as to offer a diverse selection to BME students. A path our organization is taking is to collaborate with the companies and develop information sessions, lab tours, and industry tours. These events will allow Purdue biomedical engineering students to get their foot in the door of companies that are looking to fill internship and co-op positions.

Additionally, we would like to expand our connections to other BMES chapters to expand our inter- chapter relationships. We plan to continue collaborating with UC San Diego MIND to create more virtual events and possible work with other chapters as well by reaching out and expanding networking through alumni.

It has also been evident that forming collaborations with other organizations is extremely beneficial for attendance as well as executing initiatives. Especially, the biggest issue has always been getting involvement of students. This year, participating with Purdue Engineering Student Council (PESC) and Purdue Engineering Outreach (PEO) resulted in a successful collaboration with high achievements and attendance. Thus, reaching out to other organizations to host events will be a high priority.

Purdue University strives to graduate students of the highest caliber and the Biomedical Engineering Society has some future directions that will help this goal. It is proven that most jobs look for candidates that can work well with others to produce results that are both successful and effective. With the success of the mentorship program this year, our society hopes to implement more interactive events that target teamwork.

Application for the Mentoring Program Award

Our undergraduate mentorship is aimed toward helping the entering sophomore class of biomedical engineering majors with the transition to the major process, which is where sophomore engineering students enter their declared engineering major from a general first-year engineering program. The mentors for these sophomores will be junior and senior biomedical engineering students who have gone through the same curriculum. Therefore, this was a student-to-student mentorship program.

Based on feedback from the previous year's program, we decided to do one-on-one mentorship

with monthly large group meetings. These large group meetings would serve as an opportunity to network and learn from those other than one's assigned mentee or mentor. However, to foster closer relationships, we decided to also require one meeting each month outside of the large group meetings. Mentee and mentor pairs were required to set this up themselves and were given the freedom to meet for as little or as long as they would like. Also, they were required to submit attendance to us in order for us to monitor participation and assign mentees/mentors if needed.

To begin recruiting for the program, we sent out an interest form and flyer (figure 1) a week before the start of school, which was due on the first Friday of the school year. Due to low attendance and overall consistent participation in the previous year's program, there was an emphasis on being upfront with the monthly time commitment. Reminders to sign-up were sent two more times before the due date. The sign-up form collected information on the class standing (sophomore, junior, senior), their post-graduation goals (medical school, industry, graduation school for engineering, other professional/graduate schools, other), their previous experience with research and internships, their campus involvement, and their hobbies.



Figure 1: Sign-Up Flyer

For making the pairings, we used class standing to determine who was a mentee and who was a mentor. Then, we split everyone up by post-graduation plans since that can affect the plan of study. Once that was done, hobbies were used to make individual pairings. However, the sophomore class for our major was of record-breaking size, which meant we had more mentees than mentors. This caused about half our pairs to become triples with one mentor and two mentees, but we let the mentor determine if they wanted to meet for their one-on-ones separately or together. Overall, we had 31 mentors and 46 mentees, which accounts for more than a quarter of the sophomore class. Additionally, local co-op students were allowed to participate in the program since meetings were in-person and after traditional working hours.

Because sign-ups were due at the end of August and the program required outside monthly meetings, we chose to hold our first meeting within the first week of September. This also aligned with the second week of classes so people's schedules were freer, and it was before our school's job fair, which meant mentors were able to get resume reviews and advice if needed.

For this first large group meeting, it was mainly to allow the mentee/mentor pairs to meet but was also about getting involved. Because we wanted our large group meetings to be interactive rather than lecture-like, we used the campus and research involvement from the sign-up form to identify people to present and talk about their club and research in addition to how they got involved. To keep things fun, we had “debate breaks” throughout the meeting such as “is a hot dog a sandwich?” Figure 2 shows one of those fun breaks during a meeting. We did receive feedback that reserving a room with tables would increase the interactive nature of the meeting, but we were unable to reserve a room large enough with that setup close to our department building, which was where most of our attendees already were.



Figure 2: Fun Break During a Large Group Meeting

This format of being interactive and having fun, small group discussions before bringing it back as a group worked well for us so we continued this large group meeting structure for the rest of the school year. In terms of scheduling, we tried to schedule on a different day for each monthly meeting so the same people were not missing. We scheduled after classes (i.e., after 5:30 pm) and tried to end before our major’s resource room opened for office hours (i.e., end before 7 pm). We also kept track of the exam and project schedules of all core classes and scheduled around those as seen in Figure 3.

| October Large Group Meeting Topic (Surviving BME & Study Tips) | | | | | | |
|--|---|--------------------|-----------|---------------------|-------------------|----------|
| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
| | | | | | 1 | 2 |
| 3 BIOL 230 Paper | 4 | 5 BME 304 Exam | 6 | 7 BME 305 Exam | 8 BME 301 Exam | 9 |
| 10 | 11 Fall Break | 12 Fall Break | 13 | 14 | 15 | 16 |
| 17 | 18 Spring Classes Published | 19 BME 295 Exam | 20 | 21 | 22 | 23 |
| 24 / 31 | 25 Large Group Meeting 6 - 7 pm MJIS 1001 | 26 | 27 | 28 BIOL 230 Exam | 29 | 30 |

Figure 3: Exam Schedule of Exam and Projects

Our large group meeting topics were fairly flexible and we tended to listen to the mentees to determine what was best for them. We had a set of topics prepared over the summer that we could use including stress management, time management, mental health awareness, and job fair/summer research application prep. All these topics also highlighted resources on campus that could be used for additional help and served as living documents where more was added throughout the meetings. Additionally, each semester we always had a “How to survive BME” meeting, where we gave study guide tips and tricks for the sophomore core classes. This was our most attended meeting each semester, and we even had non-mentees attend the second semester after hearing how helpful it was in the fall. To best cater this presentation to the mentees, we set up an anonymous survey where they could submit as many concerns about any of their classes. We then used this to serve as the bones of our presentation. This presentation was also helpful as many of our mentors served as undergraduate teaching assistants and could take some of the concerns to the teaching staff. Example slides from our spring meeting are shown in Figure 4.

BME 206

- Meet on off lab weeks to get work done
- Make a code for the stress-strain curves
 - Brianna recommends using pandas and seaborn if using python
- Come to lab with your notebook started
 - Typing up the procedure to familiarize yourself. It also helps you go faster in lab

BME 256

- Start early!!!!
 - Office hours get very full close to deadlines, and you may not get adequate help.
- Work in office hours
 - If you get stuck, you'll need the TAs
- If there are group issues, deal with them early
- Figure out a way to share the code so one person doesn't do all the work
 - How your teammates evaluate you affects your grade! Make sure to contribute.
- TAs are your friends
- Watch nursing videos for key concepts
- Merge slideshows for exams

| | |
|--|---|
| <p>BME 295 (Thermo)</p> <ul style="list-style-type: none"> • Have someone debug with you • Go to the BME resource room • This is still a new course, so don't be afraid to ask questions <ul style="list-style-type: none"> ◦ This is the first time this course has exams, ask TAs and Professors about expectations. | <p>BME 207 (formerly 305)</p> <ul style="list-style-type: none"> • Take turns building the circuits • Prelabs and LTSpice are your friends • Make sure you understand the concepts these first few weeks, you'll need them • Brandon's youtube = your bff <ul style="list-style-type: none"> ◦ They seem long, but they are worth it (better than lecture) ◦ https://www.youtube.com/channel/UCn3VH5NgFm4itM89DA12yw/videos • Do the optional homework even though it isn't required <ul style="list-style-type: none"> ◦ Keep up with the homework as you go rather than doing it all at the end |
| <p>PHYS 241 / 272</p> <ul style="list-style-type: none"> • Do past exams as practice <ul style="list-style-type: none"> ◦ Many question types tend to reappear from year to year • Understand your homework <ul style="list-style-type: none"> ◦ Make sure you know how to do all your homework problems. They will appear on the exams too. • Many homework and practice exam questions have solutions online <ul style="list-style-type: none"> ◦ Other colleges have practice materials for the same topic ◦ Look at AP Physics Electricity and Magnetism notes. It covers the same topics, and it is often taught in a simpler way. | <p>MA 262</p> <ul style="list-style-type: none"> • Practice exams • They teach it in a strange order, it will all come together at the end • This math is actual important, you'll use it next year a lot <ul style="list-style-type: none"> ◦ Keep your notes on how to solve different types of differential equations |

Figure 4: Example of Surviving BME Slides

We had minimal issues with the implementation of the one-on-one meetings and found most preferred to schedule things on their own time. Many mentee/mentor pairs even met beyond the required once a month. Some of our most frequent and most fun one-on-one are as follows: meet for lunch or dinner, meet for ice cream, meet for coffee, join an intramural team together (see figure 5), play frisbee golf, participate in a ping pong tournament together, and go to the corn maze (see figure 5).



Figure 5: Example of One-On-One Activities

We actively took feedback throughout the fall semester and made changes for the spring. Because our mentees outnumbered our mentors and it was becoming difficult to match everyone on post-graduation goals, we introduced a group mentorship program for the spring, where there would be at least two mentors and two mentees per group. Other than this, the same setup was adopted, with interactive and fun monthly group

meetings and one-on-one meetings with their pairs/groups. We also introduced snacks and catered sandwiches into our meetings in the spring as the campus' COVID-19 policies were loosened so we could now do so.

Finally, our main form of communication with the whole group was using GroupMe. Slides, meeting information, and other events were communicated here. We also kept our website page up-to-date (linked here: https://engineering.purdue.edu/BMES/Mentorship/index_html) and had a section in the BMES weekly email sent to all undergraduates.

Thank you for your consideration.

Sincerely,

The Purdue BMES Mentorship Committee

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